

ARTEMIS GOLD INC | Blackwater Mine

Blackwater Gold Project

Care and Maintenance Plan

November 2022

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ACRONYMS AND ABBREVIATIONS

AEMP	Aquatic Effects Monitoring Program
Artemis	Artemis Gold Inc.
BC	British Columbia
Blackwater	Blackwater Gold Project
BW Gold or Proponent	BW Gold LTD.
CEO	Chief Executive Officer
CM	Construction Manager
C&M	Care and maintenance
Code	Health, Safety and Reclamation Code for Mines in British Columbia
COO	Chief Operations Officer
DS	Decision Statement
EAC or Certificate	Environmental Assessment Certificate
EAO	Environmental Assessment Office
EM	Environmental Manager
EMC	Environmental Monitoring Committee
EMLI	Ministry of Energy, Mines and Low Carbon Innovation
EMP	Environmental Management Plan
EMPR	Ministry of Energy Mines and Petroleum Resources
EMS	Environmental Management System
ENV	Ministry of Environment and Climate Change Strategy
EOR	Engineer of Record
EPCM	Engineering, Procurement and Construction Management
FLNRORD	Ministry of Forests, Lands, Natural Resource Operations and Rural Development
FSR	forest service road
FWR	freshwater reservoir
GM	General Manager
Indigenous nations	Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Stellat'en First Nation, Saik'uz First Nation and Nazko First Nation (as defined in the Project's Environmental Assessment Certificate #M19-01)

Joint MA/EMA Application	Joint *Mines Act* / *Environmental Management Act* Permits Application
JOHSC	Joint Occupational Health and Safety Committee
km	kilometre
KP	Knight Piésold Ltd.
LGO	low-grade ore
MDMER	Metal and Diamond Mining Effluent Regulation
MERP	Mine Emergency Response Plan
ML/ARD	Metal Leaching/Acid Rock Drainage
MOE	Ministry of Environment
Mtpa	million tonnes per annum
MWLAP	Ministry of Water, Land and Air Protection
NAG	non-acid generating
OMS	Operations, Maintenance, and Surveillance
PAG	potentially acid generating
SCP	sediment control pond
TSF	tailings storage facility
t/d	tonnes per day
WMB	water balance model
WMP	Water Management Pond
WMMP	Wildlife Mitigation and Monitoring Plan
WTP	Water Treatment Plant
VP	Vice President

1. PROJECT OVERVIEW

The Blackwater Gold Project (the Project) is a gold and silver open pit mine located in central British Columbia (BC), approximately 112 kilometres (km) southwest of Vanderhoof, 160 km southwest of Prince George, and 446 km northeast of Vancouver.

The Project is presently accessed via the Kluskus Forest Service Road (FSR), the Kluskus-Ootsa FSR and an exploration access road, which connects to the Kluskus-Ootsa FSR at km 142. The Kluskus FSR joins Highway 16 approximately 10 km west of Vanderhoof. A new, approximately 13.8 km road (Mine Access Road; MAR) will be built to replace the existing exploration access road, which will be decommissioned. The planned new access is at km 124.5 km. Driving time from Vanderhoof to the mine site is about 2.5 hours.

Major mine components include a tailings storage facility (TSF), ore processing facilities, waste rock, overburden and soil stockpiles, borrow areas and quarries, water management infrastructure, water treatment plants, accommodation camps and ancillary facilities. The gold and silver will be recovered into a gold-silver doré product and shipped by air and/or transported by road. Electrical power will be supplied by a new approximately 135 km, 230 kilovolt (kV) overland transmission line that will connect to the BC Hydro grid at the Glenannan substation located near the Endako mine, 65 km west of Vanderhoof.

The Blackwater mine site is located within the traditional territories of Lhoosk'uz Dené Nation, Ulkatcho First Nation, Skin Tyee Nation and Tsilhqot'in Nation. The Kluskus and Kluskus-Ootsa FSRs and Project transmission line cross the traditional territories of Nadleh Whut'en First Nation, Saik'uz First Nation, and Stellat'en First Nation (collectively, the Carrier Sekani First Nations) as well as the traditional territories of the Nazko First Nation, Nee-Tahi-Buhn Band, Cheslatta Carrier Nation and Yekooche First Nation (EAO 2019a, 2019b).

Project construction is anticipated to take two years. Mine development will be phased with an initial milling capacity of 15,000 tonnes per day (t/d) or 5.5 million tonnes per annum (Mtpa) for the first five years of operation. After the first five years, the milling capacity will increase to 33,000 t/d or 12 Mtpa for the next five-years, and to 55,000 t/d or 20 Mtpa in Year +11 until the end of the 23-year mine life. The Closure phase is from Year +24 to approximately Year +45, ending when the Open Pit has filled to the target closure level and the TSF is allowed to passively discharge to Davidson Creek via a closure spillway. The Post-closure phase begins in Year +46.

New Gold Inc. (New Gold) received Environmental Assessment Certificate #M19-01 (EAC) on June 21, 2019 under the 2002 *Environmental Assessment Act* (EAO 2019c) and a Decision Statement (DS) on April 15, 2019 under the *Canadian Environmental Assessment Act, 2012* (CEA Agency 2019). In August 2020, Artemis Gold Inc. (Artemis) acquired the mineral tenures, assets and rights in the Blackwater Project that were previously held by New Gold Inc. On August 7, 2020, the Certificate was transferred to BW Gold LTD. (BW Gold), a wholly-owned subsidiary of Artemis, under the 2018 *Environmental Assessment Act*. The Impact Assessment Agency of Canada notified BW Gold on September 25, 2020 to verify that written notice had been provided within 30 days of the change of proponent as required in Condition 2.16 of the DS, and that a process had been initiated to amend the DS.

2. PURPOSE AND OBJECTIVES

The Care and Maintenance Plan will be implemented during any care and maintenance (C&M) period for longer than 90 days when either construction or operations cease, between the start of construction and the completion of operations (EAC Care and Maintenance definition). For the purpose of the EAC, the duration of any C&M period does not contribute to the duration of the Operations phase. Revisions to the C&M Plan will be completed prior to the initiation of a C&M period, unless otherwise authorized by the EAO. Revisions will be completed in consultation with Ministry of Energy, Mines and Low Carbon Innovation (EMLI), Ministry of Environment and Climate Change Strategy (ENV), Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), and Indigenous nations.

The C&M Plan is guided by the *Mines Act*, Health, Safety and Reclamation Code for Mines in British Columbia (Code; EMLI 2021a). The objectives of the C&M Plan are to provide:

- An outline of the key roles and responsibilities of personnel during C&M;
- A schedule of regulatory requirements to be continuously met throughout the C&M period;
- Guidance to a common set of current practices, procedures, and emergency response plans that are pertinent throughout C&M to ensure protection of the environment, mine personnel and public safety, and owner assets; and
- Procedures to be implemented for the maintenance of mine site facilities and conditions while considering requirements for the future resumption of construction or operations at the mine site in a safe, timely and cost-effective manner.

This C&M Plan generally contemplates the disturbance areas and management strategies that would be implemented if entering C&M during the first five years of mine operations while including general details related to the longer-term mine development plan. The C&M Plan will be reviewed and updated periodically, as required when there are changes in the mine infrastructure, disturbance areas, or for progressive refinement of the C&M Plan (see Section 10).

3. ROLES AND RESPONSIBILITIES

3.1 Construction and Operations

BW Gold has the obligation of ensuring that commitments are met and that relevant obligations are made known to mine personnel and site contractors during all phases of the mine life. A clear understanding of the roles, responsibilities, and level of authority that employees and contractors have when working at the mine site is essential to meet Environmental Management System (EMS) objectives.

Table 3-1 provides an overview of general environmental management responsibilities during construction and operations life for key positions that will be involved in environmental management. Other positions not specifically listed in Table 3-1 but who will provide supporting roles include independent environmental monitors, an Engineer of Record (EOR) for each tailings storage facility and dam, an Independent Tailings Review Board (ITRB), TSF qualified person, geochemistry qualified professional, and other qualified persons and qualified professionals.

Table 3-1: Blackwater Roles and Responsibilities

Role	Responsibility
Chief Executive Officer (CEO)	The CEO is responsible for overall Project governance. Reports to the Board.
Chief Operating Officer (COO)	The COO is responsible for engineering and Project development and coordinates with the Mine Manager to ensure overall Project objectives are being managed. Reports to CEO.
Vice President (VP) Environment & Social Responsibility	The VP Environment & Social Responsibility is responsible for championing the Environmental Policy Statement and EMS, establishing environmental performance targets and overseeing permitting. Reports to COO.
General Manager (GM) Development	The GM is responsible for managing project permitting, the Project's administration services and external entities, and delivering systems and programs that ensure Artemis's values are embraced and supported, Putting People First, Outstanding Corporate Citizenship, High Performance Culture and Rigorous Project Management and Financial Discipline. Reports to COO.
Mine Manager	The Mine Manager, as defined in the *Mines Act*, has overall responsibility for mine operations, including the health and safety of workers and the public, EMS implementation, overall environmental performance and protection, and permit compliance. The Mine Manager may delegate some of their responsibilities to other qualified personnel. Reports to GM. Specific to the C&M Plan, the Mine Manager is responsible for developing and maintaining the Tailings Management System, retaining an EOR, designating a TSF qualified person, and establishing an ITRB.
Construction Manager (CM)	The CM is accountable for ensuring environmental and regulatory commitments/ and obligations are being met during the construction phase. Reports to GM.
Environmental Manager (EM)	The EM is responsible for the day-to-day management of the Project's environmental programs and compliance with environmental permits, updating EMS and MPs. The EM or designate will be responsible for reporting non-compliance to the CM, and Engineering, Procurement and Construction Management (EPCM) contractor, other contractors, the Company and regulatory agencies, where required. Supports the CM and reports to Mine Manager.
Departmental Managers	Departmental Managers are responsible for implementation of the EMS relevant to their areas. Report to Mine Manager.

Role	Responsibility
Indigenous Relations Manager	Indigenous Relations Manager is responsible for Indigenous engagement throughout the life of mine. Also responsible for day-to-day management and communications with Indigenous groups. Reports to VP Environment & Social Responsibility.
Community Relations Advisor	Community Relations Advisor is responsible for managing the Community Liaison Committee and Community Feedback Mechanism. Reports to Indigenous Relations Manager.
Environmental Monitors	Environmental Monitors (includes Environmental Specialists and Technicians) are responsible for tracking and reporting on environmental permit obligations through field-based monitoring programs. Report to EM.
Aboriginal Group Monitors	Aboriginal Group Monitors are required under EAC condition 17 and will be responsible for monitoring for potential effects from the Project on the Indigenous interests. Indigenous nation Monitors will be involved in the adaptive management and follow-up monitoring programs. Report to EM.
Employees and Contractors	Employees are responsible for being aware of permit requirements specific to their roles and responsibilities. Report to departmental managers.
Qualified Professionals and Qualified Persons	Qualified professionals and qualified persons will be retained to review objectives and conduct various aspects of environmental and social monitoring as specified in EMPs and social MPs.

BW Gold will employ a qualified person as an EM who will ensure that throughout the construction phase the EMS requirements are established, implemented and maintained, and that environmental performance is reported to management for review and action. The EM is responsible for retaining the services of qualified persons or qualified professionals with specific scientific or engineering expertise to provide direction and management advice in their areas of specialization. The EM will be supported by a staff of Environmental Monitors that will include Environmental Specialists and Technicians and by a consulting team of subject matter experts in the fields of environmental science and engineering.

During the Construction phase, BW Gold will be entering into multiple EPC contracts, likely for the Transmission Line, Process Plant, Tailings and Reclaim System, and 25kV Power Distribution. Each engineer/contractor will have their own CM and there will be a BW Gold responsible PM and/or Superintendent who ultimately reports to the GM Development. Some of the scope, such as the TSF and Water Management Structures will be self-performed by BW Gold, likely using hired equipment. Other smaller scope packages may be in the form of EPCM contracts. The EPCM contractors will report to the CM's who will ultimately be responsible for ensuring that impacts are minimized, and environmental obligations are met during the Construction phase. For non-EPCM contractors, who will perform some of the minor works on site, the same reporting structure, requirements, and responsibilities will be established as outlined above. BW Gold will maintain overall responsibility for management of the construction and operation of the mine site and will therefore be responsible for establishing employment and contract agreements, communicating environmental requirements, and conducting periodic reviews of performance against stated requirements.

The CM is accountable for ensuring that environmental and regulatory commitments/obligations are being met during the construction phase. The EM will be responsible for ensuring that construction activities are proceeding in accordance with the objectives of the EMS and associated MPs. The EM or designate will be responsible for reporting non-compliance to the CM and EPCM contractor, other contractors, and regulatory agencies, where required. The EM or designate will have the authority to stop any construction

activity that is deemed to pose a risk to the environment; work will only proceed when the identified risk and concern have been addressed and rectified.

Environmental management during operation of the Project will be integrated under the direction of the EM, who will liaise closely with departmental managers and will report directly to the Mine Manager. The EM will be supported by the VP of Environment & Social Responsibility in order to provide an effective and integrated approach to environmental management and ensure adherence to corporate environmental standards. The EM will be accountable for implementing the approved MPs and reviewing them periodically for effectiveness. Departmental area managers (e.g., mining, milling, and plant/site services) will be directly responsible for implementation of the EMS and EMPs relevant to their areas. All employees and contractors are responsible for daily implementation of the practices and policies contained in the EMS.

Pursuant to Condition 19 of the Project's EAC, BW Gold has established an Environmental Monitoring Committee (EMC) to facilitate information sharing and provide advice on the development and operation of the Project, and the implementation of EAC conditions, in a coordinated and collaborative manner. Committee members include representatives of the Environmental Assessment Office (EAO), Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Saik'uz First Nation, Stellat'en First Nation, Nazko First Nation, EMLI, ENV and Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD).

3.2 Care and Maintenance

BW Gold will allocate the appropriate human resources to manage the mine site during C&M as required. During C&M, personnel will be retained to at minimum cover the following roles: Mine Manager, Environmental Manager, Environmental Technician(s) and Indigenous Monitors. Contractors may be used as required to fulfill the requirements of the C&M Plan.

In accordance with Part 1 and Part 2 of the Code (EMLI 2021a), the Project's Joint Occupational Health and Safety Committee (JOHSC) established under the direction of the Mine Manager shall be maintained under C&M and discharge its duties and responsibilities in accordance with the Code. Implemented programs will serve to determine the health hazards that may arise from Project activity, evaluate those hazards, and employ appropriate control measures. Required occupational health programs cover topics such as workplace exposure monitoring, medical surveillance, and ergonomics.

Should the Mine Manager notify the Chief Inspector under section 10.6.1 of the Code of intention to stop work in or about the mine site, commencing the temporary suspension of the construction or operations, the JOHSC will also be informed, and shall ensure appropriate occupational health and safety actions are undertaken.

During the C&M, the monitoring and management programs that are in place during the Construction or Operations phases will continue. Personnel need to be aware of any risks when approaching routine tasks, facilities need to be maintained to an acceptable housekeeping standard, potable water systems are to be maintained, and electrical systems are required to be in working order to ensure essential services are kept in operation. The Occupational Health and Safety Plan is in place to provide guidance to employees and contractors at the mine site.

4. COMPLIANCE OBLIGATIONS

4.1 Legislation

Requirements under the *Mines Act* related to temporary suspension of mine site activity are described in Part 10, section 10.6 of the Code as follows:

> ***Notice Required***
>
> *10.6.1 The owner, agent, or manager shall provide written notice of not less than 7 days to an inspector of intention to stop work in, on, or about a mine.*
>
> ***Cessation of Operations***
>
> *10.6.2 (1) If a mine ceases operation, the owner, agent, or manager shall*
>
> *(a) continue to carry out the conditions of the permit, and*
>
> *(b) carry out a program of site monitoring and maintenance.*
>
> *(2) If a mine ceases operation for a period longer than one year, the owner, agent, or manager shall*
>
> *(a) apply for an amendment to the permit setting out a revised program for approval by an inspector,*
>
> *(b) identify the hazards and provide detailed engineered plans and drawings respecting the hazards to local emergency agencies, and update the drawings as required, and*
>
> *(c) if practicable, make the plans and drawings available on site in a conspicuous location.*

4.2 Environmental Assessment Certificate and Federal Decision Statement Conditions

The C&M Plan addresses the requirements in Condition 11 of the Project's EAC #M19-01. The EAC defines C&M as:

> *The period when Construction or Operations cease for more than 90 days. For the purpose of this Certificate, the duration of any Care and Maintenance Period does not contribute to the duration of the Operations phase.*

A concordance table that identifies where the requirements in Condition 11 can be found in the C&M Plan is provided in Appendix A.

The C&M Plan requires measures to monitor, manage, and avoid build-up of water surplus that are similarly required under Condition 33, Mine Waste and Water Management Plan. This specifically relates to the following requirements of Condition 33:

a. *the means by which the Holder will implement an oxygen-preventing barrier to cover waste rock, tailings and other mine by-products to prevent adverse effects from rock that is currently or potentially acid-generating or ML. The barrier may include coverage with additional tailings, water, or another mitigation measure that will be effective at limiting the potential for ML/ARD, as determined by the Qualified Professional(s);*

b. the means by which the Holder will limit the year-over-year accumulation of water stored in TSF that exceeds the amount necessary to:

i. address water needed under paragraph a); and

ii. meet the needs for the operation of the mill.

This determination must be made by a Qualified Professional(s), taking into account safety and concerns expressed by Indigenous nations[1]. The plan must identify whether treatment and discharge of water from the TSF during Operations was considered and if not, provide a rationale;

c. the means by which the Holder will monitor and document the year-over-year water accumulation in the TSF;

Section 6.4 of the C&M Plan details how tailings and potentially acid generating (PAG) and NAG3 waste rock will be managed through the C&M period to meet Condition 33a. Section 6.8 of the C&M Plan details how the build-up of surplus water and how water accumulation will be managed through the C&M period to meet Condition 33b and c. The goal of the Mine Waste and Water Management Plan is to manage mine waste and water in a manner that is protective of the receiving environment, therefore Sections 6.4, 6.8, and 6.9 of the C&M Plan detail water management and treatment to be completed through the C&M period to mitigate potential effects to the receiving environment.

The federal DS does not contain any specific conditions related to C&M but will continue to apply during a C&M period.

4.3 Permit Requirements

All provincial and federal authorizations current at the time that the mine goes into C&M will continue to be in force unless otherwise stated in the authorization. Amendments may be sought to reflect suspension of activities and will depend on timing and timeframe of C&M. For example, permit(s) to authorize effluent and air discharge (*Environmental Management Act*) may be amended for monitoring requirements and frequency based on the level of activity on site during the C&M period (see Section 6.0). Licence(s) to divert, store, or use surface water or groundwater as well as the construction of water storage dams and groundwater wells may be amended to be delayed, dependent on timing of entering C&M.

[1] BW Gold uses Indigenous nations to replace the term ‘Aboriginal Groups’ defined in the Project’s Environmental Assessment Certificate #M19-01 as: Lhoosk’uz Dené Nation, Ulkatcho First Nation, Nadleh Whut’en First Nation, Stellat’en First Nation, Saik’uz First Nation and Nazko First Nation.

5. SUPPORT

5.1 Contact Information

During a C&M period, any changes to mine site contacts and primary off-site contacts will be provided to EAO, EMLI, ENV, FLNRORD, Impact Assessment Agency of Canada, Environment and Climate Change Canada, Indigenous nations, and local governments, in addition to any other relevant regulatory authorities and key stakeholders.

5.2 Training and Awareness

During C&M, working situations will be different for construction or operations. Even within the operations phase there will be differences in working situations and requirements. Personnel will review and update as necessary, key operating procedures and manuals (e.g., Major Power Outage Emergency Response Plan, Potable Water System Emergency Response Plan, water treatment operation and maintenance manuals, TSF Operations Maintenance and Surveillance [OMS]), at the time of the C&M event based on the actual requirements of the site at the time.

6. IMPLEMENTATION

6.1 Hydrocarbon Spill Prevention and Response

Spill prevention and response for hydrocarbon storage and leaks or other accidental emissions from machinery or equipment will continue to be conducted in accordance with the Fuel Management and Spill Control Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com) and Chemicals and Materials Storage, Transfer, and Handling Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). During C&M, additional activities will be undertaken as outlined in Table 6.1-1.

6.2 Surface Erosion Prevention and Sediment Control

Surface erosion prevention and sediment control will continue in accordance with the Surface Erosion Prevention and Sediment Control Plan (SEPSCP; March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). The EM will monitor the status of surface erosion prevention and sediment control measures and report on any increased risk at specific sites to the Mine Manager. During C&M, additional activities will be undertaken as outlined in Table 6.2-1.

6.3 Waste Rock, Overburden, and Ore Stockpiles

No additional waste rock, overburden, or ore will be generated during C&M, and existing surface stockpiles will be managed during C&M in general accordance with strategies consistent with Operations and described below.

During Operations, the waste stockpiles (for storage of non-acid-generating [NAG] waste rock and overburden) have been designed to be re-sloped to overall target closure slopes as lifts are completed (MMTS 2021). Collection channels constructed along the stockpile periphery will collect and convey contact surface runoff and toe discharges to a collection pond (KP 2022a; KP 2022e). The collected water will be pumped to the Metals Water Treatment Plant (WTP) located at the Plant Site for treatment, if required, prior to conveyance to the Water Management Pond (WMP). This operational strategy will be maintained during C&M with contact water being sampled and analyzed to determine if on-going treatment is required prior to conveyance to the WMP. Planned actions to adequately manage the constructed Waste Stockpiles during C&M are summarized in Table 6.3-1.

During Operations, the Low Grade Ore (LGO) Stockpile will be constructed over a low-permeability foundation liner system. Placement of LGO in the stockpile will begin in Year -1 and continue with subsequent lifts to a maximum build in Year +16 (MMTS 2021), during which time some LGO previously placed in the stockpile will be re-handled to maintain ore throughput rates at the mill. Thereafter (following Year +18), the LGO will be re-handled and processed until the end of Year +23 at which time no LGO will remain on the stockpile site. The liner system will limit seepage entering the groundwater by providing physical separation and promoting drainage to the contact water collection channels. Non-contact water will be diverted around the stockpile to the WMP and contact water (surface runoff and seepage) will be conveyed to the LGO Stockpile Collection Pond (KP 2021a). Contact water from the pond will be pumped to the lime neutralization system at the Plant Site prior to conveyance to the TSF. Operational strategies for LGO Stockpile contact water management will initially continue during C&M. Long-term management strategies will be developed early on in C&M with the completion of sampling and analysis of contact water to determine if on-going lime neutralization is required. Alternative contact water treatment strategies may be identified (e.g., routing flows to the Metals WTP or Membrane WTP) to facilitate discharge of these flows to the WMP instead of the TSF.

Table 6.1-1: Actions to Prevent Hydrocarbon Spills during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation to Support	Guideline or Reference
Where possible, storage tanks will be drained and decommissioned in such a manner that allows them to be commissioned on short notice.	60 days	1x	Maintenance invoices from fuel supplier Completed work orders	A Field Guide to Fuel Handling, Transportation and Storage (MWLAP 2002)
Diesel and gasoline fuel storage will be scaled back and centralized into a single dispensing facility. Facilities such as the lube and grease shop and the diesel exhaust fluid system will be scaled back to align with the volume of fuel stored onsite.	90 days	1x	Invoices from fuel supplier Documented inspection	A Field Guide to Fuel Handling, Transportation and Storage (MWLAP 2002)
Inspections of stationary fuel dispensing stations, secondary containment liners and sumps, and any other locations where hydrocarbons are stored will be conducted in accordance with Section 4.4 of the BC Fire Code Regulation, BC Reg. 263/2012, or as amended. Inspections will be based on the type of tank and associated piping and include: ■ Checking pipes, valves, flanges, connections and pumps for leaks, discoloration or corrosion; ■ Checking the secondary containment is clean of residue; ■ Checking the integrity of the liner and containment berm (fuel storage areas); and ■ Testing leak detection, and low-pressure alarms and vacuum monitoring gauges to confirm they are working.	30 days	Monthly	Documented inspection and/or completed work orders	A Field Guide to Fuel Handling, Transportation and Storage (MWLAP 2002)
Spill kits maintained on site	30 days	Monthly	Documented inspection	Spill Response Plan in the Fuel Management and Spill Control Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com)

Table 6.2-1: Actions to Prevent Surface Erosion during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Securing by seeding or covering exposed soil surfaces on working faces, which would have been left exposed during construction and operations as active work zones.	30 days, or later depending on time of year, may have to be delayed to growing period if C&M is triggered outside of growing season	1x	Documented inspection	Surface Erosion Prevention and Sediment Control Plan (March 2022)[1]
Completion of sloped features so they are geotechnically stable with erosion and water management control measures put in place.	60 days	1x	Documented inspection	*Mines Act* Permit M-246; Surface Erosion Prevention and Sediment Control Plan (March 2022)[1]
Review of the erosion and sediment transport risk assessment to identify areas of potential risk and apply site-specific mitigation measures	45 days	1x	Documented review	Surface Erosion Prevention and Sediment Control Plan (March 2022)[1]
Incident monitoring if signs of erosion are noted on site outside of the regular monitoring events. A trigger action response plan (documented in the Surface Erosion Prevention and Sediment Control Plan (March 2022) will be used to determine if subsequent action is required.	As required	NA	Documented inspection and follow-up as per incident reporting requirements	Surface Erosion Prevention and Sediment Control Plan (March 2022)[1]
Scheduled monitoring and maintenance of culverts, ditches, sediment control ponds, and other surface water collection and control structures	30 days (7 days if occurs during freshet)	Weekly during freshet; monthly during open water; after each significant melt event or runoff producing rainfall event	Weekly reports during the open water season (e.g., April – October); Monthly reports during the winter season	Surface Erosion Prevention and Sediment Control Plan (March 2022)[1]

NA = not applicable.

[1] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

Table 6.3-1: Actions to Manage Waste Rock and Low Grade Ore Stockpiles during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Waste Rock Stockpile(s)				
Continued stockpile visual inspection monitoring and instrumentation established during operations.	30 days	TBD[1]	Documented inspection	Open Pit and Stockpile Design Report (MMTS 2021)
Maintenance of stockpile lifts that have not been re-sloped for closure to allow for a bench and catchberm between the final lift and re-sloped ground.	60 days	1x	Documented inspection	Open Pit and Stockpile Design Report (MMTS 2021)
Continued collection of contact water surface runoff and seepage in collection channels along the stockpile periphery and convey water to a collection pond prior to pumping to the Metals WTP.	Continuous	NA	*Mines Act* (EMLI 2021b) *Environmental Management Act* (BC MOE 2016) annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[2] Stockpiles Geotechnical and Water Management Design Report (KP 2022a) Metal Leaching/Acid Rock Drainage (ML/ARD) Plan (March 2022) [2]
Low Grade Ore Stockpile				
Continued stockpile visual inspection monitoring and instrumentation established during operations.	30 days	TBD[1]	Documented inspection	Open Pit and Stockpile Design Report (MMTS 2021)
Continued collection of contact water surface runoff and seepage to the contact water pond prior to conveyance to the lime neutralization system at the Plant Site.	Continuous	NA	*Mines Act* (EMLI 2021b) *Environmental Management Act* (BC MOE 2016) annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[2] Stockpiles Geotechnical and Water Management Design Report (KP 2022a)

TBD = to be determined; NA= Not Applicable; TSF = tailings storage facility; the Code = Health, Safety, and Reclamation Code for Mines in British Columbia.

[1] A detailed monitoring and management plan will be developed prior to active dumping operations, which will employ appropriate status and monitoring sign off sheets. The plan will include preliminary locations, installation schedules, monitoring frequency, and initial threshold response criteria for all proposed instrumentation.

[2] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

Areas of the Plant Site where ore is processed and stockpiled will be temporarily shutdown with any remaining ore either processed or removed and placed in the LGO Stockpile (Ausenco 2021). This includes the crusher area, stockpile feed conveyor, stockpile pad, and Processing Plant area.

Planned actions to adequately manage the LGO Stockpile during C&M are included in Table 6.3-1.

6.4 Tailings Storage Facility

The TSF was designed to permanently store tailings, PAG waste rock, and potentially metal leaching (ML) non-acid generating waste rock (NAG3; considered to have the highest zinc leaching potential amongst the NAG rock) in two adjacent sites, TSF C and TSF D. Each site was also designed for the storage of mine contact water. TSF C will be constructed first to provide storage capacity for start-up of the Processing Plant and was designed to contain tailings for 21 years of mine operations and PAG/NAG3 waste rock until Year +6. TSF D will be constructed adjacent to and downstream of TSF C beginning in Year +5 to provide additional storage capacity for PAG/NAG3 waste rock and tailings. TSF D was designed to contain PAG/NAG3 waste rock generated during mining between Year +6 and Year +18 and up to approximately two years of tailings beginning in Year +21 when TSF C reaches design capacity (KP 2022b). Tailings and waste rock will be deposited strategically in TSF C and later in TSF D to achieve Metal Leaching/Acid Rock Drainage (ML/ARD) management objectives and to create the desired pond configuration for storage of mine contact water.

During the first six years of Operations, tailings will be discharged into TSF C from the west side of the facility near the existing exploration access road with the PAG/NAG3 waste rock disposed of directly upstream of Main Dam C. The tailings will form a gently sloping beach (down gradient towards the east) and the supernatant pond will form near the interface of these two disposal areas to allow for efficient saturation of the waste rock interstitial space within approximately one year of placement to meet geochemical objectives. Water will be reclaimed to support ore processing from the supernatant pond. The facility design and this C&M Plan is supported by detailed modelling of the waste rock and tailings surfaces. The estimated PAG/NAG3 waste dump elevation, tailings discharge elevation, and estimated supernatant pond elevation at the end of pre-production and during the first five years of operations are shown in Table 6.4-1.

Table 6.4-1: TSF C Waste Rock Disposal and Tailings Deposition Plan (Years -1 to +5)

End of	Main Dam C Crest Elevation	PAG/NAG3 Waste Rock Dump Elevation[1]	Tailings Discharge Point: West Side Elevation	Estimated Supernatant Pond Elevation
Year -1	1,273	1,235	-	1,234
Year +1	1,283	1,260	1,263	1,260
Year +2	1,295	1,269	1,276	1,268
Year +3	1,301	1,276	1,285	1,274
Year +4	1,307	1,289	1,292	1,278
Year +5	1,312	1,298	1,298	1,286

Source: Modified from Table 5.2 of the Blackwater Gold Project – Tailings Storage Facility Life of Mine Design Report (KP 2022b)

Units are metres above sea level.

Dash indicates not applicable.

[1]PAG/NAG3 waste rock interstitial space to be saturated within approximately one year or more rapidly depending on the facility water balance.

No new tailings will be generated during C&M. The operational strategy for the TSF upon entering C&M will be to manage water in a manner that is consistent with the design objectives for the facility, including the following:

- Prevention of ARD and minimization of ML from potentially reactive tailings and waste rock to the extent practicable;
- Control, collection, and diversion of non-contact surface water flows;
- Limiting accumulation of surplus water within the TSF to the maximum practicable extent.

BW Gold developed three C&M scenarios that differ in how the tailings in the TSF are stored to meet the conditions of EAC Condition 33 (see Section 4.2) and limit the potential for ARD and ML in TSF C. The three scenarios also considered details related to management of water surplus in the TSF C pond during C&M. Separate water balance and water quality models were developed for each of the scenarios to assess how operational management of the TSF could be modified during the C&M period to meet EAC Condition 33 and if additional water treatment capacity would be required to prevent excess water buildup (see Appendix D and Appendix F for additional details).

The modelled scenarios assumed the C&M period begins at the end of Year +3 of Operations (see Figures A.1, A.2, and A.3 in Appendix D) and lasts a period of 20 years. Year +3 of Operations was selected because it potentially has the largest exposed tailings beach area (determined as the difference between the top of the PAG/NAG3 waste rock elevation and the top of the tailings elevation; see Table 6.4-1). It was assumed that the Main Dam C crest elevation would be equivalent to the Year +2 crest elevation (1,295 masl; see Table 6.4-1) for the C&M modelling scenarios because this crest elevation constrains the available storage capacity in TSF C that could be used to store water without impacting freeboard design requirements (see KP, 2022b for details). Dewatering of the open pit was assumed to continue throughout the C&M period in all the scenarios. Operational water management at all other facilities would continue in a manner consistent with the Operations phase and is discussed in Section 6.9.

The three TSF management (cover) scenarios include the following:

- Scenario 1 – No temporary cover on the tailings beach: water is allowed to accumulate to cover the PAG/NAG3 waste rock stored in the TSF and the remaining tailings beach is sub-aerial.
- Scenario 2 – Closure soil cover: water covers the PAG/NAG3 waste rock stored in the TSF, and the remaining tailings beach area is covered with soil.
- Scenario 3 – Full water cover: water covers the PAG/NAG3 waste rock and tailings beach area in the TSF.

For Scenarios 1 and 2, water would be allowed to accumulate in TSF C to an elevation slightly above the elevation of the PAG/NAG3 waste rock dump (1,277 masl) thereby submerging the PAG/NAG3 waste rock and providing a shallow water cover to prevent oxidation. For these two scenarios, tailings material above 1,277 masl extending up to the spigot elevation at approximately 1,285 masl at the western extent of the facility would be above the elevation of the pond (Table 6.4-1).

Scenario 2 includes a soil cover on the TSF beaches as detailed in the Reclamation and Closure Plan (i.e., a 30 cm of mixed-parent-material surface soil on TSF beaches to re-creating submesic-mesic ecosystems and mesic-subhygric ecosystems [wetter ecosystems generally lost in post-closure] in depressional areas). The modelling work assumes that the soil cover is in place two years after the start of the C&M period, and the water balance assumes mature vegetation does not develop on the soil cover during the C&M period.

The volume of soil available for salvage and use for TSF cover are outlined in Section 8.2 of Soil Management Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). Table 8.2-1 in the Soil Management Plan (March 2022) includes available salvage areas and volumes of surface soils within the Project footprint, by project component based on salvage depths of 0.5 m for glaciofluvial surface soil, 1.3 m for organic surface soil, and 0.3 m for mixed-mineral surface soils. Salvaged surface soils from the undisturbed portion of the Project footprint will be stripped as mine development proceeds. BW Gold will maximize opportunities for direct placement of salvaged surface soil on newly completed areas during the life of the mine for reclamation research and progressive reclamation, however, the majority the salvaged surface soil and overburden will be stockpiled and used for reclamation after completion of the Operations phase. The TS-1, TS-2, TS-3, TS-4B, and TS-5 stockpiles will be constructed in Year -2 to Year +3 of Operations (although they will not be built to their final crest elevation until later in Operations), and surface soil will be stored for 20 to 25 years, assuming a 23-year life of mine. The TS-4A and TS-6 stockpiles are not planned to be constructed until after Year 5, meaning this surface soil will be stored for approximately 18 years or less.

For Scenario 3, water was assumed to accumulate in TSF C pond to reach the elevation at the top of the tailings beach at 1,285 masl. The pond elevation for this scenario would exceed the maximum allowable elevation based on TSF freeboard requirements for storage of the Inflow Design Flood (IDF) assuming that the dam crest is at1,295 masl (Table 6.4-1; see KP 2022b). Therefore, the Scenario 3 option would require additional dam construction to raise the height of the dam or would need to incorporate alternative means of managing the IDF during the C&M period.

The selection of the ML/ARD management scenario will be dependent upon a variety of factors, including the relative elevations of the Main Dam C crest, PAG/NAG3 dump crest, tailings beaches, and site wide water management considerations. These strategies will be reviewed by the TSF EOR upon entering C&M, and the EOR will determine the appropriate C&M ML/ARD management strategy in consultation with other qualified professionals, relevant regulatory agencies and Indigenous nations. The TSF EOR may include recommendations in addition to those specific to ML/ARD management to improve ML/ARD management success or, for example, to align with dam safety requirements.

Once the ML/ARD management strategy is implemented, the focus of C&M water management for the TSF will shift to prevention of surplus water accumulation by limiting inflows and treatment and discharge of excess water not required for ML/ARD management described in Sections 6.8 and 6.9.

Planned actions to manage the TSF during C&M, as described above, are summarized in Table 6.4-2.

6.5 Building Maintenance

The level of building maintenance required during C&M will depend on the number and types of buildings existing when the site goes into C&M, as well as ongoing requirements during the C&M period. Actions to adequately manage building maintenance during C&M are provided in Table 6.5-1. Buildings could include facilities at the Plant Site (processing plant, Metals WTP), Membrane WTP, camp accommodations, administration, laboratory, warehouse, truck shop and wash/mine dry/office, and main substation. Seacans and enclosed structures will be secured, winterized and prepared for a long-term absence (e.g., plumbing, heating, ventilation, air conditioning, and electrical), if required. A C&M checklist will be developed at the time of a C&M event for the major buildings in accordance with site requirements during C&M.

Table 6.4-2: Actions to Manage the Tailings Storage Facility during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Continue monitoring and surveillance protocols defined in the latest version of the TSF OMS Manual with annual reporting to EMLI in accordance with *Mines Act* permit.	Immediately	As required by the TSF OMS Manual[1]	As required by the TSF OMS Manual[1]	TSF OMS Manual
Drain tailings distribution system but maintain operational in the case that a NAG slurry cover is determined to form part of the C&M cover described for scenario 2.	30 days	1x	Documented inspection	NA
EOR to inspect facilities and provide recommendations for priority actions including, but not limited to, consideration of: ■ physical stability ■ geochemical stability; and ■ water quantity management.	30 days	1x	Documented inspection	NA
If C&M Scenario 1 is selected, initiate tailings beach sampling program to determine the ML/ARD potential of the exposed tailings. This sampling program will be used to provide recommendations on tailings beach management.	Following flooding of TSF	1x	Documented inspection	NA
If C&M Scenario 2 is selected, initiate inventory of stored reclamation materials to determine requirements to implement a soil/reclamation cover system on exposed tailings beach as described in Chapter 4 of the MA/EMA major works permit application	90 days	1x	Documented inspection and mapping of materials and stockpiles	NA
Review the TSF OMS Manual and prepare an updated version, if required, to document any modifications to the management and monitoring of the TSF.	180 days	Annually	Documented review Updated TSF OMS Manual, if required	TSF OMS Manual;
In accordance with Provision 10.5.3 [annual dam safety inspection] of the Code, inspections of the TSF and water management facilities and associated dams shall be inspected annually and a report shall be prepared by the EOR.	Due date in accordance with *Mines Act* permit	Annually	Annual Report by the Engineer of Record[2]	Section 10.5.3 [annual dam safety inspection] of the Code

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Perform risk assessment of the C&M Plan with a group of qualified professionals to evaluate opportunities for improvement. Adjust C&M actions based on current facility conditions, expected duration of C&M, and any opportunities identified during the risk assessment.	360 days	Every 3 to 5 years, depending on facility performance	Documented risk assessment	NA
Review of tailings storage, water management facilities, and associated dams safety in accordance with Provision 10.5.4 of the Code.	NA	Every 5 years or as directed by the Chief Inspector	Dam Safety Review Report	Section 10.5.4 [dam safety reviews] of the Code
In accordance with Section 10.4.4 of the Code submit one or more annual reports to provide a summary of: ■ TSF reclamation and environmental work performed; ■ TSF and dam safety inspections performed ■ Independent Tailings Review Board (ITRB) activities including meetings and attendees, whether the work reviewed that year meets the ITRB expectations of reasonably good practice, any conditions that compromise TSF integrity or occurrences of non-compliance with recommendations from the EOR, and signed acknowledgement by the members of the ITRB confirming that the report is a true and accurate representation of their reviews; ■ a summary of tailings storage facility and dam safety recommendations including a scheduled completion date; ■ updates to the tailings storage facilities register; and ■ other information as directed by the chief inspector.	NA	Annually	*Mines Act* annual report (EMLI 2021a)[2]	Section 10.4.4 of the Code
Continue or initiate progressive reclamation and/or reclamation research activities identified in the Reclamation and Closure Plan (March 2022)[3]	NA	NA	NA	Reclamation and Closure Plan (March 2022)[3]

EOR = Engineer of record; TBD = to be determined; NA= Not Applicable; OMS = Operations, Maintenance, and Surveillance; TSF = tailings storage facility; the Code = Health, Safety, and Reclamation Code for Mines in British Columbia.

[1] A TSF OMS manual will be prepared following initial construction and prior to commissioning of the TSF to provide comprehensive operating instructions and monitoring frequencies for the TSF instrumentation. The TSF OMS Manual will be reviewed annually and updated as required during Operations.

[2] It is anticipated that monitoring and reporting to meet the Code requirements for Dam Safety Inspection, Dam Safety Review, and the Independent Tailings Review Board will continue throughout Care and Maintenance.

[3] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

Table 6.5-1: Actions to Manage Building Maintenance during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Assess each building to identify areas that need to be secured to prevent wildlife and human access and/or those buildings that need to remain open to support C&M activities.	30 days	Monthly	Documented inspection	NA
Decommission the ore processing circuit to allow for quick commissioning during ramp up period. Temporary shutdown activities include: ■ processing coarse ore stockpile; ■ emptying grinding media from mills; ■ draining and cleaning processing tanks; ■ cleaning and locking-out conveyor systems; ■ cleaning and servicing air quality control systems; ■ shutting down the cyanide destruction circuit; and ■ draining and blowing out water reclaim, tailings conveyance systems but maintaining in a ready state to ensure readiness for potentially being used for a NAG slurry cover of the exposed tailings beaches	60 days	1x	Documented inspection	NA
Conduct inspections of buildings to check for unauthorized access, leaks, broken windows, and vermin infestation.	30 days	Monthly	Documented inspection	NA

NA = not applicable.

6.6 Monitoring and Mitigation of Adverse Wildlife Effects

During C&M, monitoring and mitigation of wildlife effects will be conducted in accordance with the most recent version of the Wildlife Mitigation and Monitoring Plan (WMMP; July 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). With reduced activity at the mine site, interactions with wildlife will likely change as wildlife may be less deterred by noise, lights, vehicle traffic, and human presence and wildlife may become more present on the mine site. This will be confirmed by wildlife monitoring.

If monitoring results during C&M show changes in wildlife use or patterns of behavior that could result in the potential for increased level of interactions or effects to wildlife or humans, the WMMP may be updated to mitigate effects. Conversely, if monitoring results show changes that result in reduced effects to wildlife or the potential to temporarily suspend a monitoring program or mitigation measure, the WMMP may be updated.

The WMMP will be reviewed and updated to include mitigation and monitoring based on the status of the Project and potential risks to wildlife in accordance with the process described in the WMMP.

6.7 Monitoring and Mitigation of Adverse Receiving Water Effects

A Mine Site Water and Discharge Monitoring and Management Plan (MSDP) has been designed to be consistent with, and facilitate adherence to, the requirements for effluent monitoring under the federal Metal and Diamond Mining Effluent Regulation (MDMER) and BC's *Environmental Management Act*, and to align with monitoring components and objectives of the Aquatic Effects Monitoring Program (AEMP). During construction and operations, discharges to receiving waters will be from the freshwater reservoir (FWR), sediment control ponds (SCPs; TSF Stage 1 SCP and Downstream Aggregate Borrow Area SCP), and non-point source discharges (groundwater seepage; Plant Site SCP/RIBs); see MSDP, March 2022 for the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com).

During C&M, water quantity and quality will continue to be managed and monitored at all active discharge locations at frequencies and for components listed in the MSDP (March 2022). Water quality monitoring may be scaled back as appropriate once water quality reaches a steady state. Monitoring of surface water and groundwater will continue to provide an early detection system for potential impacts to the receiving environment. In addition, discharge quantity and quality will continue to comply with *Environmental Management Act* permit requirements. Annual *Environmental Management Act* reporting of water quantity and quality monitoring results will continue through C&M as defined in the MSDP (March 2022) and in accordance with *Environmental Management Act* permit conditions.

Predicted mean monthly streamflow for each of the C&M modelled scenarios during select years prior to and during C&M are provided in Appendix D. Active management of water onsite allows the Davidson Creek instream flow needs (IFN) to be met during the C&M period. The IFN criteria (see MSDP, March 2022) are met in Davidson Creek under average climate conditions by actively managing the WMP and FWR water levels to with discharge to Davidson Creek. The IFN can be met in Davidson Creek during drier than average months by prioritizing treatment and release of water to meet IFN criteria.

BW Gold will inspect the authorized works on a quarterly basis and maintain them in good working order. Any malfunction that may affect the quality of the discharge in excess of permitted requirements will be immediately reported to regulators and Indigenous nations (in accordance with permit conditions). Any release of substance(s) to the receiving environment that may or will result in failure to meet the terms and conditions of the *Environmental Management Act* permit will be similarly reported. A record will be maintained of non-compliances, exceedance values, the mitigation measures taken, verification of the reporting of the exceedance and any related communications with regulators regarding the exceedance event, and future measures to be taken to avoid or control further exceedances.

The AEMP has been designed to monitor potential Project related effects in the aquatic receiving environment (see AEMP Plan, March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). Monitoring at established AEMP sites will continue through C&M with monitoring results reported on an annual basis and used to inform a defined trigger response adaptive management framework (AEMP Plan, March 2022). At minimum water quality, hydrology, and temperature data will be monitored because these AEMP components are planned to be sampled regularly or monitored continuously each year. If no effects (as defined in the AEMP Plan) have previously been identified in other AEMP sampled components - sediment quality, aquatic primary producers, aquatic invertebrates, or fish community - sampling (and reporting) for these components may not be required during C&M. The inclusion of these other components will depend on when suspension of activities occurs during construction or operations, the types of activities (and discharges) during C&M, and professional judgement.

6.8 Monitoring and Managing Build-up of Water Surplus in the Tailings Storage Facility

Once the TSF ML/ARD management strategy described in Section 6.4 is selected and implemented, the focus of C&M water management for the TSF will shift to prevention of surplus water accumulation by limiting inflows and treatment and discharge of excess water not required for ML/ARD management. For all three of the scenarios presented in Appendix D, the primary mitigation to limit surplus water accumulation during C&M will be to continue operating the water diversions and water treatment systems developed for water quantity management during Operations. The Central Diversion System will be maintained and operated to collect and convey freshwater to the WMP where these flows will combine with runoff from precipitation and snowmelt within the WMP catchment area and WTP effluents. Flows will continue to be conveyed from the WMP to the FWR for discharge to Davidson Creek to maintain instream flow needs. The Northern Diversion System (once developed in approximately Year +6) will also convey flows to the FWR as required.

The TSF C pond will continue to receive inflows during C&M from groundwater discharge and runoff from precipitation and snowmelt within the catchment areas reporting to the TSF as well as water pumped back from the downstream seepage collection points. Consolidation seepage water will also gradually be released from the tailings to the supernatant pond; however, this process of solid-liquid separation does not result in a change to the overall stored volume in the facility. Water treated at the Membrane WTP will continue to be discharged to the WMP. The Membrane WTP brine will be conveyed to the TSF.

Water from the dewatering of the open pit and other mine site contact water, such as runoff from the waste stockpiles, will continue to be conveyed to the Metals WTP for treatment, if required, prior to discharge to the WMP (as described previously in Section 6.3). Non-contact water will be diverted around the LGO Stockpile to the WMP and contact water (surface runoff and seepage) will be conveyed to the LGO Stockpile Collection Pond. Contact water from this pond will be pumped to the lime neutralization system at the Plant Site prior to conveyance to the TSF. Contact water will be sampled and analyzed during C&M to determine if on-going lime neutralization is required or if alternative treatment strategies (e.g., routing flows to the Metals WTP or Membrane WTP) could facilitate conveyance of this contact water to the WMP instead of the TSF.

These operational strategies of water diversion will initially continue during C&M with the management strategies being reviewed early in C&M. Under Scenarios 1 and 2, at least 1.2 years would be required to achieve the TSF C Pond height for PAG/NAG3 waste rock cover. Under Scenario 3, approximately four years is required to achieve the TSF C pond elevation for PAG/NAG3 waste rock and tailings cover, assuming water from the Central Diversion System would also be directed to the TSF to assist in achieving the target pond elevation.

There is greater potential for water accumulation in the TSF during C&M compared to Operations as a result of the increased brine volume that will be conveyed to the TSF and because no tailings or waste rock is being deposited into the TSF during C&M that requires additional water to saturate the interstitial space (voids). The Operational water treatment rate is 72 L/s (up to 2.3 Mm^3/yr; Appendix D) and the treatment rate required during C&M is 110 L/s (up to 3.5 Mm^3/yr) under the variable climate scenario modelled for the C&M period (Appendix D).

Preliminary actions required to manage TSF pond volumes in accordance with MSDP (March 2022) are summarized in Table 6.8-1.

6.9 Mine Site Water Management and Water Treatment Plants

Management of mine site water will continue through C&M with potentially modified procedures and mitigations established through operations (see MSDP, March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com). Preliminary triggers for additional mitigation and mine site water management and/or monitoring are provided in the MSDP and are expected to be established and updated periodically during Operations.

A Metals WTP will continue to treat water collected with open pit groundwater dewatering wells and at the pit sump and surface runoff from the Lower Waste Stockpile. Metals WTP effluent will continue to be directed to the WMP. Water from the LGO stockpile will be conveyed to the Lime Neutralization System and treated water will be discharged to the TSF C pond.

During C&M, the Membrane WTP will continue to treat surplus supernatant pond water from TSF C, however as indicated in Section 6.8 a higher maximum treatment rate is required (increasing from 72 L/s in Operations to 110 L/s for all C&M scenarios under the variable climate case). The costs (capital and operating) as well time to construct the additional treatment facility is provided in Appendix F.

The Membrane WTP is designed to remove sulphate, nitrogen (N)-species, and trace heavy metals in mine contact water. Treated water will be directed to the WMP and the brine by-product from the membrane filtration unit will be recycled to the TSF. Conveyance of brine to the open pit is not a preferred option given the desire to maintain a dewatered pit condition. Treatment efficiencies of the Membrane WTP will not be impacted by the worst case scenario C&M water quality predictions provided in Appendix F (BQE Water (V. Sundar, personal communication August 19, 2022). In-pit storage may be considered as a final storage contingency depending on water management (i.e., storage) constraints during the C&M period. Water in the WMP will be conveyed to the FWR prior to discharge to Davidson Creek.

The three C&M TSF cover scenarios described in Section 6.4 were also integrated into the water quality model developed for the Project (Lorax 2022). The C&M model water quality predictions are detailed in Appendix E and will be used to determine the preferred ML/ARD management strategy for the remaining exposed tailings beaches and whether alternative water management strategies should be implemented to enhance the C&M Plan.

Table 6.9-1 provides a summary of the three modelled C&M scenarios integrated into the existing water quality model. At the end of the C&M period the pond would be pumped down (Section 6.15) to achieve a TSF pond elevation that is suitable for a return to Operations scenario (see Appendix D). The assumed Membrane WTP capacity would need to be increased at the end of the C&M period to draw down the pond. Assuming a 50% increase in treatment capacity above the rate used to maintain the TSF Pond during C&M (165 L/s), a period of approximately 1.5 years would be needed to draw down the scenarios 1 and 2 ponds and 6 to 8 years would be needed to draw down the Scenario 3 pond prior to the restart of Operations.

Table 6.8-1: Actions to Manage Water Surplus in the Tailings Storage Facility during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Allow water to accumulate within the supernatant pond to reach an elevation as defined by the selected C&M scenario (e.g., Scenario 1 and 2 will be slightly above the crest elevation of the PAG/NAG3 waste rock dump to achieve saturation of and provide a shallow water cover to prevent oxidation while the water level in Scenario 3 would be above the top of the tailings surface in addition to the PAG/NAG3 waste rock dump), unless otherwise directed by the TSF EOR.	Immediately	1x	Water levels reported on as required by TSF OMS Manual[1]	NA
Drain and modify the water reclaim system for temporary shutdown and/or reconfigure for reduced delivery of water to Membrane WTP and/or Plant Site area.[2]	30 days	1x	Completed work orders Documented inspection	NA
Continue operation of the Membrane WTP to treat surplus water from TSF C to maintain the TSF C pond within target operating range for C&M (an increased treatment capacity will be required to maintain the operating range as identified in the modelled C&M scenarios). Treated effluent is discharged to the WMP and the Membrane WTP brine is directed to the TSF.	Continuous	As needed	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting Quarterly and annual reporting in the Regulatory Information Submission System (MDMER) if effluent is being discharged to environment	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[3] TSF OMS Manual (in prep)[1] Mine Waste and Water Management Plan (in prep)[4]
Continue monitoring of groundwater wells, outflow monitoring stations, and water level stations.	Continuous	In accordance with the Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[3] and TSF OMS Manual[1]	As required by the TSF OMS Manual[1] *Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[3] TSF Operations Maintenance and Surveillance Manual (in prep)[1]

NA = not applicable; MDMER = Metal and Diamond Mining Effluent Regulation; OMS = Operations Maintenance and Surveillance; TSF = Tailings Storage Facility; FWR = freshwater reservoir; WMP = water management pond; WTP = Water Treatment Plant.

[1] A TSF OMS manual will be prepared following initial construction and prior to commissioning of the TSF to provide comprehensive operating instructions and monitoring frequencies for the TSF instrumentation.

[2] Lime is added in a neutralization tank to neutralize the LGO stockpile runoff. There will be a minimal amount of water required for this that is anticipated to come from operating freshwater wells. Updates to this process can be completed upon entering the C&M phase. There will be reduced power to the Plant Site during the C&M phase that will be sufficient to maintain the operation of the lime neutralization system.

[3] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

[4] EAC Condition 33 Mine Waste and Water Management Plan will be developed 90 days prior to the start of placing tailings or waste rock under water cover in the TSF.

Table 6.9-1: Care and Maintenance Model Scenarios Model Assumptions

Scenario	Model Assumptions
Scenario 1 – No cover on the exposed tailings beach	■ Assumes the TSF C pond elevation increases in the C&M period to cover PAG/NAG3 waste rock that has been placed in the TSF to an elevation of 1,277 masl. ■ At this pond elevation, approximately 235,000 m^2 of the tailings beach remains exposed and would be expected to become acidic after one year of exposure.
Scenario 2 – Soil cover on the exposed tailings beach	■ Same model assumptions as per Scenario 1, except for the addition of a soil cover on the tailings beach. The soil cover is assumed to be in place within two years after the start of C&M.
Scenario 3 – Tailings beach submerged under water cover	■ Requires a TSF C pond elevation of 1,285 masl. This elevation exceeds the maximum allowable pond elevation based on freeboard requirements for storage of the Inflow Design Flood (IDF) with a dam crest at 1295 masl and would require on-going dam construction or other means of managing the IDF consistent with the TSF design criteria (KP 2022b). ■ Under this sce110nario, water from the Central Diversion System will be directed to TSF C to assist with filling the pond to the target level. ■ Filling TSF C pond takes approximately 4 years (average climate case; Year 4 to end of Year 7). It is assumed tailings beaches exposed for over one year become acidic prior to flooding. ■ TSF C pond would be maintained at 1,285 masl elevation through the C&M period and during this time, all tailings beaches are assumed to submerged. ■ Dewatering of the pond prior to the restart of Operations occurs over a six to eight year period. During this period, the exposed tailings beach is assumed to be acidic.

The source terms applied in the C&M water quality model scenarios are generally consistent with those presented in Lorax (2021) and the updates summarized in Lorax (2022) (i.e., brine updates and updated treatment rates for selected parameters). Additional updates include the following (see Appendix E for a detailed description of source terms):

- An acidic tailings source term was developed for C&M Scenario 1.
- A higher proportion of the pit wall is assumed to be acidic during the C&M period.
- A gypsum solubility cap was applied in the TSF pond during the C&M period to account for the brine input into the TSF C pond.

The key mine site facilities that reflect changes occurring in the model during the C&M period include:

- TSF C pond (see Appendix E for time series plots of key parameters): WTP brine is the source of the dominant load for major ions to the TSF C pond; however, at the assumed WTP rate (110 L/s, VCC model) the model suggests that there is sufficient dilution from background sources to maintain relatively low concentrations. Once the WTP rate is modelled to increase to dewater the pond in preparation for a re-start of operations, the major ion concentrations rapidly increase. Relatively minor loads contributing to major ion concentrations include water from the Interim ECD and the Lime Neutralization System. The dominant loads are relatively consistent for each scenario.

  The sources of load for metals include tailings beach runoff and infiltration (Scenario 1 and Scenario 3 only), water from the Interim ECD and Lime Neutralization System, and WTP brine. The relative importance of these sources varies between parameters. For example, for Cd and Zn tailings beach runoff and infiltration represent the dominant sources of loading in Scenarios 1 and 3; although this load decreases over time due to the source term assumptions (see Appendix E) and other loads

increase in relative importance. In Scenario 2, the dominant loads for Cd and Zn are Interim ECD, Lime Neutralization System, and WTP brine because the tailings beach is covered in this scenario (i.e., no acidic tailings inputs). In comparison, the dominant sources of loading for antimony are Interim ECD water and WTP brine in all three scenarios since the acidic tailings beach is not a dominant source of load for this parameter.

- Pit sump (see Appendix E for time series plots of key parameters): Predicted concentrations for sulphate and most metals show a slight increase for the C&M period in pit sump water in comparison to Operations. This increase is due to the source term assumptions including an increase in exposed acidic PAG waste rock in the pit walls. Loads from exposed pit walls generally represent the key load to pit sump water. Overall, the pit sump predictions are consistent for the three scenarios.
- FWR (see Appendix E for time series plots of key parameters): The dominant load to the FWR is treated water from TSF C (via Membrane WTP; e.g., sulphate, metals) and the pit sump (via the Metals WTP; e.g., sulphate). Due to the water treatment in place for the Project, differences in predicted water quality at upstream nodes in the three scenarios only have minor impacts on downstream water quality.

The water quality model results indicate the system is relatively insensitive to differences in cover types between the three scenarios.

From a water quality perspective, the C&M modelling indicates that all scenarios would be acceptable in that the predicted water quality in the Project receiving environment is less than BC WQG for the protection of aquatic life (and/or is equal to background terms) and is therefore unlikely to result in adverse effects to aquatic receptors. This is primarily a result of the mitigations that are in place to manage Project-related loading to the receiving environment including the treatment of pit sump water and TSF C pond water prior to discharging to the receiving environment during a C&M period.

An update to this C&M water quality model will be completed at a minimum every 5 years (see Section 10.2) while the mine is in operations to evaluate the potential risks to the aquatic receiving environment as a result of water management during a hypothetical C&M period. Prior to commencing the C&M water quality model update, the selection of a suitable C&M scenario will be completed as a risk assessment completed in coordination with the TSF EOR, geochemistry and water quality qualified professional(s), and reclamation and closure plan qualified professionals.

The most recent C&M water modelling results would therefore be updated following the risk assessment and consider at a minimum the following topics:

- The expected duration of a C&M period if it differs from 20 years;
- The ML/ARD potential from the exposed tailings taking in account how long they have been left exposed from time of spigot release into the TSF and expected subaerial beach area remaining after the management measures above are applied;
- The ability for the site to maintain a water cover over the exposed tailings and what duration it would be expected for the water cover to remain;
- Additional ML/ARD mitigations for the TSF exposed beaches and other site facilities;
- Alternative treatment routing strategies (e.g., benefits/drawbacks of routing various flows to the Metals WTP or Membrane WTP) to facilitate discharge of treated flows to the WMP instead of the TSF;
- Expansion of treatment facilities or modification of treatment technologies;

- Any additional geotechnical constraints or considerations identified at the time; and
- The risk of consuming reclamation materials for this purpose and the potential for them to be covered by tailings upon restart of operations and thus leaving the mine in a situation where reclamation materials are not available for a final cover.

Along with the risk assessment, a monitoring plan would already be in place through the MSDP and AEMP to monitor for ML/ARD and routine water quality parameters. The site would continue to discharge water when water quality is in compliance with permits and the MDMER. The MSDP may be updated during C&M if any enhancements are identified during the risk assessment and updated technical water modelling.

Actions that will be implemented to manage mine site water and the water treatment plants during periods of C&M are included in Table 6.9-2.

6.10 Access Management

Access to the mine site from the Kluskus-Ootsa FSR will be via the exploration access road until the Mine Access Road (MAR) is constructed. The MAR is planned to be constructed for use to support the construction of the mine commencing in Y -2. Once the MAR is constructed and operational in Y -2, the exploration access road will be decommissioned. The procedures in the Mine Site Traffic Control Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com) will be reviewed and modified, as required.

During C&M, the number of people coming to the site will decrease and largely be shift changes for personnel responsible for C&M, inspections by regulators, and an occasional visitor.

The gatehouse and security checkpoint, located at approximately km 5.8 along the MAR, will be staffed to monitor mine site access. Actions by the caretaker that will be taken to manage access and security control during periods of C&M are provided in Table 6.10-1.

6.11 Role of the Independent Environmental Monitor

EAC Condition 12 describes the requirements for the IEM. Pursuant to the condition, the role of the IEM is to:

a. observe, record for, and report to, the EAO and Aboriginal Groups on compliance with the Certificate; and

b. provide information to the EAO and Aboriginal Groups, EMPR (EMLI), ENV, and FLNRORD, as directed by the EAO.

The Certificate holder must retain the IEM throughout the Project's Construction, Operation, Closure and Post-closure phases.

During C&M, the IEM terms of engagement will continue to apply. The IEM will continue to participate in monitoring associated with the EAC conditions, subject to the nature and frequency of monitoring identified in the IEM terms of reference, and the EAC conditions that continue to apply (Table B-1 in Appendix B). Access to the site would also be provided to enable the IEM to perform their duties.

Table 6.9-2: Actions to Manage Mine Site Water and Water Treatment Plants during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Open Pit				
If suspension of activities occurs between Year-1 and Year+17 the open pit will be dewatered with flows (pit sump and depressurization wells) conveyed to Metals WTP in accordance with the MSDP. If suspension of activities occurs starting in Year +18, the Pit Lake water levels will be managed with natural ground water inflows; Surface water runoff and precipitation and surplus water from the TSF will be pumped to the open pit it to aid in filling.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Open Pit and Stockpile Design Report (MMTS 2021) Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]
Stockpiles				
Water contacting the LGO Stockpile will be collected, neutralized with lime inside the process plant, and discharged to TSF C in accordance with the MSDP.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]
Surface flows from the waste stockpile(s) will be collected during operations and directed to the Metals WTP in accordance with the MSDP.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]
Water Management Infrastructure				
Update the mine site water balance model (WBM) and evaluate the TSF ponds for the projected fill rate, operational freeboard, and surplus water management needs/timing.	180 days	Annually	Updated WBM	TSF OMS Manual (in prep)[2] Mine Waste and Water Management Plan (in prep)[3]
Water from the WMP will be discharged via a pumping system and pipeline to the FWR.	Continuous	As needed	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Water Management Infrastructure *(cont'd)*				
The FWR will continue to collect direct precipitation on the FWR and runoff from contributing catchments, diverted flows from the Northern Diversion System, water pumped from the WMP, and Tatelkuz Lake water via the Freshwater Supply System (only in place after year 5 of Operations) if suspension of activities occurs during the later phases of mine operations. Water in the FWR (that complies with permit limits) will be discharged to upper Davidson Creek to meet Davidson Creek instream flow needs in accordance with the MSDP.	Continuous	As needed	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting Quarterly and annual reporting in the Regulatory Information Submission System (RISS; MDMER) if effluent is being discharged to environment	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]
Surface water diversions (e.g., Central Diversion System and Northern Diversion System) will be maintained and operated as required to convey non-contact water around the TSF to the FWR for release to Davidson Creek in accordance with the MSDP.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016) annual reporting* Quarterly and annual reporting in the RISS (MDMER) if effluent is being discharged to environment	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]
Sediment Control Ponds (SCPs) will continue to collect runoff and discharge to the receiving environment in accordance with the MSDP.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting Quarterly and annual reporting in the RISS (MDMER) if effluent is being discharged to environment	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
Water Management Infrastructure *(cont'd)*				
Water collection ponds for the LGO Stockpile, Lower Waste Stockpile, and Upper Waste Stockpile will continue to collect runoff, toe discharge and direct precipitation prior to conveyance for water treatment in accordance with the MSDP.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1] Stockpiles Geotechnical and Water Management Design Report (KP 2022a); Upper Waste Stockpile Geotechnical and Water Management Design (KP 2022f)
If suspension of activities occurs between Year -1 and Year +6 the IECD will continue to manage seepage from Main Dam C, groundwater discharge, and surface water runoff and convey the recovered flows to the TSF C pond. If suspension of activities occurs between Year +6 and Year +17, the ECD will continue to manage seepage and storm water inflows and will utilize a pumpback system to convey the recovered flows to the TSF. If suspension of activities occurs starting in Year +18, the ECD will continue to manage seepage and storm water inflows and will utilize a pumpback system to convey the recovered flows to the open pit.	Continuous	NA	*Mines Act (EMLI 2021b)* and *Environmental Management Act (BC MOE 2016)* annual reporting	Mine Site Water and Discharge Monitoring and Management Plan (March 2022)[1]

NA= not applicable; MDMER = Metal and Diamond Mining Effluent Regulation; MSDP = Mine Site Water and Discharge Monitoring and Management Plan; OMS = Operations Maintenance and Surveillance; TSF = Tailings Storage Facility.

[1] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

[2] A TSF OMS manual will be prepared following initial construction and prior to commissioning of the TSF to provide comprehensive operating instructions and monitoring frequencies for the TSF instrumentation.

[3] EAC Condition 33 Mine Waste and Water Management Plan will be developed 90 days prior to the start of placing tailings or waste rock under water cover in the TSF.

6.12 Role of Aboriginal Group Monitor(s)

EAC Condition 17 describes the requirements for Aboriginal Group Monitors, which require:

- For each Indigenous nation (as defined in the Project's Environmental Assessment Certificate #M19-01), the Holder must retain, or provide funding to retain, a minimum of one monitor for each Indigenous nation prior to commencing Construction. The monitors must be retained throughout the Project's Construction, Operations and Closure phases.
- The scope of the monitor's activities will be related to monitoring for potential effects from the Project on the Indigenous nations' Interests.
- The monitor must be approved by the Indigenous nation and the Holder, unless otherwise authorized by EAO.
- The Holder is not required to retain a monitor or fund the retention of the monitor, during periods where there is no one willing or able to carry out the duties of a monitor on behalf of that particular Indigenous nation.

The Aboriginal Group Monitor activities during C&M identified will apply, subject to the EAC conditions that continue during care and maintenance (Table B-1 in Appendix B). Aboriginal Group Monitor access to the site will be in accordance with protocols identified in their terms of reference.

Table 6.10-1: Actions to Manage Mine Site Access during Care and Maintenance

Action	Timeline after Entering C&M	Frequency	Documentation	Guideline or Reference
The security gatehouse will be staffed 24/7. BW Gold will prevent the general public to access the mine site unless as an authorized visitor.	Immediately	n/a	Security records	Mine Site Traffic Control Plan (March 2022)[1]
Access to the mine site will be by appointment only and non-employees will not be allowed to travel unaccompanied on the mine site without permission. The security checkpoint will continue to authorize vehicle access to the site.	Immediately	n/a	Security records	Mine Site Traffic Control Plan (March 2022)[1]
Service roads that lead to the mine site will be a locked security gate at the mine site boundary or a physical barrier will be in place to prevent access by vehicular traffic. These roads will be signed to indicate that access is prohibited for snowmobiles, All Terrain Vehicles (ATV) and off-road motorcycles (unless required for Project work).	Immediately	n/a	Security records	Mine Site Traffic Control Plan (March 2022)[1]
High-risk areas of the mine site (e.g., explosives storage facility and electrical sub-stations) will be locked to prevent unauthorized entry. Video surveillance of high-risk areas may be installed.	Immediately[1]	n/a	Security records	Mine Site Traffic Control Plan (March 2022)[1]
Waste transfer areas will be barricaded and or locked to prevent wildlife access into these areas. All waste will be removed at the start of C&M such that waste handling will be minimal and only that which is required to support C&M.	Immediately[2]	n/a	Security records, waste inventory records	Waste (Refuse and Emissions) Management Plan (March 2022)[1]
A physical barrier will be in place at the decommissioned exploration access road to prevent off-road vehicles from accessing the reclaimed road bed. This area will be signed to indicate access is prohibited.	Immediately	n/a	Security records	Mine Site Traffic Control Plan (March 2022)[1]

n/a = not applicable.

[1] Or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com.

[2] Fencing will be installed after 90 to 180 days.

During C&M, the process and protocols for inviting Aboriginal Group Monitors (required by Condition 17) in site inspections as set out in the IEM terms of reference will continue to apply. The frequency of site inspections will be based on the detailed workplan approved by EAO (required by Condition 12) and take into account the purpose of the inspection and the EAC conditions that continue to apply during C&M (Table B-1 in Appendix B).

6.13 Applicable Environmental Assessment Certificate Documents and Conditions

Table B-1 in Appendix B identifies the:

- EAC documents that will be superseded for as long as the C&M Plan is being implemented; and
- EAC conditions that will apply in full or cease to apply during C&M, including a rationale for conditions that will cease to apply during care and maintenance.

6.14 Ramp Down

The Health, Safety and Reclamation Code for Mines in British Columbia (EMLI 2021) specifies the notification requirements for a mine as follows:

- Notice Required
- Section 10.6.1 *The owner, agent, or manager shall provide written notice of not less than 7 days to an inspector of intention to stop work in, on, or about a mine.*
- Sections 10.6.2 to 10.6.16 outline additional requirements as applicable.

Upon notification of a ramp down in site activity, regulators, Indigenous nations (as defined in the Project's Environmental Assessment Certificate #M19-01), and stakeholders will be advised of the suspension of Project activities. Appendix C provides a preliminary check list for advancing into C&M during construction and operations.

6.15 Ramp Up

The restart and ramp up of the mine site coming out of C&M will require a mine restart plan to be prepared and submitted to EMLI for review and approval. Planning for restart will be developed with and communicated to regulatory agencies, Indigenous nations, and stakeholders.

At the time of ramp up back to a fully operating state (whether during construction or operations), procedures and logbooks will be reviewed to note any issues of concern. Maintenance personnel will tour buildings and review equipment and machinery that will be restarted to ensure it is in good working order. Re-commissioning procedures will be reviewed by site personnel and equipment manufacturers and updated should this be necessary. In the case of selecting one of the three C&M scenarios described in Sections 6.4 and 6.8, the ramp up period will need to be considered. Increased treatment rates are required at the end of C&M to increase the draw down of the pond volume to resume operations (i.e., access the PAG/NAG3 waste rock dump within the TSF). As discussed in Appendix D, the Membrane WTP treatment rate could require a 50% increase (to 165 L/s) prior to restarting Operations when considering variable climate conditions. Under Scenarios 1 and 2, the time to pump down the TSF C pond is 1.5 years and under Scenario 3 the time to pump down the TSF C pond is 6 to 8 years.

Outcomes from modelling completed (or updated as described in Section 10 – Plan Validation) will also be used to verify and assess any technical, financial, schedule, market or other barriers that may come because of a C&M period followed by a re-start of operations scenario in alignment with the plan update timelines discussed in Section 10. The purpose of this would be to evaluate and assess the C&M operational strategy and steps entering the C&M period that could be implemented to avoid, limit and or reduce any potential technical, environmental risk, or financial barriers to an operational re-start (e.g., unforeseen costs due to treatment of a build-up of water in an open pit).

7. EMERGENCY PREPAREDNESS AND RESPONSE

BW Gold has prepared a Mine Emergency Response Plan (MERP; March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com) to identify and respond to potential emergency situations and accidents, some of which have the potential to affect the environment. The MERP will apply through all phases of the mine life; construction, operation, decommissioning and closure, post-closure, and during C&M. The MERP may require modification based on the number of employees and contractors on site and C&M required for facilities in place at the time the site enters into C&M. Proposals to modify the MERP would require regulatory review and approval. BW Gold is required by EAC Condition 36 to implement an Accidents Communications and Administration Plan (March 2022 or the most recent copy produced for the project, which can be accessed by visiting the project's public website at https://blackwatergoldmine.com), which includes notice provisions in the event of an accident or malfunction. During an environmental emergency, BW Gold will implement emergency response procedures to prevent or mitigate potential adverse environmental effects. Incidents will be reviewed to ensure that corrective actions have been taken, and follow-up preventative actions will be implemented as appropriate.

8. ENVIRONMENTAL MANAGEMENT AND COMPLIANCE MONITORING

The Project's Environmental Management System provides the framework to organize and guide activities during all phases of the mine and to ensure orderly, safe, compliant, and environmentally and socially responsible operations at the mine. The Mine Management Plans provide a system of procedures that will control, mitigate, monitor, record and report, and minimize the effects of the mine and promote the protection of the environment, and maintain worker and public health and safety records to support environmental protection.

BW Gold is responsible for ensuring regulatory compliance while the mine is in C&M. All relevant regulatory permits will be adhered to and authorizations will be kept current and all obligations met accordingly. This will include reporting and monitoring required by the *Mines Act* permit (including Annual Reclamation Report; EMLI 2021), *Environmental Management Act* waste discharge permits (ENV 2016), and EAC Conditions. Environmental effects monitoring and reporting is required by the federal MDMER.

9. REPORTING AND RECORD KEEPING

Reporting and record keeping will continue as per conditions in federal and provincial authorizations and regulatory requirements (as listed in Section 8). The EM will be responsible for maintaining compliance and training records. The records will be made available upon request.

As required by EAC Condition 5, reports will be submitted to EAO and Indigenous nations within the following timelines as follows, excluding Post-Closure, which is not applicable to temporary shutdown:

a. At least 30 days prior to the start of Construction;

b. On or before March 31 in each year after the start of Construction;

c. At least 30 days prior to the start of Operations;

d. On or before March 31 in each year after the start of Operations;

e. At least 30 days prior to the start of Closure; and

f. On or before March 31 in each year after the start of Closure until the end of Closure.

10. PLAN VALIDATION AND REVISION

10.1 Plan Validation

The C&M Plan will be validated through a specific C&M scenario selected in consultation with Indigenous nations and using the latest water modelling tools developed for the project to evaluate the expected performance and outcomes of applying the C&M Plan to the selected scenario. Outcomes of the modelling scenario will also be used to verify and assess any barriers that may come as a result of a C&M period followed by a re-start of operations scenario. The purpose of this would be to evaluate and assess the C&M operational strategy and steps entering the C&M period that could be implemented to avoid, limit and or reduce any potential technical, environmental risk, or financial barriers to an operational re-start (e.g., unforeseen costs due to treatment of a build-up of water in an open pit). The C&M Plan may be refined following the plan validation process to incorporate any valuable changes into management, mitigation or monitoring actions, identified by the process.

The validation exercise will be updated, if required, when major revisions to the C&M Plan occur or at other times at the discretion of the GM and Qualified Professional(s) determined in consultation with EMLI, ENV, FLNRORD, and Indigenous nations. At a minimum, BW Gold commits to re-running a C&M modelling scenario at 5-year intervals, consistent and aligned with the timing and other modelling requirements that normally take place as part of the *Mines Act* permit requirement for an updated detailed 5-year mine plan and reclamation and closure plan.

10.2 Plan Revision

Revisions to the C&M Plan will be completed in consultation with EMLI, ENV, FLNRORD, and Indigenous nations, as completely as possible, and prior to the initiation of a C&M period, unless otherwise authorized by the EAO. Revised versions of the plan will be filed with EAO, EMLI, ENV and FLRNORD, and provided to Indigenous nations. The C&M Plan and any amendments thereto, must be implemented during any C&M period to the satisfaction of a Qualified Professional and to the satisfaction of the EAO.

The first major planned revision to the C&M Plan will be when the Mine Waste and Water Management Plan, as required by EAC Condition 33, is completed. This will be developed and submitted as a draft to the parties required by the EAC Condition 33, for review as listed in the Document Submission Plan required by EAC Condition 10. Additional planned revisions will include review and periodic updates, as required due to changes in the mine infrastructure or progressive refinement of the C&M Plan. General arrangement figures will be added to reflect current site infrastructure and facilities in future revisions. At a minimum (if there is no planned C&M period), BW Gold commits to revising the C&M Plan every 5 years based on the C&M modelling exercise commitment described above, consistent and aligned with the timing for an updated detailed 5-year mine plan and reclamation and closure plan.

11. QUALIFIED PROFESSIONALS

This management plan has been reviewed by, or prepared under the direct supervision of, the following qualified professionals:

Daniel Fontaine, P.Eng.
Specialist Engineer, Associate
Knight Piésold Ltd
(Reviewed Sections 6.3, 6.4, 6.7, 6.8 and 6.9)

Cindy Starzyk, Ph.D., P.Eng.
Specialist Hydrogeological Engineer, Associate
Knight Piésold Ltd
(Reviewed Sections 6.4, 6.8 and 6.9)

Jennifer Stevenson, P.Geo.
Environmental Geoscientist,
Lorax Environmental Services Ltd.
(Reviewed Geochemistry Aspects)

Rolf Schmitt, P Geo.
ERM Consultants Canada, Ltd.

12. REFERENCES

Legislation

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Declaration on the Rights of Indigenous Peoples Act, SBC 2019, c. 44.

Environmental Assessment Act, SBC 2018, c. 51.

Environmental Management Act, SBC 2003, c. 53.

Impact Assessment Act, RSC 2019, c. 28, s.1.

Metal and Diamond Mining Effluent Regulation, SOR 2002/222.

Mines Act, RSBC 1996, c. 293.

Spill Reporting Regulation, BC. Reg. 221/2017.

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KP 2022d. *Blackwater Gold Project – Water Management Structures Detailed Design Report.* KP Reference No. VA101-457/33-14 Rev. 2, dated April 14, 2022. Prepared for BW Gold Ltd. by Knight Piésold Ltd., Vancouver, BC.

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APPENDIX A CONCORDANCE TABLE WITH ENVIRONMENTAL ASSESSMENT CERTIFICATE #M19-01 CONDITIONS (JUNE 21, 2019)

Condition	Condition	Location in Plan
Condition 2 (Plan Development)	Where a condition of this Certificate requires the Holder to develop a plan, program or other document, any such plan, program or other document must, at a minimum, include the following information: a) purpose and objectives of the plan, program or other document;	Section 2
	b) roles and responsibilities of the Holder and Employees;	Section 3, Table 3-1
	c) names and, if applicable, professional certifications and professional stamps/seals, of those responsible for the preparation of the plan, program, or other document;	Section 11
	d) schedule for implementing the plan, program or other document throughout the relevant Project phases;	Section 6 identifies timelines for implementing specific actions for topics covered by the plan when the Project enters into C&M.
	e) means by which the effectiveness of the mitigation measures will be evaluated including the schedule for evaluating effectiveness;	n/a – The C&M Plan will rely on the assessment of mitigation measures identified in EAC plans that continue to apply in C&M.
	g) schedules and methods for the submission of reporting to specific agencies, Aboriginal Groups and the public and the required form and content of those reports; and	Section 5.1, 6.13 and 6.14 include provisions to notify EMLI as per the Health, Safety and Reclamation Code, other regulators, Indigenous nations, and stakeholders when the mine enters into and out of C&M.
	h) process and timing for updating and revising the plan, program or other document, including any consultation with agencies and Aboriginal Groups that would occur in connection with such updates and revisions.	Section 10 - Plan Validation and Revision
Condition 3 (Adaptive Management)	Where a condition of this Certificate requires the Holder to develop a plan, program or other document that includes monitoring, including monitoring of mitigation measures or monitoring to determine the effectiveness of the mitigation measures, the Holder must include adaptive management in that plan. The objective of the adaptive management is to address the circumstances that will require the Holder to implement alternate or additional mitigation measures to address effects of the Project if the monitoring shows that those effects: a) are not mitigated to the extent contemplated in the Application; b) are not predicted in the Application; or c) have exceeded the triggers identified in paragraph g) of this condition. The adaptive management in the plan must include at least the following: a) the monitoring program that will be used including methods, location, frequency, timing and duration of the monitoring;	Adaptive management does not apply to the C&M Plan for the reasons provided below. The purpose of the C&M Plan address how specific topics will be addressed during C&M periods. It does not include monitoring. Monitoring will be completed as identified in the monitoring management plans that will apply during C&M. The plans applicable during the C&M are indicated in Appendix B.

Condition	Condition	Location in Plan
Condition 3 (Adaptive Management; *cont'd*)	b) the baseline information that will be used, or collected where existing baseline information is insufficient, to support the monitoring program;	No baseline information is required to be collected to support this plan and there is no monitoring plan. Monitoring will be informed by various management plans that will apply during C&M.
	c) the scope, content and frequency of reporting of the monitoring results;	BW Gold will follow reporting requirements outlined in management plans that apply during C&M and permit requirements.
	d) the identification of qualitative and quantitative triggers, which, when observed through monitoring required under paragraph d), will require the Holder to alter existing, or develop new, mitigation measures to avoid, reduce, and/or remediate effects;	The C&M Plan does not include any triggers and will defer to triggers identified in management plans that apply during C&M.
	e) the methods that will be applied to detect when a numeric trigger, or type or level of change referred to in paragraph g), has occurred;	The C&M Plan does not include any triggers or methods that will apply to detect a level of change. The C&M Plan will defer to triggers identified in management plans that apply during C&M.
	f) a description of the process for and timing to alter existing mitigation measures or develop new mitigation measures to reduce or avoid effects;	There are no mitigation measures specific to the C&M Plan. The C&M Plan will defer to the process for altering/new mitigation measures in management plans that apply during C&M.
	g) identification of the new and/or altered mitigation measures that will be applied when any of the changes identified in paragraphs a) to c) occur, or the process by which those will be established and updated over the relevant timeframe for the specific condition;	There are no mitigation measures specific to the C&M Plan. The C&M Plan will defer to provisions in other management plans that apply during C&M.
	h) the monitoring program that will be used to determine if the altered or new mitigation measures and/or remediation activities are effectively mitigating or remediating the effects and or avoiding potential effects; and	There is no monitoring program specific to the C&M Plan.
	i) the scope, content and frequency of reporting on the implementation of altered or new mitigation measures. If there are any requirements or mitigation measures required in the plan, program or other document for which adaptive management, or elements of adaptive management listed in paragraphs d) to l) are assessed to be not appropriate or applicable, the plan must include identification of those requirements and measures, and the rationale for that assessment.	None of the requirements in this condition apply as indicated above.

Condition	Condition	Location in Plan
Condition 4 (Consultation)	Where a condition of this Certificate requires the Holder consult a particular party or parties regarding the content of a plan, program or other document, the Holder must, to the satisfaction of the EAO: a) provide written notice to each such party that: i) includes a copy of the plan, program or other document; ii) invites the party to provide its views on the content of such plan, program or other document; and iii) indicates: I. if a timeframe for providing such views to the Holder is specified in the relevant condition of this Certificate, that the party may provide such views to the Holder within such time frame; or II. if a timeframe for providing such views to the Holder is not specified in the relevant condition of this Certificate, specifies a reasonable period during which the party may submit such views to the Holder; b) undertake a full and impartial consideration of any views and other information provided by a party in accordance with the timelines specified in a notice given pursuant to paragraph (a); c) provide a written explanation to each such party that provided comments in accordance with a notice given pursuant to paragraph (a) as to: i) how the views and information provided by such party to the Holder have been considered and addressed in a revised version of the plan, program or other document; or ii) why such views and information have not been addressed in a revised version of the plan, program or other document; d) maintain a record of consultation with each such party regarding the plan, program or other document; and e) provide a copy of such consultation record to the EAO, the relevant party, or both, promptly upon the written request of the EAO or such party. The copy of such consultation record must be provided to the EAO, relevant party, or both, no later than 15 days after the Holder receives the request for a copy of the consultation record, unless otherwise authorized by the EAO.	BW Gold undertook the following activities with the consulted parties: ■ During the spring of 2021, BW Gold discussed the preparation of the C&M Plan in meetings with Indigenous nations. ■ On November 18, 2021, BW Gold provided Indigenous nations with the draft C&M Plan for their review. Concurrently, BW Gold provided the Issue Tracking Table (ITT) ■ On December 29, 2021, BW Gold provided the revised C&M Plan, ITT, submission letter, and management plan review table to Indigenous nations. Additionally, BW Gold advised that the C&M Plan had been developed to address the applicable Federal Decision Statement requirements. ■ On January 19, 2022, BW Gold met with CSFN to discuss comments regarding the care and maintenance plan and collaboratively developed a workplan for modelling scenario rationale details, modeling program key questions and action items specific to the plan. ■ On January 20, 2022, BW Gold participated in an Environmental Monitoring Committee Meeting (EMC) and BW Gold and CSFN co-presented on the C&M workplan for water balance and water quality modelling. ■ February 16, CSFN provided BW Gold with a request for a schedule of completing modelling and a list of questions that they would like to see the modeling answer.

Condition	Condition	Location in Plan
Condition 4 (Consultation; *cont'd*)		■ On February 21, 2022, BW Gold provided Indigenous nations a C&M Plan scenario rationale presentation slide deck for review and on February 24, 2022, proposed a meeting for March 1, 2022, to discuss the approach and how the outcomes of the modelling might be used to enhance the draft C&M Plan. ■ On March 1, 2022, BW Gold met with CSFN to present the C&M modelling scenario rationale and requested feedback. ■ On March 17, 2022, CSFN provided comments on the C&M modelling rationale provided by BW Gold on February 21, 2022. ■ On August 11, 2022, BW Gold met with CSFN to review the C&M modelling scenario results ■ On August 18, 2022, BW Gold met with the EMC to review the C&M modelling scenario results. The presentation is provided in Appendix G.
Condition 11 (Care and Maintenance Plan)	The plan must include, at a minimum, the means by which the following will be addressed: a) spill prevention and response for hydrocarbon storage and leaks and other accidental emissions from machinery or equipment;	Section 6.1
	b) sediment and erosion control;	Section 6.2
	c) management of tailings and waste rock;	Section 6.3, 6.4
	d) building maintenance;	Section 6.5
	e) measures to monitor and mitigate adverse effects to wildlife;	Section 6.6
	f) measures to monitor and mitigate adverse effects to receiving waters;	Section 6.7, 6.9
	g) measures to monitor, manage, and avoid build-up of water surplus to that required under Condition 33 (Mine Waste and Water Management Plan)	Section 6.8
	h) the role of the Independent Environmental Monitor (IEM) required under Condition 12 and Aboriginal Group monitors required under Condition 17 during care and maintenance periods;	Section 6.11, 6.12
	i) access management; and	Section 6.10

Condition	Condition	Location in Plan
Condition 11 (Care and Maintenance Plan; *cont'd*)	j) a list of Documents required by this Certificate that this plan supersedes for as long as this plan is being implemented.	Appendix B
	The plan must identify and describe how each condition in this Certificate will either: a) apply in full or in part during Care and Maintenance; or b) cease to apply during Care and Maintenance; and c) provide a clear rationale for any conditions proposed to cease to apply under paragraph l) or apply only in part under paragraph k).	Appendix B
	The Holder must provide the draft plan that was developed in consultation with EMPR, ENV, FLNRORD, and Aboriginal Groups to the EAO, EMPR, ENV, FLNRORD, and Aboriginal Groups for review a minimum of 60 days prior to Construction, or as listed in the Document Submission Plan required by Condition 10 of this Certificate.	This plan (see Condition 4, consultation)
	This plan must be updated in consultation with EMPR, ENV, FLNRORD, and Aboriginal Groups prior to any Care and Maintenance period, unless otherwise authorized by the EAO.	Section 2
	The plan and any amendments thereto, must be implemented during any Care and Maintenance period to the satisfaction of a Qualified Professional and to the satisfaction of the EAO.	Section 10.2

APPENDIX B APPLICATION OF EAC CONDITIONS DURING CARE AND MAINTENANCE

No.	Condition	Does C&M Plan supersede EAC document as long as C&M Plan is being implemented?	Does the Condition Apply in Full, in Part, or Cease to Apply during care and maintenance?	Rationale for Conditions that Cease to Apply
1.	Document Review and Implementation	No	Apply in full	
2.	Plan Development	No	Apply in full	
3.	Adaptive Management	No	Apply in full	
4.	Consultation	No	Apply in full	
5.	Compliance Verification and Reporting	No	Apply in full	
6.	Project Status Notification	No	Apply in full	
7.	Compliance Notification	No	Apply in full	
8.	Transfer of Certificate	No	Apply in full	
9.	Transfer of Interest in Project	No	Apply in full	
10.	Document Submission Plan	n/a	Addressed	Document Submission Plan submitted to EAO in December 2021.
11.	Care and Maintenance Plan	n/a	Apply in full	
12.	Independent Environmental Monitor	No	Apply in full	
13.	Construction Environmental Management Plan	Yes	Cease to apply	Topics (access management, erosion and sediment control, spill prevention) in the CEMP are discussed in the C&M Plan (and relevant portions of the CEMP) are superseded by the management protocols set out in the C&M Plan.
14.	Existing Disturbance	n/a	Addressed	Existing Disturbance Report submitted to EAO in September 2019.
15.	Indigenous Cultural Awareness and Recognition	No	Apply in full	
16.	Aboriginal Group Engagement Plan	No	Apply in full	

No.	Condition	Does C&M Plan supersede EAC document as long as C&M Plan is being implemented?	Does the Condition Apply in Full, in Part, or Cease to Apply during care and maintenance?	Rationale for Conditions that Cease to Apply
17.	Aboriginal Group Monitor and Monitoring Plan	No	Apply in part	The Aboriginal Group Monitor and Monitoring Plan will be implemented during any care and maintenance periods. However, terms of engagement defined in Appendix D of the plan are in some cases dependent on the duration of the C&M period.
18.	Cultural and Spiritual Resources Management Plan	No	Apply in full	
19.	Environmental Monitoring Committee	No	Apply in full	
20.	Air Quality and Fugitive Dust Management Plan	No	Apply In full	
21.	Noise and Vibration Effects Monitoring and Mitigation Plan	Yes	Cease to apply	With the cessation of mining and processing, noise and vibrations from the mine site are anticipated to be negligible as there will be reduced equipment and machinery operating, no blasting and no crushing.
22.	Caribou Mitigation and Monitoring Plan	No	Apply in full	
23.	Wildlife Management and Monitoring Plan	No	Apply in full	Note plan name is Wildlife Mitigation and Monitoring Plan.
24.	Wetland Management and Offsetting Plan	No	Apply in full	
25.	End Land Use Plan	Yes	Apply in full	
26.	Water Quality Management	No	Apply in full	
27.	Water Quality Report	n/a	Addressed	Cumulative baseline report is included in Chapter 2 of the *Mines Act* / *Environmental Management Act* Permits Application.
28.	Chedakuz Creek and Tatelkuz Lake Surface Water Quality Monitoring Plan	No	Apply in full	
29.	Transmission Line Sedimentation Monitoring Plan	No	Apply in full	

No.	Condition	Does C&M Plan supersede EAC document as long as C&M Plan is being implemented?	Does the Condition Apply in Full, in Part, or Cease to Apply during care and maintenance?	Rationale for Conditions that Cease to Apply
30.	Aquatic Effects Monitoring Plan	No	Apply in full	
31.	Tatelkuz Lake Protection Plan	No	Apply in full	
32.	Cyanide Management Plan	No	Apply in full	
33.	Mine Waste and Water Management Plan	No	Apply in full	
34.	Closure and Post-Closure Water Quality Management Plan	Yes	Apply in full	
35.	Tailings Dam Safety Transparency Plan	No	Apply in full	
36.	Accidents and Malfunctions Administration and Communication Plan	No	Apply in full	
37.	Community Liaison Committee and Community Effects Monitoring and Management Plan	No	Apply in full	
38.	Tenure Holder Communication and Mitigation Plan and Report	Yes	Apply in full	
39.	Final Transmission Line Routing Plan	n/a	Addressed	Phase 1 (advising stakeholders of final routing) was completed. Phase 2 (reporting) is in progress.
40.	Health and Medical Services Plan	No	Apply in full	
41.	Country Foods Monitoring Plan	No	Apply in full	
42.	Public Communications	No	Apply in full	
43.	Mitigations Table Update	N/A	Addressed	Submitted to EAO in May 2019.

APPENDIX C PRELIMINARY RAMP DOWN CHECKLIST

Category	Action	Responsibility	Construction	Operations
Notification	Notify Joint Occupational Health and Safety Committee	Mine Manager	X	X
	Notify government agencies: EAO, EMLI, ENV, FLNRORD, Impact Assessment Agency, Environment and Climate Change Canada (and other agencies as directed)	Corporate	X	X
	Notify IEM	EM	X	X
	Notify Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Saik'uz First Nation, Stellat'en First Nation, Nazko First Nation, Nee-Tahi-Buhn Band, Cheslatta Carrier Nation, Yekooche First Nation, Skin Tyee Nation and Tsilhqot'in Nation	Mine Manager / Communications Coordinator	X	X
	Notify employees and contractors	Human Resources	X	X
	Review supply and service contracts and notify suppliers	Purchasing Department		
	Notify Community Liaison Committee members	Communications Coordinator	X	X
Procedural	Review Mine Emergency Response Plan for reduced workforce	Departmental Manager	X	X
	Review Occupational Health and Safety Program	Departmental Manager	X	X
	Review Fuel Management and Spill Control Plan	Departmental Manager	X	X
	Review security requirements based on duration of shutdown	Departmental Manager	X	X
	Review SEPSCP	EM	X	X
	Review operating procedures and OMS manuals	Departmental Manager		
	Develop Workforce Transition Plan	Human Resources	X	X
Facilities and Equipment	Secure unfinished construction works	Construction Manager	X	
	Use maintenance shutdown procedures for processing plant	Departmental Manager		X
	Complete temporary shutdown procedures and initiate maintenance procedures for: ■ Plant Site and ancillary facilities ■ Open pit or Pit Lake ■ Explosives storage area ■ Contractor laydown areas ■ Borrow, aggregate screening areas, and concrete batch plant	Departmental Managers	Variable	X

Category	Action	Responsibility	Construction	Operations
Facilities and Equipment *(cont'd)*	Check installed water management structures and associated works	Departmental Manager	X	X
	Geotechnical modifications of engineered structures to support stability	Departmental Manager	X	X
	Empty grinding media from mills and drain and clean processing tanks	Departmental Manager		X
	Secure reagents in dry area for future use and adjust deliveries of reagents to meet site needs	Departmental Manager		X
	Return limited shelf life items from warehouse	Departmental Manager		X
	Return explosives to blast contractor	Departmental Manager	X	X
	Adjust fuel supplies and deliveries to meet site needs	Departmental Manager	X	X
	Close and winterize accommodations not be required by staff	Departmental Manager	X	X
	Modify utilities to meet site needs	Departmental Manager	X	X
	Ensure roads and access points maintain integrity and are cleared of snow	Departmental Manager	X	X
Records	Log books will be maintained to ensure 'one-off' items are captured and noted for future start up	EM, Departmental Manager	X	X

APPENDIX D MEMORANDUM: BLACKWATER GOLD PROJECT - WATER BALANCE MODELLING FOR CARE AND MAINTENANCE SCENARIO

Knight Piésold CONSULTING

August 19, 2022

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Mr. Travis Desormeaux
Environmental Manager
BW Gold Ltd.
3083 - 595 Burrard Street
Vancouver, British Columbia
Canada, V7X 1L3

Dear Travis,

RE: Blackwater Gold Project –Water Balance Modelling for Care and Maintenance Scenario

1.0 INTRODUCTION

This memorandum presents the results and updates to the Life of Mine (LOM) Water Balance Model (WBM) completed by Knight Piésold Ltd. (KP) for the Blackwater Gold Project (the Project) to assess water management strategies associated with a potential Care and Maintenance (C&M) period. The water balance modelling has been conducted to support a *Joint Mines Act Permit* / *Environmental Management Act* Permit Application (the Application) for the Project. Work presented in this letter supports the C&M information requirements for the Application outlined by a letter from the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) dated April 11, 2022 (EMLI, 2022) and specifically a C&M Plan developed for the 5 Year Mine Plan. The C&M Plan also addresses the requirements in Condition 11 of the Project's Environmental Assessment Certificate (EAC) #M19-01. Results of the water balance modelling were provided to Lorax Environmental Services Ltd. (Lorax) to support water quality modelling and predicted water quality associated with the potential C&M period.

The original LOM WBM is documented in the Life of Mine Water Balance Model Report (KP, 2021a; Appendix 5-B of the Application). The LOM WBM simulates water management flows, surface water, and groundwater flows using one continuous model that is built out through the entire life cycle of the proposed Project, from pre-mining (Baseline) through Post-Closure. Detailed information on model development and the water management strategy is provided in Appendix 5-B. The water balance modelling was subsequently updated to reflect water management optimizations in Closure/Post-Closure as documented in KP (2022). Updates to the Closure/Post-Closure water management strategy reflected in the water balance modelling do not influence simulated flows during the C&M period.

2.0 CARE AND MAINTENANCE SCENARIOS MODELLED

2.1 OVERVIEW

Details of the potential C&M period assessed in this modelling work were developed in discussion between Blackwater Gold (BW Gold) and Carrier Sekani First Nation (CSFN) and reflect requirements specified in the C&M information requirements (EMLI, 2022). The information requirements specify that the following is considered in the assessment of the C&M period:

- Assume the site is to enter a C&M phase at the end of Year 3 and

- Assume the C&M phase is to extend for a minimum of 20 years.

Three C&M scenarios were modelled to assess potential water management strategies in the event that the Project is placed on C&M. The three scenarios are distinguished by the material used to cover the tailings storage facility (TSF) during the C&M period and are summarized as follows:

- **Scenario 1: No temporary soils cover on tailings.** Water covers the waste rock in the TSF (potentially acid generating (PAG) and potentially metal leaching non-acid generating (NAG3) waste rock) and the tailings are sub-aerial.
- **Scenario 2: Soil cover placed on tailings**. Water covers all waste rock in the TSF and a soil cover is placed over the tailings.
- **Scenario 3: Full water cover**. Water covers all waste rock and tailings in the TSF.

2.2 WATER MANAGEMENT STRATEGY

2.2.1 C&M WATER MANAGEMENT OVERVIEW

The C&M period was modelled to begin at the end of Year 3 and extend for 20 years. The following water management strategies continue during the C&M period, consistent with the earlier years of Operations and are represented in the model:

- Collect and treat runoff and seepage from the Lower Waste Stockpile at the Metals water treatment plant (WTP) prior to discharge to the Water Management Pond (WMP).
- Collect runoff and seepage from the Low-Grade Ore (LGO) Stockpile for lime neutralization before discharge to the TSF.
- Collect potential seepage and runoff from the TSF at the Interim Environmental Control Dam (IECD) and pump back to the TSF.
- Treat surplus water from the TSF at the Membrane WTP. Brine from the Membrane WTP is directed to the TSF.
- Dewater the open pit by pumping water from the sump and the dewatering wells and directing it for treatment at the Metals Water Treatment Plan (WTP).
- Divert non-contact water around the facilities, including north collection channel and Central Water Transfer Pond.
- Direct water collected in the WMP to the FWR to maintain flows in Davison Creek.

A water management flow schematic representing the Care and Maintenance period (all modelled scenarios) is provided in Figure 1. Design elevations of material placed in TSF C at the end of Year 3 are summarized in Table 1. Facility footprint areas do not change during the C&M period.

The TSF C Pond volume increases in the initial ramp up period of C&M, resulting in a larger pond area and smaller area of exposed tailings beach. The waste rock voids fill with water as they become fully submerged. The TSF Pond volume is pumped down at the end of the C&M period to facilitate restart of Operations. Additional detail on management of water in the TSF during C&M is provided in the section that follows.

Table 1 Material Elevations in TSF C (End of Year 3)

End of Mine Year	PAG/NAG3 Waste Rock (masl)	Top of Tailings (Discharge Point) (masl)	Supernatant Pond (masl)	Crest Main Dam C[1] (masl)
3	1,276	1,285	1,274	1,295

Note(s):

1. Crest of Main Dam C elevation assumes the construction of the embankment continues through to the end of Year 2 only.

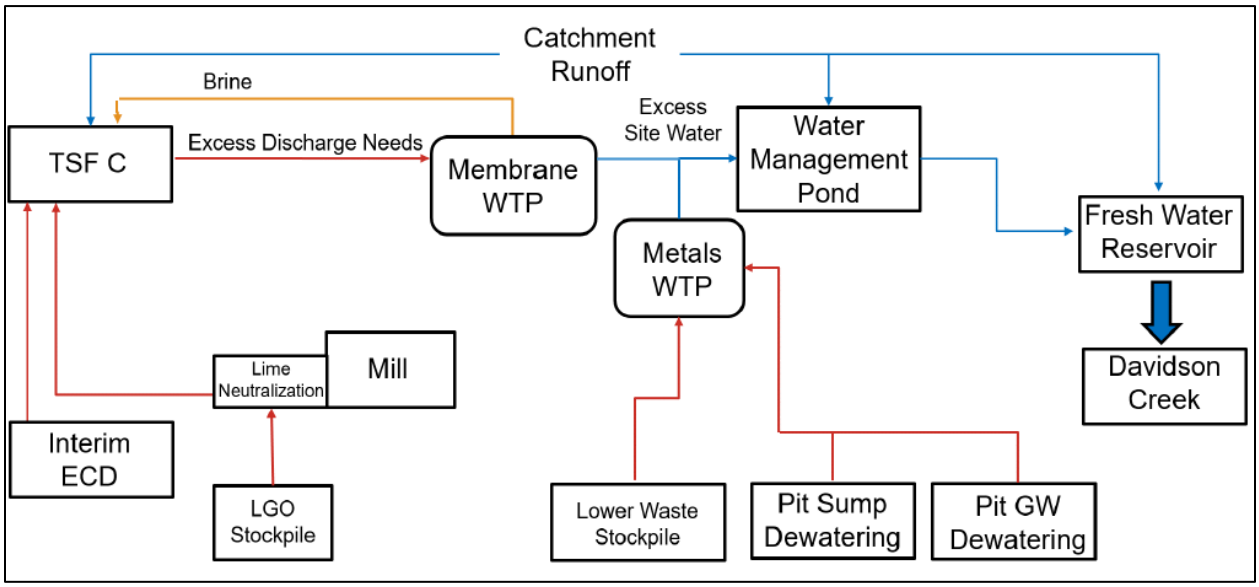


Figure 1 Simplified Flow Schematic – Care and Maintenance Period

2.2.2 MODELLED C&M SCENARIOS

Water management considerations specific to each modelled C&M scenario are described below. Water management plans for each modelled C&M scenario are provided in Appendix A.

Scenario 1 – No temporary cover on tailings:

- A TSF Pond elevation of 1,277 masl covers the entire PAG/NAG3 waste rock in TSF C with at least 1 m water cover. This target pond height has a volume of approximately 4 Mm^3.
- Assumptions for runoff and infiltration from the surface of the tailings material in the TSF remain unchanged from the first few years of Operations.

Scenario 2 – Soil cover placed on tailings:

- The TSF Pond elevation and volume requirements are the same as specified in Scenario 1.
- Placement of a soil cover over the tailings material in the TSF is assumed to be complete two years after the start of C&M. The soil cover is modelled with an increased soil moisture storage capacity compared to the tailings surface, consistent with the intended design of the cover to store and release water. The modelled water balance of the cover assumes the surface does not develop mature vegetation during the C&M period.

Scenario 3 – Full water cover:

- A TSF Pond elevation of 1,285 masl covers the entire tailings surface in addition to the PAG/NAG3 waste rock. This target pond height has a volume of approximately 14 Mm^3.

The maximum allowable TSF Pond volume based on the elevation of the Main Embankment crest at the end of Year 3, taking storm storage and minimum dry freeboard requirements (1 m) into account, is 1,279 masl (6 Mm^3). The 1,285 masl pond associated with Scenario 3 exceeds the maximum allowable elevation considering freeboard requirements for storage of the Inflow Design Flood (IDF). The modelled Scenario 3 pond elevation would not be acceptable unless on-going dam construction is planned during Year 3 resulted in a higher embankment crest elevation or if other means of managing the IDF were incorporated during the C&M period.

3.0 WATER BALANCE MODEL RESULTS

3.1 WATER MANAGEMENT

The water management strategy in C&M was assessed using average and variable climate inputs to the water balance model. Key results of the water management plan are discussed below and include the predicted time to achieve the target TSF Pond water level for C&M, the required rates of treatment at the Membrane WTP during C&M, and the time to pump down the pond to a suitable operating level to restart Operations at the end of C&M. Tables presenting the simulated annual water balance for TSF C assuming average climate conditions are provided in Appendix B. A summary of the main considerations for each scenario is provided in Table 2.

Table 2 Summary of C&M Scenarios

Scenario	Target TSF Pond Elevation (masl)	TSF Pond Volume (Mm^3)	Time to Achieve Target TSF Pond Elevation (Years)	Treatment Rate during C&M (1) (L/s)	Modelled Treatment Rate at End of C&M (2) (L/s)	Time to Pump Down TSF Pond at End of C&M (Years)
Scenarios 1 and 2	1,277	4	1.2	110	165	1.5
Scenario 3	1,285	14	4 (3)	110	165	6 to 8

Note(s):

1. Estimates of treatment rate and time are based on modelling conducted with variable climate inputs.
2. Modelled treatment rate to pump down the pond volume at the end of the C&M period was assumed to be 50% greater than the required treatment rate during the C&M period.
3. Time to achieve target TSF pond elevation for Scenario 3 includes directing water from the Central Diversion System to the TSF for three years to facilitate filling of the pond.

Waste Rock Submergence – C&M Ramp Up

At the end of Year 3, the modelled TSF C pond volume is approximately 1.5 Mm^3 assuming average climate inputs to the water balance model. The predicted time to submerge the waste rock in the TSF and to achieve the target pond elevation in each modelled scenario is as follows:

- Scenarios 1 and 2: Time to submerge the waste rock and achieve the target pond level is estimated at approximately 1.2 years assuming diversions are still fully active at directing water around the TSF to the downstream environment.

- Scenario 3: Time to cover the tailings material and waste rock is estimated at approximately 4 years assuming water at the Central Diversion is directed to the TSF for the first three years.

The simulated pond volume for each modelled C&M scenario is shown on Figure 2.

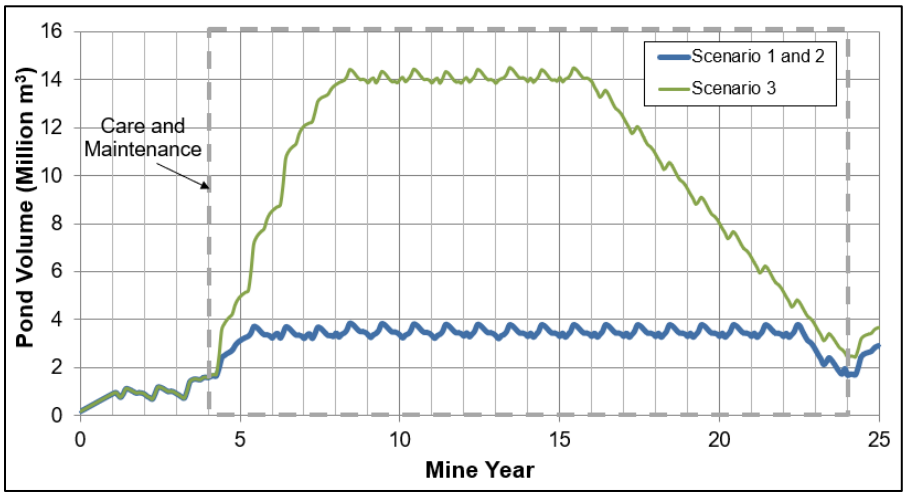
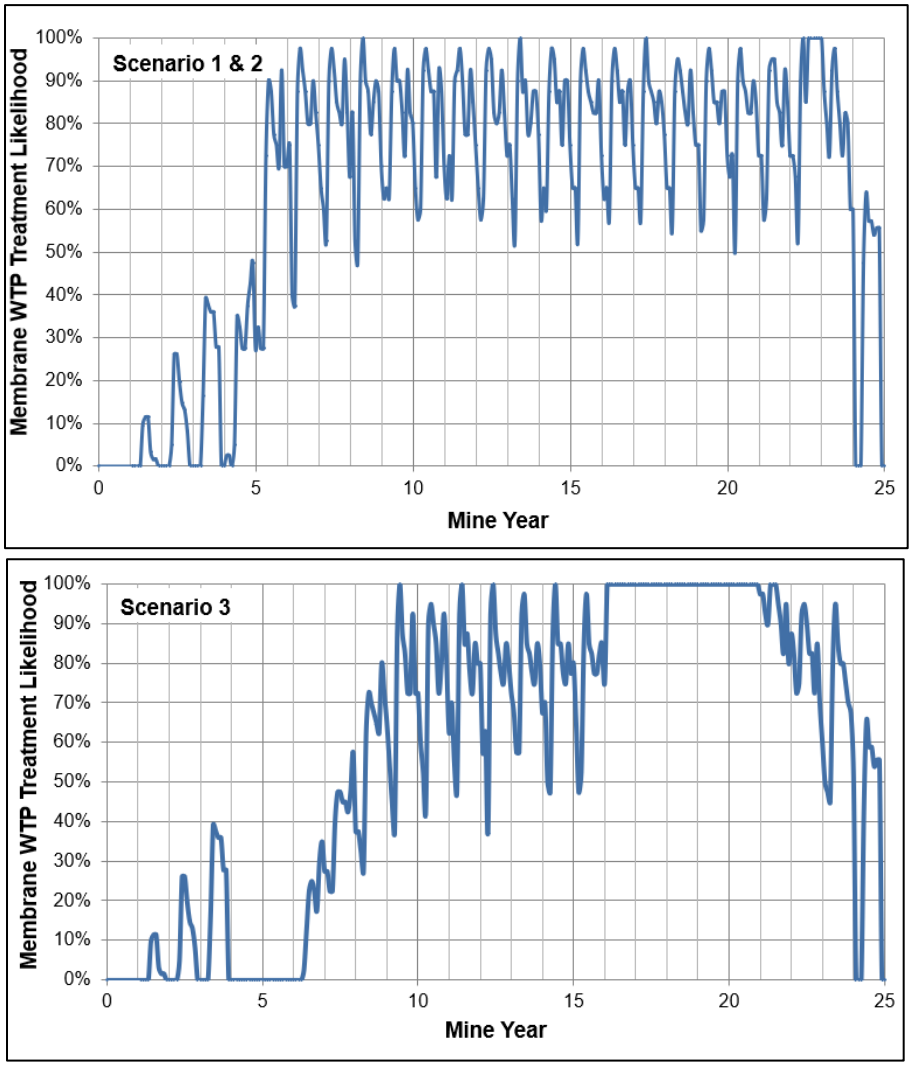


Figure 2 Simulated Pond Volumes (Average Climate)

Membrane WTP Treatment Rates during C&M

Surplus water in the TSF is managed during the C&M period by pumping excess water to the Membrane WTP prior to release downstream via the WMP and FWR. The water treatment rate required to maintain the TSF C Pond volume within the desirable range during C&M is higher than the 72 L/s treatment rate in Operations due to the increased discharge of WTP brine back into the TSF and because water is no longer lost to voids in the waste rock. Treatment is specified to occur whenever the modelled pond volume exceeds 3.4 Mm^3 for Scenarios 1 and 2 and 14.1 Mm^3 for Scenario 3. A treatment rate of 90 L/s maintains the pond within the target range during C&M under average climate conditions by treating water for 10 months of the year (April to January). An average 2.4 Mm^3 water is treated each year during the C&M period when the pond volume is being maintained (Appendix C).

Under variable climate conditions, a treatment rate of 110 L/s is required to maintain the TSF pond within the target range. Likelihood of treatment during any month of the C&M period when the TSF pond volume is being maintained is approximately 50 to 70% during low flow drier months and 90 to 100% during wetter months, such as freshet (Figure 3).



Note(s):

1. Likelihood of treatment calculated as the number of times treatment of water from TSF C Pond occurs each month out of the 40 years of historic climate input to the variable climate case water balance model.

Figure 3 Simulated Monthly Likelihood of Treatment at Membrane WTP (Variable Climate)

TSF Pond Pump-down at End of C&M Period

A higher Membrane WTP treatment rate is required at the end of the C&M period to draw down the pond volume to a level suitable to restart Operations and resume placement of waste rock in the TSF behind the embankment. To achieve this pond draw down, the Membrane WTP treatment rate at the end of C&M is modelled to increase 50% compared to the treatment rate during the period of C&M when the pond volume is maintained near a constant volume. Modelled treatment rates are 135 L/s for average climate conditions and 165 L/s for variable climate conditions. The predicted time to pump down the pond to resume Operations for each of the modelled scenarios using the assumed treatment rates is as follows:

- Scenario 1 and 2: The modelled pond is drawn down to the target level in 1.5 years.
- Scenario 3: The modelled pond is drawn down in 8 years assuming average climate conditions and between 6 to 8 years under variable climate conditions.

3.2 STREAMFLOWS

Predicted mean monthly streamflows for each of the C&M scenarios during select years prior to and during C&M are provided in Appendix C along with the calculated percent change in flow from the baseline period. Flows in Appendix C are provided for average climate conditions for model nodes located downstream of the FWR on Davidson Creek and on Chedakuz Creek. Predicted streamflows for Scenarios 1 and 2 are the same and are shown together on Tables C.1 and C.2. Flows during C&M in Creek 661 and Creek 705 remain unchanged from Year 3 predictions and are presented in Appendix E of KP (2022).

Simulated streamflow at model nodes H2B and 15-CC extending over the start (ramp up period) of C&M are presented on Figures 4 and 5 and predicted streamflow extending over the end (pump down period) of C&M is presented on Figures 6 and 7.

Davidson Creek

For Scenarios 1 and 2, simulated streamflows during the ramp up period in Year 4 are generally the same as Operations Year 3 since all diversions are still active at directing water around the TSF and water is still being treated at the Metals WTP for discharge downstream. The TSF pond reaches its target elevation by Year 5 and excess water at the TSF is treated and discharged to Davidson Creek, increasing the flows in Davidson Creek when treatment occurs. Average annual flow at H2B is similar to baseline flows once the TSF pond reaches its target elevation. Simulated streamflows are above baseline in wetter months of the pump down period of C&M (Year 23) when water stored in the TSF is treated and discharged to Davidson Creek.

For Scenario 3, freshet flows in the ramp up period to C&M (Year 4) are lower than Year 3 flows attributed to diversion of water from the Central Diversion System to the TSF to assist in filling the pond. Predicted streamflows are similar to Scenario 1 & 2 flows during C&M once the TSF pond is established. Streamflow during the pump down period of C&M is similar to Scenario 1 & 2 but would extend over a longer period (i.e., 6 to 8 years).

Streamflow in Davidson Creek is predicted to satisfy IFN criteria under average climate conditions in each month of all three scenarios (Tables C.1 and C.3). The WMP and FWR are actively managed so that water stored in the ponds is pumped down and discharged to Davidson Creek to meet IFN. The 5th and 50th (median) percentile modelled flows at H2B during the ramp up period to C&M under variable climate conditions are presented on Figure 4 for the three modelled scenarios. Streamflow at H2B is predicted to be below the IFN at the 5th percentile during C&M for all three scenarios, at flows similar to baseline flows. While not modelled, meeting IFN in Davidson Creek would be prioritized over accumulating water in the pond and water from TSF C pond would be treated for release downstream in order to meet IFN during drier flow months.

Streamflow in Davidson Creek increases over baseline flows during the pump down period while the volume of water stored in the TSF is treated and discharged. Streamflow predictions with variable climate inputs are presented on Figure 5 for the end of the C&M period and extending one year into the restart of Operations (Year 18 through 24).

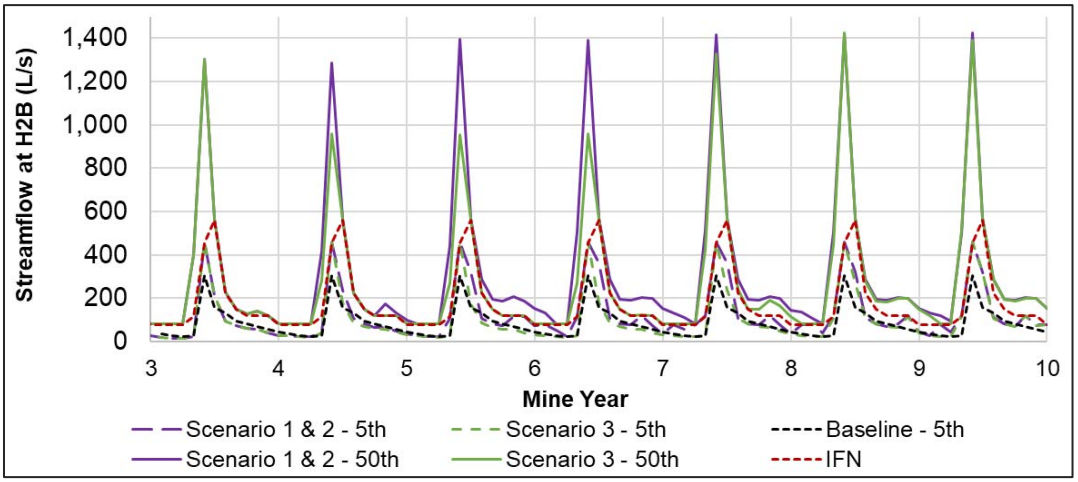


Figure 4 Percentiles of Predicted Streamflow at H2B during Ramp Up Period to C&M (Variable Climate)

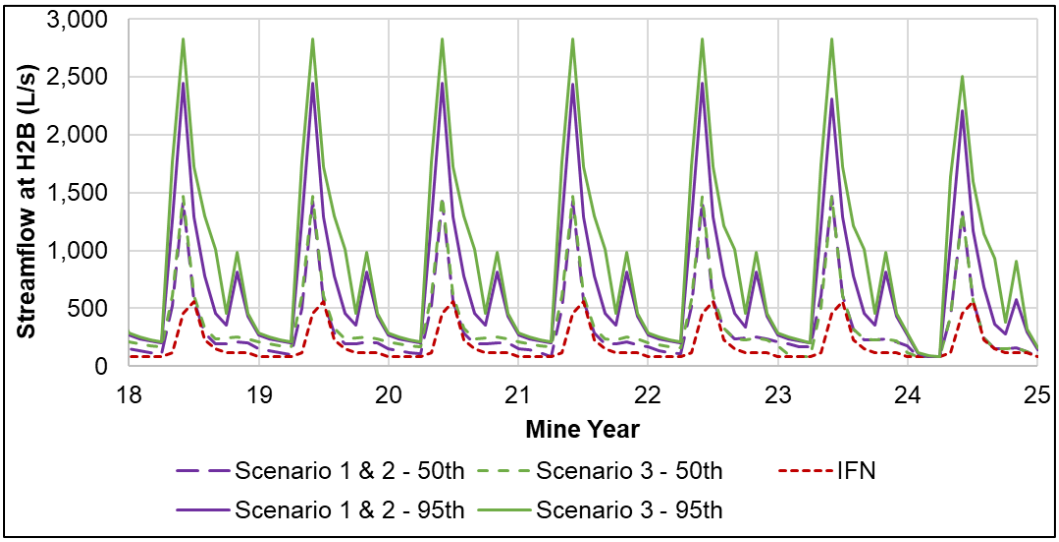
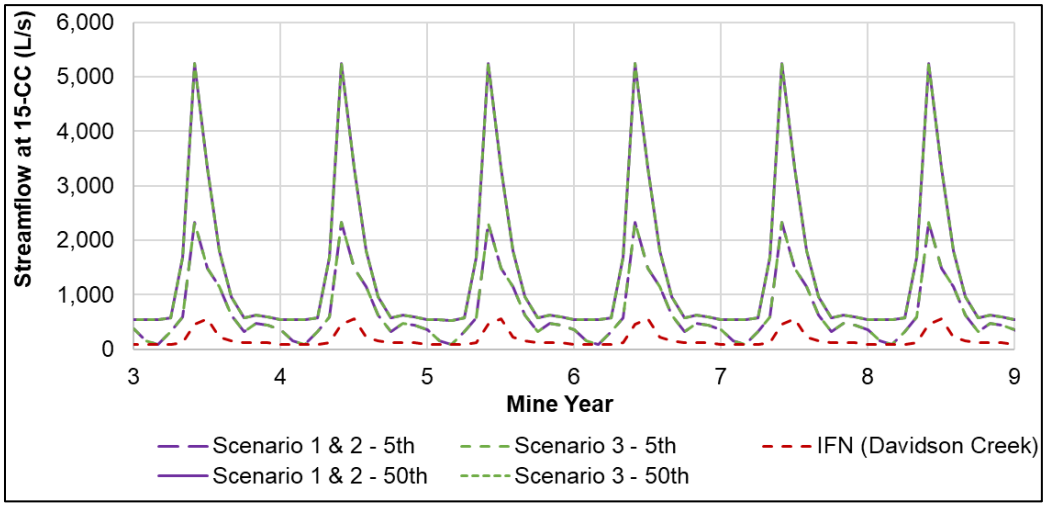


Figure 5 Percentiles of Predicted Streamflow at H2B during C&M Pump Down Period (Variable Climate)

Chedakuz Creek

Model node 15-CC on Chedakuz Creek is located upstream of the confluence with Davidson Creek and simulated flows at this location are predicted to be uninfluenced by C&M and remain similar to flows in Operations Year 3 prior to the start of C&M for all scenarios (Year 3; Tables C.2 and C.4). The 5th and 50th percentile modelled flows at 15-CC on Chedakuz Creek during the ramp up period to C&M under variable climate conditions are presented on Figure 6 for the three modelled scenarios. Streamflow predictions (50th and 95th percentile) at the end of the C&M period and extending one year into the restart of Operations are presented on Figure 7.

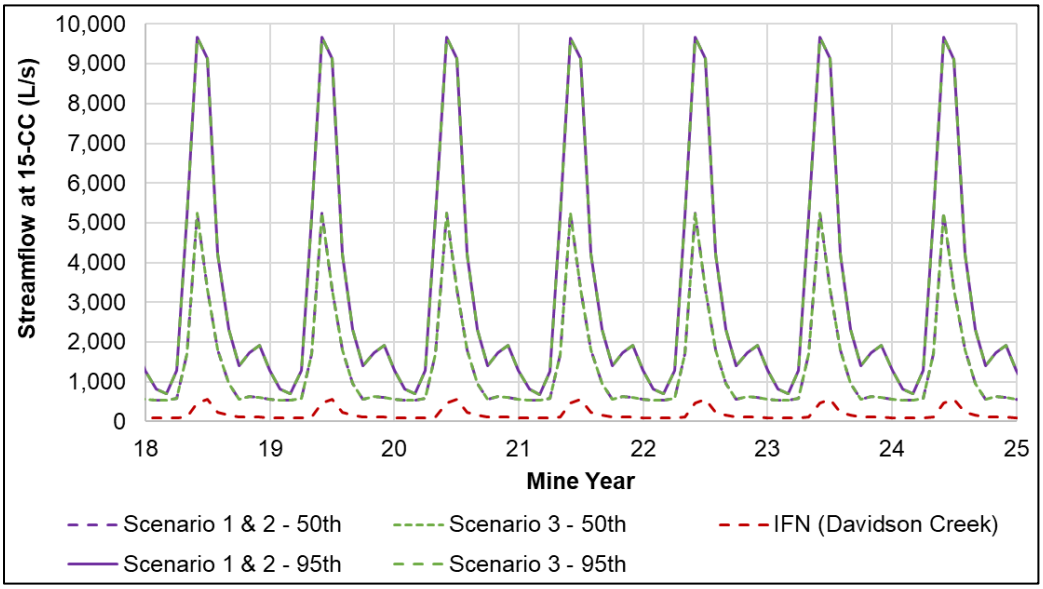
Streamflow at model node H5 on Chedakuz Creek during the C&M ramp up (Year 4) is predicted to be similar to Year 3 flows and to be higher than baseline flows during the pump down period (Tables C.2 and C.4).



Note(s):

1. IFN flows are applicable at model node H2B and are presented for comparison only.

Figure 6 Percentiles of Predicted Streamflow at 15-CC during Ramp up Period of C&M (Variable Climate)



Note(s):

1. IFN flows are applicable at model node H2B and are presented for comparison only.

Figure 7 Percentiles of Predicted Streamflow at 15-CC during C&M Pump Down Period (Variable Climate)

4.0 SUMMARY

The water management strategy for three different Care & Maintenance scenarios was assessed considering average and variable climate conditions. Results of the modelling suggest the following:

- Accumulating a pond height in TSF C that submerges the PAG/NAG3 waste rock during C&M takes slightly more than one year to achieve and results in a volume of water behind the dam of 4 Mm^3 (Scenarios 1 and 2). At the end of C&M, this pond could be pumped down to re-start Operations in approximately 1.5 years.
- Covering the tailings beach with water in addition to the waste rock results in a stored volume of water in the TSF of 14 Mm^3 (Scenario 3). Accumulation of water in the pond would take approximately 4 years if water from the Central Diversion System is also directed to the TSF. The pond volume requires between 6 to 8 years to pump down prior to restarting Operations.

The Membrane WTP treatment rate required during C&M to maintain the pond volume within the target range is higher than in Operations and is estimated at approximately 110 L/s. The treatment rate during the pump down period needs to increase to draw down the pond. The estimated time to pump the TSF Pond down to a level that allows Operations to restart and waste rock to be placed against the embankment assuming the treatment rate increases 50% (to 165 L/s) is 1.5 years for a 4 Mm^3 pond (Scenario 1 and 2) and 6 to 8 years for a 14 Mm^3 pond (Scenario 3).

A TSF pond height that covers the full tailings and waste rock surfaces (Scenario 3) does not meet freeboard requirements for storage of the Inflow Design Flood (IDF) and would not be acceptable unless on-going dam construction is planned during Year 3 resulting in a higher embankment crest elevation or if other means of managing the IDF were incorporated during the C&M period.

Active management of water onsite allows IFN criteria to be met in Davidson Creek during the C&M period. IFN criteria are met in Davidson Creek under average climate conditions by actively managing the WMP and FWR so that water stored in the ponds is pumped down to discharge to Davidson Creek. IFN can be met in Davidson Creek during drier than average months by prioritizing treatment and release of water to meet IFN criteria.

Results of the modelling were provided to Lorax to support water quality modelling (Lorax, 2022).

5.0 CLOSING

We trust that the information in this letter satisfies your requirements at this time. Please do not hesitate to contact the undersigned should you have any questions or require any clarification.

Yours truly,
Knight Piésold Ltd.

Prepared:

Marcia Wilson, P.Eng.
Project Engineer

Reviewed:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
Dr. C. A. STARZYK
39753
2022-08-19

Cindy Starzyk, Ph.D., P.Eng.
Specialist Hydrogeological Engineer
Associate

KNIGHT PIÉSOLD LTD.
PERMIT NUMBER
1001011
EGBC PERMIT TO PRACTICE

Approval that this document adheres to the Knight Piésold Quality System:

Attachments:

Appendix A	Water Management Plans
Appendix B	TSF C Water Balance Summary
Appendix C	Simulated Monthly Streamflows and Percent Change in Flow

References:

Knight Piésold Ltd. (KP), 2021a. Blackwater Gold Project – Life of Mine Water Balance Model Report. Vancouver, BC. Ref. No. VA101-457/33-1, Rev 1. November 24, 2021.

Knight Piésold Ltd. (KP), 2021b. Blackwater Gold Project – 2020 Baseline Watershed Model Report. Vancouver, BC. Ref. No. VA21-00074. September 7, 2021.

Knight Piésold Ltd. (KP), 2022. Blackwater Gold Project – Updated Water Balance Modelling in Support of Closure/Post-Closure Water Quality Optimization. Ref. No. VA21-01082. June 29, 2022.

Lorax Environmental Services Ltd. (Lorax), 2022. Care and Maintenance Water Balance/Water Quality Model. Project number A599-2 dated August 2022.

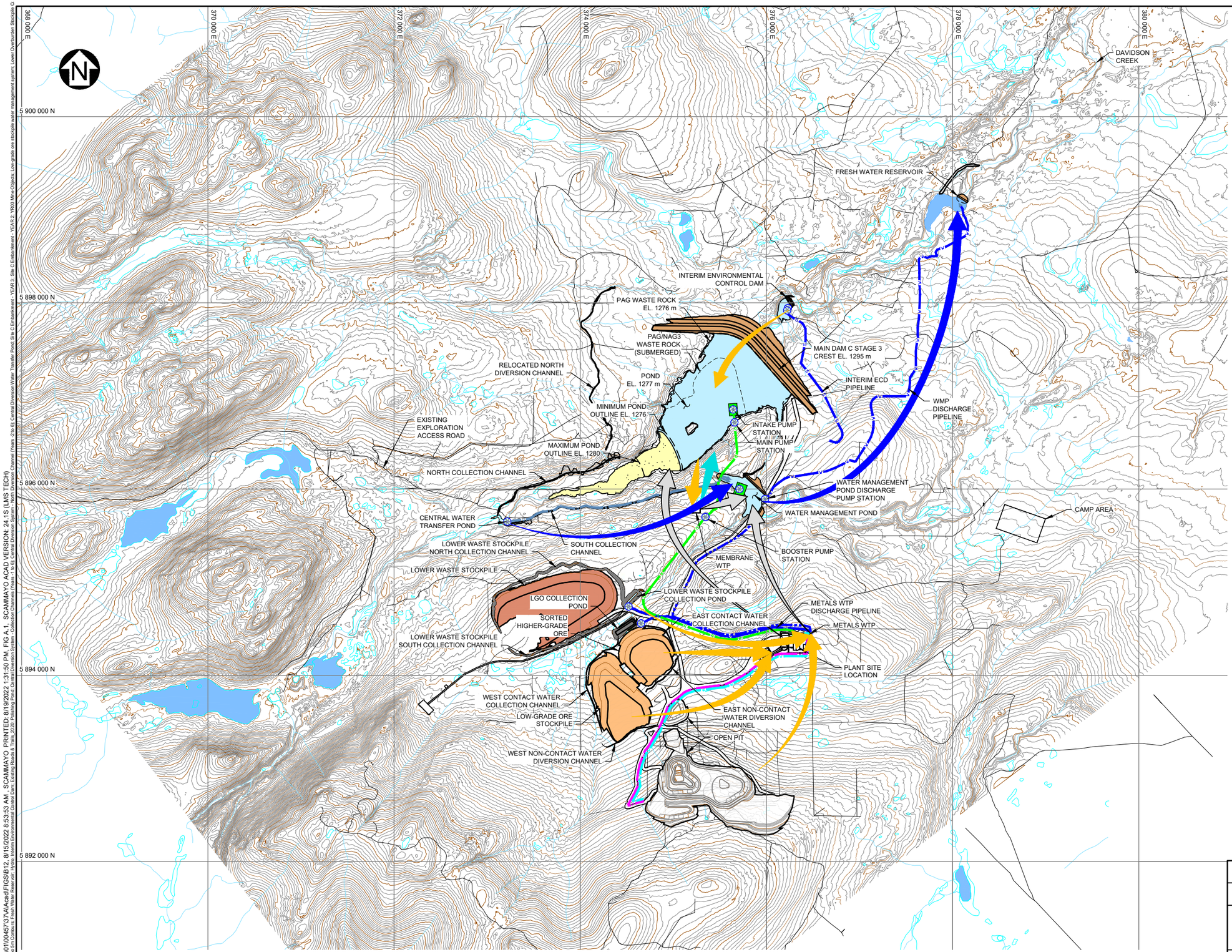
Ministry of Energy, Mines and Low Carbon Innovation (EMLI), 2022. Blackwater Gold Mine Project – Care and Maintenance Information Requirements. Letter from J. Lowell Constable, P.Eng. to Ryan Todd dated April 11, 2022.

Copy To: Ryan Todd, Georges Moukodi, Alastair Tiver, Klaus Popelka

APPENDIX A

Water Management Plans

(Figures A.1 to A.3)



PLAN
SCALE A

LEGEND:

- TAILINGS BEACH
- MINE WATER
- FRESH WATER
- EMBANKMENT FILL
- PAG WASTE ROCK
- ORE STOCKPILE
- WASTE STOCKPILE
- EXISTING ACCESS TRAILS
- INTERIM ECD PIPELINE
- CENTRAL WATER DIVERSION PIPELINE
- WATER MANAGEMENT POND DISCHARGE PIPELINE
- WTP DISCHARGE SYSTEM PIPELINE
- STOCKPILE PIPELINE
- WATER RECLAIM PIPELINE
- RAW WATER SUPPLY PIPELINE
- OPEN PIT PERIMETER WELL DEWATERING PIPELINE
- OPEN PIT SUMP DEWATERING PIPELINE
- PUMP
- FRESH WATER
- SITE WATER
- TREATED WATER
- BRINE

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 10U.
2. CONTOUR INTERVAL IS 10 METRES.
3. LOCATIONS OF WATER TREATMENT PLANTS (WTP) ARE APPROXIMATE.

FOR INFORMATION ONLY

SCALE A 400 200 0 400 800 1200 1600 2000 m

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	19AUG'22	ISSUED WITH LETTER	CAS	ABN	DDF

BW GOLD LTD.

BLACKWATER GOLD PROJECT

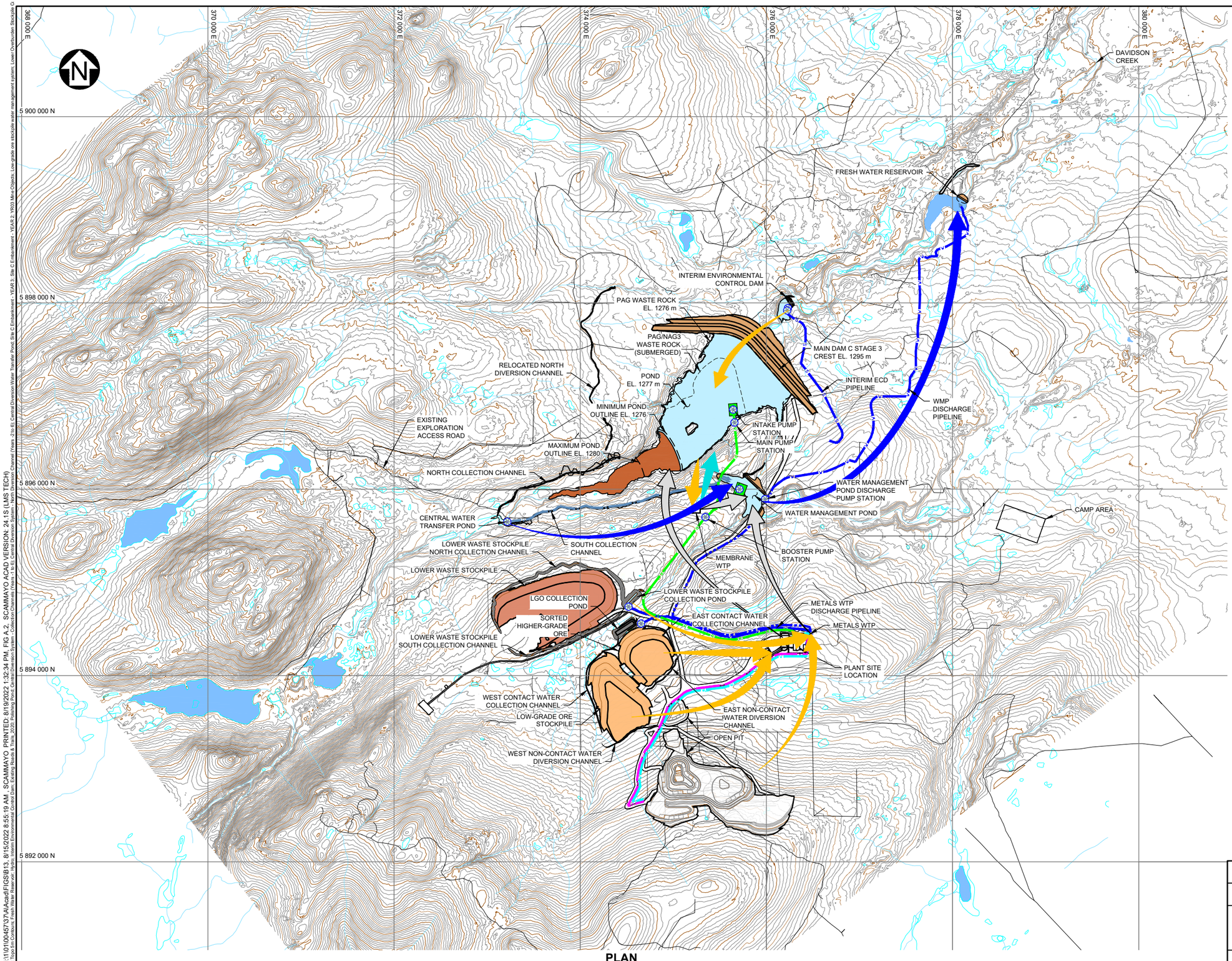
WATER MANAGEMENT PLAN
CARE AND MAINTENANCE SCENARIO 1

Knight Piésold CONSULTING

P/A NO.	REF NO.
VA101-457/37	VA22-00926

FIGURE A.1 REV 0

SAVED: M:\101\00457\37\A\Acad\FIGS\B12_8/15/2022 8:53:53 AM - SCAMMAYO PRINTED: 8/19/2022 1:31:50 PM, FIG A-1_SCAMMAYO ACAD VERSION: 24.1S (LMS TECH)
XREF FILES: \\tsp-fs\Conducx Fixed Water Assessment\Hydro\Current Environmental Cond Dam Existing Roads & Trails_2020_Existing Pond& Central Diversion System - Collection Channels Route 1 & 65 Central Diversion System - Main Diversion Channel Route 1 & 65



PLAN
SCALE A

LEGEND:

- SOIL COVER ON TAILINGS BEACH
- MINE WATER
- FRESH WATER
- EMBANKMENT FILL
- PAG WASTE ROCK
- ORE STOCKPILE
- WASTE STOCKPILE
- EXISTING ACCESS TRAILS
- INTERIM ECD PIPELINE
- CENTRAL WATER DIVERSION PIPELINE
- WATER MANAGEMENT POND DISCHARGE PIPELINE
- WTP DISCHARGE SYSTEM PIPELINE
- STOCKPILE PIPELINE
- WATER RECLAIM PIPELINE
- RAW WATER SUPPLY PIPELINE
- OPEN PIT PERIMETER WELL DEWATERING PIPELINE
- OPEN PIT SUMP DEWATERING PIPELINE
- PUMP
- FRESH WATER
- SITE WATER
- TREATED WATER
- BRINE

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 10U.
2. CONTOUR INTERVAL IS 10 METRES.
3. LOCATIONS OF WATER TREATMENT PLANTS (WTP) ARE APPROXIMATE.

FOR INFORMATION ONLY

SCALE A 400 200 0 400 800 1200 1600 2000 m

BW GOLD LTD.

BLACKWATER GOLD PROJECT

WATER MANAGEMENT PLAN
CARE AND MAINTENANCE SCENARIO 2

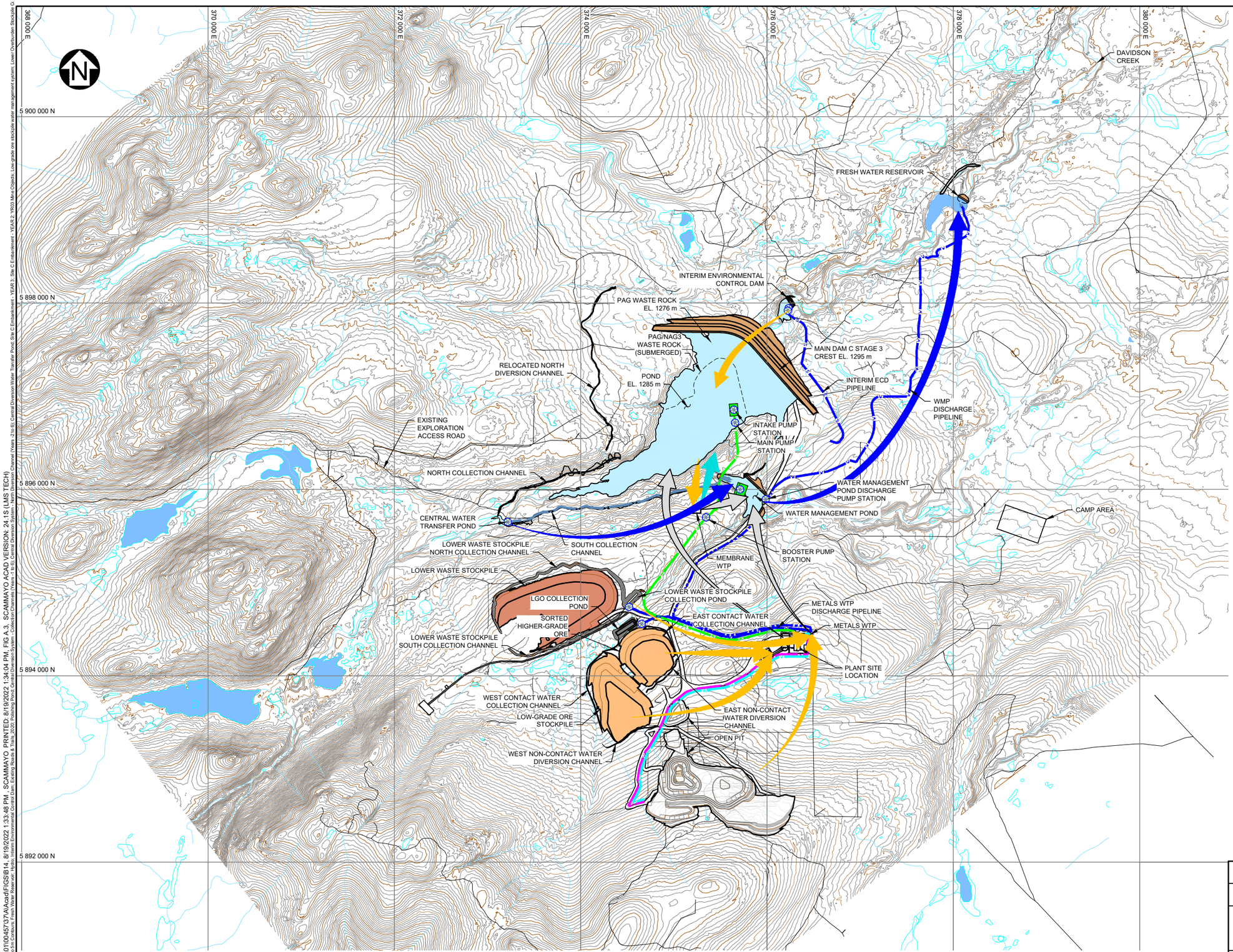
Knight Piésold CONSULTING

P/A NO.	REF NO.
VA101-457/37	VA22-00926

FIGURE A.2 REV 0

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	19AUG'22	ISSUED WITH LETTER	CAS	ABN	DDF

SAVED: M:\1\01\00457\37\A\Acad\FIGS\B13, 8/15/2022 8:55:19 AM , SCAMMAYO PRINTED: 8/19/2022 1:32:34 PM, FIG A.2, SCAMMAYO ACAD VERSION: 24.1S (LMS TECH)
XREF FILE(S): Topo 5m Contours; Fresh Water Reservoir; Hydro; Interim Environmental Control Dam; Existing Roads & Trails_2020; Polishing Pond; Central Diversion System - Collection Channels (Years -1 to 6); Central Diversion System - North Diversion Channel (Years -2 to 6); Central Diversion Water Transfer Pond; Site C Embankment - YEAR 3; Site C Embankment - YEAR 2; YR03 Mine Objects; Low-grade ore stockpile water management system; Lower Overburden Stockpile O



LEGEND:

- TAILINGS BEACH
- MINE WATER
- FRESH WATER
- EMBANKMENT FILL
- PAG WASTE ROCK
- ORE STOCKPILE
- WASTE STOCKPILE
- EXISTING ACCESS TRAILS
- INTERIM ECD PIPELINE
- CENTRAL WATER DIVERSION PIPELINE
- WATER MANAGEMENT POND DISCHARGE PIPELINE
- WTP DISCHARGE SYSTEM PIPELINE
- STOCKPILE PIPELINE
- WATER RECLAIM PIPELINE
- RAW WATER SUPPLY PIPELINE
- OPEN PIT PERIMETER WELL DEWATERING PIPELINE
- OPEN PIT SUMP DEWATERING PIPELINE
- PUMP
- FRESH WATER
- SITE WATER
- TREATED WATER
- BRINE

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 10U.
2. CONTOUR INTERVAL IS 10 METRES.
3. LOCATIONS OF WATER TREATMENT PLANTS (WTP) ARE APPROXIMATE.

FOR INFORMATION ONLY

SCALE A: 400 200 0 400 800 1200 1600 2000 m

PLAN
SCALE A

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	19AUG'22	ISSUED WITH LETTER	CAS	ABN	DDF

BW GOLD LTD.

BLACKWATER GOLD PROJECT

WATER MANAGEMENT PLAN
CARE AND MAINTENANCE SCENARIO 3

Knight Piésold CONSULTING

P/A NO. VA101-457/37 | REF NO. VA22-00926

FIGURE A.3 | REV 0

SAVED: M:\1\01\00457\37\A\Acad\FIGS\B14; 8/19/2022 1:33:48 PM, SCAMMAYO PRINTED: 8/19/2022 1:34:04 PM, FIG A.3 SCAMMAYO ACAD VERSION: 24.1S (LMS TECH)
XREF FILES: 1:\pp\Site Conditions\Fresh Water Reservoir_Rpt\en_Interim Environmental Control Dam Grading Report & Plans_2020 Pooling Pond, Central Diversion System - Collected Channels Plans - 1 to 5\ Central Diversion System - Main Diversion Channel Plan

APPENDIX B

TSF C Water Balance Summary

(Table B.1 to B.3)

Knight Piésold CONSULTING

TABLE B.1

BW GOLD LTD
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
C&M SCENARIO 1 (AVERAGE CLIMATE) ANNUAL WATER BALANCE - TSF C POND

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Model Year	Inputs (Mm^3)													Losses (Mm^3)							Mm^3	
	Tailings Slurry	Consolidation Seepage	Precipitation on TSF C Pond	Precipitation on Tailings Beach, Waste Rock, and Upstream Embankments	Starter Pond Volume	SW & GW from Upgradient Catchment[1]	LGO from Lime Neutralization	Pumpback from Interim ECD	GW Seepage from Contact Source[2]	Runoff from Plant Site	Plant Site Sewage Effluent	Brine from Membrane WTP	Total Inputs[3]	Reclaim to Mill	Water Retained in Waste Rock Voids[4]	Water Retained in Tailings Voids	Seepage	Pond Evaporation	Surplus to WTP in Operations	Total Losses[3]	Change in Pond Volume
-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.00	0.000	0.04	0.0	**0.3**	0.0	0.1	0.0	0.0	0.0	0.0	**0.1**	0.1
1	5.5	0.3	0.1	0.1	0.9	1.0	0.1	0.4	0.01	0.001	0.04	0.0	**8.3**	4.8	0.7	1.8	0.1	0.1	0.0	**7.6**	0.7
2	6.7	0.5	0.1	0.2	0.0	0.9	0.2	0.5	0.01	0.001	0.04	0.0	**9.1**	5.9	0.7	2.3	0.2	0.1	0.0	**9.1**	0.0
3	6.7	0.6	0.1	0.2	0.0	1.2	0.2	0.5	0.01	0.001	0.04	0.0	**9.7**	5.9	0.5	2.3	0.2	0.1	0.0	**9.0**	0.7
4	0.0	0.0	0.4	0.2	0.0	1.1	0.2	0.5	0.02	0.001	0.04	0.0	**2.5**	0.0	0.3	0.0	0.2	0.4	0.0	**0.9**	1.6
5	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**2.9**	0.0	0.0	0.0	0.2	0.5	2.1	**2.8**	0.1
6	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
7	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.1	**2.8**	0.2
8	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.0**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	-0.1
9	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
10	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
11	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
12	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
13	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
14	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
15	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
16	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
17	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
18	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
19	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
20	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
21	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
22	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.7	**3.2**	0.0	0.0	0.0	0.2	0.5	3.1	**3.8**	-0.6
23	0.0	0.0	0.4	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.0	**3.3**	0.0	0.0	0.0	0.2	0.3	3.9	**4.4**	-1.1
24	6.7	0.5	0.2	0.3	0.0	1.1	0.2	0.6	0.02	0.001	0.04	0.1	**9.8**	5.9	0.0	2.3	0.2	0.1	0.0	**8.5**	1.2
25	6.7	0.5	0.2	0.4	0.0	1.0	0.3	0.6	0.02	0.001	0.04	0.0	**9.9**	5.9	1.3	2.3	0.3	0.2	0.0	**9.9**	-0.1

\\KPL\VA-Prj$\1\01\00457\37\A\Data\Task 400 - Technical Water Modelling\Task 420 - LOM Water Balance Model\3-Results to Lorax\2022-04-08-C&M Scenario 1 (v2)\Model version\Average\[Blackwater LOM Wshd_CM_S1(v2_3).xlsx]TABLE B.1 TSF C_WB

NOTES:

1. UPGRADIENT FLOWS ALSO INCLUDE FLOWS FROM SEDIMENT CONTROL PONDS FOR LAYDOWN AREA AND AGGREGATE BORROW AREA.
2. INCLUDES GROUNDWATER SEEPAGE FROM STOCKPILES.
3. DIFFERENCE BETWEEN INPUTS AND LOSSES EQUALS THE CHANGE IN POND VOLUME OVER THE YEAR.
4. MODEL ASSUMES WASTE ROCK VOIDS BECOME SATURATED BETWEEN ZERO AND 12 MONTHS AFTER THE MATERIAL IS PLACED IN THE FACILITY, DEPENDING ON THE YEAR.
5. CARE AND MAINTENANCE PERIOD EXTENDS FROM YEAR 4 THROUGH THE END OF YEAR 23.

REV	DATE	DESCRIPTION	PREP'D	CHK'D
0	18AUG22	ISSUED WITH LETTER VA22-00926	MCW	CAS

Knight Piésold CONSULTING

TABLE B.2

BW GOLD LTD
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
C&M SCENARIO 2 (AVERAGE CLIMATE) ANNUAL WATER BALANCE - TSF C POND

Print Aug/19/22 13:56:56

Model Year	Inputs (Mm^3)													Losses (Mm^3)							Mm^3
	Tailings Slurry	Consolidation Seepage	Precipitation on TSF C Pond	Precipitation on Tailings Beach, Waste Rock, and Upstream Embankments	Starter Pond Volume	SW & GW from Upgradient Catchment[1]	LGO from Lime Neutralization	Pumpback from Interim ECD	GW Seepage from Contact Source[2]	Runoff from Plant Site	Plant Site Sewage Effluent	Brine from Membrane WTP	Total Inputs[3]	Reclaim to Mill	Water Retained in Waste Rock Voids[4]	Water Retained in Tailings Voids	Seepage	Pond Evaporation	Surplus to WTP in Operations	Total Losses[3]	Change in Pond Volume
-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.00	0.000	0.04	0.0	**0.3**	0.0	0.1	0.0	0.0	0.0	0.0	**0.1**	0.1
1	5.5	0.3	0.1	0.1	0.9	1.0	0.1	0.4	0.01	0.001	0.04	0.0	**8.3**	4.8	0.7	1.8	0.1	0.1	0.0	**7.6**	0.7
2	6.7	0.5	0.1	0.2	0.0	0.9	0.2	0.5	0.01	0.001	0.04	0.0	**9.1**	5.9	0.7	2.3	0.2	0.1	0.0	**9.1**	0.0
3	6.7	0.6	0.1	0.2	0.0	1.2	0.2	0.5	0.01	0.001	0.04	0.0	**9.7**	5.9	0.5	2.3	0.2	0.1	0.0	**9.0**	0.7
4	0.0	0.0	0.4	0.2	0.0	1.1	0.2	0.5	0.02	0.001	0.04	0.0	**2.5**	0.0	0.3	0.0	0.2	0.4	0.0	**0.9**	1.6
5	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**2.9**	0.0	0.0	0.0	0.2	0.5	2.1	**2.8**	0.1
6	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
7	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
8	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
9	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.1	**2.8**	0.2
10	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.0**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	-0.1
11	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
12	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
13	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
14	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
15	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
16	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
17	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
18	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
19	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
20	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
21	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.1**	0.0	0.0	0.0	0.2	0.5	2.4	**3.1**	0.0
22	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.7	**3.2**	0.0	0.0	0.0	0.2	0.5	3.1	**3.8**	-0.6
23	0.0	0.0	0.4	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.4**	0.0	0.0	0.0	0.2	0.3	3.9	**4.4**	-0.9
24	6.7	0.5	0.2	0.3	0.0	1.1	0.2	0.6	0.02	0.001	0.04	0.0	**9.7**	5.9	0.0	2.3	0.2	0.1	0.0	**8.5**	1.1
25	6.7	0.5	0.2	0.4	0.0	1.0	0.3	0.6	0.02	0.001	0.04	0.0	**9.9**	5.9	1.3	2.3	0.3	0.2	0.0	**9.9**	-0.1

\\KPL\VA-Prj$\1\01\00457\37\A\Data\Task 400 - Technical Water Modelling\Task 420 - LOM Water Balance Model\3-Results to Lorax\2022-04-21-C&M Scenario 2 (v1)\Model versions\Average\[Blackwater LOM Wshd_CM_S2(v1b).xlsx]TABLE B.2 TSF C_WB

NOTES:

1. UPGRADIENT FLOWS ALSO INCLUDE FLOWS FROM SEDIMENT CONTROL PONDS FOR LAYDOWN AREA AND AGGREGATE BORROW AREA.
2. INCLUDES GROUNDWATER SEEPAGE FROM STOCKPILES.
3. DIFFERENCE BETWEEN INPUTS AND LOSSES EQUALS THE CHANGE IN POND VOLUME OVER THE YEAR.
4. MODEL ASSUMES WASTE ROCK VOIDS BECOME SATURATED BETWEEN ZERO AND 12 MONTHS AFTER THE MATERIAL IS PLACED IN THE FACILITY, DEPENDING ON THE YEAR.
5. CARE AND MAINTENANCE PERIOD EXTENDS FROM YEAR 4 THROUGH THE END OF YEAR 23.

REV	DATE	DESCRIPTION	PREP'D	CHK'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

Knight Piésold CONSULTING

TABLE B.3

BW GOLD LTD
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
C&M SCENARIO 3 (AVERAGE CLIMATE) ANNUAL WATER BALANCE - TSF C POND

Print Aug/19/22 10:14:03

Model Year	Inputs (Mm^3)													Losses (Mm^3)							Mm^3
	Tailings Slurry	Consolidation Seepage	Precipitation on TSF C Pond	Precipitation on Tailings Beach, Waste Rock, and Upstream Embankments	Starter Pond Volume	SW & GW from Upgradient Catchment[1]	LGO from Lime Neutralization	Pumpback from Interim ECD	GW Seepage from Contact Source[2]	Runoff from Plant Site	Plant Site Sewage Effluent	Brine from Membrane WTP	Total Inputs[3]	Reclaim to Mill	Water Retained in Waste Rock Voids[4]	Water Retained in Tailings Voids	Seepage	Pond Evaporation	Surplus to WTP in Operations	Total Losses[3]	Change in Pond Volume
-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.00	0.000	0.04	0.0	**0.3**	0.0	0.1	0.0	0.0	0.0	0.0	**0.1**	0.1
1	5.5	0.3	0.1	0.1	0.9	1.0	0.1	0.4	0.01	0.001	0.04	0.0	**8.3**	4.8	0.7	1.8	0.1	0.1	0.0	**7.6**	0.7
2	6.7	0.5	0.1	0.2	0.0	0.9	0.2	0.5	0.01	0.001	0.04	0.0	**9.1**	5.9	0.7	2.3	0.2	0.1	0.0	**9.1**	0.0
3	6.7	0.6	0.1	0.2	0.0	1.2	0.2	0.5	0.01	0.001	0.04	0.0	**9.7**	5.9	0.5	2.3	0.2	0.1	0.0	**9.0**	0.7
4	0.0	0.0	0.3	0.2	0.0	2.9	0.2	0.5	0.02	0.001	0.04	0.0	**4.2**	0.0	0.3	0.0	0.2	0.3	0.0	**0.8**	3.4
5	0.0	0.0	0.5	0.1	0.0	2.9	0.2	0.4	0.02	0.001	0.04	0.0	**4.2**	0.0	0.0	0.0	0.2	0.5	0.0	**0.7**	3.6
6	0.0	0.0	0.6	0.0	0.0	2.9	0.2	0.4	0.02	0.001	0.04	0.0	**4.3**	0.0	0.0	0.0	0.2	0.5	0.0	**0.8**	3.5
7	0.0	0.0	0.6	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.0	**2.5**	0.0	0.0	0.0	0.2	0.6	0.0	**0.8**	1.7
8	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.1**	0.0	0.0	0.0	0.2	0.7	2.1	**3.1**	0.1
9	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.2**	0.0	0.0	0.0	0.2	0.7	2.1	**3.1**	0.1
10	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.1**	0.0	0.0	0.0	0.2	0.7	2.4	**3.3**	-0.1
11	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.2**	0.0	0.0	0.0	0.2	0.7	2.1	**3.1**	0.1
12	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.1**	0.0	0.0	0.0	0.2	0.7	2.4	**3.3**	-0.1
13	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.1**	0.0	0.0	0.0	0.2	0.7	2.1	**3.1**	0.1
14	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.6	**3.2**	0.0	0.0	0.0	0.2	0.7	2.1	**3.0**	0.2
15	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	0.5	**3.1**	0.0	0.0	0.0	0.2	0.7	2.4	**3.3**	-0.2
16	0.0	0.0	0.8	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.0	**3.6**	0.0	0.0	0.0	0.2	0.7	4.3	**5.2**	-1.5
17	0.0	0.0	0.7	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.6**	0.0	0.0	0.0	0.2	0.7	4.3	**5.1**	-1.5
18	0.0	0.0	0.6	0.0	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.6**	0.0	0.0	0.0	0.2	0.5	4.3	**5.0**	-1.5
19	0.0	0.0	0.6	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.5**	0.0	0.0	0.0	0.2	0.5	4.3	**5.0**	-1.4
20	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.5**	0.0	0.0	0.0	0.2	0.5	4.3	**5.0**	-1.4
21	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.5**	0.0	0.0	0.0	0.2	0.5	4.3	**4.9**	-1.4
22	0.0	0.0	0.5	0.1	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.5**	0.0	0.0	0.0	0.2	0.4	4.3	**4.9**	-1.4
23	0.0	0.0	0.3	0.2	0.0	1.1	0.2	0.4	0.02	0.001	0.04	1.1	**3.4**	0.0	0.0	0.0	0.2	0.2	4.3	**4.7**	-1.3
24	6.7	0.5	0.2	0.3	0.0	1.1	0.2	0.6	0.02	0.001	0.04	0.1	**9.8**	5.9	0.0	2.3	0.2	0.1	0.0	**8.5**	1.2
25	6.7	0.5	0.2	0.4	0.0	1.0	0.3	0.6	0.02	0.001	0.04	0.0	**9.9**	5.9	1.3	2.3	0.3	0.2	0.0	**9.9**	-0.1

\\KPL\VA-Prj$\1\01\00457\37\A\Data\Task 400 - Technical Water Modelling\Task 420 - LOM Water Balance Model\3-Results to Lorax\2022-05-11-C&M Scenario 3 (v1)\Models\Average\[Blackwater LOM Wshd_CM_S3(v1i).xlsx]TABLE B.3 TSF C_WB

NOTES:

1. UPGRADIENT FLOWS ALSO INCLUDE FLOWS FROM THE CENTRAL DIVERSION SYSTEM AND THE SEDIMENT CONTROL PONDS FOR LAYDOWN AREA AND AGGREGATE BORROW AREA.
2. INCLUDES GROUNDWATER SEEPAGE FROM STOCKPILES.
3. DIFFERENCE BETWEEN INPUTS AND LOSSES EQUALS THE CHANGE IN POND VOLUME OVER THE YEAR.
4. MODEL ASSUMES WASTE ROCK VOIDS BECOME SATURATED BETWEEN ZERO AND 12 MONTHS AFTER THE MATERIAL IS PLACED IN THE FACILITY, DEPENDING ON THE YEAR.
5. CARE AND MAINTENANCE PERIOD EXTENDS FROM YEAR 4 THROUGH THE END OF YEAR 23.

REV	DATE	DESCRIPTION	PREP'D	CHK'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

APPENDIX C

Simulated Monthly Streamflows and Percent Change in Flow

(Tables C.1 to C.4)

Knight Piésold CONSULTING

TABLE C.1

BW GOLD LTD.
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
ESTIMATED AVERAGE MONTHLY STREAMFLOWS AND CHANGE IN FLOW - AVERAGE CLIMATE - SCENARIOS 1 & 2

		Davidson Creek																							
		H2B						H4B						4-DC						1-DC					
Streamflow (L/s)	Month	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)
	January	96	81	81	81	146	180	129	115	115	115	180	214	129	115	115	115	180	214	151	136	136	136	201	235
	February	78	81	81	81	81	164	109	113	113	113	113	196	109	113	113	113	113	196	130	133	133	133	133	216
	March	63	81	81	81	81	150	93	111	111	111	111	181	93	111	111	111	111	181	113	130	130	130	131	200
	April	763	691	514	491	625	709	863	791	614	591	725	809	1035	964	787	764	898	982	1084	1013	835	812	947	1031
	May	1476	1254	1262	1276	1343	1377	1600	1378	1387	1401	1468	1502	1637	1415	1424	1438	1505	1539	1695	1474	1482	1496	1563	1597
	June	472	563	563	563	563	563	537	629	629	629	629	629	543	635	635	635	635	635	577	669	669	669	669	669
	July	209	226	226	226	226	235	258	275	275	275	275	284	261	279	279	279	279	287	289	306	306	306	306	315
	August	143	151	151	151	151	221	186	194	194	194	194	264	187	195	195	195	195	265	213	220	220	220	220	291
	September	118	121	121	121	154	210	158	161	161	161	194	250	158	161	161	161	194	250	182	184	184	184	218	274
	October	300	121	121	121	321	355	339	160	160	160	360	394	339	160	160	160	360	394	362	183	183	183	384	417
	November	266	121	121	121	280	212	304	159	159	159	318	250	305	160	160	160	319	251	328	183	183	183	342	274
	December	126	81	81	92	170	203	161	117	117	128	205	239	161	117	117	128	205	239	184	139	139	150	228	262
	Annual Average	342	297	283	284	345	382	395	350	336	336	398	434	413	369	354	355	416	453	442	398	384	384	445	482

Predicted Change in Streamflow from Baseline (L/s)																									
	January		-15	-15	-15	50	84		-15	-15	-15	50	84		-15	-15	-15	50	84		-15	-15	-15	50	84
	February		3	3	3	3	86		3	3	3	3	86		3	3	3	3	86		3	3	3	3	86
	March		18	18	18	18	87		18	18	18	18	88		18	18	18	18	88		18	18	18	18	88
	April		-72	-249	-272	-137	-53		-71	-248	-272	-137	-53		-71	-248	-272	-137	-53		-71	-248	-272	-137	-53
	May		-222	-213	-199	-132	-98		-222	-213	-199	-132	-98		-222	-213	-199	-132	-98		-222	-213	-199	-132	-98
	June		91	91	91	91	91		91	91	91	91	91		91	91	91	91	91		91	91	91	91	91
	July		17	17	17	17	26		18	18	18	18	26		18	18	18	18	26		18	18	18	18	26
	August		7	7	7	7	78		8	8	8	8	78		8	8	8	8	78		8	8	8	8	78
	September		3	3	3	36	92		3	3	3	36	92		3	3	3	36	92		3	3	3	36	92
	October		-179	-179	-179	21	55		-179	-179	-179	21	55		-179	-179	-179	21	55		-179	-179	-179	21	55
	November		-145	-145	-145	14	-54		-145	-145	-145	14	-54		-145	-145	-145	14	-54		-145	-145	-145	14	-54
	December		-45	-45	-34	44	78		-44	-44	-34	44	78		-44	-44	-34	44	78		-44	-44	-34	44	78
	Annual Average		-45	-59	-59	3	39		-45	-59	-58	3	40		-45	-59	-58	3	40		-45	-59	-58	3	40

Predicted Change in Streamflow from Baseline (%)																									
	January		-16%	-16%	-16%	52%	88%		-11%	-11%	-11%	39%	65%		-11%	-11%	-11%	39%	65%		-10%	-10%	-10%	33%	56%
	February		4%	4%	4%	4%	110%		3%	3%	3%	3%	79%		3%	3%	3%	3%	79%		2%	2%	2%	3%	66%
	March		28%	28%	28%	28%	138%		19%	19%	19%	20%	94%		19%	19%	19%	20%	94%		16%	16%	16%	16%	78%
	April		-9%	-33%	-36%	-18%	-7%		-8%	-29%	-31%	-16%	-6%		-7%	-24%	-26%	-13%	-5%		-7%	-23%	-25%	-13%	-5%
	May		-15%	-14%	-14%	-9%	-7%		-14%	-13%	-12%	-8%	-6%		-14%	-13%	-12%	-8%	-6%		-13%	-13%	-12%	-8%	-6%
	June		19%	19%	19%	19%	19%		17%	17%	17%	17%	17%		17%	17%	17%	17%	17%		16%	16%	16%	16%	16%
	July		8%	8%	8%	8%	12%		7%	7%	7%	7%	10%		7%	7%	7%	7%	10%		6%	6%	6%	6%	9%
	August		5%	5%	5%	5%	54%		4%	4%	4%	4%	42%		4%	4%	4%	4%	42%		4%	4%	4%	4%	37%
	September		2%	2%	2%	31%	78%		2%	2%	2%	23%	59%		2%	2%	2%	23%	59%		2%	2%	2%	20%	51%
	October		-60%	-60%	-60%	7%	18%		-53%	-53%	-53%	6%	16%		-53%	-53%	-53%	6%	16%		-49%	-49%	-49%	6%	15%
	November		-55%	-55%	-55%	5%	-20%		-48%	-48%	-48%	5%	-18%		-48%	-48%	-48%	5%	-18%		-44%	-44%	-44%	4%	-16%
	December		-36%	-36%	-27%	35%	62%		-28%	-28%	-21%	27%	48%		-28%	-28%	-21%	27%	48%		-24%	-24%	-18%	24%	42%
	Annual Average		-13%	-17%	-17%	1%	11%		-11%	-15%	-15%	1%	10%		-11%	-14%	-14%	1%	10%		-10%	-13%	-13%	1%	9%

NOTES:

1. STREAMFLOWS CALCULATED USING MEAN MONTHLY CLIMATE DATA INPUT TO THE LIFE OF MINE WATER BALANCE MODEL.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

Knight Piésold CONSULTING

TABLE C.2

BW GOLD LTD.
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
ESTIMATED AVERAGE MONTHLY STREAMFLOWS AND CHANGE IN FLOW - AVERAGE CLIMATE - SCENARIOS 1 & 2

		Chedakuz Creek											
		15-CC						H5					
	Month	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)
Streamflow (L/s)	January	545	543	538	538	538	538	1027	1010	1005	1005	1070	1104
	February	506	479	499	498	498	498	972	948	968	968	968	1051
	March	640	600	633	633	633	633	1164	1142	1175	1175	1175	1245
	April	2073	2074	2065	2065	2065	2065	3237	3167	2981	2958	3092	3176
	May	5733	5730	5709	5704	5703	5704	8528	8303	8291	8300	8367	8400
	June	3723	3723	3712	3711	3711	3711	5562	5653	5642	5641	5641	5641
	July	2116	2070	2109	2108	2108	2108	3299	3270	3309	3309	3308	3317
	August	1109	1096	1102	1102	1102	1102	1814	1808	1814	1814	1814	1885
	September	699	698	692	692	692	692	1261	1263	1257	1257	1290	1346
	October	794	792	786	786	786	786	1446	1266	1260	1260	1460	1494
	November	783	781	776	776	775	775	1376	1230	1224	1224	1383	1316
	December	618	616	611	611	611	611	1132	1086	1080	1091	1169	1203
	Annual Average	1612	1600	1603	1602	1602	1602	2568	2512	2501	2500	2562	2598
Predicted Change in Streamflow from Baseline (L/s)	January		-2	-7	-7	-7	-7		-17	-22	-22	43	77
	February		-27	-7	-7	-7	-7		-24	-4	-4	-4	79
	March		-41	-7	-7	-7	-7		-23	11	11	11	81
	April		0	-8	-8	-8	-8		-71	-256	-280	-145	-61
	May		-4	-24	-30	-30	-30		-225	-237	-229	-162	-128
	June		0	-11	-12	-12	-12		91	80	79	79	79
	July		-46	-7	-8	-8	-8		-28	10	10	10	19
	August		-14	-7	-7	-7	-7		-6	1	1	1	71
	September		-1	-7	-7	-7	-7		2	-4	-4	29	85
	October		-1	-7	-7	-7	-7		-180	-186	-186	14	48
	November		-2	-7	-7	-7	-7		-147	-152	-152	7	-61
	December		-2	-7	-7	-7	-7		-47	-52	-41	37	71
	Annual Average		-12	-9	-10	-10	-10		-56	-68	-68	-7	30
Predicted Change in Streamflow from Baseline (%)	January		0%	-1%	-1%	-1%	-1%		-2%	-2%	-2%	4%	8%
	February		-5%	-1%	-1%	-1%	-1%		-2%	0%	0%	0%	8%
	March		-6%	-1%	-1%	-1%	-1%		-2%	1%	1%	1%	7%
	April		0%	0%	0%	0%	0%		-2%	-8%	-9%	-4%	-2%
	May		0%	0%	-1%	-1%	-1%		-3%	-3%	-3%	-2%	-1%
	June		0%	0%	0%	0%	0%		2%	1%	1%	1%	1%
	July		-2%	0%	0%	0%	0%		-1%	0%	0%	0%	1%
	August		-1%	-1%	-1%	-1%	-1%		0%	0%	0%	0%	4%
	September		0%	-1%	-1%	-1%	-1%		0%	0%	0%	2%	7%
	October		0%	-1%	-1%	-1%	-1%		-12%	-13%	-13%	1%	3%
	November		0%	-1%	-1%	-1%	-1%		-11%	-11%	-11%	0%	-4%
	December		0%	-1%	-1%	-1%	-1%		-4%	-5%	-4%	3%	6%
	Annual Average		-1%	-1%	-1%	-1%	-1%		-2%	-3%	-3%	0%	1%

NOTES:

1. STREAMFLOWS CALCULATED USING MEAN MONTHLY CLIMATE DATA INPUT TO THE LIFE OF MINE WATER BALANCE MODEL.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

Knight Piésold CONSULTING

TABLE C.3

BW GOLD LTD.
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
ESTIMATED AVERAGE MONTHLY STREAMFLOWS AND CHANGE IN FLOW - AVERAGE CLIMATE - SCENARIO 3

		Davidson Creek																							
		H2B						H4B						4-DC						1-DC					
	Month	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)
Streamflow (L/s)	January	96	81	81	81	81	180	129	115	115	115	115	214	129	115	115	115	115	214	151	136	136	136	136	235
	February	78	81	81	81	127	164	109	113	113	113	159	196	109	113	113	113	159	196	130	133	133	133	180	216
	March	63	81	81	81	81	150	93	111	111	111	111	181	93	111	111	111	111	181	113	130	130	130	131	200
	April	763	691	514	337	642	709	863	791	614	437	743	809	1035	964	787	610	916	982	1084	1013	835	659	964	1031
	May	1476	1254	1262	989	1343	1377	1600	1378	1387	1114	1468	1502	1637	1415	1424	1151	1505	1539	1695	1474	1482	1209	1563	1597
	June	472	563	563	563	563	563	537	629	629	629	629	629	543	635	635	635	635	635	577	669	669	669	669	669
	July	209	226	226	226	226	235	258	275	275	275	275	284	261	279	279	279	279	287	289	306	306	306	306	315
	August	143	151	151	151	151	221	186	194	194	194	194	264	187	195	195	195	195	265	213	220	220	220	220	291
	September	118	121	121	121	154	210	158	161	161	161	194	250	158	161	161	161	194	250	182	184	184	184	218	274
	October	300	121	121	121	321	355	339	160	160	160	360	394	339	160	160	160	360	394	362	183	183	183	384	417
	November	266	121	121	121	280	313	304	159	159	159	318	352	305	160	160	160	319	352	328	183	183	183	342	376
	December	126	81	81	81	170	203	161	117	117	117	205	239	161	117	117	117	205	239	184	139	139	139	228	262
	Annual Average	342	297	283	246	345	390	395	350	336	299	398	443	413	369	354	317	416	461	442	398	384	346	445	490
Predicted Change in Streamflow from Baseline (L/s)	January		-15	-15	-15	-15	84		-15	-15	-15	-15	84		-15	-15	-15	-15	84		-15	-15	-15	-15	84
	February		3	3	3	49	86		3	3	3	50	86		3	3	3	50	86		3	3	3	50	86
	March		18	18	18	18	87		18	18	18	18	88		18	18	18	18	88		18	18	18	18	88
	April		-72	-249	-426	-120	-53		-71	-248	-425	-120	-53		-71	-248	-425	-120	-53		-71	-248	-425	-120	-53
	May		-222	-213	-486	-132	-98		-222	-213	-486	-132	-98		-222	-213	-486	-132	-98		-222	-213	-486	-132	-98
	June		91	91	91	91	91		91	91	91	91	91		91	91	91	91	91		91	91	91	91	91
	July		17	17	17	17	26		18	18	18	18	26		18	18	18	18	26		18	18	18	18	26
	August		7	7	7	7	78		8	8	8	8	78		8	8	8	8	78		8	8	8	8	78
	September		3	3	3	36	92		3	3	3	36	92		3	3	3	36	92		3	3	3	36	92
	October		-179	-179	-179	21	55		-179	-179	-179	21	55		-179	-179	-179	21	55		-179	-179	-179	21	55
	November		-145	-145	-145	14	47		-145	-145	-145	14	48		-145	-145	-145	14	48		-145	-145	-145	14	48
	December		-45	-45	-45	44	78		-44	-44	-44	44	78		-44	-44	-44	44	78		-44	-44	-44	44	78
	Annual Average		-45	-59	-96	3	48		-45	-59	-96	3	48		-45	-59	-96	3	48		-45	-59	-96	3	48
Predicted Change in Streamflow from Baseline (%)	January		-16%	-16%	-16%	-15%	88%		-11%	-11%	-11%	-11%	65%		-11%	-11%	-11%	-11%	65%		-10%	-10%	-10%	-10%	56%
	February		4%	4%	4%	63%	110%		3%	3%	3%	45%	79%		3%	3%	3%	45%	79%		2%	2%	2%	38%	66%
	March		28%	28%	28%	28%	138%		19%	19%	19%	20%	94%		19%	19%	19%	20%	94%		16%	16%	16%	16%	78%
	April		-9%	-33%	-56%	-16%	-7%		-8%	-29%	-49%	-14%	-6%		-7%	-24%	-41%	-12%	-5%		-7%	-23%	-39%	-11%	-5%
	May		-15%	-14%	-33%	-9%	-7%		-14%	-13%	-30%	-8%	-6%		-14%	-13%	-30%	-8%	-6%		-13%	-13%	-29%	-8%	-6%
	June		19%	19%	19%	19%	19%		17%	17%	17%	17%	17%		17%	17%	17%	17%	17%		16%	16%	16%	16%	16%
	July		8%	8%	8%	8%	12%		7%	7%	7%	7%	10%		7%	7%	7%	7%	10%		6%	6%	6%	6%	9%
	August		5%	5%	5%	5%	54%		4%	4%	4%	4%	42%		4%	4%	4%	4%	42%		4%	4%	4%	4%	37%
	September		2%	2%	2%	31%	78%		2%	2%	2%	23%	59%		2%	2%	2%	23%	59%		2%	2%	2%	20%	51%
	October		-60%	-60%	-60%	7%	18%		-53%	-53%	-53%	6%	16%		-53%	-53%	-53%	6%	16%		-49%	-49%	-49%	6%	15%
	November		-55%	-55%	-55%	5%	18%		-48%	-48%	-48%	5%	16%		-48%	-48%	-48%	5%	16%		-44%	-44%	-44%	4%	15%
	December		-36%	-36%	-36%	35%	62%		-28%	-28%	-28%	27%	48%		-28%	-28%	-28%	27%	48%		-24%	-24%	-24%	24%	42%
	Annual Average		-13%	-17%	-28%	1%	14%		-11%	-15%	-24%	1%	12%		-11%	-14%	-23%	1%	12%		-10%	-13%	-22%	1%	11%

\\KPL\VA-Prj$\1\01\00457\37\A\Correspondence\VA22-00926 - Care and Maintenance Water Balance Modelling Scenarios\Appendix C - Streamflow and Flow Change\[App C.3.4 - StreamflowSummaryTables_LOM Wshd_S3_r0.xlsx]C.3 SC Davidson Flows (C&M)

NOTES:

1. STREAMFLOWS CALCULATED USING MEAN MONTHLY CLIMATE DATA INPUT TO THE LIFE OF MINE WATER BALANCE MODEL.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

Knight Piésold CONSULTING

TABLE C.4

BW GOLD LTD.
BLACKWATER GOLD PROJECT

CARE AND MAINTENANCE WATER BALANCE MODEL
ESTIMATED AVERAGE MONTHLY STREAMFLOWS AND CHANGE IN FLOW - AVERAGE CLIMATE - SCENARIO 3

		Chedakuz Creek											
		15-CC						H5					
	Month	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)	Baseline (Yr -5)	Construction (Yr -1)	Early Operations (Yr 3)	C&M Ramp-up (Yr 4)	C&M (Yr 10)	C&M Pump Down (Yr 23)
Streamflow (L/s)	January	545	543	538	538	538	538	1027	1010	1005	1005	1005	1104
	February	506	479	499	498	498	498	972	948	968	968	1014	1051
	March	640	600	633	633	633	633	1164	1142	1175	1175	1175	1245
	April	2073	2074	2065	2065	2065	2065	3237	3167	2981	2804	3109	3176
	May	5733	5730	5709	5704	5703	5704	8528	8303	8291	8013	8367	8400
	June	3723	3723	3712	3711	3711	3711	5562	5653	5642	5641	5641	5641
	July	2116	2070	2109	2108	2108	2108	3299	3270	3309	3309	3308	3317
	August	1109	1096	1102	1102	1102	1102	1814	1808	1814	1814	1814	1885
	September	699	698	692	692	692	692	1261	1263	1257	1257	1290	1346
	October	794	792	786	786	786	786	1446	1266	1260	1260	1460	1494
	November	783	781	776	776	775	775	1376	1230	1224	1224	1383	1417
	December	618	616	611	611	611	611	1132	1086	1080	1080	1169	1203
	Annual Average	1612	1600	1603	1602	1602	1602	2568	2512	2501	2462	2561	2607
Predicted Change in Streamflow from Baseline (L/s)	January		-2	-7	-7	-7	-7		-17	-22	-22	-22	77
	February		-27	-7	-7	-7	-7		-24	-4	-4	42	79
	March		-41	-7	-7	-7	-7		-23	11	11	11	81
	April		0	-8	-8	-8	-8		-71	-256	-433	-128	-61
	May		-4	-24	-30	-30	-30		-225	-237	-516	-162	-128
	June		0	-11	-12	-12	-12		91	80	79	79	79
	July		-46	-7	-8	-8	-8		-28	10	10	10	19
	August		-14	-7	-7	-7	-7		-6	1	1	1	71
	September		-1	-7	-7	-7	-7		2	-4	-4	29	85
	October		-1	-7	-7	-7	-7		-180	-186	-186	14	48
	November		-2	-7	-7	-7	-7		-147	-152	-152	7	41
	December		-2	-7	-7	-7	-7		-47	-52	-52	37	71
	Annual Average		-12	-9	-10	-10	-10		-56	-68	-106	-7	38
Predicted Change in Streamflow from Baseline (%)	January		0%	-1%	-1%	-1%	-1%		-2%	-2%	-2%	-2%	8%
	February		-5%	-1%	-1%	-1%	-1%		-2%	0%	0%	4%	8%
	March		-6%	-1%	-1%	-1%	-1%		-2%	1%	1%	1%	7%
	April		0%	0%	0%	0%	0%		-2%	-8%	-13%	-4%	-2%
	May		0%	0%	-1%	-1%	-1%		-3%	-3%	-6%	-2%	-1%
	June		0%	0%	0%	0%	0%		2%	1%	1%	1%	1%
	July		-2%	0%	0%	0%	0%		-1%	0%	0%	0%	1%
	August		-1%	-1%	-1%	-1%	-1%		0%	0%	0%	0%	4%
	September		0%	-1%	-1%	-1%	-1%		0%	0%	0%	2%	7%
	October		0%	-1%	-1%	-1%	-1%		-12%	-13%	-13%	1%	3%
	November		0%	-1%	-1%	-1%	-1%		-11%	-11%	-11%	0%	3%
	December		0%	-1%	-1%	-1%	-1%		-4%	-5%	-5%	3%	6%
	Annual Average		-1%	-1%	-1%	-1%	-1%		-2%	-3%	-4%	0%	1%

NOTES:

1. STREAMFLOWS CALCULATED USING MEAN MONTHLY CLIMATE DATA INPUT TO THE LIFE OF MINE WATER BALANCE MODEL.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	19AUG'22	ISSUED WITH LETTER VA22-00926	MCW	CAS

APPENDIX E MEMORANDUM: CARE AND MAINTENANCE WATER BALANCE/WATER QUALITY MODEL

TECHNICAL MEMORANDUM

To:	**Travis Desormeaux (BW Gold Ltd.)**	**Date: Aug. 19, 2022**
From:	**Jennifer Stevenson, Meghan Goertzen, and Colin Fraser (Lorax Environmental Services Ltd.)**	**Project #: A599-2**
Subject:	**Care and Maintenance Water Balance/Water Quality Model**	

1. Introduction

This memorandum presents the water quality model (WQM) results for three Care and Maintenance (C&M) scenarios for the Blackwater Gold Project (the Project), developed to support BW Gold Ltd.'s Care and Maintenance Plan for the Project and water management proposed therein. The WQM scenarios are configured onto the framework of the LOM water balance model C&M scenarios developed by Knight Piésold (KP, 2022a).

The water balance (WB) and WQM scenarios considered here assume the Project enters a C&M period starting in model Year 4 of the Operations phase (equivalent to 2027 in the WQM). The C&M period occurs for 20 years, during which the pit is assumed to remain dewatered. The C&M period ceases and the Project Operation phase resumes in model Year 24 (2047), at which point the WBM resumes water management consistent with the v12b WBM (*i.e.*, the water balance presented in the Application) for the remaining life of mine. While the v12b version of the WBM does not reflect updates to Closure and Post-Closure water management that have been implemented subsequent to the Application submission (*i.e.*, v13e WBM in which the pit lake is managed to prevent seepage as well as other updates per KP (2022b) and Lorax (2022)), this WBM version was deemed suitable for the purpose of evaluating a C&M period. This is because the C&M period evaluated herein occurs in the Operations phase during which the v12b and v13e WBMs and other WQM assumptions are similar.

The following sections present an overview of the C&M scenarios and related assumptions (Section 2), followed by a description of updated source term assumptions specific to the C&M model (Section 3). Section 4 presents a summary of the WQM results while Section 5 summarizes the conclusions of the C&M modelling.

2. Summary of Care and Maintenance Scenarios

All WB/WQM C&M scenarios assume the pit developed up to Year 4 is maintained in a dewatered state for the duration of the C&M period. Water from the Open Pit and Lower Waste Stockpile continues to be conveyed to the Metals WTP during C&M, while water from the Low-Grade Ore (LGO) stockpile is sent to the Lime Neutralization System, which in turn, discharges to the Tailings Storage Facility (TSF) C pond. Surplus water from the TSF C pond is sent to the Membrane WTP, which requires a higher maximum treatment rate capacity in the C&M period;

90 L/s for the average climate case [ACC] or 110 L/s under the variable climate case [VCC] as compared to the Operations phase (72 L/s). Brine from the Membrane WTP is sent to the TSF C pond. Membrane WTP and Metals WTP effluent is directed to the Water Management Pond (WMP), which continues to discharge to the Freshwater Reservoir (FWR), similar to the Operations phase.

As noted above, three potential C&M scenarios proposed by BW Gold were integrated into the WQM. The three scenarios primarily differ in how tailings in the TSF are stored (Table 2-1). For all three scenarios, the Membrane WTP capacity increases to 135 L/s (ACC) or 165 L/s (VCC) towards the end of the C&M period in order to achieve a TSF pond elevation that is suitable for a return to Operations. While this period of increased treatment flow occurs for 18 months for Scenarios 1 and 2, eight years (ACC) or six to eight years (VCC) of increased treatment is required for Scenario 3 to sufficiently dewater the TSF pond.

Table 2-1:
Care & Maintenance Model Scenarios

Scenario	Descriptor	Notes
1	No cover on the exposed tailings beach	• Assumes the TSF C pond elevation increases in the C&M period to cover PAG waste rock that has been placed in the TSF. • At this pond elevation, approximately 235,000 m2 of the tailings beach remains exposed and would be expected to become acidic after one year of exposure.
2	Soil cover on the exposed tailings beach	• Same model assumptions as per Scenario 1, except for the addition of the soil cover on the tailings beach.
3	Tailings beach submerged under water cover	• Requires a TSF C pond elevation of 1285 masl. This elevation exceeds the maximum allowable pond elevation based on freeboard requirements for storage of the Inflow Design Flood (IDF) with a dam crest at 1295 masl, and would require on-going dam construction or other means of managing the IDF (KP 2022a). • Under this scenario, water from Central Diversion flows into TSF C pond. • Filling TSF C pond takes approximately 4 years (average climate case; Year 4 to end of Year 7). It is assumed tailings beaches exposed for over one year become acidic prior to flooding. • TSF C pond is maintained at 1285 masl elevation in Years 8 through 15. During this time, all tailings beaches are submerged. • Dewatering occurs over eight years (Year 16 to end of Year 23); during this period, the exposed tailings beach is assumed to be acidic.

3. Source Term Assumptions

Overall, the source terms applied in the C&M WQM scenarios are consistent with those presented in Lorax (2021) and the updates summarized in Lorax (2022) (*i.e.,* brine updates and updated treatment rates for selected parameters). Additional updates that have been incorporated into the C&M WQM scenarios include:

- An acidic tailings source term was developed for C&M Scenario 1. The Base Case (v13e) WQM did not include an acidic tailings source term as tailings beaches were assumed to either be saturated or covered within one year of deposition. The acidic tailings source term is also applied in Scenario 3 in years when the tailings beach has been exposed for over a year. Further details on the development of the acidic tailings source term are presented below.
- A higher proportion of the pit wall is assumed to be acidic during the C&M period. This assumption is consistent with the Closure and Post-Closure assumptions where all exposed PAG1 is acidic and 26% of PAG2 is acidic (Lorax 2021). This update was incorporated into all three scenarios.
- A gypsum solubility cap was applied in the TSF pond during the C&M period to account for the brine input into the TSF C pond. Gypsum solubility will vary depending on the relative abundance of Na and Ca, which are the two dominant cations in pond water. That is, the SO_4^{2-} anion can be held in solution when charge balanced by Na^+ instead of Ca^{2+}. A relationship providing the solubility of Ca and SO_4 as a function of Na concentration was presented in Lorax (2021), as this was incorporated into the WQM for the mill. This same function was applied for the brine input to the TSF C pond for the C&M period for all scenarios.

The acidic tailings source term was developed as follows:

1) Sulphate: The sulphate loading rate was calculated by multiplying the neutral-pH tailings sulphate loading rate by the ratio of PAG1 acidic to PAG1 neutral loading rates for waste rock. This scaled loading rate would result in rapid depletion of the sulphide and metal inventory if applied as a constant rate. Therefore, the sulphide oxidation rate was allowed to decay over time based on First Order reaction kinetics (*i.e.,* the oxidation rate declines as the sulphide inventory decreases). The decaying rate was then calculated on a monthly basis using the median total S for ore from the block model as the initial S content. A yearly average loading rate was calculated from the monthly values for source term development.
2) Parameters for which a pH-solid phase metal content correlation was developed: An initial loading rate for As, Cd, Co, Cu, Ni, Sb, Pb, and Zn was calculated using the pH-solid phase metal relationships summarized in Lorax (2021) with a pH of 3.5 and the median metal

content for ore from the block model, or static test results for parameters not included in the block model (*i.e.,* Co, Ni, Sb).

The general form of the equation is:

$$y = m \times x^{b} \times z \quad \textbf{(1.1)}$$

where:
y = loading rate (mg/kg/wk)
m = intercept
x = 10^{-pH} (*i.e.*, H^{+} concentration)
b = slope
z = solid phase concentration of the element (ppm)

A decay rate was applied to the loading rate to account for a declining metal inventory. As with sulphate, a yearly average loading rate was calculated from monthly values to incorporate into the source term. The lowest loading rate was bounded by the neutral tailings source term loading rate.

3) Other parameters: Loading rates for other parameters were calculated by multiplying the neutral-pH tailings loading rate by the ratio of PAG1 acidic to PAG1 neutral loading rates for waste rock.

The acidic tailings source terms for Year 2, which represent the highest loading rates, are summarized in Table 3-1; loading rates and source terms for the full C&M period are provided in Appendix A. Note, the neutral tailings source term is applied in the first year of C&M, as the model assumes a one-year lag time to acidic conditions.

The impact of runoff from an acidic tailings beach on the pH of the TSF C pond was evaluated under two mixing scenarios using the USGS geochemical modelling program PHREEQC (Parkhurst and Apello, 1999). The model mixed acidic (pH 3.5) tailings runoff with either TSF C pond water or non-contact water (represented by WQ10 water quality) at various ratios to predict the potential evolution of pH. The WQ10 surface water quality monitoring station is a near-field monitoring site located on Davidson Creek near the eventual location of the Environmental Control Dam (ECD).

TSF C pond water predictions from the year prior to the beginning of C&M (alkalinity = 116 mg/L, pH = 7.85) was used to represent initial conditions for the TSF C pond, while non-contact water quality for WQ10 (alkalinity = 49 mg/L, pH = 7.58) was used to represent non-contact runoff. The mixing calculations assumed a maximum proportion of acidic tailings water of up to 20%. Overall, the geochemical modelling results show that the TSF C pond is expected to maintain circum-neutral pH conditions (Figure 3-1). For the average climate scenario, the annual volume of beach runoff is equivalent to approximately 1% of the average TSF C pond volume, while the cumulative

total volume of beach runoff over the 20-year C&M period is equivalent to approximately 20% of the pond volume.

Table 3-1:
Acidic Tailings Source Term for Year 2 of Care and Maintenance

Parameter	Units	Acidic Tailings Source Term - Year 2 of C&M
Cl	mg/L	1.6
F	mg/L	0.072
SO4	mg/L	532
Ag	mg/L	0.067
Al	mg/L	0.76
As	mg/L	0.011
B	mg/L	1.1
Ba	mg/L	0.34
Be	mg/L	0.052
Ca	mg/L	5.1
Cd	mg/L	2.8
Co	mg/L	0.24
Cr	mg/L	0.055
Cu	mg/L	0.50
Fe	mg/L	16
Hg	mg/L	0.00027
K	mg/L	5.3
Li	mg/L	0.33
Mg	mg/L	2.9
Mn	mg/L	110
Mo	mg/L	0.0056
Na	mg/L	5.8
Ni	mg/L	0.32
P	mg/L	1.3
Pb	mg/L	0.38
Sb	mg/L	0.0034
Se	mg/L	0.056
Si	mg/L	7.9
Sr	mg/L	0.039
Tl	mg/L	0.015
U	mg/L	0.17
V	mg/L	0.062
Zn	mg/L	444

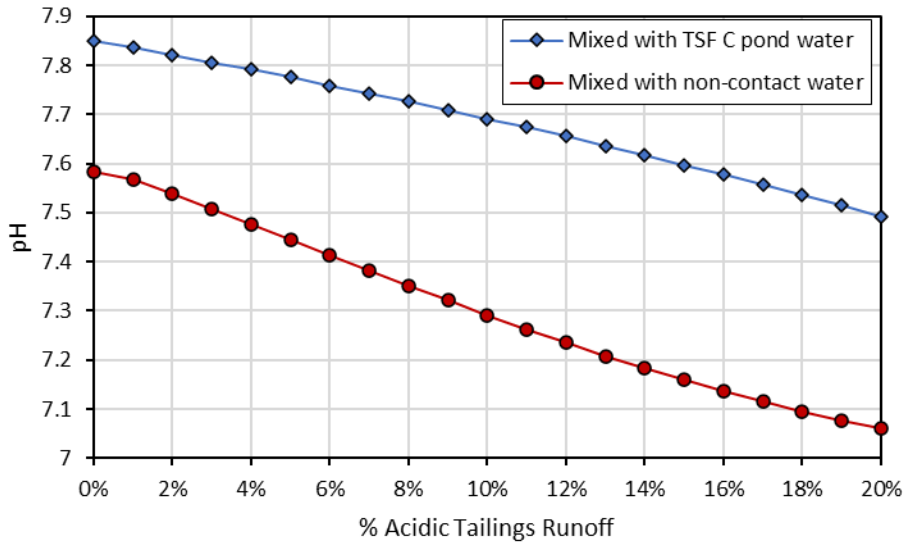

Figure 3-1: Results of mixing between TSF C pond water or non-contact water with acidic tailings runoff.

4. Results of Care and Maintenance Water Balance/Water Quality Model

4.1 Overview

Water quality predictions for the C&M period are presented in Appendix B while time series plots for key parameters are provided in Appendix C.

The key mine site facilities that reflect changes occurring in the model in the C&M period include TSF C pond, pit sump, and FWR.

- TSF C Pond: The TSF C pond is an important model node in the C&M period as this pond receives runoff from any exposed tailings beaches as well as brine from the Membrane WTP. Excess water from this pond is treated by the Membrane WTP prior to discharge.
    - In Care and Maintenance, WTP brine is the source of the dominant load for major ions to the TSF C pond; however, at the assumed WTP rate (110 L/s, VCC model) the model suggests that there is sufficient dilution from background sources to maintain relatively low concentrations. Once the WTP rate is modelled to increase to dewater the pond in preparation for a re-start of operations, the major ion concentrations rapidly increase. Relatively minor loads contributing to major ion concentrations include water from the Interim ECD and the Lime Treatment System. The dominant loads are relatively consistent for each scenario.
    - The sources of load for metals include tailings beach runoff and infiltration (Scenario 1 and Scenario 3 only), water from the Interim ECD and Lime Treatment System, and

WTP brine. The relative importance of these sources varies between parameters. For example, for Cd and Zn tailings beach runoff and infiltration represent the dominant sources of loading in Scenarios 1 and 3; although this load decreases over time due to the source term assumptions (Section 3) and other loads increase in relative importance. Since the tailings beach is covered in Scenario 2 (*i.e.,* no acidic tailings inputs), the dominant loads for Cd and Zn are Interim ECD, Lime Treatment System, and WTP brine. In comparison, the dominant sources of loading for Sb are Interim ECD water and WTP brine in all three scenarios since the acidic tailings beach is not a dominant source of load for this parameter.

  - Note, the predictions for the TSF C pond in all three scenarios indicate that any water discharged from the pond will require treatment as the concentrations of several parameters remain elevated above water quality guidelines.

- Pit Sump: Predicted concentrations for sulphate and most metals show a slight increase for the C&M period in pit sump water in comparison to Operations. This increase is due to the source term assumptions outlined in Section 3, which included an increase in exposed acidic PAG waste rock in the pit walls. Loads from exposed pit walls generally represent the key load to pit sump water. Overall, the pit predictions are consistent for the three scenarios.
- FWR: The dominant load to the FWR is treated water from TSF C (via Membrane WTP; *e.g.*, sulphate, metals) and the pit sump (via the Metals WTP; *e.g.*, sulphate). Due to the treatment in place for the Project, differences in predicted water quality at upstream nodes in the three scenarios only have minor impacts on downstream water quality.

4.2 Output Screening

This section summarizes the results of the C&M WQM outputs (*i.e.,* 95th percentile (P95) statistics of the revised VCC model) for Davidson Creek stations (WQ28, WQ27, WQ26, and WQ7) and Creek 661 station WQ5 for the C&M period for all three scenarios. C&M phase model predictions for receiving environment stations were screened against BC and CCME WQGs for the protection of aquatic life to compare potential effects to the receiving environment in each model scenario. Exceedances were assessed by calculating the relative frequency and maximum magnitude of guideline exceedance for the 20-year C&M period. The exceedance frequency is presented as a percentage calculated as the number of months when the exceedance occurs divided by the total number of months for the C&M period (240 months).

All parameters predicted to exceed their respective BC WQG in at least one model time step (*i.e.,* one month) are presented in Table 4-1 (exceedance frequency) and Table 4-2 (exceedance magnitude), while all parameters predicted to exceed their respective CCME WQG in at least one

time step are presented in Table 4-3 (exceedance frequency) and Table 4-4 (exceedance magnitude). Parameters for which no exceedances are predicted are excluded from the tables.

In general, most Project load reporting to Davidson Creek is from surface discharge via the FWR. The three scenarios show similar results due to the majority of the load originating from treatment systems (Metals WTP or Membrane WTP). Parameters for which their treatment is based on a percent removal efficiency show a higher degree of variability in predicted concentrations between scenarios in comparison to parameters that will be treated to a constant effluent concentration (*e.g.,* Cd, Zn). Differences in the treatment rate (*e.g.,* when the treatment rate increases earlier in C&M in Scenario 3) can impact downstream predictions for all parameters as there is a higher load from Membrane WTP effluent as a result of a higher flow rate. Another notable difference at WQ28 in Scenario 3 is the higher sulphate concentrations predicted in the first three years of C&M which is a result of less non-contact water diverted to the WMP in these years.

Overall, predicted WQG exceedances for all three C&M scenarios are similar in magnitude and frequency at Davidson Creek stations. Exceedances of the BC long-term and short-term WQGs for D-Al, and the CCME long-term WQGs for F, T-Al, and T-Pb are predicted at most Davidson Creek stations in all three scenarios. Total Hg is also predicted to equal or slightly exceed its BC long-term WQG in a small number of time steps in Scenario 1 at WQ28, and in Scenario 3 at WQ28, WQ27, and WQ26.

Guideline exceedances for total and dissolved Al are attributed to naturally elevated background concentrations, which yield background source term concentrations above WQGs. An SBEB is proposed for dissolved Al that reflects background concentrations (Application Appendix 5-E).

With respect to T-Hg, the elevated T-Hg predictions are attributed to the use of high detection limit values in the calculation of loadings from humidity cell data for the derivation of source terms. Specifically, humidity cell concentrations were set equal to the detection limit in the loading calculations, which translates to a high degree of conservatism in the source term predictions for this parameter. The exceedances occur at the end of the C&M period as the Project returns to the Operations phase.

Predicted exceedances of the CCME long-term WQGs for F and total Pb are related to higher volumes of TSF C pond water being directed to the Membrane WTP in the C&M scenarios. No F removal is assumed to occur in the Membrane WTP system, but the higher rate of pumping from the TSF pond to the WTP, and ultimately to the FWR, results in F concentrations discharged to Davidson Creek that exceed the CCME WQG in most months. With respect to Pb, the discharge quality for the Membrane WTP is set at 0.005 mg/L, which is higher than the CCME long-term WQG for this parameter. The higher rate of WTP discharge in the C&M scenarios compared to the Base Case (Lorax 2022) results in Pb concentrations in Davidson Creek that intermittently exceed the CCME long-term WQG in Davidson Creek between the three model scenarios. It is

noted that concentrations of both parameters are predicted to remain below their corresponding BC WQGs in all scenarios.

At Creek 661 station WQ5, the predicted WQG exceedances are the same between all three C&M scenarios and reflect WQG exceedances driven by background source terms (*i.e.*, D-Al and T-Zn), consistent with the Base Case WB/WQM (Lorax 2022). In general, the C&M model results reflect the negligible Project effect anticipated to occur to Creek 661 during a C&M event, given Project-related loading to this system is limited to surface area runoff and seepage from the Plant Site and Camp Site footprints (which are unchanged in the C&M scenarios).

Table 4-1:
Frequency of exceedance (percentage) of the BC guideline for the protection of aquatic life at Davidson Creek nodes and Creek 661 node WQ5 in the Care and Maintenance Model Scenarios 1, 2 and 3

Scenario	1		2		3	
Guideline	**BC short-term WQG**	**BC long-term WQG**	**BC short-term WQG**	**BC long-term WQG**	**BC short-term WQG**	**BC long-term WQG**
Davidson Creek						
WQ28						
T-Hg	0%	1%	0%	0%	0%	3%
D_Al	25%	43%	25%	43%	25%	43%
WQ27						
T-Hg	0%	0%	0%	0%	0%	1%
D_Al	8%	43%	8%	43%	8%	46%
WQ26						
T-Hg	0%	0%	0%	0%	0%	<1%
D_Al	8%	34%	8%	34%	8%	35%
WQ7						
D_Al	8%	34%	8%	34%	8%	35%
Creek 661						
WQ5						
T-Zn	0%	8%	0%	8%	0%	8%
D_Al	33%	75%	33%	75%	33%	75%

Notes:
WQG = British Columbia (BC) water quality guideline for the protection of aquatic life.
Predicted exceedances are based on Care and Maintenance water balance/water quality model v12b output as 95th percentile concentrations of variable climate case with Base Case source terms.
Values are percentages and are calculated as the number of months exceeding the screening value / the total number of months.
Shaded values reflect count greater than 1% (*i.e.*, predicted concentration in two or more months exceeds the corresponding WQG).
Guideline values used to screen model predictions were calculated using corresponding monthly median baseline hardness, chloride, pH, dissolved organic carbon, and highest mean monthly temperature.

Table 4-2:
Magnitude of maximum exceedance of the BC guideline for the protection of aquatic life at Davidson Creek nodes and Creek 661 node WQ5 in the Care and Maintenance Model Scenarios 1, 2 and 3

Scenario	1		2		3	
Guideline	**BC short-term WQG**	**BC long-term WQG**	**BC short-term WQG**	**BC long-term WQG**	**BC short-term WQG**	**BC long-term WQG**
Davidson Creek						
WQ28						
T-Hg	-	1.0	-	-	-	1.2
D_Al	1.4	2.8	1.4	2.8	1.4	2.9
WQ27						
T-Hg	-	-	-	-	-	1.1
D_Al	1.4	2.8	1.4	2.8	2.9	2.8
WQ26						
T-Hg	-	-	-	-	-	1.0
D_Al	1.3	2.5	1.3	2.5	1.3	2.5
WQ7						
D_Al	1.2	2.5	1.2	2.5	1.2	2.5
Creek 661						
WQ5						
T_Zn	-	3.7	-	3.7	-	3.7
D_Al	2.2	4.4	2.2	4.4	2.2	4.4

Notes:
WQG = British Columbia (BC) water quality guideline for the protection of aquatic life.
Predicted exceedances are based on Care and Maintenance water balance/water quality model v12b output as 95th percentile concentrations of variable climate case with Base Case source terms.
Magnitude of exceedance calculated as highest predicted value for the Care and Maintenance period divided by relevant water quality guideline
Shaded values reflect magnitude exceedance equal to or greater than two.
Guideline values used to screen model predictions were calculated using corresponding monthly median baseline hardness, chloride, pH, dissolved organic carbon, and highest mean monthly temperature.

Table 4-3:
Frequency of exceedance (percentage) of the CCME guideline for the protection of aquatic life at Davidson Creek nodes and Creek 661 node WQ5 in the Care and Maintenance Model Scenarios 1, 2 and 3

Scenario	1		2		3	
Guideline	CCME short-term WQG	CCME long-term WQG	CCME short-term WQG	CCME long-term WQG	CCME short-term WQG	CCME long-term WQG
Davidson Creek						
WQ28						
F	0%	99%	0%	99%	0%	96%
T_Al	0%	33%	0%	33%	0%	33%
T_Pb	0%	12%	0%	2%	0%	22%
WQ27						
F	0%	99%	0%	99%	0%	94%
T_Al	0%	33%	0%	33%	0%	33%
T_Pb	0%	8%	0%	2%	0%	16%
WQ26						
F	0%	99%	0%	99%	0%	88%
T_Al	0%	26%	0%	26%	0%	28%
T_Pb	0%	7%	0%	0%	0%	10%
WQ7						
F	0%	98%	0%	98%	0%	84%
T_Al	0%	33%	0%	33%	0%	32%
T_Pb	0%	2%	0%	0%	0%	5%
Creek 661						
WQ5						
F	0%	25%	0%	25%	0%	25%
T_Al	0%	8%	0%	8%	0%	8%
T_Pb	0%	8%	0%	8%	0%	8%

Notes:
WQG = Canadian Council of Ministers of the Environment (CCME) water quality guideline for the protection of aquatic life.
Predicted exceedances are based on Care and Maintenance water balance/water quality model v12b output as 95th percentile concentrations of variable climate case with Base Case source terms.
Values are percentages and are calculated as the number of months exceeding the screening value / the total number of months.
Shaded values reflect count greater than 1% (*i.e.*, predicted concentration in two or more months exceeds the corresponding WQG).
Guideline values used to screen model predictions were calculated using corresponding monthly median baseline hardness, chloride, pH, dissolved organic carbon, and highest mean monthly temperature.

Table 4-4:
Magnitude of maximum exceedance of the CCME guideline for the protection of aquatic life at Davidson Creek nodes and Creek 661 node WQ5 in the Care and Maintenance Model Scenarios 1, 2 and 3

Scenario	1		2		3	
Guideline	CCME short-term WQG	CCME long-term WQG	CCME short-term WQG	Guideline	CCME short-term WQG	CCME long-term WQG
Davidson Creek						
WQ28						
F	-	3.2	-	3.3	-	2.9
T_Al	-	2.5	-	2.5	-	2.6
T_Pb	-	1.3	-	1.3	-	1.4
WQ27						
F	-	3.0	-	2.9	-	2.8
T_Al	-	2.4	-	2.4	-	2.5
T_Pb	-	1.3	-	1.2	-	1.3
WQ26						
F	-	2.7	-	2.6	-	2.6
T_Al	-	2.2	-	2.2	-	2.4
T_Pb	-	1.3	-	1.2	-	1.3
WQ7						
F	-	2.3	-	2.5	-	2.3
T_Al	-	2.0	-	2.0	-	2.3
T_Pb	-	1.2	-	1.1	-	1.2
Creek 661						
WQ5						
F	-	2.6	-	2.6	-	2.6
T_Al	-	1.4	-	1.4	-	1.4
T_Pb	-	1.2	-	1.2	-	1.2

Notes:
WQG = Canadian Council of Ministers of the Environment (CCME) water quality guideline for the protection of aquatic life.
Predicted exceedances are based on Care and Maintenance water balance/water quality model v12b output as 95th percentile concentrations of variable climate case with Base Case source terms.
Magnitude of exceedance calculated as highest predicted value for the Care and Maintenance period divided by relevant water quality guideline
Shaded values reflect magnitude exceedance equal to or greater than two.
Guideline values used to screen model predictions were calculated using corresponding monthly median baseline hardness, chloride, pH, dissolved organic carbon, and highest mean monthly temperature.

5. Conclusions

The water quality results show that the system is relatively insensitive to changes between the three scenarios. From a water quality perspective, the C&M modelling indicates that all scenarios would be acceptable in that the predicted water quality in the Project receiving environment falls below BC WQG for the protection of aquatic life (and/or is equal to background terms) and is therefore unlikely to result in adverse effects to aquatic receptors. This is primarily due to the mitigations that are in place to manage Project-related loading, as pit sump water and TSF C water will continue to be treated prior to discharging to the receiving environment during a C&M period. The scope of this memorandum does not evaluate potential additional considerations, such as water management and engineering.

6. Closure

This memo was prepared by Lorax Environmental Services Ltd. on behalf of BW Gold Ltd.

Sincerely,

LORAX ENVIRONMENTAL SERVICES LTD.

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Appendix A: Acid Tailings Source Terms

Appendix A: Acidic Tailings Source Term Applied - Care and Maintenance

Table 1: Loading Rates

C&M Year	Cl	F	SO4	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sr	Tl	U	V	Zn
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
1 (neutral)	0.34	0.17	19	0.0022	0.020	0.0022	0.044	0.0044	0.00044	12	0.0023	0.0044	0.0022	0.022	0.0045	0.000044	1.1	0.044	0.52	0.32	0.0044	1.2	0.0044	0.22	0.0011	0.0011	0.0022	0.16	0.045	0.00044	0.0022	0.0044	0.11
2	0.29	0.013	44	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.24	0.020	0.0091	0.041	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.027	0.22	0.031	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	37
3	0.29	0.013	41	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.11	0.010	0.0091	0.041	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.018	0.22	0.031	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	15
4	0.29	0.013	38	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.056	0.0049	0.0091	0.040	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.012	0.22	0.031	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	5.7
5	0.29	0.013	35	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.027	0.0044	0.0091	0.039	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0084	0.22	0.030	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	2.3
6	0.29	0.013	33	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.013	0.0044	0.0091	0.038	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0057	0.22	0.030	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.89
7	0.29	0.013	30	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0063	0.0044	0.0091	0.038	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.030	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.35
8	0.29	0.013	28	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0031	0.0044	0.0091	0.037	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.030	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.14
9	0.29	0.013	26	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.036	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.029	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
10	0.29	0.013	24	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.036	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.029	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
11	0.29	0.013	23	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.035	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.029	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
12	0.29	0.013	21	0.011	0.13	0.00088	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.034	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.029	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
13	0.29	0.013	20	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.034	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.028	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
14	0.29	0.013	18	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.033	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.028	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
15	0.29	0.013	17	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.032	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.028	0.00028	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
16	0.29	0.013	16	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.032	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.028	0.00027	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
17	0.29	0.013	15	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.031	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.028	0.00027	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
18	0.29	0.013	13	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.031	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.027	0.00027	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
19	0.29	0.013	13	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.030	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.027	0.00027	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11
20	0.29	0.013	12	0.011	0.13	0.00087	0.18	0.056	0.0087	0.93	0.0023	0.0044	0.0091	0.030	1.3	0.000045	0.97	0.054	0.54	9.0	0.00093	1.1	0.0044	0.22	0.027	0.00027	0.0092	0.32	0.0064	0.0025	0.029	0.010	0.11

Table 2: Scaled Concentrations

C&M Year	Cl	F	SO4	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sr	Tl	U	V	Zn
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1 (neutral)	4.1	2.1	231	0.0050	0.0019	0.012	0.10	0.026	0.0010	148	0.028	0.053	0.0016	0.050	0.055	0.00010	14	0.10	6.3	3.8	0.026	15	0.053	0.015	0.0066	0.0067	0.013	0.98	0.27	0.0027	0.013	0.026	1.4
2	1.6	0.072	532	0.067	0.76	0.011	1.1	0.34	0.052	5.1	2.8	0.24	0.055	0.50	16	0.00027	5.3	0.33	2.9	110	0.0056	5.8	0.323	1.3	0.38	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	444
3	2.2	0.10	494	0.067	0.76	0.011	1.1	0.34	0.052	7.1	1.4	0.12	0.055	0.49	16	0.00027	7.4	0.33	4.1	109	0.0056	8.1	0.219	1.3	0.37	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	175
4	2.6	0.12	458	0.067	0.76	0.011	1.1	0.34	0.052	8.3	0.67	0.059	0.055	0.48	16	0.00027	8.6	0.33	4.8	109	0.0056	9.4	0.149	1.3	0.37	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	69
5	2.7	0.12	426	0.067	0.76	0.011	1.1	0.34	0.052	8.6	0.32	0.053	0.055	0.47	16	0.00027	8.9	0.33	4.9	109	0.0056	9.7	0.101	1.3	0.37	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	27
6	2.6	0.12	396	0.067	0.76	0.011	1.1	0.34	0.052	8.3	0.16	0.053	0.055	0.46	16	0.00027	8.6	0.33	4.8	109	0.0056	9.5	0.069	1.3	0.36	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	11
7	2.5	0.11	367	0.067	0.76	0.011	1.1	0.34	0.052	7.9	0.076	0.053	0.055	0.46	16	0.00027	8.2	0.33	4.5	109	0.0056	8.9	0.053	1.3	0.36	0.0034	0.056	7.9	0.039	0.015	0.17	0.062	4.2
8	2.3	0.10	341	0.067	0.76	0.011	1.1	0.34	0.052	7.4	0.037	0.053	0.055	0.45	16	0.00027	7.6	0.33	4.2	109	0.0056	8.4	0.053	1.3	0.36	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.7
9	2.2	0.096	317	0.067	0.76	0.011	1.1	0.34	0.052	6.9	0.028	0.053	0.055	0.44	16	0.00027	7.1	0.33	3.9	109	0.0056	7.8	0.053	1.3	0.36	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
10	2.0	0.090	294	0.067	0.76	0.011	1.1	0.34	0.052	6.4	0.028	0.053	0.055	0.43	16	0.00027	6.6	0.33	3.7	109	0.0056	7.2	0.053	1.3	0.35	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
11	1.9	0.083	273	0.067	0.76	0.011	1.1	0.34	0.052	5.9	0.028	0.053	0.055	0.42	16	0.00027	6.2	0.33	3.4	109	0.0056	6.7	0.053	1.3	0.35	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
12	1.7	0.078	254	0.067	0.76	0.011	1.1	0.34	0.052	5.5	0.028	0.053	0.055	0.42	16	0.00027	5.7	0.33	3.2	109	0.0056	6.3	0.053	1.3	0.35	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
13	1.6	0.072	236	0.067	0.76	0.011	1.1	0.34	0.052	5.1	0.028	0.053	0.055	0.41	16	0.00027	5.3	0.33	2.9	109	0.0056	5.8	0.053	1.3	0.34	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
14	1.5	0.067	219	0.067	0.76	0.011	1.1	0.34	0.052	4.8	0.028	0.053	0.055	0.40	16	0.00027	5.0	0.33	2.7	109	0.0056	5.4	0.053	1.3	0.34	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
15	1.4	0.062	204	0.067	0.76	0.011	1.1	0.34	0.052	4.4	0.028	0.053	0.055	0.39	16	0.00027	4.6	0.33	2.5	109	0.0056	5.0	0.053	1.3	0.34	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
16	1.3	0.058	189	0.067	0.76	0.011	1.1	0.34	0.052	4.1	0.028	0.053	0.055	0.39	16	0.00027	4.3	0.33	2.4	109	0.0056	4.7	0.053	1.3	0.34	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
17	1.2	0.054	176	0.067	0.76	0.011	1.1	0.34	0.052	3.8	0.028	0.053	0.055	0.38	16	0.00027	4.0	0.33	2.2	109	0.0056	4.4	0.053	1.3	0.33	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
18	1.1	0.050	163	0.067	0.76	0.011	1.1	0.34	0.052	3.6	0.028	0.053	0.0553	0.37	16	0.00027	3.7	0.33	2.1	109	0.0056	4.1	0.053	1.3	0.33	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
19	1.0	0.047	152	0.067	0.76	0.011	1.1	0.34	0.052	3.3	0.028	0.053	0.0553	0.36	16	0.00027	3.5	0.33	1.9	109	0.0056	3.8	0.053	1.3	0.33	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3
20	0.97	0.044	141	0.067	0.76	0.011	1.1	0.34	0.052	3.1	0.028	0.053	0.0553	0.36	16	0.00027	3.2	0.33	1.8	109	0.0056	3.5	0.053	1.3	0.33	0.0033	0.056	7.9	0.039	0.015	0.17	0.062	1.3

Appendix B: Water Quality Model Results

APPENDIX B.1: CARE AND MAINTENANCE SCENARIO 1 – MINE SITE NODES

APPENDIX B.2: CARE AND MAINTENANCE SCENARIO 2 – MINE SITE NODES

APPENDIX B.3: CARE AND MAINTENANCE SCENARIO 3 – MINE SITE NODES

APPENDIX B.4: CARE AND MAINTENANCE SCENARIO 1 – RECEIVING STREAM NODES

APPENDIX B.5: CARE AND MAINTENANCE SCENARIO 2 – RECEIVING STREAM NODES

APPENDIX B.6: CARE AND MAINTENANCE SCENARIO 3 – RECEIVING STREAM NODES

APPENDIX B.1: CARE AND MAINTENANCE SCENARIO 1 – MINE SITE NODES

Appendix B.1.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Mine Site Nodes, TSF C Pond

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.56138134	5.93484354	2.124699354	0.781625986	0.235535145	0.087423056	0.030853599	0.011600039	0.004110745	0.001574896	0.000657856	0.000372065
NO3_N	Care & Maintenance	P95	14.57468414	13.73901081	12.43796539	11.11199665	9.137823105	8.414753914	8.795879364	8.230451584	9.500779152	9.697604179	8.552562714	8.91946888
NO2_N	Care & Maintenance	P95	0.124027237	0.123839319	0.120001167	0.107650764	0.087377809	0.0851686	0.081123143	0.079835057	0.076680735	0.074725315	0.072086558	0.072188117
Br	Care & Maintenance	P95	0.075104676	0.073888861	0.073774137	0.068261087	0.069287293	0.071984805	0.077053182	0.077931754	0.079343557	0.079044886	0.07996019	0.077989437
Cl	Care & Maintenance	P95	2.013003111	2.005923986	2.023148537	1.869885683	1.783465505	1.825066209	1.897712708	1.897491693	1.910037398	2.005138636	1.947125673	2.010625124
F	Care & Maintenance	P95	0.519811511	0.523432195	0.513565361	0.49248147	0.476301938	0.475864738	0.472699612	0.499169648	0.506367624	0.506775796	0.509563804	0.514621377
TDP	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
SO4	Care & Maintenance	P95	2524.036377	2688.925537	2654.01709	2757.594482	2516.718506	2502.997314	2752.588379	2644.707275	2803.85498	2856.928467	2603.72168	2882.317383
T_CN	Care & Maintenance	P95	0.001104709	8.0643E-07	1.02408E-07	5.42963E-08	4.2469E-07	6.95498E-07	1.82248E-07	1.13078E-07	1.30026E-07	1.2546E-07	1.61997E-07	1.41321E-07
WAD_CN	Care & Maintenance	P95	5.94355E-06	7.04133E-08	1.00805E-07	5.42988E-08	4.24692E-07	6.95499E-07	1.82251E-07	1.1308E-07	1.30029E-07	1.25463E-07	1.61999E-07	1.41324E-07
T_Ag	Care & Maintenance	P95	0.001944921	0.001919332	0.00196007	0.001779702	0.001912684	0.001928587	0.002011467	0.001985662	0.002154749	0.002180175	0.002530423	0.00243795
T_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
T_As	Care & Maintenance	P95	0.015878055	0.015793802	0.01551889	0.015214641	0.013315882	0.013201927	0.012976662	0.013043182	0.012930668	0.012560614	0.012378925	0.012253724
T_B	Care & Maintenance	P95	0.111297004	0.109709375	0.112610221	0.107983381	0.101558119	0.103614844	0.109905198	0.108764678	0.110463575	0.120289274	0.110133171	0.121864893
T_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
T_Bi	Care & Maintenance	P95	9.00936E-05	8.67589E-05	8.39641E-05	7.62488E-05	6.13038E-05	6.02189E-05	5.89081E-05	5.80704E-05	5.51485E-05	5.23887E-05	5.1935E-05	5.13409E-05
T_Be	Care & Maintenance	P95	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791
T_Ca	Care & Maintenance	P95	560.1318359	559.7700195	559.8188477	551.43573	537.232666	546.3960571	546.0427246	549.0469971	557.0032959	550.2120361	560.246582	559.3012695
T_Cd	Care & Maintenance	P95	0.048664991	0.044165984	0.045816198	0.041718893	0.04355295	0.04426549	0.042886414	0.04298408	0.042981841	0.043819685	0.045962606	0.046665747
T_Co	Care & Maintenance	P95	0.074336685	0.075816497	0.073578671	0.069380961	0.058938965	0.057201743	0.055435527	0.054438934	0.052675121	0.05074054	0.049571596	0.048637625
T_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
T_Cu	Care & Maintenance	P95	0.015593885	0.015469234	0.015506204	0.014417594	0.014977961	0.015299271	0.01543391	0.015125381	0.015058568	0.01557961	0.016024591	0.015856508
T_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
T_Hg	Care & Maintenance	P95	0.00057994	0.000716513	0.000658019	0.000744016	0.00062753	0.000635253	0.000699607	0.000675887	0.000775755	0.000773909	0.000712706	0.000796743
T_K	Care & Maintenance	P95	137.3542175	169.8454285	156.0509949	175.3697205	151.7587891	149.4981995	170.2872314	161.6561737	182.1239319	185.054657	166.9256592	191.2279663
T_Li	Care & Maintenance	P95	0.135582969	0.154354438	0.144460186	0.15828988	0.13586612	0.136816174	0.145470083	0.135237306	0.15819779	0.162062407	0.136337101	0.161701873
T_Mg	Care & Maintenance	P95	412.2837219	514.144104	477.9554749	534.4491577	453.3850403	458.7723694	507.7717896	492.2138977	564.2695313	562.84552	524.0209961	586.8116455
T_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
T_Mo	Care & Maintenance	P95	0.100885354	0.102973551	0.101675734	0.095472783	0.078486055	0.077184729	0.075355627	0.075078905	0.072859377	0.071003564	0.070196845	0.069641739
T_Na	Care & Maintenance	P95	699.5286865	717.3435669	698.2457886	755.7224731	653.2341309	623.175293	752.0418701	702.4306641	779.887085	808.5682983	703.0147095	822.2420044
T_Ni	Care & Maintenance	P95	0.057360049	0.071607694	0.066085853	0.074223034	0.062906533	0.062698081	0.070508406	0.06802623	0.077454403	0.07760299	0.071076468	0.0808139
T_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
T_Pb	Care & Maintenance	P95	0.010234331	0.009945198	0.010211698	0.009294317	0.00993312	0.010170532	0.010224913	0.010097055	0.010468929	0.010593411	0.012303981	0.011822006
T_S	Care & Maintenance	P95	1.790480494	1.728693604	1.674334526	1.483721495	1.222542763	1.193957686	1.165490627	1.150673151	1.106715918	1.054402113	1.02992928	1.012318254
T_Sb	Care & Maintenance	P95	0.048291959	0.04898664	0.049565345	0.048977185	0.042633921	0.043328315	0.046754595	0.04640843	0.048943114	0.051934484	0.047828771	0.050384834
T_Se	Care & Maintenance	P95	0.028211653	0.035075519	0.032382358	0.036877051	0.03123467	0.031819306	0.034936901	0.033848051	0.039066784	0.038623054	0.036251705	0.040721904
T_Si	Care & Maintenance	P95	5.526091099	5.401079655	5.486803055	5.271836281	5.220135212	5.291612625	5.588937283	5.47738409	5.678397179	5.732109547	5.386018276	5.613507271
T_Sn	Care & Maintenance	P95	3.91288E-05	3.91927E-05	3.95047E-05	3.9011E-05	3.69863E-05	3.98367E-05	4.07267E-05	4.07264E-05	4.10684E-05	3.99841E-05	4.0111E-05	3.9899E-05
T_Sr	Care & Maintenance	P95	5.395596981	6.703828335	6.223786831	6.953464985	5.995769024	5.989574432	6.67204237	6.433671474	7.347568035	7.349049091	6.822049141	7.659353733
T_Ti	Care & Maintenance	P95	0.002795448	0.002686308	0.002734271	0.00261708	0.002118041	0.00310692	0.003018149	0.00305027	0.003047918	0.002925416	0.003017647	0.002752151
T_Tl	Care & Maintenance	P95	0.000666794	0.00066108	0.000668671	0.00061278	0.000633339	0.000637795	0.000671611	0.000660146	0.000683043	0.000706832	0.000766305	0.000779517
T_U	Care & Maintenance	P95	0.065099344	0.0803653	0.07398545	0.084842265	0.071936905	0.07301414	0.080557063	0.07770735	0.090026952	0.088652045	0.08345563	0.094115555
T_V	Care & Maintenance	P95	0.012025625	0.012615239	0.012322143	0.01249794	0.011127822	0.011294695	0.011821661	0.011714488	0.012861961	0.013179665	0.012110131	0.013166491
T_Zn	Care & Maintenance	P95	2.584995747	2.512336254	2.514204741	2.454308271	2.614910603	2.476874828	2.495954275	2.541370153	2.531285048	2.603579998	2.61164999	2.623019218
D_Ag	Care & Maintenance	P95	0.001942976	0.001917627	0.001958994	0.001777541	0.001911591	0.00192648	0.002009358	0.001981717	0.002151682	0.002178466	0.002529231	0.002435701
D_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
D_As	Care & Maintenance	P95	0.015872763	0.015787205	0.015507828	0.015203616	0.013309221	0.013190818	0.012963619	0.013031983	0.0129134	0.012549789	0.012368036	0.012242716
D_B	Care & Maintenance	P95	0.111297004	0.109709375	0.112610221	0.107983381	0.101558119	0.103614844	0.109905198	0.108764678	0.110463575	0.120289274	0.110133171	0.121864893
D_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
D_Bi	Care & Maintenance	P95	9.00936E-05	8.67589E-05	8.39641E-05	7.62488E-05	6.13038E-05	6.02189E-05	5.89081E-05	5.80704E-05	5.51485E-05	5.23887E-05	5.1935E-05	5.13409E-05
D_Be	Care & Maintenance	P95	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791
D_Ca	Care & Maintenance	P95	560.1674805	559.8062744	559.8572388	551.4545288	537.2490845	546.4176025	546.0593872	549.06427	557.0196533	550.21698	560.2589111	559.3394165
D_Cd	Care & Maintenance	P95	0.048664834	0.044165514	0.045815829	0.041718703	0.043552749	0.044265125	0.042885955	0.042983696	0.042981591	0.043819204	0.045962512	0.046665642
D_Co	Care & Maintenance	P95	0.074336655	0.075816482	0.073578633	0.069380909	0.058938429	0.057201389	0.055435076	0.054438494	0.052674547	0.050739989	0.049571067	0.048637111
D_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
D_Cu	Care & Maintenance	P95	0.015589694	0.015465024	0.015501574	0.014413022	0.014972311	0.015292862	0.015428921	0.015120806	0.015053665	0.015575051	0.016021101	0.015852787
D_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
D_Hg	Care & Maintenance	P95	0.000580821	0.000717527	0.000658567	0.000745836	0.00062797	0.000636313	0.000700499	0.000676918	0.000777683	0.000775074	0.00071376	0.000797653
D_K	Care & Maintenance	P95	137.3154144	169.8127289	156.0092773	175.3724823	151.6631317	149.4167633	170.228653	161.6111908	182.0753174	185.0037231	166.9258728	191.1411743
D_Li	Care & Maintenance	P95	0.135582969	0.154354438	0.144460186	0.15828988	0.13586612	0.136816174	0.145470083	0.135237306	0.15819779	0.162062407	0.136337101	0.161701873
D_Mg	Care & Maintenance	P95	412.2174988	514.0606689	477.8858337	534.361145	453.3091431	458.6895752	507.6859741	492.1333008	564.1724243	562.7540894	523.9268188	586.7197266
D_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
D_Mo	Care & Maintenance	P95	0.100884788	0.102972671	0.101674594	0.095471375	0.078481533	0.077179991	0.07535094	0.075074889	0.072854273	0.070998728	0.07019195	0.069636971
D_Na	Care & Maintenance	P95	699.5131836	716.8789673	697.848938	755.1872559	652.8486328	622.8006592	751.5967407	702.0131226	779.4090576	808.0931396	702.5346069	821.7103271
D_Ni	Care & Maintenance	P95	0.057344068	0.071589962	0.066067375	0.074211426	0.062880583	0.062682562	0.070486724	0.068007991	0.077441595	0.077582426	0.071064301	0.080787256
D_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
D_Pb	Care & Maintenance	P95	0.010230554	0.009941957	0.010209612	0.009289906	0.009930304	0.010166466	0.010220985	0.010093563	0.010462976	0.010590092	0.012301668	0.011817642
D_S	Care & Maintenance	P95	1.775787592	1.714611292	1.662875533	1.477780223	1.194569111	1.167001128	1.139523268	1.125383377	1.075345516	1.020645976	0.994150162	0.984841824
D_Sb	Care & Maintenance	P95	0.048291959	0.04898664	0.049565345	0.048977185	0.042633921	0.043328315	0.046754595	0.04640843	0.048943114	0.051934484	0.047828771	0.050384834
D_Se	Care & Maintenance	P95	0.028210085	0.035062168	0.032356013	0.036874358	0.031218017	0.031808872	0.034926113	0.033834137	0.039063774	0.03860721	0.036244895	0.040695317
D_Si	Care & Maintenance	P95	5.43146944	5.329961777	5.38365984	5.166903019	5.127884388	5.20394516	5.472515106	5.366715431	5.545904636	5.621965408	5.283126831	5.503579617
D_Sn	Care & Maintenance	P95	3.91288E-05	3.91927E-05	3.95047E-05	3.9011E-05	3.69863E-05	3.98367E-05	4.07267E-05	4.07264E-05	4.10684E-05	3.99841E-05	4.0111E-05	3.9899E-05
D_Sr	Care & Maintenance	P95	5.39413929	6.703608513	6.225093842	6.953075409	5.99663496	5.987831593	6.671747208	6.433397293	7.346918106	7.348759174	6.820930004	7.660192966
D_Ti	Care & Maintenance	P95	0.002140185	0.002084567	0.002010906	0.001964143	0.001611906	0.002000539	0.001920709	0.001910759	0.001953625	0.001838452	0.001905347	0.001851493
D_Tl	Care & Maintenance	P95	0.000666794	0.00066108	0.000668671	0.00061278	0.000633339	0.000637795	0.000671611	0.000660146	0.000683043	0.000706832	0.000766305	0.000779517
D_U	Care & Maintenance	P95	0.065006152	0.080260232	0.073899426	0.084713325	0.071849853	0.072914071	0.080452405	0.077604771	0.089890108	0.088536061	0.083341144	0.094006769
D_V	Care & Maintenance	P95	0.011990322	0.012583693	0.012295862	0.012479519	0.011110472	0.011250667	0.01178389	0.011670685	0.012825926	0.013143813	0.012077227	0.01312279
D_Zn	Care & Maintenance	P95	2.584995747	2.512332439	2.514196396	2.454298019	2.614910603	2.476874828	2.495952606	2.541368484	2.531285048	2.603579998	2.61164999	2.623019218

Appendix B.1.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Mine Site Nodes, Open Pit/Pit Lake to Pit Sump

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.0392	0.0392	0.0392	0.240211561	0.262083828	0.25731203	0.238272026	0.234058589	0.238389924	0.226796865	0.0392	0.0392
NO3_N	Care & Maintenance	P95	0.005	0.005	0.005	4.319462299	4.824046135	4.719385624	4.295503139	4.193676472	4.27843523	4.042085171	0.005	0.005030349
NO2_N	Care & Maintenance	P95	0.001	0.001	0.001	0.007938807	0.008775827	0.008609794	0.007917088	0.007731829	0.007874276	0.007504091	0.001	0.001013389
Br	Care & Maintenance	P95	0.049999997	0.049999997	0.049999997	0.049999997	0.021670196	0.049036715	0.049161647	0.049991693	0.049999997	0.049999997	0.049999997	0.049999997
Cl	Care & Maintenance	P95	0.5	0.5	0.5	1.747517824	1.881426573	1.882784605	1.732315063	1.707746387	1.735221624	1.685827374	0.5	0.500535607
F	Care & Maintenance	P95	0.137999997	0.137999997	0.137999997	1.184404373	1.305163741	1.277148962	1.176368952	1.152990699	1.174684167	1.116014481	0.137999997	0.137999997
TDP	Care & Maintenance	P95	0.02	0.02	0.02	0.057146881	0.06084137	0.059799597	0.056386013	0.05590732	0.056807976	0.054480579	0.02	0.02
SO4	Care & Maintenance	P95	23.39999962	23.39999962	23.39999962	479.4135742	532.3092041	520.477417	476.2128296	465.9242249	475.0476379	449.8513489	23.39999962	23.4141922
T_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
WAD_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
T_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000337387	0.000376841	0.000368415	0.000336016	0.000327904	0.000334264	0.000316632	1.01596E-05	1.00446E-05
T_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.734462619	1.949743629	1.901999354	1.729111433	1.685013533	1.717687011	1.62443924	0.010421682	0.007764724
T_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062346023	0.067886919	0.066424839	0.061750945	0.060785513	0.061896615	0.058936536	0.0123	0.0123
T_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269179821	0.01	0.01
T_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031937916	0.05673017	0.057033155	0.058881674	0.058900002	0.058900002	0.058900002	0.058900002
T_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
T_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
T_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.295105	136.7081909	133.6813049	122.5785599	119.9306641	122.1882858	115.9585266	8.620000839	8.627479553
T_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718363	0.522500992	0.510780931	0.465105981	0.454088509	0.463272244	0.437660694	0.000118	0.000119037
T_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.293824077	0.2675744	0.261247426	0.266528696	0.251803249	0.00032	0.00032
T_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269636	0.015928809	0.015567246	0.014189899	0.013858759	0.014135856	0.013363922	0.00019	0.00019
T_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088218659	0.0862277	0.078523614	0.076658964	0.078204967	0.073897682	0.000201596	0.000200089
T_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375727654	8.482834816	8.526948929	8.817095757	8.819999695	8.819999695	8.819999695	8.819999695
T_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116386	1E-05	1E-05
T_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54404068	43.88954163	42.90597153	39.28102493	38.43507004	39.19225311	37.11563873	2.120000124	2.120000124
T_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
T_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84980774	41.91140747	38.33081055	37.47645569	38.20586014	36.18779755	1.649999976	1.651160479
T_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.29888916	57.11790466	55.86220169	50.98716354	49.82579041	50.82435608	48.05400467	1.120000005	1.120000005
T_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319266	0.008293045	0.008159521	0.008162937	0.008161418	0.008325506	0.008136445	0.0064	0.0064
T_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26593018	14.94924545	14.73328972	14.09587002	13.99513531	14.19737244	13.7014904	6.360000134	6.360000134
T_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322773188	0.315528363	0.287362367	0.280571491	0.286238939	0.270437539	0.0006	0.0006
T_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.165800482	0.288633257	0.290040374	0.299901962	0.300000012	0.300000012	0.300000012	0.300000012
T_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.119279884	0.133245647	0.130252182	0.118611984	0.115806147	0.118146718	0.111618735	0.000111	0.000111785
T_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.279145956	7.617110252	7.61748457	7.618481159	7.619999886	7.619999886	7.619999886	7.619999886
T_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776611	0.064616069	0.063004263	0.057434507	0.056113947	0.057239007	0.054114103	0.00102	0.00102
T_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
T_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.234751701	8.636884689	8.709219933	8.798710823	8.800000191	8.800000191	8.800000191	8.800000191
T_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
T_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.484969348	0.52673918	0.516210556	0.480849653	0.473315477	0.481368721	0.459741503	0.104999997	0.104999997
T_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004334039	0.009667346	0.009782028	0.009998339	0.01	0.01	0.01	0.01
T_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
T_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914382	0.026656915	0.026064428	0.023772748	0.023225153	0.023691449	0.022395579	0.000382	0.000382
T_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.033320937	0.030445112	0.029762773	0.030353604	0.028712627	0.001	0.001
T_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01169586	55.86948395	54.61669159	49.73310471	48.55472183	49.5363121	46.79872513	0.024498027	0.024057306
D_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.00033736	0.000376841	0.000368415	0.000336016	0.000327771	0.000334264	0.000316632	1.01596E-05	1.00446E-05
D_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.73415339	1.947196126	1.900303125	1.72735548	1.684392929	1.717678666	1.623917222	0.008996241	0.007431777
D_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062344115	0.067879453	0.066416539	0.061750945	0.060784183	0.061896607	0.058932122	0.0123	0.0123
D_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269119561	0.01	0.01
D_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031932391	0.056717586	0.057018064	0.058881454	0.058900002	0.058900002	0.058900002	0.058900002
D_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
D_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
D_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.294838	136.7099609	133.6752777	122.5691528	119.9325943	122.1882858	115.9324188	8.620000839	8.627212524
D_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718273	0.522499025	0.510780275	0.465105653	0.4540883	0.463272244	0.437660456	0.000118	0.00011863
D_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.2938236	0.2675744	0.261247426	0.266528696	0.251802444	0.00032	0.00032
D_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269368	0.01592732	0.015567035	0.014189899	0.013858518	0.014135856	0.013363922	0.00019	0.00019
D_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088210925	0.086221889	0.078515776	0.076658964	0.078204967	0.07389266	0.000200798	0.000200089
D_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375088692	8.482515335	8.525986671	8.817081451	8.819999695	8.819999695	8.819999695	8.819999695
D_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116356	1E-05	1E-05
D_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54407501	43.8884697	42.90582275	39.28102493	38.43507004	39.19225311	37.10519409	2.120000124	2.120000124
D_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
D_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84281921	41.90993881	38.33081055	37.47754288	38.20584869	36.18579102	1.649999976	1.651088953
D_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.2987709	57.11761475	55.86201096	50.98689651	49.82565689	50.82435608	48.05383301	1.120000005	1.120000005
D_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319058	0.008293584	0.0081597	0.008162937	0.008161373	0.008325503	0.008136336	0.0064	0.0064
D_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26544666	14.95463848	14.73606586	14.09587002	13.99634266	14.19734955	13.69948196	6.360000134	6.360000134
D_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322772086	0.315528214	0.287360489	0.280571491	0.286238939	0.270437539	0.0006	0.0006
D_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.16607663	0.288633257	0.290107459	0.299908608	0.300000012	0.300000012	0.300000012	0.300000012
D_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.11927963	0.133243471	0.13025187	0.118611984	0.115805417	0.118146718	0.111618198	0.000111	0.000111
D_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.275409937	7.608223915	7.609751225	7.61842823	7.619999886	7.619999886	7.619999886	7.619999886
D_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776533	0.064614877	0.063003935	0.057434507	0.056113947	0.057239007	0.054113101	0.00102	0.00102
D_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
D_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.230853081	8.614022255	8.698560715	8.798700333	8.800000191	8.800000191	8.800000191	8.800000191
D_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
D_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.48496452	0.526578546	0.516154826	0.480849653	0.473321527	0.481368661	0.459518641	0.104999997	0.104999997
D_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004296272	0.009650649	0.009718313	0.009997074	0.01	0.01	0.01	0.01
D_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
D_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914319	0.026656419	0.026063807	0.023772748	0.023225067	0.023691449	0.02239546	0.000382	0.000382
D_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.03331976	0.030441662	0.029762773	0.030353596	0.028713631	0.001	0.001
D_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01167297	55.8692894	54.61666489	49.73310471	48.55471802	49.5363121	46.79866409	0.024272956	0.024011604

Appendix B.1.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Mine Site Nodes, Interim ECD

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.41823959	15.28497887	15.63916683	15.00719452	11.07796288	12.03059578	12.26759338	12.82700634	12.83582687	12.65960312	13.03459167	13.68600941
NO3_N	Care & Maintenance	P95	6.595578194	4.621411324	4.223446369	3.800043344	4.764916897	5.041156769	5.525806904	5.652696609	5.365502357	5.285130978	5.476387024	5.426754475
NO2_N	Care & Maintenance	P95	0.053306103	0.030885713	0.028209316	0.025695661	0.032103535	0.033776812	0.036928616	0.037742626	0.035828616	0.035253618	0.03661789	0.036237154
Br	Care & Maintenance	P95	0.000236913	0.000219029	0.005787489	0.015373724	0.015729601	0.012883552	0.011991546	0.009356791	0.005879235	0.013259618	0.001919203	0.000306737
Cl	Care & Maintenance	P95	3.245729446	3.065562725	2.886779308	2.462851048	2.893569708	3.186553717	3.438152313	3.522990465	3.387185574	3.350039721	3.397559404	3.421946049
F	Care & Maintenance	P95	1.122157216	1.068098664	1.014203429	0.854764163	0.993703008	1.085960746	1.169388175	1.203397274	1.16433537	1.150369048	1.154766083	1.173942208
TDP	Care & Maintenance	P95	0.006347254	0.006101578	0.005948532	0.006763992	0.007822225	0.007432958	0.006638097	0.006999214	0.00691628	0.006847532	0.006951374	0.006212499
SO4	Care & Maintenance	P95	2000.804443	1782.65564	1807.393188	1763.526855	1440.380249	1561.056152	1577.62915	1616.634521	1622.063721	1610.877319	1634.765259	1680.188477
T_CN	Care & Maintenance	P95	0.001051029	0.000963507	0.001251782	0.001786731	0.00173753	0.001565235	0.001478705	0.001318612	0.001087977	0.001604431	0.000845559	0.000865102
WAD_CN	Care & Maintenance	P95	0.000901542	0.000956519	0.001252029	0.001786853	0.001737614	0.001565337	0.001478808	0.001318753	0.001088162	0.001604534	0.000845809	0.000865418
T_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000334502	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
T_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.021296958	0.186357245	0.097689889	0.042264938	0.034785505	0.017895235	0.037205461	0.019575277	0.01677756
T_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.0178154	0.018958166	0.019838762	0.020261694	0.020098884	0.019830324	0.019676849	0.020088241
T_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
T_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017814282	0.014662798	0.015481192	0.015705369	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
T_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
T_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
T_Ca	Care & Maintenance	P95	393.9638977	372.0048218	374.5565491	369.863678	314.4874573	339.2409363	342.8687439	348.335022	349.7079163	348.751709	352.4597778	358.9265442
T_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.001438148	0.001785275	0.001911621	0.002092012	0.002140976	0.002030937	0.002000053	0.002070875	0.002053958
T_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667051	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
T_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.00085733	0.000702112	0.00073642	0.000751093	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
T_Cu	Care & Maintenance	P95	0.007885337	0.007281382	0.006691435	0.006004828	0.007597459	0.00791687	0.008646444	0.008841149	0.008396284	0.008271598	0.008558495	0.008487798
T_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.289508075	0.229945973	0.232006162	0.236712411	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
T_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267106	0.000302237	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
T_K	Care & Maintenance	P95	75.21772766	72.66133881	70.03321838	61.72455597	67.10276031	71.7530365	76.7510376	79.16244507	77.37463379	76.6344986	75.69770813	77.86212921
T_Li	Care & Maintenance	P95	0.135960191	0.126037538	0.116179846	0.10263294	0.124492727	0.135530517	0.147706822	0.151577473	0.14423658	0.142279938	0.146466523	0.145940915
T_Mg	Care & Maintenance	P95	12.03653431	12.25751019	12.4346323	11.31363201	10.790452	11.66676331	12.0484848	12.33838463	12.32907772	12.52574635	12.46244526	12.5453949
T_Mn	Care & Maintenance	P95	0.46040529	0.35180828	0.335410476	0.287173122	0.326747954	0.354028612	0.379749626	0.391831398	0.380310744	0.375544041	0.375219554	0.382979184
T_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141341895	0.153127849	0.154946983	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
T_Na	Care & Maintenance	P95	482.7615662	399.7516479	409.7792358	394.1542358	294.6036682	319.7695007	324.9194336	339.2663879	339.4760437	334.611084	343.9099426	359.9652405
T_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012459379	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
T_P	Care & Maintenance	P95	0.006289918	0.006051098	0.006725823	0.007379563	0.011436197	0.007966883	0.007460584	0.007597517	0.007179894	0.007735493	0.007017875	0.006573949
T_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000797274	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
T_S	Care & Maintenance	P95	0.004738268	0.004380588	0.183709443	0.48226878	0.157767698	0.130012363	0.122390807	0.192228556	0.136775345	0.42316547	0.021191135	0.008487212
T_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
T_Se	Care & Maintenance	P95	0.003675169	0.003451932	0.003231267	0.002730588	0.003246963	0.003610916	0.003916998	0.004019194	0.003850142	0.003804863	0.003869072	0.003893747
T_Si	Care & Maintenance	P95	3.103214264	2.801413536	3.102306843	5.729763508	5.18598938	4.386871815	4.831783772	4.560443878	4.220669746	5.121379852	3.903801203	3.438580275
T_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
T_Sr	Care & Maintenance	P95	0.718798935	0.483937323	0.44228977	0.438624769	0.511179447	0.529640019	0.580545187	0.590549946	0.562073708	0.551850855	0.574412584	0.566636145
T_Ti	Care & Maintenance	P95	1.42672E-06	1.31418E-06	8.56947E-05	0.001196206	0.003138097	0.002132606	0.001238185	0.001276303	0.000164546	0.002633456	0.000345058	3.46593E-06
T_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
T_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.00337778	0.003953657	0.004354236	0.004700095	0.004825952	0.004653165	0.004596842	0.004637635	0.004696508
T_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025564872	0.032197312	0.033927049	0.037172277	0.037993763	0.036027387	0.035456363	0.036784895	0.036427226
T_Zn	Care & Maintenance	P95	0.097614095	0.090086229	0.082714826	0.074044891	0.091865905	0.097881988	0.106947467	0.109452687	0.10394416	0.102385342	0.105908796	0.105109356
D_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000324848	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
D_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.017544467	0.134059489	0.085153446	0.032770716	0.027788594	0.016444879	0.029306805	0.018642103	0.016670221
D_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.017802503	0.01895738	0.019838717	0.02026166	0.020098884	0.01983029	0.019676732	0.020088173
D_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
D_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017810347	0.014620136	0.015480791	0.015704347	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
D_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
D_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
D_Ca	Care & Maintenance	P95	393.9639282	372.0048218	374.5565491	369.8636169	314.4875488	339.2407837	342.8686829	348.3349304	349.7078247	348.7516785	352.4598389	358.9266357
D_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.00143761	0.001783856	0.001911618	0.002092273	0.002140976	0.002030884	0.002000054	0.002070834	0.002053964
D_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667044	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
D_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.000856245	0.000697475	0.000736382	0.000750868	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
D_Cu	Care & Maintenance	P95	0.007885336	0.007281382	0.006691435	0.005997149	0.007579003	0.007921612	0.008646444	0.008841149	0.008395866	0.008271598	0.008558495	0.008487798
D_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.2891303	0.222407565	0.231982738	0.236670002	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
D_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267159	0.000302123	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
D_K	Care & Maintenance	P95	75.21746826	72.66101074	70.03288269	61.72253418	67.10408783	71.75288391	76.75090027	79.16229248	77.37447357	76.63401794	75.6978302	77.86177826
D_Li	Care & Maintenance	P95	0.135960191	0.126037538	0.116179846	0.10263294	0.124492727	0.135530517	0.147706822	0.151577473	0.14423658	0.142279938	0.146466523	0.145940915
D_Mg	Care & Maintenance	P95	12.03613663	12.25702953	12.43415451	11.31289864	10.78901577	11.66596031	12.04803371	12.33793068	12.32862663	12.52480221	12.46341228	12.54496956
D_Mn	Care & Maintenance	P95	0.46040526	0.35180828	0.335410476	0.287152886	0.326140344	0.353732556	0.379671872	0.391830295	0.380310237	0.375539422	0.375165731	0.382975906
D_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141340926	0.153127849	0.154947013	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
D_Na	Care & Maintenance	P95	482.7522278	399.7514954	409.7790833	394.1532593	294.5986023	319.7691956	324.91922	339.2662048	339.4758301	334.6109009	343.9097595	359.9650269
D_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012453237	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
D_P	Care & Maintenance	P95	0.006292959	0.006051098	0.008085016	0.011238604	0.017361116	0.010612168	0.015148146	0.036428068	0.011185026	0.081976086	0.016503816	0.006648378
D_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000778534	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
D_S	Care & Maintenance	P95	0.004738268	0.004380588	0.197301388	0.417870879	0.157767698	0.130012363	0.122390807	0.117393307	0.133373499	0.133548126	0.021191135	0.008016689
D_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
D_Se	Care & Maintenance	P95	0.003675168	0.003451932	0.003231267	0.002732376	0.003247576	0.003609454	0.003917055	0.004019189	0.003850139	0.003804544	0.003866961	0.003893732
D_Si	Care & Maintenance	P95	3.103208542	2.801413536	3.100132465	5.501202106	4.997080326	4.319203377	4.81287384	4.504397869	4.226468086	5.049548626	3.893248796	3.437490225
D_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
D_Sr	Care & Maintenance	P95	0.718798876	0.483937323	0.44228977	0.43942669	0.510744035	0.529576778	0.580392122	0.590550482	0.562121868	0.55184418	0.574940145	0.566639245
D_Ti	Care & Maintenance	P95	1.42148E-06	1.31418E-06	6.87048E-05	0.00046023	0.001694679	0.001047507	0.000668531	0.001128844	0.000125991	0.002633456	0.000345058	3.10957E-06
D_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
D_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.003373567	0.003952166	0.004353301	0.004699643	0.004825948	0.004653164	0.004596757	0.004637107	0.004696488
D_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025546445	0.032043982	0.033923954	0.037169088	0.037993737	0.036027387	0.035456363	0.036781963	0.036427226
D_Zn	Care & Maintenance	P95	0.097614087	0.090086229	0.082714826	0.074044891	0.091534629	0.097866848	0.106909208	0.109452322	0.103923216	0.102376923	0.105908796	0.105107658

Appendix B.1.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Mine Site Nodes, WMP

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.209968179	0.193713024	0.176808208	0.15282689	0.065536521	0.044198684	0.031940959	0.030310653	0.037577175	0.031583119	0.035554077	0.019935329
NO3_N	Care & Maintenance	P95	2.503513098	2.31690383	2.365717411	2.165885448	1.929531455	1.37316072	1.206630945	1.928323507	1.303648233	1.649309278	2.345254183	2.011249304
NO2_N	Care & Maintenance	P95	0.014181261	0.013483081	0.014417799	0.015216555	0.012047001	0.008750221	0.007925229	0.010512806	0.008911473	0.010099607	0.012701069	0.013347293
Br	Care & Maintenance	P95	0.080746777	0.073173299	0.079257101	0.063476034	0.055572111	0.047433902	0.047736902	0.060309514	0.052954752	0.064018138	0.067372486	0.071360543
Cl	Care & Maintenance	P95	1.606419444	1.435429931	1.562482357	1.284537196	1.110452175	0.893329144	0.886666119	1.107009768	1.03492558	1.197541714	1.348038435	1.434903264
F	Care & Maintenance	P95	0.465532452	0.414478868	0.456158787	0.372675657	0.314898461	0.262672782	0.251187563	0.357843667	0.311313212	0.352475077	0.416028798	0.392516911
TDP	Care & Maintenance	P95	0.02150818	0.023769718	0.024639651	0.02178123	0.017611431	0.019326258	0.016142134	0.017809456	0.022727311	0.025039051	0.026927017	0.02249551
SO4	Care & Maintenance	P95	33.12866974	28.71256256	27.71936798	22.09795952	33.19962692	46.16313934	57.86045456	59.43930054	71.55860901	55.23368073	70.73827362	36.61000824
T_CN	Care & Maintenance	P95	0.002742673	0.002795438	0.002882624	0.002716986	0.002594128	0.002692198	0.002390534	0.002600035	0.002633732	0.002650834	0.00253382	0.002581235
WAD_CN	Care & Maintenance	P95	0.002719237	0.002756242	0.002848383	0.002606053	0.00259375	0.002689112	0.002390534	0.002600035	0.002633732	0.002650834	0.00253382	0.002581235
T_Ag	Care & Maintenance	P95	4.90633E-05	4.35955E-05	4.74111E-05	4.54418E-05	4.31358E-05	3.4083E-05	2.92096E-05	3.54733E-05	3.2551E-05	3.71885E-05	4.34363E-05	4.27127E-05
T_Al	Care & Maintenance	P95	0.0723226	0.066206627	0.064387456	0.051586386	0.101596847	0.286919504	0.18062298	0.143277273	0.110275157	0.091420367	0.083913796	0.069141671
T_As	Care & Maintenance	P95	0.001100722	0.001093945	0.001162834	0.001035211	0.000885719	0.000857442	0.000802022	0.000978849	0.0011293	0.001062684	0.00097374	0.000906046
T_B	Care & Maintenance	P95	0.105815977	0.0929856	0.103872672	0.082315877	0.076628931	0.055870846	0.049506038	0.065866463	0.062366482	0.071191996	0.085013524	0.087759167
T_Ba	Care & Maintenance	P95	0.007527402	0.007507005	0.007543875	0.007088707	0.008583481	0.008018679	0.006574383	0.009032913	0.010663267	0.010871755	0.009701177	0.007534906
T_Bi	Care & Maintenance	P95	4.53102E-05	4.30955E-05	4.25644E-05	4.49325E-05	3.49398E-05	3.90636E-05	3.59032E-05	4.89397E-05	5.38897E-05	5.43788E-05	6.08862E-05	4.33892E-05
T_Be	Care & Maintenance	P95	0.000142407	0.0001302	0.000139175	0.00012448	0.00012227	9.85166E-05	9.1814E-05	0.000108748	9.95754E-05	0.000117538	0.000131315	0.000130892
T_Ca	Care & Maintenance	P95	18.4923687	18.36217117	18.22186089	17.78203392	20.17432404	17.78446007	18.77621651	22.2195034	25.1178875	23.91735458	24.56516266	17.93184853
T_Cd	Care & Maintenance	P95	2.56392E-05	2.3395E-05	2.48555E-05	2.38947E-05	2.1948E-05	1.74991E-05	1.68575E-05	1.9211E-05	1.84486E-05	2.05808E-05	2.31218E-05	2.40641E-05
T_Co	Care & Maintenance	P95	0.000521012	0.000456071	0.000497314	0.000454973	0.00043124	0.000346651	0.00036066	0.000462792	0.000398617	0.000511294	0.000524703	0.000467665
T_Cr	Care & Maintenance	P95	0.000500969	0.000504747	0.000533079	0.000481999	0.000415955	0.000402686	0.000356635	0.00042082	0.000442856	0.000417559	0.00043295	0.000423298
T_Cu	Care & Maintenance	P95	0.000529586	0.000522427	0.000523133	0.000506779	0.000450915	0.000664495	0.00037776	0.000417187	0.000408272	0.000456701	0.000500384	0.000503137
T_Fe	Care & Maintenance	P95	0.091220476	0.088506423	0.086744316	0.075552076	0.095568642	0.206036881	0.123774938	0.11368306	0.101588279	0.097093418	0.090695396	0.079832099
T_Hg	Care & Maintenance	P95	2.46001E-05	2.25985E-05	2.62778E-05	2.09397E-05	2.03918E-05	1.64848E-05	1.09327E-05	2.31061E-05	1.43433E-05	1.78897E-05	2.71015E-05	1.99957E-05
T_K	Care & Maintenance	P95	5.139494896	4.70293045	5.11275816	4.058671951	4.320993423	4.362839222	5.095901966	6.933498383	6.162648201	5.670717716	7.352091789	4.520885468
T_Li	Care & Maintenance	P95	0.08308775	0.074379198	0.084026411	0.067081831	0.060097028	0.047939051	0.033383913	0.066214748	0.046752043	0.052418534	0.077178627	0.068242215
T_Mg	Care & Maintenance	P95	7.525566578	6.994920731	7.893774509	6.370947838	6.469024658	5.989016533	5.63571167	9.679177284	7.321973324	7.581644058	10.09112358	6.431132317
T_Mn	Care & Maintenance	P95	0.086541981	0.073311225	0.057718858	0.049041215	0.078040093	0.108488016	0.109571241	0.181087404	0.226208255	0.207297727	0.209768683	0.096277341
T_Mo	Care & Maintenance	P95	0.000652146	0.000719361	0.000682096	0.000678013	0.000757737	0.000593289	0.000462777	0.000446038	0.000554325	0.000694583	0.000639181	0.000584827
T_Na	Care & Maintenance	P95	20.43737793	19.03096581	20.46663666	18.11684799	16.43311501	12.99652958	9.753650665	18.6483326	12.51170731	14.45491123	22.36431885	16.75570488
T_Ni	Care & Maintenance	P95	0.001493233	0.001377477	0.001564175	0.001290442	0.001256097	0.001083868	0.000773876	0.001580104	0.001089334	0.001225079	0.001822259	0.0012898
T_P	Care & Maintenance	P95	0.028827406	0.029561151	0.030648552	0.028022062	0.024892805	0.029730221	0.025340874	0.042038478	0.049253162	0.045853253	0.04701614	0.028835401
T_Pb	Care & Maintenance	P95	0.001601043	0.001422985	0.001543059	0.001444275	0.001423924	0.000966001	0.000806465	0.001049882	0.000988813	0.001146826	0.001306795	0.001358714
T_S	Care & Maintenance	P95	1.375908136	1.534068823	1.70860219	1.624186277	1.030358553	0.973606229	0.898577571	1.14962709	1.367699385	1.499432683	1.657765269	1.175399542
T_Sb	Care & Maintenance	P95	0.001096801	0.000998166	0.000787632	0.000648352	0.001010041	0.001322747	0.001370916	0.002259793	0.002816375	0.002595268	0.00264615	0.001189015
T_Se	Care & Maintenance	P95	0.000236657	0.000222334	0.000262026	0.000220232	0.000213927	0.000170191	0.000109729	0.000231906	0.000155672	0.000187559	0.000272819	0.000194881
T_Si	Care & Maintenance	P95	7.157519341	7.315535069	7.474156857	7.428067684	6.768373013	6.274666309	5.744216919	6.427681923	6.643354416	7.129745007	7.643349648	6.679607868
T_Sn	Care & Maintenance	P95	5.67178E-05	5.82976E-05	5.88553E-05	5.89825E-05	5.20269E-05	5.53267E-05	4.82851E-05	5.52621E-05	5.3799E-05	5.6002E-05	6.02917E-05	5.41021E-05
T_Sr	Care & Maintenance	P95	0.110246532	0.107302807	0.11879991	0.098675705	0.108703293	0.096444137	0.087856002	0.143085554	0.127842709	0.126681626	0.159112588	0.107284449
T_Ti	Care & Maintenance	P95	0.004271255	0.003870778	0.003416544	0.002714169	0.002730769	0.005166407	0.003975029	0.00362337	0.003357933	0.003016195	0.004355346	0.004202256
T_Tl	Care & Maintenance	P95	0.000390841	0.000339273	0.000378448	0.0003155	0.000301281	0.000214681	0.0001892	0.000240975	0.000240862	0.000272711	0.000321087	0.000323619
T_U	Care & Maintenance	P95	0.000543501	0.000508634	0.000597072	0.000495069	0.000498733	0.000411634	0.000275818	0.000538884	0.000366283	0.000442357	0.000624045	0.000447059
T_V	Care & Maintenance	P95	0.011969198	0.010485783	0.011723096	0.009425251	0.008996068	0.006979625	0.006041468	0.009569664	0.007967358	0.008880594	0.010833252	0.010172887
T_Zn	Care & Maintenance	P95	0.005034587	0.004559268	0.004922405	0.004711665	0.004364664	0.003406805	0.003096222	0.003667307	0.003480497	0.003920496	0.004475559	0.00461153
D_Ag	Care & Maintenance	P95	4.90547E-05	4.35561E-05	4.74043E-05	4.54114E-05	4.31256E-05	3.4015E-05	2.92093E-05	3.54586E-05	3.24823E-05	3.7178E-05	4.32581E-05	4.27127E-05
D_Al	Care & Maintenance	P95	0.055380527	0.050595038	0.048901111	0.039041512	0.073326498	0.205045938	0.14643836	0.115510955	0.087579042	0.072165869	0.066245005	0.055176642
D_As	Care & Maintenance	P95	0.001060664	0.00105499	0.001122475	0.001005549	0.000836707	0.00080593	0.000773977	0.000951837	0.001083234	0.001031336	0.000931364	0.000861037
D_B	Care & Maintenance	P95	0.105815977	0.0929856	0.103872672	0.082315877	0.076628931	0.055870846	0.049506038	0.065866463	0.062366482	0.071191996	0.085013524	0.087759167
D_Ba	Care & Maintenance	P95	0.007283555	0.007241372	0.007230515	0.006793111	0.008296533	0.007587046	0.006224429	0.008775558	0.010566373	0.010922351	0.009501684	0.00726966
D_Bi	Care & Maintenance	P95	4.53102E-05	4.30955E-05	4.25644E-05	4.49325E-05	3.49398E-05	3.90636E-05	3.59032E-05	4.89397E-05	5.38897E-05	5.43788E-05	6.08862E-05	4.33892E-05
D_Be	Care & Maintenance	P95	0.000142407	0.0001302	0.000139175	0.00012448	0.00012227	9.85166E-05	9.1814E-05	0.000108748	9.95754E-05	0.000117538	0.000131315	0.000130892
D_Ca	Care & Maintenance	P95	18.48008919	18.3194809	18.19287682	17.66788101	20.27347565	17.79420853	18.69585037	22.16994095	25.09659004	24.01165199	24.28991127	17.88006973
D_Cd	Care & Maintenance	P95	2.57558E-05	2.39924E-05	2.49459E-05	2.39576E-05	2.19419E-05	1.73549E-05	1.77911E-05	2.04856E-05	1.86886E-05	2.00014E-05	2.30134E-05	2.38578E-05
D_Co	Care & Maintenance	P95	0.000520985	0.000456057	0.000497293	0.000454273	0.000430911	0.000343971	0.000359282	0.000462673	0.00039853	0.000511273	0.000524459	0.000467627
D_Cr	Care & Maintenance	P95	0.000450193	0.000443283	0.000470741	0.000426656	0.000363905	0.000351591	0.000300441	0.000362498	0.000406851	0.000350148	0.000373138	0.000357761
D_Cu	Care & Maintenance	P95	0.000529174	0.000507806	0.00051634	0.000492738	0.000445844	0.000632045	0.000394764	0.000419336	0.000413098	0.000451629	0.000500011	0.000503036
D_Fe	Care & Maintenance	P95	0.068873964	0.06755808	0.06702733	0.056751885	0.063411824	0.117780954	0.082518712	0.08279039	0.079529911	0.072946794	0.068795927	0.062914513
D_Hg	Care & Maintenance	P95	2.46429E-05	2.26362E-05	2.63105E-05	2.0954E-05	2.04209E-05	1.62512E-05	1.06187E-05	2.31217E-05	1.42467E-05	1.78463E-05	2.71024E-05	2.00196E-05
D_K	Care & Maintenance	P95	5.136228561	4.700419426	5.108397484	4.057157993	4.287444592	4.36277771	5.098670959	6.930892944	6.148860455	5.667628288	7.339864731	4.518532276
D_Li	Care & Maintenance	P95	0.08308775	0.074379198	0.084026411	0.067081831	0.060097028	0.047939051	0.033383913	0.066214748	0.046752043	0.052418534	0.077178627	0.068242215
D_Mg	Care & Maintenance	P95	7.532781124	7.000680923	7.895518303	6.366966724	6.458995819	5.979511261	5.62092638	9.671012878	7.314947605	7.572332382	10.08073616	6.439807415
D_Mn	Care & Maintenance	P95	0.08530651	0.07214772	0.057026528	0.048718683	0.077137955	0.102825612	0.107115269	0.180096701	0.225024417	0.206190675	0.20936963	0.09511137
D_Mo	Care & Maintenance	P95	0.000631158	0.000692486	0.000659435	0.000646153	0.00073858	0.000572411	0.000461921	0.000455194	0.000538972	0.000696321	0.000624715	0.000581153
D_Na	Care & Maintenance	P95	20.41322708	19.00828934	20.4386673	18.09502983	16.41149902	12.94876671	9.727372169	18.63493156	12.46245575	14.42513657	22.32526398	16.72145271
D_Ni	Care & Maintenance	P95	0.00149294	0.001377207	0.001563757	0.001289782	0.001251154	0.001080935	0.000770727	0.001579709	0.001089042	0.001224893	0.001821884	0.001289462
D_P	Care & Maintenance	P95	0.133787379	0.121899068	0.1147907	0.077143453	0.062753111	0.052773006	0.033775017	0.062864818	0.092260458	0.074893437	0.132301107	0.133664131
D_Pb	Care & Maintenance	P95	0.001601026	0.001422908	0.00154302	0.00144423	0.001423904	0.000965995	0.000806465	0.001049854	0.000988028	0.001146804	0.00130678	0.001358714
D_S	Care & Maintenance	P95	1.231372118	1.472361207	1.668666601	1.627131343	0.954725981	0.900699317	0.876949489	1.131810784	1.258507609	1.472810626	1.416408062	1.108679175
D_Sb	Care & Maintenance	P95	0.001096801	0.000998166	0.000787632	0.000648352	0.001010041	0.001322747	0.001370916	0.002259793	0.002816375	0.002595268	0.00264615	0.001189015
D_Se	Care & Maintenance	P95	0.000233157	0.000217564	0.000255657	0.00021502	0.000213894	0.000168463	0.00010897	0.000232233	0.000150398	0.00018336	0.000263802	0.000188734
D_Si	Care & Maintenance	P95	6.918168545	7.093419552	7.245401382	7.224748611	6.430395603	6.046655655	5.64745903	6.382486343	6.532682896	7.0965271	7.545119286	6.570841312
D_Sn	Care & Maintenance	P95	5.67178E-05	5.82976E-05	5.88553E-05	5.89825E-05	5.20269E-05	5.53267E-05	4.82851E-05	5.52621E-05	5.3799E-05	5.6002E-05	6.02917E-05	5.41021E-05
D_Sr	Care & Maintenance	P95	0.110880636	0.107965067	0.1190257	0.098548256	0.10920801	0.096715949	0.087330788	0.14242579	0.128166348	0.128321007	0.159177184	0.109531648
D_Ti	Care & Maintenance	P95	0.004217249	0.003655616	0.003222823	0.002395286	0.001976647	0.002866192	0.00210482	0.002031622	0.002685034	0.002172395	0.004248594	0.004118293
D_Tl	Care & Maintenance	P95	0.000390841	0.000339273	0.000378448	0.0003155	0.000301281	0.000214681	0.0001892	0.000240975	0.000240862	0.000272711	0.000321087	0.000323619
D_U	Care & Maintenance	P95	0.00054118	0.000505664	0.00059314	0.000490876	0.000493947	0.000405227	0.000268861	0.000535275	0.000360639	0.000438838	0.000620351	0.000444656
D_V	Care & Maintenance	P95	0.011933514	0.010455076	0.011695825	0.009367086	0.008932677	0.006940766	0.005998847	0.009531632	0.007938409	0.008843855	0.010785203	0.01013644
D_Zn	Care & Maintenance	P95	0.004905995	0.004377468	0.004759695	0.004565518	0.004319478	0.003339609	0.002953283	0.003477552	0.003275731	0.003644249	0.004165041	0.004538112

Appendix B.1.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Mine Site Nodes, FWR

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254986644	0.253833383	0.247803316	0.238767877	0.187342495	0.052690051	0.044260651	0.046837218	0.063710377	0.071573116	0.078924678	0.074124306
NO3_N	Care & Maintenance	P95	1.748013258	1.953938961	1.90830338	1.962913871	1.702948213	1.163155675	0.935373604	0.987101674	0.840334058	0.931923866	1.228705525	1.683500767
NO2_N	Care & Maintenance	P95	0.01027023	0.011177235	0.011028069	0.011113761	0.010668069	0.007135573	0.006550273	0.006617026	0.005646727	0.006492318	0.007312434	0.009253439
Br	Care & Maintenance	P95	0.065300137	0.069232263	0.06799186	0.066355646	0.057534702	0.044440545	0.041128367	0.045646362	0.038722761	0.045447994	0.054301757	0.058872867
Cl	Care & Maintenance	P95	1.263777256	1.34760344	1.286287785	1.252017617	1.086384892	0.805198252	0.681762993	0.79546237	0.647490263	0.808981121	1.003483415	1.125991344
F	Care & Maintenance	P95	0.36112386	0.386867732	0.368378907	0.360952675	0.304695159	0.233845711	0.194891587	0.218024999	0.191666007	0.236006945	0.286714792	0.324086905
TDP	Care & Maintenance	P95	0.018742437	0.019301631	0.019891953	0.020295326	0.019489575	0.016284555	0.017056653	0.014869378	0.0159095	0.018045055	0.022376072	0.0228021
SO4	Care & Maintenance	P95	35.65496063	34.93166351	34.06848526	32.07413101	25.93767738	26.38199234	31.81160545	43.15747452	41.57164764	39.95949554	40.18355942	47.75666046
T_CN	Care & Maintenance	P95	0.002707844	0.002778559	0.002726874	0.002674432	0.00293384	0.002656783	0.002676254	0.002471337	0.002514278	0.002711848	0.002639054	0.00263048
WAD_CN	Care & Maintenance	P95	0.002707845	0.002778561	0.002712738	0.002643062	0.002933841	0.002645789	0.002665089	0.002470905	0.002514279	0.002711733	0.002639052	0.00263048
T_Ag	Care & Maintenance	P95	3.82112E-05	4.08546E-05	4.02541E-05	4.10799E-05	4.09243E-05	3.28563E-05	2.7613E-05	2.6768E-05	2.30752E-05	2.63344E-05	3.2627E-05	3.44679E-05
T_Al	Care & Maintenance	P95	0.080781847	0.070510998	0.065363452	0.060432453	0.048727956	0.197498232	0.248971075	0.161387056	0.13243638	0.103031792	0.086345069	0.086047679
T_As	Care & Maintenance	P95	0.00121424	0.001234621	0.001247418	0.001242187	0.001159574	0.000813747	0.000871602	0.000914333	0.001073367	0.001177722	0.0011557	0.00114451
T_B	Care & Maintenance	P95	0.079520069	0.086091198	0.082204975	0.08094427	0.072979294	0.0480524	0.039765835	0.041556951	0.032870952	0.046233315	0.058584176	0.06826815
T_Ba	Care & Maintenance	P95	0.007090599	0.00725791	0.007259961	0.007161998	0.008452021	0.007736526	0.007147389	0.006414859	0.007383209	0.008715948	0.00955542	0.0080571
T_Bi	Care & Maintenance	P95	4.31175E-05	4.23133E-05	4.15354E-05	3.96585E-05	3.91362E-05	3.42732E-05	3.35477E-05	3.31777E-05	3.6513E-05	3.80147E-05	4.24952E-05	5.08192E-05
T_Be	Care & Maintenance	P95	0.000114553	0.000122101	0.000119302	0.000119834	0.000116923	9.07303E-05	8.0322E-05	8.56393E-05	7.44633E-05	8.40922E-05	9.93483E-05	0.000107194
T_Ca	Care & Maintenance	P95	17.61803246	18.26775932	18.27384758	17.98807907	16.90141678	15.55057907	14.74279404	15.57384968	18.55514717	20.94600296	20.15701294	20.35311127
T_Cd	Care & Maintenance	P95	2.05648E-05	2.17633E-05	2.11755E-05	2.1325E-05	2.09575E-05	1.64895E-05	1.46311E-05	1.63949E-05	1.60105E-05	1.60357E-05	1.7804E-05	1.88851E-05
T_Co	Care & Maintenance	P95	0.00054195	0.00058299	0.000582866	0.000584632	0.000516017	0.000318	0.000305503	0.000366326	0.000408183	0.000398562	0.000485027	0.000524773
T_Cr	Care & Maintenance	P95	0.000585223	0.000598919	0.000616503	0.000610044	0.000574971	0.000393309	0.000416528	0.000446115	0.000491114	0.000516441	0.000519233	0.000546743
T_Cu	Care & Maintenance	P95	0.000435203	0.000463464	0.000458604	0.000453251	0.000435449	0.000533973	0.000541151	0.00037668	0.000360651	0.000365239	0.000393304	0.000420709
T_Fe	Care & Maintenance	P95	0.090063445	0.086737335	0.084783636	0.081989482	0.089316338	0.14559947	0.177178115	0.123511694	0.112281643	0.10225036	0.093585968	0.089617305
T_Hg	Care & Maintenance	P95	1.81037E-05	1.95953E-05	1.98111E-05	2.0185E-05	1.66959E-05	1.44449E-05	1.21218E-05	9.19766E-06	1.03611E-05	1.1546E-05	1.33889E-05	2.00976E-05
T_K	Care & Maintenance	P95	4.125011444	4.43707943	4.383104801	4.370387077	3.564734221	3.315640926	3.356996059	3.778672457	3.912707806	3.756236792	4.067622185	5.499531746
T_Li	Care & Maintenance	P95	0.060111657	0.065562032	0.064025789	0.064286239	0.055603947	0.040610954	0.033253625	0.027155973	0.025480827	0.033823784	0.044153821	0.055268262
T_Mg	Care & Maintenance	P95	6.031804085	6.380028248	6.38332653	6.46532774	5.417252541	5.178337574	4.568029404	4.366702557	5.568226337	5.349645138	5.606361866	7.636157513
T_Mn	Care & Maintenance	P95	0.077665307	0.073067285	0.069275863	0.059296615	0.046612002	0.059411161	0.069374129	0.072398826	0.092762358	0.100502767	0.134837374	0.151950479
T_Mo	Care & Maintenance	P95	0.001340963	0.001436488	0.001455277	0.001401733	0.001308583	0.000734157	0.000752334	0.000850972	0.000946794	0.001116986	0.001165925	0.001110477
T_Na	Care & Maintenance	P95	15.63831806	17.79264832	17.97343636	18.42154312	15.36439514	11.23340321	9.615526199	9.028280258	9.877721786	10.07333946	11.84004307	17.98941612
T_Ni	Care & Maintenance	P95	0.001159806	0.001233463	0.001232658	0.00124	0.001036125	0.000884556	0.000809724	0.000699267	0.000798881	0.000833445	0.000905128	0.001374561
T_P	Care & Maintenance	P95	0.027313082	0.026348218	0.025848951	0.025546025	0.023554709	0.023866078	0.024458105	0.024255272	0.030952379	0.032152139	0.03547819	0.032670457
T_Pb	Care & Maintenance	P95	0.001205401	0.001300486	0.001292694	0.001315362	0.001330379	0.000816626	0.00067366	0.000650587	0.000532101	0.000729992	0.001000694	0.001063684
T_S	Care & Maintenance	P95	1.069604516	1.130406976	1.189310074	1.154621363	1.117193103	0.930946112	0.796802104	0.801469445	0.969861031	1.117783308	1.239195228	1.290317416
T_Sb	Care & Maintenance	P95	0.001032495	0.000997323	0.000967599	0.00084524	0.000657874	0.00076033	0.000892404	0.000915105	0.001191173	0.00125529	0.00165578	0.001951378
T_Se	Care & Maintenance	P95	0.000181193	0.000198333	0.000201817	0.000211323	0.000175816	0.000149837	0.000130089	0.000100756	0.000117167	0.000126911	0.000138097	0.000209572
T_Si	Care & Maintenance	P95	6.861529827	7.162380695	7.133096218	6.810901165	7.133575439	6.290001392	5.964544773	5.69030714	5.9799757	6.817704678	7.037427902	7.240822792
T_Sn	Care & Maintenance	P95	5.41743E-05	5.55759E-05	5.49953E-05	5.36576E-05	5.91098E-05	5.36715E-05	5.39783E-05	4.94741E-05	5.11775E-05	5.4338E-05	5.51644E-05	5.69403E-05
T_Sr	Care & Maintenance	P95	0.094940715	0.101836018	0.102076434	0.102738701	0.094794266	0.091466784	0.082539946	0.076221451	0.103620037	0.103657074	0.10817612	0.127775282
T_Ti	Care & Maintenance	P95	0.003835979	0.003605549	0.003288943	0.002958791	0.002524224	0.003708627	0.004740521	0.003694062	0.003498025	0.002950417	0.003501468	0.004233329
T_Tl	Care & Maintenance	P95	0.000294536	0.000318862	0.00030307	0.000305049	0.000286465	0.000181083	0.000152216	0.00015764	0.000123568	0.000174697	0.000222102	0.000257971
T_U	Care & Maintenance	P95	0.000416505	0.000455948	0.000462095	0.000475269	0.000401923	0.00036633	0.000334937	0.00025961	0.000288505	0.000309733	0.000328227	0.000485907
T_V	Care & Maintenance	P95	0.009178787	0.009820794	0.009331246	0.009297526	0.008486139	0.006161431	0.005087289	0.005120263	0.004745714	0.006113154	0.007262549	0.008301179
T_Zn	Care & Maintenance	P95	0.004002952	0.004283356	0.004206705	0.004243959	0.00416958	0.003291347	0.002789222	0.002904691	0.002527907	0.002944025	0.00349741	0.003659037
D_Ag	Care & Maintenance	P95	3.81899E-05	4.08391E-05	4.01946E-05	4.10417E-05	4.08908E-05	3.01245E-05	2.69655E-05	2.66766E-05	2.12242E-05	2.56864E-05	3.23466E-05	3.427E-05
D_Al	Care & Maintenance	P95	0.062339962	0.054116268	0.049800523	0.045913257	0.036795087	0.140749648	0.185502589	0.127262503	0.104736626	0.081371248	0.067705765	0.067841038
D_As	Care & Maintenance	P95	0.001172164	0.001196525	0.001215421	0.001216905	0.00113463	0.000753113	0.000820464	0.000861424	0.001014921	0.001135367	0.001115467	0.001102483
D_B	Care & Maintenance	P95	0.079520069	0.086091198	0.082204975	0.08094427	0.072979294	0.048052322	0.039765753	0.041556951	0.032870952	0.046233315	0.058584165	0.06826815
D_Ba	Care & Maintenance	P95	0.006857505	0.006964561	0.006949311	0.006845653	0.008112423	0.007343372	0.006669989	0.005988656	0.007162551	0.008665395	0.009452472	0.007851646
D_Bi	Care & Maintenance	P95	4.31175E-05	4.23133E-05	4.15354E-05	3.96585E-05	3.91362E-05	3.42732E-05	3.35477E-05	3.31777E-05	3.6513E-05	3.80147E-05	4.24952E-05	5.08192E-05
D_Be	Care & Maintenance	P95	0.000114553	0.000122101	0.000119302	0.000119834	0.000116923	9.07303E-05	8.0322E-05	8.56393E-05	7.44633E-05	8.40922E-05	9.93483E-05	0.000107194
D_Ca	Care & Maintenance	P95	17.59116173	18.2322731	18.22796249	17.89759445	16.90890121	15.51120472	14.74491024	15.48135853	18.5348587	20.9122448	20.07468414	20.14143181
D_Cd	Care & Maintenance	P95	2.06507E-05	2.18568E-05	2.12941E-05	2.13956E-05	2.09656E-05	1.57286E-05	1.46481E-05	1.72623E-05	1.63432E-05	1.60126E-05	1.77397E-05	1.88507E-05
D_Co	Care & Maintenance	P95	0.000541908	0.000582934	0.000582842	0.000584305	0.000515301	0.000315202	0.00030364	0.000363622	0.000406647	0.000398366	0.000484889	0.000524766
D_Cr	Care & Maintenance	P95	0.000533115	0.000545448	0.000565836	0.000557593	0.000526	0.000335752	0.000359018	0.000391141	0.000444865	0.000450982	0.000458309	0.000493132
D_Cu	Care & Maintenance	P95	0.000434643	0.000461662	0.000450275	0.000442969	0.000430667	0.000514355	0.000532657	0.00038499	0.000368446	0.000369795	0.000393528	0.000420447
D_Fe	Care & Maintenance	P95	0.067730173	0.06709294	0.065076441	0.063050367	0.058627971	0.084913634	0.105627306	0.083679497	0.081844784	0.078932129	0.072355226	0.068620555
D_Hg	Care & Maintenance	P95	1.81193E-05	1.96136E-05	1.98305E-05	2.02053E-05	1.67146E-05	1.44706E-05	1.19921E-05	9.01769E-06	1.01877E-05	1.13762E-05	1.33198E-05	2.00943E-05
D_K	Care & Maintenance	P95	4.120280266	4.43384409	4.37917614	4.367593288	3.554101229	3.292670727	3.345810175	3.781367064	3.899375439	3.746702194	4.060725689	5.492910862
D_Li	Care & Maintenance	P95	0.060111657	0.065562032	0.064025789	0.064286239	0.055603947	0.040610954	0.033253625	0.027155973	0.025480827	0.033823784	0.044153821	0.055268262
D_Mg	Care & Maintenance	P95	6.038337708	6.385670185	6.388214588	6.465040684	5.413489342	5.167122841	4.558830738	4.351643085	5.539270401	5.340359211	5.5919981	7.639894009
D_Mn	Care & Maintenance	P95	0.076191254	0.07163845	0.067958511	0.058263991	0.046197847	0.057174977	0.067947119	0.070218347	0.091415763	0.096639998	0.133310422	0.151399612
D_Mo	Care & Maintenance	P95	0.001322691	0.001403829	0.001417352	0.001373638	0.001278129	0.000718719	0.000745289	0.000842954	0.000940875	0.001114507	0.001155614	0.001099518
D_Na	Care & Maintenance	P95	15.6133337	17.76441002	17.9434185	18.39161491	15.33826447	11.19391155	9.552862167	8.987997055	9.842167854	10.03155136	11.81685829	17.92797279
D_Ni	Care & Maintenance	P95	0.00115946	0.00123313	0.001232328	0.00123946	0.001033689	0.000881461	0.000807306	0.0006955	0.000797803	0.000833232	0.000904877	0.001374373
D_P	Care & Maintenance	P95	0.114374653	0.109017074	0.1035515	0.090243518	0.063913472	0.05032282	0.037663486	0.034503229	0.05588996	0.074974865	0.105180643	0.129534975
D_Pb	Care & Maintenance	P95	0.00120536	0.001300456	0.001292578	0.001315343	0.001330314	0.000806195	0.000671223	0.000650409	0.000531972	0.00072917	0.00100015	0.0010633
D_S	Care & Maintenance	P95	1.018115282	1.109159231	1.179423332	1.165498972	1.033712745	0.880251646	0.772437513	0.788008273	0.951109231	1.080770373	1.130353332	1.114372134
D_Sb	Care & Maintenance	P95	0.001032495	0.000997323	0.000967599	0.00084524	0.000657874	0.00076033	0.000892404	0.000915105	0.001191172	0.001255252	0.001655776	0.001951378
D_Se	Care & Maintenance	P95	0.000174497	0.000191556	0.000194256	0.000203826	0.000171849	0.000149444	0.000125183	9.98992E-05	0.000113939	0.000120626	0.000132711	0.000197301
D_Si	Care & Maintenance	P95	6.649651527	6.931401253	6.905107975	6.617705345	6.821165562	5.982816696	5.733963013	5.554203033	5.884772301	6.750898838	6.958170414	7.131346226
D_Sn	Care & Maintenance	P95	5.41743E-05	5.55759E-05	5.49953E-05	5.36576E-05	5.91098E-05	5.36715E-05	5.39783E-05	4.94741E-05	5.11775E-05	5.4338E-05	5.51644E-05	5.69403E-05
D_Sr	Care & Maintenance	P95	0.095787667	0.102681607	0.102539472	0.102795571	0.095895424	0.091875859	0.082731783	0.075369857	0.103181072	0.104031764	0.109040014	0.129568994
D_Ti	Care & Maintenance	P95	0.003643092	0.003352301	0.003077894	0.002603636	0.001946029	0.00206918	0.002563226	0.001984955	0.00209996	0.002106684	0.003264825	0.004153913
D_Tl	Care & Maintenance	P95	0.000294536	0.000318862	0.00030307	0.000305049	0.000286465	0.000181083	0.000152216	0.00015764	0.000123568	0.000174697	0.000222102	0.000257971
D_U	Care & Maintenance	P95	0.000413281	0.000452429	0.000457965	0.000470266	0.000396488	0.000358048	0.000325222	0.000252128	0.000282119	0.000304727	0.000323781	0.000481244
D_V	Care & Maintenance	P95	0.00914657	0.009788762	0.009301804	0.009246185	0.008417214	0.006102552	0.005036101	0.00507434	0.00470011	0.006085054	0.007238449	0.008266854
D_Zn	Care & Maintenance	P95	0.003821622	0.004103553	0.004042604	0.00412096	0.004097656	0.003090152	0.002653727	0.002712026	0.00225218	0.002643485	0.003250898	0.003463589

APPENDIX B.2: CARE AND MAINTENANCE SCENARIO 2 – MINE SITE NODES

Appendix B.2.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Mine Site Nodes, TSF C Pond

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.56138134	5.93484354	2.124711037	0.781633973	0.235543385	0.087460458	0.030877465	0.011617746	0.004131343	0.001590219	0.000671509	0.000399189
NO3_N	Care & Maintenance	P95	14.57468414	13.73901272	12.43751049	11.11172771	9.137112617	8.412055969	8.197346687	8.791659355	9.414578438	9.325475693	8.407253265	9.353319168
NO2_N	Care & Maintenance	P95	0.124027237	0.123841584	0.120004863	0.107652672	0.087388195	0.0851807	0.081136212	0.079849824	0.076697268	0.074742727	0.072106637	0.072208792
Br	Care & Maintenance	P95	0.076701365	0.075708173	0.075171433	0.069644503	0.070927106	0.074434474	0.078071564	0.079468139	0.080731541	0.080237545	0.080977313	0.07941962
Cl	Care & Maintenance	P95	1.935551167	1.940009594	1.959733486	1.794007182	1.715299964	1.749554038	1.88343668	1.88464272	1.907978177	1.90381515	1.921882749	1.957914352
F	Care & Maintenance	P95	0.478689432	0.490346164	0.487295449	0.466767937	0.436820418	0.447456241	0.451292932	0.467782766	0.477382302	0.463882118	0.465130001	0.488756806
TDP	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
SO4	Care & Maintenance	P95	2524.036377	2612.618896	2706.517578	2723.978027	2512.817627	2500.096191	2627.199463	2818.826416	2838.335938	2819.178223	2574.405273	2815.485596
T_CN	Care & Maintenance	P95	0.001104709	8.14224E-07	1.12573E-07	5.76301E-08	4.88822E-07	7.5304E-07	1.97497E-07	1.44626E-07	1.61022E-07	1.33112E-07	1.85735E-07	1.53201E-07
WAD_CN	Care & Maintenance	P95	5.94355E-06	7.79191E-08	1.1097E-07	5.76326E-08	4.88824E-07	7.53041E-07	1.975E-07	1.44628E-07	1.61025E-07	1.33114E-07	1.85737E-07	1.53204E-07
T_Ag	Care & Maintenance	P95	0.000407607	0.000415733	0.000473805	0.000467908	0.000396134	0.000405138	0.000404376	0.00045807	0.000459784	0.000417211	0.000393902	0.000449082
T_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
T_As	Care & Maintenance	P95	0.015878055	0.015779648	0.015495043	0.015180733	0.013209932	0.013074971	0.012834509	0.012892645	0.012742959	0.012389186	0.012197366	0.012064018
T_B	Care & Maintenance	P95	0.0754693	0.076273292	0.078807756	0.078400031	0.067987122	0.068929426	0.074327447	0.077276029	0.07840997	0.075745299	0.076098077	0.080411755
T_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
T_Bi	Care & Maintenance	P95	9.00936E-05	8.68536E-05	8.41191E-05	7.63447E-05	6.17187E-05	6.07348E-05	5.95096E-05	5.8748E-05	5.5882E-05	5.3259E-05	5.29783E-05	5.25166E-05
T_Be	Care & Maintenance	P95	0.002298593	0.002586566	0.002791	0.002791	0.002448909	0.002393606	0.002612926	0.002791	0.002791	0.002791	0.002478065	0.002791
T_Ca	Care & Maintenance	P95	560.8405151	560.8023682	560.4197998	552.7180176	536.8027344	543.9816895	545.690979	547.3515625	556.0175171	550.3553467	560.057373	560.4154663
T_Cd	Care & Maintenance	P95	0.018580174	0.01785012	0.016985321	0.016185371	0.014164397	0.01362828	0.012655633	0.012169235	0.012342782	0.011627916	0.010888131	0.010536228
T_Co	Care & Maintenance	P95	0.074336685	0.075716816	0.073479496	0.06923563	0.058373116	0.056657642	0.054760333	0.05369268	0.051771015	0.049822692	0.048602577	0.04763972
T_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
T_Cu	Care & Maintenance	P95	0.013555301	0.013156441	0.012746562	0.012299092	0.010643963	0.010381117	0.010010662	0.009994087	0.009753261	0.009380155	0.009129416	0.008932628
T_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
T_Hg	Care & Maintenance	P95	0.000506811	0.000569388	0.000621199	0.000643647	0.000532497	0.000532146	0.000573083	0.000686706	0.000687495	0.00067508	0.000602454	0.000721858
T_K	Care & Maintenance	P95	135.0471954	152.5214539	162.8551483	171.1514435	143.9113007	140.2750854	154.5343018	184.0920105	183.5848694	179.6060333	162.1788483	188.2727203
T_Li	Care & Maintenance	P95	0.11132402	0.115124546	0.126938477	0.128798306	0.107050911	0.108200587	0.109626256	0.131643504	0.129761338	0.125541076	0.112342849	0.132604495
T_Mg	Care & Maintenance	P95	409.8078613	467.6534729	501.3808594	522.7913818	435.2985229	437.7270508	473.1740723	563.942749	572.3103638	557.1366577	504.2911072	602.6602173
T_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
T_Mo	Care & Maintenance	P95	0.100885354	0.102920353	0.101588771	0.095372602	0.07817623	0.076888904	0.075024225	0.074644461	0.072415628	0.070553072	0.069721237	0.06915196
T_Na	Care & Maintenance	P95	699.5286865	699.8956299	726.744751	736.4301147	633.8015747	615.3929443	683.4011841	788.0211792	798.4952393	788.2045288	708.3565674	786.2199097
T_Ni	Care & Maintenance	P95	0.036734562	0.041300807	0.043660644	0.046566159	0.040413946	0.037696607	0.042802501	0.050380517	0.049559578	0.048902731	0.044223569	0.051680781
T_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
T_Pb	Care & Maintenance	P95	0.004117943	0.004004491	0.003870472	0.003695337	0.003156814	0.003044924	0.002928938	0.002824597	0.002863367	0.002642807	0.002553731	0.002508061
T_S	Care & Maintenance	P95	1.790480494	1.729971051	1.676267385	1.484805942	1.227231026	1.199787021	1.172287464	1.158329964	1.115004539	1.064235687	1.040311217	1.02560997
T_Sb	Care & Maintenance	P95	0.047407579	0.047977936	0.0508583	0.04975773	0.042683009	0.04391918	0.046910327	0.050494142	0.050083581	0.047882013	0.047814153	0.052193101
T_Se	Care & Maintenance	P95	0.01040148	0.011857721	0.012775542	0.013368926	0.011147595	0.011099092	0.012104421	0.014459365	0.014511769	0.014260408	0.012818324	0.015322565
T_Si	Care & Maintenance	P95	5.604667664	5.485488892	5.487730026	5.38509655	5.313137054	5.371890545	5.541323185	5.722893715	5.562087536	5.589710236	5.427370071	5.682666779
T_Sn	Care & Maintenance	P95	4.23329E-05	4.14759E-05	4.28601E-05	4.16863E-05	4.00483E-05	4.34283E-05	4.35762E-05	4.51973E-05	4.39124E-05	4.25187E-05	4.35948E-05	4.39422E-05
T_Sr	Care & Maintenance	P95	5.363353729	6.104192734	6.535002708	6.847584724	5.73615694	5.701505661	6.225846767	7.398945332	7.450068474	7.291493893	6.565248489	7.825472355
T_Ti	Care & Maintenance	P95	0.002883264	0.002762577	0.002826877	0.00270269	0.002221627	0.003191754	0.003110653	0.003156528	0.003133031	0.00301919	0.003112413	0.002842737
T_Tl	Care & Maintenance	P95	0.000324791	0.000313356	0.000353905	0.000346504	0.000294862	0.00030448	0.000303123	0.000350323	0.000347868	0.00032601	0.00031677	0.000350087
T_U	Care & Maintenance	P95	0.010409071	0.011882254	0.01264658	0.013380034	0.011443254	0.010983638	0.012260955	0.014588455	0.014363718	0.014227836	0.012734967	0.015060499
T_V	Care & Maintenance	P95	0.010971902	0.010541694	0.011838374	0.011607218	0.009861904	0.010203529	0.010458809	0.011761852	0.011727718	0.01106365	0.010771957	0.011968656
T_Zn	Care & Maintenance	P95	1.578916669	1.533856034	1.482393384	1.39091897	1.145496488	1.100269079	1.055600762	1.004695535	1.017814636	0.944254637	0.894319236	0.870605409
D_Ag	Care & Maintenance	P95	0.000405682	0.000412019	0.000470845	0.000466859	0.000394772	0.00040339	0.000402369	0.000456137	0.000458812	0.000415655	0.000391158	0.000447479
D_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
D_As	Care & Maintenance	P95	0.015872763	0.015772996	0.015483896	0.015169586	0.01320289	0.013063405	0.012820954	0.012880904	0.012731114	0.012377743	0.012185825	0.012052326
D_B	Care & Maintenance	P95	0.0754693	0.076273292	0.078807756	0.078400031	0.067987122	0.068929426	0.074327447	0.077276029	0.07840997	0.075745299	0.076098077	0.080411755
D_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
D_Bi	Care & Maintenance	P95	9.00936E-05	8.68536E-05	8.41191E-05	7.63447E-05	6.17187E-05	6.07348E-05	5.95096E-05	5.8748E-05	5.5882E-05	5.3259E-05	5.29783E-05	5.25166E-05
D_Be	Care & Maintenance	P95	0.002298593	0.002586566	0.002791	0.002791	0.002448909	0.002393606	0.002612926	0.002791	0.002791	0.002791	0.002478065	0.002791
D_Ca	Care & Maintenance	P95	560.880188	560.8424683	560.397522	552.7377319	536.8027344	544.0237427	545.706604	547.3704834	556.0349731	550.3860474	560.0280151	560.4559326
D_Cd	Care & Maintenance	P95	0.018580161	0.017850105	0.016985271	0.016185278	0.014164333	0.013628076	0.01265538	0.012169025	0.012342616	0.011627682	0.010887957	0.010536053
D_Co	Care & Maintenance	P95	0.074336655	0.075716801	0.073479459	0.069235586	0.058372583	0.056657288	0.054759882	0.053692237	0.051770441	0.049822144	0.048602052	0.047639206
D_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
D_Cu	Care & Maintenance	P95	0.013555125	0.013156121	0.01274465	0.012296804	0.010641236	0.010377491	0.010007774	0.009991399	0.009750661	0.009377586	0.009126942	0.008930229
D_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
D_Hg	Care & Maintenance	P95	0.000507612	0.000570271	0.000622728	0.000644909	0.000533381	0.000533123	0.000574095	0.000687912	0.000688098	0.000676351	0.000603515	0.000723796
D_K	Care & Maintenance	P95	135.0028534	152.4830627	162.849472	171.1158295	143.8633575	140.2711182	154.449585	184.0426483	183.476944	179.5599365	162.0782318	188.2808228
D_Li	Care & Maintenance	P95	0.11132402	0.115124546	0.126938477	0.128798306	0.107050911	0.108200587	0.109626256	0.131643504	0.129761338	0.125541076	0.112342849	0.132604495
D_Mg	Care & Maintenance	P95	409.7474365	467.5928345	501.301178	522.7149048	435.2352905	437.6609497	473.1080017	563.8554688	572.225708	557.0488281	504.2150574	602.5629883
D_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
D_Mo	Care & Maintenance	P95	0.100884788	0.102919422	0.101587541	0.09537109	0.078171365	0.076883845	0.075019173	0.074639656	0.072410025	0.070547737	0.069715813	0.069146641
D_Na	Care & Maintenance	P95	699.5131836	699.8800659	726.3070068	735.9487915	633.3950806	615.0067139	682.9745483	787.5063477	798.0073853	787.7243042	707.9255371	785.6762695
D_Ni	Care & Maintenance	P95	0.036724262	0.04128458	0.043646935	0.046548992	0.04039498	0.037684686	0.042783283	0.050351877	0.049529679	0.048881374	0.044204067	0.051666975
D_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
D_Pb	Care & Maintenance	P95	0.004116958	0.004003363	0.003869122	0.003693835	0.003156498	0.003042829	0.002926931	0.002820743	0.00285868	0.002641029	0.002552076	0.002505071
D_S	Care & Maintenance	P95	1.775787592	1.715741873	1.664586067	1.478739858	1.198718071	1.172159791	1.145538211	1.132159352	1.082680702	1.029348254	1.003337502	0.996604562
D_Sb	Care & Maintenance	P95	0.047407579	0.047977936	0.0508583	0.04975773	0.042683009	0.04391918	0.046910327	0.050494142	0.050083581	0.047882013	0.047814153	0.052193101
D_Se	Care & Maintenance	P95	0.010387123	0.011825909	0.012767448	0.013345384	0.011132399	0.011081519	0.012074696	0.014440926	0.014477925	0.014242982	0.01279748	0.015310842
D_Si	Care & Maintenance	P95	5.506483555	5.387038231	5.380147934	5.278907776	5.222123623	5.268386364	5.420933723	5.587881565	5.445210457	5.4888587	5.339119911	5.56870079
D_Sn	Care & Maintenance	P95	4.23329E-05	4.14759E-05	4.28601E-05	4.16863E-05	4.00483E-05	4.34283E-05	4.35762E-05	4.51973E-05	4.39124E-05	4.25187E-05	4.35948E-05	4.39422E-05
D_Sr	Care & Maintenance	P95	5.362970829	6.105220795	6.532968521	6.846868515	5.736801624	5.701014042	6.22666502	7.398149014	7.451214314	7.29046011	6.566223145	7.822784424
D_Ti	Care & Maintenance	P95	0.002140185	0.002087241	0.002014388	0.001968556	0.001628003	0.00205434	0.001969667	0.001964294	0.002005225	0.00188563	0.0019708	0.001898803
D_Tl	Care & Maintenance	P95	0.000324791	0.000313356	0.000353905	0.000346504	0.000294862	0.00030448	0.000303123	0.000350323	0.000347868	0.00032601	0.00031677	0.000350087
D_U	Care & Maintenance	P95	0.010313249	0.011780635	0.012523984	0.013262038	0.011344297	0.01087653	0.012156763	0.014461079	0.014251087	0.014098941	0.01263714	0.014908334
D_V	Care & Maintenance	P95	0.010939791	0.010509835	0.011809345	0.011585584	0.009843309	0.010167257	0.010427041	0.011720836	0.011697738	0.011020261	0.010746042	0.011934052
D_Zn	Care & Maintenance	P95	1.578875661	1.533814907	1.482346296	1.39089179	1.14545846	1.100190759	1.055519104	1.004610181	1.017712116	0.944147468	0.894223869	0.870510876

Appendix B.2.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Mine Site Nodes, Open Pit/Pit Lake to Pit Sump

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.0392	0.0392	0.0392	0.240211561	0.262083828	0.25731203	0.238272026	0.234058589	0.238389924	0.226796865	0.0392	0.0392
NO3_N	Care & Maintenance	P95	0.005	0.005	0.005	4.319462299	4.824046135	4.719385624	4.295503139	4.193676472	4.27843523	4.042085171	0.005	0.005030349
NO2_N	Care & Maintenance	P95	0.001	0.001	0.001	0.007938807	0.008775827	0.008609794	0.007917088	0.007731829	0.007874276	0.007504091	0.001	0.001013389
Br	Care & Maintenance	P95	0.049999997	0.049999997	0.049999997	0.049999997	0.021670196	0.049036715	0.049161647	0.049991693	0.049999997	0.049999997	0.049999997	0.049999997
Cl	Care & Maintenance	P95	0.5	0.5	0.5	1.747517824	1.881426573	1.882784605	1.732315063	1.707746387	1.735221624	1.685827374	0.5	0.500535607
F	Care & Maintenance	P95	0.137999997	0.137999997	0.137999997	1.184404373	1.305163741	1.277148962	1.176368952	1.152990699	1.174684167	1.116014481	0.137999997	0.137999997
TDP	Care & Maintenance	P95	0.02	0.02	0.02	0.057146881	0.06084137	0.059799597	0.056386013	0.05590732	0.056807976	0.054480579	0.02	0.02
SO4	Care & Maintenance	P95	23.39999962	23.39999962	23.39999962	479.4135742	532.3092041	520.477417	476.2128296	465.9242249	475.0476379	449.8513489	23.39999962	23.4141922
T_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
WAD_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
T_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000337387	0.000376841	0.000368415	0.000336016	0.000327904	0.000334264	0.000316632	1.01596E-05	1.00446E-05
T_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.734462619	1.949743629	1.901999354	1.729111433	1.685013533	1.717687011	1.62443924	0.010421682	0.007764724
T_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062346023	0.067886919	0.066424839	0.061750945	0.060785513	0.061896615	0.058936536	0.0123	0.0123
T_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269179821	0.01	0.01
T_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031937916	0.05673017	0.057033155	0.058881674	0.058900002	0.058900002	0.058900002	0.058900002
T_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
T_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
T_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.295105	136.7081909	133.6813049	122.5785599	119.9306641	122.1882858	115.9585266	8.620000839	8.627479553
T_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718363	0.522500992	0.510780931	0.465105981	0.454088509	0.463272244	0.437660694	0.000118	0.000119037
T_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.293824077	0.2675744	0.261247426	0.266528696	0.251803249	0.00032	0.00032
T_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269636	0.015928809	0.015567246	0.014189899	0.013858759	0.014135856	0.013363922	0.00019	0.00019
T_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088218659	0.0862277	0.078523614	0.076658964	0.078204967	0.073897682	0.000201596	0.000200089
T_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375727654	8.482834816	8.526948929	8.817095757	8.819999695	8.819999695	8.819999695	8.819999695
T_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116386	1E-05	1E-05
T_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54404068	43.88954163	42.90597153	39.28102493	38.43507004	39.19225311	37.11563873	2.120000124	2.120000124
T_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
T_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84980774	41.91140747	38.33081055	37.47645569	38.20586014	36.18779755	1.649999976	1.651160479
T_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.29888916	57.11790466	55.86220169	50.98716354	49.82579041	50.82435608	48.05400467	1.120000005	1.120000005
T_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319266	0.008293045	0.008159521	0.008162937	0.008161418	0.008325506	0.008136445	0.0064	0.0064
T_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26593018	14.94924545	14.73328972	14.09587002	13.99513531	14.19737244	13.7014904	6.360000134	6.360000134
T_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322773188	0.315528363	0.287362367	0.280571491	0.286238939	0.270437539	0.0006	0.0006
T_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.165800482	0.288633257	0.290040374	0.299901962	0.300000012	0.300000012	0.300000012	0.300000012
T_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.119279884	0.133245647	0.130252182	0.118611984	0.115806147	0.118146718	0.111618735	0.000111	0.000111785
T_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.279145956	7.617110252	7.61748457	7.618481159	7.619999886	7.619999886	7.619999886	7.619999886
T_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776611	0.064616069	0.063004263	0.057434507	0.056113947	0.057239007	0.054114103	0.00102	0.00102
T_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
T_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.234751701	8.636884689	8.709219933	8.798710823	8.800000191	8.800000191	8.800000191	8.800000191
T_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
T_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.484969348	0.52673918	0.516210556	0.480849653	0.473315477	0.481368721	0.459741503	0.104999997	0.104999997
T_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004334039	0.009667346	0.009782028	0.009998339	0.01	0.01	0.01	0.01
T_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
T_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914382	0.026656915	0.026064428	0.023772748	0.023225153	0.023691449	0.022395579	0.000382	0.000382
T_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.033320937	0.030445112	0.029762773	0.030353604	0.028712627	0.001	0.001
T_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01169586	55.86948395	54.61669159	49.73310471	48.55472183	49.5363121	46.79872513	0.024498027	0.024057306
D_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.00033736	0.000376841	0.000368415	0.000336016	0.000327771	0.000334264	0.000316632	1.01596E-05	1.00446E-05
D_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.73415339	1.947196126	1.900303125	1.72735548	1.684392929	1.717678666	1.623917222	0.008996241	0.007431777
D_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062344115	0.067879453	0.066416539	0.061750945	0.060784183	0.061896607	0.058932122	0.0123	0.0123
D_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269119561	0.01	0.01
D_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031932391	0.056717586	0.057018064	0.058881454	0.058900002	0.058900002	0.058900002	0.058900002
D_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
D_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
D_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.294838	136.7099609	133.6752777	122.5691528	119.9325943	122.1882858	115.9324188	8.620000839	8.627212524
D_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718273	0.522499025	0.510780275	0.465105653	0.4540883	0.463272244	0.437660456	0.000118	0.00011863
D_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.2938236	0.2675744	0.261247426	0.266528696	0.251802444	0.00032	0.00032
D_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269368	0.01592732	0.015567035	0.014189899	0.013858518	0.014135856	0.013363922	0.00019	0.00019
D_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088210925	0.086221889	0.078515776	0.076658964	0.078204967	0.07389266	0.000200798	0.000200089
D_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375088692	8.482515335	8.525986671	8.817081451	8.819999695	8.819999695	8.819999695	8.819999695
D_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116356	1E-05	1E-05
D_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54407501	43.8884697	42.90582275	39.28102493	38.43507004	39.19225311	37.10519409	2.120000124	2.120000124
D_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
D_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84281921	41.90993881	38.33081055	37.47754288	38.20584869	36.18579102	1.649999976	1.651088953
D_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.2987709	57.11761475	55.86201096	50.98689651	49.82565689	50.82435608	48.05383301	1.120000005	1.120000005
D_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319058	0.008293584	0.0081597	0.008162937	0.008161373	0.008325503	0.008136336	0.0064	0.0064
D_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26544666	14.95463848	14.73606586	14.09587002	13.99634266	14.19734955	13.69948196	6.360000134	6.360000134
D_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322772086	0.315528214	0.287360489	0.280571491	0.286238939	0.270437539	0.0006	0.0006
D_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.16607663	0.288633257	0.290107459	0.299908608	0.300000012	0.300000012	0.300000012	0.300000012
D_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.11927963	0.133243471	0.13025187	0.118611984	0.115805417	0.118146718	0.111618198	0.000111	0.000111
D_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.275409937	7.608223915	7.609751225	7.61842823	7.619999886	7.619999886	7.619999886	7.619999886
D_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776533	0.064614877	0.063003935	0.057434507	0.056113947	0.057239007	0.054113101	0.00102	0.00102
D_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
D_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.230853081	8.614022255	8.698560715	8.798700333	8.800000191	8.800000191	8.800000191	8.800000191
D_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
D_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.48496452	0.526578546	0.516154826	0.480849653	0.473321527	0.481368661	0.459518641	0.104999997	0.104999997
D_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004296272	0.009650649	0.009718313	0.009997074	0.01	0.01	0.01	0.01
D_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
D_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914319	0.026656419	0.026063807	0.023772748	0.023225067	0.023691449	0.02239546	0.000382	0.000382
D_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.03331976	0.030441662	0.029762773	0.030353596	0.028713631	0.001	0.001
D_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01167297	55.8692894	54.61666489	49.73310471	48.55471802	49.5363121	46.79866409	0.024272956	0.024011604

Appendix B.2.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Mine Site Nodes, Interim ECD

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.41823959	15.28497887	15.63916683	15.00719452	11.07796288	12.03059578	12.26759338	12.82700729	12.83582687	12.65960312	13.03459167	13.68601036
NO3_N	Care & Maintenance	P95	6.595578194	4.619113922	4.221195221	3.799448967	4.765262127	5.040774822	5.525614738	5.652918339	5.365421295	5.284444332	5.475147724	5.425864697
NO2_N	Care & Maintenance	P95	0.053306103	0.030885367	0.028209019	0.025695715	0.032102138	0.033776868	0.036928575	0.037742548	0.035828624	0.035251722	0.036617655	0.036236919
Br	Care & Maintenance	P95	0.000236913	0.000219029	0.005787489	0.015373724	0.015729601	0.012883552	0.011991546	0.009356791	0.005879235	0.013259618	0.001919203	0.000306737
Cl	Care & Maintenance	P95	3.245563745	3.065339327	2.886553526	2.462774754	2.893417597	3.186408043	3.438000202	3.522855043	3.387030602	3.349885464	3.39739871	3.421814203
F	Care & Maintenance	P95	1.122147799	1.068086863	1.01416111	0.854773819	0.993702888	1.08595109	1.169381976	1.203389764	1.164337754	1.150361896	1.154758811	1.173939943
TDP	Care & Maintenance	P95	0.006347254	0.006101578	0.005948532	0.006763992	0.007822225	0.007432958	0.006638097	0.006999214	0.00691628	0.006847532	0.006951374	0.006212499
SO4	Care & Maintenance	P95	2000.804443	1782.65564	1807.390869	1763.523682	1440.375244	1561.041992	1577.60022	1616.612915	1622.029541	1609.828735	1636.70752	1680.102539
T_CN	Care & Maintenance	P95	0.001051029	0.000963507	0.001251782	0.001786731	0.00173753	0.001565235	0.001478705	0.001318612	0.001087977	0.001604431	0.000845559	0.000865102
WAD_CN	Care & Maintenance	P95	0.000901542	0.000956519	0.001252029	0.001786853	0.001737614	0.001565337	0.001478808	0.001318753	0.001088162	0.001604534	0.000845809	0.000865418
T_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000334502	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
T_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.021296958	0.186357245	0.097689889	0.042264938	0.034785505	0.017895235	0.037205461	0.019575277	0.01677756
T_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.0178154	0.018958166	0.019838762	0.020261694	0.020098884	0.019830324	0.019676849	0.020088241
T_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
T_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017814282	0.014662798	0.015481192	0.015705369	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
T_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
T_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
T_Ca	Care & Maintenance	P95	393.9638977	372.0048218	374.5550842	369.8618469	314.4371033	339.2793274	342.8752136	348.3334351	349.7014771	348.7108459	352.4832153	358.9361572
T_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.001438148	0.001785275	0.001911621	0.002092012	0.002140976	0.002030937	0.002000053	0.002070875	0.002053958
T_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667051	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
T_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.00085733	0.000702112	0.00073642	0.000751093	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
T_Cu	Care & Maintenance	P95	0.007885337	0.007281382	0.006691435	0.006004828	0.007597459	0.00791687	0.008646444	0.008841149	0.008396284	0.008271598	0.008558495	0.008487798
T_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.289508075	0.229945973	0.232006162	0.236712411	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
T_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267106	0.000302237	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
T_K	Care & Maintenance	P95	75.20284271	72.64206696	70.01290894	61.74315262	67.15529633	71.73282623	76.74188995	79.1624527	77.39439392	76.60654449	75.69438171	77.88915253
T_Li	Care & Maintenance	P95	0.135851339	0.125904769	0.116049327	0.102555446	0.124478236	0.135440543	0.147620603	0.151482359	0.144130662	0.142152891	0.146374255	0.145829245
T_Mg	Care & Maintenance	P95	11.93510246	12.20752716	12.2745657	11.40241051	10.95704746	11.63958836	12.01087856	12.17081165	12.80145264	12.38246632	12.34202576	12.45859814
T_Mn	Care & Maintenance	P95	0.46040529	0.35180828	0.335410476	0.287173122	0.326747954	0.354028612	0.379749626	0.391831398	0.380310744	0.375544041	0.375219554	0.382979184
T_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141341895	0.153127849	0.154946983	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
T_Na	Care & Maintenance	P95	482.7615662	399.7516479	409.7791443	394.1541138	294.6034241	319.7687378	324.9177246	339.2652588	339.4742432	334.6089172	343.9076233	359.9628601
T_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012459379	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
T_P	Care & Maintenance	P95	0.006289918	0.006051098	0.006725823	0.007379563	0.011436197	0.007966883	0.007460584	0.007597517	0.007179894	0.007735493	0.007017875	0.006573949
T_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000797274	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
T_S	Care & Maintenance	P95	0.004738268	0.004380588	0.183709443	0.48226878	0.157767698	0.130012363	0.122390807	0.192228556	0.136775345	0.42316547	0.021191135	0.008487212
T_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
T_Se	Care & Maintenance	P95	0.003675169	0.003451932	0.003231267	0.002730588	0.003246963	0.003610916	0.003916998	0.004019194	0.003850142	0.003804863	0.003869072	0.003893747
T_Si	Care & Maintenance	P95	3.103214264	2.801413536	3.102306843	5.729763508	5.18598938	4.386871815	4.831783772	4.560443878	4.220669746	5.121379852	3.903801203	3.438580275
T_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
T_Sr	Care & Maintenance	P95	0.718798935	0.483937323	0.44228977	0.438624769	0.511179447	0.529640019	0.580545187	0.590549946	0.562073708	0.551850855	0.574412584	0.566636145
T_Ti	Care & Maintenance	P95	1.42672E-06	1.31418E-06	8.56947E-05	0.001196206	0.003138097	0.002132606	0.001238185	0.001276303	0.000164546	0.002633456	0.000345058	3.46593E-06
T_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
T_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.00337778	0.003953657	0.004354236	0.004700095	0.004825952	0.004653165	0.004596842	0.004637635	0.004696508
T_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025564872	0.032197312	0.033927049	0.037172277	0.037993763	0.036027387	0.035456363	0.036784895	0.036427226
T_Zn	Care & Maintenance	P95	0.097614095	0.090086229	0.082714826	0.074044891	0.091865905	0.097881988	0.106947467	0.109452687	0.10394416	0.102385342	0.105908796	0.105109356
D_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000324848	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
D_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.017544467	0.134059489	0.085153446	0.032770716	0.027788594	0.016444879	0.029306805	0.018642103	0.016670221
D_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.017802503	0.01895738	0.019838717	0.02026166	0.020098884	0.01983029	0.019676732	0.020088173
D_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
D_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017810347	0.014620136	0.015480791	0.015704347	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
D_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
D_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
D_Ca	Care & Maintenance	P95	393.9639282	372.0048218	374.5550842	369.8618164	314.4371643	339.2793884	342.8751221	348.333374	349.7015076	348.7108154	352.4833984	358.9363708
D_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.00143761	0.001783856	0.001911618	0.002092273	0.002140976	0.002030884	0.002000054	0.002070834	0.002053964
D_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667044	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
D_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.000856245	0.000697475	0.000736382	0.000750868	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
D_Cu	Care & Maintenance	P95	0.007885336	0.007281382	0.006691435	0.005997149	0.007579003	0.007921612	0.008646444	0.008841149	0.008395866	0.008271598	0.008558495	0.008487798
D_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.2891303	0.222407565	0.231982738	0.236670002	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
D_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267159	0.000302123	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
D_K	Care & Maintenance	P95	75.20258331	72.64173889	70.0125885	61.74111938	67.15658569	71.73268127	76.741745	79.16230011	77.39421844	76.60607147	75.69451141	77.88878632
D_Li	Care & Maintenance	P95	0.135851339	0.125904769	0.116049327	0.102555446	0.124478236	0.135440543	0.147620603	0.151482359	0.144130662	0.142152891	0.146374255	0.145829245
D_Mg	Care & Maintenance	P95	11.93471718	12.20711613	12.27416229	11.40170383	10.95557213	11.63857841	12.01052284	12.17041016	12.8009634	12.38180447	12.343009	12.45821857
D_Mn	Care & Maintenance	P95	0.46040526	0.35180828	0.335410476	0.287152886	0.326140344	0.353732556	0.379671872	0.391830295	0.380310237	0.375539422	0.375165731	0.382975906
D_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141340926	0.153127849	0.154947013	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
D_Na	Care & Maintenance	P95	482.7522278	399.7514954	409.7789917	394.1531067	294.5983582	319.7684631	324.9175415	339.2650757	339.473999	334.6087036	343.9074402	359.9626465
D_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012453237	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
D_P	Care & Maintenance	P95	0.006292959	0.006051098	0.008085016	0.011238604	0.017361116	0.010612168	0.015148146	0.036428068	0.011185026	0.081976086	0.016503816	0.006648378
D_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000778534	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
D_S	Care & Maintenance	P95	0.004738268	0.004380588	0.197301388	0.417870879	0.157767698	0.130012363	0.122390807	0.117393307	0.133373499	0.133548126	0.021191135	0.008016689
D_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
D_Se	Care & Maintenance	P95	0.003675168	0.003451932	0.003231267	0.002732376	0.003247576	0.003609454	0.003917055	0.004019189	0.003850139	0.003804544	0.003866961	0.003893732
D_Si	Care & Maintenance	P95	3.103208542	2.801413536	3.100132465	5.501202106	4.997080326	4.319203377	4.81287384	4.504397869	4.226468086	5.049548626	3.893248796	3.437490225
D_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
D_Sr	Care & Maintenance	P95	0.718798876	0.483937323	0.44228977	0.43942669	0.510744035	0.529576778	0.580392122	0.590550482	0.562121868	0.55184418	0.574940145	0.566639245
D_Ti	Care & Maintenance	P95	1.42148E-06	1.31418E-06	6.87048E-05	0.00046023	0.001694679	0.001047507	0.000668531	0.001128844	0.000125991	0.002633456	0.000345058	3.10957E-06
D_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
D_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.003373567	0.003952166	0.004353301	0.004699643	0.004825948	0.004653164	0.004596757	0.004637107	0.004696488
D_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025546445	0.032043982	0.033923954	0.037169088	0.037993737	0.036027387	0.035456363	0.036781963	0.036427226
D_Zn	Care & Maintenance	P95	0.097614087	0.090086229	0.082714826	0.074044891	0.091534629	0.097866848	0.106909208	0.109452322	0.103923216	0.102376923	0.105908796	0.105107658

Appendix B.2.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Mine Site Nodes, WMP

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.209968179	0.193713024	0.176808208	0.15282689	0.065536521	0.044198684	0.031940997	0.028958576	0.039033104	0.031583119	0.035554077	0.019935329
NO3_N	Care & Maintenance	P95	2.493609428	2.319328785	2.424542189	2.297619104	1.8346982	1.314818978	1.200206757	1.303670406	1.376297355	1.531714439	1.905931592	1.950348377
NO2_N	Care & Maintenance	P95	0.014313151	0.013899015	0.014203092	0.015226692	0.012052036	0.008753973	0.007927042	0.008717733	0.008914407	0.010103351	0.012707992	0.011663934
Br	Care & Maintenance	P95	0.08258599	0.077430882	0.076774351	0.066034853	0.056120418	0.048483033	0.048917059	0.04851529	0.05369743	0.060127009	0.06917882	0.074963868
Cl	Care & Maintenance	P95	1.595906377	1.47953248	1.457738042	1.264190435	1.065661073	0.885709107	0.869185805	0.839761376	1.027425647	1.136053562	1.34705627	1.390631437
F	Care & Maintenance	P95	0.466657311	0.430888921	0.42663464	0.371441931	0.306286246	0.263439268	0.246546701	0.284904987	0.307501227	0.331267178	0.398476601	0.391344815
TDP	Care & Maintenance	P95	0.02150818	0.023769718	0.024639651	0.02178123	0.017611431	0.019326258	0.016142134	0.017802494	0.023145104	0.025039051	0.026927017	0.02249551
SO4	Care & Maintenance	P95	33.11408997	28.69956589	27.42251778	22.45569038	33.34393692	46.16313934	57.85070419	57.82463455	74.51448822	55.23368073	70.73827362	36.59373856
T_CN	Care & Maintenance	P95	0.002742673	0.002795438	0.002882624	0.002716986	0.002594128	0.002692198	0.002390534	0.002600035	0.002633732	0.002650834	0.00253382	0.002581235
WAD_CN	Care & Maintenance	P95	0.002719237	0.002756242	0.002848383	0.002606053	0.00259375	0.002689112	0.002390534	0.002600035	0.002633732	0.002650834	0.00253382	0.002581235
T_Ag	Care & Maintenance	P95	4.90633E-05	4.53348E-05	4.74285E-05	4.54418E-05	4.17621E-05	3.33406E-05	3.00637E-05	3.09764E-05	3.2769E-05	3.71885E-05	4.09119E-05	4.27127E-05
T_Al	Care & Maintenance	P95	0.0723226	0.066206627	0.064387456	0.051586386	0.101596847	0.286919534	0.180623025	0.143277302	0.110275157	0.091420367	0.083913796	0.069141671
T_As	Care & Maintenance	P95	0.001100722	0.001093945	0.001162834	0.001035211	0.000885719	0.000857442	0.000802022	0.000978849	0.0011293	0.001062684	0.00097374	0.000906046
T_B	Care & Maintenance	P95	0.073519096	0.067681059	0.068144865	0.060327698	0.049799602	0.037158739	0.035109751	0.033245359	0.043093402	0.049029477	0.059071839	0.061476268
T_Ba	Care & Maintenance	P95	0.007527402	0.007507005	0.007543875	0.007088707	0.008583481	0.008018679	0.006574258	0.009032913	0.010663267	0.010871755	0.009701177	0.007534906
T_Bi	Care & Maintenance	P95	4.53102E-05	4.30955E-05	4.2571E-05	4.49392E-05	3.53781E-05	3.91277E-05	3.66241E-05	4.89397E-05	5.38897E-05	5.43788E-05	6.14864E-05	4.39445E-05
T_Be	Care & Maintenance	P95	0.00010631	0.000101657	0.000110443	9.79213E-05	9.12442E-05	8.01337E-05	6.44814E-05	8.50333E-05	8.17035E-05	8.56538E-05	9.74895E-05	9.14979E-05
T_Ca	Care & Maintenance	P95	18.47113991	18.91148758	18.11256599	17.49993134	20.1628437	17.78446007	18.78697968	22.27547073	25.35680771	23.77271271	24.51277161	17.90128708
T_Cd	Care & Maintenance	P95	2.56392E-05	2.38894E-05	2.47398E-05	2.38947E-05	2.14401E-05	1.71947E-05	1.7038E-05	1.7048E-05	1.84472E-05	1.98027E-05	2.15403E-05	2.40641E-05
T_Co	Care & Maintenance	P95	0.000521012	0.000480916	0.000489699	0.000454973	0.000415274	0.000334984	0.000364091	0.000389914	0.000405356	0.000424902	0.000513242	0.000469763
T_Cr	Care & Maintenance	P95	0.000500969	0.000504747	0.000533079	0.000481999	0.000415955	0.000402686	0.000356635	0.00042082	0.000442856	0.000417559	0.00043295	0.000423298
T_Cu	Care & Maintenance	P95	0.000529585	0.000522431	0.000520655	0.000506779	0.000448057	0.000664495	0.000372369	0.000401648	0.000415952	0.000431958	0.000481094	0.000503123
T_Fe	Care & Maintenance	P95	0.091220476	0.088506423	0.086744316	0.075552076	0.095568642	0.206036881	0.123774938	0.11368306	0.101588279	0.097093418	0.090695396	0.079832099
T_Hg	Care & Maintenance	P95	2.21591E-05	2.06855E-05	2.31375E-05	2.05105E-05	1.8243E-05	1.44153E-05	9.65302E-06	1.46443E-05	1.43087E-05	1.55548E-05	1.80717E-05	1.80934E-05
T_K	Care & Maintenance	P95	5.191488743	4.759567738	5.089742184	4.480309486	4.202505589	4.361972332	5.088997841	5.621965408	6.372253895	5.842695713	6.068814754	4.533479214
T_Li	Care & Maintenance	P95	0.068635516	0.062951796	0.06678085	0.059792079	0.048808392	0.039231781	0.027206128	0.036756095	0.038207963	0.042819049	0.053148855	0.055319104
T_Mg	Care & Maintenance	P95	7.632306576	7.103402138	7.804943085	6.8703475	6.504122734	5.911479473	5.69694519	7.38881588	7.35131979	8.070700645	7.400574207	6.535669804
T_Mn	Care & Maintenance	P95	0.085698709	0.072574161	0.057505138	0.042324632	0.078040093	0.108488016	0.109417491	0.180887327	0.226208255	0.207297727	0.209768683	0.095337741
T_Mo	Care & Maintenance	P95	0.000652146	0.000756254	0.000685279	0.000678013	0.000757737	0.000593289	0.000462777	0.000437176	0.000554315	0.000667615	0.000639181	0.000609279
T_Na	Care & Maintenance	P95	20.69857025	19.5919838	21.13570404	19.68282127	17.29484367	12.35383511	9.606208801	12.93564796	13.38464165	14.25807762	16.59560394	16.9109993
T_Ni	Care & Maintenance	P95	0.001027416	0.000952618	0.001056527	0.000950004	0.000839148	0.000746847	0.000660543	0.000867124	0.000888347	0.000911248	0.001000414	0.000906929
T_P	Care & Maintenance	P95	0.028827406	0.029561151	0.030648552	0.028022062	0.024892805	0.029730221	0.025340874	0.042038478	0.049253162	0.045853253	0.04701614	0.028835401
T_Pb	Care & Maintenance	P95	0.001555731	0.001426038	0.001517922	0.001396622	0.001321519	0.000834874	0.000661851	0.000826247	0.000927425	0.001033981	0.001228326	0.001302457
T_S	Care & Maintenance	P95	1.375908136	1.534068823	1.70860219	1.624186277	1.030358553	0.974330306	0.900557101	1.151274562	1.367699385	1.499432683	1.664025307	1.175399542
T_Sb	Care & Maintenance	P95	0.001096801	0.000998166	0.000787632	0.000648352	0.001010041	0.001322747	0.001370916	0.002259793	0.002816375	0.002595268	0.00264615	0.001189015
T_Se	Care & Maintenance	P95	9.88548E-05	9.86967E-05	0.000110572	0.000100558	9.92509E-05	8.34178E-05	6.43959E-05	7.89393E-05	8.42305E-05	9.71907E-05	9.76232E-05	8.91838E-05
T_Si	Care & Maintenance	P95	7.138622761	7.439918518	7.474156857	7.428067684	6.768373013	6.274666309	5.755561829	6.434529305	6.658646107	7.014269829	7.671380043	6.876986027
T_Sn	Care & Maintenance	P95	5.76488E-05	6.22463E-05	5.88553E-05	5.89825E-05	5.20269E-05	5.53395E-05	4.84091E-05	5.55628E-05	5.41801E-05	5.65937E-05	6.18011E-05	5.82462E-05
T_Sr	Care & Maintenance	P95	0.112247914	0.108879142	0.118495129	0.102958277	0.109140925	0.09785863	0.087546945	0.11695157	0.130160332	0.131171018	0.127249911	0.106928088
T_Ti	Care & Maintenance	P95	0.004271255	0.003870778	0.003416544	0.002719391	0.002730769	0.005166929	0.003980692	0.00362337	0.003376605	0.003038278	0.004380514	0.004210909
T_Tl	Care & Maintenance	P95	0.00019163	0.000175803	0.000183597	0.000165775	0.000146804	0.000102174	8.58874E-05	9.22861E-05	0.000108898	0.000123477	0.000150843	0.000156679
T_U	Care & Maintenance	P95	0.000163469	0.000167553	0.000178499	0.000184793	0.000221526	0.000201533	0.000154963	0.000161785	0.000152682	0.000164396	0.00015877	0.000149908
T_V	Care & Maintenance	P95	0.010730666	0.009868911	0.01007164	0.008920056	0.007847344	0.006297472	0.005488852	0.00700816	0.007084122	0.007879672	0.009149052	0.009170128
T_Zn	Care & Maintenance	P95	0.005034584	0.004702582	0.004919926	0.004711665	0.004242741	0.003358594	0.003125853	0.003272028	0.003522254	0.003863579	0.004178514	0.004611527
D_Ag	Care & Maintenance	P95	4.90547E-05	4.53269E-05	4.73905E-05	4.54114E-05	4.17498E-05	3.33405E-05	3.0063E-05	2.99154E-05	3.24823E-05	3.7178E-05	4.08891E-05	4.27127E-05
D_Al	Care & Maintenance	P95	0.055380527	0.050595038	0.048901111	0.039041512	0.073326498	0.205045968	0.14643836	0.11551097	0.087579042	0.072165869	0.066245005	0.055176642
D_As	Care & Maintenance	P95	0.001060664	0.00105499	0.001122475	0.001005549	0.000836707	0.00080593	0.000773977	0.000951837	0.001083234	0.001031336	0.000931364	0.000861037
D_B	Care & Maintenance	P95	0.073519096	0.067681059	0.068144865	0.060327698	0.049799602	0.037158739	0.035109751	0.033245359	0.043093402	0.049029477	0.059071839	0.061476268
D_Ba	Care & Maintenance	P95	0.007283555	0.007241372	0.007230515	0.006793111	0.008296533	0.007587046	0.006224304	0.008775558	0.010566373	0.010922351	0.009501684	0.00726966
D_Bi	Care & Maintenance	P95	4.53102E-05	4.30955E-05	4.2571E-05	4.49392E-05	3.53781E-05	3.91277E-05	3.66241E-05	4.89397E-05	5.38897E-05	5.43788E-05	6.14864E-05	4.39445E-05
D_Be	Care & Maintenance	P95	0.00010631	0.000101657	0.000110443	9.79213E-05	9.12442E-05	8.01337E-05	6.44814E-05	8.50333E-05	8.17035E-05	8.56538E-05	9.74895E-05	9.14979E-05
D_Ca	Care & Maintenance	P95	18.45890236	18.86981583	18.06775475	17.3861599	20.26189995	17.79420853	18.70665359	22.22611618	25.36363983	23.86375999	24.23074913	17.84956741
D_Cd	Care & Maintenance	P95	2.57558E-05	2.3996E-05	2.48267E-05	2.39576E-05	2.14304E-05	1.68627E-05	1.79062E-05	1.81343E-05	1.87213E-05	1.96898E-05	2.14901E-05	2.38578E-05
D_Co	Care & Maintenance	P95	0.000520985	0.000480891	0.000489643	0.000454273	0.000414858	0.000332564	0.00036216	0.000389464	0.00040516	0.000424847	0.000513233	0.000469743
D_Cr	Care & Maintenance	P95	0.000450193	0.000443283	0.000470741	0.000426656	0.000363905	0.000351591	0.000300441	0.000362498	0.000406851	0.000350148	0.000373138	0.000357761
D_Cu	Care & Maintenance	P95	0.000529173	0.000511176	0.000514143	0.000492738	0.000439081	0.000632045	0.000385684	0.000407314	0.00041807	0.000427724	0.000481301	0.000503022
D_Fe	Care & Maintenance	P95	0.068873964	0.06755808	0.06702733	0.056751885	0.063411824	0.117780954	0.082518712	0.08279039	0.079529911	0.072946794	0.068795927	0.062914513
D_Hg	Care & Maintenance	P95	2.22026E-05	2.07347E-05	2.31677E-05	2.05439E-05	1.8271E-05	1.42829E-05	9.30525E-06	1.45263E-05	1.41952E-05	1.54702E-05	1.80399E-05	1.81082E-05
D_K	Care & Maintenance	P95	5.18842411	4.757220268	5.085670471	4.477622986	4.169986248	4.369314671	5.091768265	5.620103836	6.364193439	5.837342262	6.042712688	4.53079319
D_Li	Care & Maintenance	P95	0.068635516	0.062951796	0.06678085	0.059792079	0.048808392	0.039231781	0.027206128	0.036756095	0.038207963	0.042819049	0.053148855	0.055319104
D_Mg	Care & Maintenance	P95	7.639321804	7.10901165	7.807928562	6.868746281	6.495369434	5.902052402	5.682002068	7.378756523	7.341859818	8.060117722	7.387112617	6.541332722
D_Mn	Care & Maintenance	P95	0.084462784	0.071387805	0.057104975	0.04187667	0.077137955	0.102825612	0.106961429	0.179895431	0.225024417	0.206190675	0.20936963	0.094171256
D_Mo	Care & Maintenance	P95	0.000630902	0.000727263	0.000664317	0.000646153	0.00073858	0.000572411	0.000461921	0.000440622	0.000538962	0.00066619	0.000624715	0.000604317
D_Na	Care & Maintenance	P95	20.67374992	19.56860733	21.10980606	19.65930939	17.27003288	12.30507374	9.57986927	12.89932537	13.34175301	14.22886848	16.5656929	16.87085915
D_Ni	Care & Maintenance	P95	0.00102702	0.000952381	0.001056095	0.000949313	0.000833893	0.00074351	0.00065726	0.000867008	0.000888073	0.000910953	0.001000146	0.000906593
D_P	Care & Maintenance	P95	0.133787379	0.121899068	0.1147907	0.077143453	0.062753111	0.052773006	0.033775017	0.062735505	0.092260458	0.07647384	0.132301107	0.133664131
D_Pb	Care & Maintenance	P95	0.001554454	0.001424869	0.001516422	0.001395096	0.001317706	0.00083344	0.000659558	0.000822709	0.000922544	0.001032167	0.00122561	0.001301258
D_S	Care & Maintenance	P95	1.233018279	1.472361207	1.668666601	1.627131343	0.958977878	0.900699317	0.878701329	1.131810784	1.258507609	1.472810626	1.421948075	1.108679175
D_Sb	Care & Maintenance	P95	0.001096801	0.000998166	0.000787632	0.000648352	0.001010041	0.001322747	0.001370916	0.002259793	0.002816375	0.002595268	0.00264615	0.001189015
D_Se	Care & Maintenance	P95	9.47711E-05	9.40109E-05	0.000104812	9.649E-05	9.83118E-05	8.10978E-05	6.33229E-05	7.79343E-05	7.86271E-05	8.94526E-05	8.91679E-05	7.9116E-05
D_Si	Care & Maintenance	P95	6.918168545	7.189946175	7.245401382	7.224748611	6.430395603	6.046655655	5.656727791	6.389165401	6.555916786	6.995941162	7.571690083	6.737995148
D_Sn	Care & Maintenance	P95	5.76488E-05	6.22463E-05	5.88553E-05	5.89825E-05	5.20269E-05	5.53395E-05	4.84091E-05	5.55628E-05	5.41801E-05	5.65937E-05	6.18011E-05	5.82462E-05
D_Sr	Care & Maintenance	P95	0.112864256	0.109398834	0.118670613	0.10287068	0.109725311	0.0981552	0.086983807	0.115540542	0.130507722	0.131709084	0.127072588	0.108485505
D_Ti	Care & Maintenance	P95	0.004217249	0.003655616	0.003222823	0.002395286	0.001976647	0.002866673	0.00210487	0.002033922	0.002685034	0.002107621	0.004251387	0.004123538
D_Tl	Care & Maintenance	P95	0.00019163	0.000175803	0.000183597	0.000165775	0.000146804	0.000102174	8.58874E-05	9.22861E-05	0.000108898	0.000123477	0.000150843	0.000156679
D_U	Care & Maintenance	P95	0.000154921	0.000158692	0.000168868	0.000173292	0.000206082	0.000183929	0.000143329	0.000150856	0.000145909	0.000160394	0.000152515	0.000142417
D_V	Care & Maintenance	P95	0.010694851	0.009836129	0.010044917	0.008880395	0.007789797	0.006253233	0.005446048	0.006952954	0.007055312	0.007853528	0.009115045	0.009133471
D_Zn	Care & Maintenance	P95	0.00490599	0.004554693	0.004769731	0.004565518	0.004187722	0.003294415	0.002958797	0.003045168	0.003295268	0.003644249	0.004020408	0.004538112

Appendix B.2.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Mine Site Nodes, FWR

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254986644	0.253833383	0.247803316	0.238767877	0.187342495	0.052690051	0.044260699	0.046837427	0.063710473	0.071573123	0.077127874	0.074124306
NO3_N	Care & Maintenance	P95	1.742072821	1.97523272	2.026477098	1.90944159	1.871664643	1.109900236	0.958481669	0.973745227	0.83254981	0.99917537	1.195858121	1.459661603
NO2_N	Care & Maintenance	P95	0.010240427	0.011276881	0.011543468	0.011060071	0.010675822	0.007138619	0.006551801	0.006620788	0.005649167	0.006494517	0.007245892	0.009259856
Br	Care & Maintenance	P95	0.066681527	0.070723519	0.071417421	0.063012302	0.060748108	0.044347297	0.042401489	0.046794623	0.039522085	0.045997463	0.054988354	0.060455561
Cl	Care & Maintenance	P95	1.255634189	1.338953376	1.351012111	1.162325859	1.123850346	0.769602418	0.676984608	0.776521325	0.636218011	0.799505055	0.995711327	1.125043988
F	Care & Maintenance	P95	0.361772209	0.387745976	0.391177505	0.334827006	0.316929847	0.223218486	0.191019461	0.211573169	0.190076575	0.234622583	0.285810232	0.33348015
TDP	Care & Maintenance	P95	0.018742437	0.019301631	0.019891953	0.020295326	0.019489575	0.016284555	0.017056653	0.014869378	0.0159095	0.018045055	0.022376072	0.0228021
SO4	Care & Maintenance	P95	35.64393997	34.91907883	34.0556488	30.83008575	25.54877663	26.12967873	31.81160545	43.11942673	40.96271515	39.95949554	40.17425919	47.75666046
T_CN	Care & Maintenance	P95	0.002707844	0.002778559	0.002726874	0.002674432	0.00293384	0.002656783	0.002676254	0.002471337	0.002514278	0.002711848	0.002639054	0.002630481
WAD_CN	Care & Maintenance	P95	0.002707845	0.002778561	0.002712738	0.002643062	0.002933841	0.002645789	0.002665089	0.002470905	0.002514279	0.002711733	0.002639052	0.00263048
T_Ag	Care & Maintenance	P95	3.82104E-05	4.08541E-05	4.12343E-05	4.06015E-05	4.12013E-05	3.26384E-05	2.75819E-05	2.68082E-05	2.35321E-05	2.63344E-05	3.2627E-05	3.49522E-05
T_Al	Care & Maintenance	P95	0.080781847	0.070510998	0.065363452	0.060432453	0.048727956	0.197498232	0.248971254	0.161387086	0.132436424	0.103031822	0.086345084	0.086047679
T_As	Care & Maintenance	P95	0.00121424	0.001234621	0.001247418	0.001242187	0.001159574	0.000813747	0.000871602	0.000914333	0.001073367	0.001177722	0.0011557	0.00114451
T_B	Care & Maintenance	P95	0.055156954	0.059856839	0.06072681	0.052545544	0.051353663	0.031485528	0.027230775	0.029541586	0.023178181	0.031816639	0.040401131	0.047570575
T_Ba	Care & Maintenance	P95	0.007090599	0.00725791	0.007259961	0.007161998	0.008452021	0.007736526	0.007147389	0.006414859	0.007383209	0.008715948	0.00955542	0.0080571
T_Bi	Care & Maintenance	P95	4.31175E-05	4.23133E-05	4.15354E-05	3.96585E-05	3.91396E-05	3.4702E-05	3.38202E-05	3.37634E-05	3.65181E-05	3.80147E-05	4.24952E-05	5.14145E-05
T_Be	Care & Maintenance	P95	8.56547E-05	9.15489E-05	9.14376E-05	8.99196E-05	8.26331E-05	7.29654E-05	6.88174E-05	5.96575E-05	6.78141E-05	6.83425E-05	7.23114E-05	7.5235E-05
T_Ca	Care & Maintenance	P95	17.65759087	18.74316597	18.61615944	17.91419029	16.90330315	15.53358269	14.74018383	15.56814575	18.41087341	20.94600296	20.00196648	20.35311127
T_Cd	Care & Maintenance	P95	2.05645E-05	2.17631E-05	2.1938E-05	2.09892E-05	2.12824E-05	1.6267E-05	1.41917E-05	1.64021E-05	1.6273E-05	1.60337E-05	1.7804E-05	1.91645E-05
T_Co	Care & Maintenance	P95	0.000545079	0.000582987	0.0006019	0.00054494	0.000531524	0.000315609	0.000296328	0.000366565	0.000396749	0.000401306	0.000470744	0.000524773
T_Cr	Care & Maintenance	P95	0.000585223	0.000598919	0.000616503	0.000610044	0.000574971	0.000393309	0.000416528	0.000446115	0.000491114	0.000516441	0.000519233	0.000546743
T_Cu	Care & Maintenance	P95	0.000440455	0.000463462	0.000468838	0.000444787	0.000447918	0.000528117	0.000541151	0.000377738	0.000363667	0.000365239	0.000393304	0.000413663
T_Fe	Care & Maintenance	P95	0.090063445	0.086737335	0.084783636	0.081989482	0.089316338	0.14559947	0.177178115	0.123511694	0.112281643	0.10225036	0.093585968	0.089617305
T_Hg	Care & Maintenance	P95	1.62613E-05	1.76527E-05	1.8176E-05	1.75918E-05	1.59832E-05	1.29298E-05	1.10701E-05	8.51357E-06	1.03709E-05	1.14902E-05	1.23081E-05	1.35955E-05
T_K	Care & Maintenance	P95	4.041005611	4.536580086	4.468397617	4.190554142	3.527308941	3.363787413	3.285741329	3.766710281	3.55316925	3.986730337	4.091106892	3.931685925
T_Li	Care & Maintenance	P95	0.049547724	0.054196376	0.055364981	0.05049932	0.047048487	0.031300616	0.025993684	0.022611855	0.023074713	0.028513137	0.036080264	0.042382795
T_Mg	Care & Maintenance	P95	5.967947006	6.55429554	6.533708572	6.348543167	5.535428047	5.126232147	4.543298244	4.350178719	5.127167702	5.305324078	5.734085083	5.494167805
T_Mn	Care & Maintenance	P95	0.077225834	0.072563671	0.068755105	0.058527265	0.041746106	0.059411161	0.06691435	0.071407244	0.086617999	0.100502767	0.134837374	0.152181864
T_Mo	Care & Maintenance	P95	0.001345095	0.001433821	0.001460194	0.001401733	0.001308583	0.000736726	0.000752326	0.000823204	0.000940872	0.001096533	0.001134356	0.001110477
T_Na	Care & Maintenance	P95	16.21600914	17.99809647	18.46456337	18.248209	16.51592636	11.12863159	9.69838047	9.00343895	9.503016472	11.27918816	12.0256567	13.94421101
T_Ni	Care & Maintenance	P95	0.000841447	0.000875008	0.000864492	0.000840609	0.000735819	0.000643398	0.000589284	0.000549086	0.000629784	0.000689009	0.000686417	0.000748983
T_P	Care & Maintenance	P95	0.027313082	0.026348218	0.025848951	0.025546025	0.023554709	0.023866078	0.024458105	0.024255272	0.030952379	0.032152139	0.03547819	0.032670457
T_Pb	Care & Maintenance	P95	0.001150135	0.001241767	0.001263279	0.001270202	0.001235812	0.000744653	0.000620161	0.00051835	0.00053646	0.000675548	0.00087659	0.000984949
T_S	Care & Maintenance	P95	1.069604516	1.130406976	1.194781303	1.154621363	1.117193103	0.930946112	0.798306465	0.805213809	0.969861031	1.117783308	1.239195228	1.294859767
T_Sb	Care & Maintenance	P95	0.001032495	0.000997323	0.000967599	0.00084524	0.000657874	0.00076033	0.000892404	0.000915105	0.001102649	0.00126843	0.00165578	0.001951378
T_Se	Care & Maintenance	P95	8.3576E-05	9.32746E-05	9.51287E-05	0.000103565	9.03849E-05	8.04956E-05	7.26796E-05	6.28857E-05	7.05701E-05	7.55893E-05	8.38835E-05	7.93786E-05
T_Si	Care & Maintenance	P95	6.861529827	7.162380695	7.133096218	6.810901165	7.133575439	6.290001392	5.964544773	5.68244791	5.952566147	6.817704678	6.906564236	7.261841297
T_Sn	Care & Maintenance	P95	5.41743E-05	5.55759E-05	5.56944E-05	5.36576E-05	5.91098E-05	5.36715E-05	5.39783E-05	5.04056E-05	5.13478E-05	5.44064E-05	5.60983E-05	5.80436E-05
T_Sr	Care & Maintenance	P95	0.094533883	0.102373824	0.103113018	0.10381335	0.094794266	0.091342926	0.081706867	0.075930454	0.097170003	0.103657074	0.10817612	0.097187728
T_Ti	Care & Maintenance	P95	0.003835979	0.003605549	0.003288943	0.002958791	0.002524224	0.003668059	0.004741027	0.003696355	0.003500856	0.002960156	0.003508584	0.004268059
T_Tl	Care & Maintenance	P95	0.000140234	0.000153239	0.000155951	0.000145056	0.000142619	8.90499E-05	7.80686E-05	7.2557E-05	6.09551E-05	8.12621E-05	0.000105004	0.000121836
T_U	Care & Maintenance	P95	0.000174306	0.000183755	0.000186312	0.000188062	0.000251452	0.000207488	0.000186323	0.00016534	0.000165743	0.000178209	0.000161106	0.000164554
T_V	Care & Maintenance	P95	0.008379448	0.008790184	0.008869027	0.007847429	0.007702725	0.005308966	0.00443385	0.004597205	0.004379444	0.005527935	0.006474197	0.007441979
T_Zn	Care & Maintenance	P95	0.00400289	0.004283318	0.004336718	0.004200973	0.004235709	0.003275779	0.002739572	0.002908015	0.002677372	0.002944024	0.00349741	0.003698549
D_Ag	Care & Maintenance	P95	3.81891E-05	4.08386E-05	4.12218E-05	4.05184E-05	4.11521E-05	2.98299E-05	2.69561E-05	2.67171E-05	2.19151E-05	2.56769E-05	3.23466E-05	3.47495E-05
D_Al	Care & Maintenance	P95	0.062339962	0.054116268	0.049800523	0.045913257	0.036795087	0.140749648	0.185502723	0.127262518	0.104736656	0.081371263	0.067705773	0.067841038
D_As	Care & Maintenance	P95	0.001172164	0.001196525	0.001215421	0.001216905	0.00113463	0.000753113	0.000820464	0.000861424	0.001014921	0.001135367	0.001115467	0.001102483
D_B	Care & Maintenance	P95	0.055156954	0.059856839	0.06072681	0.052545544	0.051353663	0.031485528	0.027230695	0.029541586	0.023178181	0.031816639	0.04040112	0.047570575
D_Ba	Care & Maintenance	P95	0.006857505	0.006964561	0.006949311	0.006845653	0.008112423	0.007343372	0.006669989	0.005988656	0.007162551	0.008665395	0.009452472	0.007851646
D_Bi	Care & Maintenance	P95	4.31175E-05	4.23133E-05	4.15354E-05	3.96585E-05	3.91396E-05	3.4702E-05	3.38202E-05	3.37634E-05	3.65181E-05	3.80147E-05	4.24952E-05	5.14145E-05
D_Be	Care & Maintenance	P95	8.56547E-05	9.15489E-05	9.14376E-05	8.99196E-05	8.26331E-05	7.29654E-05	6.88174E-05	5.96575E-05	6.78141E-05	6.83425E-05	7.23114E-05	7.5235E-05
D_Ca	Care & Maintenance	P95	17.63066483	18.70631027	18.56200981	17.84703064	16.9107914	15.49948978	14.74229908	15.47560501	18.3595295	20.9122448	19.91759109	20.14143181
D_Cd	Care & Maintenance	P95	2.06504E-05	2.18566E-05	2.20328E-05	2.10643E-05	2.12893E-05	1.52336E-05	1.4088E-05	1.72711E-05	1.65042E-05	1.60107E-05	1.77397E-05	1.90875E-05
D_Co	Care & Maintenance	P95	0.000545074	0.000582931	0.000601856	0.000544512	0.000531011	0.000311745	0.000292983	0.000363842	0.000395856	0.000401254	0.000470587	0.000524766
D_Cr	Care & Maintenance	P95	0.000533115	0.000545448	0.000565836	0.000557593	0.000526	0.000335752	0.000359018	0.000391141	0.000444865	0.000450982	0.000458309	0.000493132
D_Cu	Care & Maintenance	P95	0.000439801	0.000461661	0.000462774	0.000438042	0.000441539	0.000508215	0.000532657	0.000384799	0.000369134	0.000369795	0.000393528	0.000413606
D_Fe	Care & Maintenance	P95	0.067730173	0.06709294	0.065076441	0.063050367	0.058627971	0.084913634	0.105627306	0.083679497	0.081844784	0.078932129	0.072355226	0.068620555
D_Hg	Care & Maintenance	P95	1.62748E-05	1.76744E-05	1.82079E-05	1.76038E-05	1.59968E-05	1.30387E-05	1.07831E-05	8.26513E-06	1.02625E-05	1.13707E-05	1.22393E-05	1.35776E-05
D_K	Care & Maintenance	P95	4.036483288	4.533393383	4.464561939	4.187217712	3.522678614	3.351112604	3.273777246	3.769927979	3.545919657	3.975786209	4.078525543	3.92543149
D_Li	Care & Maintenance	P95	0.049547724	0.054196376	0.055364981	0.05049932	0.047048487	0.031300616	0.025993684	0.022611855	0.023074713	0.028513137	0.036080264	0.042382795
D_Mg	Care & Maintenance	P95	5.974485397	6.56004858	6.538619518	6.348202705	5.529828548	5.115463257	4.529663086	4.334820747	5.098156929	5.296105385	5.72116518	5.492984295
D_Mn	Care & Maintenance	P95	0.07575155	0.071134567	0.067437485	0.057494272	0.041160565	0.057238791	0.065278642	0.06922029	0.085502438	0.097745501	0.133310422	0.151644453
D_Mo	Care & Maintenance	P95	0.001326563	0.001395003	0.001421918	0.001373638	0.001278129	0.000721021	0.000745282	0.000815475	0.000928788	0.001085097	0.001124901	0.001099518
D_Na	Care & Maintenance	P95	16.18129921	17.96932983	18.43792915	18.22107697	16.4927597	11.07672119	9.627093315	8.963093758	9.439321518	11.2401247	11.98829365	13.89864635
D_Ni	Care & Maintenance	P95	0.000841188	0.000874691	0.000864224	0.000839961	0.000734391	0.000640404	0.00058658	0.000545321	0.000629536	0.000688771	0.000686148	0.00074883
D_P	Care & Maintenance	P95	0.114374653	0.109017074	0.1035515	0.090243518	0.063913472	0.05032282	0.037663486	0.034503229	0.05588996	0.074974865	0.105180643	0.129534975
D_Pb	Care & Maintenance	P95	0.001149035	0.0012402	0.001261897	0.001267309	0.001232481	0.000736261	0.000618013	0.000516417	0.000532712	0.000674252	0.000872042	0.000983577
D_S	Care & Maintenance	P95	1.018115282	1.109159231	1.179423332	1.165498972	1.033712745	0.880251646	0.772437513	0.788458884	0.951109231	1.080770373	1.130353332	1.118420959
D_Sb	Care & Maintenance	P95	0.001032495	0.000997323	0.000967599	0.00084524	0.000657874	0.00076033	0.000892404	0.000915105	0.001102647	0.001268422	0.001655776	0.001951378
D_Se	Care & Maintenance	P95	7.6407E-05	8.57042E-05	8.71213E-05	9.56734E-05	8.88962E-05	8.0078E-05	6.82819E-05	6.21854E-05	6.77694E-05	7.03473E-05	6.86656E-05	6.89218E-05
D_Si	Care & Maintenance	P95	6.649651527	6.931401253	6.905107975	6.617705345	6.821165562	5.982816696	5.733963013	5.546551704	5.860722065	6.750898838	6.821760178	7.151268482
D_Sn	Care & Maintenance	P95	5.41743E-05	5.55759E-05	5.56944E-05	5.36576E-05	5.91098E-05	5.36715E-05	5.39783E-05	5.04056E-05	5.13478E-05	5.44064E-05	5.60983E-05	5.80436E-05
D_Sr	Care & Maintenance	P95	0.095334746	0.103251345	0.103482075	0.103829503	0.095895424	0.091276579	0.081858978	0.075079009	0.096601881	0.104031764	0.109040014	0.098510228
D_Ti	Care & Maintenance	P95	0.003643092	0.003352301	0.003077894	0.002603636	0.001946029	0.00208638	0.002563532	0.001988339	0.002105205	0.002106684	0.003264825	0.004155464
D_Tl	Care & Maintenance	P95	0.000140234	0.000153239	0.000155951	0.000145056	0.000142619	8.90499E-05	7.80686E-05	7.2557E-05	6.09551E-05	8.12621E-05	0.000105004	0.000121836
D_U	Care & Maintenance	P95	0.000165996	0.000174843	0.000176761	0.000177148	0.00023365	0.000190245	0.000168564	0.000154584	0.000155673	0.000171876	0.000155049	0.000157027
D_V	Care & Maintenance	P95	0.008350527	0.008758032	0.008837726	0.007812542	0.007642244	0.005270986	0.00438904	0.004551106	0.004306224	0.005499831	0.006447566	0.007408818
D_Zn	Care & Maintenance	P95	0.003821553	0.004103512	0.004141974	0.004082224	0.004136179	0.003030218	0.002630849	0.002715609	0.002391814	0.00264256	0.003250898	0.003505612

APPENDIX B.3: CARE AND MAINTENANCE SCENARIO 3 – MINE SITE NODES

Appendix B.3.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Mine Site Nodes, TSF C Pond

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.56138134	5.905769825	2.117002964	0.758530319	0.19637692	0.07249295	0.02548239	0.00949809	0.003391497	0.00129715	0.000588442	0.000513862
NO3_N	Care & Maintenance	P95	14.55713177	13.65833855	12.35653973	11.17357731	9.164642334	9.04514122	11.38924313	10.89735413	10.60475159	11.23393726	11.64973927	11.72784042
NO2_N	Care & Maintenance	P95	0.123271227	0.122647673	0.118474334	0.104255073	0.072681792	0.07006444	0.066420697	0.064953983	0.061209839	0.06218069	0.06113635	0.067333847
Br	Care & Maintenance	P95	0.084506303	0.083588332	0.083922707	0.080707692	0.081242025	0.081931554	0.082867727	0.084615692	0.084698454	0.087012693	0.085601203	0.086868495
Cl	Care & Maintenance	P95	2.007931232	1.979368687	2.095324516	1.922233701	1.781376958	1.732159376	2.010073185	1.863397598	1.936707973	1.9851017	1.95523119	2.204764366
F	Care & Maintenance	P95	0.499249488	0.48462674	0.499039888	0.485082716	0.428702325	0.405112803	0.49223721	0.453620732	0.468882799	0.478034407	0.482596248	0.532703578
TDP	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
SO4	Care & Maintenance	P95	3329.99292	3446.639648	3294.764893	3357.682617	2827.287109	2954.251221	3490.086182	3307.664795	3319.292969	3398.500488	3546.122803	3455.723877
T_CN	Care & Maintenance	P95	0.001094704	8.10031E-07	1.39374E-07	5.87816E-08	6.79214E-07	7.41092E-07	2.94317E-07	1.93462E-07	1.3923E-07	1.28824E-07	2.15568E-07	1.5007E-07
WAD_CN	Care & Maintenance	P95	5.88967E-06	1.07126E-07	1.3844E-07	5.87827E-08	6.79216E-07	7.41093E-07	2.94318E-07	1.93463E-07	1.39231E-07	1.28827E-07	2.15569E-07	1.50073E-07
T_Ag	Care & Maintenance	P95	0.002429977	0.002370341	0.00260473	0.002209222	0.002908162	0.002833734	0.002978806	0.002976155	0.003007456	0.002809636	0.003120975	0.003161418
T_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
T_As	Care & Maintenance	P95	0.015585718	0.015464213	0.015258786	0.014863194	0.011306424	0.01106875	0.011775759	0.011851666	0.011885286	0.012159833	0.011960098	0.013100404
T_B	Care & Maintenance	P95	0.122376487	0.121559359	0.131810367	0.119011141	0.119728915	0.11798238	0.134202272	0.123521402	0.123468198	0.124300949	0.132505357	0.144849524
T_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
T_Bi	Care & Maintenance	P95	8.95439E-05	8.62322E-05	8.32999E-05	7.40223E-05	5.51197E-05	5.3996E-05	5.2518E-05	5.1629E-05	4.84926E-05	4.65376E-05	4.54423E-05	4.4708E-05
T_Be	Care & Maintenance	P95	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791
T_Ca	Care & Maintenance	P95	565.7036743	564.8381958	567.7510986	562.6102905	564.9924927	566.5153198	561.6130981	563.4073486	565.3058472	563.4935913	561.8207397	562.1960449
T_Cd	Care & Maintenance	P95	0.037614942	0.037600625	0.037515908	0.033673421	0.033564132	0.033455294	0.033313129	0.033338793	0.034635384	0.03540403	0.03667349	0.03717494
T_Co	Care & Maintenance	P95	0.073621586	0.075576626	0.073379248	0.068958014	0.049842	0.047741476	0.045595691	0.044477884	0.043289121	0.040397849	0.039422195	0.038717665
T_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
T_Cu	Care & Maintenance	P95	0.018510599	0.018150253	0.019651845	0.016962454	0.020893976	0.020458605	0.021547426	0.021547727	0.021477006	0.02057304	0.022513565	0.022984494
T_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
T_Hg	Care & Maintenance	P95	0.000926812	0.000871921	0.000885646	0.000896971	0.000708415	0.000736139	0.000952283	0.000897628	0.000914275	0.000869164	0.000953639	0.000961781
T_K	Care & Maintenance	P95	238.4596252	229.1705627	224.8576355	233.7767944	181.2449036	188.7294006	247.2680511	227.5229797	232.4772797	230.8567047	247.3798981	247.152359
T_Li	Care & Maintenance	P95	0.181460425	0.171934977	0.18084605	0.177555472	0.147481337	0.148590103	0.181688711	0.176392391	0.172809839	0.173411012	0.183614403	0.184777543
T_Mg	Care & Maintenance	P95	712.3514404	654.3908081	677.3028564	669.0456543	541.411438	562.1311646	720.2445679	668.7661133	685.9962158	650.3460083	706.7355957	740.4604492
T_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
T_Mo	Care & Maintenance	P95	0.100671366	0.102693871	0.101291709	0.094852671	0.066044368	0.06412857	0.06202228	0.061301339	0.059148684	0.056511901	0.055758763	0.055336881
T_Na	Care & Maintenance	P95	1063.328613	1123.319702	1058.896118	1080.224976	865.3270264	877.1376343	1145.042969	1050.649048	1078.876465	1099.250366	1173.245483	1127.861816
T_Ni	Care & Maintenance	P95	0.084322013	0.087524764	0.085296273	0.084682152	0.067995019	0.068177916	0.088930205	0.084928133	0.089372307	0.086748511	0.093269266	0.096737832
T_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
T_Pb	Care & Maintenance	P95	0.012669052	0.012338728	0.013571645	0.01148532	0.015192198	0.014788226	0.015529415	0.01551153	0.015697207	0.014618494	0.016286256	0.016456652
T_S	Care & Maintenance	P95	1.784159899	1.715778112	1.659823775	1.448351026	1.125746131	1.088257313	1.052514076	1.035184979	0.991949201	0.960326672	0.940233231	0.921666265
T_Sb	Care & Maintenance	P95	0.052761815	0.052487306	0.053753894	0.051516548	0.044426478	0.043418989	0.050701901	0.048805118	0.048415098	0.050491113	0.051448207	0.054590728
T_Se	Care & Maintenance	P95	0.028586969	0.028534217	0.029324573	0.028647406	0.023597857	0.02461314	0.030827614	0.029934406	0.031396285	0.029833937	0.032208752	0.034454979
T_Si	Care & Maintenance	P95	5.993515968	5.629289627	6.098980904	5.613240719	5.451618195	5.374929905	6.030778885	5.583668232	5.744078636	5.750020504	5.5908494	6.137103081
T_Sn	Care & Maintenance	P95	4.24507E-05	4.16493E-05	4.17676E-05	4.13648E-05	4.07073E-05	4.12879E-05	4.21042E-05	4.16354E-05	4.17134E-05	4.26679E-05	4.18257E-05	4.21382E-05
T_Sr	Care & Maintenance	P95	9.413252831	8.780163765	8.937483788	8.991114616	7.133131981	7.460215569	9.571454048	8.898129463	9.155025482	8.783031464	9.487181664	9.849718094
T_Ti	Care & Maintenance	P95	0.003037601	0.003016863	0.002995325	0.002898459	0.002687311	0.003107711	0.003220505	0.003229281	0.003200837	0.003129342	0.003093417	0.003066763
T_Tl	Care & Maintenance	P95	0.00079318	0.000787292	0.000844028	0.000742996	0.000864416	0.000843447	0.000904733	0.000889364	0.000877807	0.00086311	0.000930019	0.000965986
T_U	Care & Maintenance	P95	0.051913153	0.052841101	0.055843834	0.05181567	0.044597156	0.044503607	0.05654417	0.055405855	0.057878785	0.057250451	0.062517032	0.066355221
T_V	Care & Maintenance	P95	0.013896398	0.01366836	0.013950302	0.013065721	0.01204842	0.011798242	0.013655139	0.013505431	0.013207336	0.013620666	0.013894627	0.014448982
T_Zn	Care & Maintenance	P95	1.790926695	1.789868355	1.789361477	1.760681272	1.909738421	1.831074357	1.820794702	1.806001425	1.803883672	1.799547911	1.794653058	1.792661905
D_Ag	Care & Maintenance	P95	0.002427784	0.002369101	0.002603159	0.00220816	0.002907604	0.002831487	0.002976458	0.002973718	0.003006112	0.002808003	0.003118339	0.00316053
D_Al	Care & Maintenance	P95	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631	0.002631
D_As	Care & Maintenance	P95	0.015574378	0.015453224	0.015247826	0.014852148	0.011296147	0.01104749	0.011741358	0.011817834	0.011858299	0.012120612	0.011937276	0.013082108
D_B	Care & Maintenance	P95	0.122376487	0.121559359	0.131810367	0.119011141	0.119728915	0.11798238	0.134202272	0.123521402	0.123468198	0.124300949	0.132505357	0.144849524
D_Ba	Care & Maintenance	P95	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225	0.002225
D_Bi	Care & Maintenance	P95	8.95439E-05	8.62322E-05	8.32999E-05	7.40223E-05	5.51197E-05	5.3996E-05	5.2518E-05	5.1629E-05	4.84926E-05	4.65376E-05	4.54423E-05	4.4708E-05
D_Be	Care & Maintenance	P95	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791	0.002791
D_Ca	Care & Maintenance	P95	565.7510986	564.8816528	567.7944336	562.6448364	565.0354004	566.5593262	561.6508179	563.425415	565.3475342	563.5279541	561.8560181	562.1589966
D_Cd	Care & Maintenance	P95	0.037614364	0.037600055	0.037515149	0.033672918	0.033563755	0.033454876	0.033312716	0.033338405	0.034634639	0.035403315	0.036672879	0.03717434
D_Co	Care & Maintenance	P95	0.073621556	0.075576611	0.073379226	0.068957925	0.049840983	0.047740512	0.045594577	0.044476811	0.043287847	0.04039656	0.039420947	0.03871645
D_Cr	Care & Maintenance	P95	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235	0.000235
D_Cu	Care & Maintenance	P95	0.018505508	0.018146655	0.019648289	0.016958056	0.020887507	0.020450236	0.021541469	0.02154409	0.021471502	0.020569639	0.022510014	0.022980267
D_Fe	Care & Maintenance	P95	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203	0.00203
D_Hg	Care & Maintenance	P95	0.000927627	0.000873501	0.000887022	0.000897705	0.000709638	0.000736858	0.000953892	0.000900009	0.000915867	0.000870749	0.000955262	0.000962702
D_K	Care & Maintenance	P95	238.3007813	229.1351013	224.6902771	233.6092987	181.2258759	188.5986328	247.1719055	227.5112762	232.3867188	230.7923279	247.2993317	247.0076752
D_Li	Care & Maintenance	P95	0.181460425	0.171934977	0.18084605	0.177555472	0.147481337	0.148590103	0.181688711	0.176392391	0.172809839	0.173411012	0.183614403	0.184777543
D_Mg	Care & Maintenance	P95	712.213562	654.2612915	677.1686401	668.9169922	541.3083496	562.0246582	720.1026001	668.6259766	685.8545532	650.2182617	706.5980225	740.3134155
D_Mn	Care & Maintenance	P95	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996	1.31922996
D_Mo	Care & Maintenance	P95	0.100670807	0.102692835	0.101290181	0.094850972	0.0660372	0.06412103	0.062014792	0.061294384	0.059141211	0.056504138	0.055750884	0.055329196
D_Na	Care & Maintenance	P95	1062.612671	1122.665527	1058.200684	1079.553589	864.7907104	876.6223145	1144.307617	1049.987793	1078.206543	1098.552979	1172.56311	1127.157471
D_Ni	Care & Maintenance	P95	0.084278047	0.087491095	0.085261285	0.084642932	0.067969024	0.068143494	0.088893749	0.084900931	0.089325756	0.086720064	0.093238279	0.096694492
D_P	Care & Maintenance	P95	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474	0.000474
D_Pb	Care & Maintenance	P95	0.012664795	0.012336321	0.013568594	0.011483258	0.015191114	0.014781805	0.015525142	0.015506799	0.0156946	0.014615322	0.016281139	0.016454929
D_S	Care & Maintenance	P95	1.767456293	1.701820731	1.648447275	1.44213438	1.09385097	1.058090329	1.023810029	1.007440329	0.952574611	0.922400892	0.898545742	0.88187027
D_Sb	Care & Maintenance	P95	0.052761815	0.052487306	0.053753894	0.051516548	0.044426478	0.043418989	0.050701901	0.048805118	0.048415098	0.050491113	0.051448207	0.054590728
D_Se	Care & Maintenance	P95	0.028557802	0.028513147	0.029312737	0.028609226	0.023581376	0.024597198	0.030815406	0.029911133	0.031366456	0.02982028	0.032183353	0.034428403
D_Si	Care & Maintenance	P95	5.868925095	5.510198593	5.994131088	5.516442299	5.310909271	5.231519222	5.898673058	5.462842464	5.626489639	5.608221054	5.46319294	6.01890564
D_Sn	Care & Maintenance	P95	4.24507E-05	4.16493E-05	4.17676E-05	4.13648E-05	4.07073E-05	4.12879E-05	4.21042E-05	4.16354E-05	4.17134E-05	4.26679E-05	4.18257E-05	4.21382E-05
D_Sr	Care & Maintenance	P95	9.415302277	8.780055046	8.936923981	8.992815971	7.134717941	7.46151495	9.570802689	8.895403862	9.154816628	8.782530785	9.486600876	9.850524902
D_Ti	Care & Maintenance	P95	0.002090119	0.002029277	0.001987485	0.001937738	0.001721726	0.001937764	0.001964441	0.001968003	0.001953548	0.001898428	0.001917767	0.00195221
D_Tl	Care & Maintenance	P95	0.00079318	0.000787292	0.000844028	0.000742996	0.000864416	0.000843447	0.000904733	0.000889364	0.000877807	0.00086311	0.000930019	0.000965986
D_U	Care & Maintenance	P95	0.051767912	0.052691154	0.055690926	0.051664889	0.044482186	0.044376511	0.056377098	0.055240743	0.057703886	0.057093289	0.062328137	0.066181995
D_V	Care & Maintenance	P95	0.013856065	0.013638288	0.013928127	0.013051128	0.012026855	0.011748396	0.013615778	0.013469697	0.013158107	0.013565138	0.013867328	0.014414459
D_Zn	Care & Maintenance	P95	1.790926695	1.789868355	1.789361477	1.760681152	1.909738421	1.831074357	1.820794702	1.806001425	1.803883672	1.799547911	1.794653058	1.792661905

Appendix B.3.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Mine Site Nodes, Open Pit/Pit Lake

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.0392	0.0392	0.0392	0.240211561	0.262083828	0.25731203	0.238272026	0.234058589	0.238389924	0.226796865	0.0392	0.0392
NO3_N	Care & Maintenance	P95	0.005	0.005	0.005	4.319462299	4.824046135	4.719385624	4.295503139	4.193676472	4.27843523	4.042085171	0.005	0.005030349
NO2_N	Care & Maintenance	P95	0.001	0.001	0.001	0.007938807	0.008775827	0.008609794	0.007917088	0.007731829	0.007874276	0.007504091	0.001	0.001013389
Br	Care & Maintenance	P95	0.049999997	0.049999997	0.049999997	0.049999997	0.021670196	0.049036715	0.049161647	0.049991693	0.049999997	0.049999997	0.049999997	0.049999997
Cl	Care & Maintenance	P95	0.5	0.5	0.5	1.747517824	1.881426573	1.882784605	1.732315063	1.707746387	1.735221624	1.685827374	0.5	0.500535607
F	Care & Maintenance	P95	0.137999997	0.137999997	0.137999997	1.184404373	1.305163741	1.277148962	1.176368952	1.152990699	1.174684167	1.116014481	0.137999997	0.137999997
TDP	Care & Maintenance	P95	0.02	0.02	0.02	0.057146881	0.06084137	0.059799597	0.056386013	0.05590732	0.056807976	0.054480579	0.02	0.02
SO4	Care & Maintenance	P95	23.39999962	23.39999962	23.39999962	479.4135742	532.3092041	520.477417	476.2128296	465.9242249	475.0476379	449.8513489	23.39999962	23.4141922
T_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
WAD_CN	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.00216702	0.004903672	0.004916165	0.00499917	0.005	0.005	0.005	0.005
T_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000337387	0.000376841	0.000368415	0.000336016	0.000327904	0.000334264	0.000316632	1.01596E-05	1.00446E-05
T_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.734462619	1.949743629	1.901999354	1.729111433	1.685013533	1.717687011	1.62443924	0.010421682	0.007764724
T_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062346023	0.067886919	0.066424839	0.061750945	0.060785513	0.061896615	0.058936536	0.0123	0.0123
T_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269179821	0.01	0.01
T_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031937916	0.05673017	0.057033155	0.058881674	0.058900002	0.058900002	0.058900002	0.058900002
T_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
T_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
T_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.295105	136.7081909	133.6813049	122.5785599	119.9306641	122.1882858	115.9585266	8.620000839	8.627479553
T_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718363	0.522500992	0.510780931	0.465105981	0.454088509	0.463272244	0.437660694	0.000118	0.000119037
T_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.293824077	0.2675744	0.261247426	0.266528696	0.251803249	0.00032	0.00032
T_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269636	0.015928809	0.015567246	0.014189899	0.013858759	0.014135856	0.013363922	0.00019	0.00019
T_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088218659	0.0862277	0.078523614	0.076658964	0.078204967	0.073897682	0.000201596	0.000200089
T_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375727654	8.482834816	8.526948929	8.817095757	8.819999695	8.819999695	8.819999695	8.819999695
T_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116386	1E-05	1E-05
T_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54404068	43.88954163	42.90597153	39.28102493	38.43507004	39.19225311	37.11563873	2.120000124	2.120000124
T_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
T_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84980774	41.91140747	38.33081055	37.47645569	38.20586014	36.18779755	1.649999976	1.651160479
T_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.29888916	57.11790466	55.86220169	50.98716354	49.82579041	50.82435608	48.05400467	1.120000005	1.120000005
T_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319266	0.008293045	0.008159521	0.008162937	0.008161418	0.008325506	0.008136445	0.0064	0.0064
T_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26593018	14.94924545	14.73328972	14.09587002	13.99513531	14.19737244	13.7014904	6.360000134	6.360000134
T_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322773188	0.315528363	0.287362367	0.280571491	0.286238939	0.270437539	0.0006	0.0006
T_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.165800482	0.288633257	0.290040374	0.299901962	0.300000012	0.300000012	0.300000012	0.300000012
T_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.119279884	0.133245647	0.130252182	0.118611984	0.115806147	0.118146718	0.111618735	0.000111	0.000111785
T_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.279145956	7.617110252	7.61748457	7.618481159	7.619999886	7.619999886	7.619999886	7.619999886
T_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776611	0.064616069	0.063004263	0.057434507	0.056113947	0.057239007	0.054114103	0.00102	0.00102
T_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
T_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.234751701	8.636884689	8.709219933	8.798710823	8.800000191	8.800000191	8.800000191	8.800000191
T_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
T_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.484969348	0.52673918	0.516210556	0.480849653	0.473315477	0.481368721	0.459741503	0.104999997	0.104999997
T_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004334039	0.009667346	0.009782028	0.009998339	0.01	0.01	0.01	0.01
T_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
T_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914382	0.026656915	0.026064428	0.023772748	0.023225153	0.023691449	0.022395579	0.000382	0.000382
T_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.033320937	0.030445112	0.029762773	0.030353604	0.028712627	0.001	0.001
T_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01169586	55.86948395	54.61669159	49.73310471	48.55472183	49.5363121	46.79872513	0.024498027	0.024057306
D_Ag	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.00033736	0.000376841	0.000368415	0.000336016	0.000327771	0.000334264	0.000316632	1.01596E-05	1.00446E-05
D_Al	Care & Maintenance	P95	0.0074	0.0074	0.0074	1.73415339	1.947196126	1.900303125	1.72735548	1.684392929	1.717678666	1.623917222	0.008996241	0.007431777
D_As	Care & Maintenance	P95	0.0123	0.0123	0.0123	0.062344115	0.067879453	0.066416539	0.061750945	0.060784183	0.061896607	0.058932122	0.0123	0.0123
D_B	Care & Maintenance	P95	0.01	0.01	0.01	0.287077665	0.319467455	0.312185913	0.285246521	0.278954327	0.284454107	0.269119561	0.01	0.01
D_Ba	Care & Maintenance	P95	0.058900002	0.058900002	0.058900002	0.058900002	0.031932391	0.056717586	0.057018064	0.058881454	0.058900002	0.058900002	0.058900002	0.058900002
D_Bi	Care & Maintenance	P95	0.0005	0.0005	0.0005	0.0005	0.000213047	0.000481698	0.000484071	0.000499842	0.0005	0.0005	0.0005	0.0005
D_Be	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.010773807	0.012023432	0.011754568	0.010712793	0.010462225	0.010672435	0.010086837	0.0001	0.0001
D_Ca	Care & Maintenance	P95	8.620000839	8.620000839	8.620000839	123.294838	136.7099609	133.6752777	122.5691528	119.9325943	122.1882858	115.9324188	8.620000839	8.627212524
D_Cd	Care & Maintenance	P95	0.000118	0.000118	0.000118	0.467718273	0.522499025	0.510780275	0.465105653	0.4540883	0.463272244	0.437660456	0.000118	0.00011863
D_Co	Care & Maintenance	P95	0.00032	0.00032	0.00032	0.269083589	0.300573081	0.2938236	0.2675744	0.261247426	0.266528696	0.251802444	0.00032	0.00032
D_Cr	Care & Maintenance	P95	0.00019	0.00019	0.00019	0.014269368	0.01592732	0.015567035	0.014189899	0.013858518	0.014135856	0.013363922	0.00019	0.00019
D_Cu	Care & Maintenance	P95	0.0002	0.0002	0.0002	0.078953937	0.088210925	0.086221889	0.078515776	0.076658964	0.078204967	0.07389266	0.000200798	0.000200089
D_Fe	Care & Maintenance	P95	8.819999695	8.819999695	8.819999695	8.819999695	4.375088692	8.482515335	8.525986671	8.817081451	8.819999695	8.819999695	8.819999695	8.819999695
D_Hg	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.000123803	0.000136922	0.000133946	0.000122953	0.000120415	0.000122739	0.000116356	1E-05	1E-05
D_K	Care & Maintenance	P95	2.120000124	2.120000124	2.120000124	39.54407501	43.8884697	42.90582275	39.28102493	38.43507004	39.19225311	37.10519409	2.120000124	2.120000124
D_Li	Care & Maintenance	P95	0.00678	0.00678	0.00678	0.083951004	0.092766181	0.090759724	0.083340116	0.081642248	0.083232455	0.078880295	0.00678	0.00678
D_Mg	Care & Maintenance	P95	1.649999976	1.649999976	1.649999976	38.55976105	42.84281921	41.90993881	38.33081055	37.47754288	38.20584869	36.18579102	1.649999976	1.651088953
D_Mn	Care & Maintenance	P95	1.120000005	1.120000005	1.120000005	51.2987709	57.11761475	55.86201096	50.98689651	49.82565689	50.82435608	48.05383301	1.120000005	1.120000005
D_Mo	Care & Maintenance	P95	0.0064	0.0064	0.0064	0.008319058	0.008293584	0.0081597	0.008162937	0.008161373	0.008325503	0.008136336	0.0064	0.0064
D_Na	Care & Maintenance	P95	6.360000134	6.360000134	6.360000134	14.26544666	14.95463848	14.73606586	14.09587002	13.99634266	14.19734955	13.69948196	6.360000134	6.360000134
D_Ni	Care & Maintenance	P95	0.0006	0.0006	0.0006	0.288980186	0.322772086	0.315528214	0.287360489	0.280571491	0.286238939	0.270437539	0.0006	0.0006
D_P	Care & Maintenance	P95	0.300000012	0.300000012	0.300000012	0.300000012	0.16607663	0.288633257	0.290107459	0.299908608	0.300000012	0.300000012	0.300000012	0.300000012
D_Pb	Care & Maintenance	P95	0.000111	0.000111	0.000111	0.11927963	0.133243471	0.13025187	0.118611984	0.115805417	0.118146718	0.111618198	0.000111	0.000111
D_S	Care & Maintenance	P95	7.619999886	7.619999886	7.619999886	7.619999886	3.275409937	7.608223915	7.609751225	7.61842823	7.619999886	7.619999886	7.619999886	7.619999886
D_Sb	Care & Maintenance	P95	0.00102	0.00102	0.00102	0.057776533	0.064614877	0.063003935	0.057434507	0.056113947	0.057239007	0.054113101	0.00102	0.00102
D_Se	Care & Maintenance	P95	0.00012	0.00012	0.00012	0.002883758	0.003204304	0.003146774	0.002874229	0.002802304	0.002857773	0.002709962	0.000121357	0.000120161
D_Si	Care & Maintenance	P95	8.800000191	8.800000191	8.800000191	8.800000191	8.230853081	8.614022255	8.698560715	8.798700333	8.800000191	8.800000191	8.800000191	8.800000191
D_Sn	Care & Maintenance	P95	0.0001	0.0001	0.0001	0.0001	4.33404E-05	9.80734E-05	9.83233E-05	9.99834E-05	0.0001	0.0001	0.0001	0.0001
D_Sr	Care & Maintenance	P95	0.104999997	0.104999997	0.104999997	0.48496452	0.526578546	0.516154826	0.480849653	0.473321527	0.481368661	0.459518641	0.104999997	0.104999997
D_Ti	Care & Maintenance	P95	0.01	0.01	0.01	0.01	0.004296272	0.009650649	0.009718313	0.009997074	0.01	0.01	0.01	0.01
D_Tl	Care & Maintenance	P95	1E-05	1E-05	1E-05	0.001529094	0.001707649	0.001669898	0.001521099	0.00148477	0.001514666	0.001431764	1.01596E-05	1.00134E-05
D_U	Care & Maintenance	P95	0.000382	0.000382	0.000382	0.023914319	0.026656419	0.026063807	0.023772748	0.023225067	0.023691449	0.02239546	0.000382	0.000382
D_V	Care & Maintenance	P95	0.001	0.001	0.001	0.030633604	0.034094136	0.03331976	0.030441662	0.029762773	0.030353596	0.028713631	0.001	0.001
D_Zn	Care & Maintenance	P95	0.024	0.024	0.024	50.01167297	55.8692894	54.61666489	49.73310471	48.55471802	49.5363121	46.79866409	0.024272956	0.024011604

Appendix B.3.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Mine Site Nodes, Interim ECD

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	14.41823959	15.28497887	15.63910961	15.0071497	11.07754421	12.03036594	12.26748753	12.82697105	12.83580971	12.6595974	13.03458977	13.68600941
NO3_N	Care & Maintenance	P95	6.595578194	4.628349781	4.230032444	3.805235147	4.766097546	5.046560764	5.529558659	5.658287525	5.375479221	5.281683445	5.480415821	5.431082726
NO2_N	Care & Maintenance	P95	0.053306103	0.030883107	0.028219346	0.025701748	0.032099336	0.033776358	0.036955677	0.037766572	0.035881128	0.035258573	0.036608424	0.036237251
Br	Care & Maintenance	P95	0.000236913	0.000219029	0.005787489	0.015373724	0.015729601	0.012883552	0.011991546	0.009356791	0.005879235	0.013259618	0.001919203	0.000306737
Cl	Care & Maintenance	P95	3.24526453	3.065047026	2.886219501	2.462460756	2.893631697	3.186914921	3.438452005	3.522985697	3.387223959	3.349339724	3.397393942	3.421672106
F	Care & Maintenance	P95	1.122133613	1.068034649	1.014136791	0.854696155	0.993670642	1.08602488	1.169460058	1.203450441	1.164369822	1.150219917	1.154826045	1.173960328
TDP	Care & Maintenance	P95	0.006347254	0.006101578	0.005948532	0.006763992	0.007822225	0.007432958	0.006638097	0.006999214	0.00691628	0.006847532	0.006951374	0.006212499
SO4	Care & Maintenance	P95	2000.804443	1782.61377	1807.354614	1763.322876	1438.782837	1559.080322	1575.042236	1614.566772	1620.119141	1613.577881	1640.612305	1684.434937
T_CN	Care & Maintenance	P95	0.001051029	0.00096349	0.001251782	0.001786731	0.00173753	0.001565235	0.001478705	0.001318612	0.001087977	0.001604431	0.000845559	0.000865102
WAD_CN	Care & Maintenance	P95	0.000901542	0.000956519	0.001252029	0.001786853	0.001737614	0.001565337	0.001478808	0.001318754	0.001088162	0.001604534	0.000845809	0.000865418
T_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000334502	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
T_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.021296958	0.186357245	0.097689889	0.042264938	0.034785505	0.017895235	0.037205461	0.019575277	0.01677756
T_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.0178154	0.018958166	0.019838762	0.020261694	0.020098884	0.019830324	0.019676849	0.020088241
T_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
T_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017814282	0.014662798	0.015481192	0.015705369	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
T_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
T_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
T_Ca	Care & Maintenance	P95	393.9638977	371.9974976	374.5500488	369.8251038	314.4719543	339.2789917	343.0699158	348.4267273	349.7368164	348.7961426	352.4940796	359.0244751
T_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.001438148	0.001785275	0.001911621	0.002092012	0.002140976	0.002030937	0.002000053	0.002070875	0.002053958
T_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667051	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
T_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.00085733	0.000702112	0.00073642	0.000751093	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
T_Cu	Care & Maintenance	P95	0.007885337	0.007281382	0.006691435	0.006004828	0.007597459	0.00791687	0.008646444	0.008841149	0.008396284	0.008271598	0.008558495	0.008487798
T_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.289508075	0.229945973	0.232006162	0.236712411	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
T_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267106	0.000302237	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
T_K	Care & Maintenance	P95	75.33209229	72.80023193	70.16975403	62.07190323	67.34526062	71.89087677	76.86138916	79.34050751	77.78594208	76.63716125	75.85688019	78.00163269
T_Li	Care & Maintenance	P95	0.136041403	0.126133472	0.11627157	0.10267771	0.124503419	0.135590568	0.147760928	0.151629761	0.144354358	0.142219067	0.146531254	0.146010831
T_Mg	Care & Maintenance	P95	13.38387966	14.23921967	13.56843281	12.31673336	11.66498852	12.28911495	12.61538887	13.48152542	13.2277298	13.14132404	13.21377373	13.56421471
T_Mn	Care & Maintenance	P95	0.46040529	0.35180828	0.335410476	0.287173122	0.326747954	0.354028612	0.379749626	0.391831398	0.380310744	0.375544041	0.375219554	0.382979184
T_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141341895	0.153127849	0.154946983	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
T_Na	Care & Maintenance	P95	482.7615662	399.7401733	409.7630615	394.1376648	294.2556458	319.2636719	324.308136	338.7014465	338.6321716	335.569397	345.7830505	361.8693848
T_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012459379	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
T_P	Care & Maintenance	P95	0.006289918	0.006051098	0.006725823	0.007379563	0.011436197	0.007966883	0.007460584	0.007597517	0.007179894	0.007735493	0.007017875	0.006573949
T_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000797274	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
T_S	Care & Maintenance	P95	0.004738268	0.004380588	0.183709443	0.48226878	0.157767698	0.130012363	0.122390807	0.192228556	0.136775345	0.42316547	0.021191135	0.008487212
T_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
T_Se	Care & Maintenance	P95	0.003675169	0.003451932	0.003231267	0.002730588	0.003246963	0.003610916	0.003916998	0.004019194	0.003850142	0.003804863	0.003869072	0.003893747
T_Si	Care & Maintenance	P95	3.103214264	2.801413536	3.102306843	5.729763508	5.18598938	4.386871815	4.831783772	4.560443878	4.220669746	5.121379852	3.903801203	3.438580275
T_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
T_Sr	Care & Maintenance	P95	0.718798935	0.483937323	0.44228977	0.438624769	0.511179447	0.529640019	0.580545187	0.590549946	0.562073708	0.551850855	0.574412584	0.566636145
T_Ti	Care & Maintenance	P95	1.42672E-06	1.31418E-06	8.56947E-05	0.001196206	0.003138097	0.002132606	0.001238185	0.001276303	0.000164546	0.002633456	0.000345058	3.46593E-06
T_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
T_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.00337778	0.003953657	0.004354236	0.004700095	0.004825952	0.004653165	0.004596842	0.004637635	0.004696508
T_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025564872	0.032197312	0.033927049	0.037172277	0.037993763	0.036027387	0.035456363	0.036784895	0.036427226
T_Zn	Care & Maintenance	P95	0.097614095	0.090086229	0.082714826	0.074044891	0.091865905	0.097881988	0.106947467	0.109452687	0.10394416	0.102385342	0.105908796	0.105109356
D_Ag	Care & Maintenance	P95	0.00036421	0.000338664	0.000313663	0.000277249	0.000324848	0.000363182	0.000394122	0.000404311	0.00038499	0.000380117	0.000390376	0.000389571
D_Al	Care & Maintenance	P95	0.017005976	0.017544741	0.017793719	0.017544467	0.134059489	0.085153446	0.032770716	0.027788594	0.016444879	0.029306805	0.018642103	0.016670221
D_As	Care & Maintenance	P95	0.019793445	0.019435085	0.019067269	0.017706309	0.017802503	0.01895738	0.019838717	0.02026166	0.020098884	0.01983029	0.019676732	0.020088173
D_B	Care & Maintenance	P95	0.331053019	0.308477134	0.286300093	0.249834418	0.294936836	0.328113705	0.356963754	0.366179407	0.349127352	0.344772279	0.353330553	0.353337556
D_Ba	Care & Maintenance	P95	0.0245951	0.017974254	0.01827072	0.017810347	0.014620136	0.015480791	0.015704347	0.01613286	0.016139794	0.015996313	0.016295813	0.016802575
D_Bi	Care & Maintenance	P95	2.36913E-07	2.19029E-07	5.78749E-06	1.53737E-05	1.57296E-05	1.28836E-05	1.19915E-05	9.35679E-06	5.87924E-06	1.32596E-05	1.9192E-06	3.06737E-07
D_Be	Care & Maintenance	P95	0.000998041	0.000921251	0.000846027	0.000768973	0.000957775	0.001002582	0.001094597	0.001118276	0.001063096	0.00104661	0.00108404	0.001074372
D_Ca	Care & Maintenance	P95	393.9639282	371.9974976	374.5500488	369.8250732	314.4720764	339.2789917	343.0699463	348.4269409	349.7370911	348.7963562	352.4942932	359.0246887
D_Cd	Care & Maintenance	P95	0.001904749	0.001754986	0.00160863	0.00143761	0.001783856	0.001911618	0.002092273	0.002140976	0.002030884	0.002000054	0.002070834	0.002053964
D_Co	Care & Maintenance	P95	0.064327225	0.044401016	0.044811003	0.044009328	0.036660817	0.039667044	0.040116027	0.040882263	0.041061021	0.040846191	0.041396026	0.042324848
D_Cr	Care & Maintenance	P95	0.000891525	0.000864001	0.000881364	0.000856245	0.000697475	0.000736382	0.000750868	0.000770176	0.000767265	0.000758361	0.000773074	0.000799198
D_Cu	Care & Maintenance	P95	0.007885336	0.007281382	0.006691435	0.005997149	0.007579003	0.007921612	0.008646444	0.008841149	0.008395866	0.008271598	0.008558495	0.008487798
D_Fe	Care & Maintenance	P95	0.27491653	0.291891009	0.29994905	0.2891303	0.222407565	0.231982738	0.236670002	0.247138381	0.247296154	0.243886933	0.251052976	0.263501316
D_Hg	Care & Maintenance	P95	0.000301499	0.000280021	0.000259284	0.000219617	0.000267159	0.000302123	0.000328164	0.000336451	0.000320466	0.000315965	0.000325136	0.000323284
D_K	Care & Maintenance	P95	75.33181763	72.79988861	70.16940308	62.06959534	67.34641266	71.89074707	76.86122131	79.34037018	77.78577423	76.63664246	75.85700226	78.00126648
D_Li	Care & Maintenance	P95	0.136041403	0.126133472	0.11627157	0.10267771	0.124503419	0.135590568	0.147760928	0.151629761	0.144354358	0.142219067	0.146531254	0.146010831
D_Mg	Care & Maintenance	P95	13.38312531	14.23830509	13.56761456	12.31573677	11.6633358	12.28858852	12.61478615	13.48080063	13.22685337	13.14062691	13.21319294	13.56353378
D_Mn	Care & Maintenance	P95	0.46040526	0.35180828	0.335410476	0.287152886	0.326140344	0.353732556	0.379671872	0.391830295	0.380310237	0.375539422	0.375165731	0.382975906
D_Mo	Care & Maintenance	P95	0.168993831	0.174592257	0.17712608	0.172893837	0.141340926	0.153127849	0.154947013	0.158695921	0.15921922	0.158221364	0.16070126	0.165075436
D_Na	Care & Maintenance	P95	482.7522278	399.7399902	409.7629089	394.1366882	294.2505798	319.2633667	324.3079224	338.7012329	338.631897	335.5658569	345.7790222	361.8654175
D_Ni	Care & Maintenance	P95	0.016396526	0.015107242	0.013844132	0.012453237	0.015555465	0.016460612	0.018014017	0.018423688	0.017485611	0.017212881	0.017831501	0.017679369
D_P	Care & Maintenance	P95	0.006292959	0.006051098	0.008085016	0.011238604	0.017361116	0.010612168	0.015148146	0.036428068	0.011185026	0.081976086	0.016503816	0.006648378
D_Pb	Care & Maintenance	P95	0.000861811	0.000799992	0.000738983	0.00065145	0.000778534	0.000861611	0.000937563	0.000960699	0.000913525	0.000901481	0.000928598	0.00092386
D_S	Care & Maintenance	P95	0.004738268	0.004380588	0.197301388	0.417870879	0.157767698	0.130012363	0.122390807	0.117393307	0.133373499	0.133548126	0.021191135	0.008016689
D_Sb	Care & Maintenance	P95	0.226452082	0.209757522	0.19338195	0.170713156	0.20711863	0.225703284	0.24610728	0.252507538	0.240147039	0.236779884	0.243873313	0.242984086
D_Se	Care & Maintenance	P95	0.003675168	0.003451932	0.003231267	0.002732376	0.003247576	0.003609454	0.003917055	0.004019189	0.003850139	0.003804544	0.003866961	0.003893732
D_Si	Care & Maintenance	P95	3.103208542	2.801413536	3.100132465	5.501202106	4.997080326	4.319203377	4.81287384	4.504397869	4.226468086	5.049548626	3.893248796	3.437490225
D_Sn	Care & Maintenance	P95	4.73827E-07	4.38059E-07	1.1575E-05	3.07474E-05	3.14592E-05	2.57671E-05	2.39831E-05	1.87136E-05	1.17585E-05	2.65192E-05	3.83841E-06	6.13474E-07
D_Sr	Care & Maintenance	P95	0.718798876	0.483937323	0.44228977	0.43942669	0.510744035	0.529576778	0.580392122	0.590550482	0.562121868	0.55184418	0.574940145	0.566639245
D_Ti	Care & Maintenance	P95	1.42148E-06	1.31418E-06	6.87048E-05	0.00046023	0.001694679	0.001047507	0.000668531	0.001128844	0.000125991	0.002633456	0.000345058	3.10957E-06
D_Tl	Care & Maintenance	P95	0.001043057	0.000962622	0.000883826	0.000792368	0.000975343	0.001045044	0.001141325	0.001168979	0.00111026	0.001093555	0.001130501	0.001122936
D_U	Care & Maintenance	P95	0.004469698	0.004235428	0.004002464	0.003373567	0.003952166	0.004353301	0.004699643	0.004825948	0.004653164	0.004596757	0.004637107	0.004696488
D_V	Care & Maintenance	P95	0.033732627	0.031024275	0.028376881	0.025546445	0.032043982	0.033923954	0.037169088	0.037993737	0.036027387	0.035456363	0.036781963	0.036427226
D_Zn	Care & Maintenance	P95	0.097614087	0.090086229	0.082714826	0.074044891	0.091534629	0.097866848	0.106909208	0.109452322	0.103923216	0.102376923	0.105908796	0.105107658

Appendix B.3.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Mine Site Nodes, WMP

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.214110836	0.190749988	0.175137356	0.142545104	0.075307347	0.060165558	0.043067239	0.045141105	0.045530543	0.041227419	0.044844311	0.029543789
NO3_N	Care & Maintenance	P95	2.386758804	2.598511219	2.991681337	2.668104887	2.438529968	1.424295306	0.912473798	2.784504414	1.6762712	2.191838264	2.383415461	2.45868659
NO2_N	Care & Maintenance	P95	0.016262714	0.016576188	0.017724937	0.016412886	0.015456566	0.009462038	0.005636913	0.015219009	0.010547755	0.012495477	0.014397319	0.014959984
Br	Care & Maintenance	P95	0.073790863	0.074481569	0.075018302	0.076281711	0.071866319	0.056021493	0.049332358	0.063953623	0.056971233	0.066315837	0.073538542	0.072803609
Cl	Care & Maintenance	P95	1.212100387	1.250461221	1.267102838	1.245779514	1.169332504	0.903660357	0.774023294	1.380298495	0.919956625	1.072848201	1.202998996	1.157155514
F	Care & Maintenance	P95	0.373808831	0.379188359	0.378298223	0.370813638	0.326576978	0.269768059	0.215221494	0.422260702	0.292610079	0.32673344	0.379159063	0.348380238
TDP	Care & Maintenance	P95	0.022123137	0.024026128	0.023903044	0.022899123	0.017403819	0.019456165	0.017755382	0.017809277	0.022724865	0.024322577	0.025180575	0.022361426
SO4	Care & Maintenance	P95	48.74599075	44.88041306	43.01015091	29.81637573	47.127285	68.54034424	77.4318924	82.04735565	87.20545197	75.4866333	86.0999527	54.14788437
T_CN	Care & Maintenance	P95	0.002833685	0.002852785	0.002939125	0.002715976	0.002785411	0.002747827	0.00255606	0.002789174	0.002569798	0.002642572	0.002629948	0.00257959
WAD_CN	Care & Maintenance	P95	0.002788061	0.00281163	0.002919565	0.002648209	0.002785411	0.002747827	0.002556059	0.002789174	0.002569758	0.002642572	0.002629946	0.00257959
T_Ag	Care & Maintenance	P95	4.25925E-05	4.42367E-05	4.56084E-05	4.41978E-05	4.37341E-05	3.52459E-05	2.8698E-05	3.93077E-05	3.36106E-05	4.07656E-05	4.26737E-05	4.09294E-05
T_Al	Care & Maintenance	P95	0.079864413	0.072439991	0.068436645	0.056367483	0.096223161	0.303170145	0.200773612	0.170182705	0.133996189	0.116842844	0.105828747	0.082435131
T_As	Care & Maintenance	P95	0.001101502	0.001055387	0.001059805	0.000917505	0.00083804	0.000769162	0.000753023	0.000968328	0.001096012	0.000992798	0.000957622	0.000921306
T_B	Care & Maintenance	P95	0.076994359	0.078358486	0.085999884	0.074940912	0.073749624	0.05037237	0.032055255	0.090893179	0.058165241	0.07362777	0.073329084	0.074103609
T_Ba	Care & Maintenance	P95	0.008349597	0.00832767	0.008472587	0.00781581	0.0092299	0.008912085	0.007565413	0.00964657	0.011373268	0.010926314	0.010584922	0.008836891
T_Bi	Care & Maintenance	P95	4.62377E-05	4.39758E-05	4.35319E-05	4.10794E-05	3.91434E-05	4.39152E-05	3.72434E-05	5.52236E-05	6.12235E-05	5.70908E-05	5.88274E-05	4.00332E-05
T_Be	Care & Maintenance	P95	0.000124536	0.000127558	0.00013579	0.000124724	0.00012388	9.97881E-05	7.43728E-05	0.00011665	0.000101642	0.000123482	0.000126275	0.00012
T_Ca	Care & Maintenance	P95	20.36887169	19.79966545	19.72301674	16.04074478	20.83998108	22.74988365	23.44698334	26.77100182	28.32300377	24.94965363	28.18769646	21.50583458
T_Cd	Care & Maintenance	P95	2.29051E-05	2.31846E-05	2.40031E-05	2.25747E-05	2.21801E-05	1.78148E-05	1.65224E-05	2.11179E-05	1.86775E-05	2.19761E-05	2.2517E-05	2.18173E-05
T_Co	Care & Maintenance	P95	0.000457879	0.000455001	0.000463039	0.000446135	0.000436758	0.00037636	0.000354268	0.000505141	0.000440621	0.000459409	0.000518261	0.000452164
T_Cr	Care & Maintenance	P95	0.000510072	0.000480349	0.000465383	0.000420076	0.00034355	0.000366816	0.000345039	0.000421325	0.000421437	0.000402488	0.000423242	0.000411344
T_Cu	Care & Maintenance	P95	0.000491497	0.000507901	0.000511588	0.000467902	0.000454029	0.00068136	0.000378646	0.000454158	0.000415461	0.000484427	0.000469477	0.000462039
T_Fe	Care & Maintenance	P95	0.094600327	0.091769509	0.089288853	0.081651606	0.091246948	0.217413023	0.139741465	0.129202694	0.109884389	0.107522003	0.101173595	0.090874381
T_Hg	Care & Maintenance	P95	2.64805E-05	2.85448E-05	3.01004E-05	2.41217E-05	2.28621E-05	1.64036E-05	1.28119E-05	3.40091E-05	1.85711E-05	2.51072E-05	2.51567E-05	2.34802E-05
T_K	Care & Maintenance	P95	6.051894665	6.088858128	6.458593845	5.184717655	5.362858772	5.985653877	6.631569386	8.843044281	7.361223221	6.687055111	7.245987415	5.446920872
T_Li	Care & Maintenance	P95	0.077127792	0.078196108	0.089252293	0.076343082	0.073614202	0.047287878	0.030870546	0.088732131	0.054546654	0.06613189	0.072271638	0.074670799
T_Mg	Care & Maintenance	P95	8.450733185	8.862816811	9.215783119	7.517119408	7.440218925	6.604802608	6.862543106	12.33380604	8.172055244	9.289313316	8.686299324	7.657899857
T_Mn	Care & Maintenance	P95	0.119482264	0.108336635	0.10174001	0.073036671	0.126535833	0.152804628	0.137559608	0.226312101	0.275083631	0.241676942	0.248449773	0.131698415
T_Mo	Care & Maintenance	P95	0.000625947	0.000718103	0.000680861	0.00066488	0.000764972	0.000606735	0.000459993	0.0004576	0.000554645	0.000656358	0.000632948	0.000588693
T_Na	Care & Maintenance	P95	25.22199631	26.82344055	30.1977787	25.53361702	23.48941803	14.90769005	11.11479759	31.31282997	17.99349976	23.63830757	24.78187752	23.42598534
T_Ni	Care & Maintenance	P95	0.001598405	0.001708202	0.001809924	0.001445367	0.001381244	0.001013806	0.000882471	0.002089425	0.001269315	0.001622732	0.00157963	0.001443979
T_P	Care & Maintenance	P95	0.029238734	0.029902874	0.032055058	0.028690001	0.027758073	0.031729303	0.02708892	0.041865073	0.049286027	0.044160742	0.046689361	0.030610146
T_Pb	Care & Maintenance	P95	0.001364602	0.001462422	0.001510152	0.00146934	0.001449149	0.000969973	0.00077466	0.001188301	0.000987519	0.001238122	0.001311107	0.001311539
T_S	Care & Maintenance	P95	1.561918855	1.611197233	1.765848637	1.772171497	1.374352217	1.209210277	0.850319326	1.306254625	1.569059014	1.66767633	1.844309211	1.440299392
T_Sb	Care & Maintenance	P95	0.001505734	0.001385197	0.001331911	0.001007424	0.001635068	0.001914955	0.001691274	0.002840225	0.003443338	0.002983054	0.003132269	0.001662399
T_Se	Care & Maintenance	P95	0.000183116	0.00018843	0.000201493	0.000173765	0.000161814	0.000126444	9.78772E-05	0.000226052	0.000143768	0.000182673	0.000178999	0.000167378
T_Si	Care & Maintenance	P95	7.374843597	7.483922005	7.60346508	7.421785355	7.237819195	6.663972378	5.718070984	6.55551672	6.767689705	6.950309277	7.162312984	7.063863754
T_Sn	Care & Maintenance	P95	5.81373E-05	5.91394E-05	6.00131E-05	5.9696E-05	5.58452E-05	5.67287E-05	5.12161E-05	5.58921E-05	5.56608E-05	5.4592E-05	5.89258E-05	5.47902E-05
T_Sr	Care & Maintenance	P95	0.125546575	0.137881875	0.140436679	0.120733291	0.127822712	0.112266019	0.105085976	0.177980289	0.135976672	0.149398074	0.136139438	0.12054003
T_Ti	Care & Maintenance	P95	0.004482188	0.004103621	0.003588561	0.002820008	0.00288105	0.005425189	0.004340513	0.004110538	0.003564455	0.003176062	0.004433842	0.004410505
T_Tl	Care & Maintenance	P95	0.000322639	0.000319198	0.000363647	0.000307124	0.000296244	0.000213297	0.00013298	0.000377367	0.000260952	0.000328354	0.000314639	0.000333229
T_U	Care & Maintenance	P95	0.000350832	0.000349103	0.000387098	0.000329821	0.000323573	0.000270694	0.000218999	0.000416508	0.000298971	0.000371434	0.000359548	0.00033841
T_V	Care & Maintenance	P95	0.010173352	0.010268512	0.010716136	0.009905022	0.009660757	0.007341664	0.00530312	0.011249235	0.008096687	0.009096785	0.01037496	0.009530482
T_Zn	Care & Maintenance	P95	0.004473343	0.004539701	0.004785463	0.004479372	0.004420704	0.003475818	0.003029404	0.003958747	0.003556624	0.004305909	0.004337974	0.004225529
D_Ag	Care & Maintenance	P95	4.24345E-05	4.41912E-05	4.5595E-05	4.41747E-05	4.37198E-05	3.44898E-05	2.86977E-05	3.93061E-05	3.26947E-05	4.03706E-05	4.26671E-05	4.09105E-05
D_Al	Care & Maintenance	P95	0.061011612	0.055748239	0.052029673	0.042587396	0.069280282	0.216623202	0.159622118	0.136391923	0.106858589	0.092922851	0.083673753	0.065156713
D_As	Care & Maintenance	P95	0.001060664	0.001013717	0.001022196	0.000884891	0.000788462	0.000676864	0.000731301	0.000953979	0.001056349	0.00097629	0.000911883	0.000880353
D_B	Care & Maintenance	P95	0.076994359	0.078358486	0.085999884	0.074940912	0.073749624	0.05037237	0.032055255	0.090893179	0.058165241	0.07362777	0.073329084	0.074103609
D_Ba	Care & Maintenance	P95	0.008124453	0.008132986	0.008166646	0.007513287	0.008932439	0.008568295	0.007154713	0.009376843	0.011302539	0.010978596	0.010393082	0.008588462
D_Bi	Care & Maintenance	P95	4.62377E-05	4.39758E-05	4.35319E-05	4.10794E-05	3.91434E-05	4.39152E-05	3.72434E-05	5.52236E-05	6.12235E-05	5.70908E-05	5.88274E-05	4.00332E-05
D_Be	Care & Maintenance	P95	0.000124536	0.000127558	0.00013579	0.000124724	0.00012388	9.97881E-05	7.43728E-05	0.00011665	0.000101642	0.000123482	0.000126275	0.00012
D_Ca	Care & Maintenance	P95	20.20075226	19.62986755	19.55185699	16.01698494	20.85332298	22.70660973	23.35153008	26.61761475	28.3133812	24.95984077	27.91803169	21.32038116
D_Cd	Care & Maintenance	P95	2.30966E-05	2.36036E-05	2.41893E-05	2.26443E-05	2.21747E-05	1.76069E-05	1.71821E-05	2.20929E-05	1.89768E-05	2.19635E-05	2.24577E-05	2.17456E-05
D_Co	Care & Maintenance	P95	0.00045782	0.000454951	0.000462956	0.000445972	0.000436469	0.000373412	0.000352312	0.000505111	0.000440595	0.000459001	0.000518232	0.000452119
D_Cr	Care & Maintenance	P95	0.00045027	0.000416781	0.000403345	0.000370911	0.000299772	0.000302709	0.000299466	0.000361327	0.000388496	0.000339089	0.000364295	0.000353292
D_Cu	Care & Maintenance	P95	0.000492078	0.00049503	0.000506276	0.000461342	0.000450624	0.000647005	0.00039803	0.000458343	0.000419627	0.000483159	0.000468531	0.000461789
D_Fe	Care & Maintenance	P95	0.071422294	0.069917463	0.068577044	0.06288252	0.064040378	0.124149546	0.090406418	0.089987896	0.081504837	0.078906767	0.074265338	0.067559592
D_Hg	Care & Maintenance	P95	2.65037E-05	2.85537E-05	3.01304E-05	2.41525E-05	2.28882E-05	1.6127E-05	1.24383E-05	3.40339E-05	1.84114E-05	2.50829E-05	2.50895E-05	2.34965E-05
D_K	Care & Maintenance	P95	6.047317505	6.084265232	6.453522682	5.182068825	5.328116417	5.991381645	6.63483572	8.839586258	7.347859859	6.681967735	7.222153187	5.441740513
D_Li	Care & Maintenance	P95	0.077127792	0.078196108	0.089252293	0.076343082	0.073614202	0.047287878	0.030870546	0.088732131	0.054546654	0.06613189	0.072271638	0.074670799
D_Mg	Care & Maintenance	P95	8.45508194	8.866093636	9.218078613	7.517804146	7.434485912	6.590333939	6.844740868	12.32624626	8.163764954	9.278356552	8.678416252	7.659463882
D_Mn	Care & Maintenance	P95	0.118630178	0.10740526	0.100688733	0.071870714	0.125610262	0.148853809	0.133006081	0.225303471	0.27390638	0.240501955	0.248015597	0.130570099
D_Mo	Care & Maintenance	P95	0.00059993	0.000691309	0.000649762	0.000647616	0.000741096	0.000584782	0.000459083	0.000462069	0.000539284	0.000660277	0.000620006	0.000584857
D_Na	Care & Maintenance	P95	25.1836071	26.78811264	30.16526222	25.51231384	23.46551514	14.84046459	11.03337002	31.29392052	17.94061279	23.59957314	24.74282455	23.3896637
D_Ni	Care & Maintenance	P95	0.001597841	0.001707531	0.001809211	0.00144469	0.001379154	0.001008998	0.000879086	0.002088433	0.001268932	0.001622306	0.001578951	0.001443427
D_P	Care & Maintenance	P95	0.138421133	0.127960429	0.117455356	0.079709038	0.068449639	0.055493984	0.035095885	0.062811412	0.091745779	0.076723747	0.131853044	0.141613126
D_Pb	Care & Maintenance	P95	0.001364541	0.001462334	0.001510126	0.001469293	0.001449121	0.000969973	0.000774654	0.001188298	0.00098574	0.001238113	0.001311057	0.001311502
D_S	Care & Maintenance	P95	1.414280534	1.546751738	1.724735141	1.771654725	1.262346387	1.155952573	0.819588542	1.306214213	1.465196133	1.642041087	1.588317394	1.35639286
D_Sb	Care & Maintenance	P95	0.001505733	0.001385196	0.001331911	0.001007424	0.001635068	0.001914955	0.001691274	0.002840225	0.003443338	0.002983054	0.003132269	0.001662398
D_Se	Care & Maintenance	P95	0.00017421	0.000183685	0.000196142	0.000166498	0.000162068	0.000122897	9.45412E-05	0.000226279	0.000140648	0.000179787	0.000172147	0.000159168
D_Si	Care & Maintenance	P95	7.156476021	7.267087936	7.37544632	7.196938515	6.977881908	6.439042091	5.537164211	6.482983112	6.661633015	6.921850681	7.04164505	6.933485985
D_Sn	Care & Maintenance	P95	5.81373E-05	5.91394E-05	6.00131E-05	5.9696E-05	5.58452E-05	5.67287E-05	5.12161E-05	5.58921E-05	5.56608E-05	5.4592E-05	5.89258E-05	5.47902E-05
D_Sr	Care & Maintenance	P95	0.126016542	0.13870281	0.14073287	0.12077716	0.128514409	0.112398863	0.104396679	0.177312955	0.136315316	0.150110126	0.136168927	0.122451603
D_Ti	Care & Maintenance	P95	0.004425244	0.003909679	0.00341618	0.00238118	0.002316481	0.002965938	0.002331344	0.002243223	0.002663838	0.002259431	0.004101364	0.004383958
D_Tl	Care & Maintenance	P95	0.000322639	0.000319198	0.000363647	0.000307124	0.000296244	0.000213297	0.00013298	0.000377367	0.000260952	0.000328354	0.000314639	0.000333229
D_U	Care & Maintenance	P95	0.000347857	0.000345852	0.000383322	0.000323412	0.000315497	0.000261645	0.000211661	0.000413274	0.000294426	0.000367395	0.000355228	0.000334423
D_V	Care & Maintenance	P95	0.010143355	0.01024466	0.010669261	0.009873927	0.009609328	0.00729049	0.005225428	0.01120689	0.008063927	0.009025114	0.010347227	0.009482225
D_Zn	Care & Maintenance	P95	0.004291018	0.004442236	0.004591406	0.004424995	0.004379712	0.003378272	0.002875934	0.003815397	0.003374403	0.004031459	0.004126172	0.004109999

Appendix B.3.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Mine Site Nodes, FWR

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254986644	0.255304039	0.250407696	0.244501516	0.183209926	0.059588287	0.047027651	0.052684486	0.063849308	0.071062669	0.080288514	0.075217977
NO3_N	Care & Maintenance	P95	1.970885754	2.043380022	2.213053465	2.33364296	2.165082932	1.213726163	1.13392508	0.797099352	0.950951576	1.1822505	1.633272886	1.873103261
NO2_N	Care & Maintenance	P95	0.012524868	0.014783441	0.015513515	0.015477248	0.013203573	0.008265057	0.008052075	0.005318744	0.00611615	0.007592471	0.010066262	0.011591029
Br	Care & Maintenance	P95	0.067003675	0.069990523	0.071099333	0.072732002	0.06805402	0.051650856	0.051006962	0.044005852	0.040997304	0.049332954	0.060547601	0.064430065
Cl	Care & Maintenance	P95	1.049229741	1.122210622	1.148184299	1.171992898	1.091764212	0.81580013	0.782480001	0.662138939	0.632948875	0.758987725	0.945102751	1.010052204
F	Care & Maintenance	P95	0.316092104	0.339469641	0.347806215	0.349425644	0.303149372	0.236446485	0.228355944	0.178744227	0.188775584	0.22101745	0.278235525	0.308292717
TDP	Care & Maintenance	P95	0.018824682	0.022265183	0.021945426	0.020958785	0.020032521	0.015853154	0.015948912	0.015618755	0.01626518	0.017332546	0.020640405	0.02053863
SO4	Care & Maintenance	P95	44.54441071	44.28944778	40.05221939	37.71996307	28.61479378	28.22896767	41.82262421	47.82752609	54.251091	46.57735825	52.33040237	48.768116
T_CN	Care & Maintenance	P95	0.002788346	0.002914569	0.002739207	0.002712536	0.003103589	0.002636784	0.002671575	0.002547279	0.002641627	0.002588192	0.003075076	0.002658452
WAD_CN	Care & Maintenance	P95	0.002788348	0.002914571	0.002722182	0.002679855	0.00310359	0.002632889	0.002671575	0.002547279	0.002641627	0.002588192	0.003075076	0.002658453
T_Ag	Care & Maintenance	P95	3.69253E-05	3.88985E-05	4.06402E-05	4.22104E-05	4.02515E-05	3.30271E-05	3.03608E-05	2.60651E-05	2.31136E-05	2.80998E-05	3.55476E-05	3.4928E-05
T_Al	Care & Maintenance	P95	0.089679472	0.08356031	0.070605852	0.063133962	0.050544504	0.247878492	0.256429672	0.17134513	0.151513398	0.125887692	0.105609849	0.098785363
T_As	Care & Maintenance	P95	0.00121424	0.001265681	0.001282526	0.001232395	0.001155925	0.00077654	0.00077858	0.000901194	0.001066658	0.001061236	0.001085308	0.001093007
T_B	Care & Maintenance	P95	0.060519885	0.062995665	0.065112919	0.06852489	0.066153608	0.041425943	0.039024122	0.029065939	0.033471301	0.041218173	0.059876442	0.058747172
T_Ba	Care & Maintenance	P95	0.007839336	0.00847042	0.007774838	0.007771356	0.008986141	0.007796453	0.006925609	0.006929169	0.00809794	0.008037889	0.009035097	0.007890227
T_Bi	Care & Maintenance	P95	4.31175E-05	4.26847E-05	4.20443E-05	4.01039E-05	3.93586E-05	3.43971E-05	3.19653E-05	3.1663E-05	3.84205E-05	3.75863E-05	4.15694E-05	3.86395E-05
T_Be	Care & Maintenance	P95	0.000110749	0.000115853	0.000119434	0.000122768	0.000115885	9.25567E-05	8.81037E-05	6.79174E-05	7.45809E-05	8.74357E-05	0.000110923	0.000106419
T_Ca	Care & Maintenance	P95	17.54273224	18.93734741	18.63095474	18.44618607	17.21484947	16.48591805	16.01029396	17.66020012	20.73999596	21.03778267	20.31968498	19.98966408
T_Cd	Care & Maintenance	P95	2.00263E-05	2.06646E-05	2.12046E-05	2.18476E-05	2.06816E-05	1.67931E-05	1.56751E-05	1.62235E-05	1.54727E-05	1.62464E-05	1.9793E-05	1.93932E-05
T_Co	Care & Maintenance	P95	0.000501844	0.000551632	0.000580904	0.000586981	0.000517709	0.000350863	0.000337173	0.000359108	0.000395481	0.000385041	0.000503706	0.000507306
T_Cr	Care & Maintenance	P95	0.000585223	0.000625991	0.000639556	0.000607435	0.000554647	0.000364943	0.000385893	0.000436947	0.00048574	0.000483371	0.000508207	0.000504579
T_Cu	Care & Maintenance	P95	0.000424911	0.000441754	0.000453891	0.000459489	0.000442816	0.000538056	0.000555664	0.000376012	0.00036094	0.00038524	0.000448133	0.000414516
T_Fe	Care & Maintenance	P95	0.097570688	0.096515872	0.088346489	0.084360555	0.096064776	0.178546175	0.181461066	0.131282002	0.123969123	0.111630432	0.105522573	0.098427691
T_Hg	Care & Maintenance	P95	1.91593E-05	2.0268E-05	2.18778E-05	2.35298E-05	2.10212E-05	1.48867E-05	1.3687E-05	1.07994E-05	1.32313E-05	1.45655E-05	1.8478E-05	1.80306E-05
T_K	Care & Maintenance	P95	4.73124361	4.994340897	4.80701828	5.242415428	4.626079082	3.583426237	3.734071493	4.051077366	4.462135792	3.924230099	5.063005447	5.02111721
T_Li	Care & Maintenance	P95	0.060240172	0.069183655	0.072273031	0.073139586	0.063274056	0.040001944	0.037322063	0.025529217	0.030866351	0.039165802	0.053222995	0.057715539
T_Mg	Care & Maintenance	P95	6.393013	6.798096657	6.88485527	7.42531538	6.599751949	5.572975159	5.254301071	4.733128548	5.826090813	5.559708118	6.932309628	6.868300438
T_Mn	Care & Maintenance	P95	0.09996397	0.093894139	0.084172115	0.081089057	0.044618297	0.080853939	0.090615109	0.092800222	0.106974863	0.106003925	0.130670339	0.121928304
T_Mo	Care & Maintenance	P95	0.001353865	0.001621758	0.001696483	0.001436542	0.001310725	0.000745006	0.000723786	0.000824299	0.000999585	0.001167228	0.001085034	0.001049929
T_Na	Care & Maintenance	P95	20.15945244	21.35878944	21.98505974	24.93676376	22.26190758	12.91740131	12.85419464	9.917856216	13.20050144	14.35793877	18.2223587	18.76127052
T_Ni	Care & Maintenance	P95	0.001193054	0.001285314	0.001280462	0.001427844	0.001249573	0.000843772	0.000849173	0.00077171	0.000908525	0.000943491	0.001223751	0.001190893
T_P	Care & Maintenance	P95	0.027664382	0.029038221	0.027294764	0.026847588	0.024996119	0.024606522	0.023537911	0.025134332	0.030820196	0.032025468	0.031918168	0.02981765
T_Pb	Care & Maintenance	P95	0.001156532	0.001245836	0.001315453	0.001366791	0.001304418	0.000865452	0.000786358	0.000638983	0.000577924	0.000765897	0.001023264	0.001072056
T_S	Care & Maintenance	P95	1.139536023	1.192756653	1.192540646	1.209530234	1.121103883	1.023105145	0.866139233	0.866801262	1.038269639	1.15924716	1.26238811	1.204700828
T_Sb	Care & Maintenance	P95	0.001277755	0.001226781	0.00108194	0.001035522	0.000644877	0.001059543	0.001104293	0.001159907	0.001335501	0.001315981	0.00160539	0.001578283
T_Se	Care & Maintenance	P95	0.00013093	0.000147763	0.00015426	0.000171194	0.000152955	0.000107344	0.000110518	9.43471E-05	0.000108381	0.000116009	0.00014435	0.000140707
T_Si	Care & Maintenance	P95	7.461879253	7.319911957	7.080886364	6.897270679	7.491981983	6.268293858	5.77058506	5.721926689	6.179830551	6.465634823	7.700062752	6.818556786
T_Sn	Care & Maintenance	P95	5.85502E-05	5.83226E-05	5.52363E-05	5.45213E-05	6.21834E-05	5.30485E-05	5.44351E-05	5.10244E-05	5.28939E-05	5.23599E-05	6.1619E-05	5.4159E-05
T_Sr	Care & Maintenance	P95	0.108718932	0.1066797	0.111742616	0.1194885	0.108457103	0.102584645	0.09120407	0.090907946	0.107167467	0.102129534	0.123482212	0.11201705
T_Ti	Care & Maintenance	P95	0.003944293	0.003704525	0.003412202	0.003054078	0.002621855	0.004288437	0.004879725	0.003835478	0.003841308	0.003196832	0.004976139	0.004471064
T_Tl	Care & Maintenance	P95	0.000240995	0.00025497	0.000263925	0.000278369	0.00028049	0.000166252	0.000161435	0.000119558	0.000147669	0.000183366	0.000259774	0.000250477
T_U	Care & Maintenance	P95	0.000263966	0.000289727	0.000302504	0.000322871	0.000297192	0.000255335	0.000252331	0.0002199	0.000240177	0.000255717	0.000302873	0.000293488
T_V	Care & Maintenance	P95	0.008502856	0.009146758	0.009376815	0.009384449	0.008621676	0.006361529	0.00604791	0.004222374	0.004930294	0.006132848	0.00786096	0.008265276
T_Zn	Care & Maintenance	P95	0.003883524	0.00405868	0.004223715	0.004351803	0.004118257	0.003318904	0.00302612	0.002829774	0.002574764	0.003082192	0.003810231	0.003685708
D_Ag	Care & Maintenance	P95	3.67321E-05	3.8865E-05	4.05602E-05	4.21563E-05	4.02206E-05	3.08943E-05	3.02308E-05	2.59741E-05	2.12582E-05	2.68132E-05	3.5001E-05	3.48757E-05
D_Al	Care & Maintenance	P95	0.06953226	0.064581431	0.054318327	0.047734525	0.038293872	0.176660001	0.190878734	0.133458957	0.11994908	0.098470815	0.083117887	0.077793762
D_As	Care & Maintenance	P95	0.001172164	0.001230038	0.001251669	0.001206821	0.00112534	0.000717078	0.000705726	0.000852091	0.001012719	0.001022916	0.00104281	0.001046643
D_B	Care & Maintenance	P95	0.060519882	0.062995665	0.065112919	0.06852489	0.066153608	0.041425943	0.039024122	0.029065939	0.033471301	0.041218173	0.059876427	0.058747172
D_Ba	Care & Maintenance	P95	0.007598406	0.00816604	0.007439977	0.007468722	0.00863231	0.007426457	0.006366781	0.006463523	0.007770646	0.007909175	0.008773586	0.007629255
D_Bi	Care & Maintenance	P95	4.31175E-05	4.26847E-05	4.20443E-05	4.01039E-05	3.93586E-05	3.43971E-05	3.19653E-05	3.1663E-05	3.84205E-05	3.75863E-05	4.15694E-05	3.86395E-05
D_Be	Care & Maintenance	P95	0.000110749	0.000115853	0.000119434	0.000122768	0.000115885	9.25567E-05	8.81037E-05	6.79174E-05	7.45809E-05	8.74357E-05	0.000110923	0.000106419
D_Ca	Care & Maintenance	P95	17.36410522	18.7673378	18.400877	18.12758064	17.18226814	16.52981758	16.0072937	17.50625038	20.6374073	20.91157722	20.25767899	19.83821106
D_Cd	Care & Maintenance	P95	2.0165E-05	2.07882E-05	2.12931E-05	2.19189E-05	2.06923E-05	1.62861E-05	1.54789E-05	1.70839E-05	1.59928E-05	1.62735E-05	1.96538E-05	1.93047E-05
D_Co	Care & Maintenance	P95	0.00050177	0.000551544	0.000580833	0.000586675	0.000517141	0.000348972	0.000333905	0.000356355	0.000394539	0.000384468	0.000503211	0.000507115
D_Cr	Care & Maintenance	P95	0.000533115	0.000573371	0.000585803	0.000555624	0.000496261	0.000310612	0.000340131	0.000390194	0.000437653	0.000430999	0.000451655	0.000448102
D_Cu	Care & Maintenance	P95	0.000424793	0.000440637	0.000447797	0.000453032	0.000431524	0.000518563	0.000544832	0.000385051	0.00037051	0.000388145	0.000447688	0.000414403
D_Fe	Care & Maintenance	P95	0.072375178	0.072596394	0.06818939	0.064350322	0.063472599	0.101764396	0.108524255	0.088296793	0.089306749	0.080766328	0.08199811	0.073645569
D_Hg	Care & Maintenance	P95	1.91636E-05	2.02808E-05	2.19026E-05	2.35524E-05	2.10523E-05	1.52547E-05	1.33542E-05	1.05818E-05	1.31274E-05	1.43907E-05	1.84645E-05	1.80211E-05
D_K	Care & Maintenance	P95	4.727288246	4.991353512	4.802278042	5.238688946	4.619994164	3.551562786	3.739049673	4.053962231	4.456298828	3.919364929	5.053072929	5.014294624
D_Li	Care & Maintenance	P95	0.060240172	0.069183655	0.072273031	0.073139586	0.063274056	0.040001944	0.037322063	0.025529217	0.030866351	0.039165802	0.053222995	0.057715539
D_Mg	Care & Maintenance	P95	6.412943363	6.802018166	6.88722086	7.422754765	6.597080231	5.559279442	5.240228176	4.719277859	5.814523697	5.548902035	6.92261076	6.866447926
D_Mn	Care & Maintenance	P95	0.098282062	0.09215346	0.082646042	0.079886362	0.043638945	0.079155177	0.085354008	0.089645252	0.103367507	0.101782918	0.128029838	0.121442564
D_Mo	Care & Maintenance	P95	0.001335639	0.001595523	0.001666138	0.001403887	0.001280584	0.00072552	0.000713274	0.000811382	0.000984357	0.001160583	0.001072926	0.001041655
D_Na	Care & Maintenance	P95	20.12487984	21.31342125	21.94798279	24.9059906	22.23308182	12.86921692	12.77666664	9.869300842	13.14692688	14.30779743	18.18170166	18.72112083
D_Ni	Care & Maintenance	P95	0.001192622	0.001284881	0.001279982	0.001427101	0.001248189	0.000840323	0.000847138	0.0007686	0.000907359	0.000943173	0.001223437	0.001190475
D_P	Care & Maintenance	P95	0.118352741	0.112188473	0.107403778	0.092605293	0.063582167	0.049439371	0.040299587	0.036786027	0.070170023	0.060881443	0.149165377	0.139235646
D_Pb	Care & Maintenance	P95	0.001156173	0.001245771	0.001315298	0.001366685	0.001304358	0.000861559	0.000786106	0.000638849	0.000577625	0.000763397	0.001022202	0.001071961
D_S	Care & Maintenance	P95	1.064821959	1.138050795	1.192111969	1.209474087	1.031372547	0.98466444	0.836571574	0.880437732	1.022826314	1.143106699	1.180055261	1.118800282
D_Sb	Care & Maintenance	P95	0.001277755	0.00122678	0.00108194	0.001035522	0.000644877	0.001059529	0.001104293	0.001159878	0.001335501	0.001315944	0.00160539	0.001578283
D_Se	Care & Maintenance	P95	0.000124973	0.000141573	0.000140493	0.000164083	0.000148691	0.000108559	0.000105445	9.16483E-05	0.000104035	0.000111974	0.000137556	0.000128871
D_Si	Care & Maintenance	P95	7.223348618	7.078661919	6.852951527	6.700113297	7.045199394	6.0322299	5.55745697	5.577291012	6.066272736	6.394516468	7.554772377	6.669793606
D_Sn	Care & Maintenance	P95	5.85502E-05	5.83226E-05	5.52363E-05	5.45213E-05	6.21834E-05	5.30485E-05	5.44351E-05	5.10244E-05	5.28939E-05	5.23599E-05	6.1619E-05	5.4159E-05
D_Sr	Care & Maintenance	P95	0.110386856	0.107866988	0.112010255	0.119486697	0.108542278	0.103181675	0.091301478	0.090343885	0.106817119	0.101725139	0.123918496	0.11308571
D_Ti	Care & Maintenance	P95	0.003643092	0.003449624	0.003225737	0.002708799	0.001974243	0.002396428	0.002605616	0.002064281	0.002426702	0.001927755	0.0048087	0.004418255
D_Tl	Care & Maintenance	P95	0.000240995	0.00025497	0.000263925	0.000278369	0.00028049	0.000166252	0.000161435	0.000119558	0.000147669	0.000183366	0.000259774	0.000250477
D_U	Care & Maintenance	P95	0.000259432	0.000285858	0.000298069	0.000317347	0.000290269	0.000240594	0.000243378	0.000212352	0.000232768	0.000250455	0.000297476	0.000288299
D_V	Care & Maintenance	P95	0.008471872	0.009117925	0.009348752	0.009356881	0.00857015	0.006292655	0.006009764	0.004160673	0.004872162	0.006087186	0.007796306	0.008237729
D_Zn	Care & Maintenance	P95	0.00369353	0.00390409	0.004080357	0.004232588	0.004036344	0.003134255	0.00293189	0.002638921	0.002280447	0.002813262	0.003456969	0.003496776

APPENDIX B.4: CARE AND MAINTENANCE SCENARIO 1 – RECEIVING STREAM NODES

Appendix B.4.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ28

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254642785	0.2537435	0.247803316	0.237576798	0.18623881	0.052487895	0.04411675	0.046628032	0.063319482	0.071392804	0.078591064	0.07372845
NO3_N	Care & Maintenance	P95	1.742771983	1.953211665	1.907862663	1.952673793	1.695048332	1.161396384	0.933529973	0.983866155	0.836647928	0.929984629	1.224465251	1.674714923
NO2_N	Care & Maintenance	P95	0.01024906	0.011173239	0.011006697	0.011049856	0.010612505	0.007088926	0.006527059	0.006585499	0.00562352	0.006473367	0.007295337	0.009201183
Br	Care & Maintenance	P95	0.065179676	0.069216095	0.067907177	0.066146933	0.057384826	0.044410888	0.04109722	0.045575313	0.038662385	0.045394357	0.054196842	0.058781557
Cl	Care & Maintenance	P95	1.260723948	1.347195268	1.28426826	1.246996522	1.082572699	0.804358602	0.680863261	0.79361397	0.645754874	0.806537569	1.000814199	1.12362504
F	Care & Maintenance	P95	0.359208018	0.386737347	0.368378907	0.359589726	0.303404182	0.233528152	0.194428518	0.217410251	0.190967828	0.23508589	0.285816997	0.323298067
TDP	Care & Maintenance	P95	0.018716702	0.019245313	0.01987757	0.020262904	0.019431943	0.016273279	0.017003126	0.0148331	0.015826227	0.017979549	0.022312384	0.022751939
SO4	Care & Maintenance	P95	35.45775223	34.79000092	33.95990753	31.94947243	25.81053925	26.36153984	31.64525032	43.09076309	41.4369812	39.81429672	40.0094986	47.48892975
T_CN	Care & Maintenance	P95	0.002705958	0.002776132	0.00272476	0.002672413	0.002931554	0.002656561	0.002675476	0.00247153	0.002514195	0.002711001	0.002638012	0.002629547
WAD_CN	Care & Maintenance	P95	0.002705959	0.002776134	0.002710751	0.002641354	0.002931555	0.002645582	0.002664355	0.0024711	0.002514196	0.002710887	0.00263801	0.002629547
T_Ag	Care & Maintenance	P95	3.81103E-05	4.08409E-05	4.02541E-05	4.09414E-05	4.07752E-05	3.27433E-05	2.75999E-05	2.66952E-05	2.30156E-05	2.62426E-05	3.25571E-05	3.44191E-05
T_Al	Care & Maintenance	P95	0.080372222	0.070282772	0.065092064	0.060176637	0.050240442	0.197173491	0.248620749	0.160962567	0.132276922	0.103072107	0.086326696	0.0858116
T_As	Care & Maintenance	P95	0.001207963	0.001226853	0.001238256	0.001236416	0.001156714	0.000812634	0.000870602	0.000912849	0.001070189	0.001174608	0.001152402	0.001139531
T_B	Care & Maintenance	P95	0.079294182	0.086060569	0.082204975	0.080623105	0.072667554	0.047982335	0.039691616	0.04143291	0.032701883	0.046052501	0.058451347	0.068096198
T_Ba	Care & Maintenance	P95	0.007084294	0.007257036	0.007254158	0.007165081	0.008438571	0.007731098	0.00714345	0.006418434	0.007385246	0.008701546	0.009527656	0.008041675
T_Bi	Care & Maintenance	P95	4.30353E-05	4.22464E-05	4.14764E-05	3.96238E-05	3.90671E-05	3.42657E-05	3.35164E-05	3.31505E-05	3.64737E-05	3.79533E-05	4.23943E-05	5.0663E-05
T_Be	Care & Maintenance	P95	0.000114356	0.000122074	0.00011925	0.000119567	0.000116616	9.06689E-05	8.02618E-05	8.55161E-05	7.43988E-05	8.39471E-05	9.92242E-05	0.000107044
T_Ca	Care & Maintenance	P95	17.58451271	18.25588989	18.27072906	17.96789742	16.8399086	15.52936077	14.728899	15.56463528	18.52179527	20.89425087	20.08455658	20.28489685
T_Cd	Care & Maintenance	P95	2.05099E-05	2.17559E-05	2.11638E-05	2.12529E-05	2.0916E-05	1.64593E-05	1.45823E-05	1.63565E-05	1.59271E-05	1.60053E-05	1.77657E-05	1.88574E-05
T_Co	Care & Maintenance	P95	0.000539058	0.000582788	0.000581766	0.00058191	0.000513574	0.000317598	0.000304702	0.000365269	0.000406931	0.000397032	0.00048309	0.000521869
T_Cr	Care & Maintenance	P95	0.000582805	0.000594669	0.000612517	0.000605195	0.00057399	0.000392781	0.0004158	0.000444883	0.000489246	0.000515536	0.000517982	0.000544709
T_Cu	Care & Maintenance	P95	0.000434641	0.00046273	0.000458175	0.000452213	0.00043657	0.000533871	0.000540641	0.000376101	0.00035983	0.000364864	0.000392973	0.000420261
T_Fe	Care & Maintenance	P95	0.09004508	0.086664245	0.084597953	0.081937402	0.090024821	0.145363912	0.177027404	0.123443924	0.112286992	0.102308556	0.093657292	0.089671366
T_Hg	Care & Maintenance	P95	1.80697E-05	1.95423E-05	1.9775E-05	2.00781E-05	1.66667E-05	1.44358E-05	1.20868E-05	9.17436E-06	1.03163E-05	1.15172E-05	1.33583E-05	2.00056E-05
T_K	Care & Maintenance	P95	4.107252598	4.429469109	4.380702019	4.356334686	3.548428535	3.311111212	3.350015163	3.77042675	3.900626421	3.743159056	4.050704002	5.483256817
T_Li	Care & Maintenance	P95	0.059982609	0.065537654	0.063897625	0.063902527	0.055348109	0.040550575	0.033162676	0.027065217	0.025346681	0.033675216	0.044044126	0.054981261
T_Mg	Care & Maintenance	P95	6.012674809	6.372369289	6.38101387	6.451169014	5.393818378	5.171769619	4.560265541	4.361644745	5.551495552	5.33417511	5.583296299	7.600411415
T_Mn	Care & Maintenance	P95	0.077319309	0.072776034	0.069042198	0.059105806	0.046440467	0.059314013	0.069139555	0.072212592	0.092295349	0.099990264	0.134238943	0.151250288
T_Mo	Care & Maintenance	P95	0.001336913	0.001433494	0.001453004	0.001399166	0.001302453	0.000733322	0.000751836	0.000850284	0.000945972	0.00111344	0.001162103	0.001106501
T_Na	Care & Maintenance	P95	15.59590244	17.741539	17.94204903	18.32903671	15.29144001	11.21964264	9.591225624	9.013707161	9.839082718	10.04985619	11.80593872	17.89405823
T_Ni	Care & Maintenance	P95	0.001156211	0.001230352	0.001230573	0.001234005	0.001032129	0.00088207	0.000807683	0.000697722	0.000795533	0.000831342	0.000901336	0.001367764
T_P	Care & Maintenance	P95	0.027132668	0.026215455	0.02568846	0.025375929	0.023511464	0.023840809	0.024393251	0.024152026	0.030818975	0.032059398	0.035341382	0.032500762
T_Pb	Care & Maintenance	P95	0.001201811	0.001299999	0.001292694	0.00130991	0.001324576	0.000814239	0.000671528	0.000648477	0.000530378	0.000726925	0.000998186	0.001061953
T_S	Care & Maintenance	P95	1.068753481	1.130279303	1.189062834	1.154132605	1.112126827	0.929855287	0.795937002	0.799850643	0.969037473	1.116304398	1.234728694	1.286311269
T_Sb	Care & Maintenance	P95	0.001027999	0.000993466	0.000964461	0.00084332	0.000654527	0.00075907	0.000889316	0.000912719	0.001185333	0.001248837	0.001648365	0.001942416
T_Se	Care & Maintenance	P95	0.000180759	0.000197843	0.00020155	0.000210446	0.00017508	0.00014933	0.000129828	0.000100661	0.000116778	0.000126678	0.000137855	0.000208825
T_Si	Care & Maintenance	P95	6.857527256	7.155118942	7.123698235	6.805409908	7.120750427	6.288306713	5.963260174	5.690907478	5.980129242	6.814236641	7.032754421	7.237795353
T_Sn	Care & Maintenance	P95	5.41364E-05	5.55274E-05	5.49489E-05	5.3633E-05	5.90627E-05	5.36663E-05	5.39609E-05	4.94777E-05	5.11768E-05	5.43207E-05	5.51381E-05	5.68921E-05
T_Sr	Care & Maintenance	P95	0.094820164	0.101694599	0.102036588	0.102622479	0.094437324	0.091401488	0.082485534	0.076188415	0.10350588	0.103474922	0.10779167	0.127388269
T_Ti	Care & Maintenance	P95	0.003844155	0.003617851	0.003295743	0.002967199	0.00253964	0.003718017	0.004740966	0.003699043	0.003507637	0.002957705	0.00351542	0.004238518
T_Tl	Care & Maintenance	P95	0.000293178	0.000318742	0.00030307	0.000303611	0.000285176	0.000180817	0.000151899	0.00015727	0.000122976	0.000173959	0.000221748	0.000257283
T_U	Care & Maintenance	P95	0.000415593	0.000455164	0.000461599	0.000473759	0.000400844	0.000365504	0.000334273	0.000259399	0.000287819	0.000309225	0.000327097	0.000484183
T_V	Care & Maintenance	P95	0.00915172	0.009817169	0.009331246	0.009254093	0.008449912	0.006152585	0.005067594	0.005104012	0.004728779	0.006087743	0.007238899	0.008282675
T_Zn	Care & Maintenance	P95	0.003995343	0.004282294	0.004206705	0.004233445	0.00415736	0.003283994	0.002785831	0.002899836	0.002524197	0.002937719	0.003492446	0.003653011
D_Ag	Care & Maintenance	P95	3.80891E-05	4.08254E-05	4.01946E-05	4.09034E-05	4.07267E-05	3.00864E-05	2.6916E-05	2.66041E-05	2.11707E-05	2.56321E-05	3.22767E-05	3.42212E-05
D_Al	Care & Maintenance	P95	0.039499998	0.025900001	0.0207	0.021600001	0.037741702	0.14061591	0.100999996	0.101999998	0.053100001	0.081405059	0.067706175	0.067664459
D_As	Care & Maintenance	P95	0.001165503	0.001188726	0.00120641	0.001210978	0.001131267	0.000751955	0.000819583	0.000859747	0.001011811	0.001132213	0.001111481	0.001097258
D_B	Care & Maintenance	P95	0.079294182	0.086060569	0.082204975	0.080623105	0.072667554	0.047982261	0.039691534	0.04143291	0.032701883	0.046052501	0.058451336	0.068096198
D_Ba	Care & Maintenance	P95	0.006854802	0.006961399	0.006948665	0.006848307	0.0080943	0.007339072	0.006668735	0.005994652	0.007165713	0.008648889	0.009427244	0.007835212
D_Bi	Care & Maintenance	P95	4.30353E-05	4.22464E-05	4.14764E-05	3.96238E-05	3.90671E-05	3.42657E-05	3.35164E-05	3.31505E-05	3.64737E-05	3.79533E-05	4.23943E-05	5.0663E-05
D_Be	Care & Maintenance	P95	0.000114356	0.000122074	0.00011925	0.000119567	0.000116616	9.06689E-05	8.02618E-05	8.55161E-05	7.43988E-05	8.39471E-05	9.92242E-05	0.000107044
D_Ca	Care & Maintenance	P95	17.55731773	18.21957016	18.22439766	17.87601471	16.84712219	15.48976994	14.73097229	15.47210884	18.49990654	20.8590126	20.00063705	20.07444191
D_Cd	Care & Maintenance	P95	2.05955E-05	2.18494E-05	2.12559E-05	2.13233E-05	2.09046E-05	1.56941E-05	1.45995E-05	1.71998E-05	1.6258E-05	1.59755E-05	1.77018E-05	1.88231E-05
D_Co	Care & Maintenance	P95	0.000539015	0.000582732	0.000581742	0.000581584	0.000512923	0.000314805	0.000302844	0.000362574	0.0004054	0.000396836	0.000482952	0.000521863
D_Cr	Care & Maintenance	P95	0.00053056	0.000540985	0.000561606	0.000552552	0.000524649	0.000335193	0.000358193	0.000390054	0.000443384	0.000449708	0.000456856	0.000491126
D_Cu	Care & Maintenance	P95	0.000434082	0.00046132	0.000449868	0.000442232	0.00043138	0.000512429	0.000532164	0.000384739	0.000368019	0.000369406	0.000393202	0.000420004
D_Fe	Care & Maintenance	P95	0.067696713	0.066975817	0.064912803	0.062972903	0.058936995	0.084824637	0.105566815	0.083663978	0.081845134	0.078991905	0.072371706	0.068657875
D_Hg	Care & Maintenance	P95	1.80853E-05	1.95606E-05	1.97944E-05	2.00984E-05	1.66832E-05	1.44465E-05	1.1961E-05	9.00117E-06	1.01393E-05	1.1348E-05	1.32894E-05	2.00023E-05
D_K	Care & Maintenance	P95	4.102617264	4.426239967	4.376784801	4.353552341	3.537808895	3.288165808	3.341584206	3.768875599	3.887330532	3.734385014	4.043808937	5.476696014
D_Li	Care & Maintenance	P95	0.059982609	0.065537654	0.063897625	0.063902527	0.055348109	0.040550575	0.033162676	0.027065217	0.025346681	0.033675216	0.044044126	0.054981261
D_Mg	Care & Maintenance	P95	6.018792629	6.377958775	6.385729313	6.451274395	5.389959335	5.160531998	4.55128479	4.346354485	5.52238369	5.324886799	5.568845749	7.604314804
D_Mn	Care & Maintenance	P95	0.07584732	0.071349502	0.067727223	0.058072437	0.045979481	0.057078492	0.067706697	0.070033573	0.090958454	0.096137553	0.132710248	0.150694013
D_Mo	Care & Maintenance	P95	0.001318414	0.0014005	0.001414957	0.001370782	0.001272053	0.000717885	0.000744655	0.000842092	0.000939855	0.001110728	0.001151459	0.001095284
D_Na	Care & Maintenance	P95	15.57167339	17.71271515	17.91210175	18.29920387	15.26589775	11.18020439	9.528964043	8.972764015	9.803578377	10.00788403	11.78215313	17.83299446
D_Ni	Care & Maintenance	P95	0.001155866	0.001230021	0.001230243	0.001233468	0.001029705	0.000878985	0.000805274	0.000693967	0.00079446	0.00083113	0.000901086	0.001367576
D_P	Care & Maintenance	P95	0.114707433	0.109377302	0.104002848	0.090592392	0.064453557	0.05070214	0.038088303	0.035231031	0.056365948	0.075349033	0.105554603	0.129674196
D_Pb	Care & Maintenance	P95	0.00120177	0.001299969	0.001292578	0.001309892	0.001324341	0.00080385	0.000669098	0.0006483	0.000530249	0.000726105	0.000997641	0.001061569
D_S	Care & Maintenance	P95	1.017199636	1.109159231	1.179423332	1.164266706	1.029135108	0.879239619	0.770722806	0.786331475	0.950365722	1.076564789	1.126774788	1.108703852
D_Sb	Care & Maintenance	P95	0.001027999	0.000993466	0.000964461	0.000843319	0.000654527	0.00075907	0.000889316	0.000912719	0.001185332	0.001248799	0.001648361	0.001942415
D_Se	Care & Maintenance	P95	0.000174028	0.000190972	0.000193975	0.000202938	0.000171112	0.000148931	0.000124862	9.97832E-05	0.000113534	0.000120329	0.000132407	0.0001964
D_Si	Care & Maintenance	P95	6.646005154	6.924241066	6.897372246	6.611515522	6.807320595	5.980928421	5.733598709	5.554724693	5.884963512	6.747100353	6.952707767	7.124466419
D_Sn	Care & Maintenance	P95	5.41364E-05	5.55274E-05	5.49489E-05	5.3633E-05	5.90627E-05	5.36663E-05	5.39609E-05	4.94777E-05	5.11768E-05	5.43207E-05	5.51381E-05	5.68921E-05
D_Sr	Care & Maintenance	P95	0.09560468	0.102558181	0.102483667	0.10268414	0.095522724	0.091808595	0.082679063	0.075323418	0.103055522	0.103837043	0.108671732	0.12914452
D_Ti	Care & Maintenance	P95	0.00365581	0.003366839	0.003098246	0.002619825	0.001956235	0.002088037	0.002567488	0.001999495	0.002109794	0.002121143	0.003279334	0.004160624
D_Tl	Care & Maintenance	P95	0.000293178	0.000318742	0.00030307	0.000303611	0.000285176	0.000180817	0.000151899	0.00015727	0.000122976	0.000173959	0.000221748	0.000257283
D_U	Care & Maintenance	P95	0.00041234	0.000451509	0.000457463	0.000468717	0.000395288	0.000357229	0.000324556	0.000251908	0.000281398	0.000304222	0.000322933	0.00047947
D_V	Care & Maintenance	P95	0.0091196	0.009785151	0.009301804	0.00920299	0.008379654	0.006093788	0.005016606	0.005058245	0.00468334	0.006058472	0.007213721	0.008247766
D_Zn	Care & Maintenance	P95	0.003811524	0.004102179	0.004042604	0.004108983	0.004084847	0.003085099	0.00264797	0.002704527	0.002245857	0.002634174	0.003244044	0.003455308

Appendix B.4.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ27

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.221151575	0.220532715	0.215563402	0.223046035	0.184993044	0.051499639	0.042077851	0.043177783	0.057460379	0.064976841	0.071725383	0.064573452
NO3_N	Care & Maintenance	P95	1.520344615	1.714687467	1.66975987	1.902460933	1.683436036	1.13545382	0.884123623	0.90904671	0.760169744	0.877124369	1.134521604	1.479354262
NO2_N	Care & Maintenance	P95	0.008977798	0.009851121	0.009674524	0.010660809	0.010519662	0.006959149	0.006205567	0.006125956	0.005139211	0.006212901	0.006946982	0.008179868
Br	Care & Maintenance	P95	0.059954703	0.063697204	0.062427551	0.065024406	0.057160977	0.043969039	0.040226981	0.043977223	0.037364934	0.044647299	0.051976487	0.056589752
Cl	Care & Maintenance	P95	1.129918218	1.210929036	1.152791977	1.230687141	1.076851726	0.79188472	0.658264458	0.75180912	0.609173119	0.785714447	0.944464445	1.067229867
F	Care & Maintenance	P95	0.317451358	0.343249381	0.326537043	0.354377359	0.301492512	0.22883597	0.185676545	0.2034031	0.177079096	0.222949356	0.266806394	0.304662943
TDP	Care & Maintenance	P95	0.018331297	0.018404096	0.019691877	0.020067843	0.019296432	0.016101209	0.016340369	0.014333013	0.014794478	0.017410086	0.021307301	0.022086944
SO4	Care & Maintenance	P95	31.04220581	30.67054558	29.8516922	30.62973022	25.64828873	25.80778694	30.27736855	40.78085709	37.87327957	36.53732681	37.11196136	41.64119339
T_CN	Care & Maintenance	P95	0.002674518	0.002735673	0.002691079	0.00266012	0.002927437	0.002652227	0.002664238	0.002471371	0.002509875	0.002706545	0.002627746	0.002613428
WAD_CN	Care & Maintenance	P95	0.00267452	0.002735675	0.002678899	0.00262964	0.002927438	0.002641519	0.002653708	0.002470976	0.002509876	0.002706433	0.002627745	0.002613427
T_Ag	Care & Maintenance	P95	3.40949E-05	3.63979E-05	3.6684E-05	3.88465E-05	4.0558E-05	3.21235E-05	2.63907E-05	2.50323E-05	2.19654E-05	2.48509E-05	3.02724E-05	3.23852E-05
T_Al	Care & Maintenance	P95	0.073792361	0.064186662	0.058748528	0.059520733	0.052496605	0.1961959	0.241610125	0.153093606	0.12187539	0.103309542	0.086581491	0.081151873
T_As	Care & Maintenance	P95	0.001133761	0.001129151	0.001136598	0.001216595	0.00115018	0.000805102	0.000854748	0.000891607	0.001027504	0.001142808	0.001103676	0.001074065
T_B	Care & Maintenance	P95	0.06970083	0.076020256	0.072343811	0.078642637	0.072203465	0.047016378	0.037882056	0.038642503	0.030156702	0.043496311	0.055710245	0.064023189
T_Ba	Care & Maintenance	P95	0.007042663	0.007173887	0.007251709	0.007161409	0.008416223	0.007661342	0.007088722	0.006519743	0.007474781	0.008572646	0.009156604	0.007807244
T_Bi	Care & Maintenance	P95	4.06072E-05	3.99402E-05	3.92787E-05	3.81432E-05	3.89639E-05	3.4058E-05	3.32346E-05	3.25033E-05	3.5392E-05	3.70479E-05	4.1132E-05	4.73189E-05
T_Be	Care & Maintenance	P95	0.000105967	0.000113074	0.000112132	0.000116009	0.000116156	8.97457E-05	7.86224E-05	8.27505E-05	7.32348E-05	8.16875E-05	9.51042E-05	0.00010133
T_Ca	Care & Maintenance	P95	16.80314636	17.44068718	17.58211517	17.61024094	16.75462914	15.29367065	14.40128517	15.27272797	17.99693298	19.92619133	19.30066681	18.8444519
T_Cd	Care & Maintenance	P95	1.81857E-05	1.93692E-05	1.92668E-05	2.04415E-05	2.08434E-05	1.62156E-05	1.41342E-05	1.5309E-05	1.49519E-05	1.56891E-05	1.65025E-05	1.78488E-05
T_Co	Care & Maintenance	P95	0.000476393	0.000516774	0.000514298	0.000567322	0.000510228	0.000311605	0.000291296	0.000341127	0.000374144	0.000373384	0.000443896	0.00046971
T_Cr	Care & Maintenance	P95	0.000548498	0.000547775	0.000559899	0.000595799	0.000571632	0.0003895	0.000405532	0.000426564	0.000468406	0.000507181	0.000497096	0.000519485
T_Cu	Care & Maintenance	P95	0.00041039	0.000436003	0.000431366	0.000446584	0.000438221	0.000530352	0.000539641	0.000367085	0.000352148	0.000375165	0.00038103	0.000402474
T_Fe	Care & Maintenance	P95	0.087939769	0.08321695	0.079908431	0.081491634	0.091280468	0.144664735	0.173308551	0.120790802	0.10918805	0.102801219	0.094040185	0.088735946
T_Hg	Care & Maintenance	P95	1.60353E-05	1.73669E-05	1.75817E-05	1.94282E-05	1.657E-05	1.42777E-05	1.15826E-05	8.66125E-06	9.58586E-06	1.10466E-05	1.2462E-05	1.7922E-05
T_K	Care & Maintenance	P95	3.703284502	3.918911695	3.880629301	4.106112957	3.52748394	3.243442297	3.190411329	3.588046789	3.616573811	3.566585779	3.777051926	4.951111794
T_Li	Care & Maintenance	P95	0.052231487	0.057485756	0.055863678	0.061569504	0.054971788	0.039654873	0.03138354	0.025033433	0.023677995	0.031576384	0.041292246	0.049147591
T_Mg	Care & Maintenance	P95	5.519774437	5.858731747	5.914850235	6.197031975	5.364130974	5.076423168	4.454182625	4.241868019	5.273522854	5.157957554	5.316064835	6.909412384
T_Mn	Care & Maintenance	P95	0.067581341	0.063593149	0.060390413	0.056364823	0.046154264	0.058123954	0.067004509	0.067241155	0.084028892	0.091779232	0.122458503	0.132125556
T_Mo	Care & Maintenance	P95	0.001254971	0.001344485	0.001370189	0.001359262	0.001293928	0.000722753	0.000737157	0.000836523	0.000930982	0.001051631	0.001094165	0.001037092
T_Na	Care & Maintenance	P95	13.94900417	15.92443657	16.06845665	17.76681709	15.19796944	10.99362755	9.224104881	8.551762581	9.224429131	9.83382988	11.08656311	16.06203079
T_Ni	Care & Maintenance	P95	0.001038164	0.001107513	0.001105885	0.001197542	0.001027252	0.000867883	0.000778279	0.000663234	0.000753098	0.000810904	0.000840358	0.001228039
T_P	Care & Maintenance	P95	0.024597501	0.023922255	0.023461403	0.024482803	0.023482453	0.023490656	0.023698196	0.022787161	0.028712234	0.029894534	0.032771457	0.02979229
T_Pb	Care & Maintenance	P95	0.001062329	0.001148497	0.001164936	0.001235321	0.001315985	0.000799143	0.000637908	0.000600791	0.000484023	0.000683635	0.000917485	0.000986782
T_S	Care & Maintenance	P95	1.031014681	1.095987916	1.130837917	1.137625217	1.103830457	0.914494872	0.772295654	0.791755736	0.954663634	1.077649474	1.145428538	1.188203216
T_Sb	Care & Maintenance	P95	0.000900437	0.00087127	0.000846293	0.000800606	0.000648829	0.000743645	0.000861574	0.000849596	0.001081167	0.001145087	0.001503842	0.001698639
T_Se	Care & Maintenance	P95	0.000165085	0.000182503	0.000184259	0.000204032	0.000174157	0.000147023	0.000125526	9.57666E-05	0.000110571	0.000123759	0.000129813	0.000189858
T_Si	Care & Maintenance	P95	6.771830559	7.024524212	6.967638969	6.763421059	7.103708744	6.261578083	5.951601982	5.703133583	5.969652176	6.797115803	6.936036587	7.108241081
T_Sn	Care & Maintenance	P95	5.35053E-05	5.47176E-05	5.42161E-05	5.34844E-05	5.89916E-05	5.35665E-05	5.37122E-05	4.94707E-05	5.10435E-05	5.42296E-05	5.46152E-05	5.59219E-05
T_Sr	Care & Maintenance	P95	0.092287071	0.098489456	0.100084029	0.101848744	0.09371832	0.090117127	0.081611946	0.076026827	0.10196992	0.100826815	0.103714131	0.119217359
T_Ti	Care & Maintenance	P95	0.003990253	0.003792656	0.003514236	0.003093005	0.002569276	0.003745393	0.004748052	0.003780554	0.003645516	0.003110832	0.003575787	0.004171589
T_Tl	Care & Maintenance	P95	0.000256295	0.000279917	0.000268401	0.000286485	0.000283256	0.000176916	0.000144247	0.000145781	0.000112181	0.000163542	0.000210194	0.000241007
T_U	Care & Maintenance	P95	0.000383245	0.000424442	0.00043248	0.000464196	0.000398941	0.000361353	0.000323499	0.000252366	0.000277832	0.000304191	0.00031415	0.000444085
T_V	Care & Maintenance	P95	0.008002868	0.008632798	0.008184462	0.008888113	0.008395897	0.006025183	0.004816121	0.004737095	0.004430091	0.005733645	0.006742688	0.007836391
T_Zn	Care & Maintenance	P95	0.003679863	0.003935576	0.003929922	0.004083578	0.004139042	0.003243794	0.002712985	0.002791293	0.002466101	0.002839252	0.003326491	0.00349969
D_Ag	Care & Maintenance	P95	3.39793E-05	3.63843E-05	3.66293E-05	3.88099E-05	4.04816E-05	2.95233E-05	2.57333E-05	2.49482E-05	2.02663E-05	2.44221E-05	3.0012E-05	3.21955E-05
D_Al	Care & Maintenance	P95	0.0372	0.0244	0.018200001	0.021524636	0.039084136	0.137999997	0.099399999	0.098499998	0.051640574	0.081472777	0.067289792	0.064400002
D_As	Care & Maintenance	P95	0.001091421	0.001092157	0.001103708	0.001190261	0.00112356	0.000744942	0.000803272	0.000838129	0.000971756	0.001095294	0.001061371	0.001030521
D_B	Care & Maintenance	P95	0.06970083	0.076020256	0.072343811	0.078642637	0.072203465	0.047016304	0.037881978	0.038642503	0.030156702	0.043496311	0.055710237	0.064023189
D_Ba	Care & Maintenance	P95	0.006818153	0.006928643	0.006957821	0.006845434	0.008060114	0.007272395	0.006644106	0.00614151	0.007258601	0.008491971	0.009113517	0.007623727
D_Bi	Care & Maintenance	P95	4.06072E-05	3.99402E-05	3.92787E-05	3.81432E-05	3.89639E-05	3.4058E-05	3.32346E-05	3.25033E-05	3.5392E-05	3.70479E-05	4.1132E-05	4.73189E-05
D_Be	Care & Maintenance	P95	0.000105967	0.000113074	0.000112132	0.000116009	0.000116156	8.97457E-05	7.86224E-05	8.27505E-05	7.32348E-05	8.16875E-05	9.51042E-05	0.00010133
D_Ca	Care & Maintenance	P95	16.7260952	17.29621315	17.46683884	17.57311821	16.76046181	15.25285149	14.39180851	15.18593788	17.96558952	19.80226517	19.18043327	18.65089607
D_Cd	Care & Maintenance	P95	1.82922E-05	1.94511E-05	1.93495E-05	2.05478E-05	2.08034E-05	1.54062E-05	1.393E-05	1.60748E-05	1.53688E-05	1.55524E-05	1.64451E-05	1.78169E-05
D_Co	Care & Maintenance	P95	0.000476355	0.000516725	0.000514277	0.000567007	0.000509748	0.000308875	0.000289536	0.000338638	0.000372754	0.000373196	0.000443771	0.000469472
D_Cr	Care & Maintenance	P95	0.000496614	0.000495329	0.000511895	0.000542024	0.000521463	0.000332182	0.000347032	0.000375868	0.000424061	0.000440395	0.000437743	0.000465409
D_Cu	Care & Maintenance	P95	0.000410107	0.000434762	0.000425734	0.00043629	0.00043222	0.000506522	0.000522148	0.000375736	0.00035908	0.000363039	0.000381261	0.000402283
D_Fe	Care & Maintenance	P95	0.065796211	0.064275004	0.061018899	0.062387045	0.059341174	0.084583171	0.103663988	0.082633525	0.08002466	0.079237066	0.072185509	0.067753583
D_Hg	Care & Maintenance	P95	1.60489E-05	1.73828E-05	1.75986E-05	1.94477E-05	1.65742E-05	1.42409E-05	1.14677E-05	8.50129E-06	9.42533E-06	1.08859E-05	1.23988E-05	1.79186E-05
D_K	Care & Maintenance	P95	3.699148893	3.916218519	3.876334429	4.103992939	3.516830683	3.220646143	3.18422699	3.590960979	3.61097765	3.557095289	3.769687414	4.945484638
D_Li	Care & Maintenance	P95	0.052231487	0.057485756	0.055863678	0.061569504	0.054971788	0.039654873	0.03138354	0.025033433	0.023677995	0.031576384	0.041292246	0.049147591
D_Mg	Care & Maintenance	P95	5.509960175	5.86486578	5.864116669	6.199332714	5.360178471	5.065239429	4.444747448	4.224936962	5.239467144	5.147319317	5.300504684	6.915541172
D_Mn	Care & Maintenance	P95	0.066570029	0.062299006	0.05917526	0.055262484	0.045599442	0.055884007	0.065555446	0.065153755	0.082866751	0.089138396	0.120894954	0.131513208
D_Mo	Care & Maintenance	P95	0.001225224	0.001305648	0.00132979	0.001331555	0.001263579	0.000707483	0.000727287	0.000826335	0.000920251	0.001043214	0.00108296	0.001019144
D_Na	Care & Maintenance	P95	13.91499138	15.89919662	16.03355408	17.73443031	15.17338943	10.96369457	9.167693138	8.514652252	9.197641373	9.790319443	11.05730247	16.03105545
D_Ni	Care & Maintenance	P95	0.001037865	0.001107236	0.001105598	0.001197026	0.001024587	0.000864866	0.000775997	0.000659765	0.000752192	0.000810687	0.000840132	0.001227799
D_P	Care & Maintenance	P95	0.119173884	0.11451903	0.109921344	0.092763148	0.065016024	0.05299009	0.044001035	0.044164218	0.063063256	0.0792033	0.1082718	0.126481056
D_Pb	Care & Maintenance	P95	0.001062104	0.00114835	0.001164829	0.00123525	0.001315437	0.000788938	0.000635604	0.000600628	0.000483906	0.000682842	0.000916979	0.000986427
D_S	Care & Maintenance	P95	0.970726728	1.057378411	1.145208359	1.119172812	1.021636128	0.865011096	0.74348706	0.767091811	0.942485392	1.000194311	1.047386527	0.996968031
D_Sb	Care & Maintenance	P95	0.000900437	0.00087127	0.000846293	0.000800606	0.000648829	0.000743645	0.000861574	0.000849596	0.001081166	0.001145059	0.001503839	0.001698639
D_Se	Care & Maintenance	P95	0.000159865	0.000170384	0.00017602	0.000197392	0.000170152	0.000146304	0.000119551	9.55331E-05	0.000106232	0.000117569	0.000123536	0.000179156
D_Si	Care & Maintenance	P95	6.559563637	6.796741486	6.748986244	6.564208508	6.790787697	5.955719471	5.722767353	5.566303253	5.872419834	6.726989269	6.856533527	6.963167191
D_Sn	Care & Maintenance	P95	5.35053E-05	5.47176E-05	5.42161E-05	5.34844E-05	5.89916E-05	5.35665E-05	5.37122E-05	4.94707E-05	5.10435E-05	5.42296E-05	5.46152E-05	5.59219E-05
D_Sr	Care & Maintenance	P95	0.092450328	0.09935613	0.099700451	0.10194654	0.094776288	0.090506993	0.08171802	0.07509356	0.101330332	0.101023078	0.104995869	0.120404914
D_Ti	Care & Maintenance	P95	0.003826796	0.003574923	0.003343485	0.002717453	0.002010909	0.002143548	0.00265067	0.002223128	0.002366035	0.002271505	0.003383994	0.004062974
D_Tl	Care & Maintenance	P95	0.000256295	0.000279917	0.000268401	0.000286485	0.000283256	0.000176883	0.000144247	0.000145781	0.000112181	0.000163542	0.000210194	0.000241007
D_U	Care & Maintenance	P95	0.000377979	0.000419654	0.000427742	0.000459434	0.000393561	0.000352799	0.000313721	0.000244522	0.000271477	0.000299415	0.000309835	0.000438494
D_V	Care & Maintenance	P95	0.007974893	0.00860474	0.008146169	0.008860331	0.008323909	0.005963154	0.004756581	0.004690552	0.004387287	0.00567998	0.00669341	0.007788769
D_Zn	Care & Maintenance	P95	0.003522192	0.003728921	0.003683909	0.003962711	0.004067026	0.003054452	0.002555205	0.002607165	0.00220326	0.002540196	0.00301705	0.003282722

Appendix B.4.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ26

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.170837641	0.173284471	0.169814855	0.180421844	0.178636685	0.047982968	0.03753474	0.037912156	0.047902502	0.055694394	0.063182943	0.055207606
NO3_N	Care & Maintenance	P95	1.330912471	1.468029022	1.462880731	1.697823286	1.617481589	1.075005054	0.789474666	0.778578818	0.654230356	0.810654283	0.999375939	1.262811661
NO2_N	Care & Maintenance	P95	0.007596463	0.008485558	0.008469217	0.009482086	0.010061624	0.00653103	0.005472576	0.005374926	0.004340636	0.005592014	0.006203996	0.007181342
Br	Care & Maintenance	P95	0.055506386	0.05794239	0.057410803	0.061201483	0.055891696	0.042915352	0.038163107	0.041128453	0.035380106	0.042285487	0.048587508	0.053562839
Cl	Care & Maintenance	P95	1.017453074	1.072125435	1.035440207	1.143632531	1.04626286	0.763705671	0.619600952	0.680997133	0.560525596	0.732679188	0.861374557	0.991578341
F	Care & Maintenance	P95	0.281789064	0.299067408	0.288240463	0.32296589	0.291108221	0.218192041	0.171270609	0.179579079	0.158418074	0.200282842	0.239006624	0.284588248
TDP	Care & Maintenance	P95	0.017892478	0.017410472	0.019476155	0.019634293	0.018630302	0.01572082	0.015191327	0.013444043	0.013063069	0.0163236	0.019961981	0.021107368
SO4	Care & Maintenance	P95	26.61056709	26.34843826	24.89113045	29.59994507	24.75087547	24.62293434	27.13630295	35.2284317	32.61332703	32.83700562	32.8592453	35.65641785
T_CN	Care & Maintenance	P95	0.002625374	0.00267791	0.002639242	0.002615291	0.002896414	0.002635074	0.002633862	0.002465018	0.002495758	0.002692575	0.002608497	0.002582635
WAD_CN	Care & Maintenance	P95	0.002625375	0.002677911	0.002629173	0.00258789	0.002896415	0.002625351	0.002624498	0.002464702	0.002495758	0.002692466	0.002608495	0.002582634
T_Ag	Care & Maintenance	P95	3.04415E-05	3.21871E-05	3.2954E-05	3.51314E-05	3.94283E-05	3.03349E-05	2.38591E-05	2.2272E-05	1.97913E-05	2.28795E-05	2.66737E-05	2.96702E-05
T_Al	Care & Maintenance	P95	0.063066848	0.055503421	0.050688889	0.055493776	0.067472138	0.192504004	0.219631881	0.135597795	0.103079036	0.104513183	0.085267022	0.073193364
T_As	Care & Maintenance	P95	0.00104906	0.001041608	0.001036249	0.001149193	0.001128491	0.000799414	0.000849931	0.000881338	0.000985854	0.001113197	0.001039655	0.001008351
T_B	Care & Maintenance	P95	0.0602744	0.065761499	0.063264899	0.07065963	0.06967888	0.044787552	0.034766447	0.033905528	0.026859453	0.040275171	0.050616547	0.058540247
T_Ba	Care & Maintenance	P95	0.007205043	0.007341125	0.007394839	0.007280407	0.008272883	0.007504944	0.007172329	0.006717181	0.007564894	0.00847942	0.008803003	0.007625108
T_Bi	Care & Maintenance	P95	3.70656E-05	3.67581E-05	3.60344E-05	3.55718E-05	3.85601E-05	3.36E-05	3.24836E-05	3.13249E-05	3.37812E-05	3.60687E-05	3.93611E-05	4.37327E-05
T_Be	Care & Maintenance	P95	9.90413E-05	0.000105083	0.00010562	0.000109295	0.000114083	8.812E-05	7.654E-05	7.93071E-05	7.17585E-05	8.00401E-05	8.97728E-05	9.81058E-05
T_Ca	Care & Maintenance	P95	16.35696983	17.00419426	17.28546333	17.315588	16.30805588	14.86977673	14.08863831	14.57011604	17.25721741	18.42134666	18.29878616	17.63082314
T_Cd	Care & Maintenance	P95	1.66004E-05	1.74005E-05	1.76489E-05	1.91013E-05	2.0551E-05	1.56683E-05	1.30258E-05	1.40744E-05	1.40168E-05	1.51148E-05	1.49633E-05	1.68359E-05
T_Co	Care & Maintenance	P95	0.000419793	0.000449765	0.000454331	0.000500929	0.000493451	0.000298313	0.000269749	0.000300424	0.00032799	0.000343559	0.000397036	0.000434387
T_Cr	Care & Maintenance	P95	0.000488603	0.000477153	0.000474375	0.000548888	0.0005599	0.000378992	0.00037714	0.000381986	0.000423315	0.000480778	0.000466801	0.000470034
T_Cu	Care & Maintenance	P95	0.000391337	0.000412616	0.000411523	0.000426607	0.000452187	0.000534476	0.000511421	0.000354494	0.000342611	0.000401616	0.000365962	0.00038668
T_Fe	Care & Maintenance	P95	0.079400942	0.075304933	0.070599139	0.077679664	0.098903917	0.142364696	0.158918411	0.11412742	0.100076422	0.106852181	0.09398555	0.086456895
T_Hg	Care & Maintenance	P95	1.38777E-05	1.53426E-05	1.56577E-05	1.73299E-05	1.62566E-05	1.38775E-05	1.07574E-05	7.83744E-06	8.59446E-06	1.02039E-05	1.11965E-05	1.54754E-05
T_K	Care & Maintenance	P95	3.418730259	3.563903809	3.552070856	3.840209007	3.445408583	3.131853104	2.972699165	3.246776342	3.287966967	3.328484774	3.394351482	4.398208141
T_Li	Care & Maintenance	P95	0.044528179	0.04917014	0.048596345	0.054867201	0.052841473	0.037587129	0.028438583	0.021493839	0.020780925	0.028597992	0.036279205	0.043666206
T_Mg	Care & Maintenance	P95	5.190600872	5.472492218	5.598825455	5.798838615	5.203618526	4.870265961	4.286307812	3.989533901	4.839942455	4.813256264	4.922065258	6.219398975
T_Mn	Care & Maintenance	P95	0.058252133	0.053520277	0.04952044	0.054851424	0.044355754	0.055807587	0.062638037	0.058101151	0.072954752	0.083169691	0.108252041	0.11176534
T_Mo	Care & Maintenance	P95	0.001194901	0.001282488	0.001312474	0.001290043	0.001253234	0.000703759	0.000741008	0.00082476	0.000912501	0.00100855	0.001029613	0.000988366
T_Na	Care & Maintenance	P95	12.45950794	14.09543419	14.41236782	16.07243156	14.66986752	10.51494408	8.614204407	7.810441017	8.334909439	9.397984505	10.04318523	14.01356125
T_Ni	Care & Maintenance	P95	0.000944939	0.000995012	0.001001664	0.001085644	0.001000593	0.000838513	0.000732647	0.000613359	0.000697754	0.000778027	0.000783675	0.001081378
T_P	Care & Maintenance	P95	0.020989902	0.021267166	0.020312009	0.022837946	0.023290724	0.02271213	0.021842061	0.019860417	0.025603626	0.027932473	0.029579299	0.02645958
T_Pb	Care & Maintenance	P95	0.000918947	0.000997183	0.001027848	0.001093504	0.001268836	0.000746348	0.000568932	0.000518381	0.000414808	0.000618987	0.000786361	0.000878331
T_S	Care & Maintenance	P95	0.996763349	1.06675458	1.069257617	1.099896669	1.063183904	0.890921295	0.707626343	0.742450595	0.928261757	1.026052952	1.035792947	1.098522544
T_Sb	Care & Maintenance	P95	0.000765978	0.000743805	0.000721063	0.000772917	0.000631016	0.000718699	0.000803895	0.00074655	0.000956121	0.001043483	0.001345012	0.001456278
T_Se	Care & Maintenance	P95	0.000149403	0.000166452	0.000168401	0.000186725	0.000169669	0.000141611	0.000119482	9.14374E-05	9.94089E-05	0.000116263	0.000123245	0.000170086
T_Si	Care & Maintenance	P95	6.71541357	6.923374176	6.803299427	6.70539856	7.008832932	6.186903	5.962273598	5.775578976	5.996580601	6.772766113	6.849489212	7.007559776
T_Sn	Care & Maintenance	P95	5.25194E-05	5.35616E-05	5.31116E-05	5.28237E-05	5.85083E-05	5.31767E-05	5.31087E-05	4.93357E-05	5.06619E-05	5.39446E-05	5.39362E-05	5.48611E-05
T_Sr	Care & Maintenance	P95	0.091166094	0.097150624	0.09991841	0.099806704	0.090372235	0.08725819	0.080520749	0.075222895	0.098618522	0.097084135	0.098868556	0.111807443
T_Ti	Care & Maintenance	P95	0.00371167	0.003528596	0.003302608	0.003413673	0.0027178	0.003857741	0.004761853	0.003981142	0.003894586	0.003415632	0.003810625	0.004286283
T_Tl	Care & Maintenance	P95	0.000219198	0.00024028	0.000236876	0.000256139	0.000272847	0.000168013	0.000131088	0.000126486	9.80902E-05	0.000151201	0.000188668	0.000219121
T_U	Care & Maintenance	P95	0.000347766	0.000391203	0.000407837	0.000427426	0.000391066	0.000350291	0.000301487	0.000237666	0.000260166	0.000291129	0.000294503	0.00039485
T_V	Care & Maintenance	P95	0.007006488	0.007419886	0.007229459	0.007967945	0.008103547	0.005741516	0.004387266	0.004102913	0.003980237	0.00507784	0.006001055	0.007245715
T_Zn	Care & Maintenance	P95	0.003394815	0.003778556	0.003653551	0.003795278	0.004056068	0.003150108	0.00257358	0.002627228	0.002362026	0.002726844	0.003080857	0.003307078
D_Ag	Care & Maintenance	P95	3.03366E-05	3.21204E-05	3.29054E-05	3.51086E-05	3.9178E-05	2.826E-05	2.35265E-05	2.22E-05	1.83913E-05	2.23895E-05	2.64483E-05	2.96435E-05
D_Al	Care & Maintenance	P95	0.0262	0.013900001	0.0106	0.021230837	0.046324033	0.125666678	0.077	0.068000004	0.034899998	0.07265	0.064217709	0.047400001
D_As	Care & Maintenance	P95	0.001006513	0.001008753	0.001000784	0.001117551	0.001097427	0.000737635	0.00079262	0.000821206	0.000934857	0.001063323	0.00100099	0.000968916
D_B	Care & Maintenance	P95	0.0602744	0.065761499	0.063264899	0.07065963	0.06967888	0.044787481	0.034766376	0.033905528	0.026859453	0.040275171	0.050616544	0.058540247
D_Ba	Care & Maintenance	P95	0.006928092	0.007037799	0.007133693	0.006998335	0.0078641	0.007105779	0.006736162	0.006395526	0.007340126	0.008317305	0.008722814	0.007461367
D_Bi	Care & Maintenance	P95	3.70656E-05	3.67581E-05	3.60344E-05	3.55718E-05	3.85601E-05	3.36E-05	3.24836E-05	3.13249E-05	3.37812E-05	3.60687E-05	3.93611E-05	4.37327E-05
D_Be	Care & Maintenance	P95	9.90413E-05	0.000105083	0.00010562	0.000109295	0.000114083	8.812E-05	7.654E-05	7.93071E-05	7.17585E-05	8.00401E-05	8.97728E-05	9.81058E-05
D_Ca	Care & Maintenance	P95	16.3058567	16.85309792	17.0736866	17.26877594	16.30976295	14.82020378	13.95395756	14.57191277	17.19252014	18.26004028	18.17826653	17.49591064
D_Cd	Care & Maintenance	P95	1.67265E-05	1.74704E-05	1.77217E-05	1.91575E-05	2.03591E-05	1.48398E-05	1.28239E-05	1.45892E-05	1.43954E-05	1.49746E-05	1.49156E-05	1.67693E-05
D_Co	Care & Maintenance	P95	0.000419766	0.000449723	0.000454313	0.000500621	0.000492775	0.000295743	0.000267129	0.000298293	0.000326802	0.000342931	0.000396926	0.000434307
D_Cr	Care & Maintenance	P95	0.000431792	0.000426946	0.000421307	0.000497084	0.000505039	0.000323121	0.000322579	0.000335416	0.000381466	0.000415032	0.000406201	0.000415239
D_Cu	Care & Maintenance	P95	0.000391403	0.00040799	0.000407531	0.000417495	0.000437485	0.000487214	0.000498005	0.000362912	0.000355035	0.000355877	0.000366844	0.000386882
D_Fe	Care & Maintenance	P95	0.058140136	0.057088144	0.052026231	0.059028704	0.06152023	0.083382323	0.097408488	0.077606715	0.074090011	0.080065638	0.070385784	0.064767212
D_Hg	Care & Maintenance	P95	1.38869E-05	1.53563E-05	1.56724E-05	1.73561E-05	1.61511E-05	1.36906E-05	1.07025E-05	7.70048E-06	8.43712E-06	1.0066E-05	1.1193E-05	1.54726E-05
D_K	Care & Maintenance	P95	3.416424036	3.560794115	3.548120499	3.837968349	3.434605598	3.109878302	2.970542192	3.248126507	3.282000542	3.318713188	3.395698547	4.397367001
D_Li	Care & Maintenance	P95	0.044528179	0.04917014	0.048596345	0.054867201	0.052841473	0.037587129	0.028438583	0.021493839	0.020780925	0.028597992	0.036279205	0.043666206
D_Mg	Care & Maintenance	P95	5.177482605	5.476559639	5.52775526	5.796303272	5.198921204	4.857186317	4.292796135	3.976126194	4.808009148	4.801749706	4.896759987	6.242329121
D_Mn	Care & Maintenance	P95	0.057609424	0.052213244	0.048338715	0.053742066	0.04314702	0.053466536	0.060176317	0.05598788	0.071648516	0.080299705	0.106621571	0.110812135
D_Mo	Care & Maintenance	P95	0.001163072	0.001237208	0.00126335	0.001259664	0.001222403	0.000687942	0.000728965	0.000810756	0.000896296	0.000999569	0.00101483	0.000961634
D_Na	Care & Maintenance	P95	12.4163866	14.07385159	14.37631226	16.02594948	14.65254498	10.47330284	8.593880653	7.759203434	8.299351692	9.357318878	10.02891254	14.00392056
D_Ni	Care & Maintenance	P95	0.000944752	0.000994741	0.001001413	0.001085257	0.000998	0.000834404	0.000730604	0.000610388	0.000696976	0.000777824	0.000783456	0.00108124
D_P	Care & Maintenance	P95	0.111766078	0.108548068	0.104437351	0.106898434	0.068788394	0.058252476	0.058007281	0.064573176	0.076593257	0.084038153	0.113196477	0.129765734
D_Pb	Care & Maintenance	P95	0.000918926	0.000997054	0.001027754	0.001093459	0.001266591	0.000740426	0.000567473	0.000518241	0.000412012	0.000618132	0.000785923	0.000878263
D_S	Care & Maintenance	P95	0.842400432	0.989026368	1.093429089	1.0236305	0.984879911	0.829795122	0.698384047	0.726255119	0.909710824	0.901185334	0.980861843	0.878686428
D_Sb	Care & Maintenance	P95	0.000765978	0.000743805	0.000721063	0.000772917	0.000631016	0.000718699	0.000803895	0.00074655	0.000956121	0.001043459	0.00134501	0.001456277
D_Se	Care & Maintenance	P95	0.000145444	0.000150768	0.000162839	0.000179636	0.00016551	0.000140662	0.000110453	8.73529E-05	9.62975E-05	0.000112139	0.000113346	0.000155693
D_Si	Care & Maintenance	P95	6.529020786	6.702826977	6.595896244	6.468898296	6.691200733	5.904379368	5.755265236	5.634207249	5.886046886	6.687636375	6.752501488	6.805428028
D_Sn	Care & Maintenance	P95	5.25194E-05	5.35616E-05	5.31116E-05	5.28237E-05	5.85083E-05	5.31767E-05	5.31087E-05	4.93357E-05	5.06619E-05	5.39446E-05	5.39362E-05	5.48611E-05
D_Sr	Care & Maintenance	P95	0.091037646	0.097616471	0.098949544	0.099897265	0.091228716	0.08754877	0.080886453	0.075083733	0.097630955	0.097084798	0.099362366	0.112481639
D_Ti	Care & Maintenance	P95	0.003531454	0.003349938	0.003149361	0.003262277	0.002200294	0.00243551	0.002986399	0.002727214	0.002916302	0.002626589	0.003607969	0.004195191
D_Tl	Care & Maintenance	P95	0.000219198	0.00024028	0.000236876	0.000256139	0.000272847	0.000167981	0.000131088	0.000126486	9.80902E-05	0.000151201	0.000188668	0.000219121
D_U	Care & Maintenance	P95	0.000343648	0.000385694	0.000402095	0.000421145	0.000384657	0.00034138	0.000292062	0.000229441	0.000252654	0.000285666	0.000289603	0.000387776
D_V	Care & Maintenance	P95	0.006965963	0.007395932	0.007187167	0.007926697	0.008017945	0.005667439	0.004303685	0.0040631	0.003909546	0.005030159	0.005920815	0.007180194
D_Zn	Care & Maintenance	P95	0.003190727	0.003531101	0.003402596	0.00363196	0.003977273	0.002958272	0.002431483	0.002423149	0.002092211	0.00239232	0.002673473	0.002994436

Appendix B.4.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ7

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.142306611	0.145101249	0.142179221	0.149196967	0.164695799	0.045289837	0.033997752	0.035311326	0.042688411	0.049214255	0.056205422	0.048092429
NO3_N	Care & Maintenance	P95	1.140806794	1.269083142	1.294807196	1.448227286	1.554214597	1.023172617	0.712593853	0.68217051	0.571170807	0.754181325	0.898274064	1.160325408
NO2_N	Care & Maintenance	P95	0.006799831	0.007522245	0.007383989	0.008222838	0.00936418	0.006263531	0.004906185	0.0048046	0.003787114	0.004864857	0.005608881	0.006707927
Br	Care & Maintenance	P95	0.052080806	0.05340001	0.053000402	0.05292793	0.05468908	0.042042542	0.036805876	0.039128374	0.034268796	0.040868171	0.046144523	0.051266313
Cl	Care & Maintenance	P95	0.906280875	0.95875597	0.928584754	0.955925286	1.015498996	0.738890469	0.584640563	0.627518594	0.525656581	0.695072889	0.798435092	0.925762415
F	Care & Maintenance	P95	0.247227266	0.263756394	0.255696446	0.264484733	0.281243056	0.209445447	0.160528228	0.162347913	0.146435261	0.188628852	0.219190523	0.265415728
TDP	Care & Maintenance	P95	0.016607076	0.015404898	0.018962564	0.018574867	0.0178425	0.01530599	0.014107374	0.013136958	0.011950272	0.015520844	0.017963946	0.018540192
SO4	Care & Maintenance	P95	24.28530502	22.80668831	21.82582092	26.57191849	23.78994179	23.4813652	25.18522072	31.18242645	28.69122124	30.17508125	29.67542267	30.80212784
T_CN	Care & Maintenance	P95	0.002604245	0.002649291	0.002607638	0.002593845	0.002877177	0.002627754	0.002618447	0.002470425	0.002496461	0.002681435	0.00259656	0.002570821
WAD_CN	Care & Maintenance	P95	0.002604245	0.002649292	0.002599085	0.002571808	0.002877178	0.002618636	0.002610051	0.002470158	0.002496462	0.002681331	0.002596558	0.002570821
T_Ag	Care & Maintenance	P95	2.76977E-05	2.88579E-05	2.96779E-05	3.32954E-05	3.84043E-05	2.95276E-05	2.23547E-05	2.01278E-05	1.80916E-05	2.18107E-05	2.41639E-05	2.85437E-05
T_Al	Care & Maintenance	P95	0.056709588	0.050724838	0.045281209	0.052833159	0.115364283	0.192048132	0.203083619	0.124573253	0.090469643	0.093712345	0.082103528	0.067170836
T_As	Care & Maintenance	P95	0.000952421	0.000947717	0.000927936	0.001095569	0.001101649	0.000779029	0.00081881	0.000840699	0.000933977	0.001063394	0.000965102	0.0009302
T_B	Care & Maintenance	P95	0.052485451	0.057382088	0.056354128	0.058853466	0.067168914	0.042767841	0.031418297	0.03031908	0.024150612	0.037028734	0.04590318	0.053575195
T_Ba	Care & Maintenance	P95	0.007321359	0.007524619	0.007848256	0.0078968	0.008323275	0.007432777	0.007177428	0.00691283	0.00767105	0.008369274	0.008551016	0.007655897
T_Bi	Care & Maintenance	P95	3.50645E-05	3.48583E-05	3.40973E-05	3.37912E-05	3.803E-05	3.31896E-05	3.16472E-05	3.05396E-05	3.27481E-05	3.5418E-05	3.7808E-05	4.09631E-05
T_Be	Care & Maintenance	P95	9.42475E-05	9.74865E-05	9.90773E-05	0.000101107	0.000111596	8.62855E-05	7.38744E-05	7.56736E-05	6.96558E-05	7.82318E-05	8.50505E-05	9.40734E-05
T_Ca	Care & Maintenance	P95	16.06331062	16.66801071	17.18324089	16.81681252	15.78836536	14.45436668	13.6486721	14.19761467	16.91548729	17.69154549	17.50821114	17.00270271
T_Cd	Care & Maintenance	P95	1.52582E-05	1.70724E-05	1.61636E-05	1.7672E-05	2.02795E-05	1.51522E-05	1.24063E-05	1.26585E-05	1.30311E-05	1.46591E-05	1.41683E-05	1.59282E-05
T_Co	Care & Maintenance	P95	0.000367697	0.000394634	0.000402219	0.00043031	0.000480748	0.000286996	0.000253354	0.000269334	0.000292385	0.000325842	0.000357395	0.000402733
T_Cr	Care & Maintenance	P95	0.000437216	0.000433223	0.000422051	0.000524465	0.000565985	0.000374914	0.000361359	0.000350758	0.000386586	0.000454301	0.000438911	0.00043163
T_Cu	Care & Maintenance	P95	0.000375912	0.000390147	0.000392461	0.00039554	0.000495561	0.000545598	0.000510043	0.000343459	0.000335013	0.000386702	0.000354637	0.000373375
T_Fe	Care & Maintenance	P95	0.084832944	0.082788005	0.080525301	0.115135439	0.134591773	0.146319121	0.15572989	0.119888417	0.110371776	0.112125367	0.101977795	0.093174323
T_Hg	Care & Maintenance	P95	1.24187E-05	1.35349E-05	1.38648E-05	1.44246E-05	1.59723E-05	1.34373E-05	1.02052E-05	7.17654E-06	7.9104E-06	9.73245E-06	1.0326E-05	1.36431E-05
T_K	Care & Maintenance	P95	3.082604408	3.152664661	3.161236286	3.143985271	3.32301712	2.998433113	2.718359709	2.934307814	2.960373163	3.093819857	3.065574884	3.891654968
T_Li	Care & Maintenance	P95	0.039242603	0.042458437	0.042047691	0.044471096	0.050791912	0.035803996	0.025863908	0.018892117	0.018799433	0.025938535	0.032561019	0.040144261
T_Mg	Care & Maintenance	P95	4.955368519	5.186299801	5.352137566	5.334406853	5.043613911	4.698820591	4.079414368	3.876888752	4.635883808	4.646695137	4.664614201	5.799479961
T_Mn	Care & Maintenance	P95	0.052113634	0.048234195	0.044490132	0.052642275	0.042863697	0.053754289	0.059411947	0.053830467	0.06567657	0.075663291	0.097309671	0.097798742
T_Mo	Care & Maintenance	P95	0.001124425	0.001216637	0.001222302	0.001241749	0.001215618	0.000679351	0.000706892	0.000806006	0.000888265	0.000975205	0.000972331	0.000942188
T_Na	Care & Maintenance	P95	11.46813774	12.61933613	12.95211697	13.60246944	14.14159584	10.10214329	8.129904747	7.238374233	7.720304489	8.920339584	9.381219864	12.5658865
T_Ni	Care & Maintenance	P95	0.000868684	0.000892278	0.000899191	0.000922222	0.000985181	0.000810137	0.000687945	0.000568347	0.000649453	0.000731515	0.000740623	0.000958955
T_P	Care & Maintenance	P95	0.018625489	0.019290879	0.018131794	0.021471068	0.023297315	0.022226395	0.020654878	0.018235384	0.023461102	0.026584402	0.027077062	0.023697654
T_Pb	Care & Maintenance	P95	0.000815189	0.000878242	0.000921079	0.00102686	0.001225239	0.000710923	0.000513006	0.000457151	0.000377784	0.000564552	0.000695791	0.00080235
T_S	Care & Maintenance	P95	0.946301162	1.016286612	1.026449084	1.059780598	1.001012206	0.857728541	0.665715337	0.706229508	0.84262073	0.987637758	0.944933236	1.031323433
T_Sb	Care & Maintenance	P95	0.000671563	0.000634404	0.000611727	0.000726067	0.000588641	0.000687166	0.00073825	0.000679303	0.00084562	0.000934186	0.001195469	0.001246097
T_Se	Care & Maintenance	P95	0.000136112	0.000151177	0.000152257	0.000164008	0.000165439	0.000138497	0.00011517	8.67738E-05	9.15566E-05	0.000113944	0.000118524	0.000154127
T_Si	Care & Maintenance	P95	6.639938831	6.816641331	6.686462879	6.608573437	6.917225838	6.11903286	5.962658882	5.851159573	6.014121056	6.747097969	6.799321651	6.923997879
T_Sn	Care & Maintenance	P95	5.20948E-05	5.29886E-05	5.22599E-05	5.22191E-05	5.80468E-05	5.30013E-05	5.28625E-05	4.94384E-05	5.05674E-05	5.37161E-05	5.3496E-05	5.41405E-05
T_Sr	Care & Maintenance	P95	0.090305358	0.096033931	0.099135511	0.097083569	0.088314831	0.084516257	0.07919006	0.075337	0.097493395	0.09502694	0.095490672	0.107350968
T_Ti	Care & Maintenance	P95	0.003515812	0.003227008	0.00267397	0.003744979	0.00370029	0.003909013	0.004786178	0.004139964	0.00373236	0.003652127	0.004015441	0.004129746
T_Tl	Care & Maintenance	P95	0.000188128	0.000207832	0.00020953	0.000229451	0.000262644	0.000160645	0.000116966	0.000111411	8.63504E-05	0.000137153	0.000169759	0.000200952
T_U	Care & Maintenance	P95	0.000320314	0.000362467	0.000387535	0.000385444	0.000382586	0.000340258	0.000282149	0.000223988	0.000246563	0.000275401	0.000280557	0.000359925
T_V	Care & Maintenance	P95	0.006026037	0.006431103	0.006404235	0.006794948	0.007838767	0.005500239	0.004128871	0.003680418	0.003695583	0.004783272	0.005442849	0.006672677
T_Zn	Care & Maintenance	P95	0.003205471	0.003476102	0.003400617	0.003538336	0.003980194	0.003044458	0.002475519	0.002487469	0.002278622	0.002653315	0.002893395	0.003168494
D_Ag	Care & Maintenance	P95	2.76137E-05	2.87985E-05	2.96345E-05	3.32556E-05	3.78545E-05	2.76175E-05	2.17193E-05	2.00647E-05	1.70827E-05	2.1348E-05	2.39205E-05	2.8519E-05
D_Al	Care & Maintenance	P95	0.0167	0.012399999	0.0088	0.020741533	0.056730352	0.124522544	0.073569715	0.063789964	0.0233	0.053600002	0.05913784	0.037999999
D_As	Care & Maintenance	P95	0.000905332	0.00091216	0.000893356	0.00106525	0.001053706	0.000714735	0.000758913	0.000787974	0.000880564	0.001016223	0.000920199	0.000884707
D_B	Care & Maintenance	P95	0.052485451	0.057382088	0.056354128	0.058831278	0.067168914	0.042767774	0.031418297	0.03031908	0.024150612	0.037028644	0.04590318	0.053575195
D_Ba	Care & Maintenance	P95	0.007058208	0.007222641	0.007603747	0.007512666	0.0077126	0.006990509	0.006752807	0.006615253	0.007474337	0.008233367	0.008471394	0.007498216
D_Bi	Care & Maintenance	P95	3.50645E-05	3.48583E-05	3.40973E-05	3.37912E-05	3.803E-05	3.31896E-05	3.16472E-05	3.05396E-05	3.27481E-05	3.5418E-05	3.7808E-05	4.09631E-05
D_Be	Care & Maintenance	P95	9.42475E-05	9.74865E-05	9.90773E-05	0.000101107	0.000111596	8.62855E-05	7.38744E-05	7.56736E-05	6.96558E-05	7.82318E-05	8.50505E-05	9.40734E-05
D_Ca	Care & Maintenance	P95	16.00673866	16.60438347	16.89500999	16.86174393	15.77626896	14.45670605	13.50282001	14.20293427	16.85865021	17.56279755	17.35476494	16.86560059
D_Cd	Care & Maintenance	P95	1.53597E-05	1.56157E-05	1.62749E-05	1.76817E-05	1.98608E-05	1.43675E-05	1.22287E-05	1.31726E-05	1.32535E-05	1.45276E-05	1.39987E-05	1.58668E-05
D_Co	Care & Maintenance	P95	0.000367585	0.000394598	0.000402154	0.00042951	0.000475647	0.000283994	0.000250915	0.000267468	0.00029135	0.000325483	0.000357269	0.000401772
D_Cr	Care & Maintenance	P95	0.000384895	0.000381467	0.000374026	0.0004725	0.000488562	0.000315936	0.000302894	0.000306752	0.000346173	0.000390754	0.000374031	0.000375325
D_Cu	Care & Maintenance	P95	0.000375982	0.000386201	0.000388948	0.0003846	0.000450429	0.000493197	0.000494792	0.000352041	0.000344464	0.00034821	0.000355844	0.000373315
D_Fe	Care & Maintenance	P95	0.060528878	0.059417702	0.054450374	0.071255736	0.065181173	0.083458103	0.097760171	0.081077993	0.079874739	0.082514256	0.074152075	0.066765882
D_Hg	Care & Maintenance	P95	1.24307E-05	1.35467E-05	1.38775E-05	1.44395E-05	1.56698E-05	1.32543E-05	1.00327E-05	7.05658E-06	7.77323E-06	9.59482E-06	1.02972E-05	1.37426E-05
D_K	Care & Maintenance	P95	3.081895113	3.149837494	3.152078867	3.134010553	3.308816433	2.977633953	2.717244148	2.937429428	2.954603672	3.08518362	3.067595482	3.886875153
D_Li	Care & Maintenance	P95	0.039242603	0.042458437	0.042047691	0.044471096	0.050791912	0.035803996	0.025863908	0.018892117	0.018799433	0.025938535	0.032561019	0.040144261
D_Mg	Care & Maintenance	P95	4.946872234	5.216701984	5.281215191	5.340324879	5.036263943	4.685701847	4.086802006	3.86358428	4.600058079	4.616887093	4.617231369	5.804941177
D_Mn	Care & Maintenance	P95	0.051448684	0.046958543	0.042846866	0.051447503	0.040064406	0.051216148	0.055584516	0.051765602	0.064130507	0.072450504	0.095590778	0.096512683
D_Mo	Care & Maintenance	P95	0.001094785	0.001167247	0.001169514	0.001212434	0.001185074	0.00066275	0.000692944	0.000786299	0.000873819	0.00095827	0.000953314	0.000910066
D_Na	Care & Maintenance	P95	11.43522644	12.57961845	12.92780399	13.5536375	14.12638855	10.04735088	8.113472939	7.193492413	7.672622204	8.872694969	9.349793434	12.56081963
D_Ni	Care & Maintenance	P95	0.000868518	0.000892045	0.000898975	0.000921766	0.000967352	0.000807995	0.000686107	0.000565745	0.000648765	0.000731295	0.000740422	0.000953645
D_P	Care & Maintenance	P95	0.096350618	0.094429709	0.080391102	0.086498186	0.066203669	0.059691448	0.053742759	0.077722751	0.078176335	0.090416588	0.11785765	0.112992756
D_Pb	Care & Maintenance	P95	0.000815169	0.000878126	0.000920914	0.001026783	0.001218489	0.000706176	0.000511675	0.000457028	0.000375254	0.000563737	0.0006954	0.000802288
D_S	Care & Maintenance	P95	0.777180254	0.969706714	1.065117121	0.974701107	0.92293036	0.799716532	0.661759794	0.675719857	0.873127282	0.896365166	0.926252782	0.844522476
D_Sb	Care & Maintenance	P95	0.000671563	0.000634404	0.000611727	0.000727594	0.000588641	0.000687166	0.00073825	0.000679303	0.00084562	0.000934158	0.001195467	0.001246096
D_Se	Care & Maintenance	P95	0.000132277	0.000138127	0.000144049	0.000157134	0.000160428	0.000136825	0.000103903	8.42462E-05	8.72463E-05	0.000109128	0.00010674	0.00014074
D_Si	Care & Maintenance	P95	6.502011776	6.655778885	6.439027309	6.375130653	6.576654434	5.847699165	5.75728035	5.697542191	5.920007229	6.639592171	6.685703278	6.726620197
D_Sn	Care & Maintenance	P95	5.20948E-05	5.29886E-05	5.22599E-05	5.22191E-05	5.80468E-05	5.30013E-05	5.28625E-05	4.94384E-05	5.05674E-05	5.37161E-05	5.3496E-05	5.41405E-05
D_Sr	Care & Maintenance	P95	0.090802431	0.097372629	0.097615778	0.097150467	0.088422813	0.08476343	0.079525515	0.075056478	0.096640415	0.095052995	0.095388912	0.107624151
D_Ti	Care & Maintenance	P95	0.00293802	0.002807975	0.002276851	0.002665177	0.00223538	0.002364447	0.002748905	0.003081613	0.002868569	0.002933688	0.003851702	0.003637466
D_Tl	Care & Maintenance	P95	0.000188128	0.000207832	0.00020953	0.000229451	0.000262463	0.000160616	0.000116966	0.000111411	8.63504E-05	0.000137153	0.000169759	0.000200952
D_U	Care & Maintenance	P95	0.000316062	0.000357314	0.000379987	0.000377727	0.000374271	0.000330792	0.000273529	0.000216491	0.00023927	0.0002698	0.000275522	0.000351218
D_V	Care & Maintenance	P95	0.005991381	0.006410453	0.006366625	0.006717096	0.007719646	0.005408619	0.004027803	0.00362941	0.003605456	0.004716111	0.005337459	0.006589605
D_Zn	Care & Maintenance	P95	0.003013806	0.003280766	0.003179878	0.003387893	0.003881204	0.002869362	0.002286443	0.002209367	0.001951225	0.002279183	0.002442434	0.002847262

Appendix B.4.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQCk661

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010296233	0.008109621	0.009197331	0.010195488	0.006239757	0.010253108	0.010258093	0.005725736	0.010273589	0.01027623	0.007795455	0.010290384
NO3_N	Care & Maintenance	P95	0.14004612	0.055772014	0.144012004	0.226363182	0.02292257	0.035146806	0.026043268	0.021260655	0.021656755	0.025620678	0.02772144	0.038491298
NO2_N	Care & Maintenance	P95	0.001709609	0.00071578	0.002078675	0.003381482	0.000661521	0.001679095	0.001682621	0.000802695	0.001693586	0.001695455	0.00145051	0.00170547
Br	Care & Maintenance	P95	0.02489743	0.024893841	0.024939662	0.024962449	0.024934551	0.024924386	0.024922162	0.024905013	0.02489789	0.024923269	0.024905767	0.024901817
Cl	Care & Maintenance	P95	0.406531781	0.257428974	0.306996763	0.354505897	0.255560935	0.23975797	0.306207001	0.256711572	0.207126871	0.256919414	0.257048577	0.30698359
F	Care & Maintenance	P95	0.063853674	0.054911464	0.054339975	0.052582197	0.037998959	0.048368618	0.048434936	0.038287934	0.043668546	0.043703951	0.043773085	0.068748556
TDP	Care & Maintenance	P95	0.005980622	0.003988437	0.007983774	0.011983894	0.009478472	0.003659439	0.004988408	0.003989654	0.001997047	0.003493177	0.002744447	0.002744215
SO4	Care & Maintenance	P95	2.510807037	2.501450062	2.14873004	1.639826059	1.695864081	0.695305884	0.704072833	1.129187584	1.178874969	1.829906583	2.072541237	3.743463039
T_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
WAD_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
T_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	1.93927E-05	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.9995E-05	2.54789E-05
T_Al	Care & Maintenance	P95	0.056798901	0.041955136	0.088604949	0.135308474	0.264327168	0.206065744	0.083264887	0.065912403	0.055803888	0.073797382	0.076540612	0.070752516
T_As	Care & Maintenance	P95	0.000434536	0.000971487	0.000998812	0.000986437	0.000659667	0.000481281	0.000516698	0.000872587	0.000523705	0.000524899	0.000671414	0.00043188
T_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.005521378	0.003542365	0.001819873
T_Ba	Care & Maintenance	P95	0.007009632	0.004653804	0.006090716	0.007498696	0.004270104	0.003058491	0.003863064	0.004344421	0.004973178	0.003860362	0.0040961	0.005247945
T_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
T_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
T_Ca	Care & Maintenance	P95	12.3271513	10.53808689	8.893159866	7.169839859	3.982190609	3.43913722	5.334037781	5.95632267	8.033316612	6.742750645	7.045593262	9.588638306
T_Cd	Care & Maintenance	P95	0.000106955	9.83679E-06	9.88795E-06	9.17137E-06	2.07474E-05	9.66401E-06	9.70661E-06	1.15811E-05	9.83911E-06	9.86169E-06	1.65183E-05	2.16645E-05
T_Co	Care & Maintenance	P95	7.73519E-05	6.7431E-05	6.4614E-05	5.65094E-05	6.3048E-05	5.49272E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	5.71255E-05
T_Cr	Care & Maintenance	P95	0.000150192	0.000299501	0.000287246	0.000274861	0.000474234	0.000150164	0.000194961	0.000316157	0.000229806	0.000150179	0.000339406	0.000150188
T_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000639673	0.000262952	0.000462175	0.000338309	0.000313727	0.000214412	0.000368809	0.000413989
T_Fe	Care & Maintenance	P95	0.372477859	0.171282351	0.170843944	0.170248419	0.223753884	0.1126673	0.104183979	0.19451955	0.209154531	0.121634752	0.167378068	0.186277345
T_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	7.02206E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.06975E-06	3.69131E-06
T_K	Care & Maintenance	P95	0.455954134	0.762362599	0.605371773	0.38591221	0.477018595	0.42597267	0.429437101	0.453104317	0.440211236	0.442047328	0.445631802	0.451888144
T_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
T_Mg	Care & Maintenance	P95	3.416749716	2.381469488	2.259654522	2.136926651	0.961431444	0.842417002	1.371518135	1.621255875	2.073051929	1.80457294	1.859349012	2.649912596
T_Mn	Care & Maintenance	P95	0.023297289	0.016043326	0.015139373	0.013492292	0.014732055	0.006763984	0.007444285	0.012589715	0.007649129	0.007512205	0.014078629	0.017334513
T_Mo	Care & Maintenance	P95	0.000257052	0.000689549	0.000439776	0.000169503	0.000229298	0.000151114	0.000203651	0.00043192	0.00037127	0.000234624	0.000251206	0.000265671
T_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.949081898	2.667256832	1.624258876	1.727152348	2.274847746	2.524455547	2.922783136	2.525213003	2.475964785	2.973891258
T_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000309509	0.000333022	0.000270754	0.000218941	0.000229361	0.000275048	0.00018607	0.000126653	0.000276306	0.000222467
T_P	Care & Maintenance	P95	0.018927287	0.019920494	0.022947572	0.022967372	0.025935275	0.014958494	0.004988408	0.021921264	0.021915361	0.009973226	0.018933197	0.018930394
T_Pb	Care & Maintenance	P95	0.00035137	2.82992E-05	0.000148781	0.000268727	8.34698E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	7.04835E-05
T_S	Care & Maintenance	P95	0.66725117	0.72690016	0.738214016	0.928603113	0.249345496	0.24924387	0.249221623	0.431354851	0.248978898	0.707820833	0.249057695	0.627525747
T_Sb	Care & Maintenance	P95	0.000160495	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
T_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.95096E-05	0.000303901	0.000179623	5.89508E-05	9.83497E-05	0.000304258	0.000191973	0.000180202
T_Si	Care & Maintenance	P95	7.870571613	7.512708187	6.625349522	5.733763695	4.585080624	4.053244114	5.318738461	5.737011433	5.990869999	5.39428997	5.692868233	6.722268581
T_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
T_Sr	Care & Maintenance	P95	0.070234768	0.065067135	0.055124175	0.044729166	0.025398746	0.02433965	0.036337901	0.043492306	0.055910982	0.04180209	0.045457717	0.058228396
T_Ti	Care & Maintenance	P95	0.001892205	0.004978768	0.003616251	0.002246621	0.004986911	0.002126881	0.001595018	0.003138032	0.000896324	0.000897238	0.003088315	0.00164352
T_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
T_U	Care & Maintenance	P95	5.62112E-05	8.60404E-05	7.59837E-05	6.40598E-05	0.000116877	9.17881E-05	6.23754E-05	8.74464E-05	6.36927E-05	5.57918E-05	6.73352E-05	4.36612E-05
T_V	Care & Maintenance	P95	0.000262795	0.000879189	0.000508974	0.000119418	0.00092404	0.000286818	0.000533265	0.000797217	0.000357448	0.000258555	0.000483382	0.000470336
T_Zn	Care & Maintenance	P95	0.028071364	0.001616377	0.002160964	0.002672411	0.004573794	0.001516411	0.001551536	0.003296029	0.001706811	0.002602871	0.001759574	0.00094287
D_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	5.45491E-06	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.55203E-05	2.54789E-05
D_Al	Care & Maintenance	P95	0.04683993	0.031798448	0.075287171	0.118833251	0.169575855	0.192938894	0.075788237	0.054198742	0.042856988	0.05784649	0.06214508	0.220661432
D_As	Care & Maintenance	P95	0.000335129	0.000882021	0.000954073	0.000986437	0.000580023	0.000381787	0.000442085	0.000815395	0.000424252	0.000524899	0.00063164	0.00038217
D_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.002537952	0.003542365	0.001819873
D_Ba	Care & Maintenance	P95	0.006244194	0.004335701	0.005886909	0.007409048	0.003141803	0.002892668	0.003723786	0.004121455	0.004943343	0.003790749	0.003822647	0.005138583
D_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
D_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
D_Ca	Care & Maintenance	P95	11.92952156	9.971467972	8.485545158	6.920817375	3.758189201	3.37280798	5.234553814	5.90244627	7.933864594	6.34496069	6.971015453	9.588638306
D_Cd	Care & Maintenance	P95	5.92394E-05	5.06526E-06	7.50192E-06	9.17137E-06	1.30816E-05	9.66401E-06	9.70661E-06	1.03875E-05	9.83911E-06	9.86169E-06	1.29386E-05	9.9827E-06
D_Co	Care & Maintenance	P95	6.74111E-05	6.7431E-05	6.21286E-05	5.1529E-05	6.3048E-05	5.16107E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	4.22126E-05
D_Cr	Care & Maintenance	P95	0.000150192	0.000359246	0.000317174	0.000274861	0.000309666	0.000150164	0.000170064	0.000255554	0.000150178	0.000150179	0.000229821	0.000150188
D_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000589895	0.000262952	0.00033782	0.000263711	0.000313727	6.52405E-05	0.00023954	0.000413989
D_Fe	Care & Maintenance	P95	0.178277895	0.129460707	0.144657269	0.159764186	0.129667521	0.092129603	0.101492383	0.152015001	0.10757114	0.104686931	0.11955899	0.112069942
D_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	6.32517E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.56694E-06	3.69131E-06
D_K	Care & Maintenance	P95	0.455954134	0.661961675	0.555165589	0.38591221	0.44715181	0.42597267	0.429437101	0.457828879	0.440211236	0.442047328	0.445631802	0.451888144
D_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
D_Mg	Care & Maintenance	P95	3.406790495	2.371528864	2.244741678	2.117004633	0.9455024	0.832467675	1.366544008	1.622084737	2.063106775	1.814517736	1.76985538	2.649912596
D_Mn	Care & Maintenance	P95	0.020712692	0.012285748	0.012246306	0.011460267	0.007245444	0.004764159	0.006056487	0.008486819	0.007131974	0.006666902	0.007819057	0.010718166
D_Mo	Care & Maintenance	P95	0.000257052	0.000547397	0.000368692	0.000169503	0.000196445	0.000127899	0.000188729	0.000270539	0.00037127	0.000212746	0.000244245	0.000220932
D_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.924227238	2.617452383	1.591073513	1.478417754	2.274847746	2.507878065	2.823330402	2.525213003	2.475964785	2.973891258
D_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000277198	0.000268276	0.000270754	0.000218941	0.000219412	0.000275048	0.00018607	0.000126653	0.000251447	0.000162815
D_P	Care & Maintenance	P95	0.004984725	0.14936845	0.077316038	0.004994408	0.024937894	0.004988739	0.004988408	0.087172404	0.004984794	0.004988573	0.077212691	0.004985378
D_Pb	Care & Maintenance	P95	2.82954E-05	2.82992E-05	2.82364E-05	2.71747E-05	2.74696E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	2.82303E-05
D_S	Care & Maintenance	P95	0.418276817	0.856348157	0.897827864	0.798798382	0.249345496	0.24924387	0.249221623	0.273955166	0.617467701	0.857360423	0.537964582	0.637486458
D_Sb	Care & Maintenance	P95	0.000135643	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
D_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.45319E-05	0.000303901	0.000179623	9.12766E-05	0.000102328	0.000304258	0.000181035	0.000180202
D_Si	Care & Maintenance	P95	7.870571613	7.482886314	6.359405994	5.230738163	4.216722965	3.855914831	4.632300377	5.642520905	5.990869999	5.39428997	5.638177395	6.692442894
D_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
D_Sr	Care & Maintenance	P95	0.068445429	0.064768918	0.054254264	0.043284833	0.023308069	0.023875346	0.036288153	0.043011561	0.055413723	0.04180209	0.044065598	0.057433043
D_Ti	Care & Maintenance	P95	0.001195077	0.004978768	0.003516493	0.002046921	0.002717866	0.001196371	0.001046731	0.002938792	0.000796733	0.000797545	0.002938881	0.000896465
D_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
D_U	Care & Maintenance	P95	5.62112E-05	8.40522E-05	7.2504E-05	5.90793E-05	8.35259E-05	8.51552E-05	5.59089E-05	7.70026E-05	5.07638E-05	4.9825E-05	6.18661E-05	3.12338E-05
D_V	Care & Maintenance	P95	0.000153447	0.000759901	0.000423226	6.71236E-05	0.000585549	0.000225464	0.000319374	0.000605749	0.000307721	0.000288389	0.000428691	0.000174563
D_Zn	Care & Maintenance	P95	0.01265048	0.003703921	0.003204854	0.002672411	0.003453789	0.001450081	0.001551536	0.00210246	0.001706811	0.001608395	0.002057886	0.000371209

Appendix B.4.6: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ5

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010963622	0.008791563	0.009901682	0.010762515	0.00678452	0.010765209	0.010827253	0.006392808	0.010894493	0.010938779	0.008509735	0.010972886
NO3_N	Care & Maintenance	P95	0.185208485	0.101082198	0.190589622	0.263673693	0.058192015	0.070850566	0.065833434	0.064060211	0.065132655	0.071962141	0.075278372	0.086065248
NO2_N	Care & Maintenance	P95	0.002181841	0.001191037	0.002561163	0.003762854	0.00102852	0.002041448	0.002085349	0.001246101	0.002132927	0.002164262	0.001935256	0.002188396
Br	Care & Maintenance	P95	0.024671009	0.024679273	0.024694156	0.024883775	0.024870206	0.024815343	0.024824368	0.024720034	0.02471059	0.024844147	0.024721535	0.024670606
Cl	Care & Maintenance	P95	0.421247393	0.273791373	0.323571414	0.367575616	0.268196166	0.252756536	0.319895029	0.272022992	0.223301142	0.27351597	0.274088919	0.323397458
F	Care & Maintenance	P95	0.072535709	0.063526526	0.063436553	0.060072038	0.044813	0.055184137	0.05600987	0.046549298	0.051994231	0.052588038	0.052894752	0.077558942
TDP	Care & Maintenance	P95	0.005937846	0.003965065	0.007917752	0.011950149	0.009457308	0.003649015	0.004973845	0.003969505	0.001991629	0.003486141	0.002733592	0.002730591
SO4	Care & Maintenance	P95	3.661616087	3.627927303	3.342022896	2.625515223	2.57260108	1.596267462	1.705423355	2.199567318	2.265672922	2.980982304	3.251202345	4.903269291
T_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
WAD_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
T_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	2.02851E-05	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	2.11917E-05	2.66044E-05
T_Al	Care & Maintenance	P95	0.056354981	0.041662332	0.087811328	0.134907186	0.263665617	0.205199152	0.082969487	0.065482147	0.055444159	0.073588453	0.076033495	0.070169725
T_As	Care & Maintenance	P95	0.000737636	0.001261089	0.001303955	0.001237152	0.000886126	0.000713172	0.000774048	0.001144647	0.000804452	0.000824476	0.000977029	0.000741843
T_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.006771926	0.004853566	0.00315927
T_Ba	Care & Maintenance	P95	0.007234095	0.004904456	0.006335227	0.007683451	0.004467259	0.003271249	0.004090347	0.004582642	0.00520734	0.00412507	0.004364689	0.005501651
T_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
T_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
T_Ca	Care & Maintenance	P95	12.83890438	11.06247902	9.469182968	7.662473202	4.452955246	3.92296958	5.850152493	6.503061295	8.562823296	7.324998379	7.63932991	10.14951801
T_Cd	Care & Maintenance	P95	0.00011136	1.54241E-05	1.57817E-05	1.40193E-05	2.4945E-05	1.40423E-05	1.45728E-05	1.67851E-05	1.51477E-05	1.55263E-05	2.2244E-05	2.73393E-05
T_Co	Care & Maintenance	P95	0.000116444	0.000105823	0.000105156	8.98933E-05	9.26948E-05	8.51284E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	9.73762E-05
T_Cr	Care & Maintenance	P95	0.000150626	0.000298492	0.000286215	0.00027457	0.000473481	0.000150497	0.000194912	0.000315164	0.00022945	0.000150609	0.000338245	0.000150632
T_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000661652	0.000289158	0.000489024	0.000368672	0.00034488	0.000248979	0.000402192	0.000446867
T_Fe	Care & Maintenance	P95	0.369117767	0.169831887	0.169191658	0.16972129	0.223184243	0.112187497	0.10378693	0.19309704	0.207603693	0.12125814	0.166162118	0.184575647
T_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.75383E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.08454E-06	4.72853E-06
T_K	Care & Maintenance	P95	0.91995281	1.212474585	1.082404017	0.780135036	0.826970339	0.782007873	0.825143218	0.877862871	0.871892154	0.902680993	0.91858387	0.926394105
T_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
T_Mg	Care & Maintenance	P95	3.40957427	2.384706497	2.26475811	2.142514467	0.978316665	0.860795617	1.38589251	1.633626699	2.079978228	1.815541625	1.869862437	2.649706841
T_Mn	Care & Maintenance	P95	0.028698191	0.021424793	0.020829206	0.018183358	0.018894739	0.011074806	0.012228132	0.017665064	0.012866957	0.013082113	0.019708239	0.022938941
T_Mo	Care & Maintenance	P95	0.000408116	0.000831719	0.000593224	0.000298587	0.000343582	0.000268018	0.000332994	0.000568048	0.000510322	0.000384831	0.000405218	0.000420019
T_Na	Care & Maintenance	P95	3.568682432	3.273393869	3.006129503	2.717311144	1.679378271	1.782087922	2.329643726	2.580247164	2.974489212	2.58568716	2.538736582	3.030044556
T_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000373492	0.000385295	0.00031791	0.000267379	0.000283082	0.000332192	0.000245234	0.000190581	0.000339903	0.000287023
T_P	Care & Maintenance	P95	0.018766772	0.0197598	0.022734245	0.022899009	0.025871644	0.014898636	0.004973845	0.021767929	0.021760102	0.009945619	0.018802591	0.018766485
T_Pb	Care & Maintenance	P95	0.000354456	3.55656E-05	0.000154776	0.000272284	8.85136E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	7.74958E-05
T_S	Care & Maintenance	P95	0.661183059	0.720634818	0.730947018	0.925676405	0.248702064	0.248153403	0.24824369	0.428150982	0.247105926	0.705573797	0.24721536	0.621699274
T_Sb	Care & Maintenance	P95	0.000409431	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
T_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.97562E-05	0.000311795	0.000189819	7.13859E-05	0.000110491	0.00031447	0.000203996	0.000192428
T_Si	Care & Maintenance	P95	7.871860504	7.518672466	6.64394474	5.759184361	4.619346142	4.093528271	5.34903574	5.764414787	6.015539169	5.428564072	5.723977566	6.739352226
T_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
T_Sr	Care & Maintenance	P95	0.073241889	0.068078272	0.058438696	0.047569294	0.02812246	0.027117526	0.03928832	0.046573579	0.058886241	0.045165058	0.048860963	0.061468106
T_Ti	Care & Maintenance	P95	0.001874997	0.004935855	0.003580653	0.00223954	0.004974041	0.002117576	0.00158876	0.003114724	0.000889581	0.000894389	0.003065471	0.00162826
T_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
T_U	Care & Maintenance	P95	7.02046E-05	9.93444E-05	9.01585E-05	7.58354E-05	0.000126823	0.00010215	7.42295E-05	9.98714E-05	7.66121E-05	6.96837E-05	8.14421E-05	5.81421E-05
T_V	Care & Maintenance	P95	0.000404267	0.001009555	0.000651638	0.000241005	0.001024104	0.000395031	0.000650727	0.000920146	0.000487825	0.000399001	0.000624523	0.000612145
T_Zn	Care & Maintenance	P95	0.028008152	0.0018727	0.002423826	0.002882442	0.004741464	0.001718217	0.001775449	0.003515105	0.001949218	0.002849609	0.002024476	0.001219903
D_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	6.48852E-06	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	1.67782E-05	2.66044E-05
D_Al	Care & Maintenance	P95	0.046486575	0.031593189	0.07462465	0.118483894	0.169158861	0.192129716	0.075522177	0.05385549	0.042594653	0.057688203	0.061744444	0.218686759
D_As	Care & Maintenance	P95	0.000639563	0.001172799	0.001259837	0.001237152	0.000807288	0.000614703	0.000700289	0.001088158	0.000706241	0.000824476	0.000937799	0.000692816
D_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.003828253	0.004853566	0.00315927
D_Ba	Care & Maintenance	P95	0.006478935	0.004590536	0.006134245	0.007594823	0.003350391	0.003107134	0.003952663	0.004362416	0.005177877	0.004056385	0.004094978	0.005393791
D_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
D_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
D_Ca	Care & Maintenance	P95	12.44661427	10.50330544	9.067220688	7.416285992	4.231224537	3.857323408	5.751807213	6.449847698	8.464612961	6.932508469	7.565772057	10.14951801
D_Cd	Care & Maintenance	P95	6.42847E-05	1.07153E-05	1.34287E-05	1.40193E-05	1.73568E-05	1.40423E-05	1.45728E-05	1.56062E-05	1.51477E-05	1.55263E-05	1.87132E-05	1.58179E-05
D_Co	Care & Maintenance	P95	0.000106637	0.000105823	0.000102705	8.49695E-05	9.26948E-05	8.18461E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	8.26681E-05
D_Cr	Care & Maintenance	P95	0.000150626	0.000357722	0.000315848	0.00027457	0.000309338	0.000150497	0.000170206	0.000255011	0.000150581	0.000150609	0.00022947	0.000150632
D_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000612378	0.000289158	0.000366092	0.00029499	0.00034488	0.000101796	0.000274692	0.000446867
D_Fe	Care & Maintenance	P95	0.176683903	0.128370702	0.143262789	0.159270108	0.129340634	0.091739655	0.101105899	0.150908187	0.10678447	0.104364119	0.118696779	0.111057244
D_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.064E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.57492E-06	4.72853E-06
D_K	Care & Maintenance	P95	0.91995281	1.113392949	1.032894015	0.780135036	0.797406197	0.782007873	0.825143218	0.882529318	0.871892154	0.902680993	0.91858387	0.926394105
D_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
D_Mg	Care & Maintenance	P95	3.399705887	2.374896288	2.250051975	2.122819901	0.96254909	0.850948632	1.380975127	1.63444531	2.070157051	1.825353861	1.781593561	2.649706841
D_Mn	Care & Maintenance	P95	0.026148301	0.017716594	0.017976249	0.016174469	0.011483992	0.009095566	0.010856214	0.013612596	0.012356261	0.012248073	0.01353431	0.016413433
D_Mo	Care & Maintenance	P95	0.000408116	0.000691435	0.000523126	0.000298587	0.000311062	0.000245042	0.000318242	0.000408651	0.000510322	0.000363244	0.000398353	0.000375894
D_Na	Care & Maintenance	P95	3.568682432	3.273393869	2.981619596	2.668073893	1.646529198	1.535914063	2.329643726	2.563873291	2.876277924	2.58568716	2.538736582	3.030044556
D_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000341629	0.000321286	0.00031791	0.000267379	0.000273248	0.000332192	0.000245234	0.000190581	0.000315383	0.00022819
D_P	Care & Maintenance	P95	0.004951005	0.148092017	0.076567508	0.004982691	0.024876835	0.0049725	0.004973845	0.086534418	0.004956901	0.00497679	0.076650985	0.004950945
D_Pb	Care & Maintenance	P95	3.57196E-05	3.55656E-05	3.59032E-05	3.34825E-05	3.30808E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	3.58227E-05
D_S	Care & Maintenance	P95	0.414472938	0.848967016	0.888989627	0.796280801	0.248702064	0.248153403	0.24824369	0.271920353	0.612822711	0.854638696	0.533985198	0.631567478
D_Sb	Care & Maintenance	P95	0.000384913	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
D_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.48288E-05	0.000311795	0.000189819	0.000103314	0.000114419	0.00031447	0.000193208	0.000192428
D_Si	Care & Maintenance	P95	7.871860504	7.489242554	6.381688595	5.26188612	4.254721165	3.898230076	4.670451641	5.671084881	6.015539169	5.428564072	5.670035362	6.709936142
D_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
D_Sr	Care & Maintenance	P95	0.071476586	0.067783974	0.057580847	0.046141408	0.026052969	0.026658	0.03923915	0.046098743	0.058395188	0.045165058	0.047487892	0.060683668
D_Ti	Care & Maintenance	P95	0.001184208	0.004935855	0.003481876	0.00204047	0.002710853	0.001191136	0.001042623	0.002916964	0.000790739	0.000795013	0.002917141	0.000888142
D_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
D_U	Care & Maintenance	P95	7.02046E-05	9.73824E-05	8.67271E-05	7.09117E-05	9.38095E-05	9.55853E-05	6.7837E-05	8.9556E-05	6.38446E-05	6.37964E-05	7.60479E-05	4.58853E-05
D_V	Care & Maintenance	P95	0.000296387	0.000891834	0.000567079	0.000189306	0.000689043	0.000334309	0.000439285	0.000731031	0.000438719	0.000428438	0.00057058	0.000320434
D_Zn	Care & Maintenance	P95	0.01276421	0.003932809	0.003453244	0.002882442	0.003632808	0.001652571	0.001775449	0.002336205	0.001949218	0.001868385	0.002318706	0.000656091

Appendix B.4.7: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ8

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.008543154	0.008608781	0.01	0.00905	0.008779639	0.0086	0.008220797	0.007937597	0.01	0.01	0.008346112	0.01
NO3_N	Care & Maintenance	P95	0.068000004	0.0854	0.092200004	0.053649999	0.070800588	0.044915538	0.037879989	0.030036602	0.027554745	0.026264014	0.081	0.086000003
NO2_N	Care & Maintenance	P95	0.001179893	0.0028	0.001223245	0.001164441	0.0016	0.001471034	0.001378482	0.001233696	0.001151006	0.001133458	0.0015	0.0015
Br	Care & Maintenance	P95	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999
Cl	Care & Maintenance	P95	0.290490448	0.289582968	0.287846893	0.285627782	0.290533841	0.291666657	0.399999976	0.325438946	0.309205592	0.300395489	0.296457827	0.292964756
F	Care & Maintenance	P95	0.061999999	0.059999999	0.064999998	0.061500002	0.061999999	0.060999997	0.059999999	0.059417404	0.059999999	0.064000003	0.060999997	0.066
TDP	Care & Maintenance	P95	0.016000001	0.013	0.018750001	0.0175	0.013578156	0.01022636	0.009427901	0.0085	0.008457224	0.008160164	0.0115	0.016000001
SO4	Care & Maintenance	P95	4.069999695	4.029999733	4.159999847	3.650000095	3.789999962	3.59499979	3.431183338	3.629999876	3.539999962	3.74000001	3.700000048	3.879999876
T_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
WAD_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
T_Ag	Care & Maintenance	P95	1.14504E-05	1.1424E-05	2.5E-05	1.5E-05	1.4327E-05	1.5E-05	1.38908E-05	1.24613E-05	1.17132E-05	1.16123E-05	1.15927E-05	1.15879E-05
T_Al	Care & Maintenance	P95	0.045220643	0.04270982	0.041136548	0.039269812	0.051869012	0.067537948	0.065789461	0.057762444	0.053805687	0.051637679	0.049304355	0.047249909
T_As	Care & Maintenance	P95	0.00062	0.00057	0.000571138	0.000572443	0.000623997	0.0006039	0.000576199	0.000563499	0.000564659	0.000561724	0.00059	0.00062
T_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.004956604	0.005	0.005	0.005	0.005	0.005	0.005
T_Ba	Care & Maintenance	P95	0.0063	0.00605	0.00584	0.005727904	0.005881	0.005818333	0.00565	0.005581329	0.00609	0.00629	0.00599	0.0056653
T_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
T_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
T_Ca	Care & Maintenance	P95	21.70000076	22.60000038	21.19999886	19.54999924	19.64999962	19.35000038	18.79999924	19.95000076	19.5	21.29999924	20.40000153	23.19999886
T_Cd	Care & Maintenance	P95	5.98466E-06	6.97822E-06	7.5E-06	6.98894E-06	7.13141E-06	7.34792E-06	6.75075E-06	6.13195E-06	5.92264E-06	5.82956E-06	5.79329E-06	5.99273E-06
T_Co	Care & Maintenance	P95	5.05578E-05	5.07553E-05	5.08552E-05	5.08988E-05	5.08262E-05	5.12971E-05	5.10357E-05	5.05983E-05	5.07515E-05	5.06282E-05	5.04661E-05	5.05196E-05
T_Cr	Care & Maintenance	P95	0.00015076	0.000148585	0.00014839	0.000148468	0.000160141	0.000198027	0.000181807	0.000158695	0.000162268	0.000159847	0.000152543	0.000156919
T_Cu	Care & Maintenance	P95	0.000294197	0.00029429	0.000293188	0.000291982	0.000334325	0.00033923	0.000312537	0.000308777	0.000305775	0.000303489	0.000297727	0.000295309
T_Fe	Care & Maintenance	P95	0.066455349	0.067692861	0.067728996	0.066212088	0.075754978	0.085343987	0.076182462	0.068372272	0.067597792	0.068299323	0.065809645	0.06795755
T_Hg	Care & Maintenance	P95	2.88041E-06	2.87006E-06	2.86592E-06	2.8427E-06	2.79138E-06	3.38989E-06	3.02903E-06	2.9335E-06	2.8987E-06	2.87691E-06	2.85455E-06	2.889E-06
T_K	Care & Maintenance	P95	0.899999976	0.899999976	0.907000005	0.96450001	0.832229733	0.791999996	0.775999963	0.797500014	0.787999988	0.88499999	0.799999952	0.848999977
T_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
T_Mg	Care & Maintenance	P95	5.014999866	5.130000114	5.070000172	4.559999943	4.720000267	4.588333607	4.53000021	4.625	4.660000324	4.829999924	4.690000057	5.150000095
T_Mn	Care & Maintenance	P95	0.017482238	0.016439868	0.015693141	0.014417599	0.016000001	0.01500864	0.013458639	0.012879174	0.012352709	0.012224556	0.0513	0.018453646
T_Mo	Care & Maintenance	P95	0.000552	0.00059	0.00056	0.000521	0.00052	0.0005195	0.0005	0.000529	0.000559	0.000555	0.00053	0.000545
T_Na	Care & Maintenance	P95	3.899999857	3.799999952	3.799999952	3.503786087	3.575000048	3.400000095	3.400000095	3.370000124	3.5	3.700000048	3.5	3.799999952
T_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.00025	0.000260457	0.000256674	0.000253741	0.000252475	0.000252573	0.000251469	0.00025	0.00025
T_P	Care & Maintenance	P95	0.030999999	0.032000002	0.029999999	0.029000001	0.027000001	0.026724365	0.023903636	0.021864926	0.021149687	0.020822769	0.033	0.030999999
T_Pb	Care & Maintenance	P95	3.85487E-05	4.07711E-05	4.0357E-05	4.02433E-05	7.28757E-05	5.54605E-05	4.79094E-05	4.37767E-05	4.21298E-05	4.13441E-05	4.01497E-05	3.90423E-05
T_S	Care & Maintenance	P95	1.330000043	1.379999995	1.180000067	1.50999999	1.273689151	1.169999957	1.200000048	1.3549999	1.180000067	1.379999995	1.169999957	1.350000024
T_Sb	Care & Maintenance	P95	6.26913E-05	6.28345E-05	6.33039E-05	6.30896E-05	6.40868E-05	6.42393E-05	6.06366E-05	5.99993E-05	6.08346E-05	6.11288E-05	6.18703E-05	6.27133E-05
T_Se	Care & Maintenance	P95	9.30128E-05	9.68284E-05	9.47747E-05	9.32558E-05	8.90302E-05	7.58057E-05	8.29662E-05	8.72624E-05	8.47121E-05	8.5E-05	9.51663E-05	9.64647E-05
T_Si	Care & Maintenance	P95	4.579999924	4.710000038	4.449999809	4.379795074	4.469752789	4.422982216	4.257268906	4.092207909	4.059483528	4.037065983	4.389999866	4.53000021
T_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
T_Sr	Care & Maintenance	P95	0.105999999	0.105999999	0.101999998	0.092448801	0.098466672	0.093449995	0.0911	0.092649996	0.096900001	0.096000001	0.095700003	0.107000001
T_Ti	Care & Maintenance	P95	0.003408093	0.003101747	0.002916371	0.00285617	0.002613903	0.002552094	0.0039	0.0027	0.002632198	0.005	0.005	0.005
T_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
T_U	Care & Maintenance	P95	9E-05	9E-05	9E-05	8.6328E-05	8.50663E-05	8.8896E-05	8.76653E-05	8.9E-05	9E-05	8.64378E-05	9E-05	8.75E-05
T_V	Care & Maintenance	P95	0.000310782	0.000307933	0.000311335	0.000308876	0.000294905	0.000380709	0.000325287	0.000318132	0.000323236	0.000319587	0.000311663	0.000311332
T_Zn	Care & Maintenance	P95	0.001833607	0.002153645	0.00210933	0.002069171	0.002120779	0.002248208	0.001986461	0.001901885	0.001889984	0.001872253	0.001878017	0.001862629
D_Ag	Care & Maintenance	P95	1.03439E-05	1.03776E-05	1.02611E-05	1.5E-05	1.29721E-05	1.5E-05	1.2899E-05	1.11736E-05	1.04186E-05	1.03534E-05	1.06329E-05	1.04454E-05
D_Al	Care & Maintenance	P95	0.032598488	0.031579368	0.031119874	0.030040657	0.040348336	0.04288736	0.044951733	0.039663929	0.037801281	0.036469825	0.033812944	0.031961635
D_As	Care & Maintenance	P95	0.00056	0.00052	0.00054	0.000528271	0.00058608	0.000559725	0.000527874	0.000514407	0.00052	0.00053	0.000517876	0.00055
D_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.00494892	0.005	0.005	0.005	0.005	0.005	0.005
D_Ba	Care & Maintenance	P95	0.00605	0.00563	0.005455	0.005443146	0.00563988	0.00559	0.00537	0.005525	0.00595	0.00581	0.00553	0.005392892
D_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
D_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
D_Ca	Care & Maintenance	P95	22.19999886	22.29999924	21.10000038	18.95000076	18.86666679	19.18333435	18.70000076	19.54999924	19.79999924	19.79999924	20	21
D_Cd	Care & Maintenance	P95	6.78684E-06	7.23213E-06	7.12342E-06	6.85399E-06	7.5E-06	7.8075E-06	7.5E-06	7.35487E-06	7.02284E-06	6.805E-06	6.83265E-06	6.79546E-06
D_Co	Care & Maintenance	P95	5E-05	5E-05	5E-05	4.96865E-05	5E-05	5.06421E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Cr	Care & Maintenance	P95	0.000110919	0.000109586	0.000110872	0.000109946	0.000126362	0.000123053	0.000118833	0.000120637	0.000116971	0.000114664	0.00011118	0.000113469
D_Cu	Care & Maintenance	P95	0.000308045	0.000307675	0.000306483	0.000304634	0.000346481	0.000344704	0.0004	0.000335413	0.000322298	0.00032051	0.00031115	0.000304674
D_Fe	Care & Maintenance	P95	0.043176372	0.042891204	0.043100003	0.04261345	0.055656467	0.050405126	0.045218166	0.04160453	0.042199802	0.042094328	0.04178752	0.044040661
D_Hg	Care & Maintenance	P95	2.85664E-06	2.84505E-06	2.83977E-06	2.81853E-06	2.78788E-06	3.25907E-06	2.95706E-06	2.87321E-06	2.84397E-06	2.82827E-06	2.8096E-06	2.86177E-06
D_K	Care & Maintenance	P95	0.861999989	0.897000015	0.893000007	0.944999993	0.807859838	0.773923278	0.75168556	0.743000031	0.763999999	0.799999952	0.824999988	0.844000041
D_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
D_Mg	Care & Maintenance	P95	5.400000095	5.049999714	5.309999943	4.475517273	4.699999809	4.36833334	4.420000076	4.485000134	4.610000134	4.800000191	4.610000134	4.855000019
D_Mn	Care & Maintenance	P95	0.004406439	0.004521863	0.004539967	0.004494756	0.005259512	0.004514821	0.00496	0.004334067	0.0044	0.0047	0.004462278	0.004384978
D_Mo	Care & Maintenance	P95	0.00051	0.00051	0.000544	0.000480878	0.000477	0.0004995	0.000512	0.0005025	0.00057	0.000494	0.00049	0.00048
D_Na	Care & Maintenance	P95	4	3.799999952	3.799999952	3.465518475	3.549999952	3.365739346	3.400000095	3.375	3.5	3.5	3.400000095	3.700000048
D_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.000248057	0.00025	0.000251132	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
D_P	Care & Maintenance	P95	0.067823239	0.064019099	0.062393848	0.059784561	0.054789599	0.039417785	0.064000003	0.087499999	0.053003393	0.150000006	0.150000006	0.074130394
D_Pb	Care & Maintenance	P95	2.55471E-05	2.55408E-05	2.55507E-05	2.55386E-05	2.56443E-05	2.55674E-05	2.54978E-05	2.54591E-05	2.5471E-05	2.54827E-05	2.55243E-05	2.55506E-05
D_S	Care & Maintenance	P95	1.279999971	1.449999928	1.419999957	1.25999999	1.208880424	1.204999924	1.269999981	1.320000052	1.159694314	1.309999943	1.25	1.410000086
D_Sb	Care & Maintenance	P95	6.26327E-05	6.25433E-05	6.29853E-05	6.27697E-05	6.38222E-05	6.40132E-05	6.05639E-05	5.99335E-05	6.07737E-05	6.10712E-05	6.18231E-05	6.26502E-05
D_Se	Care & Maintenance	P95	0.0001105	9.70102E-05	9.48274E-05	9.24679E-05	8.5068E-05	7.70183E-05	8.48019E-05	8.85E-05	8.25496E-05	8.28984E-05	9.49817E-05	9.44401E-05
D_Si	Care & Maintenance	P95	4.590000153	4.509999752	4.460000038	4.294899464	4.299478531	4.172879696	4.007989407	3.871937752	3.842913628	3.831040382	4.340000153	4.470000267
D_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Sr	Care & Maintenance	P95	0.104000002	0.105999999	0.103	0.091167629	0.097199999	0.090433337	0.089300007	0.092699997	0.097199999	0.093699999	0.091499999	0.101500005
D_Ti	Care & Maintenance	P95	0.001950015	0.001814368	0.001740755	0.001639009	0.001488281	0.001281202	0.001041916	0.002575	0.001172029	0.005	0.005	0.00223106
D_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
D_U	Care & Maintenance	P95	8.75E-05	8.01484E-05	8.5E-05	8.04805E-05	8E-05	8.01938E-05	8.01167E-05	8.6E-05	8.7E-05	8.06423E-05	8.02007E-05	8E-05
D_V	Care & Maintenance	P95	0.000265972	0.000263801	0.000267902	0.000268593	0.000251727	0.000301487	0.000264426	0.000262905	0.000271099	0.000269701	0.000267532	0.000270273
D_Zn	Care & Maintenance	P95	0.0014	0.00131683	0.001316707	0.0015	0.001511171	0.001753172	0.001501507	0.0013499	0.001334003	0.001300466	0.001240521	0.001220674

Appendix B.4.8: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ9

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.028449932	0.028127765	0.030930787	0.064232744	0.043021303	0.016826354	0.0119193	0.01427978	0.018432502	0.024284573	0.017628035	0.0161718
NO3_N	Care & Maintenance	P95	0.412606925	0.438603908	0.309941232	0.716690719	0.473047227	0.199290887	0.110540099	0.120257579	0.168265313	0.39593029	0.316188663	0.327641636
NO2_N	Care & Maintenance	P95	0.002792486	0.003529535	0.002235696	0.004322118	0.00363721	0.002072108	0.001671757	0.001629065	0.001754	0.002765067	0.002559308	0.002717623
Br	Care & Maintenance	P95	0.032472335	0.033126913	0.03001119	0.037263252	0.032498881	0.02780989	0.02686999	0.026737392	0.027699964	0.032781992	0.031356361	0.031451318
Cl	Care & Maintenance	P95	0.467260301	0.464144498	0.402362853	0.597717106	0.469336152	0.360167891	0.397756904	0.329607606	0.367738575	0.487448603	0.434091568	0.428138733
F	Care & Maintenance	P95	0.119240999	0.119432211	0.101289265	0.15628916	0.119403772	0.082019873	0.075247198	0.075062387	0.090895124	0.12427289	0.112902939	0.113450631
TDP	Care & Maintenance	P95	0.016084105	0.012852998	0.016248735	0.017942712	0.013364436	0.010005662	0.009232567	0.010006343	0.00839766	0.011224795	0.011969048	0.015533125
SO4	Care & Maintenance	P95	10.3344326	10.03687668	7.426751614	12.53131294	8.764533997	8.309336662	7.243843555	11.07790375	10.4223938	14.9363718	11.78372955	9.763825417
T_CN	Care & Maintenance	P95	0.002517159	0.002529271	0.002515259	0.00253062	0.002593158	0.002521153	0.00251495	0.002495735	0.002499201	0.002584275	0.002520457	0.002512704
WAD_CN	Care & Maintenance	P95	0.002517159	0.002528157	0.002514328	0.002529222	0.002593158	0.002519378	0.002514032	0.002495714	0.002499201	0.00258426	0.002520457	0.002512704
T_Ag	Care & Maintenance	P95	1.38903E-05	1.36205E-05	2.21122E-05	2.32546E-05	1.84161E-05	1.7788E-05	1.41015E-05	1.2026E-05	1.23341E-05	1.59402E-05	1.39284E-05	1.59874E-05
T_Al	Care & Maintenance	P95	0.039510112	0.031636428	0.04393696	0.050230209	0.07291425	0.088422105	0.085191064	0.064974256	0.054991439	0.055103425	0.051053599	0.039594516
T_As	Care & Maintenance	P95	0.000693642	0.000651698	0.000628386	0.00080149	0.000690596	0.000618909	0.000617159	0.000647901	0.000684634	0.000764874	0.000684695	0.000654445
T_B	Care & Maintenance	P95	0.020495767	0.020439843	0.014148396	0.030902188	0.021618502	0.010720678	0.00908183	0.008426869	0.011818113	0.021242291	0.016038092	0.015942562
T_Ba	Care & Maintenance	P95	0.006762928	0.007013185	0.006894805	0.006788548	0.006521294	0.00626467	0.00623042	0.006194431	0.006927767	0.007343321	0.006701345	0.006497799
T_Bi	Care & Maintenance	P95	2.68017E-05	2.69357E-05	2.63226E-05	2.87131E-05	2.7678E-05	2.64672E-05	2.5854E-05	2.57802E-05	2.67761E-05	2.97769E-05	2.84494E-05	2.71846E-05
T_Be	Care & Maintenance	P95	6.40656E-05	6.44176E-05	5.99222E-05	7.46628E-05	6.66192E-05	5.65863E-05	5.43904E-05	5.37134E-05	5.57171E-05	6.25112E-05	6.17968E-05	6.08107E-05
T_Ca	Care & Maintenance	P95	20.32764244	21.57192421	20.73093605	19.24177361	18.40339851	17.84347343	17.78959274	18.7608242	18.83164787	20.07096291	19.38718224	21.66600227
T_Cd	Care & Maintenance	P95	7.61533E-06	8.07147E-06	8.75934E-06	1.21425E-05	9.75175E-06	8.03071E-06	7.61681E-06	6.36996E-06	7.51937E-06	9.69593E-06	7.84458E-06	7.82451E-06
T_Co	Care & Maintenance	P95	0.000160307	0.000155776	0.000117519	0.00022997	0.000169444	9.58838E-05	8.16092E-05	9.56529E-05	0.000121449	0.000200395	0.000145072	0.000135781
T_Cr	Care & Maintenance	P95	0.000219031	0.000209212	0.000218095	0.000317438	0.000242943	0.000219627	0.000201806	0.000196568	0.000224067	0.000277951	0.000231424	0.000215003
T_Cu	Care & Maintenance	P95	0.00029689	0.000300507	0.000299973	0.000352299	0.000405311	0.000365201	0.000379969	0.000310169	0.000305923	0.000319539	0.000298904	0.000292489
T_Fe	Care & Maintenance	P95	0.087757729	0.095203087	0.118632488	0.113277368	0.104994506	0.104448199	0.095717505	0.095775113	0.105672061	0.109320015	0.104776107	0.085599177
T_Hg	Care & Maintenance	P95	5.60413E-06	5.78629E-06	4.75199E-06	8.30124E-06	6.24881E-06	4.75315E-06	3.99413E-06	3.67217E-06	4.22183E-06	5.92874E-06	5.19283E-06	4.87672E-06
T_K	Care & Maintenance	P95	1.548445702	1.51387012	1.284006953	1.921126008	1.392504454	1.162835479	1.071865797	1.385071278	1.343584657	1.729579091	1.560370207	1.415045261
T_Li	Care & Maintenance	P95	0.012817937	0.012907554	0.008506435	0.021890976	0.013902199	0.006406254	0.003912022	0.004161878	0.006500915	0.013332562	0.010082363	0.009924887
T_Mg	Care & Maintenance	P95	4.893874645	4.968441963	5.044443607	4.798646927	4.598096848	4.35929966	4.269537449	4.396326065	4.547353268	4.664251328	4.546068192	5.063697338
T_Mn	Care & Maintenance	P95	0.027765747	0.024174012	0.021837041	0.02866495	0.022782832	0.02505541	0.022327779	0.025426663	0.027527679	0.037761576	0.054291435	0.029570146
T_Mo	Care & Maintenance	P95	0.000713828	0.000801175	0.000730603	0.000865477	0.000742832	0.000543101	0.000551187	0.00059734	0.000670489	0.000693453	0.000614638	0.000627919
T_Na	Care & Maintenance	P95	5.975697041	6.253584862	5.421300888	8.034711838	6.300835609	4.389144897	4.03286171	3.814322948	4.558326721	6.058858395	5.370316505	5.518512726
T_Ni	Care & Maintenance	P95	0.000427083	0.000437691	0.000369719	0.000559124	0.000442206	0.00034992	0.000312258	0.000310259	0.000359409	0.00045458	0.000416682	0.00039144
T_P	Care & Maintenance	P95	0.028783605	0.028009787	0.033210281	0.03073195	0.025914649	0.023490664	0.021119451	0.019351985	0.018763142	0.021976843	0.02968422	0.028726351
T_Pb	Care & Maintenance	P95	0.000293955	0.000287924	0.000215867	0.000516609	0.000363456	0.000158335	0.000109162	0.000101994	0.000147247	0.000323549	0.000229701	0.00022473
T_S	Care & Maintenance	P95	1.293476939	1.335749626	1.240767598	1.546459556	1.191962719	1.097986221	1.133734226	1.219558716	1.095419526	1.329822302	1.123262405	1.344229102
T_Sb	Care & Maintenance	P95	0.000259468	0.000229449	0.000147708	0.000322118	0.000184805	0.000221757	0.000193448	0.000226998	0.000253711	0.000427306	0.000313868	0.000252534
T_Se	Care & Maintenance	P95	9.64164E-05	9.6907E-05	0.000137366	0.000120054	0.000100083	8.79839E-05	8.48629E-05	7.97202E-05	7.75424E-05	9.33515E-05	9.19286E-05	8.9921E-05
T_Si	Care & Maintenance	P95	5.214849472	5.374482632	5.206852913	5.349508286	5.139941692	4.677862167	4.390695572	4.370692253	4.601020336	5.045342445	5.123383522	5.118375301
T_Sn	Care & Maintenance	P95	5.03448E-05	5.06221E-05	5.03351E-05	5.06101E-05	5.18953E-05	5.05081E-05	5.04343E-05	4.99199E-05	5.00972E-05	5.17166E-05	5.04196E-05	5.05364E-05
T_Sr	Care & Maintenance	P95	0.102933683	0.104433991	0.102904566	0.094278313	0.094072066	0.089318216	0.086989634	0.091040283	0.097811073	0.095894173	0.095395081	0.105616242
T_Ti	Care & Maintenance	P95	0.003459901	0.002587404	0.002709372	0.003487085	0.003172744	0.002733455	0.003909555	0.003513457	0.0029778	0.004811308	0.004858448	0.003915396
T_Tl	Care & Maintenance	P95	6.9281E-05	6.82628E-05	5.10659E-05	0.000116705	7.81695E-05	3.81976E-05	2.60125E-05	2.32553E-05	3.57878E-05	7.63796E-05	5.26904E-05	5.57158E-05
T_U	Care & Maintenance	P95	0.00017054	0.000180731	0.000164142	0.00023319	0.000181228	0.00013166	0.000114831	0.000118268	0.000135702	0.000170958	0.000156217	0.000143522
T_V	Care & Maintenance	P95	0.002262054	0.002098912	0.001559637	0.003465501	0.00240781	0.001221073	0.000965205	0.001096645	0.001518466	0.002558343	0.002070009	0.001835447
T_Zn	Care & Maintenance	P95	0.002100896	0.002207162	0.002061794	0.002694458	0.002395468	0.002171797	0.001922851	0.001833187	0.001917228	0.002145505	0.002062274	0.001893622
D_Ag	Care & Maintenance	P95	1.36817E-05	1.34477E-05	1.53924E-05	2.32446E-05	1.68919E-05	1.68752E-05	1.1589E-05	1.09595E-05	1.12992E-05	1.53293E-05	1.33124E-05	1.55734E-05
D_Al	Care & Maintenance	P95	0.00435	0.0037	0.0029	0.018000001	0.042451091	0.038999997	0.029000001	0.0147	0.016249999	0.0142	0.0208	0.008300001
D_As	Care & Maintenance	P95	0.000637716	0.000607212	0.000596736	0.000765046	0.000646804	0.00056563	0.000568753	0.000593291	0.000648757	0.000731107	0.000620814	0.000600088
D_B	Care & Maintenance	P95	0.020495767	0.020439843	0.014069086	0.030884461	0.021618502	0.010683546	0.00908183	0.008426869	0.011818036	0.021242291	0.016038092	0.015942561
D_Ba	Care & Maintenance	P95	0.006630091	0.006594726	0.006363572	0.006295989	0.006163915	0.005909904	0.005833983	0.006086145	0.006675598	0.006986565	0.006333602	0.006263637
D_Bi	Care & Maintenance	P95	2.68017E-05	2.69357E-05	2.63226E-05	2.87131E-05	2.7678E-05	2.64672E-05	2.5854E-05	2.57802E-05	2.67761E-05	2.97769E-05	2.84494E-05	2.71846E-05
D_Be	Care & Maintenance	P95	6.40656E-05	6.44176E-05	5.99222E-05	7.46628E-05	6.66192E-05	5.65863E-05	5.43904E-05	5.37134E-05	5.57171E-05	6.25112E-05	6.17968E-05	6.08107E-05
D_Ca	Care & Maintenance	P95	20.92590904	20.85050392	20.36110497	18.67072487	17.83244324	17.62507248	17.84503937	18.54200554	19.05856705	18.96426392	19.14005089	20.02833939
D_Cd	Care & Maintenance	P95	7.91181E-06	7.841E-06	7.99631E-06	1.21008E-05	1.08075E-05	8.47218E-06	8.31605E-06	7.5678E-06	8.10258E-06	1.02098E-05	8.27256E-06	8.23199E-06
D_Co	Care & Maintenance	P95	0.000160134	0.000155693	0.000117231	0.000228757	0.000167614	9.22948E-05	8.1039E-05	9.44458E-05	0.000120758	0.000200045	0.000144895	0.000133736
D_Cr	Care & Maintenance	P95	0.00016187	0.00015431	0.000155754	0.000274516	0.000182536	0.000153643	0.000149254	0.000157142	0.00018273	0.00022607	0.000180296	0.000168801
D_Cu	Care & Maintenance	P95	0.000302572	0.000337807	0.000296746	0.00033397	0.000377408	0.000354655	0.000394791	0.00032122	0.000315239	0.000320003	0.000307392	0.000308699
D_Fe	Care & Maintenance	P95	0.05309451	0.053300917	0.058617134	0.05595452	0.059046235	0.059140645	0.058204353	0.058617599	0.065269545	0.064112589	0.058374815	0.054344803
D_Hg	Care & Maintenance	P95	5.59527E-06	5.78843E-06	4.74429E-06	8.29594E-06	6.15729E-06	4.70446E-06	3.9061E-06	3.60867E-06	4.1615E-06	5.83214E-06	5.17974E-06	4.88724E-06
D_K	Care & Maintenance	P95	1.539022684	1.502408385	1.268752098	1.908084035	1.376620531	1.124757051	1.033403039	1.35277617	1.322851896	1.681329012	1.566941738	1.412754416
D_Li	Care & Maintenance	P95	0.012817937	0.012907554	0.008506435	0.021890976	0.013902199	0.006406254	0.003912022	0.004161878	0.006500915	0.013332562	0.010082363	0.009924887
D_Mg	Care & Maintenance	P95	5.079813004	4.916567326	5.138609409	4.74472332	4.568002224	4.213579655	4.270915985	4.296303272	4.488641739	4.627538204	4.426184654	4.876945019
D_Mn	Care & Maintenance	P95	0.023988595	0.020392485	0.016413441	0.02321309	0.013012788	0.018566724	0.015538955	0.01891925	0.022481879	0.032949522	0.027172742	0.023752417
D_Mo	Care & Maintenance	P95	0.000676347	0.000749962	0.000696301	0.000825221	0.000704906	0.00052075	0.000546367	0.000568559	0.000657481	0.000655675	0.000576078	0.000580136
D_Na	Care & Maintenance	P95	5.992404938	6.204173088	5.368629932	7.96406889	6.277229786	4.315483093	4.028647423	3.794062853	4.521832943	5.947622776	5.292870522	5.42324543
D_Ni	Care & Maintenance	P95	0.00042701	0.00043764	0.00036591	0.00055667	0.000433544	0.000350336	0.000311101	0.00030991	0.000358587	0.000454189	0.000416613	0.000385521
D_P	Care & Maintenance	P95	0.060939688	0.055134915	0.050358195	0.060066804	0.04822313	0.035614908	0.055930916	0.104124591	0.067109697	0.142290756	0.145528227	0.065116435
D_Pb	Care & Maintenance	P95	0.000291656	0.000284532	0.000211806	0.000511642	0.000354333	0.000144152	0.000106095	9.62972E-05	0.00014165	0.000317146	0.000224587	0.000221621
D_S	Care & Maintenance	P95	1.180523515	1.371091723	1.359378815	1.261617184	1.133759379	1.09819448	1.187464237	1.156360388	1.128703713	1.247193694	1.211280823	1.317224979
D_Sb	Care & Maintenance	P95	0.000259454	0.000229384	0.000147621	0.000323004	0.000184714	0.000221694	0.000193414	0.00022699	0.00025369	0.000427284	0.000313845	0.000252516
D_Se	Care & Maintenance	P95	0.000127136	9.30466E-05	0.000131976	0.000115726	9.62852E-05	8.18545E-05	7.78505E-05	8.19598E-05	7.89598E-05	8.86413E-05	8.81147E-05	8.42526E-05
D_Si	Care & Maintenance	P95	5.126584053	5.175750256	5.037723064	5.152513504	4.825281143	4.39887619	4.158238411	4.211213589	4.459909439	4.862129688	5.049922466	5.027113438
D_Sn	Care & Maintenance	P95	5.03448E-05	5.06221E-05	5.03351E-05	5.06101E-05	5.18953E-05	5.05081E-05	5.04343E-05	4.99199E-05	5.00972E-05	5.17166E-05	5.04196E-05	5.05364E-05
D_Sr	Care & Maintenance	P95	0.103043094	0.104594745	0.103334017	0.093120165	0.093166783	0.086960465	0.087476641	0.090701759	0.097197771	0.094992772	0.092302598	0.101383291
D_Ti	Care & Maintenance	P95	0.00165521	0.001425059	0.0013052	0.001696215	0.001437297	0.001366703	0.001212246	0.003287731	0.001936545	0.004728199	0.004829248	0.001887881
D_Tl	Care & Maintenance	P95	6.9281E-05	6.82628E-05	5.10659E-05	0.000116705	7.81097E-05	3.81935E-05	2.60125E-05	2.32553E-05	3.57878E-05	7.63796E-05	5.26904E-05	5.57158E-05
D_U	Care & Maintenance	P95	0.000164932	0.000173728	0.000155626	0.000226185	0.000175119	0.00012504	0.000111298	0.000113495	0.000129625	0.000166074	0.000147597	0.000137001
D_V	Care & Maintenance	P95	0.002235786	0.002085947	0.001436572	0.003412171	0.002343687	0.001126662	0.000856855	0.001025523	0.001397151	0.002510312	0.002012148	0.001783721
D_Zn	Care & Maintenance	P95	0.001783681	0.001680349	0.001694603	0.002352951	0.002117522	0.001833425	0.001434502	0.001312481	0.001362262	0.001709298	0.00152566	0.001341224

Appendix B.4.9: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, WQ13

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.027968705	0.027585741	0.030182088	0.063533969	0.042395096	0.01661429	0.011865254	0.014154076	0.018051449	0.023831069	0.017235136	0.015859907
NO3_N	Care & Maintenance	P95	0.393273771	0.415595025	0.301340282	0.705905914	0.464973152	0.193930104	0.108335949	0.116555698	0.163961291	0.385382086	0.306015402	0.319250852
NO2_N	Care & Maintenance	P95	0.002712113	0.003423797	0.00215898	0.004268824	0.003584747	0.002029497	0.001644268	0.001588898	0.001716495	0.002728443	0.002486153	0.002675285
Br	Care & Maintenance	P95	0.032096617	0.03263006	0.02978909	0.036960144	0.03236765	0.027731894	0.026824994	0.026691632	0.027631614	0.032560326	0.031081315	0.031233151
Cl	Care & Maintenance	P95	0.456335664	0.451051414	0.395682395	0.591286659	0.465488613	0.357321769	0.3941935	0.327201039	0.364116818	0.480687708	0.42589131	0.422646105
F	Care & Maintenance	P95	0.116164744	0.115767986	0.099586204	0.154468	0.11818599	0.081307039	0.074773237	0.074267387	0.089722931	0.122272275	0.110458128	0.111774012
TDP	Care & Maintenance	P95	0.0159807	0.012789842	0.016030628	0.017823648	0.013290253	0.009867605	0.00916081	0.009988982	0.008385644	0.011090233	0.011791987	0.01525888
SO4	Care & Maintenance	P95	10.09689236	9.701898575	7.28482914	12.44251537	8.667396545	8.125658989	7.174552441	10.78013706	10.22365952	14.61110592	11.48208237	9.586865425
T_CN	Care & Maintenance	P95	0.002516642	0.002528054	0.002514789	0.002530028	0.002591252	0.002520558	0.002514676	0.002495829	0.002499225	0.002581966	0.002520062	0.002512316
WAD_CN	Care & Maintenance	P95	0.002516643	0.002526964	0.002513882	0.002528819	0.002591252	0.00251884	0.002513773	0.002495808	0.002499225	0.002581952	0.002520062	0.002512316
T_Ag	Care & Maintenance	P95	1.33409E-05	1.31903E-05	2.17284E-05	2.28948E-05	1.82237E-05	1.77178E-05	1.39391E-05	1.18813E-05	1.21052E-05	1.56485E-05	1.35185E-05	1.56055E-05
T_Al	Care & Maintenance	P95	0.040062647	0.031284045	0.04349719	0.050590344	0.074448325	0.088078052	0.084211014	0.064051747	0.05412605	0.054286756	0.05068253	0.039153229
T_As	Care & Maintenance	P95	0.000692092	0.000650667	0.000627218	0.000797014	0.000688564	0.000617632	0.000618128	0.000648454	0.00068445	0.000761646	0.000682077	0.00065321
T_B	Care & Maintenance	P95	0.019713124	0.019532761	0.013846129	0.030423747	0.021326978	0.010535795	0.008983462	0.008332739	0.011564313	0.020808185	0.01553376	0.015605014
T_Ba	Care & Maintenance	P95	0.006807565	0.007003252	0.006924068	0.006846758	0.006537403	0.006274911	0.00624963	0.006230063	0.006949346	0.007375254	0.006740005	0.006522836
T_Bi	Care & Maintenance	P95	2.67608E-05	2.68173E-05	2.62744E-05	2.86749E-05	2.76394E-05	2.64121E-05	2.58373E-05	2.57526E-05	2.66979E-05	2.9644E-05	2.8319E-05	2.71128E-05
T_Be	Care & Maintenance	P95	6.33577E-05	6.36806E-05	5.95513E-05	7.41755E-05	6.63262E-05	5.64361E-05	5.42839E-05	5.36139E-05	5.55422E-05	6.21677E-05	6.12836E-05	6.04444E-05
T_Ca	Care & Maintenance	P95	20.33600044	21.54699898	20.72302246	19.24585915	18.35394859	17.82668686	17.79260445	18.75760841	18.83948135	20.05671692	19.3759346	21.63098335
T_Cd	Care & Maintenance	P95	7.33422E-06	7.92928E-06	8.55367E-06	1.19528E-05	9.65743E-06	7.97942E-06	7.56478E-06	6.25711E-06	7.36636E-06	9.62949E-06	7.60164E-06	7.70907E-06
T_Co	Care & Maintenance	P95	0.000154168	0.0001504	0.000114996	0.000226419	0.00016734	9.43872E-05	8.08462E-05	9.43358E-05	0.000119316	0.000196956	0.000141348	0.000132557
T_Cr	Care & Maintenance	P95	0.000217344	0.000204286	0.000213895	0.000314024	0.000242372	0.000218095	0.000200444	0.000195062	0.00022141	0.000273857	0.000228938	0.000212411
T_Cu	Care & Maintenance	P95	0.000294033	0.0003017	0.000297451	0.00035071	0.000408425	0.000365592	0.000380814	0.000313225	0.000306532	0.000317919	0.000296586	0.000293654
T_Fe	Care & Maintenance	P95	0.091553994	0.09755221	0.120825462	0.115148976	0.106084451	0.105036393	0.096379183	0.097301036	0.107845232	0.113286257	0.108511478	0.087371565
T_Hg	Care & Maintenance	P95	5.42752E-06	5.58536E-06	4.65242E-06	8.20864E-06	6.15741E-06	4.69393E-06	3.95492E-06	3.65101E-06	4.17351E-06	5.83901E-06	5.09327E-06	4.82122E-06
T_K	Care & Maintenance	P95	1.510317564	1.470855236	1.269487143	1.905439377	1.376658678	1.147393703	1.06585443	1.362076879	1.328079462	1.703395367	1.526748061	1.396320343
T_Li	Care & Maintenance	P95	0.01211968	0.012148947	0.008154348	0.021546716	0.013667511	0.006272188	0.003830082	0.004059272	0.006276802	0.013011791	0.009646853	0.009605071
T_Mg	Care & Maintenance	P95	4.889311314	4.960261345	5.039803505	4.796420097	4.589567661	4.34272337	4.264037132	4.395429611	4.544945717	4.653711796	4.544008732	5.049073219
T_Mn	Care & Maintenance	P95	0.027811272	0.023875568	0.021924999	0.028754981	0.022748722	0.024811588	0.022299826	0.025535483	0.027630681	0.037720844	0.053808257	0.029414622
T_Mo	Care & Maintenance	P95	0.000708336	0.000787279	0.000725805	0.000862351	0.000736654	0.000542256	0.000552033	0.000598816	0.000670648	0.000692378	0.000611996	0.000626905
T_Na	Care & Maintenance	P95	5.881011963	6.091212749	5.343440533	7.963314533	6.217661858	4.351613045	4.016946793	3.799876928	4.532218933	5.989574432	5.293705463	5.458294868
T_Ni	Care & Maintenance	P95	0.00041699	0.000426215	0.000364373	0.000554267	0.000437532	0.000347599	0.000310994	0.000309093	0.000356402	0.000449301	0.000410518	0.000386678
T_P	Care & Maintenance	P95	0.028725723	0.027965751	0.032964971	0.030734932	0.025872756	0.02339058	0.020976696	0.019209931	0.018699581	0.021852054	0.02954663	0.028619761
T_Pb	Care & Maintenance	P95	0.000278898	0.000274648	0.000208734	0.00050691	0.000357697	0.000155092	0.000107124	9.90596E-05	0.000142729	0.000315596	0.000220346	0.000217794
T_S	Care & Maintenance	P95	1.294488192	1.339764595	1.240310669	1.545323014	1.189811349	1.098225951	1.133282781	1.216423512	1.094981194	1.335390449	1.126397252	1.344392061
T_Sb	Care & Maintenance	P95	0.000251685	0.000219291	0.000144255	0.000318351	0.000182669	0.000214305	0.000189689	0.000223481	0.000248123	0.000416771	0.000304287	0.000246161
T_Se	Care & Maintenance	P95	9.59583E-05	9.56314E-05	0.000134533	0.000119124	9.95062E-05	8.74848E-05	8.49793E-05	7.95123E-05	7.74123E-05	9.33954E-05	9.10824E-05	8.89397E-05
T_Si	Care & Maintenance	P95	5.213434696	5.346960068	5.198441505	5.346965313	5.126151562	4.65734148	4.386812687	4.359442711	4.58437252	5.038511276	5.123434067	5.119039059
T_Sn	Care & Maintenance	P95	5.03344E-05	5.0597E-05	5.03249E-05	5.05983E-05	5.18564E-05	5.04936E-05	5.04284E-05	4.99217E-05	5.00948E-05	5.16696E-05	5.04114E-05	5.05193E-05
T_Sr	Care & Maintenance	P95	0.10303653	0.104410775	0.102928929	0.094285391	0.093938731	0.089176886	0.086998701	0.091130957	0.097925238	0.095869087	0.095416538	0.105524279
T_Ti	Care & Maintenance	P95	0.00348261	0.002596891	0.002731225	0.00351103	0.003206248	0.002735717	0.003911268	0.003498542	0.002987636	0.004815065	0.004860234	0.003890345
T_Tl	Care & Maintenance	P95	6.56491E-05	6.50464E-05	4.9345E-05	0.000114497	7.68852E-05	3.76857E-05	2.5505E-05	2.25529E-05	3.46459E-05	7.44731E-05	5.0498E-05	5.41531E-05
T_U	Care & Maintenance	P95	0.000167624	0.000176253	0.000162493	0.000230844	0.000178888	0.000130937	0.000114348	0.000118022	0.00013466	0.000169035	0.000154063	0.000142183
T_V	Care & Maintenance	P95	0.002152128	0.001986481	0.001510715	0.003408779	0.002376265	0.001203718	0.000956037	0.001085383	0.001478064	0.002492673	0.001986078	0.001775841
T_Zn	Care & Maintenance	P95	0.002063547	0.002171756	0.002044791	0.002670888	0.002379698	0.002157727	0.001917231	0.001837362	0.001904595	0.002129781	0.002037372	0.001878905
D_Ag	Care & Maintenance	P95	1.31562E-05	1.30256E-05	1.50041E-05	2.2885E-05	1.672E-05	1.68268E-05	1.15204E-05	1.07621E-05	1.11196E-05	1.5052E-05	1.29305E-05	1.52059E-05
D_Al	Care & Maintenance	P95	0.004344471	0.0036	0.0027	0.017899456	0.042414255	0.037500001	0.026000001	0.014611998	0.007	0.011899999	0.020400001	0.008254055
D_As	Care & Maintenance	P95	0.00063631	0.000605725	0.000593263	0.00075962	0.000644391	0.000563662	0.000569332	0.000595452	0.000648228	0.000724761	0.000618311	0.000598956
D_B	Care & Maintenance	P95	0.019713124	0.019532761	0.013769438	0.030406324	0.021326978	0.010477983	0.008983462	0.008332739	0.011564239	0.020808185	0.01553376	0.015605012
D_Ba	Care & Maintenance	P95	0.006655559	0.006600497	0.006403334	0.00633783	0.006166724	0.00591423	0.005854203	0.006108569	0.006703412	0.007019487	0.006355712	0.006292332
D_Bi	Care & Maintenance	P95	2.67608E-05	2.68173E-05	2.62744E-05	2.86749E-05	2.76394E-05	2.64121E-05	2.58373E-05	2.57526E-05	2.66979E-05	2.9644E-05	2.8319E-05	2.71128E-05
D_Be	Care & Maintenance	P95	6.33577E-05	6.36806E-05	5.95513E-05	7.41755E-05	6.63262E-05	5.64361E-05	5.42839E-05	5.36139E-05	5.55422E-05	6.21677E-05	6.12836E-05	6.04444E-05
D_Ca	Care & Maintenance	P95	20.94596863	20.84317207	20.35233498	18.68444061	17.80050087	17.60783577	17.84237671	18.54660034	19.07249069	18.96105385	19.11767387	19.99169731
D_Cd	Care & Maintenance	P95	7.61363E-06	7.64494E-06	7.80605E-06	1.19119E-05	1.06615E-05	8.39514E-06	8.17623E-06	7.48289E-06	7.93711E-06	1.00083E-05	8.0588E-06	8.01715E-06
D_Co	Care & Maintenance	P95	0.000154003	0.000150322	0.000114718	0.00022523	0.000165541	9.06521E-05	8.029E-05	9.31594E-05	0.000118568	0.000196614	0.000141178	0.000130589
D_Cr	Care & Maintenance	P95	0.000161577	0.000150873	0.000152745	0.000270002	0.000181654	0.000152868	0.000147934	0.000155898	0.000179325	0.000223882	0.000177659	0.000165506
D_Cu	Care & Maintenance	P95	0.000300043	0.000335568	0.000295421	0.000332442	0.000378919	0.000352393	0.000392418	0.000318594	0.000313122	0.00031813	0.000304847	0.000309236
D_Fe	Care & Maintenance	P95	0.053780597	0.054499611	0.058497347	0.056809969	0.059327558	0.059189968	0.05877981	0.059948996	0.066642918	0.065205678	0.05945953	0.055490915
D_Hg	Care & Maintenance	P95	5.41902E-06	5.58738E-06	4.645E-06	8.20346E-06	6.06797E-06	4.64654E-06	3.8692E-06	3.5728E-06	4.12097E-06	5.74504E-06	5.08066E-06	4.83135E-06
D_K	Care & Maintenance	P95	1.502520323	1.460064411	1.249504566	1.891278028	1.363690376	1.109560609	1.027537465	1.330494523	1.307013512	1.656409502	1.534878492	1.393823147
D_Li	Care & Maintenance	P95	0.01211968	0.012148947	0.008154348	0.021546716	0.013667511	0.006272188	0.003830082	0.004059272	0.006276802	0.013011791	0.009646853	0.009605071
D_Mg	Care & Maintenance	P95	5.073413372	4.911300659	5.132042885	4.743063927	4.558910847	4.199930191	4.268951416	4.293940067	4.485362053	4.612631798	4.417221069	4.865097046
D_Mn	Care & Maintenance	P95	0.023753032	0.020129999	0.01637049	0.02329497	0.012969657	0.018305266	0.015516029	0.019029917	0.022594614	0.032768235	0.027160656	0.023679882
D_Mo	Care & Maintenance	P95	0.000670057	0.000737318	0.000691369	0.000822073	0.000699954	0.000519477	0.000546887	0.000569499	0.000657161	0.000653778	0.000574194	0.000579555
D_Na	Care & Maintenance	P95	5.893122673	6.04769659	5.294013977	7.891180038	6.195844173	4.280308247	4.012813568	3.78174758	4.491308689	5.878670692	5.219125748	5.364558697
D_Ni	Care & Maintenance	P95	0.000416921	0.000426167	0.000360735	0.00055185	0.000429098	0.000348004	0.000309859	0.000309033	0.000355601	0.00044892	0.000410452	0.00038096
D_P	Care & Maintenance	P95	0.060226697	0.056332227	0.051493399	0.060449671	0.047950722	0.035123724	0.057009656	0.103710346	0.067843653	0.142491192	0.145614997	0.065482989
D_Pb	Care & Maintenance	P95	0.000276722	0.000271409	0.000204824	0.000502042	0.00034853	0.000141519	0.000104132	9.35594E-05	0.000137335	0.000309366	0.000215455	0.000214793
D_S	Care & Maintenance	P95	1.179864883	1.369235992	1.365132809	1.263200879	1.132756591	1.097781658	1.186899543	1.15088594	1.129760146	1.250213146	1.208151221	1.315599799
D_Sb	Care & Maintenance	P95	0.000251671	0.00021923	0.000144171	0.000319224	0.000182579	0.000214066	0.000189656	0.000223473	0.000248102	0.00041675	0.000304265	0.000246143
D_Se	Care & Maintenance	P95	0.000126157	9.10765E-05	0.000128953	0.000114646	9.49205E-05	8.15808E-05	7.76059E-05	8.16651E-05	7.85418E-05	8.78053E-05	8.72959E-05	8.3701E-05
D_Si	Care & Maintenance	P95	5.120836735	5.144012451	5.025269032	5.147057056	4.814962387	4.382632256	4.153180599	4.204378128	4.445459843	4.849531651	5.046425343	5.024311543
D_Sn	Care & Maintenance	P95	5.03344E-05	5.0597E-05	5.03249E-05	5.05983E-05	5.18564E-05	5.04936E-05	5.04284E-05	4.99217E-05	5.00948E-05	5.16696E-05	5.04114E-05	5.05193E-05
D_Sr	Care & Maintenance	P95	0.103219546	0.10456752	0.103428908	0.093225881	0.09305463	0.086798847	0.087470621	0.090755507	0.097293243	0.094941601	0.09233322	0.101282038
D_Ti	Care & Maintenance	P95	0.001627752	0.001448044	0.001342291	0.001709752	0.001433442	0.001346926	0.001243987	0.003275472	0.001947536	0.004735332	0.00483143	0.001900449
D_Tl	Care & Maintenance	P95	6.56491E-05	6.50464E-05	4.9345E-05	0.000114497	7.68264E-05	3.76817E-05	2.5505E-05	2.25529E-05	3.46459E-05	7.44731E-05	5.0498E-05	5.41531E-05
D_U	Care & Maintenance	P95	0.000161774	0.000169373	0.000154179	0.000223606	0.000172693	0.000124196	0.000110865	0.000113281	0.000128793	0.000164204	0.000145429	0.000135521
D_V	Care & Maintenance	P95	0.002124455	0.001973698	0.001392249	0.003349533	0.002306951	0.001106486	0.000842246	0.001012632	0.001354605	0.002446014	0.001930893	0.00172604
D_Zn	Care & Maintenance	P95	0.001749358	0.001646376	0.0016537	0.002321358	0.00210517	0.001811469	0.001414419	0.001295419	0.001334275	0.001677688	0.001476847	0.001309699

Appendix B.4.10: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, Chedakuz Midway

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.021507962	0.021018131	0.021774916	0.053708553	0.033999559	0.01427223	0.011072153	0.012904715	0.014133044	0.018878307	0.013878356	0.012393838
NO3_N	Care & Maintenance	P95	0.243834391	0.238399491	0.207943141	0.560230911	0.355687618	0.130659074	0.079746313	0.079513825	0.112463333	0.266995728	0.199584365	0.224015296
NO2_N	Care & Maintenance	P95	0.002002404	0.002681084	0.001513973	0.003550166	0.002869526	0.001679397	0.001303717	0.001248021	0.00138329	0.002293909	0.001695192	0.002177895
Br	Care & Maintenance	P95	0.02875031	0.028662849	0.027666941	0.033945974	0.03059358	0.026830086	0.026270995	0.026126949	0.026804162	0.0299825	0.028468924	0.028883057
Cl	Care & Maintenance	P95	0.35822922	0.354739934	0.336868763	0.510093451	0.413505763	0.327667743	0.361121356	0.311011106	0.325536311	0.40205124	0.353597701	0.359105229
F	Care & Maintenance	P95	0.088524148	0.087494075	0.084084481	0.132140651	0.101733968	0.072675996	0.068932839	0.066842407	0.078096688	0.099001773	0.088879809	0.092153348
TDP	Care & Maintenance	P95	0.014901457	0.011821189	0.013818691	0.017106397	0.012330768	0.008667994	0.008160801	0.009806497	0.008250635	0.009594776	0.009924054	0.012958057
SO4	Care & Maintenance	P95	7.513687134	6.749743462	6.00921917	11.11477089	7.363977432	6.061331272	6.274160385	7.767560482	7.907121658	10.84108925	8.171976089	7.573544502
T_CN	Care & Maintenance	P95	0.002510771	0.002516691	0.002509501	0.002522359	0.00256664	0.002513617	0.002511025	0.002497009	0.002499497	0.00255498	0.00251526	0.002507926
WAD_CN	Care & Maintenance	P95	0.002510771	0.002515906	0.002508892	0.00252221	0.00256664	0.002512527	0.002510329	0.002496994	0.002499497	0.002554971	0.00251526	0.002507926
T_Ag	Care & Maintenance	P95	9.80007E-06	9.65868E-06	1.76756E-05	1.87854E-05	1.5551E-05	1.68919E-05	1.22736E-05	9.76876E-06	9.65347E-06	1.22316E-05	1.00183E-05	1.16077E-05
T_Al	Care & Maintenance	P95	0.045720957	0.026058536	0.038402442	0.055186708	0.091478802	0.082438961	0.073632896	0.055007301	0.044675961	0.04623504	0.04651412	0.033590175
T_As	Care & Maintenance	P95	0.000673047	0.000637614	0.000614012	0.000743043	0.000660875	0.000602927	0.000631077	0.00065458	0.000682582	0.000725261	0.000652664	0.00063872
T_B	Care & Maintenance	P95	0.012701099	0.012608354	0.010315337	0.024570577	0.017388286	0.008527636	0.007772923	0.00724064	0.008931623	0.015650649	0.011248726	0.011810097
T_Ba	Care & Maintenance	P95	0.007334261	0.006930619	0.007217093	0.007676198	0.006721812	0.00641196	0.006516514	0.0066307	0.007315415	0.007687575	0.007160091	0.006834163
T_Bi	Care & Maintenance	P95	2.62468E-05	2.59575E-05	2.57692E-05	2.80385E-05	2.70925E-05	2.58648E-05	2.56182E-05	2.54896E-05	2.60735E-05	2.80857E-05	2.69671E-05	2.63818E-05
T_Be	Care & Maintenance	P95	5.69905E-05	5.71793E-05	5.56802E-05	6.7801E-05	6.23724E-05	5.45831E-05	5.29761E-05	5.24445E-05	5.36201E-05	5.81458E-05	5.62924E-05	5.65012E-05
T_Ca	Care & Maintenance	P95	20.46656227	21.24087906	20.63061333	19.2983036	17.83755684	17.56025887	17.83826447	18.71382141	18.95604515	19.84430885	19.20881653	21.16104889
T_Cd	Care & Maintenance	P95	5.33645E-06	6.53004E-06	6.65669E-06	9.49454E-06	8.21042E-06	7.19763E-06	6.96726E-06	5.18061E-06	5.65035E-06	8.81986E-06	5.49421E-06	6.51617E-06
T_Co	Care & Maintenance	P95	0.000105967	0.00010284	8.81884E-05	0.000179949	0.00013894	7.74718E-05	7.14612E-05	7.99712E-05	9.43793E-05	0.000153472	0.000100418	9.94019E-05
T_Cr	Care & Maintenance	P95	0.000196652	0.000163186	0.000183516	0.000278195	0.000234673	0.000201934	0.000187929	0.000181188	0.000191716	0.000230212	0.000200854	0.000183099
T_Cu	Care & Maintenance	P95	0.000277896	0.000312487	0.000280234	0.00032629	0.000466576	0.000370266	0.000392522	0.000351267	0.000313309	0.000296879	0.000278	0.000306341
T_Fe	Care & Maintenance	P95	0.136388734	0.117052861	0.140999183	0.148135096	0.130213782	0.111444876	0.104006261	0.119373709	0.140005141	0.157448635	0.150894597	0.102993861
T_Hg	Care & Maintenance	P95	4.0586E-06	4.04396E-06	3.72807E-06	6.95859E-06	5.21461E-06	4.0676E-06	3.55102E-06	3.323E-06	3.65585E-06	4.76562E-06	4.0514E-06	4.22551E-06
T_K	Care & Maintenance	P95	1.22521615	1.130792737	1.130957127	1.715011358	1.254946947	0.996004462	0.991167247	1.127323627	1.155891776	1.405734539	1.197247863	1.194099069
T_Li	Care & Maintenance	P95	0.006712651	0.006270513	0.005102878	0.016907446	0.010495276	0.004424556	0.00290395	0.002904295	0.00428554	0.009258445	0.005960945	0.006164731
T_Mg	Care & Maintenance	P95	4.835793495	4.86177969	4.98692131	4.764659405	4.455459118	4.171879768	4.193011761	4.381872177	4.514173985	4.534612179	4.517082214	4.891308308
T_Mn	Care & Maintenance	P95	0.028264742	0.021379266	0.022796305	0.031677272	0.022277333	0.022420421	0.021963635	0.027125472	0.029247483	0.037278991	0.048039585	0.02767892
T_Mo	Care & Maintenance	P95	0.000663136	0.000684904	0.000680022	0.000821636	0.000676261	0.000533367	0.000563119	0.000616292	0.000672263	0.000680612	0.000587282	0.000616307
T_Na	Care & Maintenance	P95	4.868226528	4.805241585	4.637031555	6.996840477	5.427244663	3.908899069	3.810302496	3.693101645	4.190331459	5.159519672	4.492305279	4.7501297
T_Ni	Care & Maintenance	P95	0.000342615	0.000337516	0.000315747	0.000488491	0.000389224	0.000319352	0.000294569	0.000289342	0.000320993	0.000385805	0.000346019	0.000337552
T_P	Care & Maintenance	P95	0.027985755	0.027407514	0.030293336	0.030777287	0.025293816	0.022530051	0.019580934	0.017700033	0.017925946	0.020456724	0.028187135	0.027607776
T_Pb	Care & Maintenance	P95	0.000156615	0.000156801	0.000134438	0.000379974	0.000279969	0.00011665	8.20841E-05	7.14913E-05	0.000102946	0.000221838	0.000137828	0.000143614
T_S	Care & Maintenance	P95	1.307384133	1.39243722	1.23479712	1.529507995	1.157593846	1.102939487	1.1262573	1.175464153	1.08899188	1.399938703	1.17410481	1.346292257
T_Sb	Care & Maintenance	P95	0.000171124	0.000133925	0.000105977	0.0002678	0.000153097	0.000141557	0.000149285	0.000157026	0.000182619	0.000293432	0.000203219	0.000176015
T_Se	Care & Maintenance	P95	8.91926E-05	8.37891E-05	0.000108624	0.000106823	9.24241E-05	8.1627E-05	8.64837E-05	7.70938E-05	7.58528E-05	9.39631E-05	8.24668E-05	7.92158E-05
T_Si	Care & Maintenance	P95	5.201563835	5.130788326	5.140972614	5.300916672	4.976180077	4.440877438	4.336965561	4.246415615	4.431277752	4.971221447	5.124661922	5.126539707
T_Sn	Care & Maintenance	P95	5.02164E-05	5.0347E-05	5.02096E-05	5.04469E-05	5.13551E-05	5.03249E-05	5.03459E-05	4.99439E-05	5.00665E-05	5.11205E-05	5.03121E-05	5.03304E-05
T_Sr	Care & Maintenance	P95	0.104282558	0.104127526	0.103179932	0.094386034	0.09173432	0.087738879	0.087146297	0.092289954	0.098965697	0.095544979	0.095641829	0.104433753
T_Ti	Care & Maintenance	P95	0.004200922	0.002769954	0.003057727	0.003954483	0.003663754	0.002766188	0.003934992	0.003339903	0.003087918	0.004875119	0.00489059	0.003644625
T_Tl	Care & Maintenance	P95	3.75176E-05	3.65957E-05	3.14168E-05	8.8833E-05	5.95351E-05	3.14632E-05	1.9264E-05	1.64199E-05	2.37111E-05	5.18176E-05	3.17684E-05	3.65764E-05
T_U	Care & Maintenance	P95	0.000143552	0.000141347	0.00014686	0.000207222	0.000152973	0.000122035	0.00010807	0.000112985	0.000123363	0.000146091	0.000131531	0.000127843
T_V	Care & Maintenance	P95	0.001306643	0.001159954	0.000991915	0.002738687	0.001950094	0.000977512	0.000843234	0.000879972	0.001098515	0.001740279	0.001224187	0.001184837
T_Zn	Care & Maintenance	P95	0.001815299	0.001906174	0.00184747	0.0023725	0.002166851	0.001998184	0.001822138	0.001883623	0.001769715	0.001933884	0.001818012	0.001736713
D_Ag	Care & Maintenance	P95	9.53234E-06	9.48975E-06	1.10851E-05	1.87773E-05	1.43366E-05	1.62431E-05	1.08785E-05	9.05843E-06	9.06915E-06	1.18507E-05	9.67466E-06	1.13888E-05
D_Al	Care & Maintenance	P95	0.004267667	0.003104912	0.002599888	0.016438967	0.041956663	0.036487207	0.026000001	0.013287517	0.007	0.011899999	0.017706029	0.007588952
D_As	Care & Maintenance	P95	0.000619042	0.000586908	0.000553648	0.000695957	0.000611473	0.000540942	0.000577046	0.000619367	0.0006428	0.000653969	0.000590213	0.000585882
D_B	Care & Maintenance	P95	0.012701099	0.012608354	0.01026394	0.024558481	0.017388286	0.00827777	0.007772923	0.00724064	0.008931623	0.015650649	0.011248725	0.011810097
D_Ba	Care & Maintenance	P95	0.006944204	0.006642693	0.006839294	0.006923466	0.006198531	0.005966779	0.006137853	0.006356751	0.007059275	0.007340286	0.006596718	0.006662297
D_Bi	Care & Maintenance	P95	2.62468E-05	2.59575E-05	2.57692E-05	2.80385E-05	2.70925E-05	2.58648E-05	2.56182E-05	2.54896E-05	2.60735E-05	2.80857E-05	2.69671E-05	2.63818E-05
D_Be	Care & Maintenance	P95	5.69905E-05	5.71793E-05	5.56802E-05	6.7801E-05	6.23724E-05	5.45831E-05	5.29761E-05	5.24445E-05	5.36201E-05	5.81458E-05	5.62924E-05	5.65012E-05
D_Ca	Care & Maintenance	P95	21.24148941	20.75314903	20.25100327	19.01088333	17.32381248	17.33899879	17.80156898	18.6120491	19.20029068	18.92007446	18.76751518	19.54139709
D_Cd	Care & Maintenance	P95	5.57751E-06	5.70496E-06	5.91357E-06	9.61144E-06	8.68957E-06	7.38743E-06	7.16522E-06	6.08688E-06	6.09873E-06	7.64983E-06	5.82746E-06	6.03831E-06
D_Co	Care & Maintenance	P95	0.00010588	0.000102799	8.80463E-05	0.000179074	0.00013757	7.32641E-05	7.10919E-05	7.94158E-05	9.38065E-05	0.000153191	0.000100257	9.81598E-05
D_Cr	Care & Maintenance	P95	0.000158	0.000115765	0.000117783	0.000222875	0.000169674	0.000145237	0.000135621	0.000136761	0.00014163	0.000198522	0.000150567	0.000127137
D_Cu	Care & Maintenance	P95	0.000282942	0.000320183	0.000279988	0.000312109	0.000397315	0.000326061	0.00036671	0.000303394	0.000291377	0.000297419	0.000282303	0.000315177
D_Fe	Care & Maintenance	P95	0.060281634	0.063103035	0.05726672	0.072803892	0.06492234	0.059765149	0.066030614	0.076330908	0.088894941	0.080195218	0.071461402	0.068550147
D_Hg	Care & Maintenance	P95	4.05244E-06	4.04428E-06	3.72354E-06	6.95505E-06	5.14702E-06	4.03197E-06	3.50054E-06	3.26781E-06	3.6236E-06	4.70271E-06	4.04387E-06	4.23154E-06
D_K	Care & Maintenance	P95	1.22993803	1.125484467	1.071122289	1.688651562	1.244023442	0.965791106	0.956217885	1.103118896	1.131299138	1.374155641	1.220204115	1.189653039
D_Li	Care & Maintenance	P95	0.006712651	0.006270513	0.005102878	0.016907446	0.010495276	0.004424556	0.00290395	0.002904295	0.00428554	0.009258445	0.005960945	0.006164731
D_Mg	Care & Maintenance	P95	4.996214867	4.84756422	5.069421768	4.720650196	4.422979355	4.043542862	4.227808952	4.273944378	4.443321705	4.448937416	4.30607748	4.728165627
D_Mn	Care & Maintenance	P95	0.021876175	0.0179151	0.015972583	0.025841292	0.012345115	0.01544067	0.01523973	0.020399498	0.023914061	0.030674452	0.027026737	0.022878516
D_Mo	Care & Maintenance	P95	0.000618282	0.000644195	0.000641547	0.000781078	0.000643474	0.000506704	0.000553926	0.000580704	0.000654651	0.000630956	0.000555801	0.000573187
D_Na	Care & Maintenance	P95	4.814965725	4.806208134	4.619917393	6.904541492	5.416632175	3.865493059	3.807248116	3.662121534	4.114683151	5.052423477	4.447704792	4.675114155
D_Ni	Care & Maintenance	P95	0.000342581	0.000337489	0.000313648	0.000486584	0.000385227	0.000319618	0.000293729	0.000289158	0.000320449	0.000385541	0.00034598	0.000334091
D_P	Care & Maintenance	P95	0.050214447	0.070224114	0.065005265	0.068155065	0.045022309	0.028752917	0.074855074	0.099383146	0.07570821	0.145011321	0.1468907	0.071556263
D_Pb	Care & Maintenance	P95	0.000154817	0.000155007	0.00013204	0.000376388	0.000270216	0.00010682	8.00082E-05	6.62675E-05	9.81342E-05	0.000218506	0.000135114	0.000141291
D_S	Care & Maintenance	P95	1.171488762	1.345973969	1.456334829	1.313664079	1.1163311	1.091643929	1.177295208	1.096311927	1.146258473	1.284826398	1.172225833	1.297195435
D_Sb	Care & Maintenance	P95	0.000171118	0.000133883	0.000105923	0.000268032	0.000153028	0.000139603	0.000149259	0.000157009	0.000182605	0.000293418	0.000203206	0.000176005
D_Se	Care & Maintenance	P95	0.000115155	7.73446E-05	0.000101273	0.000102786	8.20751E-05	7.83695E-05	7.4289E-05	7.81987E-05	7.23036E-05	7.97161E-05	7.86334E-05	7.75966E-05
D_Si	Care & Maintenance	P95	5.066104412	4.908535957	4.930569649	5.052143574	4.683702469	4.214746952	4.092267036	4.126990318	4.306567192	4.704346657	5.007543087	4.992220879
D_Sn	Care & Maintenance	P95	5.02164E-05	5.0347E-05	5.02096E-05	5.04469E-05	5.13551E-05	5.03249E-05	5.03459E-05	4.99439E-05	5.00665E-05	5.11205E-05	5.03121E-05	5.03304E-05
D_Sr	Care & Maintenance	P95	0.105362177	0.104235381	0.104688965	0.094908834	0.091316372	0.085110821	0.087388381	0.091442063	0.098275207	0.094294548	0.092671111	0.100306146
D_Ti	Care & Maintenance	P95	0.001275052	0.001963519	0.001781599	0.001975064	0.00138693	0.001184946	0.001711294	0.003110343	0.002250777	0.004820689	0.004882987	0.00207466
D_Tl	Care & Maintenance	P95	3.75176E-05	3.65957E-05	3.14168E-05	8.8833E-05	5.94903E-05	3.14602E-05	1.9264E-05	1.64199E-05	2.37111E-05	5.18176E-05	3.17684E-05	3.65764E-05
D_U	Care & Maintenance	P95	0.000135653	0.000135124	0.000140469	0.00019912	0.00014603	0.00011416	0.00010525	0.000108942	0.000118577	0.000141868	0.00012275	0.000119652
D_V	Care & Maintenance	P95	0.001270045	0.001151949	0.000921613	0.002614285	0.001810663	0.000851253	0.000662401	0.000763817	0.00096765	0.001713005	0.001195734	0.001158056
D_Zn	Care & Maintenance	P95	0.00145297	0.001354887	0.00125655	0.001930829	0.001938491	0.001544608	0.001205557	0.001150022	0.001041784	0.001298279	0.00110398	0.00101755

Appendix B.4.11: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 1

Receiving Stream Nodes, Chedakuz Outlet

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.01967462	0.018927962	0.019509874	0.049895301	0.031101102	0.01362266	0.010789646	0.012587508	0.013060558	0.017263284	0.013139333	0.011445858
NO3_N	Care & Maintenance	P95	0.20873639	0.203354388	0.182213366	0.506529808	0.315745264	0.111147813	0.069847152	0.067288741	0.097068183	0.230715156	0.171135753	0.193652138
NO2_N	Care & Maintenance	P95	0.001831369	0.00252232	0.001350965	0.003285859	0.002605279	0.001581466	0.001217165	0.001144086	0.001294559	0.00215895	0.001482388	0.002037857
Br	Care & Maintenance	P95	0.027959336	0.027910519	0.02720768	0.032951415	0.029946173	0.026583159	0.026090996	0.025990257	0.02654081	0.029202018	0.027815623	0.028227469
Cl	Care & Maintenance	P95	0.336040467	0.333422571	0.322753638	0.482788414	0.39455083	0.316648126	0.354414254	0.305360645	0.315069139	0.37823841	0.335303217	0.340542585
F	Care & Maintenance	P95	0.082268901	0.081768401	0.080624491	0.124354661	0.095735453	0.069932483	0.067033343	0.064982988	0.075216912	0.091954537	0.083776988	0.086209521
TDP	Care & Maintenance	P95	0.014602561	0.011590928	0.012984817	0.016963487	0.011994878	0.008365643	0.007827724	0.009756185	0.008209012	0.009164811	0.009529325	0.012296319
SO4	Care & Maintenance	P95	6.854989529	6.151660442	5.698359013	10.56086826	6.954777718	5.501433372	6.008852959	7.073449135	7.203743935	9.827075005	7.273292065	6.972720146
T_CN	Care & Maintenance	P95	0.002509037	0.002513857	0.002507958	0.002519682	0.002558145	0.002511506	0.002509712	0.002497406	0.002499578	0.002546717	0.002513642	0.002506637
WAD_CN	Care & Maintenance	P95	0.002509037	0.002513175	0.002507441	0.00251952	0.002558145	0.002510649	0.002509094	0.002497392	0.002499579	0.002546709	0.002513642	0.002506637
T_Ag	Care & Maintenance	P95	9.01211E-06	8.90844E-06	1.6413E-05	1.76443E-05	1.45328E-05	1.66474E-05	1.17538E-05	9.27181E-06	9.01444E-06	1.11976E-05	9.11614E-06	1.05775E-05
T_Al	Care & Maintenance	P95	0.047518786	0.024812425	0.036896523	0.056753226	0.099142075	0.08105386	0.069198944	0.052613437	0.042036887	0.043732196	0.045278572	0.032005932
T_As	Care & Maintenance	P95	0.000666885	0.000633225	0.000610134	0.000729916	0.000650632	0.000598519	0.000635728	0.000656329	0.000682102	0.00071463	0.000644093	0.000634284
T_B	Care & Maintenance	P95	0.011119307	0.011059043	0.009402057	0.022525504	0.015952105	0.007928912	0.007379857	0.006910041	0.008324197	0.01410555	0.010148604	0.010703047
T_Ba	Care & Maintenance	P95	0.00743736	0.006917505	0.007285521	0.007940662	0.006776967	0.00645479	0.006618486	0.006742508	0.007406333	0.007765938	0.007265858	0.006930331
T_Bi	Care & Maintenance	P95	2.60498E-05	2.58173E-05	2.56416E-05	2.77203E-05	2.68809E-05	2.5736E-05	2.55526E-05	2.54292E-05	2.59258E-05	2.76091E-05	2.66099E-05	2.61692E-05
T_Be	Care & Maintenance	P95	5.55671E-05	5.57205E-05	5.46617E-05	6.56884E-05	6.09331E-05	5.39622E-05	5.25526E-05	5.20608E-05	5.30331E-05	5.69112E-05	5.51075E-05	5.54023E-05
T_Ca	Care & Maintenance	P95	20.5155983	21.14186859	20.60249901	19.34656906	17.64497757	17.46658897	17.85762596	18.69761086	18.9998703	19.76031876	19.13991737	20.97662163
T_Cd	Care & Maintenance	P95	4.86652E-06	6.15666E-06	6.24177E-06	8.65704E-06	7.64301E-06	6.91758E-06	6.70457E-06	4.79998E-06	5.16776E-06	8.55965E-06	4.95974E-06	6.22219E-06
T_Co	Care & Maintenance	P95	9.55027E-05	9.21314E-05	8.17857E-05	0.000163671	0.000128599	7.35754E-05	6.92304E-05	7.47879E-05	8.72759E-05	0.000138641	9.06625E-05	9.10402E-05
T_Cr	Care & Maintenance	P95	0.000189965	0.000153369	0.000175147	0.000268211	0.000231868	0.000198404	0.000183789	0.000174809	0.000183475	0.000217787	0.000192623	0.000174301
T_Cu	Care & Maintenance	P95	0.000273982	0.000315101	0.000275459	0.000321951	0.000488975	0.000371728	0.000397248	0.000362144	0.000315257	0.000290364	0.000273091	0.000309709
T_Fe	Care & Maintenance	P95	0.145122007	0.120659672	0.145697951	0.163024604	0.13818799	0.113255799	0.106730178	0.125745401	0.14833048	0.170576558	0.160984844	0.107128635
T_Hg	Care & Maintenance	P95	3.73796E-06	3.74929E-06	3.53435E-06	6.49821E-06	4.9285E-06	3.8649E-06	3.44632E-06	3.21693E-06	3.49045E-06	4.42877E-06	3.77283E-06	4.06003E-06
T_K	Care & Maintenance	P95	1.151469946	1.066856027	1.099906921	1.652375221	1.208749652	0.951653957	0.966037929	1.071516514	1.109543324	1.313612819	1.113366485	1.130550742
T_Li	Care & Maintenance	P95	0.005435453	0.005117348	0.004325774	0.01520277	0.009337897	0.003824094	0.002595669	0.002593429	0.003724579	0.00805926	0.004999158	0.005206584
T_Mg	Care & Maintenance	P95	4.81942749	4.829995632	4.971290112	4.752251625	4.395808697	4.128406525	4.1686759	4.376152515	4.503565788	4.499723911	4.504959583	4.84592104
T_Mn	Care & Maintenance	P95	0.028408276	0.020854527	0.023018064	0.032656621	0.022099696	0.021825181	0.021857629	0.027743746	0.029725801	0.037224315	0.046609152	0.027216317
T_Mo	Care & Maintenance	P95	0.000653876	0.000666265	0.000670791	0.000807227	0.000653879	0.000531231	0.000567011	0.000621735	0.00067268	0.000677242	0.000581118	0.000613442
T_Na	Care & Maintenance	P95	4.636191845	4.548416615	4.463066578	6.639503479	5.194215775	3.772472382	3.738660097	3.659827232	4.084580898	4.898555756	4.278121471	4.564043999
T_Ni	Care & Maintenance	P95	0.000323516	0.000320051	0.000303907	0.000464158	0.000376621	0.000310259	0.000288873	0.000284352	0.000310106	0.000365755	0.000328776	0.000324636
T_P	Care & Maintenance	P95	0.027732655	0.027217805	0.029596929	0.030793926	0.025105163	0.022240466	0.019070262	0.017304735	0.017690279	0.020052705	0.02768903	0.027202748
T_Pb	Care & Maintenance	P95	0.000132123	0.000130165	0.000114681	0.000335508	0.000251665	0.000104822	7.39691E-05	6.43701E-05	9.17761E-05	0.000193532	0.00011785	0.00012352
T_S	Care & Maintenance	P95	1.312123179	1.41258359	1.233003259	1.520312428	1.144163013	1.104685068	1.122861147	1.16366899	1.086726546	1.421028495	1.188533783	1.346869588
T_Sb	Care & Maintenance	P95	0.000148428	0.000117105	9.58724E-05	0.000245656	0.000143203	0.000124544	0.000138177	0.000137681	0.0001625	0.000255767	0.000175946	0.000156778
T_Se	Care & Maintenance	P95	8.78493E-05	8.14597E-05	0.000102049	0.000102431	9.06757E-05	7.98332E-05	8.70024E-05	7.627E-05	7.53609E-05	9.41394E-05	8.03548E-05	7.68642E-05
T_Si	Care & Maintenance	P95	5.199069023	5.094955444	5.131875992	5.28263092	4.925760746	4.386659145	4.319730282	4.210555077	4.393745422	4.958641052	5.125253677	5.128734589
T_Sn	Care & Maintenance	P95	5.01816E-05	5.02827E-05	5.01758E-05	5.0402E-05	5.11822E-05	5.0274E-05	5.0314E-05	4.99513E-05	5.00576E-05	5.09522E-05	5.02788E-05	5.02763E-05
T_Sr	Care & Maintenance	P95	0.104679354	0.104036622	0.103240885	0.094425477	0.090556815	0.087388866	0.087208502	0.092683837	0.099269107	0.095433712	0.095702738	0.104091547
T_Ti	Care & Maintenance	P95	0.004381484	0.002830823	0.003142369	0.004121301	0.003829132	0.002777301	0.003942982	0.00329442	0.003116613	0.004893769	0.00490568	0.003571765
T_Tl	Care & Maintenance	P95	3.08371E-05	3.01912E-05	2.67795E-05	8.01218E-05	5.321E-05	2.92504E-05	1.72394E-05	1.51376E-05	2.08284E-05	4.47675E-05	2.69774E-05	3.14464E-05
T_U	Care & Maintenance	P95	0.000138575	0.000134582	0.000143094	0.000200251	0.000146392	0.000119266	0.000105893	0.000111172	0.000119959	0.000138913	0.000125508	0.000123871
T_V	Care & Maintenance	P95	0.001119078	0.000974814	0.00086652	0.002514787	0.001794709	0.00090472	0.000806615	0.000820939	0.000995689	0.001517854	0.001049551	0.001026934
T_Zn	Care & Maintenance	P95	0.001762202	0.001852852	0.001797691	0.002281714	0.002089338	0.001951351	0.001778996	0.001896846	0.001729632	0.001868244	0.001761938	0.001697976
D_Ag	Care & Maintenance	P95	8.8291E-06	8.74895E-06	1.01702E-05	1.76401E-05	1.34304E-05	1.60588E-05	1.06599E-05	8.56171E-06	8.50127E-06	1.08151E-05	8.83451E-06	1.03413E-05
D_Al	Care & Maintenance	P95	0.004238682	0.002908329	0.002490433	0.01577241	0.041802242	0.035494879	0.024836348	0.012732396	0.007	0.011899999	0.016781159	0.007324149
D_As	Care & Maintenance	P95	0.000613455	0.00057939	0.000541899	0.000680899	0.00059928	0.000534112	0.000579807	0.000626191	0.000641379	0.000634286	0.000582032	0.000581885
D_B	Care & Maintenance	P95	0.011119307	0.011059043	0.009359444	0.022514567	0.015952105	0.007607777	0.007379857	0.006910041	0.008324197	0.01410555	0.010148603	0.010703047
D_Ba	Care & Maintenance	P95	0.007006866	0.006650311	0.00694554	0.00710189	0.006207913	0.005983549	0.006243595	0.006431426	0.007145476	0.007420396	0.006656768	0.006770452
D_Bi	Care & Maintenance	P95	2.60498E-05	2.58173E-05	2.56416E-05	2.77203E-05	2.68809E-05	2.5736E-05	2.55526E-05	2.54292E-05	2.59258E-05	2.76091E-05	2.66099E-05	2.61692E-05
D_Be	Care & Maintenance	P95	5.55671E-05	5.57205E-05	5.46617E-05	6.56884E-05	6.09331E-05	5.39622E-05	5.25526E-05	5.20608E-05	5.30331E-05	5.69112E-05	5.51075E-05	5.54023E-05
D_Ca	Care & Maintenance	P95	21.33823204	20.72403145	20.22317886	19.1727581	17.15449524	17.24114799	17.78401184	18.63513947	19.25243378	18.90595245	18.57774925	19.39285088
D_Cd	Care & Maintenance	P95	5.15738E-06	5.24174E-06	5.43588E-06	8.6863E-06	7.97102E-06	7.08382E-06	6.88661E-06	5.68646E-06	5.56382E-06	6.90394E-06	5.22601E-06	5.49914E-06
D_Co	Care & Maintenance	P95	9.54303E-05	9.20989E-05	8.17363E-05	0.000162905	0.000127386	6.8814E-05	6.89383E-05	7.43301E-05	8.68851E-05	0.000138402	9.059E-05	9.00074E-05
D_Cr	Care & Maintenance	P95	0.000156847	0.000106681	0.000107199	0.000209733	0.000165266	0.000143501	0.00013166	0.000129476	0.000131488	0.000190878	0.000143531	0.000115293
D_Cu	Care & Maintenance	P95	0.000278132	0.000317385	0.000276051	0.000305372	0.000402508	0.000317838	0.000359599	0.000298705	0.000285897	0.000290824	0.000277396	0.000316944
D_Fe	Care & Maintenance	P95	0.061576705	0.064769752	0.056944169	0.078410603	0.067152038	0.059943262	0.068139583	0.081560403	0.094465256	0.084572077	0.074916311	0.072084382
D_Hg	Care & Maintenance	P95	3.73301E-06	3.74911E-06	3.53053E-06	6.49521E-06	4.86615E-06	3.83347E-06	3.39626E-06	3.17575E-06	3.45129E-06	4.37544E-06	3.76665E-06	4.06498E-06
D_K	Care & Maintenance	P95	1.159317732	1.062502861	1.025137186	1.624017835	1.199047327	0.92143631	0.931564927	1.046820283	1.083906054	1.286816835	1.140246511	1.12504518
D_Li	Care & Maintenance	P95	0.005435453	0.005117348	0.004325774	0.01520277	0.009337897	0.003824094	0.002595669	0.002593429	0.003724579	0.00805926	0.004999158	0.005206584
D_Mg	Care & Maintenance	P95	4.97176218	4.827132702	5.051802635	4.712397575	4.362519741	4.005151749	4.209190369	4.265871048	4.428771496	4.409597874	4.284377575	4.687003136
D_Mn	Care & Maintenance	P95	0.021530272	0.017448228	0.015879108	0.026809532	0.012096274	0.014727324	0.015152405	0.021018105	0.02432376	0.030045683	0.026988529	0.022649433
D_Mo	Care & Maintenance	P95	0.000607672	0.000627245	0.000631424	0.000767101	0.000623797	0.000503185	0.000556404	0.000584219	0.000653875	0.000623746	0.000551499	0.000571387
D_Na	Care & Maintenance	P95	4.578389168	4.558848381	4.449131489	6.539755821	5.188949108	3.73769784	3.735985518	3.621619225	3.997570276	4.79259491	4.241533279	4.488501072
D_Ni	Care & Maintenance	P95	0.000323489	0.00032003	0.000302168	0.00046244	0.000373002	0.000310484	0.000288137	0.000283772	0.000309643	0.000365528	0.000328743	0.000321685
D_P	Care & Maintenance	P95	0.047457851	0.074267887	0.068826996	0.070440002	0.043724533	0.027451823	0.080587052	0.097951315	0.078041553	0.14578566	0.147357583	0.073751248
D_Pb	Care & Maintenance	P95	0.000130641	0.000128719	0.000112831	0.000332372	0.000241702	9.58825E-05	7.21894E-05	6.00082E-05	8.76533E-05	0.000190686	0.000115792	0.000121579
D_S	Care & Maintenance	P95	1.168833256	1.338257194	1.483359575	1.331806302	1.107690334	1.088909507	1.172536969	1.081029415	1.153206825	1.295153975	1.157734513	1.291422248
D_Sb	Care & Maintenance	P95	0.000148423	0.00011707	9.58282E-05	0.000245813	0.000143154	0.000122727	0.000138153	0.000137667	0.000162488	0.000255755	0.000175936	0.00015677
D_Se	Care & Maintenance	P95	0.000111756	7.35011E-05	9.51263E-05	9.84494E-05	7.83589E-05	7.73863E-05	7.33061E-05	7.70232E-05	7.03918E-05	7.77435E-05	7.66727E-05	7.58263E-05
D_Si	Care & Maintenance	P95	5.053776264	4.865553379	4.911912918	5.01288271	4.63931179	4.165809631	4.071971416	4.106334209	4.273906708	4.660855293	4.996359348	4.982675552
D_Sn	Care & Maintenance	P95	5.01816E-05	5.02827E-05	5.01758E-05	5.0402E-05	5.11822E-05	5.0274E-05	5.0314E-05	4.99513E-05	5.00576E-05	5.09522E-05	5.02788E-05	5.02763E-05
D_Sr	Care & Maintenance	P95	0.106207393	0.104128808	0.105024502	0.095433377	0.090313829	0.084706932	0.087357827	0.091675244	0.098526351	0.094077744	0.092770502	0.100005068
D_Ti	Care & Maintenance	P95	0.001181466	0.002100475	0.00191906	0.002065495	0.001369045	0.001131794	0.001869818	0.003056986	0.002329331	0.004847302	0.004899097	0.002139422
D_Tl	Care & Maintenance	P95	3.08371E-05	3.01912E-05	2.67795E-05	8.01218E-05	5.31703E-05	2.92478E-05	1.72394E-05	1.51376E-05	2.08284E-05	4.47675E-05	2.69774E-05	3.14464E-05
D_U	Care & Maintenance	P95	0.000130901	0.000128591	0.000137168	0.000191305	0.000139187	0.000110952	0.000103302	0.000107361	0.000115275	0.000134877	0.000116688	0.00011525
D_V	Care & Maintenance	P95	0.001077491	0.00096839	0.000807672	0.002367107	0.001629711	0.000765395	0.0006058	0.000693337	0.000857408	0.001494647	0.001028526	0.001004659
D_Zn	Care & Maintenance	P95	0.001394138	0.00129134	0.001174656	0.001850999	0.001877806	0.001481904	0.001145288	0.001107593	0.000959083	0.001182446	0.001015952	0.000944099

APPENDIX B.5: CARE AND MAINTENANCE SCENARIO 2 – RECEIVING STREAM NODES

Appendix B.5.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ28

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254642785	0.2537435	0.247803316	0.237576798	0.18623881	0.052487895	0.044116795	0.046628244	0.063319579	0.071392812	0.076753035	0.07372845
NO3_N	Care & Maintenance	P95	1.733864903	1.974395037	2.026477098	1.904435277	1.861457467	1.105264783	0.956418037	0.970571518	0.828893185	0.997466505	1.191732168	1.456547856
NO2_N	Care & Maintenance	P95	0.01022694	0.011272351	0.011543468	0.011016662	0.010620223	0.007091951	0.006528581	0.006588858	0.005625947	0.006475559	0.007228956	0.009207562
Br	Care & Maintenance	P95	0.066555701	0.070704825	0.071417421	0.062797613	0.060591549	0.044315986	0.042378481	0.046719868	0.039448366	0.045942362	0.054881066	0.060347617
Cl	Care & Maintenance	P95	1.25258553	1.338504314	1.351012111	1.157176614	1.120052218	0.767677307	0.675848365	0.774740398	0.634523749	0.798059821	0.993066609	1.122674465
F	Care & Maintenance	P95	0.359861851	0.387600929	0.391177505	0.333162725	0.315649778	0.222914174	0.190471545	0.210988343	0.18938449	0.233710364	0.284915715	0.332829535
TDP	Care & Maintenance	P95	0.018716702	0.019245313	0.01987757	0.020262904	0.019431943	0.016273279	0.017003126	0.0148331	0.015826227	0.017979549	0.022312384	0.022751939
SO4	Care & Maintenance	P95	35.44675827	34.77742386	33.94707108	30.70245552	25.43222809	26.10949326	31.64525032	43.05272675	40.78902435	39.81429672	40.0002327	47.48892975
T_CN	Care & Maintenance	P95	0.002705958	0.002776132	0.00272476	0.002672413	0.002931554	0.002656561	0.002675476	0.00247153	0.002514195	0.002711001	0.002638012	0.002629548
WAD_CN	Care & Maintenance	P95	0.002705959	0.002776134	0.002710751	0.002641354	0.002931555	0.002645582	0.002664355	0.0024711	0.002514196	0.002710887	0.00263801	0.002629548
T_Ag	Care & Maintenance	P95	3.81095E-05	4.08392E-05	4.12343E-05	4.05024E-05	4.10592E-05	3.25225E-05	2.75559E-05	2.67352E-05	2.34406E-05	2.62426E-05	3.25571E-05	3.49185E-05
T_Al	Care & Maintenance	P95	0.080372222	0.070282772	0.065092064	0.060176637	0.050240442	0.197173491	0.248620957	0.160962597	0.132276967	0.103072129	0.086326711	0.0858116
T_As	Care & Maintenance	P95	0.001207963	0.001226853	0.001238256	0.001236416	0.001156714	0.000812634	0.000870602	0.000912849	0.001070189	0.001174608	0.001152402	0.001139531
T_B	Care & Maintenance	P95	0.055004161	0.059833951	0.06072681	0.052403703	0.051151786	0.031387165	0.02717091	0.029458437	0.023068191	0.031698618	0.040313099	0.047383215
T_Ba	Care & Maintenance	P95	0.007084294	0.007257036	0.007254158	0.007165081	0.008438571	0.007731098	0.00714345	0.006418434	0.007385246	0.008701546	0.009527656	0.008041675
T_Bi	Care & Maintenance	P95	4.30353E-05	4.22464E-05	4.14764E-05	3.96238E-05	3.90705E-05	3.46941E-05	3.37879E-05	3.37341E-05	3.64788E-05	3.79533E-05	4.23943E-05	5.12549E-05
T_Be	Care & Maintenance	P95	8.54826E-05	9.1452E-05	9.14149E-05	8.97583E-05	8.24575E-05	7.28679E-05	6.87807E-05	5.96318E-05	6.77311E-05	6.82845E-05	7.2172E-05	7.51536E-05
T_Ca	Care & Maintenance	P95	17.62384415	18.72961998	18.61243629	17.89336205	16.84178543	15.51239014	14.72630501	15.55891895	18.38500404	20.89425087	19.93048668	20.28489685
T_Cd	Care & Maintenance	P95	2.05096E-05	2.17551E-05	2.1938E-05	2.09381E-05	2.12417E-05	1.62173E-05	1.41594E-05	1.63565E-05	1.61709E-05	1.60033E-05	1.77657E-05	1.91179E-05
T_Co	Care & Maintenance	P95	0.000541879	0.000582766	0.0006019	0.000542995	0.000529437	0.00031521	0.000295516	0.000365508	0.000394617	0.000399405	0.000469269	0.000521869
T_Cr	Care & Maintenance	P95	0.000582805	0.000594669	0.000612517	0.000605195	0.00057399	0.000392781	0.0004158	0.000444883	0.000489246	0.000515536	0.000517982	0.000544709
T_Cu	Care & Maintenance	P95	0.000439542	0.000462962	0.000468838	0.000444262	0.000448916	0.00052806	0.000540641	0.000377155	0.00036284	0.000364864	0.000392973	0.000413409
T_Fe	Care & Maintenance	P95	0.09004508	0.086664245	0.084597953	0.081937402	0.090024821	0.145363912	0.177027404	0.123443924	0.112286992	0.102308556	0.093657292	0.089671366
T_Hg	Care & Maintenance	P95	1.62073E-05	1.76179E-05	1.8176E-05	1.75451E-05	1.5958E-05	1.29066E-05	1.10522E-05	8.47593E-06	1.03203E-05	1.14544E-05	1.22805E-05	1.35679E-05
T_K	Care & Maintenance	P95	4.019554615	4.527106762	4.465967178	4.17605114	3.51324439	3.359740496	3.277352095	3.760912895	3.542102337	3.975274563	4.074197769	3.917752266
T_Li	Care & Maintenance	P95	0.049313203	0.054173864	0.055364981	0.050348088	0.046844359	0.031253748	0.025960419	0.02253782	0.022961378	0.028404988	0.035990745	0.042265605
T_Mg	Care & Maintenance	P95	5.945064068	6.54461813	6.531348228	6.333571434	5.519682407	5.11923933	4.539366245	4.346385479	5.109886169	5.293031216	5.711403847	5.484237194
T_Mn	Care & Maintenance	P95	0.076879844	0.07227242	0.06852144	0.058338556	0.041620161	0.059314013	0.06678623	0.071223669	0.086097136	0.099990264	0.134238943	0.151435047
T_Mo	Care & Maintenance	P95	0.00134104	0.001427356	0.001457888	0.001399166	0.001302453	0.000735887	0.000751829	0.000822752	0.000939838	0.001092507	0.001130903	0.001106501
T_Na	Care & Maintenance	P95	16.15233803	17.96393204	18.46456337	18.20211792	16.43147278	11.11208439	9.684001923	8.988926888	9.457058907	11.24470043	11.99842644	13.91551781
T_Ni	Care & Maintenance	P95	0.000838598	0.000873547	0.000864146	0.000838222	0.000733188	0.00064288	0.000588393	0.000548061	0.00062791	0.000687624	0.00068347	0.000747686
T_P	Care & Maintenance	P95	0.027132668	0.026215455	0.02568846	0.025375929	0.023511464	0.023840809	0.024393251	0.024152026	0.030818975	0.032059398	0.035341382	0.032500762
T_Pb	Care & Maintenance	P95	0.001146373	0.001241256	0.001263279	0.001266719	0.001229358	0.000742194	0.000618039	0.000515785	0.000533204	0.000671886	0.000874258	0.000980689
T_S	Care & Maintenance	P95	1.068753481	1.130279303	1.194527745	1.154132605	1.112126827	0.929855287	0.797437191	0.80357635	0.969037473	1.116304398	1.234728694	1.290823936
T_Sb	Care & Maintenance	P95	0.001027999	0.000993466	0.000964461	0.00084332	0.000654527	0.00075907	0.000889316	0.000912719	0.001095807	0.001260919	0.001648365	0.001942416
T_Se	Care & Maintenance	P95	8.35106E-05	9.31488E-05	9.5118E-05	0.000103461	9.00548E-05	8.03975E-05	7.26489E-05	6.28878E-05	7.04568E-05	7.54981E-05	8.3647E-05	7.9297E-05
T_Si	Care & Maintenance	P95	6.857527256	7.155118942	7.123698235	6.805409908	7.120750427	6.288306713	5.963260174	5.68309927	5.952755451	6.814236641	6.902638435	7.258690357
T_Sn	Care & Maintenance	P95	5.41364E-05	5.55274E-05	5.56817E-05	5.3633E-05	5.90627E-05	5.36663E-05	5.39609E-05	5.04044E-05	5.13469E-05	5.43907E-05	5.60676E-05	5.79877E-05
T_Sr	Care & Maintenance	P95	0.094400376	0.102262482	0.103101969	0.103716731	0.094437324	0.091247804	0.081668526	0.075908318	0.097092956	0.103474922	0.10779167	0.09698724
T_Ti	Care & Maintenance	P95	0.003844155	0.003617851	0.003295743	0.002967199	0.00253964	0.003674773	0.004741471	0.003699126	0.003510448	0.002967413	0.003522469	0.004273016
T_Tl	Care & Maintenance	P95	0.00013978	0.000153177	0.000155951	0.000144672	0.000142019	8.89219E-05	7.78083E-05	7.2328E-05	6.05989E-05	8.08312E-05	0.000104834	0.000121509
T_U	Care & Maintenance	P95	0.000174352	0.000184305	0.000186868	0.000188267	0.000251055	0.000207411	0.000186198	0.000165405	0.000165837	0.000178081	0.000160971	0.000164484
T_V	Care & Maintenance	P95	0.008331607	0.008786619	0.008869027	0.00782487	0.00767184	0.005301329	0.004415203	0.004582735	0.004359957	0.005497935	0.006448335	0.007427114
T_Zn	Care & Maintenance	P95	0.003995279	0.004282159	0.004336718	0.004193525	0.004223846	0.003268243	0.002738119	0.002903144	0.002671264	0.002937718	0.003492446	0.003696085
D_Ag	Care & Maintenance	P95	3.80883E-05	4.08237E-05	4.12218E-05	4.04195E-05	4.09958E-05	2.97921E-05	2.69276E-05	2.66444E-05	2.18291E-05	2.56226E-05	3.22767E-05	3.47158E-05
D_Al	Care & Maintenance	P95	0.039499998	0.025900001	0.0207	0.021600001	0.037741702	0.14061591	0.100999996	0.101999998	0.053100001	0.081405073	0.06770619	0.067664459
D_As	Care & Maintenance	P95	0.001165503	0.001188726	0.00120641	0.001210978	0.001131267	0.000751955	0.000819583	0.000859747	0.001011811	0.001132213	0.001111481	0.001097258
D_B	Care & Maintenance	P95	0.055004161	0.059833951	0.06072681	0.052403703	0.051151786	0.031387165	0.027170828	0.029458437	0.023068191	0.031698618	0.040313084	0.047383215
D_Ba	Care & Maintenance	P95	0.006854802	0.006961399	0.006948665	0.006848307	0.0080943	0.007339072	0.006668735	0.005994652	0.007165713	0.008648889	0.009427244	0.007835212
D_Bi	Care & Maintenance	P95	4.30353E-05	4.22464E-05	4.14764E-05	3.96238E-05	3.90705E-05	3.46941E-05	3.37879E-05	3.37341E-05	3.64788E-05	3.79533E-05	4.23943E-05	5.12549E-05
D_Be	Care & Maintenance	P95	8.54826E-05	9.1452E-05	9.14149E-05	8.97583E-05	8.24575E-05	7.28679E-05	6.87807E-05	5.96318E-05	6.77311E-05	6.82845E-05	7.2172E-05	7.51536E-05
D_Ca	Care & Maintenance	P95	17.59659004	18.69193649	18.55806732	17.82468414	16.84900093	15.47805882	14.72837734	15.46634197	18.33243942	20.8590126	19.84453392	20.07444191
D_Cd	Care & Maintenance	P95	2.05953E-05	2.18486E-05	2.20328E-05	2.10131E-05	2.12302E-05	1.51818E-05	1.4056E-05	1.72091E-05	1.64003E-05	1.59735E-05	1.77018E-05	1.90411E-05
D_Co	Care & Maintenance	P95	0.000541874	0.000582711	0.000601856	0.000542569	0.000528927	0.000311352	0.000292182	0.000362793	0.00039373	0.000399354	0.000469112	0.000521863
D_Cr	Care & Maintenance	P95	0.00053056	0.000540985	0.000561606	0.000552552	0.000524649	0.000335193	0.000358193	0.000390054	0.000443384	0.000449708	0.000456856	0.000491126
D_Cu	Care & Maintenance	P95	0.000438891	0.000461308	0.000462774	0.000437531	0.000442161	0.000506576	0.000532164	0.000384187	0.000368419	0.000369406	0.000393202	0.000413355
D_Fe	Care & Maintenance	P95	0.067696713	0.066975817	0.064912803	0.062972903	0.058936995	0.084824637	0.105566815	0.083663978	0.081845134	0.078991905	0.072371706	0.068657875
D_Hg	Care & Maintenance	P95	1.62208E-05	1.76395E-05	1.82079E-05	1.75571E-05	1.59696E-05	1.30055E-05	1.07656E-05	8.23888E-06	1.02072E-05	1.13355E-05	1.22119E-05	1.35501E-05
D_K	Care & Maintenance	P95	4.015149117	4.523927689	4.462143898	4.172729969	3.508602858	3.347071648	3.264550209	3.763534307	3.53487277	3.964286804	4.061644077	3.911588907
D_Li	Care & Maintenance	P95	0.049313203	0.054173864	0.055364981	0.050348088	0.046844359	0.031253748	0.025960419	0.02253782	0.022961378	0.028404988	0.035990745	0.042265605
D_Mg	Care & Maintenance	P95	5.951089382	6.550309181	6.536086559	6.333665371	5.514023304	5.108444214	4.525847435	4.330854893	5.080666065	5.283811569	5.698402882	5.483134747
D_Mn	Care & Maintenance	P95	0.075407617	0.070845611	0.067206189	0.057304822	0.040995572	0.057142228	0.06504795	0.06903819	0.084961236	0.097160235	0.132710248	0.15089184
D_Mo	Care & Maintenance	P95	0.001322283	0.001388342	0.001419491	0.001370782	0.001272053	0.000720183	0.000744648	0.000814895	0.000927561	0.001080849	0.001121128	0.001095284
D_Na	Care & Maintenance	P95	16.11875343	17.93476868	18.43792915	18.17502975	16.40894508	11.06025887	9.612943649	8.947922707	9.393652916	11.20540905	11.96060753	13.87008667
D_Ni	Care & Maintenance	P95	0.00083834	0.000873231	0.000863878	0.000837577	0.000731768	0.00063989	0.000585694	0.000544308	0.000627662	0.000687388	0.000683203	0.000747533
D_P	Care & Maintenance	P95	0.114707433	0.109377302	0.104002848	0.090592392	0.064453557	0.05070214	0.038088303	0.035231031	0.056365948	0.075349033	0.105554603	0.129674196
D_Pb	Care & Maintenance	P95	0.001145276	0.00123969	0.001261897	0.001263835	0.001225841	0.000733843	0.000615901	0.000513862	0.00052948	0.000670597	0.000869712	0.000979322
D_S	Care & Maintenance	P95	1.017199636	1.109159231	1.179423332	1.164266706	1.029135108	0.879239619	0.770722806	0.786568224	0.950365722	1.076564789	1.126774788	1.112726212
D_Sb	Care & Maintenance	P95	0.001027999	0.000993466	0.000964461	0.000843319	0.000654527	0.00075907	0.000889316	0.000912719	0.001095805	0.00126091	0.001648361	0.001942415
D_Se	Care & Maintenance	P95	7.63101E-05	8.55615E-05	8.71071E-05	9.55621E-05	8.8544E-05	7.99894E-05	6.82095E-05	6.21553E-05	6.76599E-05	7.01545E-05	6.83925E-05	6.88075E-05
D_Si	Care & Maintenance	P95	6.646005154	6.924241066	6.897372246	6.611515522	6.807320595	5.980928421	5.733598709	5.547093391	5.860948563	6.747100353	6.81707716	7.144272327
D_Sn	Care & Maintenance	P95	5.41364E-05	5.55274E-05	5.56817E-05	5.3633E-05	5.90627E-05	5.36663E-05	5.39609E-05	5.04044E-05	5.13469E-05	5.43907E-05	5.60676E-05	5.79877E-05
D_Sr	Care & Maintenance	P95	0.095157363	0.103153706	0.103467479	0.103736952	0.095522724	0.091179095	0.081821896	0.075050294	0.096504249	0.103837043	0.108671732	0.098278761
D_Ti	Care & Maintenance	P95	0.00365581	0.003366839	0.003098246	0.002619825	0.001956235	0.002105125	0.002567794	0.002002863	0.00211318	0.002121143	0.003279334	0.004162168
D_Tl	Care & Maintenance	P95	0.00013978	0.000153177	0.000155951	0.000144672	0.000142019	8.89219E-05	7.78083E-05	7.2328E-05	6.05989E-05	8.08312E-05	0.000104834	0.000121509
D_U	Care & Maintenance	P95	0.000166016	0.000175051	0.00017738	0.00017732	0.000233182	0.000190202	0.000168462	0.000154655	0.000155752	0.000171757	0.000154923	0.00015691
D_V	Care & Maintenance	P95	0.008302848	0.00875448	0.008837726	0.007790038	0.007610057	0.005263406	0.004370591	0.004536792	0.004286441	0.005476024	0.006420339	0.007393423
D_Zn	Care & Maintenance	P95	0.003811457	0.004102014	0.004141974	0.004073659	0.004123897	0.003021166	0.002628069	0.002708092	0.002382124	0.002634173	0.003244044	0.003497959

Appendix B.5.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ27

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.221151575	0.220532715	0.215563402	0.223046035	0.184993044	0.051499639	0.042077892	0.043177977	0.057460468	0.064976849	0.069987811	0.064573452
NO3_N	Care & Maintenance	P95	1.514387608	1.723903656	1.771086693	1.793190002	1.849825263	1.079876781	0.906749547	0.896779001	0.753125906	0.946299493	1.10420692	1.365484953
NO2_N	Care & Maintenance	P95	0.008933786	0.00988679	0.010132223	0.010518809	0.010527317	0.006962114	0.006207008	0.006108821	0.005141406	0.006214997	0.006884002	0.008184764
Br	Care & Maintenance	P95	0.061152153	0.064788215	0.065447994	0.0618365	0.060372975	0.043873753	0.041453302	0.045034379	0.038400944	0.045175139	0.05261033	0.058250241
Cl	Care & Maintenance	P95	1.122811913	1.198178411	1.209995389	1.134302855	1.114709258	0.755220115	0.653400183	0.734380603	0.598973751	0.77811861	0.937256336	1.0662781
F	Care & Maintenance	P95	0.31801495	0.342351019	0.346392781	0.325749785	0.313868403	0.21845293	0.181887358	0.197477147	0.175640911	0.221647233	0.265973181	0.313894331
TDP	Care & Maintenance	P95	0.018331297	0.018404096	0.019691877	0.020067843	0.019296432	0.016101209	0.016340369	0.014333013	0.014794478	0.017410086	0.021307301	0.022086944
SO4	Care & Maintenance	P95	31.03269768	30.67054558	29.84057617	30.38496399	25.29305267	25.56120682	30.27717209	40.74488068	37.36130905	36.53732681	37.10324478	41.64119339
T_CN	Care & Maintenance	P95	0.002674518	0.002735673	0.002691079	0.00266012	0.002927437	0.002652227	0.002664238	0.002471371	0.002509875	0.002706545	0.002627746	0.002613428
WAD_CN	Care & Maintenance	P95	0.00267452	0.002735675	0.002678899	0.00262964	0.002927438	0.002641519	0.002653708	0.002470976	0.002509876	0.002706433	0.002627745	0.002613428
T_Ag	Care & Maintenance	P95	3.40949E-05	3.62243E-05	3.70346E-05	3.67818E-05	4.08628E-05	3.19054E-05	2.63432E-05	2.50691E-05	2.20567E-05	2.48509E-05	3.02724E-05	3.27842E-05
T_Al	Care & Maintenance	P95	0.073792361	0.064186662	0.058748528	0.059520733	0.052496605	0.1961959	0.241610304	0.153093651	0.121875428	0.103309564	0.086581491	0.081151873
T_As	Care & Maintenance	P95	0.001133761	0.001129151	0.001136598	0.001216595	0.00115018	0.000805102	0.000854748	0.000891607	0.001027504	0.001142808	0.001103676	0.001074065
T_B	Care & Maintenance	P95	0.048543822	0.05277732	0.053601723	0.050571285	0.050869334	0.030754214	0.026007708	0.027583638	0.0214062	0.03002852	0.038501058	0.044510458
T_Ba	Care & Maintenance	P95	0.007042663	0.007173887	0.007251709	0.007161409	0.008416223	0.007661342	0.007088722	0.006519743	0.007474781	0.008572646	0.009156604	0.007807244
T_Bi	Care & Maintenance	P95	4.06072E-05	3.99402E-05	3.92787E-05	3.81432E-05	3.89672E-05	3.44771E-05	3.3496E-05	3.30423E-05	3.53967E-05	3.70731E-05	4.1132E-05	4.78347E-05
T_Be	Care & Maintenance	P95	8.08384E-05	8.69297E-05	8.60427E-05	8.72796E-05	8.20921E-05	7.23406E-05	6.77652E-05	5.88564E-05	6.64058E-05	6.76139E-05	7.08376E-05	7.35348E-05
T_Ca	Care & Maintenance	P95	16.85039902	17.85442352	17.87448311	17.601717	16.75649452	15.27704525	14.39884377	15.26730347	17.87290382	19.92619133	19.16156769	18.8444519
T_Cd	Care & Maintenance	P95	1.81857E-05	1.95409E-05	1.94515E-05	1.92973E-05	2.11747E-05	1.59601E-05	1.37266E-05	1.5309E-05	1.50275E-05	1.56871E-05	1.65025E-05	1.81262E-05
T_Co	Care & Maintenance	P95	0.000479058	0.000518842	0.00053134	0.000523908	0.000526554	0.000309269	0.000282157	0.000341347	0.000362588	0.000373384	0.000438093	0.00047087
T_Cr	Care & Maintenance	P95	0.000548498	0.000547775	0.000559899	0.000595799	0.000571632	0.0003895	0.000405532	0.000426564	0.000468406	0.000507181	0.000497096	0.000519485
T_Cu	Care & Maintenance	P95	0.000414747	0.000439771	0.000440463	0.000428779	0.00045033	0.000524812	0.000539641	0.000367944	0.000353588	0.000375164	0.00038103	0.00040264
T_Fe	Care & Maintenance	P95	0.087939769	0.08321695	0.079908431	0.081491634	0.091280468	0.144664735	0.173308551	0.120790802	0.10918805	0.102801219	0.094040185	0.088735946
T_Hg	Care & Maintenance	P95	1.44231E-05	1.59837E-05	1.61693E-05	1.66498E-05	1.58797E-05	1.27838E-05	1.06053E-05	8.00136E-06	9.67967E-06	1.09119E-05	1.14725E-05	1.26132E-05
T_K	Care & Maintenance	P95	3.597692013	3.999788761	3.950471163	3.93605876	3.493950367	3.292543888	3.128183842	3.577409267	3.31855464	3.820353508	3.804896116	3.666750908
T_Li	Care & Maintenance	P95	0.043035433	0.047273792	0.048357293	0.047843851	0.046562321	0.030564774	0.024629295	0.020853024	0.021386689	0.026778243	0.033453126	0.039344631
T_Mg	Care & Maintenance	P95	5.456996918	6.004654408	6.041789532	6.087249756	5.463292122	5.024757385	4.401785851	4.222823143	4.870164871	5.20070076	5.505826473	5.272307396
T_Mn	Care & Maintenance	P95	0.067638636	0.063154109	0.059936218	0.055663664	0.04144055	0.058123954	0.065197319	0.066324644	0.078451373	0.091779232	0.122458503	0.131930187
T_Mo	Care & Maintenance	P95	0.001258582	0.001336427	0.001374433	0.001359262	0.001293928	0.00072526	0.00073715	0.000810961	0.000925254	0.001043606	0.001066646	0.001037092
T_Na	Care & Maintenance	P95	14.46862316	16.35487747	16.50891304	17.3499012	16.3352108	10.88466454	9.31289959	8.528851509	8.939362526	10.72799587	11.3669672	12.75852299
T_Ni	Care & Maintenance	P95	0.000762536	0.00080629	0.000785341	0.000804054	0.00073043	0.000634232	0.000570518	0.000525023	0.000601758	0.000675852	0.00065129	0.000719402
T_P	Care & Maintenance	P95	0.024597501	0.023922255	0.023461403	0.024482803	0.023482453	0.023490656	0.023698196	0.022787161	0.028712234	0.029894534	0.032771457	0.02979229
T_Pb	Care & Maintenance	P95	0.00099904	0.001092631	0.001129128	0.001136699	0.001220555	0.00072813	0.000585406	0.000477662	0.000484694	0.000624976	0.000803177	0.000901387
T_S	Care & Maintenance	P95	1.031014681	1.095987916	1.135610342	1.137625217	1.103830457	0.914494872	0.77458781	0.795192957	0.954663634	1.077649474	1.145428538	1.19213748
T_Sb	Care & Maintenance	P95	0.000900437	0.00087127	0.000846293	0.000800606	0.000648829	0.000743645	0.000861574	0.000849596	0.000999678	0.001150375	0.001503842	0.001698639
T_Se	Care & Maintenance	P95	8.04912E-05	9.11386E-05	9.1291E-05	9.97619E-05	8.9353E-05	7.96175E-05	7.14306E-05	6.08291E-05	6.893E-05	7.3622E-05	8.14102E-05	7.59607E-05
T_Si	Care & Maintenance	P95	6.771830559	7.024524212	6.967638969	6.763421059	7.103708744	6.261578083	5.951601982	5.695872307	5.942084312	6.797115803	6.817698479	7.126448631
T_Sn	Care & Maintenance	P95	5.35053E-05	5.47176E-05	5.48713E-05	5.34844E-05	5.89916E-05	5.35665E-05	5.37122E-05	5.03088E-05	5.1202E-05	5.42715E-05	5.54611E-05	5.6877E-05
T_Sr	Care & Maintenance	P95	0.091799445	0.099459767	0.10100273	0.102822304	0.09371832	0.08995688	0.08083456	0.0757939	0.096229054	0.100826815	0.103714131	0.092734762
T_Ti	Care & Maintenance	P95	0.003990253	0.003792656	0.003514236	0.003093005	0.002569276	0.003696173	0.004748539	0.00378147	0.003648052	0.00311995	0.003582467	0.004173962
T_Tl	Care & Maintenance	P95	0.00012207	0.000134121	0.000136664	0.000134332	0.000141182	8.70737E-05	7.38009E-05	6.71757E-05	5.52896E-05	7.593E-05	9.78412E-05	0.000113356
T_U	Care & Maintenance	P95	0.000173395	0.000187316	0.000192994	0.000189015	0.00025038	0.000206901	0.000183734	0.000165469	0.000167228	0.000177212	0.000159184	0.00016272
T_V	Care & Maintenance	P95	0.007288582	0.007688936	0.0077679	0.007441777	0.00762843	0.005192793	0.00421202	0.004255677	0.004078119	0.005061915	0.006010591	0.006989933
T_Zn	Care & Maintenance	P95	0.003679862	0.003938379	0.003971893	0.003910176	0.004207042	0.003228258	0.002670776	0.002794344	0.002578919	0.002839251	0.003326491	0.003538343
D_Ag	Care & Maintenance	P95	3.39793E-05	3.62108E-05	3.69813E-05	3.67074E-05	4.07744E-05	2.92354E-05	2.57782E-05	2.49853E-05	2.05414E-05	2.44221E-05	3.0012E-05	3.25964E-05
D_Al	Care & Maintenance	P95	0.0372	0.0244	0.018200001	0.021524636	0.039084136	0.137999997	0.099399999	0.098499998	0.051640574	0.081472792	0.067289799	0.064400002
D_As	Care & Maintenance	P95	0.001091421	0.001092157	0.001103708	0.001190261	0.00112356	0.000744942	0.000803272	0.000838129	0.000971756	0.001095294	0.001061371	0.001030521
D_B	Care & Maintenance	P95	0.048543822	0.05277732	0.053601723	0.050571285	0.050869334	0.030754214	0.026007634	0.027583638	0.0214062	0.03002852	0.038501047	0.044510458
D_Ba	Care & Maintenance	P95	0.006818153	0.006928643	0.006957821	0.006845434	0.008060114	0.007272395	0.006644106	0.00614151	0.007258601	0.008491971	0.009113517	0.007623727
D_Bi	Care & Maintenance	P95	4.06072E-05	3.99402E-05	3.92787E-05	3.81432E-05	3.89672E-05	3.44771E-05	3.3496E-05	3.30423E-05	3.53967E-05	3.70731E-05	4.1132E-05	4.78347E-05
D_Be	Care & Maintenance	P95	8.08384E-05	8.69297E-05	8.60427E-05	8.72796E-05	8.20921E-05	7.23406E-05	6.77652E-05	5.88564E-05	6.64058E-05	6.76139E-05	7.08376E-05	7.35348E-05
D_Ca	Care & Maintenance	P95	16.77337646	17.70875931	17.75838089	17.54564095	16.7623291	15.24134731	14.38936615	15.1804657	17.81369972	19.80226517	19.03949165	18.65089607
D_Cd	Care & Maintenance	P95	1.82922E-05	1.96495E-05	1.95342E-05	1.93938E-05	2.11375E-05	1.49373E-05	1.3408E-05	1.60839E-05	1.53688E-05	1.55505E-05	1.64451E-05	1.80547E-05
D_Co	Care & Maintenance	P95	0.000479054	0.000518816	0.000531302	0.00052359	0.000525986	0.000305498	0.000279006	0.000338839	0.000361785	0.000373196	0.000437945	0.000470735
D_Cr	Care & Maintenance	P95	0.000496614	0.000495329	0.000511895	0.000542024	0.000521463	0.000332182	0.000347032	0.000375868	0.000424061	0.000440395	0.000437743	0.000465409
D_Cu	Care & Maintenance	P95	0.00041418	0.000438156	0.000435174	0.000419108	0.000442855	0.000501649	0.000522148	0.000374514	0.000361275	0.000363039	0.000381261	0.000402578
D_Fe	Care & Maintenance	P95	0.065796211	0.064275004	0.061018899	0.062387045	0.059341174	0.084583171	0.103663988	0.082633525	0.08002466	0.079237066	0.072185509	0.067753583
D_Hg	Care & Maintenance	P95	1.44348E-05	1.60028E-05	1.61971E-05	1.66693E-05	1.58796E-05	1.27794E-05	1.03336E-05	7.78317E-06	9.51559E-06	1.08016E-05	1.14097E-05	1.26208E-05
D_K	Care & Maintenance	P95	3.593590498	3.997142076	3.946253061	3.933411121	3.489243507	3.279790401	3.132312775	3.580435276	3.313065052	3.811107874	3.792303562	3.661170006
D_Li	Care & Maintenance	P95	0.043035433	0.047273792	0.048357293	0.047843851	0.046562321	0.030564774	0.024629295	0.020853024	0.021386689	0.026778243	0.033453126	0.039344631
D_Mg	Care & Maintenance	P95	5.44697094	6.010884762	5.990563393	6.089498997	5.457498074	5.014006138	4.387195587	4.205604076	4.835931301	5.192383766	5.492021561	5.274610519
D_Mn	Care & Maintenance	P95	0.067114837	0.061859727	0.058720827	0.054560989	0.04074965	0.055946358	0.062975436	0.064231269	0.0774059	0.089138396	0.120894954	0.131328285
D_Mo	Care & Maintenance	P95	0.00122861	0.00129504	0.001333731	0.001331555	0.001263579	0.000709729	0.000727281	0.000801068	0.000908855	0.001038623	0.00105624	0.001019144
D_Na	Care & Maintenance	P95	14.42665958	16.32875252	16.47686386	17.31777954	16.31361389	10.8450985	9.248118401	8.491684914	8.890152931	10.68536758	11.32190514	12.74331856
D_Ni	Care & Maintenance	P95	0.000762312	0.000806006	0.000785108	0.000803483	0.000728767	0.000631308	0.00056796	0.000521556	0.000601525	0.000675622	0.000651038	0.000719257
D_P	Care & Maintenance	P95	0.119173884	0.11451903	0.109921344	0.092763148	0.065016024	0.05299009	0.044001035	0.044164218	0.063063256	0.0792033	0.1082718	0.126481056
D_Pb	Care & Maintenance	P95	0.000998086	0.001091694	0.001126237	0.001134122	0.001216711	0.000719916	0.000583386	0.000476132	0.000481323	0.000624173	0.000798965	0.000899258
D_S	Care & Maintenance	P95	0.970726728	1.057378411	1.145208359	1.119172812	1.021636128	0.865011096	0.74348706	0.767279804	0.942485392	1.000194311	1.047386527	1.000474691
D_Sb	Care & Maintenance	P95	0.000900437	0.00087127	0.000846293	0.000800606	0.000648829	0.000743645	0.000861574	0.000849596	0.000999676	0.001150366	0.001503839	0.001698639
D_Se	Care & Maintenance	P95	7.48606E-05	7.90387E-05	8.26632E-05	9.31134E-05	8.77342E-05	7.89058E-05	6.59276E-05	6.07346E-05	6.53249E-05	6.87727E-05	6.58377E-05	6.70397E-05
D_Si	Care & Maintenance	P95	6.559563637	6.796741486	6.748986244	6.564208508	6.790787697	5.955719471	5.722767353	5.559195995	5.848305225	6.726989269	6.733179569	6.980425835
D_Sn	Care & Maintenance	P95	5.35053E-05	5.47176E-05	5.48713E-05	5.34844E-05	5.89916E-05	5.35665E-05	5.37122E-05	5.03088E-05	5.1202E-05	5.42715E-05	5.54611E-05	5.6877E-05
D_Sr	Care & Maintenance	P95	0.091440573	0.100349583	0.100541689	0.102947354	0.094776288	0.089881189	0.080904461	0.074883029	0.095379867	0.101023078	0.104995869	0.093518145
D_Ti	Care & Maintenance	P95	0.003826796	0.003574923	0.003343485	0.002717453	0.002010909	0.002160294	0.002650966	0.002226238	0.002367572	0.002271505	0.003383994	0.004064412
D_Tl	Care & Maintenance	P95	0.00012207	0.000134121	0.000136664	0.000134332	0.000141182	8.70406E-05	7.38009E-05	6.71757E-05	5.52896E-05	7.593E-05	9.78412E-05	0.000113356
D_U	Care & Maintenance	P95	0.000163771	0.000177593	0.000183672	0.000179099	0.000232452	0.000189559	0.000166682	0.00015461	0.000157557	0.000171085	0.000152948	0.000154641
D_V	Care & Maintenance	P95	0.007263537	0.00766093	0.007740598	0.007419807	0.007565046	0.005151184	0.004159704	0.004208971	0.004013177	0.005008286	0.005958548	0.006942173
D_Zn	Care & Maintenance	P95	0.00352219	0.003714266	0.003721755	0.003802587	0.004107696	0.002991171	0.002542301	0.002610453	0.002311877	0.00253976	0.003017051	0.003323626

Appendix B.5.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ26

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.170837641	0.173284471	0.169814855	0.180421844	0.178636685	0.047982968	0.037534777	0.037912194	0.047074012	0.055694394	0.061405137	0.055207606
NO3_N	Care & Maintenance	P95	1.322117448	1.480240583	1.505769134	1.614612818	1.783918858	1.011816859	0.818787873	0.768195868	0.648185968	0.864208043	0.972697556	1.249426484
NO2_N	Care & Maintenance	P95	0.007536889	0.008660742	0.008665162	0.009241864	0.010069008	0.006508645	0.005475072	0.005280457	0.004342424	0.005593881	0.006116357	0.007357671
Br	Care & Maintenance	P95	0.056009047	0.059535731	0.059196495	0.057271421	0.059475582	0.042757738	0.03918786	0.042033859	0.036416844	0.042793125	0.049145643	0.055698
Cl	Care & Maintenance	P95	0.999711931	1.056469321	1.065725565	1.04688406	1.093550563	0.728408873	0.613525629	0.666112006	0.551804662	0.728271723	0.854970098	1.004555225
F	Care & Maintenance	P95	0.278288126	0.296765536	0.300712019	0.293062091	0.306788594	0.208248332	0.167283848	0.174562708	0.155991286	0.199207172	0.238276094	0.289962471
TDP	Care & Maintenance	P95	0.017892478	0.017410472	0.019476155	0.019634293	0.018630302	0.01572082	0.015191327	0.013444043	0.013063069	0.0163236	0.019961981	0.021107368
SO4	Care & Maintenance	P95	26.41586113	26.34843826	24.67671585	29.58787155	24.72406197	24.38721085	27.13612175	35.19822693	31.95116234	33.73099136	32.86064911	35.65641785
T_CN	Care & Maintenance	P95	0.002625374	0.00267791	0.002639242	0.002615291	0.002896414	0.002635074	0.002633862	0.002465018	0.002495758	0.002692575	0.002608497	0.002582635
WAD_CN	Care & Maintenance	P95	0.002625375	0.002677911	0.002629173	0.00258789	0.002896415	0.002625351	0.002624498	0.002464702	0.002495758	0.002692466	0.002608495	0.002582635
T_Ag	Care & Maintenance	P95	3.04404E-05	3.2546E-05	3.29538E-05	3.41785E-05	4.01139E-05	2.98969E-05	2.3954E-05	2.23031E-05	1.99317E-05	2.28754E-05	2.66737E-05	3.02371E-05
T_Al	Care & Maintenance	P95	0.063066848	0.055503421	0.050688889	0.055493776	0.067472138	0.192504004	0.21963191	0.135597825	0.103079066	0.104513206	0.085267037	0.073193364
T_As	Care & Maintenance	P95	0.00104906	0.001041608	0.001036249	0.001149193	0.001128491	0.000799414	0.000849931	0.000881338	0.000985854	0.001113197	0.001039655	0.001008351
T_B	Care & Maintenance	P95	0.041742928	0.045675706	0.046331119	0.045514408	0.049751725	0.02926659	0.02396637	0.024447735	0.019299272	0.02782663	0.035138562	0.040970568
T_Ba	Care & Maintenance	P95	0.007205043	0.007341125	0.007394839	0.007280407	0.008272883	0.007504944	0.007172329	0.006717181	0.007564894	0.00847942	0.008803003	0.007625108
T_Bi	Care & Maintenance	P95	3.70656E-05	3.67581E-05	3.60344E-05	3.55718E-05	3.85634E-05	3.39994E-05	3.27763E-05	3.17857E-05	3.389E-05	3.61939E-05	3.93611E-05	4.41672E-05
T_Be	Care & Maintenance	P95	7.74793E-05	8.32446E-05	8.19789E-05	8.42283E-05	8.11038E-05	7.1585E-05	6.68399E-05	5.88683E-05	6.5299E-05	6.70067E-05	6.94571E-05	7.22308E-05
T_Ca	Care & Maintenance	P95	16.3988266	17.36685562	17.54395294	17.24535942	16.30986977	14.85381603	14.07021523	14.56543255	17.14921951	18.42134666	18.17874718	17.63082314
T_Cd	Care & Maintenance	P95	1.65998E-05	1.78128E-05	1.76488E-05	1.83738E-05	2.09523E-05	1.52394E-05	1.26295E-05	1.40744E-05	1.4017E-05	1.5113E-05	1.49633E-05	1.70338E-05
T_Co	Care & Maintenance	P95	0.000419783	0.000462666	0.000459439	0.000470653	0.000515103	0.000296074	0.000261621	0.00030061	0.000316621	0.000343471	0.000392304	0.000435396
T_Cr	Care & Maintenance	P95	0.000488603	0.000477153	0.000474375	0.000548888	0.0005599	0.000378992	0.00037714	0.000381986	0.000423315	0.000480778	0.000466801	0.000470034
T_Cu	Care & Maintenance	P95	0.00039631	0.000418641	0.000415451	0.000409979	0.000459692	0.000528402	0.000511421	0.000355601	0.000343743	0.00040335	0.000365962	0.000390889
T_Fe	Care & Maintenance	P95	0.079400942	0.075304933	0.070599139	0.077679664	0.098903917	0.142364696	0.158918411	0.11412742	0.100076422	0.106852181	0.09398555	0.086456895
T_Hg	Care & Maintenance	P95	1.26518E-05	1.42921E-05	1.41507E-05	1.49865E-05	1.5698E-05	1.2336E-05	9.86184E-06	7.27818E-06	8.90156E-06	9.98763E-06	1.0392E-05	1.17062E-05
T_K	Care & Maintenance	P95	3.325841427	3.608106375	3.56086731	3.615707636	3.434942961	3.194707155	2.925639391	3.239398003	3.065323114	3.561607838	3.515674114	3.478097916
T_Li	Care & Maintenance	P95	0.036859948	0.040866189	0.041077808	0.042049214	0.045415204	0.028958151	0.022057826	0.017927568	0.01847096	0.023953825	0.029409898	0.035605185
T_Mg	Care & Maintenance	P95	5.085522175	5.584621906	5.65474987	5.609161854	5.316088676	4.816854477	4.175657749	3.950912952	4.524189472	4.97143364	5.164932728	5.045043945
T_Mn	Care & Maintenance	P95	0.062127911	0.053520277	0.049181134	0.054169014	0.040745955	0.055807587	0.060855132	0.057364456	0.068337038	0.083169691	0.108252041	0.108931549
T_Mo	Care & Maintenance	P95	0.001198142	0.001274008	0.001315921	0.001290043	0.001253234	0.000706101	0.000741001	0.000801517	0.000906528	0.001009817	0.001011652	0.000988366
T_Na	Care & Maintenance	P95	12.77845955	14.66758347	14.51142979	15.61101723	15.77586269	10.40188694	8.662451744	7.781389713	8.133638382	9.804556847	10.35023308	11.80557346
T_Ni	Care & Maintenance	P95	0.000697956	0.000742899	0.000716845	0.000748456	0.000716266	0.000620066	0.000544928	0.000495222	0.000562626	0.000655132	0.000618685	0.000689353
T_P	Care & Maintenance	P95	0.020989902	0.021267166	0.020312009	0.022837946	0.023290724	0.02271213	0.021842061	0.019860417	0.025603626	0.027932473	0.029579299	0.02645958
T_Pb	Care & Maintenance	P95	0.000851832	0.00095476	0.000976539	0.000991856	0.001187315	0.000676154	0.000506761	0.000413377	0.000411849	0.000582143	0.000688256	0.000824521
T_S	Care & Maintenance	P95	0.996763349	1.06675458	1.073478222	1.099896669	1.063183904	0.890921295	0.709499598	0.745352566	0.928261757	1.026052952	1.035792947	1.101902246
T_Sb	Care & Maintenance	P95	0.000802405	0.000743805	0.000721063	0.000772917	0.000631016	0.000718699	0.000803895	0.00074655	0.000887933	0.001043483	0.001345012	0.001456278
T_Se	Care & Maintenance	P95	7.85849E-05	8.89348E-05	8.73522E-05	9.65435E-05	8.72404E-05	7.75839E-05	7.16927E-05	6.12142E-05	6.44271E-05	7.1204E-05	8.03122E-05	7.48094E-05
T_Si	Care & Maintenance	P95	6.71541357	6.923374176	6.803299427	6.70539856	7.008832932	6.186903	5.962273598	5.770992756	5.982014656	6.772766113	6.745100975	7.022914886
T_Sn	Care & Maintenance	P95	5.25194E-05	5.35616E-05	5.40311E-05	5.28237E-05	5.85083E-05	5.31767E-05	5.31167E-05	5.00865E-05	5.0796E-05	5.39446E-05	5.46903E-05	5.56872E-05
T_Sr	Care & Maintenance	P95	0.090620585	0.098186985	0.100730166	0.100589357	0.090372235	0.08723674	0.079811737	0.075131126	0.093974449	0.097084135	0.098868556	0.089615919
T_Ti	Care & Maintenance	P95	0.00371167	0.003528596	0.003302608	0.003413673	0.0027178	0.003790707	0.004762291	0.003982985	0.003896563	0.00341722	0.003815665	0.004288308
T_Tl	Care & Maintenance	P95	0.000103776	0.000116844	0.000117194	0.000118561	0.000137897	8.28877E-05	6.46519E-05	5.87743E-05	4.82382E-05	6.96864E-05	8.62582E-05	0.000102792
T_U	Care & Maintenance	P95	0.000171581	0.000189157	0.000206715	0.000192999	0.000246854	0.000204775	0.000177754	0.000161746	0.000165343	0.000174602	0.000156139	0.000159229
T_V	Care & Maintenance	P95	0.006363349	0.006653413	0.00663623	0.006603085	0.007458074	0.004950246	0.003815956	0.003691199	0.003689585	0.004585289	0.005324437	0.006439914
T_Zn	Care & Maintenance	P95	0.003409797	0.003798787	0.003653532	0.00366529	0.004150216	0.003134673	0.002549212	0.002629802	0.002440771	0.002726458	0.003080857	0.003341835
D_Ag	Care & Maintenance	P95	3.03356E-05	3.24843E-05	3.29052E-05	3.41366E-05	3.99111E-05	2.79842E-05	2.36557E-05	2.22313E-05	1.83913E-05	2.23853E-05	2.64483E-05	3.01977E-05
D_Al	Care & Maintenance	P95	0.0262	0.013900001	0.0106	0.021230837	0.046324033	0.125666678	0.077	0.068000004	0.034899998	0.07265	0.064217716	0.047400001
D_As	Care & Maintenance	P95	0.001006513	0.001008753	0.001000784	0.001117551	0.001097427	0.000737635	0.00079262	0.000821206	0.000934857	0.001063323	0.00100099	0.000968916
D_B	Care & Maintenance	P95	0.041742928	0.045675706	0.046331119	0.045514408	0.049751725	0.02926659	0.023966303	0.024447735	0.019299272	0.02782663	0.035138559	0.040970568
D_Ba	Care & Maintenance	P95	0.006928092	0.007037799	0.007133693	0.006998335	0.0078641	0.007105779	0.006736162	0.006395526	0.007340126	0.008317305	0.008722814	0.007461367
D_Bi	Care & Maintenance	P95	3.70656E-05	3.67581E-05	3.60344E-05	3.55718E-05	3.85634E-05	3.39994E-05	3.27763E-05	3.17857E-05	3.389E-05	3.61939E-05	3.93611E-05	4.41672E-05
D_Be	Care & Maintenance	P95	7.74793E-05	8.32446E-05	8.19789E-05	8.42283E-05	8.11038E-05	7.1585E-05	6.68399E-05	5.88683E-05	6.5299E-05	6.70067E-05	6.94571E-05	7.22308E-05
D_Ca	Care & Maintenance	P95	16.34773827	17.21471786	17.33144569	17.17927742	16.31158066	14.80888557	13.96209431	14.56719017	17.06090355	18.26004028	18.05660057	17.49591064
D_Cd	Care & Maintenance	P95	1.6726E-05	1.79061E-05	1.77216E-05	1.84511E-05	2.08149E-05	1.42193E-05	1.22953E-05	1.45892E-05	1.43954E-05	1.49728E-05	1.49156E-05	1.69723E-05
D_Co	Care & Maintenance	P95	0.000419756	0.000462643	0.000459407	0.000470347	0.000514408	0.000292506	0.000258752	0.000298463	0.000315952	0.000342843	0.000392167	0.000435273
D_Cr	Care & Maintenance	P95	0.000431792	0.000426946	0.000421307	0.000497084	0.000505039	0.000323121	0.000322579	0.000335416	0.000381466	0.000415032	0.000406201	0.000415239
D_Cu	Care & Maintenance	P95	0.0003963	0.000414078	0.000410963	0.000400115	0.000445899	0.000481188	0.000498005	0.000361096	0.000357511	0.000355842	0.000366844	0.000390042
D_Fe	Care & Maintenance	P95	0.058140136	0.057088144	0.052026231	0.059028704	0.06152023	0.083382323	0.097408488	0.077606715	0.074090011	0.080065638	0.070385784	0.064767212
D_Hg	Care & Maintenance	P95	1.26671E-05	1.43084E-05	1.41742E-05	1.50041E-05	1.56184E-05	1.22177E-05	9.61731E-06	7.08896E-06	8.75264E-06	9.89265E-06	1.03181E-05	1.17211E-05
D_K	Care & Maintenance	P95	3.323564053	3.604995012	3.557020187	3.613009691	3.430069208	3.182103872	2.929139376	3.240750074	3.063156843	3.554569006	3.51009202	3.475025415
D_Li	Care & Maintenance	P95	0.036859948	0.040866189	0.041077808	0.042049214	0.045415204	0.028958151	0.022057826	0.017927568	0.01847096	0.023953825	0.029409898	0.035605185
D_Mg	Care & Maintenance	P95	5.072475433	5.59095335	5.579945087	5.606461525	5.309704304	4.804143906	4.183273792	3.938681841	4.492665768	4.962416649	5.143046856	5.056570053
D_Mn	Care & Maintenance	P95	0.061522491	0.052213244	0.047980729	0.053059336	0.039789639	0.05352632	0.057800695	0.055254214	0.067131996	0.080299705	0.106621571	0.107943721
D_Mo	Care & Maintenance	P95	0.001166121	0.001227946	0.001266552	0.001259664	0.001222403	0.000690041	0.000728959	0.000787386	0.000884711	0.000998142	0.000996805	0.000961634
D_Na	Care & Maintenance	P95	12.73536968	14.64471817	14.47761631	15.56124783	15.76220036	10.35076332	8.614125252	7.73003149	8.079515457	9.767195702	10.32140732	11.79659939
D_Ni	Care & Maintenance	P95	0.000697767	0.000742649	0.000716645	0.000747961	0.000714672	0.000617272	0.000542654	0.000492253	0.000562423	0.000654917	0.000618491	0.00068922
D_P	Care & Maintenance	P95	0.111766078	0.108548068	0.104437351	0.106898434	0.068788394	0.058252476	0.058007281	0.064573176	0.076593257	0.084038153	0.113196477	0.129765734
D_Pb	Care & Maintenance	P95	0.000850957	0.000953958	0.000973988	0.000989811	0.00118126	0.000673743	0.000505043	0.000412042	0.000407912	0.000581942	0.000684622	0.000822967
D_S	Care & Maintenance	P95	0.842400432	0.989026368	1.09359622	1.0236305	0.984879911	0.829795122	0.698384047	0.726416409	0.909710824	0.901185334	0.980861843	0.881677389
D_Sb	Care & Maintenance	P95	0.000802405	0.000743805	0.000721063	0.000772917	0.000631016	0.000718699	0.000803895	0.00074655	0.000887932	0.001043459	0.00134501	0.001456277
D_Se	Care & Maintenance	P95	7.42698E-05	7.3438E-05	8.1648E-05	8.8992E-05	8.51327E-05	7.71705E-05	6.27468E-05	5.73141E-05	6.18963E-05	6.69454E-05	6.23914E-05	6.31549E-05
D_Si	Care & Maintenance	P95	6.529020786	6.702826977	6.595896244	6.468898296	6.691200733	5.904379368	5.755265236	5.627305984	5.869091034	6.687636375	6.643723965	6.819983006
D_Sn	Care & Maintenance	P95	5.25194E-05	5.35616E-05	5.40311E-05	5.28237E-05	5.85083E-05	5.31767E-05	5.31167E-05	5.00865E-05	5.0796E-05	5.39446E-05	5.46903E-05	5.56872E-05
D_Sr	Care & Maintenance	P95	0.089996196	0.098738037	0.099600501	0.100749373	0.091228716	0.087089092	0.080049194	0.074898623	0.092555389	0.097084798	0.099362366	0.089958631
D_Ti	Care & Maintenance	P95	0.003531454	0.003349938	0.003149361	0.003262277	0.002200294	0.00243551	0.002986599	0.002728518	0.00291971	0.002626589	0.003611025	0.004196419
D_Tl	Care & Maintenance	P95	0.000103776	0.000116844	0.000117194	0.000118561	0.000137897	8.28563E-05	6.46519E-05	5.87743E-05	4.82382E-05	6.96864E-05	8.62582E-05	0.000102792
D_U	Care & Maintenance	P95	0.000164226	0.000179429	0.000196774	0.000180802	0.000228004	0.000187566	0.000162791	0.000150435	0.00015458	0.000167797	0.000149881	0.000149799
D_V	Care & Maintenance	P95	0.006325474	0.006632391	0.006613093	0.006564909	0.007385471	0.00489574	0.003732812	0.003651246	0.003618878	0.004537907	0.005244248	0.006374547
D_Zn	Care & Maintenance	P95	0.003190678	0.003537047	0.003402576	0.003527058	0.004047172	0.002882177	0.002448362	0.002425923	0.002166562	0.002391912	0.002673473	0.003038397

Appendix B.5.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ7

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.142306611	0.145101249	0.142179221	0.149196967	0.164695799	0.045289837	0.033997785	0.035311352	0.042104743	0.049214255	0.054823283	0.048092429
NO3_N	Care & Maintenance	P95	1.127548575	1.297017455	1.296915531	1.411267638	1.702968478	0.96256566	0.741010487	0.673057795	0.565910399	0.818998873	0.874311268	1.14497292
NO2_N	Care & Maintenance	P95	0.006732371	0.007764617	0.007519613	0.008227011	0.00937089	0.006166742	0.004908385	0.004687478	0.003788635	0.00486632	0.005531021	0.006758825
Br	Care & Maintenance	P95	0.052479651	0.055357844	0.054405864	0.052318983	0.057921696	0.041832175	0.037559047	0.039921239	0.035119612	0.041439928	0.046646025	0.053299464
Cl	Care & Maintenance	P95	0.890948474	0.958156347	0.951395512	0.940754294	1.05599308	0.705025613	0.581932843	0.6144768	0.522411704	0.690872729	0.792646885	0.945586681
F	Care & Maintenance	P95	0.245703265	0.265023082	0.265432745	0.261743307	0.294730425	0.199897662	0.157466561	0.157945335	0.144785568	0.190920442	0.21853596	0.269226938
TDP	Care & Maintenance	P95	0.016607076	0.015404898	0.018962564	0.018574867	0.0178425	0.01530599	0.014107374	0.013136958	0.011950272	0.015520844	0.017963946	0.018540192
SO4	Care & Maintenance	P95	24.26446152	22.80076218	21.6417942	26.56905174	23.65063858	23.25574684	25.38182449	31.15592957	28.35980797	32.02733612	29.796978	30.80212784
T_CN	Care & Maintenance	P95	0.002604245	0.002649291	0.002607638	0.002593845	0.002877177	0.002627754	0.002618447	0.002470425	0.002496461	0.002681435	0.00259656	0.002570822
WAD_CN	Care & Maintenance	P95	0.002604245	0.002649292	0.002599085	0.002571808	0.002877178	0.002618636	0.002610051	0.002470158	0.002496462	0.002681331	0.002596558	0.002570821
T_Ag	Care & Maintenance	P95	2.76977E-05	2.96361E-05	2.96777E-05	3.32947E-05	3.89152E-05	2.88004E-05	2.21359E-05	2.01551E-05	1.80916E-05	2.18068E-05	2.41531E-05	2.89435E-05
T_Al	Care & Maintenance	P95	0.056709588	0.050724838	0.045281209	0.052833159	0.115364283	0.192048132	0.203083754	0.124573268	0.090469666	0.093712367	0.082103543	0.067170836
T_As	Care & Maintenance	P95	0.000952421	0.000947717	0.000927936	0.001095569	0.001101649	0.000779029	0.00081881	0.000840699	0.000933977	0.001063394	0.000965102	0.0009302
T_B	Care & Maintenance	P95	0.036845196	0.040617023	0.040534638	0.039844945	0.047752805	0.028064018	0.022002473	0.022034628	0.017528836	0.025996692	0.032014292	0.037824314
T_Ba	Care & Maintenance	P95	0.007321359	0.007524619	0.007848256	0.0078968	0.008323275	0.007432777	0.007177428	0.00691283	0.00767105	0.008369274	0.008551016	0.007655897
T_Bi	Care & Maintenance	P95	3.50645E-05	3.48583E-05	3.40973E-05	3.37912E-05	3.80331E-05	3.357E-05	3.19073E-05	3.09432E-05	3.29281E-05	3.55346E-05	3.7808E-05	4.13332E-05
T_Be	Care & Maintenance	P95	7.35611E-05	7.90951E-05	7.75646E-05	7.63402E-05	7.94994E-05	7.04832E-05	6.51062E-05	5.78525E-05	6.35018E-05	6.60653E-05	6.74175E-05	7.03426E-05
T_Ca	Care & Maintenance	P95	16.10038948	16.98294258	17.40880013	16.62133789	15.79007721	14.40310764	13.65397167	14.19348812	16.8022728	17.69154549	17.40294266	17.00270271
T_Cd	Care & Maintenance	P95	1.52577E-05	1.74839E-05	1.61635E-05	1.76716E-05	2.0622E-05	1.46502E-05	1.2179E-05	1.26692E-05	1.30313E-05	1.46574E-05	1.41683E-05	1.60475E-05
T_Co	Care & Maintenance	P95	0.000369505	0.000412939	0.000402217	0.000430302	0.000499537	0.000284845	0.000245117	0.000269497	0.000283058	0.000325804	0.000357286	0.000402689
T_Cr	Care & Maintenance	P95	0.000437216	0.000433223	0.000422051	0.000524465	0.000565985	0.000374914	0.000361359	0.000350758	0.00038657	0.000454301	0.000438911	0.00043163
T_Cu	Care & Maintenance	P95	0.000378426	0.000398134	0.000392459	0.00039587	0.000505437	0.000538353	0.000510043	0.000343962	0.000336168	0.000386702	0.000354626	0.000379381
T_Fe	Care & Maintenance	P95	0.084832944	0.082788005	0.080525301	0.115135439	0.134591773	0.146319121	0.15572989	0.119888417	0.110371776	0.112125367	0.101977795	0.093174323
T_Hg	Care & Maintenance	P95	1.14126E-05	1.28171E-05	1.25141E-05	1.27596E-05	1.5394E-05	1.18867E-05	9.3075E-06	6.75835E-06	8.23829E-06	9.47946E-06	9.64175E-06	1.09137E-05
T_K	Care & Maintenance	P95	3.023807764	3.22612524	3.147002697	3.047657967	3.298226118	3.073039532	2.701274872	2.92478919	2.816004276	3.283900261	3.204922438	3.246459484
T_Li	Care & Maintenance	P95	0.032402057	0.035808347	0.035385385	0.03591536	0.043386448	0.027574979	0.019973213	0.015764141	0.016442126	0.022707598	0.026408166	0.032624781
T_Mg	Care & Maintenance	P95	4.863107204	5.317633629	5.386547089	5.154738903	5.118644714	4.648669243	3.976278543	3.802409887	4.373077869	4.846050739	4.910132408	4.894236565
T_Mn	Care & Maintenance	P95	0.057319548	0.047889318	0.044326421	0.05199251	0.04009473	0.053754289	0.058222331	0.053169247	0.061459344	0.075663291	0.097309671	0.094809949
T_Mo	Care & Maintenance	P95	0.001127284	0.001209301	0.001235418	0.001241749	0.001215618	0.000681549	0.000706886	0.000783209	0.000883212	0.000976703	0.000956434	0.000942188
T_Na	Care & Maintenance	P95	11.59544373	13.28884411	12.99123287	13.61633682	15.07442379	9.977036476	8.087880135	7.2129035	7.592901707	9.175981522	9.643669128	11.03961372
T_Ni	Care & Maintenance	P95	0.000647161	0.00068228	0.000652539	0.000642129	0.000711372	0.000604255	0.000519267	0.000464841	0.000527645	0.000632803	0.00058517	0.000655693
T_P	Care & Maintenance	P95	0.018625489	0.019290879	0.018131794	0.021471068	0.023297315	0.022226395	0.020654878	0.018235384	0.023461102	0.026584402	0.027077062	0.023697654
T_Pb	Care & Maintenance	P95	0.000765967	0.000855484	0.000865149	0.000940912	0.00114062	0.000644786	0.000455026	0.000365197	0.000368224	0.00055077	0.000608848	0.000759117
T_S	Care & Maintenance	P95	0.946301162	1.016286612	1.03013134	1.059780598	1.001012206	0.857728541	0.667403996	0.708779633	0.84262073	0.987637758	0.944933236	1.034227371
T_Sb	Care & Maintenance	P95	0.000732289	0.000634404	0.000611727	0.000726067	0.000588643	0.000687166	0.00073825	0.000679303	0.000783241	0.000934186	0.001195469	0.001246097
T_Se	Care & Maintenance	P95	7.57375E-05	8.52961E-05	8.22249E-05	8.91946E-05	8.59625E-05	7.69262E-05	7.22321E-05	6.03116E-05	6.13285E-05	7.22792E-05	7.91557E-05	7.27969E-05
T_Si	Care & Maintenance	P95	6.639938831	6.816641331	6.686462879	6.608573437	6.917225838	6.11903286	5.962658882	5.845327377	6.004979134	6.747097969	6.70685339	6.937077045
T_Sn	Care & Maintenance	P95	5.20948E-05	5.29886E-05	5.33822E-05	5.22191E-05	5.80468E-05	5.30013E-05	5.287E-05	5.00692E-05	5.06838E-05	5.37161E-05	5.41671E-05	5.48799E-05
T_Sr	Care & Maintenance	P95	0.089784101	0.097070247	0.099821143	0.096964374	0.087642737	0.08475972	0.07830146	0.075239949	0.093409434	0.09502694	0.095490672	0.088489078
T_Ti	Care & Maintenance	P95	0.003515812	0.003227008	0.00267397	0.003744979	0.00370029	0.003851454	0.004786384	0.004143281	0.003733993	0.003653473	0.004019476	0.004131509
T_Tl	Care & Maintenance	P95	9.17611E-05	0.000102822	0.000102338	0.00010748	0.000132155	7.95848E-05	5.8246E-05	5.2102E-05	4.28897E-05	6.35064E-05	7.7802E-05	9.45224E-05
T_U	Care & Maintenance	P95	0.0001698	0.000189004	0.000230999	0.000202152	0.000243673	0.000202356	0.000170153	0.00015612	0.000161368	0.000170661	0.000153145	0.000158506
T_V	Care & Maintenance	P95	0.005574268	0.005872316	0.005740529	0.005987428	0.007182406	0.004744825	0.003561124	0.003319781	0.00342915	0.004368532	0.00483567	0.005935359
T_Zn	Care & Maintenance	P95	0.00320537	0.003522756	0.003400601	0.003538265	0.004058978	0.003028531	0.002447929	0.002489729	0.00233024	0.00265295	0.002893395	0.003190854
D_Ag	Care & Maintenance	P95	2.76137E-05	2.9581E-05	2.96343E-05	3.32549E-05	3.83708E-05	2.73525E-05	2.17819E-05	2.00922E-05	1.70827E-05	2.13441E-05	2.39097E-05	2.89074E-05
D_Al	Care & Maintenance	P95	0.0167	0.012399999	0.0088	0.020741533	0.056730352	0.124522544	0.073569715	0.063789964	0.0233	0.053600002	0.059137847	0.037999999
D_As	Care & Maintenance	P95	0.000905332	0.00091216	0.000893356	0.00106525	0.001053706	0.000714735	0.000758913	0.000787974	0.000880564	0.001016223	0.000920199	0.000884707
D_B	Care & Maintenance	P95	0.036845196	0.040617023	0.040534638	0.039822761	0.047752805	0.028064018	0.022002473	0.022034628	0.017528836	0.025996603	0.032014292	0.037824314
D_Ba	Care & Maintenance	P95	0.007058208	0.007222641	0.007603747	0.007512666	0.0077126	0.006990509	0.006752807	0.006615253	0.007474337	0.008233367	0.008471394	0.007498216
D_Bi	Care & Maintenance	P95	3.50645E-05	3.48583E-05	3.40973E-05	3.37912E-05	3.80331E-05	3.357E-05	3.19073E-05	3.09432E-05	3.29281E-05	3.55346E-05	3.7808E-05	4.13332E-05
D_Be	Care & Maintenance	P95	7.35611E-05	7.90951E-05	7.75646E-05	7.63402E-05	7.94994E-05	7.04832E-05	6.51062E-05	5.78525E-05	6.35018E-05	6.60653E-05	6.74175E-05	7.03426E-05
D_Ca	Care & Maintenance	P95	16.04383659	16.91840744	17.11992645	16.64063454	15.77798271	14.38977242	13.53575039	14.19877338	16.72516251	17.56279755	17.24808311	16.86560059
D_Cd	Care & Maintenance	P95	1.5375E-05	1.626E-05	1.62748E-05	1.76814E-05	2.0225E-05	1.37714E-05	1.18511E-05	1.31763E-05	1.32535E-05	1.45259E-05	1.39929E-05	1.59912E-05
D_Co	Care & Maintenance	P95	0.000369488	0.000412919	0.000402152	0.000429501	0.00049383	0.000280884	0.000242458	0.000267618	0.000282476	0.000325443	0.000357159	0.000401728
D_Cr	Care & Maintenance	P95	0.000384895	0.000381467	0.000374026	0.0004725	0.000488562	0.000315936	0.000302894	0.000306752	0.000346147	0.000390754	0.000374031	0.000375325
D_Cu	Care & Maintenance	P95	0.000378426	0.000394313	0.000388947	0.000386817	0.000459353	0.000488085	0.000494792	0.000348896	0.000345988	0.000348177	0.000355831	0.000378602
D_Fe	Care & Maintenance	P95	0.060528878	0.059417702	0.054450374	0.071255736	0.065181173	0.083458103	0.097760171	0.081077993	0.079874739	0.082514256	0.074152075	0.066765882
D_Hg	Care & Maintenance	P95	1.14296E-05	1.28312E-05	1.25343E-05	1.27753E-05	1.50915E-05	1.16239E-05	8.94552E-06	6.58855E-06	8.06324E-06	9.30791E-06	9.57457E-06	1.09919E-05
D_K	Care & Maintenance	P95	3.022402525	3.222603798	3.137630224	3.041091681	3.289461136	3.06099844	2.691162348	2.927907705	2.813599825	3.277855158	3.20408082	3.241089106
D_Li	Care & Maintenance	P95	0.032402057	0.035808347	0.035385385	0.03591536	0.043386448	0.027574979	0.019973213	0.015764141	0.016442126	0.022707598	0.026408166	0.032624781
D_Mg	Care & Maintenance	P95	4.854673386	5.346827507	5.312475681	5.160918713	5.109206676	4.636844635	3.980742216	3.790711641	4.338253498	4.824062347	4.868315697	4.895861626
D_Mn	Care & Maintenance	P95	0.056661639	0.046714198	0.042757142	0.050797429	0.038284618	0.051273625	0.054677568	0.051101655	0.059995212	0.072450504	0.095590778	0.093481034
D_Mo	Care & Maintenance	P95	0.001097478	0.001159231	0.001184704	0.001212434	0.001185074	0.00066472	0.000692939	0.000761757	0.000863975	0.000963561	0.000937363	0.000910066
D_Na	Care & Maintenance	P95	11.56124973	13.24993324	12.96918392	13.55627823	15.06320953	9.912574768	8.048204422	7.167915821	7.530976772	9.128184319	9.607997894	11.03360748
D_Ni	Care & Maintenance	P95	0.000646967	0.000682031	0.000652366	0.00064177	0.000691322	0.000603155	0.000517195	0.000462241	0.000527462	0.000632601	0.000584989	0.000652501
D_P	Care & Maintenance	P95	0.096350618	0.094429709	0.080391102	0.086498186	0.066203669	0.059691448	0.053742759	0.077722751	0.078176335	0.090416588	0.11785765	0.112992756
D_Pb	Care & Maintenance	P95	0.000764697	0.000852882	0.000862874	0.000936326	0.001129595	0.000642281	0.0004535	0.000364027	0.000364733	0.000550583	0.000605613	0.000757694
D_S	Care & Maintenance	P95	0.777180254	0.969706714	1.068375826	0.974701107	0.92293036	0.799716532	0.661759794	0.675863028	0.873127282	0.896365166	0.926252782	0.84709233
D_Sb	Care & Maintenance	P95	0.000732289	0.000634404	0.000611727	0.000727594	0.000588643	0.000687166	0.00073825	0.000679303	0.00078324	0.000934158	0.001195467	0.001246096
D_Se	Care & Maintenance	P95	7.15955E-05	7.19234E-05	7.3846E-05	8.22133E-05	8.23901E-05	7.5885E-05	6.02961E-05	5.78765E-05	5.76741E-05	6.75733E-05	6.00323E-05	6.22548E-05
D_Si	Care & Maintenance	P95	6.502011776	6.655778885	6.439027309	6.375130653	6.576654434	5.847699165	5.75728035	5.689674854	5.912990093	6.639592171	6.589362144	6.73901844
D_Sn	Care & Maintenance	P95	5.20948E-05	5.29886E-05	5.33822E-05	5.22191E-05	5.80468E-05	5.30013E-05	5.287E-05	5.00692E-05	5.06838E-05	5.37161E-05	5.41671E-05	5.48799E-05
D_Sr	Care & Maintenance	P95	0.089969322	0.098359115	0.098148562	0.097035773	0.088342763	0.084593803	0.078515917	0.074895389	0.092188552	0.095052995	0.095388912	0.088484168
D_Ti	Care & Maintenance	P95	0.00293802	0.002807975	0.002276851	0.002665177	0.00223538	0.002364447	0.002749113	0.003082711	0.002871771	0.002934503	0.003854148	0.003638535
D_Tl	Care & Maintenance	P95	9.17611E-05	0.000102822	0.000102338	0.00010748	0.000131951	7.95549E-05	5.8246E-05	5.2102E-05	4.28897E-05	6.35064E-05	7.7802E-05	9.45224E-05
D_U	Care & Maintenance	P95	0.00016284	0.0001804	0.000216582	0.000187898	0.000223057	0.000185013	0.000157728	0.00014629	0.000151348	0.000163851	0.000146801	0.00014746
D_V	Care & Maintenance	P95	0.005538578	0.005854211	0.00572064	0.005909935	0.00707115	0.004672006	0.003461058	0.00326865	0.003339008	0.004309394	0.004730327	0.005852429
D_Zn	Care & Maintenance	P95	0.003013708	0.003311585	0.00317986	0.003387821	0.003934355	0.002780909	0.0023084	0.002211803	0.001990587	0.002278797	0.002442434	0.002882243

Appendix B.5.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQCk661

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010296233	0.008109621	0.009197331	0.010195488	0.006239757	0.010253108	0.010258093	0.005725736	0.010273589	0.01027623	0.007795455	0.010290384
NO3_N	Care & Maintenance	P95	0.14004612	0.055772014	0.144012004	0.226363182	0.02292257	0.035146806	0.026043268	0.021260655	0.021656755	0.025620678	0.02772144	0.038491298
NO2_N	Care & Maintenance	P95	0.001709609	0.00071578	0.002078675	0.003381482	0.000661521	0.001679095	0.001682621	0.000802695	0.001693586	0.001695455	0.00145051	0.00170547
Br	Care & Maintenance	P95	0.02489743	0.024893841	0.024939662	0.024962449	0.024934551	0.024924386	0.024922162	0.024905013	0.02489789	0.024923269	0.024905767	0.024901817
Cl	Care & Maintenance	P95	0.406531781	0.257428974	0.306996763	0.354505897	0.255560935	0.23975797	0.306207001	0.256711572	0.207126871	0.256919414	0.257048577	0.30698359
F	Care & Maintenance	P95	0.063853674	0.054911464	0.054339975	0.052582197	0.037998959	0.048368618	0.048434936	0.038287934	0.043668546	0.043703951	0.043773085	0.068748556
TDP	Care & Maintenance	P95	0.005980622	0.003988437	0.007983774	0.011983894	0.009478472	0.003659439	0.004988408	0.003989654	0.001997047	0.003493177	0.002744447	0.002744215
SO4	Care & Maintenance	P95	2.510807037	2.501450062	2.14873004	1.639826059	1.695864081	0.695305884	0.704072833	1.129187584	1.178874969	1.829906583	2.072541237	3.743463039
T_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
WAD_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
T_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	1.93927E-05	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.9995E-05	2.54789E-05
T_Al	Care & Maintenance	P95	0.056798901	0.041955136	0.088604949	0.135308474	0.264327168	0.206065744	0.083264887	0.065912403	0.055803888	0.073797382	0.076540612	0.070752516
T_As	Care & Maintenance	P95	0.000434536	0.000971487	0.000998812	0.000986437	0.000659667	0.000481281	0.000516698	0.000872587	0.000523705	0.000524899	0.000671414	0.00043188
T_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.005521378	0.003542365	0.001819873
T_Ba	Care & Maintenance	P95	0.007009632	0.004653804	0.006090716	0.007498696	0.004270104	0.003058491	0.003863064	0.004344421	0.004973178	0.003860362	0.0040961	0.005247945
T_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
T_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
T_Ca	Care & Maintenance	P95	12.3271513	10.53808689	8.893159866	7.169839859	3.982190609	3.43913722	5.334037781	5.95632267	8.033316612	6.742750645	7.045593262	9.588638306
T_Cd	Care & Maintenance	P95	0.000106955	9.83679E-06	9.88795E-06	9.17137E-06	2.07474E-05	9.66401E-06	9.70661E-06	1.15811E-05	9.83911E-06	9.86169E-06	1.65183E-05	2.16645E-05
T_Co	Care & Maintenance	P95	7.73519E-05	6.7431E-05	6.4614E-05	5.65094E-05	6.3048E-05	5.49272E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	5.71255E-05
T_Cr	Care & Maintenance	P95	0.000150192	0.000299501	0.000287246	0.000274861	0.000474234	0.000150164	0.000194961	0.000316157	0.000229806	0.000150179	0.000339406	0.000150188
T_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000639673	0.000262952	0.000462175	0.000338309	0.000313727	0.000214412	0.000368809	0.000413989
T_Fe	Care & Maintenance	P95	0.372477859	0.171282351	0.170843944	0.170248419	0.223753884	0.1126673	0.104183979	0.19451955	0.209154531	0.121634752	0.167378068	0.186277345
T_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	7.02206E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.06975E-06	3.69131E-06
T_K	Care & Maintenance	P95	0.455954134	0.762362599	0.605371773	0.38591221	0.477018595	0.42597267	0.429437101	0.453104317	0.440211236	0.442047328	0.445631802	0.451888144
T_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
T_Mg	Care & Maintenance	P95	3.416749716	2.381469488	2.259654522	2.136926651	0.961431444	0.842417002	1.371518135	1.621255875	2.073051929	1.80457294	1.859349012	2.649912596
T_Mn	Care & Maintenance	P95	0.023297289	0.016043326	0.015139373	0.013492292	0.014732055	0.006763984	0.007444285	0.012589715	0.007649129	0.007512205	0.014078629	0.017334513
T_Mo	Care & Maintenance	P95	0.000257052	0.000689549	0.000439776	0.000169503	0.000229298	0.000151114	0.000203651	0.00043192	0.00037127	0.000234624	0.000251206	0.000265671
T_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.949081898	2.667256832	1.624258876	1.727152348	2.274847746	2.524455547	2.922783136	2.525213003	2.475964785	2.973891258
T_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000309509	0.000333022	0.000270754	0.000218941	0.000229361	0.000275048	0.00018607	0.000126653	0.000276306	0.000222467
T_P	Care & Maintenance	P95	0.018927287	0.019920494	0.022947572	0.022967372	0.025935275	0.014958494	0.004988408	0.021921264	0.021915361	0.009973226	0.018933197	0.018930394
T_Pb	Care & Maintenance	P95	0.00035137	2.82992E-05	0.000148781	0.000268727	8.34698E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	7.04835E-05
T_S	Care & Maintenance	P95	0.66725117	0.72690016	0.738214016	0.928603113	0.249345496	0.24924387	0.249221623	0.431354851	0.248978898	0.707820833	0.249057695	0.627525747
T_Sb	Care & Maintenance	P95	0.000160495	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
T_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.95096E-05	0.000303901	0.000179623	5.89508E-05	9.83497E-05	0.000304258	0.000191973	0.000180202
T_Si	Care & Maintenance	P95	7.870571613	7.512708187	6.625349522	5.733763695	4.585080624	4.053244114	5.318738461	5.737011433	5.990869999	5.39428997	5.692868233	6.722268581
T_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
T_Sr	Care & Maintenance	P95	0.070234768	0.065067135	0.055124175	0.044729166	0.025398746	0.02433965	0.036337901	0.043492306	0.055910982	0.04180209	0.045457717	0.058228396
T_Ti	Care & Maintenance	P95	0.001892205	0.004978768	0.003616251	0.002246621	0.004986911	0.002126881	0.001595018	0.003138032	0.000896324	0.000897238	0.003088315	0.00164352
T_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
T_U	Care & Maintenance	P95	5.62112E-05	8.60404E-05	7.59837E-05	6.40598E-05	0.000116877	9.17881E-05	6.23754E-05	8.74464E-05	6.36927E-05	5.57918E-05	6.73352E-05	4.36612E-05
T_V	Care & Maintenance	P95	0.000262795	0.000879189	0.000508974	0.000119418	0.00092404	0.000286818	0.000533265	0.000797217	0.000357448	0.000258555	0.000483382	0.000470336
T_Zn	Care & Maintenance	P95	0.028071364	0.001616377	0.002160964	0.002672411	0.004573794	0.001516411	0.001551536	0.003296029	0.001706811	0.002602871	0.001759574	0.00094287
D_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	5.45491E-06	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.55203E-05	2.54789E-05
D_Al	Care & Maintenance	P95	0.04683993	0.031798448	0.075287171	0.118833251	0.169575855	0.192938894	0.075788237	0.054198742	0.042856988	0.05784649	0.06214508	0.220661432
D_As	Care & Maintenance	P95	0.000335129	0.000882021	0.000954073	0.000986437	0.000580023	0.000381787	0.000442085	0.000815395	0.000424252	0.000524899	0.00063164	0.00038217
D_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.002537952	0.003542365	0.001819873
D_Ba	Care & Maintenance	P95	0.006244194	0.004335701	0.005886909	0.007409048	0.003141803	0.002892668	0.003723786	0.004121455	0.004943343	0.003790749	0.003822647	0.005138583
D_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
D_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
D_Ca	Care & Maintenance	P95	11.92952156	9.971467972	8.485545158	6.920817375	3.758189201	3.37280798	5.234553814	5.90244627	7.933864594	6.34496069	6.971015453	9.588638306
D_Cd	Care & Maintenance	P95	5.92394E-05	5.06526E-06	7.50192E-06	9.17137E-06	1.30816E-05	9.66401E-06	9.70661E-06	1.03875E-05	9.83911E-06	9.86169E-06	1.29386E-05	9.9827E-06
D_Co	Care & Maintenance	P95	6.74111E-05	6.7431E-05	6.21286E-05	5.1529E-05	6.3048E-05	5.16107E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	4.22126E-05
D_Cr	Care & Maintenance	P95	0.000150192	0.000359246	0.000317174	0.000274861	0.000309666	0.000150164	0.000170064	0.000255554	0.000150178	0.000150179	0.000229821	0.000150188
D_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000589895	0.000262952	0.00033782	0.000263711	0.000313727	6.52405E-05	0.00023954	0.000413989
D_Fe	Care & Maintenance	P95	0.178277895	0.129460707	0.144657269	0.159764186	0.129667521	0.092129603	0.101492383	0.152015001	0.10757114	0.104686931	0.11955899	0.112069942
D_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	6.32517E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.56694E-06	3.69131E-06
D_K	Care & Maintenance	P95	0.455954134	0.661961675	0.555165589	0.38591221	0.44715181	0.42597267	0.429437101	0.457828879	0.440211236	0.442047328	0.445631802	0.451888144
D_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
D_Mg	Care & Maintenance	P95	3.406790495	2.371528864	2.244741678	2.117004633	0.9455024	0.832467675	1.366544008	1.622084737	2.063106775	1.814517736	1.76985538	2.649912596
D_Mn	Care & Maintenance	P95	0.020712692	0.012285748	0.012246306	0.011460267	0.007245444	0.004764159	0.006056487	0.008486819	0.007131974	0.006666902	0.007819057	0.010718166
D_Mo	Care & Maintenance	P95	0.000257052	0.000547397	0.000368692	0.000169503	0.000196445	0.000127899	0.000188729	0.000270539	0.00037127	0.000212746	0.000244245	0.000220932
D_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.924227238	2.617452383	1.591073513	1.478417754	2.274847746	2.507878065	2.823330402	2.525213003	2.475964785	2.973891258
D_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000277198	0.000268276	0.000270754	0.000218941	0.000219412	0.000275048	0.00018607	0.000126653	0.000251447	0.000162815
D_P	Care & Maintenance	P95	0.004984725	0.14936845	0.077316038	0.004994408	0.024937894	0.004988739	0.004988408	0.087172404	0.004984794	0.004988573	0.077212691	0.004985378
D_Pb	Care & Maintenance	P95	2.82954E-05	2.82992E-05	2.82364E-05	2.71747E-05	2.74696E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	2.82303E-05
D_S	Care & Maintenance	P95	0.418276817	0.856348157	0.897827864	0.798798382	0.249345496	0.24924387	0.249221623	0.273955166	0.617467701	0.857360423	0.537964582	0.637486458
D_Sb	Care & Maintenance	P95	0.000135643	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
D_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.45319E-05	0.000303901	0.000179623	9.12766E-05	0.000102328	0.000304258	0.000181035	0.000180202
D_Si	Care & Maintenance	P95	7.870571613	7.482886314	6.359405994	5.230738163	4.216722965	3.855914831	4.632300377	5.642520905	5.990869999	5.39428997	5.638177395	6.692442894
D_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
D_Sr	Care & Maintenance	P95	0.068445429	0.064768918	0.054254264	0.043284833	0.023308069	0.023875346	0.036288153	0.043011561	0.055413723	0.04180209	0.044065598	0.057433043
D_Ti	Care & Maintenance	P95	0.001195077	0.004978768	0.003516493	0.002046921	0.002717866	0.001196371	0.001046731	0.002938792	0.000796733	0.000797545	0.002938881	0.000896465
D_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
D_U	Care & Maintenance	P95	5.62112E-05	8.40522E-05	7.2504E-05	5.90793E-05	8.35259E-05	8.51552E-05	5.59089E-05	7.70026E-05	5.07638E-05	4.9825E-05	6.18661E-05	3.12338E-05
D_V	Care & Maintenance	P95	0.000153447	0.000759901	0.000423226	6.71236E-05	0.000585549	0.000225464	0.000319374	0.000605749	0.000307721	0.000288389	0.000428691	0.000174563
D_Zn	Care & Maintenance	P95	0.01265048	0.003703921	0.003204854	0.002672411	0.003453789	0.001450081	0.001551536	0.00210246	0.001706811	0.001608395	0.002057886	0.000371209

Appendix B.5.6: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ5

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010963622	0.008791563	0.009901682	0.010762515	0.00678452	0.010765209	0.010827253	0.006392808	0.010894493	0.010938779	0.008509735	0.010972886
NO3_N	Care & Maintenance	P95	0.185208485	0.101082198	0.190589622	0.263673693	0.058192015	0.070850566	0.065833434	0.064060211	0.065132655	0.071962141	0.075278372	0.086065248
NO2_N	Care & Maintenance	P95	0.002181841	0.001191037	0.002561163	0.003762854	0.00102852	0.002041448	0.002085349	0.001246101	0.002132927	0.002164262	0.001935256	0.002188396
Br	Care & Maintenance	P95	0.024671009	0.024679273	0.024694156	0.024883775	0.024870206	0.024815343	0.024824368	0.024720034	0.02471059	0.024844147	0.024721535	0.024670606
Cl	Care & Maintenance	P95	0.421247393	0.273791373	0.323571414	0.367575616	0.268196166	0.252756536	0.319895029	0.272022992	0.223301142	0.27351597	0.274088919	0.323397458
F	Care & Maintenance	P95	0.072535709	0.063526526	0.063436553	0.060072038	0.044813	0.055184137	0.05600987	0.046549298	0.051994231	0.052588038	0.052894752	0.077558942
TDP	Care & Maintenance	P95	0.005937846	0.003965065	0.007917752	0.011950149	0.009457308	0.003649015	0.004973845	0.003969505	0.001991629	0.003486141	0.002733592	0.002730591
SO4	Care & Maintenance	P95	3.661616087	3.627927303	3.342022896	2.625515223	2.57260108	1.596267462	1.705423355	2.199567318	2.265672922	2.980982304	3.251202345	4.903269291
T_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
WAD_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
T_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	2.02851E-05	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	2.11917E-05	2.66044E-05
T_Al	Care & Maintenance	P95	0.056354981	0.041662332	0.087811328	0.134907186	0.263665617	0.205199152	0.082969487	0.065482147	0.055444159	0.073588453	0.076033495	0.070169725
T_As	Care & Maintenance	P95	0.000737636	0.001261089	0.001303955	0.001237152	0.000886126	0.000713172	0.000774048	0.001144647	0.000804452	0.000824476	0.000977029	0.000741843
T_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.006771926	0.004853566	0.00315927
T_Ba	Care & Maintenance	P95	0.007234095	0.004904456	0.006335227	0.007683451	0.004467259	0.003271249	0.004090347	0.004582642	0.00520734	0.00412507	0.004364689	0.005501651
T_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
T_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
T_Ca	Care & Maintenance	P95	12.83890438	11.06247902	9.469182968	7.662473202	4.452955246	3.92296958	5.850152493	6.503061295	8.562823296	7.324998379	7.63932991	10.14951801
T_Cd	Care & Maintenance	P95	0.00011136	1.54241E-05	1.57817E-05	1.40193E-05	2.4945E-05	1.40423E-05	1.45728E-05	1.67851E-05	1.51477E-05	1.55263E-05	2.2244E-05	2.73393E-05
T_Co	Care & Maintenance	P95	0.000116444	0.000105823	0.000105156	8.98933E-05	9.26948E-05	8.51284E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	9.73762E-05
T_Cr	Care & Maintenance	P95	0.000150626	0.000298492	0.000286215	0.00027457	0.000473481	0.000150497	0.000194912	0.000315164	0.00022945	0.000150609	0.000338245	0.000150632
T_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000661652	0.000289158	0.000489024	0.000368672	0.00034488	0.000248979	0.000402192	0.000446867
T_Fe	Care & Maintenance	P95	0.369117767	0.169831887	0.169191658	0.16972129	0.223184243	0.112187497	0.10378693	0.19309704	0.207603693	0.12125814	0.166162118	0.184575647
T_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.75383E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.08454E-06	4.72853E-06
T_K	Care & Maintenance	P95	0.91995281	1.212474585	1.082404017	0.780135036	0.826970339	0.782007873	0.825143218	0.877862871	0.871892154	0.902680993	0.91858387	0.926394105
T_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
T_Mg	Care & Maintenance	P95	3.40957427	2.384706497	2.26475811	2.142514467	0.978316665	0.860795617	1.38589251	1.633626699	2.079978228	1.815541625	1.869862437	2.649706841
T_Mn	Care & Maintenance	P95	0.028698191	0.021424793	0.020829206	0.018183358	0.018894739	0.011074806	0.012228132	0.017665064	0.012866957	0.013082113	0.019708239	0.022938941
T_Mo	Care & Maintenance	P95	0.000408116	0.000831719	0.000593224	0.000298587	0.000343582	0.000268018	0.000332994	0.000568048	0.000510322	0.000384831	0.000405218	0.000420019
T_Na	Care & Maintenance	P95	3.568682432	3.273393869	3.006129503	2.717311144	1.679378271	1.782087922	2.329643726	2.580247164	2.974489212	2.58568716	2.538736582	3.030044556
T_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000373492	0.000385295	0.00031791	0.000267379	0.000283082	0.000332192	0.000245234	0.000190581	0.000339903	0.000287023
T_P	Care & Maintenance	P95	0.018766772	0.0197598	0.022734245	0.022899009	0.025871644	0.014898636	0.004973845	0.021767929	0.021760102	0.009945619	0.018802591	0.018766485
T_Pb	Care & Maintenance	P95	0.000354456	3.55656E-05	0.000154776	0.000272284	8.85136E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	7.74958E-05
T_S	Care & Maintenance	P95	0.661183059	0.720634818	0.730947018	0.925676405	0.248702064	0.248153403	0.24824369	0.428150982	0.247105926	0.705573797	0.24721536	0.621699274
T_Sb	Care & Maintenance	P95	0.000409431	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
T_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.97562E-05	0.000311795	0.000189819	7.13859E-05	0.000110491	0.00031447	0.000203996	0.000192428
T_Si	Care & Maintenance	P95	7.871860504	7.518672466	6.64394474	5.759184361	4.619346142	4.093528271	5.34903574	5.764414787	6.015539169	5.428564072	5.723977566	6.739352226
T_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
T_Sr	Care & Maintenance	P95	0.073241889	0.068078272	0.058438696	0.047569294	0.02812246	0.027117526	0.03928832	0.046573579	0.058886241	0.045165058	0.048860963	0.061468106
T_Ti	Care & Maintenance	P95	0.001874997	0.004935855	0.003580653	0.00223954	0.004974041	0.002117576	0.00158876	0.003114724	0.000889581	0.000894389	0.003065471	0.00162826
T_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
T_U	Care & Maintenance	P95	7.02046E-05	9.93444E-05	9.01585E-05	7.58354E-05	0.000126823	0.00010215	7.42295E-05	9.98714E-05	7.66121E-05	6.96837E-05	8.14421E-05	5.81421E-05
T_V	Care & Maintenance	P95	0.000404267	0.001009555	0.000651638	0.000241005	0.001024104	0.000395031	0.000650727	0.000920146	0.000487825	0.000399001	0.000624523	0.000612145
T_Zn	Care & Maintenance	P95	0.028008152	0.0018727	0.002423826	0.002882442	0.004741464	0.001718217	0.001775449	0.003515105	0.001949218	0.002849609	0.002024476	0.001219903
D_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	6.48852E-06	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	1.67782E-05	2.66044E-05
D_Al	Care & Maintenance	P95	0.046486575	0.031593189	0.07462465	0.118483894	0.169158861	0.192129716	0.075522177	0.05385549	0.042594653	0.057688203	0.061744444	0.218686759
D_As	Care & Maintenance	P95	0.000639563	0.001172799	0.001259837	0.001237152	0.000807288	0.000614703	0.000700289	0.001088158	0.000706241	0.000824476	0.000937799	0.000692816
D_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.003828253	0.004853566	0.00315927
D_Ba	Care & Maintenance	P95	0.006478935	0.004590536	0.006134245	0.007594823	0.003350391	0.003107134	0.003952663	0.004362416	0.005177877	0.004056385	0.004094978	0.005393791
D_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
D_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
D_Ca	Care & Maintenance	P95	12.44661427	10.50330544	9.067220688	7.416285992	4.231224537	3.857323408	5.751807213	6.449847698	8.464612961	6.932508469	7.565772057	10.14951801
D_Cd	Care & Maintenance	P95	6.42847E-05	1.07153E-05	1.34287E-05	1.40193E-05	1.73568E-05	1.40423E-05	1.45728E-05	1.56062E-05	1.51477E-05	1.55263E-05	1.87132E-05	1.58179E-05
D_Co	Care & Maintenance	P95	0.000106637	0.000105823	0.000102705	8.49695E-05	9.26948E-05	8.18461E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	8.26681E-05
D_Cr	Care & Maintenance	P95	0.000150626	0.000357722	0.000315848	0.00027457	0.000309338	0.000150497	0.000170206	0.000255011	0.000150581	0.000150609	0.00022947	0.000150632
D_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000612378	0.000289158	0.000366092	0.00029499	0.00034488	0.000101796	0.000274692	0.000446867
D_Fe	Care & Maintenance	P95	0.176683903	0.128370702	0.143262789	0.159270108	0.129340634	0.091739655	0.101105899	0.150908187	0.10678447	0.104364119	0.118696779	0.111057244
D_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.064E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.57492E-06	4.72853E-06
D_K	Care & Maintenance	P95	0.91995281	1.113392949	1.032894015	0.780135036	0.797406197	0.782007873	0.825143218	0.882529318	0.871892154	0.902680993	0.91858387	0.926394105
D_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
D_Mg	Care & Maintenance	P95	3.399705887	2.374896288	2.250051975	2.122819901	0.96254909	0.850948632	1.380975127	1.63444531	2.070157051	1.825353861	1.781593561	2.649706841
D_Mn	Care & Maintenance	P95	0.026148301	0.017716594	0.017976249	0.016174469	0.011483992	0.009095566	0.010856214	0.013612596	0.012356261	0.012248073	0.01353431	0.016413433
D_Mo	Care & Maintenance	P95	0.000408116	0.000691435	0.000523126	0.000298587	0.000311062	0.000245042	0.000318242	0.000408651	0.000510322	0.000363244	0.000398353	0.000375894
D_Na	Care & Maintenance	P95	3.568682432	3.273393869	2.981619596	2.668073893	1.646529198	1.535914063	2.329643726	2.563873291	2.876277924	2.58568716	2.538736582	3.030044556
D_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000341629	0.000321286	0.00031791	0.000267379	0.000273248	0.000332192	0.000245234	0.000190581	0.000315383	0.00022819
D_P	Care & Maintenance	P95	0.004951005	0.148092017	0.076567508	0.004982691	0.024876835	0.0049725	0.004973845	0.086534418	0.004956901	0.00497679	0.076650985	0.004950945
D_Pb	Care & Maintenance	P95	3.57196E-05	3.55656E-05	3.59032E-05	3.34825E-05	3.30808E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	3.58227E-05
D_S	Care & Maintenance	P95	0.414472938	0.848967016	0.888989627	0.796280801	0.248702064	0.248153403	0.24824369	0.271920353	0.612822711	0.854638696	0.533985198	0.631567478
D_Sb	Care & Maintenance	P95	0.000384913	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
D_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.48288E-05	0.000311795	0.000189819	0.000103314	0.000114419	0.00031447	0.000193208	0.000192428
D_Si	Care & Maintenance	P95	7.871860504	7.489242554	6.381688595	5.26188612	4.254721165	3.898230076	4.670451641	5.671084881	6.015539169	5.428564072	5.670035362	6.709936142
D_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
D_Sr	Care & Maintenance	P95	0.071476586	0.067783974	0.057580847	0.046141408	0.026052969	0.026658	0.03923915	0.046098743	0.058395188	0.045165058	0.047487892	0.060683668
D_Ti	Care & Maintenance	P95	0.001184208	0.004935855	0.003481876	0.00204047	0.002710853	0.001191136	0.001042623	0.002916964	0.000790739	0.000795013	0.002917141	0.000888142
D_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
D_U	Care & Maintenance	P95	7.02046E-05	9.73824E-05	8.67271E-05	7.09117E-05	9.38095E-05	9.55853E-05	6.7837E-05	8.9556E-05	6.38446E-05	6.37964E-05	7.60479E-05	4.58853E-05
D_V	Care & Maintenance	P95	0.000296387	0.000891834	0.000567079	0.000189306	0.000689043	0.000334309	0.000439285	0.000731031	0.000438719	0.000428438	0.00057058	0.000320434
D_Zn	Care & Maintenance	P95	0.01276421	0.003932809	0.003453244	0.002882442	0.003632808	0.001652571	0.001775449	0.002336205	0.001949218	0.001868385	0.002318706	0.000656091

Appendix B.5.7: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ8

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.008543154	0.008608781	0.01	0.00905	0.008779639	0.0086	0.008220797	0.007937597	0.01	0.01	0.008346112	0.01
NO3_N	Care & Maintenance	P95	0.068000004	0.0854	0.092200004	0.053649999	0.070800588	0.044915538	0.037879989	0.030036602	0.027554745	0.026264014	0.081	0.086000003
NO2_N	Care & Maintenance	P95	0.001179893	0.0028	0.001223245	0.001164441	0.0016	0.001471034	0.001378482	0.001233696	0.001151006	0.001133458	0.0015	0.0015
Br	Care & Maintenance	P95	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999
Cl	Care & Maintenance	P95	0.290490448	0.289582968	0.287846893	0.285627782	0.290533841	0.291666657	0.399999976	0.325438946	0.309205592	0.300395489	0.296457827	0.292964756
F	Care & Maintenance	P95	0.061999999	0.059999999	0.064999998	0.061500002	0.061999999	0.060999997	0.059999999	0.059417404	0.059999999	0.064000003	0.060999997	0.066
TDP	Care & Maintenance	P95	0.016000001	0.013	0.018750001	0.0175	0.013578156	0.01022636	0.009427901	0.0085	0.008457224	0.008160164	0.0115	0.016000001
SO4	Care & Maintenance	P95	4.069999695	4.029999733	4.159999847	3.650000095	3.789999962	3.59499979	3.431183338	3.629999876	3.539999962	3.74000001	3.700000048	3.879999876
T_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
WAD_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
T_Ag	Care & Maintenance	P95	1.14504E-05	1.1424E-05	2.5E-05	1.5E-05	1.4327E-05	1.5E-05	1.38908E-05	1.24613E-05	1.17132E-05	1.16123E-05	1.15927E-05	1.15879E-05
T_Al	Care & Maintenance	P95	0.045220643	0.04270982	0.041136548	0.039269812	0.051869012	0.067537948	0.065789461	0.057762444	0.053805687	0.051637679	0.049304355	0.047249909
T_As	Care & Maintenance	P95	0.00062	0.00057	0.000571138	0.000572443	0.000623997	0.0006039	0.000576199	0.000563499	0.000564659	0.000561724	0.00059	0.00062
T_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.004956604	0.005	0.005	0.005	0.005	0.005	0.005
T_Ba	Care & Maintenance	P95	0.0063	0.00605	0.00584	0.005727904	0.005881	0.005818333	0.00565	0.005581329	0.00609	0.00629	0.00599	0.0056653
T_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
T_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
T_Ca	Care & Maintenance	P95	21.70000076	22.60000038	21.19999886	19.54999924	19.64999962	19.35000038	18.79999924	19.95000076	19.5	21.29999924	20.40000153	23.19999886
T_Cd	Care & Maintenance	P95	5.98466E-06	6.97822E-06	7.5E-06	6.98894E-06	7.13141E-06	7.34792E-06	6.75075E-06	6.13195E-06	5.92264E-06	5.82956E-06	5.79329E-06	5.99273E-06
T_Co	Care & Maintenance	P95	5.05578E-05	5.07553E-05	5.08552E-05	5.08988E-05	5.08262E-05	5.12971E-05	5.10357E-05	5.05983E-05	5.07515E-05	5.06282E-05	5.04661E-05	5.05196E-05
T_Cr	Care & Maintenance	P95	0.00015076	0.000148585	0.00014839	0.000148468	0.000160141	0.000198027	0.000181807	0.000158695	0.000162268	0.000159847	0.000152543	0.000156919
T_Cu	Care & Maintenance	P95	0.000294197	0.00029429	0.000293188	0.000291982	0.000334325	0.00033923	0.000312537	0.000308777	0.000305775	0.000303489	0.000297727	0.000295309
T_Fe	Care & Maintenance	P95	0.066455349	0.067692861	0.067728996	0.066212088	0.075754978	0.085343987	0.076182462	0.068372272	0.067597792	0.068299323	0.065809645	0.06795755
T_Hg	Care & Maintenance	P95	2.88041E-06	2.87006E-06	2.86592E-06	2.8427E-06	2.79138E-06	3.38989E-06	3.02903E-06	2.9335E-06	2.8987E-06	2.87691E-06	2.85455E-06	2.889E-06
T_K	Care & Maintenance	P95	0.899999976	0.899999976	0.907000005	0.96450001	0.832229733	0.791999996	0.775999963	0.797500014	0.787999988	0.88499999	0.799999952	0.848999977
T_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
T_Mg	Care & Maintenance	P95	5.014999866	5.130000114	5.070000172	4.559999943	4.720000267	4.588333607	4.53000021	4.625	4.660000324	4.829999924	4.690000057	5.150000095
T_Mn	Care & Maintenance	P95	0.017482238	0.016439868	0.015693141	0.014417599	0.016000001	0.01500864	0.013458639	0.012879174	0.012352709	0.012224556	0.0513	0.018453646
T_Mo	Care & Maintenance	P95	0.000552	0.00059	0.00056	0.000521	0.00052	0.0005195	0.0005	0.000529	0.000559	0.000555	0.00053	0.000545
T_Na	Care & Maintenance	P95	3.899999857	3.799999952	3.799999952	3.503786087	3.575000048	3.400000095	3.400000095	3.370000124	3.5	3.700000048	3.5	3.799999952
T_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.00025	0.000260457	0.000256674	0.000253741	0.000252475	0.000252573	0.000251469	0.00025	0.00025
T_P	Care & Maintenance	P95	0.030999999	0.032000002	0.029999999	0.029000001	0.027000001	0.026724365	0.023903636	0.021864926	0.021149689	0.020822769	0.033	0.030999999
T_Pb	Care & Maintenance	P95	3.85487E-05	4.07711E-05	4.0357E-05	4.02433E-05	7.28757E-05	5.54605E-05	4.79094E-05	4.37767E-05	4.21298E-05	4.13441E-05	4.01497E-05	3.90423E-05
T_S	Care & Maintenance	P95	1.330000043	1.379999995	1.180000067	1.50999999	1.273689151	1.169999957	1.200000048	1.3549999	1.180000067	1.379999995	1.169999957	1.350000024
T_Sb	Care & Maintenance	P95	6.26913E-05	6.28345E-05	6.33039E-05	6.30896E-05	6.40868E-05	6.42393E-05	6.06366E-05	5.99993E-05	6.08346E-05	6.11288E-05	6.18703E-05	6.27133E-05
T_Se	Care & Maintenance	P95	9.30128E-05	9.68284E-05	9.47747E-05	9.32558E-05	8.90302E-05	7.58057E-05	8.29662E-05	8.72624E-05	8.47121E-05	8.5E-05	9.51663E-05	9.64647E-05
T_Si	Care & Maintenance	P95	4.579999924	4.710000038	4.449999809	4.379795074	4.469752789	4.422982216	4.257268906	4.092207909	4.059483528	4.037065983	4.389999866	4.53000021
T_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
T_Sr	Care & Maintenance	P95	0.105999999	0.105999999	0.101999998	0.092448801	0.098466672	0.093449995	0.0911	0.092649996	0.096900001	0.096000001	0.095700003	0.107000001
T_Ti	Care & Maintenance	P95	0.003408093	0.003101747	0.002916371	0.00285617	0.002613903	0.002552094	0.0039	0.0027	0.002632198	0.005	0.005	0.005
T_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
T_U	Care & Maintenance	P95	9E-05	9E-05	9E-05	8.6328E-05	8.50663E-05	8.8896E-05	8.76653E-05	8.9E-05	9E-05	8.64378E-05	9E-05	8.75E-05
T_V	Care & Maintenance	P95	0.000310782	0.000307933	0.000311335	0.000308876	0.000294905	0.000380709	0.000325287	0.000318132	0.000323236	0.000319587	0.000311663	0.000311332
T_Zn	Care & Maintenance	P95	0.001833607	0.002153645	0.00210933	0.002069171	0.002120779	0.002248208	0.001986461	0.001901885	0.001889984	0.001872253	0.001878017	0.001862629
D_Ag	Care & Maintenance	P95	1.03439E-05	1.03776E-05	1.02611E-05	1.5E-05	1.29721E-05	1.5E-05	1.2899E-05	1.11736E-05	1.04186E-05	1.03534E-05	1.06329E-05	1.04454E-05
D_Al	Care & Maintenance	P95	0.032598488	0.031579368	0.031119874	0.030040657	0.040348336	0.04288736	0.044951733	0.039663929	0.037801281	0.036469825	0.033812944	0.031961635
D_As	Care & Maintenance	P95	0.00056	0.00052	0.00054	0.000528271	0.00058608	0.000559725	0.000527874	0.000514407	0.00052	0.00053	0.000517876	0.00055
D_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.00494892	0.005	0.005	0.005	0.005	0.005	0.005
D_Ba	Care & Maintenance	P95	0.00605	0.00563	0.005455	0.005443146	0.00563988	0.00559	0.00537	0.005525	0.00595	0.00581	0.00553	0.005392892
D_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
D_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
D_Ca	Care & Maintenance	P95	22.19999886	22.29999924	21.10000038	18.95000076	18.86666679	19.18333435	18.70000076	19.54999924	19.79999924	19.79999924	20	21
D_Cd	Care & Maintenance	P95	6.78684E-06	7.23213E-06	7.12342E-06	6.85399E-06	7.5E-06	7.8075E-06	7.5E-06	7.35487E-06	7.02284E-06	6.805E-06	6.83265E-06	6.79546E-06
D_Co	Care & Maintenance	P95	5E-05	5E-05	5E-05	4.96865E-05	5E-05	5.06421E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Cr	Care & Maintenance	P95	0.000110919	0.000109586	0.000110872	0.000109946	0.000126362	0.000123053	0.000118833	0.000120637	0.000116971	0.000114664	0.00011118	0.000113469
D_Cu	Care & Maintenance	P95	0.000308045	0.000307675	0.000306483	0.000304634	0.000346481	0.000344704	0.0004	0.000335413	0.000322298	0.00032051	0.00031115	0.000304674
D_Fe	Care & Maintenance	P95	0.043176372	0.042891204	0.043100003	0.04261345	0.055656467	0.050405126	0.045218166	0.04160453	0.042199802	0.042094328	0.04178752	0.044040661
D_Hg	Care & Maintenance	P95	2.85664E-06	2.84505E-06	2.83977E-06	2.81853E-06	2.78788E-06	3.25907E-06	2.95706E-06	2.87321E-06	2.84397E-06	2.82827E-06	2.8096E-06	2.86177E-06
D_K	Care & Maintenance	P95	0.861999989	0.897000015	0.893000007	0.944999993	0.807859838	0.773923278	0.75168556	0.743000031	0.763999999	0.799999952	0.824999988	0.844000041
D_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
D_Mg	Care & Maintenance	P95	5.400000095	5.049999714	5.309999943	4.475517273	4.699999809	4.36833334	4.420000076	4.485000134	4.610000134	4.800000191	4.610000134	4.855000019
D_Mn	Care & Maintenance	P95	0.004406439	0.004521863	0.004539967	0.004494756	0.005259512	0.004514821	0.00496	0.004334067	0.0044	0.0047	0.004462278	0.004384978
D_Mo	Care & Maintenance	P95	0.00051	0.00051	0.000544	0.000480878	0.000477	0.0004995	0.000512	0.0005025	0.00057	0.000494	0.00049	0.00048
D_Na	Care & Maintenance	P95	4	3.799999952	3.799999952	3.465518475	3.549999952	3.365739346	3.400000095	3.375	3.5	3.5	3.400000095	3.700000048
D_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.000248057	0.00025	0.000251132	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
D_P	Care & Maintenance	P95	0.067823239	0.064019099	0.062393848	0.059784561	0.054789599	0.039417785	0.064000003	0.087499999	0.053003393	0.150000006	0.150000006	0.074130394
D_Pb	Care & Maintenance	P95	2.55471E-05	2.55408E-05	2.55507E-05	2.55386E-05	2.56443E-05	2.55674E-05	2.54978E-05	2.54591E-05	2.5471E-05	2.54827E-05	2.55243E-05	2.55506E-05
D_S	Care & Maintenance	P95	1.279999971	1.449999928	1.419999957	1.25999999	1.208880424	1.204999924	1.269999981	1.320000052	1.159694314	1.309999943	1.25	1.410000086
D_Sb	Care & Maintenance	P95	6.26327E-05	6.25433E-05	6.29853E-05	6.27697E-05	6.38222E-05	6.40132E-05	6.05639E-05	5.99335E-05	6.07737E-05	6.10712E-05	6.18231E-05	6.26502E-05
D_Se	Care & Maintenance	P95	0.0001105	9.70102E-05	9.48274E-05	9.24679E-05	8.5068E-05	7.70183E-05	8.48019E-05	8.85E-05	8.25496E-05	8.28984E-05	9.49817E-05	9.44401E-05
D_Si	Care & Maintenance	P95	4.590000153	4.509999752	4.460000038	4.294899464	4.299478531	4.172879696	4.007989407	3.871937752	3.842913628	3.831040382	4.340000153	4.470000267
D_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Sr	Care & Maintenance	P95	0.104000002	0.105999999	0.103	0.091167629	0.097199999	0.090433337	0.089300007	0.092699997	0.097199999	0.093699999	0.091499999	0.101500005
D_Ti	Care & Maintenance	P95	0.001950015	0.001814368	0.001740755	0.001639009	0.001488281	0.001281202	0.001041916	0.002575	0.001172029	0.005	0.005	0.00223106
D_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
D_U	Care & Maintenance	P95	8.75E-05	8.01485E-05	8.5E-05	8.04805E-05	8E-05	8.01938E-05	8.01167E-05	8.6E-05	8.7E-05	8.06423E-05	8.02007E-05	8E-05
D_V	Care & Maintenance	P95	0.000265972	0.000263801	0.000267902	0.000268593	0.000251727	0.000301487	0.000264426	0.000262905	0.000271099	0.000269701	0.000267532	0.000270273
D_Zn	Care & Maintenance	P95	0.0014	0.00131683	0.001316707	0.0015	0.001511171	0.001753172	0.001501507	0.0013499	0.001334003	0.001300466	0.001240521	0.001220674

Appendix B.5.8: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ9

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.028449932	0.028127765	0.030930787	0.064232744	0.043021303	0.016826354	0.011919302	0.014279785	0.018432543	0.024284573	0.017587364	0.015654927
NO3_N	Care & Maintenance	P95	0.410865426	0.431282014	0.300836831	0.702973485	0.485480249	0.197126225	0.105973847	0.119736224	0.172375873	0.398251027	0.310365885	0.32164216
NO2_N	Care & Maintenance	P95	0.002777986	0.003493564	0.002179058	0.004378069	0.003639183	0.002072661	0.001672227	0.001629489	0.001717691	0.002779119	0.002543945	0.002702855
Br	Care & Maintenance	P95	0.032705657	0.033162184	0.029742165	0.03798119	0.032813869	0.027907876	0.02682255	0.026778899	0.027734146	0.033059511	0.031478468	0.03168885
Cl	Care & Maintenance	P95	0.464569658	0.456328005	0.397969395	0.593417227	0.467533827	0.36543408	0.393962324	0.327834189	0.356820732	0.484672874	0.431419492	0.426014662
F	Care & Maintenance	P95	0.119012006	0.117684342	0.099398039	0.156768814	0.119637586	0.083971329	0.072682209	0.075048395	0.088570558	0.124083526	0.112678617	0.113215573
TDP	Care & Maintenance	P95	0.016084105	0.012852998	0.016248735	0.017942712	0.013364436	0.010005662	0.009232567	0.010006343	0.00839766	0.011224795	0.011969048	0.015533125
SO4	Care & Maintenance	P95	10.33469391	10.02963734	7.362015724	12.52883625	8.807804108	8.313965797	7.22724247	11.07221508	10.08266735	15.53459549	11.80423641	10.0084219
T_CN	Care & Maintenance	P95	0.002517159	0.002529271	0.002515259	0.00253062	0.002593158	0.002521153	0.00251495	0.002495735	0.002499201	0.002584275	0.002520457	0.002512704
WAD_CN	Care & Maintenance	P95	0.002517159	0.002528157	0.002514328	0.002529222	0.002593158	0.002519378	0.002514032	0.002495714	0.002499201	0.00258426	0.002520457	0.002512704
T_Ag	Care & Maintenance	P95	1.38901E-05	1.33694E-05	2.2054E-05	2.32544E-05	1.87836E-05	1.76305E-05	1.40512E-05	1.20401E-05	1.23277E-05	1.59384E-05	1.39262E-05	1.59867E-05
T_Al	Care & Maintenance	P95	0.039510116	0.031636428	0.04393696	0.050230209	0.07291425	0.088422105	0.085184813	0.064965397	0.054991439	0.055103425	0.051053602	0.039594516
T_As	Care & Maintenance	P95	0.000693642	0.000651698	0.000628386	0.00080149	0.000690596	0.000618909	0.000617159	0.000647901	0.000684634	0.000764874	0.000684695	0.000654445
T_B	Care & Maintenance	P95	0.01504216	0.015064953	0.010755952	0.022011697	0.015809508	0.008582619	0.007386765	0.00725675	0.008808431	0.015469827	0.01228052	0.01209512
T_Ba	Care & Maintenance	P95	0.006762928	0.007013185	0.006894805	0.006788548	0.006521294	0.00626467	0.00623042	0.006194431	0.006927767	0.007343321	0.006701345	0.006497799
T_Bi	Care & Maintenance	P95	2.6853E-05	2.7049E-05	2.63226E-05	2.87131E-05	2.76786E-05	2.64976E-05	2.58804E-05	2.58113E-05	2.67775E-05	2.98293E-05	2.85084E-05	2.7229E-05
T_Be	Care & Maintenance	P95	5.49685E-05	5.56166E-05	5.45253E-05	6.29314E-05	5.73409E-05	5.37408E-05	5.19428E-05	5.16077E-05	5.32856E-05	5.7557E-05	5.54348E-05	5.51564E-05
T_Ca	Care & Maintenance	P95	20.32398796	21.59569931	20.74927139	19.24368095	18.41751099	17.88247299	17.78959274	18.76483345	18.82506371	20.07096291	19.38997459	21.66600227
T_Cd	Care & Maintenance	P95	7.61504E-06	8.07146E-06	8.75928E-06	1.21424E-05	9.47068E-06	8.04535E-06	7.61935E-06	6.24416E-06	7.45159E-06	9.87848E-06	7.9126E-06	7.8245E-06
T_Co	Care & Maintenance	P95	0.000160301	0.000151935	0.000117518	0.000229968	0.000169444	0.000100135	8.06492E-05	9.33755E-05	0.000116664	0.00020521	0.000145063	0.000135774
T_Cr	Care & Maintenance	P95	0.000219031	0.000208149	0.000218095	0.000317438	0.000242943	0.000219627	0.000201655	0.000193229	0.000224044	0.000277951	0.000231424	0.000215002
T_Cu	Care & Maintenance	P95	0.000296887	0.000299018	0.000299973	0.000353201	0.000405311	0.000365201	0.000379987	0.00030824	0.000305902	0.000322569	0.000298887	0.000292482
T_Fe	Care & Maintenance	P95	0.087757729	0.095203087	0.118632488	0.113277368	0.104994506	0.104448199	0.095717505	0.095775113	0.105672061	0.109320015	0.104776107	0.085599177
T_Hg	Care & Maintenance	P95	5.21454E-06	5.3429E-06	4.34404E-06	7.75753E-06	5.93755E-06	4.61099E-06	3.93678E-06	3.57278E-06	4.12295E-06	5.72769E-06	5.08925E-06	4.63895E-06
T_K	Care & Maintenance	P95	1.554813862	1.496165276	1.245705366	1.960713148	1.457145214	1.244633555	1.066832185	1.38840878	1.351910591	1.874637604	1.652869582	1.431329727
T_Li	Care & Maintenance	P95	0.010678977	0.010410516	0.006799809	0.018172937	0.011472243	0.005477585	0.00306362	0.00361691	0.005324083	0.01154582	0.008405653	0.008222396
T_Mg	Care & Maintenance	P95	4.876871586	4.993037701	5.050661087	4.838570118	4.666625977	4.359034061	4.259821892	4.39898777	4.489492416	4.740911007	4.586545944	4.941334724
T_Mn	Care & Maintenance	P95	0.027730973	0.02407277	0.02132467	0.028541671	0.022035684	0.024688181	0.022284884	0.025231503	0.027127471	0.037635937	0.054291435	0.029799515
T_Mo	Care & Maintenance	P95	0.000713828	0.000801175	0.000737058	0.000865477	0.000742832	0.000543101	0.000551186	0.00059734	0.000670489	0.000700466	0.000614638	0.00063322
T_Na	Care & Maintenance	P95	5.922252655	6.164832592	5.263669014	8.203467369	6.449059486	4.363770008	3.934047699	3.801935673	4.568684578	6.438015461	5.513234615	5.508202553
T_Ni	Care & Maintenance	P95	0.000363077	0.000360632	0.00031575	0.000442417	0.000370712	0.000320167	0.000289607	0.000296282	0.000327665	0.000431749	0.000371397	0.00034496
T_P	Care & Maintenance	P95	0.028783605	0.028009787	0.033210281	0.03073195	0.025914649	0.023490664	0.021119451	0.019351985	0.018763142	0.021976843	0.02968422	0.028726351
T_Pb	Care & Maintenance	P95	0.00025845	0.000251623	0.000191455	0.000454504	0.000342741	0.000151421	9.10425E-05	9.10288E-05	0.000133328	0.000280759	0.000210827	0.000204232
T_S	Care & Maintenance	P95	1.29356277	1.336469054	1.241759419	1.546459556	1.192470193	1.097986221	1.133734226	1.219839096	1.095419526	1.329822302	1.123262405	1.344627976
T_Sb	Care & Maintenance	P95	0.000259462	0.000229449	0.000147696	0.000322118	0.000183698	0.000221757	0.000193049	0.000226927	0.000242357	0.000427306	0.000316752	0.000252527
T_Se	Care & Maintenance	P95	8.49041E-05	8.5222E-05	0.000126977	8.84103E-05	8.22338E-05	7.9035E-05	7.92189E-05	7.76596E-05	7.1718E-05	8.29099E-05	8.15986E-05	8.23881E-05
T_Si	Care & Maintenance	P95	5.214849472	5.374482632	5.205319881	5.349508286	5.145955086	4.677862167	4.391523838	4.370029926	4.60291481	5.045342445	5.124690533	5.118863106
T_Sn	Care & Maintenance	P95	5.03448E-05	5.06221E-05	5.03875E-05	5.06101E-05	5.18953E-05	5.05081E-05	5.04357E-05	4.99775E-05	5.01156E-05	5.17166E-05	5.04688E-05	5.06251E-05
T_Sr	Care & Maintenance	P95	0.102770217	0.104346797	0.103053451	0.094682418	0.093851522	0.089154944	0.086727567	0.091113225	0.09734457	0.095894173	0.095395081	0.103623144
T_Ti	Care & Maintenance	P95	0.003459901	0.002587404	0.002709372	0.003487085	0.003172744	0.002735491	0.003909627	0.00351378	0.0029778	0.004812305	0.004859162	0.003915396
T_Tl	Care & Maintenance	P95	3.42325E-05	3.3398E-05	2.90079E-05	5.96004E-05	4.15845E-05	2.62989E-05	1.594E-05	1.49119E-05	1.8684E-05	3.74417E-05	2.78045E-05	3.10928E-05
T_U	Care & Maintenance	P95	0.000118747	0.000128129	0.000133843	0.000135742	0.000137342	0.000112837	0.00010358	0.000107325	0.00011313	0.000118196	0.000109971	0.00010543
T_V	Care & Maintenance	P95	0.002048402	0.001844861	0.001414228	0.003082548	0.002180933	0.001198795	0.000857018	0.001064853	0.001336048	0.002348617	0.001901982	0.001675448
T_Zn	Care & Maintenance	P95	0.002100878	0.002188027	0.002062141	0.002694437	0.002358884	0.002172705	0.001923432	0.001833251	0.00191738	0.002167741	0.002062097	0.001893546
D_Ag	Care & Maintenance	P95	1.36811E-05	1.31955E-05	1.53923E-05	2.32444E-05	1.73266E-05	1.69439E-05	1.1575E-05	1.09577E-05	1.12992E-05	1.54727E-05	1.33102E-05	1.55727E-05
D_Al	Care & Maintenance	P95	0.00435	0.0037	0.0029	0.018000001	0.042451091	0.038999997	0.029000001	0.0147	0.016249999	0.0142	0.0208	0.008300001
D_As	Care & Maintenance	P95	0.000637716	0.000607212	0.000596736	0.000765046	0.000646804	0.00056563	0.000568753	0.000593291	0.000648757	0.000731107	0.000620814	0.000600088
D_B	Care & Maintenance	P95	0.01504216	0.015064953	0.010676642	0.021981234	0.015809508	0.008545487	0.007386765	0.00725675	0.008808354	0.015469827	0.01228052	0.012095119
D_Ba	Care & Maintenance	P95	0.006630091	0.006594726	0.006363572	0.006295989	0.006163915	0.005909904	0.005833983	0.006086145	0.006675598	0.006986565	0.006333602	0.006263637
D_Bi	Care & Maintenance	P95	2.6853E-05	2.7049E-05	2.63226E-05	2.87131E-05	2.76786E-05	2.64976E-05	2.58804E-05	2.58113E-05	2.67775E-05	2.98293E-05	2.85084E-05	2.7229E-05
D_Be	Care & Maintenance	P95	5.49685E-05	5.56166E-05	5.45253E-05	6.29314E-05	5.73409E-05	5.37408E-05	5.19428E-05	5.16077E-05	5.32856E-05	5.7557E-05	5.54348E-05	5.51564E-05
D_Ca	Care & Maintenance	P95	20.92868423	20.87022018	20.38294411	18.67350197	17.84549713	17.66263771	17.84503937	18.54200554	19.05084038	18.96426392	19.14284515	20.01481247
D_Cd	Care & Maintenance	P95	7.91153E-06	7.84098E-06	7.99817E-06	1.21007E-05	1.06633E-05	8.42915E-06	8.31604E-06	7.5678E-06	7.95426E-06	1.02086E-05	8.27233E-06	8.23164E-06
D_Co	Care & Maintenance	P95	0.000160128	0.000151852	0.00011723	0.000228755	0.000167614	9.73588E-05	8.00154E-05	9.2487E-05	0.000115749	0.000204884	0.000144886	0.000133729
D_Cr	Care & Maintenance	P95	0.00016187	0.000154163	0.000155754	0.000274516	0.000182536	0.000153643	0.000149208	0.000154231	0.0001827	0.000226048	0.000179343	0.000168924
D_Cu	Care & Maintenance	P95	0.000302569	0.000337802	0.000296746	0.000333967	0.000377408	0.000354823	0.000394791	0.00032122	0.000315239	0.000323311	0.00030737	0.000309215
D_Fe	Care & Maintenance	P95	0.05309451	0.053300917	0.058617134	0.05595452	0.059046235	0.059140645	0.058204353	0.058617394	0.065269545	0.064112589	0.058374815	0.054344803
D_Hg	Care & Maintenance	P95	5.20267E-06	5.34495E-06	4.33625E-06	7.75221E-06	5.80258E-06	4.56832E-06	3.80924E-06	3.49824E-06	4.04509E-06	5.6619E-06	5.07831E-06	4.64959E-06
D_K	Care & Maintenance	P95	1.545396805	1.484622359	1.230495453	1.946842909	1.442922711	1.200244546	1.02881968	1.356113076	1.33187151	1.828246355	1.660165548	1.429009438
D_Li	Care & Maintenance	P95	0.010678977	0.010410516	0.006799809	0.018172937	0.011472243	0.005477585	0.00306362	0.00361691	0.005324083	0.01154582	0.008405653	0.008222396
D_Mg	Care & Maintenance	P95	5.066506386	4.942506313	5.143112659	4.788510799	4.642917633	4.221560478	4.264461517	4.297025204	4.42733717	4.708113194	4.458540916	4.773369312
D_Mn	Care & Maintenance	P95	0.02393228	0.02029275	0.01583912	0.023089746	0.012535561	0.018242862	0.015496721	0.0187231	0.021849271	0.032823816	0.027085127	0.023421196
D_Mo	Care & Maintenance	P95	0.000676347	0.000749962	0.000701334	0.000825221	0.000704906	0.00052075	0.000546367	0.000568559	0.000657481	0.000664665	0.000577295	0.000586853
D_Na	Care & Maintenance	P95	5.938925743	6.115393162	5.21122551	8.137655258	6.423732758	4.290088654	3.928352118	3.792876482	4.538609028	6.337596416	5.436631203	5.410921574
D_Ni	Care & Maintenance	P95	0.000363003	0.000360567	0.000311944	0.000440182	0.000363323	0.000316839	0.000288556	0.000296235	0.000327131	0.000430847	0.000371321	0.00033907
D_P	Care & Maintenance	P95	0.060939688	0.055134915	0.050358195	0.060066804	0.04822313	0.035614908	0.055930916	0.104124591	0.067109697	0.142290756	0.145528227	0.065116435
D_Pb	Care & Maintenance	P95	0.000254942	0.00024904	0.000186537	0.000447357	0.000332323	0.000140579	8.35507E-05	8.19194E-05	0.000128295	0.000275509	0.000205301	0.000201926
D_S	Care & Maintenance	P95	1.18059957	1.370776653	1.359378815	1.261617184	1.133759379	1.09819448	1.187464237	1.156360388	1.128703713	1.247193694	1.211280823	1.317577958
D_Sb	Care & Maintenance	P95	0.000259447	0.000229384	0.00014761	0.000323004	0.000183608	0.000221694	0.000193016	0.000226919	0.000242336	0.000427284	0.000316729	0.000252509
D_Se	Care & Maintenance	P95	0.000118515	8.30663E-05	0.000121215	8.25472E-05	7.81118E-05	7.19699E-05	7.57609E-05	7.90138E-05	7.35333E-05	7.61361E-05	7.96783E-05	7.61328E-05
D_Si	Care & Maintenance	P95	5.127147198	5.175750256	5.036489964	5.152513504	4.825281143	4.39887619	4.158053875	4.210491657	4.461717606	4.865765095	5.051197529	5.027588844
D_Sn	Care & Maintenance	P95	5.03448E-05	5.06221E-05	5.03875E-05	5.06101E-05	5.18953E-05	5.05081E-05	5.04357E-05	4.99775E-05	5.01156E-05	5.17166E-05	5.04688E-05	5.06251E-05
D_Sr	Care & Maintenance	P95	0.10287942	0.104524776	0.103452407	0.093533665	0.093039796	0.086801127	0.087436892	0.090790428	0.09662424	0.094992772	0.092302598	0.099336818
D_Ti	Care & Maintenance	P95	0.00165648	0.001423365	0.001306059	0.001696215	0.001437297	0.001366703	0.001211367	0.003288647	0.001937158	0.004728199	0.004829681	0.001882618
D_Tl	Care & Maintenance	P95	3.42325E-05	3.3398E-05	2.90079E-05	5.96004E-05	4.15247E-05	2.62947E-05	1.594E-05	1.49119E-05	1.8684E-05	3.74417E-05	2.78045E-05	3.10928E-05
D_U	Care & Maintenance	P95	0.000111874	0.000119823	0.000124295	0.000128173	0.000128434	0.000104486	9.55318E-05	0.00010174	0.00010664	0.000112368	0.000100599	9.80972E-05
D_V	Care & Maintenance	P95	0.002022121	0.00183202	0.001291191	0.003029285	0.002116904	0.001123676	0.000737482	0.000991393	0.001212091	0.002307413	0.001844167	0.001623705
D_Zn	Care & Maintenance	P95	0.001783605	0.001657933	0.001694591	0.00235293	0.002117522	0.001828106	0.001429626	0.001312481	0.001362262	0.001709099	0.001525484	0.001341148

Appendix B.5.9: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, WQ13

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.027968705	0.027585741	0.030182088	0.063533969	0.042395096	0.01661429	0.011865254	0.014154079	0.018051488	0.023747614	0.017235221	0.015335487
NO3_N	Care & Maintenance	P95	0.393718988	0.408509821	0.292743355	0.692432582	0.477222174	0.191825762	0.103591442	0.116503179	0.167965144	0.387660652	0.298032165	0.313432544
NO2_N	Care & Maintenance	P95	0.002698267	0.003389026	0.002123824	0.004296343	0.003586688	0.002030028	0.001644727	0.001589305	0.001691102	0.002742159	0.00247134	0.002660971
Br	Care & Maintenance	P95	0.032317754	0.032658372	0.029534655	0.037667111	0.032677207	0.027827162	0.026777968	0.026730239	0.027662981	0.032829929	0.031198073	0.031481791
Cl	Care & Maintenance	P95	0.453772753	0.443592578	0.392727196	0.585815489	0.463719368	0.362229794	0.390719324	0.326166421	0.353392512	0.477990508	0.423342705	0.420588493
F	Care & Maintenance	P95	0.115944847	0.114092939	0.098152585	0.154394269	0.118416347	0.083149672	0.072259881	0.074254133	0.087517656	0.122088164	0.110246554	0.111546502
TDP	Care & Maintenance	P95	0.0159807	0.012789842	0.016030628	0.017823648	0.013290253	0.009867605	0.00916081	0.009988982	0.008385644	0.011090233	0.011791987	0.01525888
SO4	Care & Maintenance	P95	10.05078983	9.695046425	7.249652386	12.44005489	8.71002388	8.129997253	7.158356667	10.77461433	9.883429527	15.12940788	11.47118282	9.825028419
T_CN	Care & Maintenance	P95	0.002516642	0.002528054	0.002514789	0.002530028	0.002591252	0.002520558	0.002514676	0.002495829	0.002499225	0.002581966	0.002520062	0.002512316
WAD_CN	Care & Maintenance	P95	0.002516643	0.002526964	0.002513882	0.002528819	0.002591252	0.00251884	0.002513773	0.002495808	0.002499225	0.002581952	0.002520062	0.002512316
T_Ag	Care & Maintenance	P95	1.33407E-05	1.29501E-05	2.16824E-05	2.28946E-05	1.86265E-05	1.75762E-05	1.38902E-05	1.18949E-05	1.2099E-05	1.56597E-05	1.35163E-05	1.56048E-05
T_Al	Care & Maintenance	P95	0.040062647	0.031284045	0.04349719	0.050590344	0.074448325	0.088078052	0.084204838	0.064043157	0.05412605	0.054286756	0.050682534	0.039153229
T_As	Care & Maintenance	P95	0.000692092	0.000650667	0.000627218	0.000797014	0.000688564	0.000617632	0.000618128	0.000648454	0.00068445	0.000761646	0.000682077	0.00065321
T_B	Care & Maintenance	P95	0.014535451	0.014443689	0.010565548	0.021602931	0.015619919	0.00845519	0.007330494	0.0071866	0.00866872	0.015189848	0.011948412	0.01187611
T_Ba	Care & Maintenance	P95	0.006807565	0.007003252	0.006924068	0.006846758	0.006537403	0.006274911	0.00624963	0.006230063	0.006949346	0.007375254	0.006740005	0.006522836
T_Bi	Care & Maintenance	P95	2.68109E-05	2.69237E-05	2.62744E-05	2.86749E-05	2.764E-05	2.64415E-05	2.58615E-05	2.57798E-05	2.67058E-05	2.9695E-05	2.83764E-05	2.71557E-05
T_Be	Care & Maintenance	P95	5.47847E-05	5.53708E-05	5.43461E-05	6.26477E-05	5.7229E-05	5.36373E-05	5.18979E-05	5.15579E-05	5.32112E-05	5.73179E-05	5.51877E-05	5.49895E-05
T_Ca	Care & Maintenance	P95	20.33387566	21.57067108	20.74063492	19.24666405	18.36778069	17.86156464	17.79260445	18.76157379	18.8329258	20.05671692	19.37869453	21.63098335
T_Cd	Care & Maintenance	P95	7.33394E-06	7.92927E-06	8.55361E-06	1.19527E-05	9.37993E-06	7.9938E-06	7.56727E-06	6.12833E-06	7.29079E-06	9.8082E-06	7.6672E-06	7.70906E-06
T_Co	Care & Maintenance	P95	0.000154163	0.000146736	0.000114995	0.000226417	0.00016734	9.87711E-05	7.9851E-05	9.27246E-05	0.000114782	0.00020167	0.00014134	0.00013255
T_Cr	Care & Maintenance	P95	0.000217344	0.000202836	0.000213895	0.000314024	0.000242372	0.000218095	0.000200297	0.000191871	0.000221388	0.000273857	0.000228938	0.00021241
T_Cu	Care & Maintenance	P95	0.00029403	0.000300315	0.000297451	0.00035099	0.000408425	0.000365592	0.000380832	0.000310627	0.000306511	0.000320886	0.000296565	0.000293645
T_Fe	Care & Maintenance	P95	0.091553994	0.09755221	0.120825462	0.115148976	0.106084451	0.105036393	0.096379183	0.097301036	0.107845232	0.113286257	0.108511478	0.087371565
T_Hg	Care & Maintenance	P95	5.07682E-06	5.16742E-06	4.27818E-06	7.62966E-06	5.87166E-06	4.56523E-06	3.90831E-06	3.54272E-06	4.07733E-06	5.65522E-06	4.99522E-06	4.591E-06
T_K	Care & Maintenance	P95	1.516017556	1.453843236	1.233036757	1.938698292	1.448247552	1.230000734	1.060936928	1.365259171	1.336350083	1.841682792	1.618726969	1.412211776
T_Li	Care & Maintenance	P95	0.010143518	0.009798788	0.006591694	0.017746132	0.011280418	0.005341427	0.003010534	0.003569746	0.005206145	0.011271846	0.00804599	0.007983008
T_Mg	Care & Maintenance	P95	4.872782707	4.98443079	5.045744419	4.834410667	4.652158737	4.342877388	4.255796909	4.398062706	4.487168789	4.727771759	4.583184719	4.929571629
T_Mn	Care & Maintenance	P95	0.027778132	0.02378143	0.02144249	0.028632538	0.022020342	0.024459893	0.022258049	0.025344057	0.027237719	0.037598491	0.053808257	0.029664526
T_Mo	Care & Maintenance	P95	0.000708336	0.000787279	0.000731241	0.000862351	0.000736638	0.000542256	0.000552032	0.000598816	0.000670648	0.00069942	0.000611996	0.000632142
T_Na	Care & Maintenance	P95	5.829606533	6.007697582	5.193506718	8.088478088	6.403787613	4.326935291	3.92023468	3.794602633	4.542639732	6.369894505	5.432855606	5.450602055
T_Ni	Care & Maintenance	P95	0.000356566	0.000354111	0.000312821	0.000437679	0.000368409	0.000318401	0.000288717	0.000295438	0.000325583	0.000426388	0.000365767	0.000341869
T_P	Care & Maintenance	P95	0.028725723	0.027965751	0.032964971	0.030734932	0.025872756	0.02339058	0.020976696	0.019209931	0.018699581	0.021852054	0.02954663	0.028619761
T_Pb	Care & Maintenance	P95	0.000245207	0.000237634	0.000185234	0.000446579	0.000337366	0.000147959	8.97222E-05	8.8897E-05	0.000130784	0.000274917	0.000204222	0.000198293
T_S	Care & Maintenance	P95	1.294572353	1.340496302	1.241112351	1.545323014	1.190312386	1.098225951	1.133282781	1.21669817	1.094981194	1.335390449	1.126397252	1.344779015
T_Sb	Care & Maintenance	P95	0.000251679	0.000219291	0.000144244	0.000318351	0.000181575	0.000214305	0.000189301	0.000223411	0.000237512	0.000416771	0.000307066	0.000246153
T_Se	Care & Maintenance	P95	8.47782E-05	8.47918E-05	0.000124331	8.78403E-05	8.21354E-05	7.86918E-05	7.93264E-05	7.74785E-05	7.17277E-05	8.31406E-05	8.12545E-05	8.19901E-05
T_Si	Care & Maintenance	P95	5.213434696	5.346960068	5.197001457	5.346965313	5.132033348	4.65734148	4.387622356	4.358799934	4.586190701	5.038511276	5.124696732	5.119513035
T_Sn	Care & Maintenance	P95	5.03344E-05	5.0597E-05	5.03759E-05	5.05983E-05	5.18564E-05	5.04936E-05	5.04298E-05	4.99775E-05	5.01128E-05	5.16696E-05	5.0455E-05	5.06052E-05
T_Sr	Care & Maintenance	P95	0.102877259	0.104326136	0.1030671	0.094682433	0.093655363	0.089061148	0.086738832	0.091194905	0.097432978	0.095869087	0.095416538	0.103589959
T_Ti	Care & Maintenance	P95	0.00348261	0.002596891	0.002731225	0.00351103	0.003206248	0.002737645	0.00391134	0.003498858	0.002987636	0.004816044	0.004860938	0.003890345
T_Tl	Care & Maintenance	P95	3.2756E-05	3.1935E-05	2.81109E-05	5.82829E-05	4.09426E-05	2.60361E-05	1.56722E-05	1.45919E-05	1.83624E-05	3.65752E-05	2.69704E-05	3.02858E-05
T_U	Care & Maintenance	P95	0.000118829	0.00012683	0.000133577	0.000135794	0.00013643	0.000112371	0.00010325	0.00010709	0.000112722	0.000117573	0.000109606	0.000105403
T_V	Care & Maintenance	P95	0.001950271	0.001746419	0.001370737	0.003033402	0.002153388	0.001178768	0.000849819	0.001054224	0.001303467	0.002289007	0.001825839	0.00162185
T_Zn	Care & Maintenance	P95	0.00206353	0.002153426	0.002045128	0.002670868	0.002346235	0.002159017	0.001917802	0.001837423	0.001904743	0.002148708	0.002037204	0.001878831
D_Ag	Care & Maintenance	P95	1.3156E-05	1.27845E-05	1.5004E-05	2.28848E-05	1.71505E-05	1.6873E-05	1.15068E-05	1.07621E-05	1.10947E-05	1.52091E-05	1.29283E-05	1.52052E-05
D_Al	Care & Maintenance	P95	0.004344471	0.0036	0.0027	0.017899456	0.042414255	0.037500001	0.026000001	0.014611998	0.007	0.011899999	0.020400001	0.008254055
D_As	Care & Maintenance	P95	0.00063631	0.000605725	0.000593263	0.00075962	0.000644391	0.000563662	0.000569332	0.000595452	0.000648228	0.000724761	0.000618311	0.000598956
D_B	Care & Maintenance	P95	0.014535451	0.014443689	0.010488857	0.021573264	0.015619919	0.008397378	0.007330494	0.0071866	0.008668646	0.015189848	0.011948412	0.011876109
D_Ba	Care & Maintenance	P95	0.006655559	0.006600497	0.006403334	0.00633783	0.006166724	0.00591423	0.005854203	0.006108569	0.006703412	0.007019487	0.006355712	0.006292332
D_Bi	Care & Maintenance	P95	2.68109E-05	2.69237E-05	2.62744E-05	2.86749E-05	2.764E-05	2.64415E-05	2.58615E-05	2.57798E-05	2.67058E-05	2.9695E-05	2.83764E-05	2.71557E-05
D_Be	Care & Maintenance	P95	5.47847E-05	5.53708E-05	5.43461E-05	6.26477E-05	5.7229E-05	5.36373E-05	5.18979E-05	5.15579E-05	5.32112E-05	5.73179E-05	5.51877E-05	5.49895E-05
D_Ca	Care & Maintenance	P95	20.9486866	20.86257172	20.37333107	18.68528557	17.8117733	17.64227486	17.84237671	18.54660034	19.06481361	18.96105385	19.12043381	19.98100471
D_Cd	Care & Maintenance	P95	7.61336E-06	7.64493E-06	7.80785E-06	1.19118E-05	1.05431E-05	8.34294E-06	8.17623E-06	7.48289E-06	7.78188E-06	1.00195E-05	8.05858E-06	8.0168E-06
D_Co	Care & Maintenance	P95	0.000153998	0.000146658	0.000114717	0.000225228	0.000165541	9.58435E-05	7.92337E-05	9.18477E-05	0.000113943	0.000201352	0.00014117	0.000130582
D_Cr	Care & Maintenance	P95	0.000161577	0.000150942	0.000152745	0.000270002	0.000181654	0.000152868	0.000147856	0.000153012	0.000179296	0.000223859	0.000176156	0.000165656
D_Cu	Care & Maintenance	P95	0.00030004	0.000335563	0.000295421	0.00033244	0.000378918	0.000352557	0.000392418	0.000318594	0.000313122	0.000321609	0.000304842	0.000309719
D_Fe	Care & Maintenance	P95	0.053780597	0.054499611	0.058497347	0.056809969	0.059327558	0.059189968	0.05877981	0.059948798	0.066642918	0.065205678	0.05945953	0.055490915
D_Hg	Care & Maintenance	P95	5.06549E-06	5.16934E-06	4.26601E-06	7.62444E-06	5.73938E-06	4.52339E-06	3.78302E-06	3.4654E-06	4.00178E-06	5.59091E-06	4.98468E-06	4.60124E-06
D_K	Care & Maintenance	P95	1.508226037	1.44298172	1.213096738	1.923346877	1.434232235	1.185984731	1.022616029	1.3336761	1.315956712	1.796705127	1.627411366	1.409685135
D_Li	Care & Maintenance	P95	0.010143518	0.009798788	0.006591694	0.017746132	0.011280418	0.005341427	0.003010534	0.003569746	0.005206145	0.011271846	0.00804599	0.007983008
D_Mg	Care & Maintenance	P95	5.06044817	4.93671608	5.136284828	4.785419941	4.628149986	4.208049774	4.262751102	4.295731068	4.423350811	4.690357685	4.447931767	4.763957024
D_Mn	Care & Maintenance	P95	0.023726277	0.020035533	0.015822146	0.023172462	0.012494176	0.017965844	0.015474894	0.018837526	0.021981301	0.032645814	0.027076131	0.023360185
D_Mo	Care & Maintenance	P95	0.000670057	0.000737318	0.000694816	0.000822073	0.000699954	0.000519477	0.000546886	0.000569499	0.000657161	0.000662533	0.000575481	0.000586106
D_Na	Care & Maintenance	P95	5.841684341	5.964155674	5.144296169	8.020251274	6.379389763	4.255611897	3.914652824	3.783999681	4.509632111	6.269482136	5.359034538	5.354839802
D_Ni	Care & Maintenance	P95	0.000356497	0.00035405	0.000309186	0.000435497	0.000361898	0.000315157	0.000287686	0.000295392	0.000325063	0.000425512	0.000365695	0.000336174
D_P	Care & Maintenance	P95	0.060226697	0.056332227	0.051493399	0.060449671	0.047950722	0.035123724	0.057009656	0.103717566	0.067843653	0.142491192	0.145614997	0.065482989
D_Pb	Care & Maintenance	P95	0.000242305	0.000235211	0.000180824	0.000439562	0.000326928	0.000137914	8.23801E-05	8.00818E-05	0.000125868	0.000269789	0.000198896	0.000196071
D_S	Care & Maintenance	P95	1.179939508	1.368840694	1.365132809	1.263200879	1.132756591	1.097781658	1.186899543	1.15088594	1.129760146	1.250213146	1.208151221	1.315942287
D_Sb	Care & Maintenance	P95	0.000251665	0.00021923	0.00014416	0.000319224	0.000181486	0.000214066	0.000189268	0.000223403	0.000237491	0.00041675	0.000307044	0.000246136
D_Se	Care & Maintenance	P95	0.000117872	8.22809E-05	0.000118474	8.21312E-05	7.76345E-05	7.1967E-05	7.55563E-05	7.87894E-05	7.32321E-05	7.57918E-05	7.92487E-05	7.59331E-05
D_Si	Care & Maintenance	P95	5.121385574	5.144012451	5.024555683	5.147057056	4.814962387	4.382632256	4.152989864	4.203677177	4.447195053	4.853039742	5.047657013	5.024774075
D_Sn	Care & Maintenance	P95	5.03344E-05	5.0597E-05	5.03759E-05	5.05983E-05	5.18564E-05	5.04936E-05	5.04298E-05	4.99775E-05	5.01128E-05	5.16696E-05	5.0455E-05	5.06052E-05
D_Sr	Care & Maintenance	P95	0.103060074	0.10449978	0.103545621	0.09367907	0.092826158	0.086594768	0.087433726	0.090838417	0.09670075	0.094941601	0.09233322	0.099313512
D_Ti	Care & Maintenance	P95	0.001629363	0.001446385	0.001343124	0.001709752	0.001433442	0.001346926	0.001243132	0.003272715	0.001948137	0.004735332	0.004831857	0.00189533
D_Tl	Care & Maintenance	P95	3.2756E-05	3.1935E-05	2.81109E-05	5.82829E-05	4.08838E-05	2.60319E-05	1.56722E-05	1.45919E-05	1.83624E-05	3.65752E-05	2.69704E-05	3.02858E-05
D_U	Care & Maintenance	P95	0.000111756	0.000118732	0.00012425	0.000128099	0.00012752	0.000103958	9.53869E-05	0.000101624	0.000106318	0.000111837	0.00010022	9.79769E-05
D_V	Care & Maintenance	P95	0.001922588	0.001734371	0.001252298	0.002974221	0.002084167	0.00109974	0.000728304	0.000978611	0.001177552	0.00224898	0.001770698	0.001572034
D_Zn	Care & Maintenance	P95	0.001749286	0.001624985	0.001653688	0.002321338	0.00210517	0.00180528	0.001410721	0.001295419	0.001334275	0.001677495	0.001476681	0.001309626

Appendix B.5.10: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, Chedakuz Midway

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.021507962	0.021018131	0.021774916	0.053708553	0.033999559	0.01427223	0.011072153	0.012904718	0.014133054	0.018878369	0.013760113	0.012168612
NO3_N	Care & Maintenance	P95	0.240552917	0.235304117	0.202795744	0.549981415	0.378858358	0.126125962	0.0757365	0.079431787	0.11510019	0.266789317	0.193632826	0.221044928
NO2_N	Care & Maintenance	P95	0.002012253	0.002684988	0.001502067	0.003522153	0.002871017	0.001677348	0.001304037	0.001248311	0.001382073	0.00230347	0.001681112	0.002192662
Br	Care & Maintenance	P95	0.028901827	0.028734667	0.027752096	0.034189709	0.031173734	0.026894441	0.026231753	0.026187979	0.02681076	0.030160088	0.028588509	0.029051337
Cl	Care & Maintenance	P95	0.356849015	0.350979745	0.335662842	0.506666422	0.41217804	0.324623942	0.360878646	0.310372412	0.322115153	0.400269687	0.352643341	0.359016597
F	Care & Maintenance	P95	0.088397346	0.086725071	0.083789848	0.131757841	0.101915397	0.073321149	0.06761875	0.066810898	0.077000141	0.09887936	0.088817686	0.092379205
TDP	Care & Maintenance	P95	0.014901457	0.011821189	0.013818691	0.017106397	0.012330768	0.008664683	0.008160801	0.009806497	0.008250635	0.009594776	0.009924054	0.012958057
SO4	Care & Maintenance	P95	7.49987793	6.745889664	6.004691601	11.11257935	7.399866104	6.083199978	6.262898445	7.767587662	7.74113512	10.84054184	8.154754639	7.619860172
T_CN	Care & Maintenance	P95	0.002510771	0.002516691	0.002509501	0.002522359	0.00256664	0.002513617	0.002511025	0.002497009	0.002499497	0.00255498	0.00251526	0.002507926
WAD_CN	Care & Maintenance	P95	0.002510771	0.002515906	0.002508892	0.00252221	0.00256664	0.002512527	0.002510329	0.002496994	0.002499497	0.002554971	0.00251526	0.002507926
T_Ag	Care & Maintenance	P95	9.79992E-06	9.65866E-06	1.76193E-05	1.87852E-05	1.56964E-05	1.68654E-05	1.22543E-05	9.76876E-06	9.65347E-06	1.23489E-05	1.0018E-05	1.16077E-05
T_Al	Care & Maintenance	P95	0.045720957	0.026058536	0.038402442	0.055186708	0.091478802	0.082438961	0.073603228	0.055008143	0.044675384	0.046235297	0.04651412	0.033590175
T_As	Care & Maintenance	P95	0.000673047	0.000637614	0.000614012	0.000743043	0.000660875	0.000602927	0.000631077	0.00065458	0.000682582	0.000725261	0.000652664	0.00063872
T_B	Care & Maintenance	P95	0.009993339	0.009871295	0.00827594	0.017738862	0.013058316	0.00694062	0.006634445	0.006445173	0.00735183	0.012137178	0.009167667	0.009414502
T_Ba	Care & Maintenance	P95	0.007334261	0.006930619	0.007217093	0.007676198	0.006721812	0.00641196	0.006516514	0.0066307	0.007315408	0.007687575	0.007160091	0.006834163
T_Bi	Care & Maintenance	P95	2.62824E-05	2.5999E-05	2.57692E-05	2.80385E-05	2.7093E-05	2.58959E-05	2.56363E-05	2.5508E-05	2.60889E-05	2.81203E-05	2.70049E-05	2.64243E-05
T_Be	Care & Maintenance	P95	5.32497E-05	5.35068E-05	5.24553E-05	5.91107E-05	5.57987E-05	5.25636E-05	5.13768E-05	5.09639E-05	5.22254E-05	5.4649E-05	5.31427E-05	5.31684E-05
T_Ca	Care & Maintenance	P95	20.46870422	21.26138687	20.64078331	19.30163383	17.89959526	17.57842255	17.83826447	18.71712875	18.94125366	19.84430885	19.21109009	21.06855965
T_Cd	Care & Maintenance	P95	5.33641E-06	6.53226E-06	6.63846E-06	9.46831E-06	8.10041E-06	7.19763E-06	6.96915E-06	5.18061E-06	5.59732E-06	8.8829E-06	5.48677E-06	6.51595E-06
T_Co	Care & Maintenance	P95	0.000105964	0.000100883	8.81877E-05	0.000179948	0.00013894	7.93918E-05	7.12065E-05	7.92718E-05	9.26722E-05	0.000156865	0.000100405	9.93978E-05
T_Cr	Care & Maintenance	P95	0.000196652	0.000163186	0.000183516	0.000278195	0.000234673	0.000201934	0.000187853	0.000179164	0.000191702	0.000230208	0.000200854	0.000183099
T_Cu	Care & Maintenance	P95	0.000277896	0.000311878	0.000280233	0.000326288	0.000466472	0.000370266	0.000392536	0.00034986	0.000313296	0.00029992	0.000277997	0.000306335
T_Fe	Care & Maintenance	P95	0.136388734	0.117052861	0.140999183	0.148135096	0.130213782	0.111444876	0.104006261	0.119373709	0.140005141	0.157448635	0.150894597	0.102993861
T_Hg	Care & Maintenance	P95	3.84899E-06	3.84013E-06	3.57809E-06	6.31504E-06	5.15866E-06	3.93512E-06	3.52111E-06	3.25422E-06	3.54843E-06	4.74189E-06	3.91746E-06	4.08586E-06
T_K	Care & Maintenance	P95	1.216477513	1.124874473	1.122341514	1.685385823	1.319452167	1.028225541	0.988274336	1.129040956	1.157974601	1.469501734	1.233257174	1.187488556
T_Li	Care & Maintenance	P95	0.005552499	0.005128221	0.004175474	0.013683739	0.008836877	0.003735521	0.002324422	0.002502763	0.003759874	0.008056675	0.004991295	0.0052327
T_Mg	Care & Maintenance	P95	4.824826717	4.87871027	4.990101814	4.781907082	4.503379345	4.166454792	4.195474148	4.381267548	4.463690281	4.580309391	4.53059864	4.79698658
T_Mn	Care & Maintenance	P95	0.028251851	0.021331206	0.022571944	0.031632669	0.021789486	0.022221137	0.021935266	0.0270255	0.029188359	0.037268218	0.048039585	0.028036823
T_Mo	Care & Maintenance	P95	0.000663136	0.000684904	0.000682892	0.000821636	0.000676261	0.000533548	0.000563118	0.000616292	0.000672263	0.00068688	0.00058607	0.000619957
T_Na	Care & Maintenance	P95	4.895899296	4.817420006	4.588441372	6.901891232	5.750620842	3.892433882	3.740491152	3.698347092	4.222920895	5.510981083	4.520623207	4.795675278
T_Ni	Care & Maintenance	P95	0.000307823	0.000304019	0.000287403	0.000388418	0.00034535	0.000297402	0.000277553	0.000281399	0.000300707	0.000365192	0.000313386	0.00030821
T_P	Care & Maintenance	P95	0.027985755	0.027407514	0.030293336	0.030777287	0.025293816	0.022530051	0.019580934	0.017700033	0.017925946	0.020456724	0.028187135	0.027607776
T_Pb	Care & Maintenance	P95	0.000140747	0.000135054	0.000120441	0.000351129	0.000264756	0.000107143	7.24781E-05	6.52748E-05	9.91495E-05	0.000201709	0.000133716	0.000134052
T_S	Care & Maintenance	P95	1.307460427	1.392879248	1.234800458	1.529508352	1.158002257	1.102939487	1.1262573	1.175788641	1.08899188	1.399938703	1.17410481	1.346543193
T_Sb	Care & Maintenance	P95	0.000171124	0.000133925	0.000105976	0.0002678	0.000152898	0.000141557	0.00014902	0.000157026	0.000174217	0.000293432	0.000204893	0.000176014
T_Se	Care & Maintenance	P95	8.34948E-05	7.93326E-05	0.000102682	8.16076E-05	8.05639E-05	7.52067E-05	8.17278E-05	7.51935E-05	7.18778E-05	8.73863E-05	7.76005E-05	7.6039E-05
T_Si	Care & Maintenance	P95	5.201563835	5.131475449	5.143762589	5.300916672	4.976180077	4.440877438	4.337545395	4.246001244	4.430417538	4.971221447	5.125443459	5.126853466
T_Sn	Care & Maintenance	P95	5.02164E-05	5.0347E-05	5.02442E-05	5.04469E-05	5.13551E-05	5.03249E-05	5.03471E-05	4.99779E-05	5.00796E-05	5.11205E-05	5.03121E-05	5.03854E-05
T_Sr	Care & Maintenance	P95	0.104173891	0.104072377	0.103221603	0.094698109	0.091309637	0.08803907	0.086931489	0.092256904	0.098485097	0.095544979	0.095641829	0.103169046
T_Ti	Care & Maintenance	P95	0.004200922	0.002769954	0.003057727	0.003954483	0.003663754	0.002767198	0.003935057	0.003340049	0.003088162	0.004875801	0.00489059	0.003645121
T_Tl	Care & Maintenance	P95	1.95274E-05	1.90974E-05	1.87672E-05	4.59236E-05	3.27991E-05	2.2477E-05	1.24997E-05	1.17481E-05	1.42657E-05	2.68104E-05	1.83057E-05	2.1164E-05
T_U	Care & Maintenance	P95	0.000119459	0.000116529	0.000130854	0.000136529	0.000125697	0.000107644	9.95887E-05	0.000105582	0.000107999	0.000111025	0.000105483	0.000105098
T_V	Care & Maintenance	P95	0.0011929	0.001028981	0.000910237	0.002456251	0.001781183	0.000930162	0.000780069	0.000852046	0.001000588	0.001599303	0.001135906	0.001089507
T_Zn	Care & Maintenance	P95	0.001815283	0.001906155	0.00184747	0.002372482	0.002166851	0.00198786	0.001822571	0.001883661	0.001769812	0.001933765	0.001817974	0.001736623
D_Ag	Care & Maintenance	P95	9.53216E-06	9.48976E-06	1.10851E-05	1.87771E-05	1.47023E-05	1.6218E-05	1.08791E-05	9.05843E-06	9.06915E-06	1.18791E-05	9.68621E-06	1.13887E-05
D_Al	Care & Maintenance	P95	0.004267667	0.003117797	0.002595208	0.016438967	0.041956663	0.036487207	0.026000001	0.013287517	0.007	0.011899999	0.017706029	0.007588952
D_As	Care & Maintenance	P95	0.000619042	0.000586908	0.000553648	0.000695957	0.000611473	0.000540942	0.000577046	0.000619367	0.0006428	0.000653969	0.000590213	0.000585882
D_B	Care & Maintenance	P95	0.009993339	0.009871295	0.00822581	0.017726768	0.013058316	0.006636876	0.006634445	0.006445173	0.00735183	0.012137178	0.009167666	0.009414501
D_Ba	Care & Maintenance	P95	0.006944204	0.006642693	0.006839294	0.006923466	0.006198531	0.005966779	0.006137853	0.006356751	0.007059267	0.007340286	0.006596718	0.006662297
D_Bi	Care & Maintenance	P95	2.62824E-05	2.5999E-05	2.57692E-05	2.80385E-05	2.7093E-05	2.58959E-05	2.56363E-05	2.5508E-05	2.60889E-05	2.81203E-05	2.70049E-05	2.64243E-05
D_Be	Care & Maintenance	P95	5.32497E-05	5.35068E-05	5.24553E-05	5.91107E-05	5.57987E-05	5.25636E-05	5.13768E-05	5.09639E-05	5.22254E-05	5.4649E-05	5.31427E-05	5.31684E-05
D_Ca	Care & Maintenance	P95	21.24363136	20.76799583	20.26609421	19.08542061	17.39183426	17.35915565	17.80156898	18.61232376	19.18301964	18.92007446	18.76278305	19.50735664
D_Cd	Care & Maintenance	P95	5.57732E-06	5.70731E-06	5.9147E-06	9.45962E-06	8.71905E-06	7.33625E-06	7.16628E-06	6.08688E-06	5.97869E-06	7.70606E-06	5.8462E-06	6.03831E-06
D_Co	Care & Maintenance	P95	0.000105878	0.000100843	8.80449E-05	0.000179072	0.00013757	7.39996E-05	7.07032E-05	7.88262E-05	9.2211E-05	0.000156601	0.000100244	9.81558E-05
D_Cr	Care & Maintenance	P95	0.000158	0.000115765	0.000117783	0.000222875	0.000169674	0.000145237	0.000135619	0.000132781	0.000141623	0.000198507	0.000150019	0.000126981
D_Cu	Care & Maintenance	P95	0.000283113	0.000320935	0.000279988	0.000312107	0.000397314	0.000323861	0.00036671	0.000303029	0.000291377	0.000300409	0.000282303	0.000315254
D_Fe	Care & Maintenance	P95	0.060281634	0.063103035	0.05726672	0.072803892	0.06492234	0.059765149	0.066023558	0.076330908	0.088894941	0.080195218	0.071461402	0.068550147
D_Hg	Care & Maintenance	P95	3.84885E-06	3.84112E-06	3.57185E-06	6.31141E-06	5.09032E-06	3.89946E-06	3.47239E-06	3.19492E-06	3.5057E-06	4.6962E-06	3.9011E-06	4.09504E-06
D_K	Care & Maintenance	P95	1.221202374	1.118753433	1.065031648	1.659037113	1.308465481	0.992316544	0.953325331	1.104835987	1.133340478	1.440527678	1.257000804	1.182705522
D_Li	Care & Maintenance	P95	0.005552499	0.005128221	0.004175474	0.013683739	0.008836877	0.003735521	0.002324422	0.002502763	0.003759874	0.008056675	0.004991295	0.0052327
D_Mg	Care & Maintenance	P95	4.987369061	4.86559248	5.075564861	4.746696472	4.472745895	4.040617466	4.231761932	4.269843102	4.386488914	4.491174221	4.306604385	4.658038616
D_Mn	Care & Maintenance	P95	0.021857658	0.017866872	0.015668998	0.025796667	0.011887314	0.015248293	0.0152118	0.020299053	0.02370481	0.030591423	0.02696011	0.022682531
D_Mo	Care & Maintenance	P95	0.000618282	0.000644195	0.000643417	0.000781078	0.000643474	0.000506704	0.000553925	0.000580704	0.000654426	0.000636941	0.000556807	0.000577713
D_Na	Care & Maintenance	P95	4.842586994	4.815504074	4.568125248	6.809546471	5.739671707	3.849015236	3.736390352	3.664932013	4.153954029	5.410661221	4.480183125	4.717325687
D_Ni	Care & Maintenance	P95	0.0003078	0.000303981	0.000285435	0.000386641	0.000341337	0.000295276	0.000276787	0.000281065	0.000300162	0.000364619	0.000313346	0.000304621
D_P	Care & Maintenance	P95	0.050214447	0.070224114	0.065005265	0.068155065	0.045022309	0.028752917	0.074855074	0.099383146	0.07570821	0.145011321	0.1468907	0.071556263
D_Pb	Care & Maintenance	P95	0.000138985	0.000133103	0.000117619	0.000345536	0.000254053	0.000100602	6.70917E-05	5.97186E-05	9.5694E-05	0.000198099	0.000130375	0.000132707
D_S	Care & Maintenance	P95	1.171544433	1.34495461	1.456334829	1.313664079	1.116335988	1.091643929	1.177295208	1.096419096	1.146258473	1.284826398	1.172258854	1.297195554
D_Sb	Care & Maintenance	P95	0.000171117	0.000133883	0.000105922	0.000268032	0.000152844	0.000139603	0.000148994	0.000157009	0.000174207	0.000293418	0.00020488	0.000176004
D_Se	Care & Maintenance	P95	0.000109963	7.31625E-05	9.60516E-05	7.61161E-05	7.00707E-05	7.19538E-05	7.31263E-05	7.63887E-05	6.93924E-05	7.28385E-05	7.50593E-05	7.3765E-05
D_Si	Care & Maintenance	P95	5.066480637	4.90920639	4.930871964	5.052143574	4.683702469	4.214746952	4.093091488	4.126642704	4.30487442	4.706411839	5.00830555	4.992527008
D_Sn	Care & Maintenance	P95	5.02164E-05	5.0347E-05	5.02442E-05	5.04469E-05	5.13551E-05	5.03249E-05	5.03471E-05	4.99779E-05	5.00796E-05	5.11205E-05	5.03121E-05	5.03854E-05
D_Sr	Care & Maintenance	P95	0.10541629	0.104192734	0.104600884	0.0953357	0.090789318	0.085374527	0.087387264	0.091460183	0.097802512	0.094294548	0.092671111	0.099019855
D_Ti	Care & Maintenance	P95	0.00127727	0.001957901	0.001781599	0.001975064	0.00138693	0.001186734	0.001711635	0.003110343	0.002250931	0.004820689	0.004882987	0.002074732
D_Tl	Care & Maintenance	P95	1.95274E-05	1.90974E-05	1.87672E-05	4.59236E-05	3.2764E-05	2.24736E-05	1.24997E-05	1.17481E-05	1.42657E-05	2.68104E-05	1.83057E-05	2.1164E-05
D_U	Care & Maintenance	P95	0.000110825	0.00011008	0.000123865	0.000126906	0.00011675	9.86901E-05	9.36496E-05	0.000100902	0.000102595	0.000106365	9.62277E-05	9.65628E-05
D_V	Care & Maintenance	P95	0.00115629	0.001021056	0.00083993	0.00233183	0.001641825	0.000801306	0.000611794	0.000725106	0.000873167	0.001572871	0.001108013	0.001065829
D_Zn	Care & Maintenance	P95	0.001456782	0.001354885	0.00125655	0.001930796	0.00196137	0.001537068	0.001205666	0.001150022	0.001039332	0.001317537	0.00110398	0.00101755

Appendix B.5.11: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 2

Receiving Stream Nodes, Chedakuz Outlet

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.01967462	0.018927962	0.019509874	0.049895301	0.031101102	0.01362266	0.010789646	0.01258751	0.013060566	0.01726334	0.012987323	0.011255617
NO3_N	Care & Maintenance	P95	0.206116602	0.20077461	0.178174838	0.49743259	0.345201463	0.104114585	0.066609919	0.067067385	0.098460883	0.230490088	0.166229159	0.194061846
NO2_N	Care & Maintenance	P95	0.00183868	0.002542976	0.00135032	0.003261225	0.002606604	0.001581691	0.00121732	0.001144333	0.001293529	0.002178518	0.001482626	0.002053281
Br	Care & Maintenance	P95	0.028091494	0.028038286	0.02728172	0.033224795	0.030622745	0.026638893	0.026055425	0.026043722	0.0265428	0.029351762	0.027918376	0.028366052
Cl	Care & Maintenance	P95	0.335621029	0.330419689	0.32195583	0.479759485	0.393381804	0.31310913	0.354185581	0.304782689	0.311888248	0.376734883	0.334516317	0.340317816
F	Care & Maintenance	P95	0.082166046	0.081154853	0.080338754	0.124024838	0.09663263	0.069951333	0.06623368	0.064964145	0.074402519	0.091851033	0.083725467	0.086829782
TDP	Care & Maintenance	P95	0.014602561	0.011590928	0.012984817	0.016963487	0.011994878	0.008362382	0.007827724	0.009756185	0.008209012	0.009164811	0.009529325	0.012296319
SO4	Care & Maintenance	P95	6.843594551	6.148670673	5.689446926	10.55880165	6.992510319	5.51886797	6.008827209	7.07002449	7.106354237	9.826580048	7.259664059	6.953641415
T_CN	Care & Maintenance	P95	0.002509037	0.002513857	0.002507958	0.002519682	0.002558145	0.002511506	0.002509712	0.002497406	0.002499578	0.002546717	0.002513642	0.002506637
WAD_CN	Care & Maintenance	P95	0.002509037	0.002513175	0.002507441	0.00251952	0.002558145	0.002510649	0.002509094	0.002497392	0.002499579	0.002546709	0.002513642	0.002506637
T_Ag	Care & Maintenance	P95	9.01187E-06	8.90846E-06	1.63442E-05	1.73327E-05	1.4518E-05	1.65932E-05	1.17358E-05	9.27181E-06	9.01539E-06	1.11979E-05	9.11588E-06	1.0577E-05
T_Al	Care & Maintenance	P95	0.047518786	0.024812425	0.036896523	0.056753226	0.099142075	0.08105386	0.069173433	0.052614953	0.042036399	0.043732416	0.045278572	0.032005932
T_As	Care & Maintenance	P95	0.000666885	0.000633225	0.000610134	0.000729916	0.000650632	0.000598519	0.000635728	0.000656329	0.000682102	0.00071463	0.000644093	0.000634284
T_B	Care & Maintenance	P95	0.008968133	0.008876891	0.00772003	0.016402815	0.012155144	0.006469308	0.006427192	0.006251366	0.007014507	0.011157467	0.008433959	0.008696622
T_Ba	Care & Maintenance	P95	0.00743736	0.006917505	0.007285521	0.007940662	0.006776967	0.00645479	0.006618486	0.006742508	0.007406326	0.007765938	0.007265858	0.006930331
T_Bi	Care & Maintenance	P95	2.60746E-05	2.58471E-05	2.56416E-05	2.77203E-05	2.68813E-05	2.57625E-05	2.55574E-05	2.54453E-05	2.59391E-05	2.76386E-05	2.66408E-05	2.62052E-05
T_Be	Care & Maintenance	P95	5.26395E-05	5.29862E-05	5.19623E-05	5.80326E-05	5.52958E-05	5.22323E-05	5.12349E-05	5.08378E-05	5.18735E-05	5.38788E-05	5.26275E-05	5.26503E-05
T_Ca	Care & Maintenance	P95	20.51741982	21.16059113	20.61072731	19.34801865	17.7501297	17.4836731	17.85762596	18.70064354	18.98744202	19.76031876	19.14198875	20.91526413
T_Cd	Care & Maintenance	P95	4.86652E-06	6.15659E-06	6.12917E-06	8.65704E-06	7.6079E-06	6.91758E-06	6.70624E-06	4.79998E-06	5.10263E-06	8.58794E-06	4.93923E-06	6.22201E-06
T_Co	Care & Maintenance	P95	9.55008E-05	9.0621E-05	8.17852E-05	0.000163669	0.000128599	7.41539E-05	6.88458E-05	7.4592E-05	8.65303E-05	0.000141569	9.06565E-05	9.11293E-05
T_Cr	Care & Maintenance	P95	0.000189965	0.000153369	0.000175147	0.000268211	0.000231868	0.000198404	0.000183721	0.000172985	0.000183471	0.000217784	0.000192623	0.000174301
T_Cu	Care & Maintenance	P95	0.000273982	0.000314635	0.000275459	0.000321949	0.000488773	0.000371728	0.00039726	0.00036066	0.000315246	0.000292358	0.000273089	0.000309704
T_Fe	Care & Maintenance	P95	0.145122007	0.120659672	0.145697951	0.163024604	0.13818799	0.113255799	0.106730178	0.125745401	0.14833048	0.170576558	0.160984844	0.107128635
T_Hg	Care & Maintenance	P95	3.6073E-06	3.59108E-06	3.39572E-06	5.92186E-06	4.91988E-06	3.74964E-06	3.41067E-06	3.15199E-06	3.38963E-06	4.43677E-06	3.64008E-06	3.94622E-06
T_K	Care & Maintenance	P95	1.144509912	1.06648016	1.094407558	1.620875239	1.267916799	0.969854057	0.963457286	1.071708322	1.111395955	1.360562921	1.134431958	1.122292042
T_Li	Care & Maintenance	P95	0.004513709	0.004180365	0.003553328	0.012314293	0.008086151	0.003240711	0.00208804	0.002219951	0.003267169	0.007025048	0.004188099	0.00444904
T_Mg	Care & Maintenance	P95	4.810159206	4.844511032	4.973791599	4.764113426	4.42506361	4.13495636	4.170434475	4.373907089	4.45751667	4.537492752	4.51476717	4.763140202
T_Mn	Care & Maintenance	P95	0.028398201	0.020816579	0.022847308	0.03262027	0.021692671	0.021663871	0.021833481	0.027660109	0.029678505	0.037224315	0.046609152	0.027521847
T_Mo	Care & Maintenance	P95	0.000653876	0.000666265	0.000673133	0.000807227	0.000653879	0.000531393	0.000567011	0.000621735	0.00067268	0.000682925	0.000579483	0.000616369
T_Na	Care & Maintenance	P95	4.650718212	4.578063965	4.43619585	6.555035114	5.490432262	3.758532524	3.678011656	3.661932468	4.119515419	5.223892689	4.281122208	4.58650732
T_Ni	Care & Maintenance	P95	0.000297401	0.000294193	0.000280327	0.000372723	0.00033678	0.000289704	0.000273832	0.000276504	0.000292901	0.000346988	0.000301761	0.000299382
T_P	Care & Maintenance	P95	0.027732655	0.027217805	0.029596929	0.030793926	0.025105163	0.022240466	0.019070262	0.017304735	0.017690279	0.020052705	0.02768903	0.027202748
T_Pb	Care & Maintenance	P95	0.000118646	0.000113412	0.000103605	0.000317152	0.000238285	9.46762E-05	6.64599E-05	5.92185E-05	8.8762E-05	0.00017742	0.000113417	0.000115982
T_S	Care & Maintenance	P95	1.312188387	1.41258359	1.233006358	1.520312667	1.144534111	1.104685068	1.122861147	1.163929701	1.086726546	1.421028495	1.188533783	1.347080112
T_Sb	Care & Maintenance	P95	0.000148425	0.000117105	9.58718E-05	0.000245656	0.000143203	0.000124544	0.000137952	0.000137681	0.000154353	0.000255767	0.00017716	0.000156777
T_Se	Care & Maintenance	P95	8.30867E-05	7.76316E-05	9.78072E-05	8.00303E-05	7.96619E-05	7.42904E-05	8.2847E-05	7.44176E-05	7.19414E-05	8.87462E-05	7.60638E-05	7.40439E-05
T_Si	Care & Maintenance	P95	5.199069023	5.095553875	5.135401726	5.28263092	4.925760746	4.386659145	4.320233345	4.210124493	4.393026352	4.958641052	5.125900745	5.128999233
T_Sn	Care & Maintenance	P95	5.01816E-05	5.02827E-05	5.02053E-05	5.0402E-05	5.11822E-05	5.0274E-05	5.03151E-05	4.99785E-05	5.00692E-05	5.09522E-05	5.02788E-05	5.03224E-05
T_Sr	Care & Maintenance	P95	0.104586698	0.103990324	0.103266925	0.094708167	0.090378791	0.087602891	0.087011747	0.09265513	0.098859914	0.095433712	0.095702738	0.103025407
T_Ti	Care & Maintenance	P95	0.004381484	0.002830823	0.003142369	0.004121301	0.003829132	0.002778173	0.00394304	0.003294549	0.003116813	0.004894339	0.00490568	0.003572213
T_Tl	Care & Maintenance	P95	1.66296E-05	1.62598E-05	1.63613E-05	4.16707E-05	3.01023E-05	2.12515E-05	1.16299E-05	1.11082E-05	1.29377E-05	2.38127E-05	1.59624E-05	1.84259E-05
T_U	Care & Maintenance	P95	0.000119581	0.0001145	0.000130238	0.000136813	0.000122168	0.000106377	9.86421E-05	0.000104885	0.000106578	0.000109166	0.000104273	0.000105005
T_V	Care & Maintenance	P95	0.001026478	0.000874938	0.000797151	0.00226188	0.001645446	0.000847033	0.000757598	0.000792809	0.000915923	0.001390677	0.000974055	0.000957447
T_Zn	Care & Maintenance	P95	0.001762177	0.001852852	0.001797691	0.002279372	0.002089338	0.001936583	0.001779379	0.001896877	0.001729713	0.001868144	0.001761908	0.001697901
D_Ag	Care & Maintenance	P95	8.82883E-06	8.74895E-06	1.01702E-05	1.73284E-05	1.37458E-05	1.60374E-05	1.06711E-05	8.56171E-06	8.50222E-06	1.08142E-05	8.84737E-06	1.03413E-05
D_Al	Care & Maintenance	P95	0.004238682	0.002923402	0.002484621	0.01577241	0.041802242	0.035494879	0.024836348	0.012732396	0.007	0.011899999	0.016781161	0.007324149
D_As	Care & Maintenance	P95	0.000613455	0.00057939	0.000541899	0.000680899	0.00059928	0.000534112	0.000579807	0.000626191	0.000641379	0.000634286	0.000582032	0.000581885
D_B	Care & Maintenance	P95	0.008968133	0.008876891	0.007677479	0.016391879	0.012155144	0.00608898	0.006427192	0.006251366	0.007014507	0.011157467	0.008433958	0.008696621
D_Ba	Care & Maintenance	P95	0.007006866	0.006650311	0.00694554	0.00710189	0.006207913	0.005983549	0.006243595	0.006431425	0.007145469	0.007420396	0.006656768	0.006770452
D_Bi	Care & Maintenance	P95	2.60746E-05	2.58471E-05	2.56416E-05	2.77203E-05	2.68813E-05	2.57625E-05	2.55574E-05	2.54453E-05	2.59391E-05	2.76386E-05	2.66408E-05	2.62052E-05
D_Be	Care & Maintenance	P95	5.26395E-05	5.29862E-05	5.19623E-05	5.80326E-05	5.52958E-05	5.22323E-05	5.12349E-05	5.08378E-05	5.18735E-05	5.38788E-05	5.26275E-05	5.26503E-05
D_Ca	Care & Maintenance	P95	21.34004974	20.73714828	20.23703957	19.27864456	17.26795578	17.26164246	17.78401184	18.63537788	19.23791695	18.90595245	18.57372475	19.33157349
D_Cd	Care & Maintenance	P95	5.15738E-06	5.24174E-06	5.43588E-06	8.65395E-06	8.11047E-06	6.99103E-06	6.88762E-06	5.68646E-06	5.50674E-06	6.92032E-06	5.29506E-06	5.49914E-06
D_Co	Care & Maintenance	P95	9.54283E-05	9.05809E-05	8.17358E-05	0.000162904	0.000127386	6.8814E-05	6.83974E-05	7.42215E-05	8.61262E-05	0.000141278	9.0584E-05	9.01516E-05
D_Cr	Care & Maintenance	P95	0.000156847	0.000106681	0.000107199	0.000209733	0.000165266	0.000143501	0.000131584	0.000125999	0.000131482	0.000190865	0.00014353	0.000115097
D_Cu	Care & Maintenance	P95	0.000278191	0.000317407	0.000276051	0.00030537	0.000402508	0.000317859	0.000359599	0.000298369	0.000285897	0.000292939	0.000277396	0.00031694
D_Fe	Care & Maintenance	P95	0.061576705	0.064769752	0.056944169	0.078410603	0.067152038	0.059943262	0.068139583	0.081560403	0.094465256	0.084572077	0.074916311	0.072084382
D_Hg	Care & Maintenance	P95	3.60724E-06	3.59185E-06	3.39056E-06	5.91877E-06	4.85793E-06	3.71819E-06	3.35688E-06	3.11082E-06	3.36199E-06	4.3973E-06	3.62709E-06	3.95387E-06
D_K	Care & Maintenance	P95	1.152360201	1.061363697	1.021741033	1.590724707	1.25815928	0.93489325	0.928984582	1.048026085	1.08575654	1.336287022	1.162318707	1.116786838
D_Li	Care & Maintenance	P95	0.004513709	0.004180365	0.003553328	0.012314293	0.008086151	0.003240711	0.00208804	0.002219951	0.003267169	0.007025048	0.004188099	0.00444904
D_Mg	Care & Maintenance	P95	4.964220047	4.842584133	5.05730772	4.733705044	4.393400669	4.008008003	4.216799259	4.259836197	4.376902103	4.433372974	4.284653664	4.627105713
D_Mn	Care & Maintenance	P95	0.021515299	0.01741015	0.015634298	0.026773158	0.011629296	0.014571594	0.015128631	0.020934073	0.024191493	0.02997504	0.026918041	0.022487544
D_Mo	Care & Maintenance	P95	0.000607672	0.000627245	0.000632918	0.000767101	0.000623797	0.00050333	0.000556403	0.000584219	0.000653786	0.000628865	0.000551907	0.00057526
D_Na	Care & Maintenance	P95	4.601569176	4.586031437	4.422285557	6.455246449	5.484867573	3.723747015	3.674428701	3.618691206	4.038933754	5.123608112	4.248515129	4.519206524
D_Ni	Care & Maintenance	P95	0.000297382	0.000294162	0.000278692	0.000371133	0.000333146	0.000289136	0.000273161	0.000276208	0.000292671	0.000346505	0.000301732	0.000296425
D_P	Care & Maintenance	P95	0.047457851	0.074267887	0.068826996	0.070440002	0.043724533	0.027449956	0.080587052	0.097951315	0.078041553	0.14578566	0.147357583	0.073751248
D_Pb	Care & Maintenance	P95	0.000117378	0.000111031	0.000101272	0.00031212	0.000227486	8.91683E-05	6.17561E-05	5.43787E-05	8.57879E-05	0.000174311	0.00011069	0.000114872
D_S	Care & Maintenance	P95	1.168867588	1.337178707	1.483359575	1.331806302	1.107694864	1.088909507	1.172536969	1.081127763	1.153206825	1.295153975	1.157764554	1.291422248
D_Sb	Care & Maintenance	P95	0.00014842	0.00011707	9.58276E-05	0.000245813	0.000143155	0.000122727	0.000137928	0.000137667	0.000154345	0.000255755	0.000177152	0.000156769
D_Se	Care & Maintenance	P95	0.000107399	7.01191E-05	9.17725E-05	7.5223E-05	6.85902E-05	7.1956E-05	7.22175E-05	7.54673E-05	6.81458E-05	7.16456E-05	7.36516E-05	7.30955E-05
D_Si	Care & Maintenance	P95	5.054497242	4.866136551	4.911850929	5.01288271	4.63931179	4.165809631	4.072705746	4.106036186	4.273086548	4.662507534	4.996990681	4.982933998
D_Sn	Care & Maintenance	P95	5.01816E-05	5.02827E-05	5.02053E-05	5.0402E-05	5.11822E-05	5.0274E-05	5.03151E-05	4.99785E-05	5.00692E-05	5.09522E-05	5.02788E-05	5.03224E-05
D_Sr	Care & Maintenance	P95	0.106305748	0.10409344	0.10491024	0.095826246	0.089971133	0.084910035	0.087368093	0.09167619	0.098118573	0.094077744	0.092770502	0.098920517
D_Ti	Care & Maintenance	P95	0.001183437	0.002096937	0.001921534	0.002065495	0.001369045	0.001133381	0.001870109	0.003056986	0.002329336	0.004847302	0.004899097	0.002140554
D_Tl	Care & Maintenance	P95	1.66296E-05	1.62598E-05	1.63613E-05	4.16707E-05	3.00707E-05	2.12486E-05	1.16299E-05	1.11082E-05	1.29377E-05	2.38127E-05	1.59624E-05	1.84259E-05
D_U	Care & Maintenance	P95	0.000110641	0.000108376	0.000123784	0.00012639	0.000113161	9.73677E-05	9.31217E-05	0.00010071	0.000101474	0.000104699	9.50577E-05	9.61292E-05
D_V	Care & Maintenance	P95	0.000984096	0.000865417	0.000739341	0.002114181	0.001480512	0.000705134	0.000571706	0.000660411	0.000782162	0.001368345	0.00095403	0.00093654
D_Zn	Care & Maintenance	P95	0.001398273	0.001291338	0.001174656	0.001830534	0.001908237	0.001468859	0.001145515	0.001107593	0.000958009	0.001194956	0.001015857	0.000944099

APPENDIX B.6: CARE AND MAINTENANCE SCENARIO 3 – RECEIVING STREAM NODES

Appendix B.6.1: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ28

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.254642785	0.255213737	0.250407696	0.243725643	0.18213518	0.059504099	0.046862856	0.052434109	0.063673325	0.070841961	0.079847731	0.074653402
NO3_N	Care & Maintenance	P95	1.967116237	2.042567015	2.213053465	2.324420214	2.152337074	1.20868969	1.131144762	0.792831182	0.945352554	1.180269122	1.630807877	1.864759326
NO2_N	Care & Maintenance	P95	0.012499634	0.014778056	0.015513515	0.015408125	0.013145806	0.008253258	0.008033418	0.005292893	0.006078619	0.007561567	0.010033887	0.011560665
Br	Care & Maintenance	P95	0.066884376	0.069981292	0.071099333	0.072571598	0.067874417	0.051610526	0.050907224	0.04393952	0.040938154	0.049270958	0.060424529	0.064293362
Cl	Care & Maintenance	P95	1.04695344	1.122029662	1.148184299	1.168893456	1.088261366	0.81504333	0.780446112	0.660722733	0.630947769	0.757646143	0.94390285	1.007742763
F	Care & Maintenance	P95	0.315440446	0.33935526	0.347806215	0.348004699	0.301867872	0.236160859	0.227655813	0.178260729	0.188037515	0.220523	0.277388066	0.30745253
TDP	Care & Maintenance	P95	0.018797912	0.02215784	0.021910932	0.020916479	0.019951921	0.015842387	0.01589933	0.015576505	0.016187344	0.017240673	0.020582505	0.020489868
SO4	Care & Maintenance	P95	44.18214417	44.13230133	39.72436142	37.37583542	28.48327255	28.1508255	41.65945435	47.68091202	54.08610916	46.45531845	52.1192627	48.44303513
T_CN	Care & Maintenance	P95	0.002785626	0.002912673	0.002737498	0.002709643	0.003100585	0.002636235	0.002670432	0.002547027	0.002641524	0.00258786	0.003070451	0.002656697
WAD_CN	Care & Maintenance	P95	0.002785627	0.002912675	0.002720548	0.00267742	0.003100586	0.002632667	0.002670433	0.002547027	0.002641525	0.002587861	0.003070451	0.002656697
T_Ag	Care & Maintenance	P95	3.68947E-05	3.88914E-05	4.06402E-05	4.20632E-05	4.01189E-05	3.29402E-05	3.02637E-05	2.59934E-05	2.30292E-05	2.8066E-05	3.5472E-05	3.48717E-05
T_Al	Care & Maintenance	P95	0.089219175	0.083436161	0.070245281	0.06266544	0.052714538	0.247270823	0.255126894	0.171003982	0.151434034	0.125864893	0.10555397	0.098404706
T_As	Care & Maintenance	P95	0.001207963	0.001257393	0.001272768	0.001221325	0.001152161	0.000776163	0.000777944	0.000899953	0.001063777	0.001057331	0.001081994	0.001088819
T_B	Care & Maintenance	P95	0.060262285	0.062973201	0.065112919	0.068145625	0.065853685	0.041303236	0.038880058	0.028995112	0.033295482	0.041164771	0.059791051	0.05851531
T_Ba	Care & Maintenance	P95	0.00782577	0.008465329	0.007770639	0.007769038	0.008964306	0.007791672	0.006922465	0.006930171	0.008095959	0.008027133	0.008996304	0.007873943
T_Bi	Care & Maintenance	P95	4.30353E-05	4.26163E-05	4.19836E-05	4.00681E-05	3.92302E-05	3.43808E-05	3.19348E-05	3.163E-05	3.83487E-05	3.75401E-05	4.14776E-05	3.85698E-05
T_Be	Care & Maintenance	P95	0.000110678	0.000115828	0.000119434	0.000122482	0.000115611	9.24997E-05	8.79576E-05	6.78669E-05	7.44838E-05	8.73808E-05	0.000110766	0.00010623
T_Ca	Care & Maintenance	P95	17.51044273	18.9118557	18.59169769	18.42670441	17.11086845	16.47640419	15.98665524	17.61615181	20.68952751	20.96664619	20.2562561	19.91297913
T_Cd	Care & Maintenance	P95	1.99762E-05	2.06577E-05	2.12046E-05	2.17711E-05	2.06451E-05	1.678E-05	1.5614E-05	1.61734E-05	1.54277E-05	1.62169E-05	1.97496E-05	1.93441E-05
T_Co	Care & Maintenance	P95	0.000500553	0.000551454	0.000580904	0.000584467	0.000514848	0.000350458	0.000336078	0.000358063	0.000393357	0.000383673	0.000502937	0.000505173
T_Cr	Care & Maintenance	P95	0.000581852	0.000621085	0.000635914	0.000601817	0.000553488	0.000364521	0.000385365	0.000435899	0.000483781	0.000482059	0.000506849	0.000502302
T_Cu	Care & Maintenance	P95	0.000424411	0.000441682	0.000453891	0.000458666	0.000444138	0.00053795	0.000554724	0.000375564	0.00036039	0.000385045	0.000447652	0.000414257
T_Fe	Care & Maintenance	P95	0.097484469	0.096460864	0.08814273	0.084266603	0.09693072	0.178115085	0.180895969	0.13122417	0.123963997	0.111646555	0.105521366	0.098418519
T_Hg	Care & Maintenance	P95	1.91273E-05	2.01824E-05	2.18778E-05	2.3452E-05	2.09509E-05	1.48462E-05	1.36575E-05	1.07752E-05	1.31772E-05	1.45125E-05	1.84556E-05	1.79612E-05
T_K	Care & Maintenance	P95	4.722140312	4.994340897	4.79767704	5.223470688	4.600750446	3.578861713	3.720644474	4.039546967	4.449519157	3.906717539	5.041324615	4.999510288
T_Li	Care & Maintenance	P95	0.060123447	0.069157757	0.072273031	0.072805822	0.062903866	0.039831933	0.037251305	0.025401285	0.030663731	0.039063998	0.053136766	0.057456315
T_Mg	Care & Maintenance	P95	6.375969887	6.798096657	6.88485527	7.408101559	6.565293312	5.566857815	5.247046471	4.715451717	5.808870316	5.539886475	6.907236576	6.848235607
T_Mn	Care & Maintenance	P95	0.099115334	0.093080029	0.083510362	0.079986632	0.044446059	0.080724113	0.090411291	0.092368551	0.106671765	0.105532899	0.130292207	0.121371187
T_Mo	Care & Maintenance	P95	0.001349752	0.001619218	0.001693334	0.00143379	0.001303179	0.000744248	0.000723341	0.000823712	0.000997924	0.001162801	0.001082057	0.001046672
T_Na	Care & Maintenance	P95	20.12575531	21.32350159	21.94293213	24.86043549	22.13637924	12.87018967	12.82135582	9.898803711	13.13747883	14.30599403	18.20057869	18.68859673
T_Ni	Care & Maintenance	P95	0.001191228	0.001283279	0.001278238	0.001420793	0.001243662	0.000841175	0.000846757	0.000770011	0.000904396	0.000942307	0.001222304	0.00118313
T_P	Care & Maintenance	P95	0.027474836	0.028888496	0.027145123	0.026621239	0.024933338	0.024581276	0.023475213	0.025044622	0.030688414	0.031934459	0.03178034	0.029684123
T_Pb	Care & Maintenance	P95	0.001155994	0.00124558	0.001315453	0.001361477	0.001299255	0.000864325	0.000783445	0.000635947	0.000575092	0.000764806	0.001020844	0.001068608
T_S	Care & Maintenance	P95	1.136367202	1.192702889	1.19231987	1.208101392	1.115963697	1.021875739	0.864272654	0.864685535	1.037079334	1.157325864	1.257458329	1.201667786
T_Sb	Care & Maintenance	P95	0.001267229	0.00122215	0.00107388	0.001022095	0.000641294	0.00105781	0.001102023	0.00115422	0.00133089	0.0013106	0.001597153	0.001571096
T_Se	Care & Maintenance	P95	0.000130812	0.000147351	0.000154057	0.00017057	0.000152231	0.00010722	0.000110401	9.42537E-05	0.000108095	0.000115901	0.000144225	0.000140067
T_Si	Care & Maintenance	P95	7.453485489	7.319783211	7.07192564	6.889959812	7.476695061	6.266582966	5.769627571	5.723762989	6.178704739	6.463821411	7.683913708	6.817310333
T_Sn	Care & Maintenance	P95	5.84938E-05	5.82843E-05	5.52002E-05	5.44766E-05	6.21227E-05	5.30359E-05	5.44177E-05	5.10189E-05	5.28918E-05	5.23516E-05	6.15255E-05	5.41306E-05
T_Sr	Care & Maintenance	P95	0.108573243	0.106632903	0.111689873	0.119272478	0.107973322	0.102511466	0.091168731	0.090829588	0.107083686	0.101916805	0.123095028	0.111940913
T_Ti	Care & Maintenance	P95	0.003949842	0.003715943	0.003428999	0.003065516	0.002640644	0.004292667	0.004880486	0.003841492	0.003842086	0.003200391	0.004978033	0.004476482
T_Tl	Care & Maintenance	P95	0.000240225	0.000254947	0.000263925	0.000276897	0.000278868	0.000165707	0.000160738	0.000119221	0.000146752	0.000182608	0.000259399	0.000249466
T_U	Care & Maintenance	P95	0.000263205	0.000289489	0.000302211	0.000322459	0.000296476	0.000255262	0.000252037	0.000219774	0.000239802	0.000255468	0.000302456	0.000292245
T_V	Care & Maintenance	P95	0.008483663	0.009143339	0.009376815	0.009347182	0.008588183	0.006353347	0.006027054	0.004196969	0.004900982	0.006118062	0.007848203	0.008241105
T_Zn	Care & Maintenance	P95	0.003881214	0.0040577	0.004223715	0.004340547	0.00410737	0.003311358	0.00301904	0.002822887	0.002567855	0.003079887	0.003804571	0.003682079
D_Ag	Care & Maintenance	P95	3.67016E-05	3.88579E-05	4.05602E-05	4.20094E-05	4.00742E-05	3.08523E-05	3.01342E-05	2.59027E-05	2.11825E-05	2.678E-05	3.49254E-05	3.47777E-05
D_Al	Care & Maintenance	P95	0.039499998	0.025900001	0.0207	0.021600001	0.039570231	0.144000009	0.100999996	0.101999998	0.053100001	0.092600003	0.083081126	0.070299998
D_As	Care & Maintenance	P95	0.001165503	0.001221682	0.001242034	0.001195443	0.001120963	0.000716657	0.00070541	0.00085049	0.001010211	0.001019348	0.001039391	0.001042266
D_B	Care & Maintenance	P95	0.060262281	0.062973201	0.065112919	0.068145625	0.065853685	0.041303236	0.038880058	0.028995112	0.033295482	0.041164771	0.05979104	0.05851531
D_Ba	Care & Maintenance	P95	0.007588426	0.008159722	0.007438069	0.007466719	0.008604526	0.007421916	0.006366876	0.006467075	0.007770502	0.007896795	0.008740217	0.007612296
D_Bi	Care & Maintenance	P95	4.30353E-05	4.26163E-05	4.19836E-05	4.00681E-05	3.92302E-05	3.43808E-05	3.19348E-05	3.163E-05	3.83487E-05	3.75401E-05	4.14776E-05	3.85698E-05
D_Be	Care & Maintenance	P95	0.000110678	0.000115828	0.000119434	0.000122482	0.000115611	9.24997E-05	8.79576E-05	6.78669E-05	7.44838E-05	8.73808E-05	0.000110766	0.00010623
D_Ca	Care & Maintenance	P95	17.33171463	18.7407341	18.34621811	18.10766602	17.09556198	16.52017784	15.98828888	17.46244621	20.58558273	20.83880615	20.19271851	19.76244545
D_Cd	Care & Maintenance	P95	2.01144E-05	2.07813E-05	2.12931E-05	2.18422E-05	2.06381E-05	1.62717E-05	1.54186E-05	1.70225E-05	1.5946E-05	1.62296E-05	1.96111E-05	1.92559E-05
D_Co	Care & Maintenance	P95	0.000500479	0.000551366	0.000580833	0.000584163	0.000514284	0.00034857	0.000332822	0.000355319	0.000392421	0.000383102	0.000502441	0.000504983
D_Cr	Care & Maintenance	P95	0.000529542	0.000568226	0.000581978	0.000549957	0.000494691	0.000310154	0.000339453	0.000389053	0.000435967	0.000429547	0.00045004	0.000445782
D_Cu	Care & Maintenance	P95	0.00042459	0.000440566	0.000447797	0.000452234	0.00043239	0.000517014	0.000543925	0.000384327	0.000369913	0.000387946	0.000447214	0.000414146
D_Fe	Care & Maintenance	P95	0.072300449	0.072536878	0.06797801	0.064227335	0.063751228	0.101572774	0.108285718	0.088274837	0.089285336	0.080793634	0.081932917	0.073648095
D_Hg	Care & Maintenance	P95	1.91316E-05	2.01951E-05	2.19026E-05	2.34694E-05	2.0978E-05	1.52007E-05	1.33334E-05	1.05628E-05	1.30725E-05	1.43384E-05	1.8442E-05	1.79517E-05
D_K	Care & Maintenance	P95	4.718225956	4.991353512	4.792981148	5.219763279	4.594658375	3.547030926	3.725656509	4.042372227	4.443708897	3.901753426	5.031403065	4.992788792
D_Li	Care & Maintenance	P95	0.060123447	0.069157757	0.072273031	0.072805822	0.062903866	0.039831933	0.037251305	0.025401285	0.030663731	0.039063998	0.053136766	0.057456315
D_Mg	Care & Maintenance	P95	6.395139694	6.802018166	6.88722086	7.405929089	6.562503338	5.553144932	5.233139038	4.700891495	5.797038078	5.529084682	6.897445202	6.846506596
D_Mn	Care & Maintenance	P95	0.097438388	0.091346301	0.081990972	0.078781977	0.043425381	0.079023913	0.085155383	0.089218311	0.103069156	0.101322368	0.127654195	0.12087968
D_Mo	Care & Maintenance	P95	0.001331298	0.001592743	0.001662865	0.001400889	0.001274408	0.000724769	0.000712692	0.000810632	0.000982478	0.001155906	0.001069664	0.001038152
D_Na	Care & Maintenance	P95	20.09163857	21.27786446	21.90593147	24.82972145	22.10826492	12.82218552	12.7565937	9.849475861	13.08407974	14.25563717	18.15966797	18.64861488
D_Ni	Care & Maintenance	P95	0.001190797	0.001282846	0.00127776	0.001420054	0.001242286	0.000837738	0.00084473	0.000767124	0.000903238	0.00094199	0.001221991	0.001182716
D_P	Care & Maintenance	P95	0.118649162	0.112520367	0.107815258	0.093133889	0.064091787	0.049796499	0.040816199	0.037488449	0.070622727	0.061265934	0.149221405	0.139342383
D_Pb	Care & Maintenance	P95	0.001155635	0.001245515	0.001315298	0.001361372	0.00129904	0.000860438	0.000783193	0.000635815	0.000574795	0.00076231	0.001019783	0.001068033
D_S	Care & Maintenance	P95	1.063398242	1.137834787	1.192111969	1.208138585	1.026768923	0.983679056	0.834313214	0.877884388	1.021697164	1.138336778	1.175523877	1.114319086
D_Sb	Care & Maintenance	P95	0.001267229	0.00122215	0.00107388	0.001022095	0.000641294	0.001057796	0.001102023	0.001154192	0.00133089	0.001310563	0.001597152	0.001571096
D_Se	Care & Maintenance	P95	0.000124839	0.000141021	0.000140276	0.000164008	0.000147961	0.000108256	0.000105213	9.15373E-05	0.000103742	0.000111799	0.000137401	0.000127939
D_Si	Care & Maintenance	P95	7.215593338	7.078533173	6.845654488	6.69204998	7.029681683	6.030426502	5.557675838	5.579125881	6.065121174	6.392428875	7.537824631	6.663384438
D_Sn	Care & Maintenance	P95	5.84938E-05	5.82843E-05	5.52002E-05	5.44766E-05	6.21227E-05	5.30359E-05	5.44177E-05	5.10189E-05	5.28918E-05	5.23516E-05	6.15255E-05	5.41306E-05
D_Sr	Care & Maintenance	P95	0.110207476	0.10782367	0.111945204	0.119275771	0.108047105	0.103106335	0.091267042	0.090258248	0.106725328	0.101544753	0.123545788	0.112999231
D_Ti	Care & Maintenance	P95	0.00365581	0.003463294	0.003244497	0.002729455	0.001998122	0.002416142	0.002615272	0.002079549	0.00244923	0.001936969	0.004812606	0.004424001
D_Tl	Care & Maintenance	P95	0.000240225	0.000254947	0.000263925	0.000276897	0.000278868	0.000165707	0.000160738	0.000119221	0.000146752	0.000182608	0.000259399	0.000249466
D_U	Care & Maintenance	P95	0.00025859	0.000285423	0.000297763	0.000317072	0.000289387	0.000240471	0.000243078	0.000212214	0.000232364	0.000250208	0.000297064	0.000286976
D_V	Care & Maintenance	P95	0.008452751	0.009114516	0.009348752	0.009315243	0.008535358	0.006284563	0.005989045	0.004135682	0.00484321	0.006071781	0.007783089	0.008212762
D_Zn	Care & Maintenance	P95	0.003690478	0.003903377	0.004080357	0.004219809	0.004024968	0.003132068	0.002922572	0.00263151	0.002271326	0.002809883	0.003449905	0.003493431

Appendix B.6.2: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ27

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.221151575	0.22180973	0.217827365	0.22917515	0.180798098	0.058169726	0.044664875	0.048440438	0.057810202	0.064368688	0.072432987	0.065218419
NO3_N	Care & Maintenance	P95	1.770368934	1.812655807	1.991360188	2.094935179	2.13796258	1.181623816	1.07229495	0.731176138	0.876374185	1.119376659	1.512048841	1.674202919
NO2_N	Care & Maintenance	P95	0.011680361	0.013000374	0.013595147	0.014900528	0.013076491	0.008079477	0.007640346	0.004917663	0.005554555	0.00717351	0.009342212	0.010845405
Br	Care & Maintenance	P95	0.063971162	0.066603564	0.067590363	0.071623944	0.06761574	0.051008046	0.049534936	0.042444024	0.040111363	0.048570301	0.05778411	0.061699249
Cl	Care & Maintenance	P95	0.991663635	1.056771159	1.080028534	1.150640368	1.083220363	0.802664042	0.752530456	0.629065692	0.599142134	0.738953769	0.895138621	0.958833992
F	Care & Maintenance	P95	0.293776274	0.306576341	0.313901246	0.339636803	0.299967051	0.231531963	0.217578471	0.167245463	0.177321166	0.213721424	0.259306878	0.287476987
TDP	Care & Maintenance	P95	0.018396087	0.020900276	0.021453071	0.020643564	0.019782778	0.015679641	0.015295685	0.015004212	0.015140394	0.016478973	0.019886637	0.019856941
SO4	Care & Maintenance	P95	38.52558136	38.73783875	34.8321228	35.83554459	28.30342484	27.65784645	39.48549652	44.12825775	49.33609009	42.23394394	47.18327332	42.33174896
T_CN	Care & Maintenance	P95	0.002743296	0.002854792	0.00270224	0.002694095	0.003093121	0.002632274	0.002660027	0.002540837	0.002624905	0.002580175	0.003033229	0.002632492
WAD_CN	Care & Maintenance	P95	0.002743297	0.002854794	0.002687483	0.002662715	0.003093122	0.002628939	0.002660027	0.002540837	0.002624906	0.002580176	0.00303323	0.002632493
T_Ag	Care & Maintenance	P95	3.45177E-05	3.63595E-05	3.72817E-05	4.03545E-05	3.99326E-05	3.24082E-05	2.89387E-05	2.43833E-05	2.1878E-05	2.69299E-05	3.26652E-05	3.28658E-05
T_Al	Care & Maintenance	P95	0.081395917	0.075679056	0.062975682	0.061257817	0.055279471	0.245140865	0.247099355	0.160774469	0.138912842	0.123955034	0.104052007	0.091464832
T_As	Care & Maintenance	P95	0.001116754	0.001154632	0.001164583	0.001196733	0.001144292	0.000769717	0.00076949	0.000881727	0.001021833	0.001014549	0.001034145	0.001012933
T_B	Care & Maintenance	P95	0.054679789	0.055512719	0.057584263	0.065167964	0.065488949	0.040606629	0.037023313	0.027524808	0.030688057	0.039410859	0.055824302	0.053057872
T_Ba	Care & Maintenance	P95	0.00768265	0.008225819	0.007700097	0.007725086	0.008902847	0.007720171	0.006878713	0.006992679	0.008120517	0.007837276	0.008743996	0.007650215
T_Bi	Care & Maintenance	P95	4.06072E-05	4.02617E-05	3.97196E-05	3.85435E-05	3.90561E-05	3.41617E-05	3.15304E-05	3.10701E-05	3.70946E-05	3.64598E-05	4.03883E-05	3.67229E-05
T_Be	Care & Maintenance	P95	0.000104574	0.000107387	0.000112193	0.000118603	0.000115214	9.15599E-05	8.59386E-05	6.67121E-05	7.28481E-05	8.5516E-05	0.000105126	0.000102743
T_Ca	Care & Maintenance	P95	16.66716576	17.98302269	17.82752228	17.96839905	16.96808815	16.2218132	15.80986977	17.05797386	19.94187164	19.74929428	19.61266327	18.46739388
T_Cd	Care & Maintenance	P95	1.87053E-05	1.92411E-05	1.95173E-05	2.10281E-05	2.0583E-05	1.64951E-05	1.51106E-05	1.51097E-05	1.48577E-05	1.58452E-05	1.81616E-05	1.8394E-05
T_Co	Care & Maintenance	P95	0.000469712	0.00048917	0.000513045	0.000566123	0.000510848	0.000343897	0.000321079	0.000334463	0.000361444	0.000361772	0.000471025	0.00047181
T_Cr	Care & Maintenance	P95	0.000537564	0.000566336	0.000579699	0.000589431	0.000550859	0.000361907	0.00037807	0.000419753	0.000458102	0.000471077	0.00048378	0.0004716
T_Cu	Care & Maintenance	P95	0.000411005	0.000421254	0.000428431	0.000450685	0.000446033	0.000535447	0.000553406	0.00036661	0.000353506	0.000393735	0.000429178	0.000403354
T_Fe	Care & Maintenance	P95	0.094333582	0.091743901	0.083002508	0.08358252	0.09924484	0.1767205	0.176637858	0.127570763	0.119664587	0.111641496	0.104783311	0.096226566
T_Hg	Care & Maintenance	P95	1.74427E-05	1.79378E-05	1.95168E-05	2.12198E-05	2.08668E-05	1.47195E-05	1.30713E-05	1.02641E-05	1.21733E-05	1.36712E-05	1.7266E-05	1.63676E-05
T_K	Care & Maintenance	P95	4.192543983	4.40257597	4.311693192	4.772107601	4.571848392	3.505465984	3.547429085	3.760821581	4.082219601	3.696412325	4.698687553	4.561667442
T_Li	Care & Maintenance	P95	0.05454978	0.060333662	0.063105069	0.070350327	0.062485453	0.038947012	0.035344388	0.023482354	0.028700033	0.037666954	0.049388357	0.051573463
T_Mg	Care & Maintenance	P95	5.955404758	6.221008301	6.44867754	6.87853384	6.526431561	5.463747501	5.096106529	4.514956474	5.520592213	5.378314495	6.630124092	6.208115101
T_Mn	Care & Maintenance	P95	0.086325832	0.080737166	0.072661601	0.07766977	0.043949205	0.078987285	0.085650422	0.085242003	0.096801944	0.096305288	0.118432723	0.106089257
T_Mo	Care & Maintenance	P95	0.001266173	0.001504694	0.001574173	0.001391526	0.001292662	0.000733682	0.000710018	0.000811809	0.000977633	0.00109574	0.001022061	0.000984814
T_Na	Care & Maintenance	P95	18.40867233	18.99620247	19.55405617	22.54189682	21.99382782	12.59922886	12.27825832	9.456274986	12.21545982	13.4880352	16.99763298	17.0171833
T_Ni	Care & Maintenance	P95	0.00109595	0.001151199	0.001143723	0.001315097	0.001237159	0.0008278	0.000814126	0.000737458	0.000843791	0.000893241	0.001150809	0.001086219
T_P	Care & Maintenance	P95	0.02498178	0.026030662	0.024743505	0.025994387	0.024857609	0.024216654	0.022599677	0.023659397	0.028594006	0.029656965	0.029488051	0.026884653
T_Pb	Care & Maintenance	P95	0.001072766	0.001154547	0.001198407	0.001310817	0.001291884	0.000846031	0.000743751	0.000587801	0.000524427	0.00072842	0.000929239	0.000999915
T_S	Care & Maintenance	P95	1.089533806	1.1498909	1.132776737	1.192746878	1.109461665	1.004541516	0.832016289	0.851810873	1.016454101	1.11476326	1.164556384	1.112780929
T_Sb	Care & Maintenance	P95	0.001111588	0.001069973	0.000936968	0.000993027	0.000633866	0.001034823	0.001043323	0.001065456	0.00120374	0.001190725	0.001454327	0.001375074
T_Se	Care & Maintenance	P95	0.000123629	0.000137559	0.000142779	0.00016169	0.000151431	0.000105891	0.000107124	9.06773E-05	0.000102797	0.000109461	0.000135329	0.000128137
T_Si	Care & Maintenance	P95	7.332167625	7.166678905	6.922571659	6.822608948	7.427685261	6.241368294	5.762205601	5.734431744	6.143110752	6.453306198	7.591170788	6.73966217
T_Sn	Care & Maintenance	P95	5.76626E-05	5.71227E-05	5.44368E-05	5.41017E-05	6.19722E-05	5.29491E-05	5.42406E-05	5.08887E-05	5.25535E-05	5.22972E-05	6.07739E-05	5.36053E-05
T_Sr	Care & Maintenance	P95	0.104998633	0.10274341	0.108522885	0.116539083	0.107393786	0.100986995	0.089513496	0.089499995	0.105572745	0.099672511	0.119397089	0.107301131
T_Ti	Care & Maintenance	P95	0.004084461	0.003877809	0.003630092	0.003191618	0.002670404	0.004305022	0.004882503	0.003928894	0.003947595	0.003361307	0.004971817	0.004335067
T_Tl	Care & Maintenance	P95	0.000216593	0.000229627	0.000233048	0.000254377	0.000277048	0.000162658	0.000152168	0.000112237	0.000133196	0.000173668	0.000240697	0.000230571
T_U	Care & Maintenance	P95	0.000251862	0.000278504	0.00029307	0.00031383	0.000295469	0.00025357	0.000245797	0.000216484	0.000234356	0.000246632	0.000289164	0.000274782
T_V	Care & Maintenance	P95	0.007718271	0.007999832	0.008210605	0.009098493	0.008540252	0.006224712	0.005736983	0.003938187	0.004571226	0.005914568	0.007344288	0.007789536
T_Zn	Care & Maintenance	P95	0.003689634	0.003862147	0.003943897	0.004187653	0.004091626	0.003270386	0.002934884	0.002717447	0.002488969	0.003001243	0.003590905	0.003538103
D_Ag	Care & Maintenance	P95	3.43466E-05	3.63285E-05	3.72609E-05	4.03401E-05	3.98634E-05	3.02708E-05	2.8816E-05	2.42995E-05	2.02759E-05	2.57086E-05	3.21699E-05	3.28224E-05
D_Al	Care & Maintenance	P95	0.0372	0.0244	0.018200001	0.02152011	0.041330479	0.137999997	0.099399999	0.098499998	0.051640574	0.087700002	0.08122386	0.064400002
D_As	Care & Maintenance	P95	0.001074682	0.001119713	0.001133577	0.00117166	0.001111704	0.000710881	0.000695597	0.000830132	0.000975695	0.000972985	0.00099096	0.000967315
D_B	Care & Maintenance	P95	0.054679785	0.055512719	0.057584263	0.065167964	0.065488949	0.040606629	0.037023313	0.027524808	0.030688057	0.039410859	0.055824291	0.053057872
D_Ba	Care & Maintenance	P95	0.007451972	0.007971472	0.007382866	0.007436495	0.008517449	0.007354946	0.006359138	0.006576807	0.007808985	0.007666175	0.008572498	0.007402617
D_Bi	Care & Maintenance	P95	4.06072E-05	4.02617E-05	3.97196E-05	3.85435E-05	3.90561E-05	3.41617E-05	3.15304E-05	3.10701E-05	3.70946E-05	3.64598E-05	4.03883E-05	3.67229E-05
D_Be	Care & Maintenance	P95	0.000104574	0.000107387	0.000112193	0.000118603	0.000115214	9.15599E-05	8.59386E-05	6.67121E-05	7.28481E-05	8.5516E-05	0.000105126	0.000102743
D_Ca	Care & Maintenance	P95	16.60385132	17.71752739	17.53598785	17.73579788	16.95175934	16.2625618	15.80592632	16.91679192	19.8358593	19.60610962	19.51999283	18.31588173
D_Cd	Care & Maintenance	P95	1.88246E-05	1.93346E-05	1.95926E-05	2.11282E-05	2.05509E-05	1.59893E-05	1.47093E-05	1.59114E-05	1.53529E-05	1.56934E-05	1.80355E-05	1.83348E-05
D_Co	Care & Maintenance	P95	0.000469644	0.000489023	0.000512983	0.00056583	0.000510201	0.00034205	0.000317994	0.000331929	0.000360596	0.000361227	0.000470574	0.00047174
D_Cr	Care & Maintenance	P95	0.000485638	0.000513958	0.000530899	0.000536224	0.000491132	0.000307703	0.000329176	0.000375876	0.00041185	0.000413659	0.000428655	0.000414517
D_Cu	Care & Maintenance	P95	0.000410548	0.000420358	0.000424006	0.000443025	0.000433387	0.000512666	0.000534106	0.000375548	0.000361417	0.000381019	0.000428775	0.000403162
D_Fe	Care & Maintenance	P95	0.069748968	0.069127858	0.06365981	0.063526809	0.064423174	0.100981645	0.106337287	0.086688504	0.086333431	0.081553549	0.081309155	0.07197421
D_Hg	Care & Maintenance	P95	1.74467E-05	1.79405E-05	1.95539E-05	2.12399E-05	2.08878E-05	1.49891E-05	1.27695E-05	1.00647E-05	1.21147E-05	1.35086E-05	1.72543E-05	1.63587E-05
D_K	Care & Maintenance	P95	4.188056946	4.400102139	4.30754137	4.770195961	4.56569767	3.473976851	3.541598797	3.764061689	4.078331947	3.688202381	4.688457012	4.555788994
D_Li	Care & Maintenance	P95	0.05454978	0.060333662	0.063105069	0.070350327	0.062485453	0.038947012	0.035344388	0.023482354	0.028700033	0.037666954	0.049388357	0.051573463
D_Mg	Care & Maintenance	P95	5.960986614	6.225700378	6.406030655	6.880270004	6.523539066	5.450143337	5.0837183	4.498427868	5.502718925	5.366564274	6.616155624	6.210557938
D_Mn	Care & Maintenance	P95	0.084732562	0.079183228	0.071272418	0.07647939	0.042744841	0.077269331	0.080589667	0.082276434	0.093440749	0.092322163	0.115862407	0.105533332
D_Mo	Care & Maintenance	P95	0.001236465	0.001471428	0.001540225	0.001359404	0.001262644	0.000714456	0.000696833	0.000797077	0.000958303	0.001082851	0.001009272	0.000969203
D_Na	Care & Maintenance	P95	18.36802864	18.95637703	19.51297951	22.5039444	21.96671867	12.56358624	12.21853638	9.410624504	12.17240429	13.43432713	16.95265388	17.00120926
D_Ni	Care & Maintenance	P95	0.001095561	0.001150822	0.001143307	0.001314514	0.001235531	0.000824439	0.000812208	0.000734775	0.000842742	0.000892945	0.00115052	0.001085955
D_P	Care & Maintenance	P95	0.122576497	0.117247723	0.113221638	0.096289329	0.065253943	0.052099176	0.046934713	0.04620152	0.076878086	0.068394966	0.149046868	0.132378116
D_Pb	Care & Maintenance	P95	0.001072434	0.001154487	0.001198366	0.001310789	0.001291395	0.000842228	0.000743513	0.000587679	0.000524157	0.000726049	0.000928277	0.000999812
D_S	Care & Maintenance	P95	1.011298895	1.082698941	1.15623796	1.158509731	1.02093029	0.967622697	0.803626239	0.851840913	1.007263064	1.056988358	1.090104699	0.999358118
D_Sb	Care & Maintenance	P95	0.001111588	0.001069973	0.000936968	0.000993027	0.000633866	0.00103481	0.001043323	0.001065456	0.00120374	0.001190692	0.001454326	0.001375074
D_Se	Care & Maintenance	P95	0.000118713	0.000125568	0.000129119	0.000153314	0.000147133	0.000106485	0.000100816	8.8578E-05	9.74749E-05	0.000105556	0.000128972	0.000119544
D_Si	Care & Maintenance	P95	7.097396374	6.929840565	6.703967094	6.609469414	6.98402071	6.003798008	5.552513123	5.590078354	6.027680874	6.379352093	7.449296951	6.558084488
D_Sn	Care & Maintenance	P95	5.76626E-05	5.71227E-05	5.44368E-05	5.41017E-05	6.19722E-05	5.29491E-05	5.42406E-05	5.08887E-05	5.25535E-05	5.22972E-05	6.07739E-05	5.36053E-05
D_Sr	Care & Maintenance	P95	0.10566657	0.103896357	0.107973263	0.116622992	0.107457146	0.101560459	0.089549035	0.088827305	0.105057709	0.099695295	0.120155655	0.108051427
D_Ti	Care & Maintenance	P95	0.003826796	0.003658655	0.003470181	0.002844741	0.002036131	0.002473665	0.002703209	0.002307579	0.0026772	0.002201346	0.004815303	0.004209084
D_Tl	Care & Maintenance	P95	0.000216593	0.000229627	0.000233048	0.000254377	0.000277048	0.00016263	0.000152168	0.000112237	0.000133196	0.000173668	0.000240697	0.000230571
D_U	Care & Maintenance	P95	0.000244991	0.000273265	0.000288045	0.000308821	0.000288359	0.000238594	0.000236472	0.000208652	0.000227075	0.000241971	0.000284211	0.000269768
D_V	Care & Maintenance	P95	0.007690436	0.007974713	0.008186126	0.009071808	0.008485818	0.006153017	0.005690157	0.00386332	0.004524131	0.005860276	0.007258644	0.007747856
D_Zn	Care & Maintenance	P95	0.003526021	0.003693254	0.003740807	0.004072654	0.004009717	0.003096095	0.002821328	0.002539639	0.002229902	0.002729928	0.003177956	0.003320263

Appendix B.6.3: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ26

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.170837641	0.174289584	0.171591908	0.185376152	0.17449908	0.05438013	0.039625194	0.04126342	0.047286127	0.056379825	0.060808878	0.053514563
NO3_N	Care & Maintenance	P95	1.505153894	1.545920968	1.693951845	1.844528913	2.037088633	1.115051627	0.966403842	0.652002037	0.73510468	1.028134227	1.331662893	1.432836175
NO2_N	Care & Maintenance	P95	0.010501721	0.011114151	0.01159726	0.013100415	0.012791646	0.007673969	0.006936228	0.004285812	0.004779868	0.006677828	0.008367019	0.00977087
Br	Care & Maintenance	P95	0.060271114	0.062644482	0.063441515	0.068247363	0.066577621	0.049814053	0.046996687	0.03962674	0.038176142	0.04599341	0.05378082	0.058141883
Cl	Care & Maintenance	P95	0.925137341	0.982265472	1.001537442	1.088072419	1.054304957	0.779593825	0.703246057	0.575900495	0.559268177	0.694024026	0.823997378	0.901925743
F	Care & Maintenance	P95	0.26777178	0.281701237	0.288218498	0.31589067	0.29017809	0.222838312	0.201560527	0.148646072	0.159262374	0.200509906	0.23536168	0.268760324
TDP	Care & Maintenance	P95	0.017910097	0.01915125	0.020822937	0.01984656	0.018792396	0.015315942	0.014563103	0.013825699	0.013251313	0.015056781	0.018758144	0.019000631
SO4	Care & Maintenance	P95	30.62260628	31.88486099	28.27799416	31.93693542	27.16277695	25.86305237	33.49712753	37.93416595	39.25073242	34.08900833	37.54545593	34.37080765
T_CN	Care & Maintenance	P95	0.002678282	0.002772779	0.002647527	0.002636987	0.003061197	0.002615795	0.002623382	0.00252069	0.002581423	0.00255664	0.002942318	0.002580012
WAD_CN	Care & Maintenance	P95	0.002678283	0.00277278	0.002635329	0.002611347	0.003061197	0.002615022	0.002623382	0.00252069	0.002581423	0.002556641	0.002942318	0.002580012
T_Ag	Care & Maintenance	P95	3.18237E-05	3.35003E-05	3.42636E-05	3.79609E-05	3.92329E-05	3.09698E-05	2.66227E-05	2.17081E-05	1.99307E-05	2.48278E-05	2.89354E-05	3.0568E-05
T_Al	Care & Maintenance	P95	0.068681158	0.064223051	0.053482298	0.056821927	0.07516782	0.237094671	0.22278142	0.140673906	0.116142362	0.120977104	0.099693619	0.080379881
T_As	Care & Maintenance	P95	0.001024342	0.001059313	0.001043772	0.001107809	0.001116062	0.000767998	0.000774342	0.000874317	0.00098117	0.000988002	0.00097893	0.000940862
T_B	Care & Maintenance	P95	0.048008382	0.048945941	0.051866509	0.060026169	0.063922569	0.038428616	0.0335606	0.024628334	0.02736585	0.036913142	0.049930766	0.047336731
T_Ba	Care & Maintenance	P95	0.007720999	0.008190484	0.007758767	0.007784701	0.00871337	0.007562442	0.007010472	0.007124253	0.008114113	0.007753858	0.008376706	0.007427067
T_Bi	Care & Maintenance	P95	3.70656E-05	3.70141E-05	3.63797E-05	3.58431E-05	3.80377E-05	3.36854E-05	3.04485E-05	3.00506E-05	3.53086E-05	3.47287E-05	3.88173E-05	3.48413E-05
T_Be	Care & Maintenance	P95	9.93001E-05	0.000102814	0.000105097	0.000114419	0.000113879	9.0163E-05	8.32253E-05	6.56862E-05	7.07889E-05	8.28781E-05	9.8757E-05	9.91421E-05
T_Ca	Care & Maintenance	P95	16.39197731	17.11284447	17.24568748	17.48551941	16.37172318	15.74218273	15.49151802	16.10230637	18.66447258	18.27292824	18.7240963	17.74010277
T_Cd	Care & Maintenance	P95	1.75891E-05	1.79918E-05	1.82124E-05	2.0189E-05	2.0383E-05	1.61101E-05	1.40716E-05	1.37248E-05	1.39575E-05	1.52359E-05	1.64769E-05	1.71759E-05
T_Co	Care & Maintenance	P95	0.000432131	0.000443467	0.000445983	0.000493301	0.000490313	0.000331713	0.000294737	0.000294639	0.000315634	0.000344123	0.000424319	0.000438815
T_Cr	Care & Maintenance	P95	0.000467828	0.00047154	0.000484981	0.000523227	0.00053539	0.000353479	0.000363504	0.000378713	0.000408701	0.00044244	0.000448243	0.000426438
T_Cu	Care & Maintenance	P95	0.000399456	0.000407638	0.000411191	0.000438791	0.000465372	0.000539041	0.000522651	0.000354282	0.00034463	0.000413729	0.000407921	0.00038888
T_Fe	Care & Maintenance	P95	0.083472595	0.08187937	0.072559148	0.078164883	0.106690384	0.171769127	0.161343992	0.116705403	0.108999342	0.115989849	0.102649555	0.091761768
T_Hg	Care & Maintenance	P95	1.53936E-05	1.55949E-05	1.69958E-05	1.80241E-05	2.0343E-05	1.41135E-05	1.20097E-05	9.29069E-06	1.06423E-05	1.17752E-05	1.5508E-05	1.442E-05
T_K	Care & Maintenance	P95	3.786229849	3.79718256	3.885511398	4.257861614	4.418127537	3.37699461	3.320233583	3.430650711	3.540622711	3.533615112	4.281616688	4.144880772
T_Li	Care & Maintenance	P95	0.048613209	0.051310249	0.053556561	0.061541591	0.060348812	0.036632147	0.033103958	0.020214979	0.024724234	0.034899238	0.043755017	0.046477672
T_Mg	Care & Maintenance	P95	5.5860219	5.586924553	6.008232117	6.260273457	6.261744499	5.23416996	4.800521374	4.22768116	5.170079708	5.064539433	6.241152287	5.636617661
T_Mn	Care & Maintenance	P95	0.072593428	0.065441817	0.057859577	0.064056642	0.042508788	0.074613988	0.073288172	0.069505103	0.076900378	0.081136309	0.101118959	0.089888826
T_Mo	Care & Maintenance	P95	0.001193305	0.001398218	0.00144214	0.001282248	0.001244663	0.000716507	0.00071831	0.000802609	0.00094798	0.001034308	0.000968835	0.000941362
T_Na	Care & Maintenance	P95	16.28689194	16.50786972	17.23094368	19.57105446	21.01345825	11.87640953	11.25031662	8.598391533	10.65753174	11.71557808	15.19240856	14.94837379
T_Ni	Care & Maintenance	P95	0.000986053	0.001008626	0.001008021	0.001153537	0.001193921	0.00079714	0.000758711	0.000681524	0.000752398	0.000838913	0.001050559	0.001002519
T_P	Care & Maintenance	P95	0.022145038	0.02229131	0.021082034	0.02400919	0.024394939	0.023428235	0.020793553	0.021274339	0.025500689	0.027286746	0.026280656	0.023361105
T_Pb	Care & Maintenance	P95	0.000975582	0.001049193	0.001086221	0.001218049	0.001262848	0.000811698	0.000672076	0.000496922	0.000460598	0.000658577	0.000803522	0.000909908
T_S	Care & Maintenance	P95	1.044367313	1.101571441	1.061199784	1.169118285	1.054840803	0.97670722	0.774967194	0.8027789	0.981036544	1.057209253	1.046571016	1.017689943
T_Sb	Care & Maintenance	P95	0.000975701	0.000904292	0.000779618	0.00089355	0.00061059	0.000983626	0.000907147	0.00089564	0.000968139	0.001012943	0.001309554	0.001184421
T_Se	Care & Maintenance	P95	0.000115747	0.000124835	0.000131773	0.000149242	0.000146857	0.000103281	0.000103136	8.70279E-05	9.24691E-05	9.93946E-05	0.000127037	0.00011667
T_Si	Care & Maintenance	P95	7.177145958	7.022453785	6.763986111	6.728795528	7.260088444	6.18290472	5.786090851	5.834060669	6.150091648	6.442982197	7.426321507	6.681651592
T_Sn	Care & Maintenance	P95	5.61763E-05	5.54502E-05	5.32751E-05	5.31226E-05	6.13274E-05	5.2592E-05	5.36759E-05	5.04717E-05	5.1671E-05	5.21089E-05	5.89506E-05	5.29155E-05
T_Sr	Care & Maintenance	P95	0.102383517	0.10037113	0.107042871	0.111409679	0.103267722	0.097487651	0.087630525	0.086698934	0.102574788	0.096106969	0.114230134	0.101763964
T_Ti	Care & Maintenance	P95	0.003753372	0.003597063	0.003386072	0.003539887	0.002794134	0.004348025	0.004881701	0.004114911	0.00416016	0.003658185	0.004978363	0.004517438
T_Tl	Care & Maintenance	P95	0.000189279	0.000197364	0.000199063	0.000226186	0.000264565	0.000151273	0.000132864	9.84179E-05	0.000110899	0.000156411	0.000212699	0.000199749
T_U	Care & Maintenance	P95	0.000237906	0.000260668	0.000283404	0.000297005	0.000289097	0.000248087	0.000234265	0.000206581	0.000220685	0.000230823	0.000269548	0.000252602
T_V	Care & Maintenance	P95	0.006982325	0.007203127	0.00738671	0.008220065	0.008346569	0.005985594	0.005254717	0.003475425	0.004118576	0.005497491	0.006606349	0.0069963
T_Zn	Care & Maintenance	P95	0.003515241	0.003768383	0.003723514	0.003998369	0.004039685	0.003163425	0.002790344	0.002568331	0.002391228	0.002867121	0.003320868	0.00336443
D_Ag	Care & Maintenance	P95	3.1801E-05	3.34722E-05	3.42447E-05	3.79476E-05	3.90528E-05	2.91073E-05	2.65123E-05	2.16364E-05	1.83891E-05	2.37315E-05	2.85244E-05	3.05201E-05
D_Al	Care & Maintenance	P95	0.0262	0.013900001	0.0106	0.021204891	0.047461703	0.125666678	0.077	0.068000004	0.034899998	0.07265	0.077500001	0.047400001
D_As	Care & Maintenance	P95	0.000981854	0.001021871	0.001010026	0.001074277	0.001077272	0.000706619	0.000698343	0.000816093	0.000934467	0.000942597	0.000944246	0.000901019
D_B	Care & Maintenance	P95	0.048008382	0.048945941	0.051866509	0.060026169	0.063922569	0.038428616	0.0335606	0.024628334	0.02736585	0.036913142	0.049930755	0.047336731
D_Ba	Care & Maintenance	P95	0.007444595	0.007878896	0.007508688	0.007527701	0.008287514	0.007190138	0.006492154	0.006767095	0.007815235	0.007451788	0.008197017	0.007220342
D_Bi	Care & Maintenance	P95	3.70656E-05	3.70141E-05	3.63797E-05	3.58431E-05	3.80377E-05	3.36854E-05	3.04485E-05	3.00506E-05	3.53086E-05	3.47287E-05	3.88173E-05	3.48413E-05
D_Be	Care & Maintenance	P95	9.93001E-05	0.000102814	0.000105097	0.000114419	0.000113879	9.0163E-05	8.32253E-05	6.56862E-05	7.07889E-05	8.28781E-05	9.8757E-05	9.91421E-05
D_Ca	Care & Maintenance	P95	16.3439827	16.86838913	16.81712723	17.24869537	16.35405922	15.77021885	15.41426754	16.09401131	18.45900726	18.09510612	18.62879181	17.70796013
D_Cd	Care & Maintenance	P95	1.77057E-05	1.80764E-05	1.82805E-05	2.02108E-05	2.0254E-05	1.55633E-05	1.36415E-05	1.43854E-05	1.43993E-05	1.50813E-05	1.63649E-05	1.7099E-05
D_Co	Care & Maintenance	P95	0.000432073	0.000443411	0.000445946	0.000493026	0.000489599	0.000329945	0.000291962	0.000292469	0.000314925	0.000343664	0.000423942	0.000438781
D_Cr	Care & Maintenance	P95	0.000410834	0.000418622	0.000436621	0.000471379	0.000469326	0.000299724	0.000305344	0.000334848	0.000366895	0.00037891	0.000394663	0.000375317
D_Cu	Care & Maintenance	P95	0.000399037	0.000404551	0.000407256	0.000431234	0.000442221	0.00050057	0.00050587	0.000362631	0.000357637	0.000368522	0.00040751	0.000388366
D_Fe	Care & Maintenance	P95	0.060597491	0.060450375	0.053293351	0.059059896	0.06638097	0.098606415	0.099028341	0.079800248	0.077279203	0.082357094	0.078226358	0.067431733
D_Hg	Care & Maintenance	P95	1.53972E-05	1.5604E-05	1.70271E-05	1.8036E-05	2.02557E-05	1.43046E-05	1.17214E-05	9.11801E-06	1.05926E-05	1.16848E-05	1.54997E-05	1.44122E-05
D_K	Care & Maintenance	P95	3.783487558	3.794058561	3.88168931	4.254140377	4.411741257	3.34678793	3.302796125	3.432468653	3.540103436	3.525213718	4.278738976	4.143255711
D_Li	Care & Maintenance	P95	0.048613209	0.051310249	0.053556561	0.061541591	0.060348812	0.036632147	0.033103958	0.020214979	0.024724234	0.034899238	0.043755017	0.046477672
D_Mg	Care & Maintenance	P95	5.579808235	5.588819027	5.930252552	6.257413864	6.257871628	5.213740349	4.810066223	4.214805126	5.15160799	5.052125454	6.220219135	5.657701969
D_Mn	Care & Maintenance	P95	0.071336068	0.064083926	0.056549773	0.062657274	0.04079771	0.072715871	0.068821013	0.06677562	0.073793702	0.077553593	0.100192189	0.0889825
D_Mo	Care & Maintenance	P95	0.00115939	0.001355564	0.001394073	0.001262283	0.001212723	0.000697032	0.000703174	0.000784094	0.000923242	0.001010912	0.000951569	0.000915987
D_Na	Care & Maintenance	P95	16.2451973	16.48474312	17.19734764	19.50691032	20.99585152	11.82596111	11.20021725	8.540594101	10.61605263	11.6875	15.16481113	14.94870758
D_Ni	Care & Maintenance	P95	0.000985717	0.001008319	0.001007648	0.001152958	0.001192369	0.000793966	0.000754461	0.000679196	0.000751541	0.000838672	0.001050308	0.001002285
D_P	Care & Maintenance	P95	0.114349857	0.110743932	0.10697414	0.109809123	0.070972577	0.060517889	0.063496776	0.067998342	0.088323995	0.07944259	0.148571804	0.135437682
D_Pb	Care & Maintenance	P95	0.000975538	0.001049138	0.001086184	0.001218035	0.001261277	0.000807571	0.000671861	0.000496782	0.000458744	0.000656449	0.000802997	0.000909832
D_S	Care & Maintenance	P95	0.878635764	1.017201662	1.103729248	1.077567697	0.971569061	0.935770333	0.749471426	0.803880155	0.965038061	0.946573555	1.012933731	0.852944314
D_Sb	Care & Maintenance	P95	0.000975701	0.000904292	0.000779618	0.00089355	0.00061059	0.000983613	0.000907147	0.00089564	0.000968139	0.001012907	0.001309554	0.001184421
D_Se	Care & Maintenance	P95	0.000111863	0.000109369	0.000122513	0.000140236	0.000142421	0.000103264	9.23476E-05	8.15616E-05	8.85688E-05	9.50722E-05	0.000117411	0.000103563
D_Si	Care & Maintenance	P95	6.972869396	6.795506001	6.556696415	6.48443222	6.825843334	5.945547581	5.603404999	5.687196732	6.015030861	6.355910778	7.274194717	6.431696892
D_Sn	Care & Maintenance	P95	5.61763E-05	5.54502E-05	5.32751E-05	5.31226E-05	6.13274E-05	5.2592E-05	5.36759E-05	5.04717E-05	5.1671E-05	5.21089E-05	5.89506E-05	5.29155E-05
D_Sr	Care & Maintenance	P95	0.102663673	0.100995295	0.105796233	0.111453138	0.103186801	0.097950198	0.087995544	0.08671356	0.101770967	0.096070066	0.114414178	0.102128848
D_Ti	Care & Maintenance	P95	0.003531454	0.003417263	0.003246434	0.00339523	0.002201299	0.002763803	0.003077407	0.002833806	0.003103107	0.002759695	0.004865182	0.00440779
D_Tl	Care & Maintenance	P95	0.000189279	0.000197364	0.000199063	0.000226186	0.000264565	0.000151246	0.000132864	9.84179E-05	0.000110899	0.000156411	0.000212699	0.000199749
D_U	Care & Maintenance	P95	0.000233199	0.000254456	0.000276765	0.000289821	0.000281038	0.000233073	0.000223988	0.000198361	0.000212015	0.000224818	0.000264044	0.000245619
D_V	Care & Maintenance	P95	0.006945912	0.007175319	0.007359893	0.008184134	0.008268842	0.005904893	0.005193019	0.003411708	0.004052103	0.005447186	0.00651066	0.006921088
D_Zn	Care & Maintenance	P95	0.003308866	0.003569808	0.003511931	0.003891958	0.003953755	0.003034693	0.002704531	0.002365944	0.002125354	0.002583927	0.002827763	0.003077213

Appendix B.6.4: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ7

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.142306611	0.145941511	0.143652797	0.152697727	0.158114076	0.051607717	0.036508776	0.036909711	0.042130511	0.049835563	0.053968538	0.046635389
NO3_N	Care & Maintenance	P95	1.336959362	1.341520309	1.486053228	1.570965171	1.918294787	1.05682373	0.885832131	0.599838197	0.65512073	0.96303606	1.198935747	1.279065967
NO2_N	Care & Maintenance	P95	0.009368839	0.009752222	0.010039832	0.010436933	0.012249279	0.007349509	0.006426157	0.003841691	0.004308224	0.006286672	0.007685053	0.008780041
Br	Care & Maintenance	P95	0.057024445	0.059152439	0.059858065	0.059211604	0.064809337	0.048788197	0.044922605	0.037639756	0.036937922	0.044740707	0.050854016	0.055285174
Cl	Care & Maintenance	P95	0.866393387	0.914309084	0.931458771	0.908468723	1.022377133	0.757735252	0.660651922	0.535468042	0.532078028	0.668156743	0.775535583	0.849470735
F	Care & Maintenance	P95	0.248328924	0.258512855	0.265913159	0.25731653	0.280360073	0.21513541	0.190364525	0.135249957	0.14858301	0.190568775	0.219979703	0.244754598
TDP	Care & Maintenance	P95	0.016634546	0.016440514	0.019970218	0.018490151	0.017852014	0.014916261	0.013663124	0.013398617	0.011960787	0.013992064	0.016574139	0.01626623
SO4	Care & Maintenance	P95	26.15691566	27.29474831	23.82658958	26.98109245	25.65335846	24.6637249	29.76719856	32.88417053	32.99032211	29.41200829	31.99129105	31.03532791
T_CN	Care & Maintenance	P95	0.002649552	0.00272772	0.002612571	0.002604513	0.003027542	0.002608711	0.002604728	0.002517347	0.00256692	0.002549539	0.002882787	0.002562576
WAD_CN	Care & Maintenance	P95	0.00264885	0.002727721	0.002602211	0.00258649	0.003027543	0.002608711	0.002604729	0.002517347	0.00256692	0.00254954	0.002882788	0.002562577
T_Ag	Care & Maintenance	P95	2.93529E-05	3.08542E-05	3.15323E-05	3.38152E-05	3.81073E-05	3.03107E-05	2.4588E-05	1.96353E-05	1.85177E-05	2.3165E-05	2.60435E-05	2.92161E-05
T_Al	Care & Maintenance	P95	0.061605249	0.057964265	0.047496781	0.052665874	0.126346231	0.233781651	0.206176683	0.13012746	0.101598956	0.10585133	0.094733484	0.071846575
T_As	Care & Maintenance	P95	0.000928983	0.000960682	0.000941479	0.001041314	0.001085193	0.000751077	0.000752757	0.000837217	0.000925931	0.00094185	0.000916543	0.000863751
T_B	Care & Maintenance	P95	0.043853551	0.044416413	0.047680788	0.050512195	0.061543703	0.036797602	0.03087765	0.022561876	0.024815599	0.034890275	0.045481995	0.042862497
T_Ba	Care & Maintenance	P95	0.007745758	0.008236986	0.008012686	0.008150468	0.008742322	0.007487005	0.007034714	0.007278167	0.008157537	0.007665261	0.008145302	0.007502724
T_Bi	Care & Maintenance	P95	3.50645E-05	3.50413E-05	3.4382E-05	3.40812E-05	3.63703E-05	3.32875E-05	2.99407E-05	2.94292E-05	3.3974E-05	3.36848E-05	3.74443E-05	3.3645E-05
T_Be	Care & Maintenance	P95	9.47985E-05	9.79171E-05	9.99597E-05	0.000103161	0.000111178	8.85039E-05	8.00966E-05	6.38628E-05	6.83755E-05	8.04071E-05	9.28879E-05	9.52803E-05
T_Ca	Care & Maintenance	P95	16.18754959	16.662323	17.06119347	17.05653191	15.8456192	15.31530666	15.08718204	15.41147423	18.02770615	17.55489731	17.99816704	17.41332817
T_Cd	Care & Maintenance	P95	1.62003E-05	1.7714E-05	1.69788E-05	1.77799E-05	2.00949E-05	1.57444E-05	1.34476E-05	1.24011E-05	1.29982E-05	1.47383E-05	1.53966E-05	1.62291E-05
T_Co	Care & Maintenance	P95	0.000398963	0.00040694	0.00040902	0.00042862	0.000477688	0.000320531	0.000273234	0.000264281	0.000282191	0.000331771	0.000388284	0.000402957
T_Cr	Care & Maintenance	P95	0.000417369	0.000427582	0.000449604	0.000492033	0.000544461	0.000351017	0.000349947	0.000349732	0.000379034	0.00041658	0.000426183	0.000399627
T_Cu	Care & Maintenance	P95	0.000386029	0.000392998	0.000396136	0.000406139	0.000496812	0.00054989	0.000520797	0.000343016	0.00033804	0.00039965	0.000388796	0.000376821
T_Fe	Care & Maintenance	P95	0.088256106	0.088345252	0.081386536	0.11559473	0.147847429	0.17333588	0.157810673	0.124042444	0.1176337	0.121080153	0.109220713	0.09825135
T_Hg	Care & Maintenance	P95	1.37933E-05	1.37571E-05	1.49631E-05	1.54766E-05	1.97333E-05	1.34511E-05	1.1298E-05	8.50584E-06	9.57512E-06	1.12356E-05	1.41807E-05	1.28618E-05
T_K	Care & Maintenance	P95	3.399266243	3.320792675	3.473301649	3.495910406	4.188984871	3.230855703	3.048488379	3.176968098	3.121498823	3.340767145	3.891469479	3.823011398
T_Li	Care & Maintenance	P95	0.043173239	0.044110876	0.046108849	0.048040777	0.057712477	0.034726102	0.030987037	0.018618396	0.022060102	0.032717638	0.03954142	0.04133305
T_Mg	Care & Maintenance	P95	5.302369118	5.233006001	5.685183525	5.745800018	5.973542213	5.049211025	4.542654991	4.095957279	4.959311485	4.907671452	5.911361694	5.358964443
T_Mn	Care & Maintenance	P95	0.06542448	0.057454333	0.051202405	0.055670228	0.041560084	0.070873782	0.065206774	0.061947301	0.066238865	0.072784089	0.092817843	0.07919208
T_Mo	Care & Maintenance	P95	0.001117404	0.001306071	0.001341911	0.001225566	0.001196248	0.000693797	0.000684588	0.000785048	0.000918143	0.000982796	0.000917284	0.000900693
T_Na	Care & Maintenance	P95	14.68995667	14.63404942	15.55176258	16.53188515	19.89953041	11.34165478	10.42545319	8.040855408	9.880382538	11.13483143	13.92622566	13.41380215
T_Ni	Care & Maintenance	P95	0.000898933	0.000904632	0.000906498	0.000937651	0.001161948	0.000766898	0.000717139	0.00063142	0.000688624	0.00078968	0.000970085	0.000913702
T_P	Care & Maintenance	P95	0.019986454	0.019677514	0.018661194	0.022253945	0.024380364	0.022886075	0.019435043	0.019810885	0.023350608	0.025511803	0.024039995	0.020986583
T_Pb	Care & Maintenance	P95	0.000887999	0.000954095	0.000987167	0.00103115	0.001215062	0.000780548	0.000611204	0.000438392	0.000415662	0.000608848	0.000730233	0.000838205
T_S	Care & Maintenance	P95	0.989408016	1.04595232	1.017830968	1.114131331	0.972107649	0.938555896	0.726443291	0.76275897	0.883731723	1.015012741	0.951820314	0.95764333
T_Sb	Care & Maintenance	P95	0.0008601	0.000769248	0.000663267	0.000749222	0.000578077	0.000927547	0.000791698	0.000776043	0.00082962	0.000895886	0.001190107	0.001014853
T_Se	Care & Maintenance	P95	0.000108821	0.000114283	0.000119856	0.000136955	0.000142203	0.000101594	0.000100439	8.31131E-05	8.55836E-05	9.83963E-05	0.00012104	0.000109902
T_Si	Care & Maintenance	P95	7.021500587	6.896556377	6.698499203	6.623567104	7.171055317	6.112966061	5.798938274	5.921387196	6.149202824	6.434860229	7.297176361	6.630654812
T_Sn	Care & Maintenance	P95	5.51195E-05	5.45477E-05	5.27422E-05	5.2302E-05	6.06778E-05	5.2415E-05	5.33594E-05	5.03957E-05	5.13733E-05	5.1987E-05	5.7746E-05	5.25192E-05
T_Sr	Care & Maintenance	P95	0.100221604	0.098661885	0.105145149	0.106899485	0.10017132	0.094052449	0.08582817	0.085394688	0.101131126	0.094793804	0.110122472	0.099307537
T_Ti	Care & Maintenance	P95	0.003541678	0.003284244	0.002695064	0.003764415	0.003853741	0.004367913	0.004896287	0.004258704	0.00393462	0.003937512	0.005011825	0.004212886
T_Tl	Care & Maintenance	P95	0.000167767	0.000174295	0.000179513	0.000201077	0.000249598	0.000143438	0.000119751	8.93242E-05	0.000100462	0.000143639	0.000191784	0.000179604
T_U	Care & Maintenance	P95	0.00022882	0.000248583	0.000279484	0.000290334	0.000284098	0.000242505	0.000222301	0.000196566	0.000209568	0.000219406	0.000255027	0.000242284
T_V	Care & Maintenance	P95	0.006451877	0.006500842	0.006720738	0.006750717	0.008052229	0.005766797	0.00493504	0.003233364	0.003822277	0.005181571	0.006073155	0.006380815
T_Zn	Care & Maintenance	P95	0.003330913	0.00355771	0.003515941	0.003583454	0.003957641	0.003079647	0.002668774	0.002437324	0.002306856	0.002752244	0.003100629	0.003211071
D_Ag	Care & Maintenance	P95	2.93323E-05	3.08287E-05	3.15151E-05	3.38024E-05	3.7467E-05	2.85233E-05	2.44884E-05	1.95725E-05	1.71767E-05	2.22519E-05	2.56869E-05	2.91724E-05
D_Al	Care & Maintenance	P95	0.0167	0.012399999	0.0088	0.020535426	0.059787598	0.124522604	0.073571421	0.063791111	0.0233	0.053600002	0.068159193	0.037999999
D_As	Care & Maintenance	P95	0.000880654	0.000921207	0.000916436	0.00100801	0.001026585	0.000689355	0.0006788	0.000786183	0.000875883	0.000898751	0.000873549	0.000817021
D_B	Care & Maintenance	P95	0.043853551	0.044416413	0.047680788	0.050490797	0.061543703	0.036797602	0.03087765	0.022561876	0.024803231	0.034890275	0.045481987	0.042862497
D_Ba	Care & Maintenance	P95	0.007488631	0.007928071	0.007752805	0.007795225	0.00807723	0.007067008	0.006536476	0.006971683	0.007902957	0.007420065	0.007975453	0.007309633
D_Bi	Care & Maintenance	P95	3.50645E-05	3.50413E-05	3.4382E-05	3.40812E-05	3.63703E-05	3.32875E-05	2.99407E-05	2.94292E-05	3.3974E-05	3.36848E-05	3.74443E-05	3.3645E-05
D_Be	Care & Maintenance	P95	9.47985E-05	9.79171E-05	9.99597E-05	0.000103161	0.000111178	8.85039E-05	8.00966E-05	6.38628E-05	6.83755E-05	8.04071E-05	9.28879E-05	9.52803E-05
D_Ca	Care & Maintenance	P95	16.13544464	16.54718399	16.60136414	16.90170288	15.78899097	15.30939579	14.988204	15.43500614	17.85273743	17.3012886	17.87143707	17.37251091
D_Cd	Care & Maintenance	P95	1.62834E-05	1.66302E-05	1.70779E-05	1.77199E-05	1.96998E-05	1.51268E-05	1.30532E-05	1.2891E-05	1.32827E-05	1.45933E-05	1.50844E-05	1.61677E-05
D_Co	Care & Maintenance	P95	0.00039891	0.000406889	0.000408986	0.000427821	0.000472549	0.000318354	0.000269956	0.000262381	0.000281575	0.00033131	0.000387955	0.000402122
D_Cr	Care & Maintenance	P95	0.00036527	0.000369374	0.000409567	0.000439958	0.000451926	0.000293002	0.000288506	0.000306272	0.000340645	0.000360138	0.000368188	0.000350087
D_Cu	Care & Maintenance	P95	0.000385672	0.000390199	0.000392568	0.000396282	0.000454545	0.000503695	0.000502453	0.000351788	0.000347285	0.00035791	0.000388414	0.000376351
D_Fe	Care & Maintenance	P95	0.062509425	0.062231563	0.055833329	0.07223282	0.069773391	0.097692125	0.099248797	0.083767705	0.083756588	0.086014315	0.081358805	0.06910003
D_Hg	Care & Maintenance	P95	1.37965E-05	1.37586E-05	1.49899E-05	1.54916E-05	1.93703E-05	1.36242E-05	1.08631E-05	8.35311E-06	9.53152E-06	1.10938E-05	1.41742E-05	1.29526E-05
D_K	Care & Maintenance	P95	3.398929596	3.31781745	3.464482307	3.488340855	4.177427292	3.202148914	3.027658224	3.179255724	3.116792679	3.333333254	3.888355255	3.817925215
D_Li	Care & Maintenance	P95	0.043173239	0.044110876	0.046108849	0.048040777	0.057712477	0.034726102	0.030987037	0.018618396	0.022060102	0.032717638	0.03954142	0.04133305
D_Mg	Care & Maintenance	P95	5.299855709	5.263207912	5.60835743	5.744912624	5.965778351	5.028800011	4.548882008	4.083115578	4.936070442	4.88192606	5.871652126	5.363790989
D_Mn	Care & Maintenance	P95	0.06423185	0.056113645	0.049438357	0.054224413	0.038788904	0.06867899	0.060860533	0.058657505	0.06366194	0.068679899	0.091751382	0.077945784
D_Mo	Care & Maintenance	P95	0.001086177	0.001258357	0.001287824	0.00119454	0.001165714	0.000673809	0.000667748	0.000760886	0.000896421	0.000965348	0.000895974	0.000869552
D_Na	Care & Maintenance	P95	14.65999222	14.5941391	15.52855015	16.47013092	19.8850708	11.27681637	10.37844563	7.990619183	9.837609291	11.08872318	13.89122391	13.41718483
D_Ni	Care & Maintenance	P95	0.00089864	0.000904366	0.000906175	0.000936994	0.001138202	0.000765936	0.000711697	0.000629378	0.000687811	0.000789459	0.00096986	0.000907336
D_P	Care & Maintenance	P95	0.098439045	0.096266039	0.081417814	0.086856462	0.067639798	0.062548012	0.058527287	0.082756504	0.08815936	0.091610871	0.148934796	0.112380363
D_Pb	Care & Maintenance	P95	0.000887959	0.000954046	0.000987134	0.001031088	0.001207197	0.000775224	0.000611011	0.00043827	0.000413973	0.000607804	0.000729485	0.00083812
D_S	Care & Maintenance	P95	0.803913414	0.994873226	1.075667381	1.006653786	0.881504536	0.904361069	0.703527153	0.74664259	0.921500325	0.936053395	0.954488099	0.819141448
D_Sb	Care & Maintenance	P95	0.0008601	0.000769248	0.000663267	0.00075091	0.000578077	0.000927535	0.000791698	0.000776043	0.00082962	0.000895855	0.001190107	0.001014853
D_Se	Care & Maintenance	P95	0.000104814	0.000102661	0.000109488	0.000128503	0.000136552	0.000100806	8.78159E-05	7.93289E-05	8.06032E-05	9.27706E-05	0.000109244	9.80703E-05
D_Si	Care & Maintenance	P95	6.869466305	6.731929779	6.471346378	6.370735168	6.725446224	5.881872654	5.61933279	5.759709358	6.045907974	6.327839375	7.133495331	6.410763741
D_Sn	Care & Maintenance	P95	5.51195E-05	5.45477E-05	5.27422E-05	5.2302E-05	6.06778E-05	5.2415E-05	5.33594E-05	5.03957E-05	5.13733E-05	5.1987E-05	5.7746E-05	5.25192E-05
D_Sr	Care & Maintenance	P95	0.101082377	0.100218087	0.103338875	0.106937669	0.099992253	0.09446004	0.08604271	0.08525645	0.100407533	0.09476386	0.109852359	0.099420518
D_Ti	Care & Maintenance	P95	0.00293802	0.002864257	0.002305326	0.002688742	0.002220652	0.002667592	0.002797699	0.0032092	0.003020837	0.003218181	0.004922874	0.003608889
D_Tl	Care & Maintenance	P95	0.000167767	0.000174295	0.000179513	0.000201077	0.000249323	0.000143408	0.000119751	8.93242E-05	0.000100462	0.000143639	0.000191784	0.000179604
D_U	Care & Maintenance	P95	0.000224089	0.000242924	0.000270816	0.000282483	0.000273919	0.000227157	0.000213272	0.000189075	0.000201332	0.000213421	0.00024939	0.000234978
D_V	Care & Maintenance	P95	0.006418337	0.00647971	0.006696433	0.006657557	0.007950833	0.005671576	0.004854867	0.003159924	0.003732976	0.005117313	0.005956095	0.006295558
D_Zn	Care & Maintenance	P95	0.003142222	0.003377575	0.003324114	0.003397875	0.003850014	0.00296802	0.002544052	0.002159406	0.001986843	0.002408342	0.002572942	0.002923932

Appendix B.6.5: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQCk661

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010296233	0.008109621	0.009197331	0.010195488	0.006239757	0.010253108	0.010258093	0.005725736	0.010273589	0.01027623	0.007795455	0.010290384
NO3_N	Care & Maintenance	P95	0.14004612	0.055772014	0.144012004	0.226363182	0.02292257	0.035146806	0.026043268	0.021260655	0.021656755	0.025620678	0.02772144	0.038491298
NO2_N	Care & Maintenance	P95	0.001709609	0.00071578	0.002078675	0.003381482	0.000661521	0.001679095	0.001682621	0.000802695	0.001693586	0.001695455	0.00145051	0.00170547
Br	Care & Maintenance	P95	0.02489743	0.024893841	0.024939662	0.024962449	0.024934551	0.024924386	0.024922162	0.024905013	0.02489789	0.024923269	0.024905767	0.024901817
Cl	Care & Maintenance	P95	0.406531781	0.257428974	0.306996763	0.354505897	0.255560935	0.23975797	0.306207001	0.256711572	0.207126871	0.256919414	0.257048577	0.30698359
F	Care & Maintenance	P95	0.063853674	0.054911464	0.054339975	0.052582197	0.037998959	0.048368618	0.048434936	0.038287934	0.043668546	0.043703951	0.043773085	0.068748556
TDP	Care & Maintenance	P95	0.005980622	0.003988437	0.007983774	0.011983894	0.009478472	0.003659439	0.004988408	0.003989654	0.001997047	0.003493177	0.002744447	0.002744215
SO4	Care & Maintenance	P95	2.510807037	2.501450062	2.14873004	1.639826059	1.695864081	0.695305884	0.704072833	1.129187584	1.178874969	1.829906583	2.072541237	3.743463039
T_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
WAD_CN	Care & Maintenance	P95	0.002489743	0.002489384	0.002493966	0.002496245	0.002493455	0.002492439	0.002492216	0.002490501	0.002489789	0.002492327	0.002490577	0.002490181
T_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	1.93927E-05	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.9995E-05	2.54789E-05
T_Al	Care & Maintenance	P95	0.056798901	0.041955136	0.088604949	0.135308474	0.264327168	0.206065744	0.083264887	0.065912403	0.055803888	0.073797382	0.076540612	0.070752516
T_As	Care & Maintenance	P95	0.000434536	0.000971487	0.000998812	0.000986437	0.000659667	0.000481281	0.000516698	0.000872587	0.000523705	0.000524899	0.000671414	0.00043188
T_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.005521378	0.003542365	0.001819873
T_Ba	Care & Maintenance	P95	0.007009632	0.004653804	0.006090716	0.007498696	0.004270104	0.003058491	0.003863064	0.004344421	0.004973178	0.003860362	0.0040961	0.005247945
T_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
T_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
T_Ca	Care & Maintenance	P95	12.3271513	10.53808689	8.893159866	7.169839859	3.982190609	3.43913722	5.334037781	5.95632267	8.033316612	6.742750645	7.045593262	9.588638306
T_Cd	Care & Maintenance	P95	0.000106955	9.83679E-06	9.88795E-06	9.17137E-06	2.07474E-05	9.66401E-06	9.70661E-06	1.15811E-05	9.83911E-06	9.86169E-06	1.65183E-05	2.16645E-05
T_Co	Care & Maintenance	P95	7.73519E-05	6.7431E-05	6.4614E-05	5.65094E-05	6.3048E-05	5.49272E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	5.71255E-05
T_Cr	Care & Maintenance	P95	0.000150192	0.000299501	0.000287246	0.000274861	0.000474234	0.000150164	0.000194961	0.000316157	0.000229806	0.000150179	0.000339406	0.000150188
T_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000639673	0.000262952	0.000462175	0.000338309	0.000313727	0.000214412	0.000368809	0.000413989
T_Fe	Care & Maintenance	P95	0.372477859	0.171282351	0.170843944	0.170248419	0.223753884	0.1126673	0.104183979	0.19451955	0.209154531	0.121634752	0.167378068	0.186277345
T_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	7.02206E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.06975E-06	3.69131E-06
T_K	Care & Maintenance	P95	0.455954134	0.762362599	0.605371773	0.38591221	0.477018595	0.42597267	0.429437101	0.453104317	0.440211236	0.442047328	0.445631802	0.451888144
T_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
T_Mg	Care & Maintenance	P95	3.416749716	2.381469488	2.259654522	2.136926651	0.961431444	0.842417002	1.371518135	1.621255875	2.073051929	1.80457294	1.859349012	2.649912596
T_Mn	Care & Maintenance	P95	0.023297289	0.016043326	0.015139373	0.013492292	0.014732055	0.006763984	0.007444285	0.012589715	0.007649129	0.007512205	0.014078629	0.017334513
T_Mo	Care & Maintenance	P95	0.000257052	0.000689549	0.000439776	0.000169503	0.000229298	0.000151114	0.000203651	0.00043192	0.00037127	0.000234624	0.000251206	0.000265671
T_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.949081898	2.667256832	1.624258876	1.727152348	2.274847746	2.524455547	2.922783136	2.525213003	2.475964785	2.973891258
T_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000309509	0.000333022	0.000270754	0.000218941	0.000229361	0.000275048	0.00018607	0.000126653	0.000276306	0.000222467
T_P	Care & Maintenance	P95	0.018927287	0.019920494	0.022947572	0.022967372	0.025935275	0.014958494	0.004988408	0.021921264	0.021915361	0.009973226	0.018933197	0.018930394
T_Pb	Care & Maintenance	P95	0.00035137	2.82992E-05	0.000148781	0.000268727	8.34698E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	7.04835E-05
T_S	Care & Maintenance	P95	0.66725117	0.72690016	0.738214016	0.928603113	0.249345496	0.24924387	0.249221623	0.431354851	0.248978898	0.707820833	0.249057695	0.627525747
T_Sb	Care & Maintenance	P95	0.000160495	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
T_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.95096E-05	0.000303901	0.000179623	5.89508E-05	9.83497E-05	0.000304258	0.000191973	0.000180202
T_Si	Care & Maintenance	P95	7.870571613	7.512708187	6.625349522	5.733763695	4.585080624	4.053244114	5.318738461	5.737011433	5.990869999	5.39428997	5.692868233	6.722268581
T_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
T_Sr	Care & Maintenance	P95	0.070234768	0.065067135	0.055124175	0.044729166	0.025398746	0.02433965	0.036337901	0.043492306	0.055910982	0.04180209	0.045457717	0.058228396
T_Ti	Care & Maintenance	P95	0.001892205	0.004978768	0.003616251	0.002246621	0.004986911	0.002126881	0.001595018	0.003138032	0.000896324	0.000897238	0.003088315	0.00164352
T_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
T_U	Care & Maintenance	P95	5.62112E-05	8.60404E-05	7.59837E-05	6.40598E-05	0.000116877	9.17881E-05	6.23754E-05	8.74464E-05	6.36927E-05	5.57918E-05	6.73352E-05	4.36612E-05
T_V	Care & Maintenance	P95	0.000262795	0.000879189	0.000508974	0.000119418	0.00092404	0.000286818	0.000533265	0.000797217	0.000357448	0.000258555	0.000483382	0.000470336
T_Zn	Care & Maintenance	P95	0.028071364	0.001616377	0.002160964	0.002672411	0.004573794	0.001516411	0.001551536	0.003296029	0.001706811	0.002602871	0.001759574	0.00094287
D_Ag	Care & Maintenance	P95	2.54885E-05	5.60772E-06	1.5538E-05	2.53224E-05	5.45491E-06	2.54174E-05	2.54256E-05	5.54903E-06	2.54512E-05	2.54555E-05	1.55203E-05	2.54789E-05
D_Al	Care & Maintenance	P95	0.04683993	0.031798448	0.075287171	0.118833251	0.169575855	0.192938894	0.075788237	0.054198742	0.042856988	0.05784649	0.06214508	0.220661432
D_As	Care & Maintenance	P95	0.000335129	0.000882021	0.000954073	0.000986437	0.000580023	0.000381787	0.000442085	0.000815395	0.000424252	0.000524899	0.00063164	0.00038217
D_B	Care & Maintenance	P95	0.001085794	0.005559772	0.004430671	0.003127777	0.005419016	0.001000518	0.001010372	0.005505716	0.001041017	0.002537952	0.003542365	0.001819873
D_Ba	Care & Maintenance	P95	0.006244194	0.004335701	0.005886909	0.007409048	0.003141803	0.002892668	0.003723786	0.004121455	0.004943343	0.003790749	0.003822647	0.005138583
D_Bi	Care & Maintenance	P95	2.48974E-05	2.48938E-05	2.49397E-05	2.49624E-05	2.49346E-05	2.49244E-05	2.49222E-05	2.4905E-05	2.48979E-05	2.49233E-05	2.49058E-05	2.49018E-05
D_Be	Care & Maintenance	P95	5.55921E-05	5.55985E-05	5.5492E-05	5.36903E-05	5.41907E-05	5.4778E-05	5.48721E-05	5.50579E-05	5.51646E-05	5.52145E-05	5.53118E-05	5.54817E-05
D_Ca	Care & Maintenance	P95	11.92952156	9.971467972	8.485545158	6.920817375	3.758189201	3.37280798	5.234553814	5.90244627	7.933864594	6.34496069	6.971015453	9.588638306
D_Cd	Care & Maintenance	P95	5.92394E-05	5.06526E-06	7.50192E-06	9.17137E-06	1.30816E-05	9.66401E-06	9.70661E-06	1.03875E-05	9.83911E-06	9.86169E-06	1.29386E-05	9.9827E-06
D_Co	Care & Maintenance	P95	6.74111E-05	6.7431E-05	6.21286E-05	5.1529E-05	6.3048E-05	5.16107E-05	4.02985E-05	6.57478E-05	4.61897E-05	4.6346E-05	5.65948E-05	4.22126E-05
D_Cr	Care & Maintenance	P95	0.000150192	0.000359246	0.000317174	0.000274861	0.000309666	0.000150164	0.000170064	0.000255554	0.000150178	0.000150179	0.000229821	0.000150188
D_Cu	Care & Maintenance	P95	0.000513678	0.000265177	0.00043887	0.000608635	0.000589895	0.000262952	0.00033782	0.000263711	0.000313727	6.52405E-05	0.00023954	0.000413989
D_Fe	Care & Maintenance	P95	0.178277895	0.129460707	0.144657269	0.159764186	0.129667521	0.092129603	0.101492383	0.152015001	0.10757114	0.104686931	0.11955899	0.112069942
D_Hg	Care & Maintenance	P95	2.95464E-06	2.95516E-06	2.9465E-06	2.80002E-06	6.32517E-06	2.88846E-06	2.8961E-06	2.91121E-06	2.91989E-06	2.92394E-06	5.56694E-06	3.69131E-06
D_K	Care & Maintenance	P95	0.455954134	0.661961675	0.555165589	0.38591221	0.44715181	0.42597267	0.429437101	0.457828879	0.440211236	0.442047328	0.445631802	0.451888144
D_Li	Care & Maintenance	P95	0.000707652	0.000707889	0.000703935	0.000637033	0.000655615	0.000677423	0.000680916	0.000687814	0.000691779	0.00069363	0.000697244	0.000703552
D_Mg	Care & Maintenance	P95	3.406790495	2.371528864	2.244741678	2.117004633	0.9455024	0.832467675	1.366544008	1.622084737	2.063106775	1.814517736	1.76985538	2.649912596
D_Mn	Care & Maintenance	P95	0.020712692	0.012285748	0.012246306	0.011460267	0.007245444	0.004764159	0.006056487	0.008486819	0.007131974	0.006666902	0.007819057	0.010718166
D_Mo	Care & Maintenance	P95	0.000257052	0.000547397	0.000368692	0.000169503	0.000196445	0.000127899	0.000188729	0.000270539	0.00037127	0.000212746	0.000244245	0.000220932
D_Na	Care & Maintenance	P95	3.521114111	3.222917557	2.924227238	2.617452383	1.591073513	1.478417754	2.274847746	2.507878065	2.823330402	2.525213003	2.475964785	2.973891258
D_Ni	Care & Maintenance	P95	0.000237931	0.000277726	0.000277198	0.000268276	0.000270754	0.000218941	0.000219412	0.000275048	0.00018607	0.000126653	0.000251447	0.000162815
D_P	Care & Maintenance	P95	0.004984725	0.14936845	0.077316038	0.004994408	0.024937894	0.004988739	0.004988408	0.087172404	0.004984794	0.004988573	0.077212691	0.004985378
D_Pb	Care & Maintenance	P95	2.82954E-05	2.82992E-05	2.82364E-05	2.71747E-05	2.74696E-05	2.78157E-05	2.78711E-05	2.79806E-05	2.80435E-05	2.80729E-05	2.81302E-05	2.82303E-05
D_S	Care & Maintenance	P95	0.418276817	0.856348157	0.897827864	0.798798382	0.249345496	0.24924387	0.249221623	0.273955166	0.617467701	0.857360423	0.537964582	0.637486458
D_Sb	Care & Maintenance	P95	0.000135643	0.000160621	0.00014609	9.80149E-05	0.000132805	0.000119536	0.000121397	0.000149939	0.000127185	0.000128172	0.000142527	0.000133458
D_Se	Care & Maintenance	P95	0.000304566	3.12025E-05	4.35118E-05	5.39907E-05	5.45319E-05	0.000303901	0.000179623	9.12766E-05	0.000102328	0.000304258	0.000181035	0.000180202
D_Si	Care & Maintenance	P95	7.870571613	7.482886314	6.359405994	5.230738163	4.216722965	3.855914831	4.632300377	5.642520905	5.990869999	5.39428997	5.638177395	6.692442894
D_Sn	Care & Maintenance	P95	4.97949E-05	4.97877E-05	4.98793E-05	4.99249E-05	4.98691E-05	4.98488E-05	4.98443E-05	4.981E-05	4.97958E-05	4.98465E-05	4.98115E-05	4.98036E-05
D_Sr	Care & Maintenance	P95	0.068445429	0.064768918	0.054254264	0.043284833	0.023308069	0.023875346	0.036288153	0.043011561	0.055413723	0.04180209	0.044065598	0.057433043
D_Ti	Care & Maintenance	P95	0.001195077	0.004978768	0.003516493	0.002046921	0.002717866	0.001196371	0.001046731	0.002938792	0.000796733	0.000797545	0.002938881	0.000896465
D_Tl	Care & Maintenance	P95	2.69736E-05	7.09444E-06	1.69964E-05	2.63024E-05	6.56779E-06	2.66863E-05	2.67195E-05	6.89218E-06	2.68227E-05	2.68403E-05	1.69309E-05	2.69346E-05
D_U	Care & Maintenance	P95	5.62112E-05	8.40522E-05	7.2504E-05	5.90793E-05	8.35259E-05	8.51552E-05	5.59089E-05	7.70026E-05	5.07638E-05	4.9825E-05	6.18661E-05	3.12338E-05
D_V	Care & Maintenance	P95	0.000153447	0.000759901	0.000423226	6.71236E-05	0.000585549	0.000225464	0.000319374	0.000605749	0.000307721	0.000288389	0.000428691	0.000174563
D_Zn	Care & Maintenance	P95	0.01265048	0.003703921	0.003204854	0.002672411	0.003453789	0.001450081	0.001551536	0.00210246	0.001706811	0.001608395	0.002057886	0.000371209

Appendix B.6.6: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ5

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.010963622	0.008791563	0.009901682	0.010762515	0.00678452	0.010765209	0.010827253	0.006392808	0.010894493	0.010938779	0.008509735	0.010972886
NO3_N	Care & Maintenance	P95	0.185208485	0.101082198	0.190589622	0.263673693	0.058192015	0.070850566	0.065833434	0.064060211	0.065132655	0.071962141	0.075278372	0.086065248
NO2_N	Care & Maintenance	P95	0.002181841	0.001191037	0.002561163	0.003762854	0.00102852	0.002041448	0.002085349	0.001246101	0.002132927	0.002164262	0.001935256	0.002188396
Br	Care & Maintenance	P95	0.024671009	0.024679273	0.024694156	0.024883775	0.024870206	0.024815343	0.024824368	0.024720034	0.02471059	0.024844147	0.024721535	0.024670606
Cl	Care & Maintenance	P95	0.421247393	0.273791373	0.323571414	0.367575616	0.268196166	0.252756536	0.319895029	0.272022992	0.223301142	0.27351597	0.274088919	0.323397458
F	Care & Maintenance	P95	0.072535709	0.063526526	0.063436553	0.060072038	0.044813	0.055184137	0.05600987	0.046549298	0.051994231	0.052588038	0.052894752	0.077558942
TDP	Care & Maintenance	P95	0.005937846	0.003965065	0.007917752	0.011950149	0.009457308	0.003649015	0.004973845	0.003969505	0.001991629	0.003486141	0.002733592	0.002730591
SO4	Care & Maintenance	P95	3.661616087	3.627927303	3.342022896	2.625515223	2.57260108	1.596267462	1.705423355	2.199567318	2.265672922	2.980982304	3.251202345	4.903269291
T_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
WAD_CN	Care & Maintenance	P95	0.002467101	0.002467928	0.002469416	0.002488378	0.002487021	0.002481534	0.002482437	0.002472003	0.002471059	0.002484415	0.002472153	0.00246706
T_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	2.02851E-05	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	2.11917E-05	2.66044E-05
T_Al	Care & Maintenance	P95	0.056354981	0.041662332	0.087811328	0.134907186	0.263665617	0.205199152	0.082969487	0.065482147	0.055444159	0.073588453	0.076033495	0.070169725
T_As	Care & Maintenance	P95	0.000737636	0.001261089	0.001303955	0.001237152	0.000886126	0.000713172	0.000774048	0.001144647	0.000804452	0.000824476	0.000977029	0.000741843
T_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.006771926	0.004853566	0.00315927
T_Ba	Care & Maintenance	P95	0.007234095	0.004904456	0.006335227	0.007683451	0.004467259	0.003271249	0.004090347	0.004582642	0.00520734	0.00412507	0.004364689	0.005501651
T_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
T_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
T_Ca	Care & Maintenance	P95	12.83890438	11.06247902	9.469182968	7.662473202	4.452955246	3.92296958	5.850152493	6.503061295	8.562823296	7.324998379	7.63932991	10.14951801
T_Cd	Care & Maintenance	P95	0.00011136	1.54241E-05	1.57817E-05	1.40193E-05	2.4945E-05	1.40423E-05	1.45728E-05	1.67851E-05	1.51477E-05	1.55263E-05	2.2244E-05	2.73393E-05
T_Co	Care & Maintenance	P95	0.000116444	0.000105823	0.000105156	8.98933E-05	9.26948E-05	8.51284E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	9.73762E-05
T_Cr	Care & Maintenance	P95	0.000150626	0.000298492	0.000286215	0.00027457	0.000473481	0.000150497	0.000194912	0.000315164	0.00022945	0.000150609	0.000338245	0.000150632
T_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000661652	0.000289158	0.000489024	0.000368672	0.00034488	0.000248979	0.000402192	0.000446867
T_Fe	Care & Maintenance	P95	0.369117767	0.169831887	0.169191658	0.16972129	0.223184243	0.112187497	0.10378693	0.19309704	0.207603693	0.12125814	0.166162118	0.184575647
T_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.75383E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.08454E-06	4.72853E-06
T_K	Care & Maintenance	P95	0.91995281	1.212474585	1.082404017	0.780135036	0.826970339	0.782007873	0.825143218	0.877862871	0.871892154	0.902680993	0.91858387	0.926394105
T_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
T_Mg	Care & Maintenance	P95	3.40957427	2.384706497	2.26475811	2.142514467	0.978316665	0.860795617	1.38589251	1.633626699	2.079978228	1.815541625	1.869862437	2.649706841
T_Mn	Care & Maintenance	P95	0.028698191	0.021424793	0.020829206	0.018183358	0.018894739	0.011074806	0.012228132	0.017665064	0.012866957	0.013082113	0.019708239	0.022938941
T_Mo	Care & Maintenance	P95	0.000408116	0.000831719	0.000593224	0.000298587	0.000343582	0.000268018	0.000332994	0.000568048	0.000510322	0.000384831	0.000405218	0.000420019
T_Na	Care & Maintenance	P95	3.568682432	3.273393869	3.006129503	2.717311144	1.679378271	1.782087922	2.329643726	2.580247164	2.974489212	2.58568716	2.538736582	3.030044556
T_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000373492	0.000385295	0.00031791	0.000267379	0.000283082	0.000332192	0.000245234	0.000190581	0.000339903	0.000287023
T_P	Care & Maintenance	P95	0.018766772	0.0197598	0.022734245	0.022899009	0.025871644	0.014898636	0.004973845	0.021767929	0.021760102	0.009945619	0.018802591	0.018766485
T_Pb	Care & Maintenance	P95	0.000354456	3.55656E-05	0.000154776	0.000272284	8.85136E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	7.74958E-05
T_S	Care & Maintenance	P95	0.661183059	0.720634818	0.730947018	0.925676405	0.248702064	0.248153403	0.24824369	0.428150982	0.247105926	0.705573797	0.24721536	0.621699274
T_Sb	Care & Maintenance	P95	0.000409431	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
T_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.97562E-05	0.000311795	0.000189819	7.13859E-05	0.000110491	0.00031447	0.000203996	0.000192428
T_Si	Care & Maintenance	P95	7.871860504	7.518672466	6.64394474	5.759184361	4.619346142	4.093528271	5.34903574	5.764414787	6.015539169	5.428564072	5.723977566	6.739352226
T_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
T_Sr	Care & Maintenance	P95	0.073241889	0.068078272	0.058438696	0.047569294	0.02812246	0.027117526	0.03928832	0.046573579	0.058886241	0.045165058	0.048860963	0.061468106
T_Ti	Care & Maintenance	P95	0.001874997	0.004935855	0.003580653	0.00223954	0.004974041	0.002117576	0.00158876	0.003114724	0.000889581	0.000894389	0.003065471	0.00162826
T_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
T_U	Care & Maintenance	P95	7.02046E-05	9.93444E-05	9.01585E-05	7.58354E-05	0.000126823	0.00010215	7.42295E-05	9.98714E-05	7.66121E-05	6.96837E-05	8.14421E-05	5.81421E-05
T_V	Care & Maintenance	P95	0.000404267	0.001009555	0.000651638	0.000241005	0.001024104	0.000395031	0.000650727	0.000920146	0.000487825	0.000399001	0.000624523	0.000612145
T_Zn	Care & Maintenance	P95	0.028008152	0.0018727	0.002423826	0.002882442	0.004741464	0.001718217	0.001775449	0.003515105	0.001949218	0.002849609	0.002024476	0.001219903
D_Ag	Care & Maintenance	P95	2.65892E-05	6.94624E-06	1.68124E-05	2.62575E-05	6.48852E-06	2.6262E-05	2.63643E-05	6.80158E-06	2.64752E-05	2.65482E-05	1.67782E-05	2.66044E-05
D_Al	Care & Maintenance	P95	0.046486575	0.031593189	0.07462465	0.118483894	0.169158861	0.192129716	0.075522177	0.05385549	0.042594653	0.057688203	0.061744444	0.218686759
D_As	Care & Maintenance	P95	0.000639563	0.001172799	0.001259837	0.001237152	0.000807288	0.000614703	0.000700289	0.001088158	0.000706241	0.000824476	0.000937799	0.000692816
D_B	Care & Maintenance	P95	0.002405542	0.006792679	0.005747009	0.004223546	0.006371079	0.002013186	0.002135876	0.00665943	0.002268844	0.003828253	0.004853566	0.00315927
D_Ba	Care & Maintenance	P95	0.006478935	0.004590536	0.006134245	0.007594823	0.003350391	0.003107134	0.003952663	0.004362416	0.005177877	0.004056385	0.004094978	0.005393791
D_Bi	Care & Maintenance	P95	2.4671E-05	2.46793E-05	2.46942E-05	2.48838E-05	2.48702E-05	2.48153E-05	2.48244E-05	2.472E-05	2.47106E-05	2.48441E-05	2.47215E-05	2.46706E-05
D_Be	Care & Maintenance	P95	6.81907E-05	6.79292E-05	6.85021E-05	6.43943E-05	6.37127E-05	6.44452E-05	6.56164E-05	6.65966E-05	6.68857E-05	6.77217E-05	6.81535E-05	6.83656E-05
D_Ca	Care & Maintenance	P95	12.44661427	10.50330544	9.067220688	7.416285992	4.231224537	3.857323408	5.751807213	6.449847698	8.464612961	6.932508469	7.565772057	10.14951801
D_Cd	Care & Maintenance	P95	6.42847E-05	1.07153E-05	1.34287E-05	1.40193E-05	1.73568E-05	1.40423E-05	1.45728E-05	1.56062E-05	1.51477E-05	1.55263E-05	1.87132E-05	1.58179E-05
D_Co	Care & Maintenance	P95	0.000106637	0.000105823	0.000102705	8.49695E-05	9.26948E-05	8.18461E-05	7.40356E-05	0.000101674	8.29319E-05	8.55524E-05	9.67137E-05	8.26681E-05
D_Cr	Care & Maintenance	P95	0.000150626	0.000357722	0.000315848	0.00027457	0.000309338	0.000150497	0.000170206	0.000255011	0.000150581	0.000150609	0.00022947	0.000150632
D_Cu	Care & Maintenance	P95	0.000544494	0.000298603	0.000471726	0.000633683	0.000612378	0.000289158	0.000366092	0.00029499	0.00034488	0.000101796	0.000274692	0.000446867
D_Fe	Care & Maintenance	P95	0.176683903	0.128370702	0.143262789	0.159270108	0.129340634	0.091739655	0.101105899	0.150908187	0.10678447	0.104364119	0.118696779	0.111057244
D_Hg	Care & Maintenance	P95	3.97891E-06	3.95766E-06	4.00423E-06	3.67026E-06	7.064E-06	3.6744E-06	3.76962E-06	3.84931E-06	3.87281E-06	3.94078E-06	6.57492E-06	4.72853E-06
D_K	Care & Maintenance	P95	0.91995281	1.113392949	1.032894015	0.780135036	0.797406197	0.782007873	0.825143218	0.882529318	0.871892154	0.902680993	0.91858387	0.926394105
D_Li	Care & Maintenance	P95	0.001175475	0.001165768	0.00118704	0.001034505	0.001009194	0.001036393	0.001079884	0.001116282	0.001127019	0.001158061	0.001174095	0.00118197
D_Mg	Care & Maintenance	P95	3.399705887	2.374896288	2.250051975	2.122819901	0.96254909	0.850948632	1.380975127	1.63444531	2.070157051	1.825353861	1.781593561	2.649706841
D_Mn	Care & Maintenance	P95	0.026148301	0.017716594	0.017976249	0.016174469	0.011483992	0.009095566	0.010856214	0.013612596	0.012356261	0.012248073	0.01353431	0.016413433
D_Mo	Care & Maintenance	P95	0.000408116	0.000691435	0.000523126	0.000298587	0.000311062	0.000245042	0.000318242	0.000408651	0.000510322	0.000363244	0.000398353	0.000375894
D_Na	Care & Maintenance	P95	3.568682432	3.273393869	2.981619596	2.668073893	1.646529198	1.535914063	2.329643726	2.563873291	2.876277924	2.58568716	2.538736582	3.030044556
D_Ni	Care & Maintenance	P95	0.000300858	0.000338792	0.000341629	0.000321286	0.00031791	0.000267379	0.000273248	0.000332192	0.000245234	0.000190581	0.000315383	0.00022819
D_P	Care & Maintenance	P95	0.004951005	0.148092017	0.076567508	0.004982691	0.024876835	0.0049725	0.004973845	0.086534418	0.004956901	0.00497679	0.076650985	0.004950945
D_Pb	Care & Maintenance	P95	3.57196E-05	3.55656E-05	3.59032E-05	3.34825E-05	3.30808E-05	3.35124E-05	3.42026E-05	3.47803E-05	3.49507E-05	3.54433E-05	3.56977E-05	3.58227E-05
D_S	Care & Maintenance	P95	0.414472938	0.848967016	0.888989627	0.796280801	0.248702064	0.248153403	0.24824369	0.271920353	0.612822711	0.854638696	0.533985198	0.631567478
D_Sb	Care & Maintenance	P95	0.000384913	0.000404265	0.000403329	0.0003098	0.00032095	0.000310806	0.000333979	0.000377933	0.000359093	0.000375634	0.000396437	0.000388373
D_Se	Care & Maintenance	P95	0.000314853	4.48635E-05	5.77531E-05	6.5566E-05	6.48288E-05	0.000311795	0.000189819	0.000103314	0.000114419	0.00031447	0.000193208	0.000192428
D_Si	Care & Maintenance	P95	7.871860504	7.489242554	6.381688595	5.26188612	4.254721165	3.898230076	4.670451641	5.671084881	6.015539169	5.428564072	5.670035362	6.709936142
D_Sn	Care & Maintenance	P95	4.9342E-05	4.93585E-05	4.93883E-05	4.97676E-05	4.97404E-05	4.96307E-05	4.96487E-05	4.94401E-05	4.94212E-05	4.96883E-05	4.94431E-05	4.93412E-05
D_Sr	Care & Maintenance	P95	0.071476586	0.067783974	0.057580847	0.046141408	0.026052969	0.026658	0.03923915	0.046098743	0.058395188	0.045165058	0.047487892	0.060683668
D_Ti	Care & Maintenance	P95	0.001184208	0.004935855	0.003481876	0.00204047	0.002710853	0.001191136	0.001042623	0.002916964	0.000790739	0.000795013	0.002917141	0.000888142
D_Tl	Care & Maintenance	P95	3.14198E-05	1.17075E-05	2.17258E-05	3.008E-05	1.013E-05	3.0098E-05	3.05113E-05	1.12089E-05	3.09593E-05	3.12543E-05	2.1599E-05	3.14815E-05
D_U	Care & Maintenance	P95	7.02046E-05	9.73824E-05	8.67271E-05	7.09117E-05	9.38095E-05	9.55853E-05	6.7837E-05	8.9556E-05	6.38446E-05	6.37964E-05	7.60479E-05	4.58853E-05
D_V	Care & Maintenance	P95	0.000296387	0.000891834	0.000567079	0.000189306	0.000689043	0.000334309	0.000439285	0.000731031	0.000438719	0.000428438	0.00057058	0.000320434
D_Zn	Care & Maintenance	P95	0.01276421	0.003932809	0.003453244	0.002882442	0.003632808	0.001652571	0.001775449	0.002336205	0.001949218	0.001868385	0.002318706	0.000656091

Appendix B.6.7: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ8

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.008543154	0.008608781	0.01	0.00905	0.008779639	0.0086	0.008220797	0.007937597	0.01	0.01	0.008346112	0.01
NO3_N	Care & Maintenance	P95	0.068000004	0.0854	0.092200004	0.053649999	0.070800588	0.044915538	0.037879989	0.030036602	0.027554745	0.026264014	0.081	0.086000003
NO2_N	Care & Maintenance	P95	0.001179893	0.0028	0.001223245	0.001164441	0.0016	0.001471034	0.001378482	0.001233696	0.001151006	0.001133458	0.0015	0.0015
Br	Care & Maintenance	P95	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999	0.024999999
Cl	Care & Maintenance	P95	0.290490448	0.289582968	0.287846893	0.285627782	0.290533841	0.291666657	0.399999976	0.325438946	0.309205592	0.300395489	0.296457827	0.292964756
F	Care & Maintenance	P95	0.061999999	0.059999999	0.064999998	0.061500002	0.061999999	0.060999997	0.059999999	0.059417404	0.059999999	0.064000003	0.060999997	0.066
TDP	Care & Maintenance	P95	0.016000001	0.013	0.018750001	0.0175	0.013578156	0.01022636	0.009427901	0.0085	0.008457224	0.008160164	0.0115	0.016000001
SO4	Care & Maintenance	P95	4.069999695	4.029999733	4.159999847	3.650000095	3.789999962	3.59499979	3.431183338	3.629999876	3.539999962	3.74000001	3.700000048	3.879999876
T_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
WAD_CN	Care & Maintenance	P95	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
T_Ag	Care & Maintenance	P95	1.14504E-05	1.1424E-05	2.5E-05	1.5E-05	1.4327E-05	1.5E-05	1.38908E-05	1.24613E-05	1.17132E-05	1.16123E-05	1.15927E-05	1.15879E-05
T_Al	Care & Maintenance	P95	0.045220643	0.04270982	0.041136548	0.039269812	0.051869012	0.067537948	0.065789461	0.057762444	0.053805687	0.051637679	0.049304355	0.047249909
T_As	Care & Maintenance	P95	0.00062	0.00057	0.000571138	0.000572443	0.000623997	0.0006039	0.000576199	0.000563499	0.000564659	0.000561724	0.00059	0.00062
T_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.004956604	0.005	0.005	0.005	0.005	0.005	0.005
T_Ba	Care & Maintenance	P95	0.0063	0.00605	0.00584	0.005727904	0.005881	0.005818333	0.00565	0.005581329	0.00609	0.00629	0.00599	0.0056653
T_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
T_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
T_Ca	Care & Maintenance	P95	21.70000076	22.60000038	21.19999886	19.54999924	19.64999962	19.35000038	18.79999924	19.95000076	19.5	21.29999924	20.40000153	23.19999886
T_Cd	Care & Maintenance	P95	5.98466E-06	6.97822E-06	7.5E-06	6.98894E-06	7.13141E-06	7.34792E-06	6.75075E-06	6.13195E-06	5.92264E-06	5.82956E-06	5.79329E-06	5.99273E-06
T_Co	Care & Maintenance	P95	5.05578E-05	5.07553E-05	5.08552E-05	5.08988E-05	5.08262E-05	5.12971E-05	5.10357E-05	5.05983E-05	5.07515E-05	5.06282E-05	5.04661E-05	5.05196E-05
T_Cr	Care & Maintenance	P95	0.00015076	0.000148585	0.00014839	0.000148468	0.000160141	0.000198027	0.000181807	0.000158695	0.000162268	0.000159847	0.000152543	0.000156919
T_Cu	Care & Maintenance	P95	0.000294197	0.00029429	0.000293188	0.000291982	0.000334325	0.00033923	0.000312537	0.000308777	0.000305775	0.000303489	0.000297727	0.000295309
T_Fe	Care & Maintenance	P95	0.066455349	0.067692861	0.067728996	0.066212088	0.075754978	0.085343987	0.076182462	0.068372272	0.067597792	0.068299323	0.065809645	0.06795755
T_Hg	Care & Maintenance	P95	2.88041E-06	2.87006E-06	2.86592E-06	2.8427E-06	2.79138E-06	3.38989E-06	3.02903E-06	2.9335E-06	2.8987E-06	2.87691E-06	2.85455E-06	2.889E-06
T_K	Care & Maintenance	P95	0.899999976	0.899999976	0.907000005	0.96450001	0.832229733	0.791999996	0.775999963	0.797500014	0.787999988	0.88499999	0.799999952	0.848999977
T_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
T_Mg	Care & Maintenance	P95	5.014999866	5.130000114	5.070000172	4.559999943	4.720000267	4.588333607	4.53000021	4.625	4.660000324	4.829999924	4.690000057	5.150000095
T_Mn	Care & Maintenance	P95	0.017482238	0.016439868	0.015693141	0.014417599	0.016000001	0.01500864	0.013458639	0.012879174	0.012352709	0.012224556	0.0513	0.018453646
T_Mo	Care & Maintenance	P95	0.000552	0.00059	0.00056	0.000521	0.00052	0.0005195	0.0005	0.000529	0.000559	0.000555	0.00053	0.000545
T_Na	Care & Maintenance	P95	3.899999857	3.799999952	3.799999952	3.503786087	3.575000048	3.400000095	3.400000095	3.370000124	3.5	3.700000048	3.5	3.799999952
T_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.00025	0.000260457	0.000256674	0.000253741	0.000252475	0.000252573	0.000251469	0.00025	0.00025
T_P	Care & Maintenance	P95	0.030999999	0.032000002	0.029999999	0.029000001	0.027000001	0.026724365	0.023903636	0.021864926	0.021149689	0.020822769	0.033	0.030999999
T_Pb	Care & Maintenance	P95	3.85487E-05	4.07711E-05	4.0357E-05	4.02433E-05	7.28757E-05	5.54605E-05	4.79094E-05	4.37767E-05	4.21298E-05	4.13441E-05	4.01497E-05	3.90423E-05
T_S	Care & Maintenance	P95	1.330000043	1.379999995	1.180000067	1.50999999	1.273689151	1.169999957	1.200000048	1.3549999	1.180000067	1.379999995	1.169999957	1.350000024
T_Sb	Care & Maintenance	P95	6.26913E-05	6.28345E-05	6.33039E-05	6.30896E-05	6.40868E-05	6.42393E-05	6.06366E-05	5.99993E-05	6.08346E-05	6.11288E-05	6.18703E-05	6.27133E-05
T_Se	Care & Maintenance	P95	9.30128E-05	9.68284E-05	9.47747E-05	9.32558E-05	8.90302E-05	7.58057E-05	8.29662E-05	8.72624E-05	8.47121E-05	8.5E-05	9.51663E-05	9.64647E-05
T_Si	Care & Maintenance	P95	4.579999924	4.710000038	4.449999809	4.379795074	4.469752789	4.422982216	4.257268906	4.092207909	4.059483528	4.037065983	4.389999866	4.53000021
T_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
T_Sr	Care & Maintenance	P95	0.105999999	0.105999999	0.101999998	0.092448801	0.098466672	0.093449995	0.0911	0.092649996	0.096900001	0.096000001	0.095700003	0.107000001
T_Ti	Care & Maintenance	P95	0.003408093	0.003101747	0.002916371	0.00285617	0.002613903	0.002552094	0.0039	0.0027	0.002632198	0.005	0.005	0.005
T_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
T_U	Care & Maintenance	P95	9E-05	9E-05	9E-05	8.6328E-05	8.50663E-05	8.8896E-05	8.76653E-05	8.9E-05	9E-05	8.64378E-05	9E-05	8.75E-05
T_V	Care & Maintenance	P95	0.000310782	0.000307933	0.000311335	0.000308876	0.000294905	0.000380709	0.000325287	0.000318132	0.000323236	0.000319587	0.000311663	0.000311332
T_Zn	Care & Maintenance	P95	0.001833607	0.002153645	0.00210933	0.002069171	0.002120779	0.002248208	0.001986461	0.001901885	0.001889984	0.001872253	0.001878017	0.001862629
D_Ag	Care & Maintenance	P95	1.03439E-05	1.03776E-05	1.02611E-05	1.5E-05	1.29721E-05	1.5E-05	1.2899E-05	1.11736E-05	1.04186E-05	1.03534E-05	1.06329E-05	1.04454E-05
D_Al	Care & Maintenance	P95	0.032598488	0.031579368	0.031119874	0.030040657	0.040348336	0.04288736	0.044951733	0.039663929	0.037801281	0.036469825	0.033812944	0.031961635
D_As	Care & Maintenance	P95	0.00056	0.00052	0.00054	0.000528271	0.00058608	0.000559725	0.000527874	0.000514407	0.00052	0.00053	0.000517876	0.00055
D_B	Care & Maintenance	P95	0.005	0.005	0.005	0.005	0.005	0.00494892	0.005	0.005	0.005	0.005	0.005	0.005
D_Ba	Care & Maintenance	P95	0.00605	0.00563	0.005455	0.005443146	0.00563988	0.00559	0.00537	0.005525	0.00595	0.00581	0.00553	0.005392892
D_Bi	Care & Maintenance	P95	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05	2.5E-05
D_Be	Care & Maintenance	P95	5.09284E-05	5.09177E-05	5.09345E-05	5.09139E-05	5.10934E-05	5.09628E-05	5.08447E-05	5.07791E-05	5.07993E-05	5.08192E-05	5.08896E-05	5.09344E-05
D_Ca	Care & Maintenance	P95	22.19999886	22.29999924	21.10000038	18.95000076	18.86666679	19.18333435	18.70000076	19.54999924	19.79999924	19.79999924	20	21
D_Cd	Care & Maintenance	P95	6.78684E-06	7.23213E-06	7.12342E-06	6.85399E-06	7.5E-06	7.8075E-06	7.5E-06	7.35487E-06	7.02284E-06	6.805E-06	6.83265E-06	6.79546E-06
D_Co	Care & Maintenance	P95	5E-05	5E-05	5E-05	4.96865E-05	5E-05	5.06421E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Cr	Care & Maintenance	P95	0.000110919	0.000109586	0.000110872	0.000109946	0.000126362	0.000123053	0.000118833	0.000120637	0.000116971	0.000114664	0.00011118	0.000113469
D_Cu	Care & Maintenance	P95	0.000308045	0.000307675	0.000306483	0.000304634	0.000346481	0.000344704	0.0004	0.000335413	0.000322298	0.00032051	0.00031115	0.000304674
D_Fe	Care & Maintenance	P95	0.043176372	0.042891204	0.043100003	0.04261345	0.055656467	0.050405126	0.045218166	0.04160453	0.042199802	0.042094328	0.04178752	0.044040661
D_Hg	Care & Maintenance	P95	2.85664E-06	2.84505E-06	2.83977E-06	2.81853E-06	2.78788E-06	3.25907E-06	2.95706E-06	2.87321E-06	2.84397E-06	2.82827E-06	2.8096E-06	2.86177E-06
D_K	Care & Maintenance	P95	0.861999989	0.897000015	0.893000007	0.944999993	0.807859898	0.773923278	0.75168556	0.743000031	0.763999999	0.799999952	0.824999988	0.844000041
D_Li	Care & Maintenance	P95	0.000534476	0.000534077	0.000534702	0.000533938	0.000540602	0.000535752	0.000531366	0.000528931	0.000529681	0.000530419	0.000533035	0.000534697
D_Mg	Care & Maintenance	P95	5.400000095	5.049999714	5.309999943	4.475517273	4.699999809	4.36833334	4.420000076	4.485000134	4.610000134	4.800000191	4.610000134	4.855000019
D_Mn	Care & Maintenance	P95	0.004406439	0.004521863	0.004539967	0.004494756	0.005259512	0.004514821	0.00496	0.004334067	0.0044	0.0047	0.004462278	0.004384978
D_Mo	Care & Maintenance	P95	0.00051	0.00051	0.000544	0.000480878	0.000477	0.0004995	0.000512	0.0005025	0.00057	0.000494	0.00049	0.00048
D_Na	Care & Maintenance	P95	4	3.799999952	3.799999952	3.465518475	3.549999952	3.365739346	3.400000095	3.375	3.5	3.5	3.400000095	3.700000048
D_Ni	Care & Maintenance	P95	0.00025	0.00025	0.00025	0.000248057	0.00025	0.000251132	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
D_P	Care & Maintenance	P95	0.067823239	0.064019099	0.062393848	0.059784561	0.054789599	0.039417785	0.064000003	0.087499999	0.053003393	0.150000006	0.150000006	0.074130394
D_Pb	Care & Maintenance	P95	2.55471E-05	2.55408E-05	2.55507E-05	2.55386E-05	2.56443E-05	2.55674E-05	2.54978E-05	2.54591E-05	2.5471E-05	2.54827E-05	2.55243E-05	2.55506E-05
D_S	Care & Maintenance	P95	1.279999971	1.449999928	1.419999957	1.25999999	1.208880424	1.204999924	1.269999981	1.320000052	1.159694314	1.309999943	1.25	1.410000086
D_Sb	Care & Maintenance	P95	6.26327E-05	6.25433E-05	6.29853E-05	6.27697E-05	6.38222E-05	6.40132E-05	6.05639E-05	5.99335E-05	6.07737E-05	6.10712E-05	6.18231E-05	6.26502E-05
D_Se	Care & Maintenance	P95	0.0001105	9.70102E-05	9.48274E-05	9.24679E-05	8.5068E-05	7.70183E-05	8.48019E-05	8.85E-05	8.25496E-05	8.28984E-05	9.49817E-05	9.44401E-05
D_Si	Care & Maintenance	P95	4.590000153	4.509999752	4.460000038	4.294899464	4.299478531	4.172879696	4.007989407	3.871937752	3.842913628	3.831040382	4.340000153	4.470000267
D_Sn	Care & Maintenance	P95	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05	5E-05
D_Sr	Care & Maintenance	P95	0.104000002	0.105999999	0.103	0.091167629	0.097199999	0.090433337	0.089300007	0.092699997	0.097199999	0.093699999	0.091499999	0.101500005
D_Ti	Care & Maintenance	P95	0.001950015	0.001814368	0.001740755	0.001639009	0.001488281	0.001281202	0.001041916	0.002575	0.001172029	0.005	0.005	0.00223106
D_Tl	Care & Maintenance	P95	1.05734E-05	1.06205E-05	1.05089E-05	1.5E-05	1.31641E-05	1.5E-05	1.30154E-05	1.12886E-05	1.05412E-05	1.0485E-05	1.08735E-05	1.06935E-05
D_U	Care & Maintenance	P95	8.75E-05	8.01484E-05	8.5E-05	8.04805E-05	8E-05	8.01938E-05	8.01167E-05	8.6E-05	8.7E-05	8.06423E-05	8.02007E-05	8E-05
D_V	Care & Maintenance	P95	0.000265972	0.000263801	0.000267902	0.000268593	0.000251727	0.000301487	0.000264426	0.000262905	0.000271099	0.000269701	0.000267532	0.000270273
D_Zn	Care & Maintenance	P95	0.0014	0.00131683	0.001316707	0.0015	0.001511171	0.001753172	0.001501507	0.0013499	0.001334003	0.001300466	0.001240521	0.001220674

Appendix B.6.8: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ9

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.028449932	0.028250391	0.031162832	0.055266872	0.037260912	0.016816979	0.011518953	0.015349925	0.017811215	0.025052447	0.017525766	0.016102236
NO3_N	Care & Maintenance	P95	0.417720973	0.44926998	0.338436574	0.719910681	0.52007848	0.219868258	0.145028383	0.13714622	0.20935896	0.484310359	0.403268605	0.322788596
NO2_N	Care & Maintenance	P95	0.003334472	0.004387483	0.003079743	0.005201003	0.004317415	0.002315842	0.001810461	0.00167986	0.002011841	0.003487658	0.003159117	0.002984054
Br	Care & Maintenance	P95	0.034317628	0.037494175	0.033391509	0.040919963	0.0367238	0.02899527	0.027836405	0.027046556	0.029253557	0.034845229	0.032605875	0.032414291
Cl	Care & Maintenance	P95	0.454096615	0.510601342	0.427835017	0.585825324	0.501523137	0.365068018	0.397723258	0.343027115	0.369816303	0.473101616	0.426600307	0.408423305
F	Care & Maintenance	P95	0.116438471	0.133795545	0.111250989	0.153531089	0.124791577	0.084269874	0.077518724	0.079639852	0.090249546	0.124089465	0.110394411	0.108418964
TDP	Care & Maintenance	P95	0.016091458	0.012675579	0.01629163	0.01783693	0.012948226	0.009977401	0.00923771	0.009941808	0.008391944	0.01033017	0.011932235	0.015350389
SO4	Care & Maintenance	P95	11.44261837	11.18033981	7.874669552	13.60413742	8.890001297	8.67768383	7.25090313	10.92983437	10.420331	13.87263107	11.73608303	9.837029457
T_CN	Care & Maintenance	P95	0.002521689	0.002531533	0.002517465	0.002532932	0.002608965	0.002517264	0.002514871	0.002504946	0.002514663	0.002509306	0.002621126	0.002510877
WAD_CN	Care & Maintenance	P95	0.00252169	0.002531533	0.002516178	0.002529266	0.002608965	0.002517264	0.002514871	0.002504946	0.002514663	0.002509307	0.002621127	0.002510877
T_Ag	Care & Maintenance	P95	1.44809E-05	1.61176E-05	2.25704E-05	2.33259E-05	1.95776E-05	1.79665E-05	1.39962E-05	1.25665E-05	1.27241E-05	1.63351E-05	1.42831E-05	1.60611E-05
T_Al	Care & Maintenance	P95	0.039237093	0.0329169	0.044688299	0.049696971	0.073183261	0.093497463	0.084790245	0.064457729	0.054732643	0.055626795	0.053405985	0.040853858
T_As	Care & Maintenance	P95	0.000680234	0.000639149	0.000641312	0.000741709	0.000670742	0.000612229	0.000608807	0.000640632	0.000682317	0.000712703	0.00067644	0.000653448
T_B	Care & Maintenance	P95	0.017167818	0.019331211	0.013568975	0.026153751	0.020102302	0.010285026	0.008764701	0.00843132	0.011122791	0.019330813	0.015745392	0.012999543
T_Ba	Care & Maintenance	P95	0.006824576	0.00704421	0.006962411	0.006824398	0.006519257	0.006283243	0.006201586	0.006227216	0.007036364	0.007061125	0.006669503	0.00644453
T_Bi	Care & Maintenance	P95	2.65111E-05	2.65774E-05	2.63572E-05	2.81346E-05	2.73486E-05	2.64955E-05	2.57425E-05	2.5826E-05	2.66581E-05	2.77058E-05	2.74062E-05	2.67358E-05
T_Be	Care & Maintenance	P95	6.39523E-05	6.43152E-05	6.1365E-05	7.45035E-05	6.70278E-05	5.6741E-05	5.46714E-05	5.34837E-05	5.61573E-05	6.29179E-05	6.19467E-05	5.99819E-05
T_Ca	Care & Maintenance	P95	20.40703773	21.50589943	20.6812973	19.27217865	18.59802628	17.88199615	17.9317112	18.8801918	18.93282318	19.99129486	19.49651527	21.61989975
T_Cd	Care & Maintenance	P95	8.40802E-06	9.25024E-06	9.34567E-06	1.21737E-05	1.00834E-05	8.23384E-06	7.70148E-06	6.81498E-06	7.803E-06	9.91205E-06	7.985E-06	7.89561E-06
T_Co	Care & Maintenance	P95	0.000169424	0.000193367	0.00013091	0.000230876	0.000169295	0.000100188	8.20849E-05	9.9099E-05	0.000124377	0.000202305	0.00014508	0.000135981
T_Cr	Care & Maintenance	P95	0.000223118	0.000219269	0.000221693	0.00028815	0.000226784	0.000216824	0.000200791	0.000197557	0.000223318	0.000266966	0.000231629	0.000216249
T_Cu	Care & Maintenance	P95	0.00029737	0.000308663	0.000305801	0.000353241	0.000405315	0.000365203	0.00038019	0.000308381	0.000307047	0.000323975	0.000299418	0.000293663
T_Fe	Care & Maintenance	P95	0.087757729	0.095272399	0.11892464	0.113345221	0.106092565	0.105674729	0.095538825	0.096048392	0.106971651	0.111560345	0.107572056	0.086689286
T_Hg	Care & Maintenance	P95	5.30062E-06	5.56182E-06	4.7893E-06	8.2575E-06	6.51055E-06	4.93788E-06	4.10944E-06	4.06349E-06	4.79254E-06	6.58103E-06	5.71051E-06	4.88962E-06
T_K	Care & Maintenance	P95	1.551911831	1.528653741	1.329030514	2.185470343	1.549393415	1.292682767	1.123556137	1.430104971	1.503241777	2.048258781	1.646717787	1.47685051
T_Li	Care & Maintenance	P95	0.012788831	0.014786531	0.01062302	0.021248797	0.015441097	0.006846919	0.00490239	0.004594376	0.00710297	0.015068683	0.011850473	0.009588928
T_Mg	Care & Maintenance	P95	4.961395741	4.979561806	5.084063053	5.007071495	4.810719967	4.431341648	4.313912392	4.466312885	4.58360672	4.815949917	4.778049469	5.029523849
T_Mn	Care & Maintenance	P95	0.028557418	0.027280008	0.022967851	0.030870434	0.023072209	0.026947536	0.022806635	0.025087858	0.027356189	0.035547994	0.053653784	0.029429553
T_Mo	Care & Maintenance	P95	0.000717727	0.000789972	0.00073277	0.000854496	0.000744741	0.000551436	0.000546755	0.000603677	0.000673023	0.000704033	0.000622077	0.000631387
T_Na	Care & Maintenance	P95	6.22685957	6.364653587	5.726200581	9.058019638	7.17216301	4.993909836	4.29937315	4.295506477	5.338480473	7.208618641	6.282158375	5.761444569
T_Ni	Care & Maintenance	P95	0.000409708	0.00040185	0.000365309	0.000553733	0.000443687	0.000362618	0.000315983	0.000330266	0.000382442	0.00049721	0.000450192	0.000400514
T_P	Care & Maintenance	P95	0.028968588	0.028178554	0.033195317	0.030861203	0.02612168	0.023802767	0.021172034	0.019501686	0.018841581	0.020309988	0.029434212	0.028531494
T_Pb	Care & Maintenance	P95	0.000303619	0.000388445	0.000252397	0.000519822	0.000379857	0.000159738	0.000115326	0.00010982	0.000160984	0.000337799	0.000244102	0.000227395
T_S	Care & Maintenance	P95	1.29841888	1.341962457	1.241611242	1.547214508	1.206459284	1.111855626	1.14025104	1.230659485	1.100740314	1.333682775	1.121951222	1.333684444
T_Sb	Care & Maintenance	P95	0.000299185	0.000278634	0.000161738	0.000358327	0.000207154	0.000244003	0.00019538	0.000222872	0.000249771	0.000393275	0.000302372	0.000252175
T_Se	Care & Maintenance	P95	9.0364E-05	9.04387E-05	0.000127656	0.000103858	9.30101E-05	8.18549E-05	8.25911E-05	7.91938E-05	7.64132E-05	9.05974E-05	8.8824E-05	8.75394E-05
T_Si	Care & Maintenance	P95	5.208714485	5.364436626	5.181815147	5.259405613	5.131861687	4.619794369	4.395231724	4.391652584	4.577375412	4.812125206	5.269908428	5.120075226
T_Sn	Care & Maintenance	P95	5.07434E-05	5.06298E-05	5.03833E-05	5.06578E-05	5.22089E-05	5.03569E-05	5.05403E-05	5.01061E-05	5.0301E-05	5.05154E-05	5.24443E-05	5.04715E-05
T_Sr	Care & Maintenance	P95	0.103881232	0.104606926	0.103698149	0.095930643	0.096293636	0.090754189	0.087767161	0.092386268	0.098413654	0.095881164	0.097768813	0.104410999
T_Ti	Care & Maintenance	P95	0.003478551	0.002580633	0.002705616	0.003490885	0.003179768	0.002796394	0.003949414	0.003527176	0.003010941	0.004870795	0.005026969	0.003926155
T_Tl	Care & Maintenance	P95	5.64441E-05	5.93002E-05	4.7352E-05	0.000103084	7.43075E-05	3.83948E-05	2.42358E-05	2.56919E-05	3.90118E-05	7.01678E-05	5.5662E-05	5.15976E-05
T_U	Care & Maintenance	P95	0.000127579	0.000141113	0.000138758	0.000177422	0.000138825	0.000125562	0.000108415	0.000116344	0.000132033	0.000147045	0.000141014	0.000131214
T_V	Care & Maintenance	P95	0.002340554	0.002689221	0.001753163	0.003382409	0.002424331	0.001251536	0.001023412	0.001226587	0.001538738	0.002719752	0.002105588	0.001779956
T_Zn	Care & Maintenance	P95	0.002114726	0.002368041	0.002136193	0.002700679	0.002449715	0.002172753	0.001943698	0.001810988	0.001943319	0.002162514	0.002087992	0.001906421
D_Ag	Care & Maintenance	P95	1.4173E-05	1.59118E-05	1.63588E-05	2.33174E-05	1.83372E-05	1.71261E-05	1.15905E-05	1.12253E-05	1.1665E-05	1.57001E-05	1.37037E-05	1.57469E-05
D_Al	Care & Maintenance	P95	0.00435	0.0037	0.0029	0.018000001	0.042532552	0.038999997	0.029000001	0.0147	0.016249999	0.0142	0.0208	0.008300001
D_As	Care & Maintenance	P95	0.000625815	0.000592918	0.000606654	0.000703979	0.000625129	0.000559884	0.000558251	0.000583078	0.000644914	0.000681855	0.000609687	0.00060111
D_B	Care & Maintenance	P95	0.017167818	0.019331211	0.013465484	0.02613825	0.020102302	0.010248191	0.008764701	0.00843132	0.011122791	0.019330813	0.015745392	0.012999543
D_Ba	Care & Maintenance	P95	0.006730738	0.006628861	0.006420579	0.006330679	0.006155735	0.005929519	0.005789122	0.006106107	0.006745583	0.006647459	0.006290896	0.006197998
D_Bi	Care & Maintenance	P95	2.65111E-05	2.65774E-05	2.63572E-05	2.81346E-05	2.73486E-05	2.64955E-05	2.57425E-05	2.5826E-05	2.66581E-05	2.77058E-05	2.74062E-05	2.67358E-05
D_Be	Care & Maintenance	P95	6.39523E-05	6.43152E-05	6.1365E-05	7.45035E-05	6.70278E-05	5.6741E-05	5.46714E-05	5.34837E-05	5.61573E-05	6.29179E-05	6.19467E-05	5.99819E-05
D_Ca	Care & Maintenance	P95	20.99158287	20.81084633	20.32036209	18.7011261	18.03683472	17.66610909	17.96555519	18.66384315	19.10274887	18.94012642	19.27319145	19.97947884
D_Cd	Care & Maintenance	P95	8.70886E-06	8.99268E-06	8.43504E-06	1.21304E-05	1.09988E-05	8.51848E-06	8.32549E-06	7.7066E-06	8.32E-06	1.04388E-05	8.44442E-06	8.2968E-06
D_Co	Care & Maintenance	P95	0.000169265	0.000193191	0.000130734	0.000229669	0.000167258	9.74127E-05	8.17237E-05	9.79422E-05	0.00012364	0.000201931	0.000144907	0.000133935
D_Cr	Care & Maintenance	P95	0.000167471	0.000162685	0.000163003	0.000250553	0.000164613	0.000151757	0.000149696	0.000158985	0.000182257	0.000220917	0.000179395	0.000168907
D_Cu	Care & Maintenance	P95	0.000302576	0.000342843	0.00030331	0.000334139	0.00037741	0.000355714	0.000398599	0.000321329	0.000315741	0.000322277	0.000307199	0.000310606
D_Fe	Care & Maintenance	P95	0.053033147	0.053266089	0.058676261	0.055842701	0.059502956	0.059704371	0.05804874	0.059062392	0.066180475	0.065742776	0.05922991	0.055462029
D_Hg	Care & Maintenance	P95	5.29713E-06	5.55695E-06	4.77702E-06	8.25007E-06	6.46085E-06	4.89566E-06	4.03242E-06	3.96556E-06	4.72907E-06	6.45047E-06	5.70072E-06	4.89787E-06
D_K	Care & Maintenance	P95	1.538863659	1.518885016	1.313874364	2.172433376	1.535266995	1.250203252	1.088042498	1.397795677	1.479604125	2.007337809	1.654641032	1.474764705
D_Li	Care & Maintenance	P95	0.012788831	0.014786531	0.01062302	0.021248797	0.015441097	0.006846919	0.00490239	0.004594376	0.00710297	0.015068683	0.011850473	0.009588928
D_Mg	Care & Maintenance	P95	5.149664402	4.9316082	5.175955296	4.951071262	4.783854961	4.289874554	4.328094959	4.364113331	4.523610592	4.783545494	4.659244061	4.859116554
D_Mn	Care & Maintenance	P95	0.025281735	0.024277391	0.017500319	0.025974991	0.013793189	0.019527568	0.015903343	0.018616736	0.022240905	0.030984364	0.027085539	0.023603482
D_Mo	Care & Maintenance	P95	0.000678035	0.000736387	0.000698168	0.000817544	0.000706585	0.000528392	0.000541653	0.000575755	0.000664368	0.000671448	0.00058622	0.000584256
D_Na	Care & Maintenance	P95	6.243317604	6.315369129	5.68007946	8.993821144	7.146739006	4.943406105	4.294730186	4.285602093	5.292241573	7.096800327	6.205803394	5.668882847
D_Ni	Care & Maintenance	P95	0.000409654	0.000401774	0.000361931	0.000551451	0.000438498	0.000358835	0.000314734	0.000330175	0.000381926	0.000496807	0.00045011	0.000395645
D_P	Care & Maintenance	P95	0.060859997	0.055036876	0.050271988	0.059467323	0.048498821	0.035926759	0.056688491	0.104174234	0.067170277	0.14369221	0.150706261	0.065254241
D_Pb	Care & Maintenance	P95	0.000300968	0.00038633	0.000249465	0.000514872	0.000368398	0.000148774	0.000109872	0.000104369	0.000155737	0.000331488	0.000238344	0.0002243
D_S	Care & Maintenance	P95	1.181542754	1.37460947	1.360746264	1.262257576	1.133336902	1.106718659	1.193562269	1.168682337	1.139170408	1.25234127	1.214268446	1.317306876
D_Sb	Care & Maintenance	P95	0.000299175	0.000278597	0.000161638	0.00035911	0.000207017	0.000243938	0.000195344	0.000222864	0.00024975	0.000393253	0.000302347	0.000252157
D_Se	Care & Maintenance	P95	0.00012203	8.78421E-05	0.000123584	9.96093E-05	8.6737E-05	7.56443E-05	7.73737E-05	8.3166E-05	7.7945E-05	8.50339E-05	8.47892E-05	8.00106E-05
D_Si	Care & Maintenance	P95	5.125434399	5.184779644	5.012896538	5.08561182	4.802925587	4.396763802	4.161501884	4.224091053	4.429505825	4.647894382	5.186383724	5.032732964
D_Sn	Care & Maintenance	P95	5.07434E-05	5.06298E-05	5.03833E-05	5.06578E-05	5.22089E-05	5.03569E-05	5.05403E-05	5.01061E-05	5.0301E-05	5.05154E-05	5.24443E-05	5.04715E-05
D_Sr	Care & Maintenance	P95	0.104108244	0.104745254	0.1040916	0.094707914	0.095400229	0.088378012	0.088292137	0.092084318	0.097889863	0.094812505	0.094759226	0.100462079
D_Ti	Care & Maintenance	P95	0.001680163	0.00144096	0.001300417	0.001687966	0.001430186	0.001408791	0.001209727	0.003296187	0.001955257	0.004806724	0.005008722	0.001884123
D_Tl	Care & Maintenance	P95	5.64441E-05	5.93002E-05	4.7352E-05	0.000103084	7.42477E-05	3.83906E-05	2.42358E-05	2.56919E-05	3.90118E-05	7.01678E-05	5.5662E-05	5.15976E-05
D_U	Care & Maintenance	P95	0.000122235	0.000133135	0.000129502	0.000170456	0.000132456	0.000117485	0.000102978	0.000111533	0.000125581	0.000141965	0.000132239	0.000124413
D_V	Care & Maintenance	P95	0.002310212	0.002669826	0.001634602	0.003330932	0.002368894	0.001176036	0.000913495	0.001161803	0.001426038	0.002678943	0.002054326	0.001730826
D_Zn	Care & Maintenance	P95	0.001786745	0.001879291	0.001776499	0.002359812	0.00219872	0.001833673	0.001442416	0.001326224	0.001412711	0.001754789	0.001540866	0.001352451

Appendix B.6.9: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, WQ13

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.027968705	0.027705289	0.03041397	0.05459819	0.036709391	0.01657209	0.011468188	0.015217496	0.017511064	0.0245394	0.017160522	0.01570959
NO3_N	Care & Maintenance	P95	0.402700394	0.426048011	0.329880804	0.702728629	0.510232687	0.212008864	0.142035186	0.133822873	0.203985721	0.473409742	0.387318015	0.314480335
NO2_N	Care & Maintenance	P95	0.003242527	0.004248763	0.002972565	0.005128957	0.004237277	0.002267999	0.001782925	0.001658033	0.001975025	0.003440477	0.003038409	0.002936169
Br	Care & Maintenance	P95	0.033848424	0.036821041	0.033079784	0.040542372	0.036443397	0.028898658	0.027776636	0.026995262	0.029122267	0.034607284	0.032335792	0.032181378
Cl	Care & Maintenance	P95	0.443816036	0.496356815	0.421225756	0.579174697	0.495533288	0.362248629	0.394614875	0.340417266	0.36613071	0.467741549	0.418542176	0.403139949
F	Care & Maintenance	P95	0.113499627	0.129797027	0.10943649	0.151262835	0.122833893	0.083442748	0.07705532	0.078739949	0.089303114	0.122526221	0.108365819	0.106896468
TDP	Care & Maintenance	P95	0.015984315	0.012612026	0.016079327	0.017731575	0.012899622	0.009868166	0.009165858	0.009927316	0.008380532	0.010221727	0.011741728	0.015079737
SO4	Care & Maintenance	P95	11.06651497	10.78860474	7.666606426	13.49220371	8.810333252	8.502113342	7.179141521	10.63752651	10.22163868	13.57130432	11.43440342	9.659296036
T_CN	Care & Maintenance	P95	0.002521114	0.002530737	0.002516893	0.002532188	0.00260707	0.002516798	0.002514628	0.002504721	0.002514201	0.002509121	0.002616142	0.002510556
WAD_CN	Care & Maintenance	P95	0.002521114	0.002530738	0.002515646	0.002528825	0.00260707	0.002516798	0.002514628	0.002504721	0.002514201	0.002509122	0.002616142	0.002510556
T_Ag	Care & Maintenance	P95	1.40049E-05	1.55087E-05	2.19691E-05	2.29637E-05	1.92234E-05	1.78993E-05	1.38325E-05	1.23479E-05	1.24708E-05	1.60456E-05	1.38619E-05	1.57159E-05
T_Al	Care & Maintenance	P95	0.039609957	0.032214276	0.044227399	0.050112449	0.074719943	0.093030266	0.083817229	0.063460059	0.05387529	0.054826319	0.052936252	0.040259052
T_As	Care & Maintenance	P95	0.00067921	0.000637461	0.000639951	0.00073823	0.000669003	0.000610755	0.00061003	0.000641378	0.000682225	0.000711018	0.000674128	0.000652253
T_B	Care & Maintenance	P95	0.01655139	0.018559279	0.013135082	0.02580802	0.019837255	0.010104305	0.008685377	0.00834719	0.010936946	0.019006686	0.015261869	0.012743501
T_Ba	Care & Maintenance	P95	0.006889143	0.007032015	0.006991473	0.006882853	0.006528674	0.006292652	0.006218157	0.006268835	0.00704822	0.007093599	0.006709199	0.006469939
T_Bi	Care & Maintenance	P95	2.64744E-05	2.65099E-05	2.63077E-05	2.81002E-05	2.73065E-05	2.64545E-05	2.57271E-05	2.58031E-05	2.6604E-05	2.76304E-05	2.73137E-05	2.66772E-05
T_Be	Care & Maintenance	P95	6.3249E-05	6.35589E-05	6.0803E-05	7.39212E-05	6.66743E-05	5.65771E-05	5.45729E-05	5.33688E-05	5.59653E-05	6.26292E-05	6.14263E-05	5.9675E-05
T_Ca	Care & Maintenance	P95	20.41288567	21.48193741	20.6749649	19.27493095	18.53273773	17.86426926	17.93381119	18.87329674	18.94098663	19.97127342	19.47068405	21.57906914
T_Cd	Care & Maintenance	P95	8.10955E-06	8.98129E-06	9.0966E-06	1.19829E-05	9.90832E-06	8.14877E-06	7.66109E-06	6.71109E-06	7.62922E-06	9.83767E-06	7.7354E-06	7.77598E-06
T_Co	Care & Maintenance	P95	0.000163395	0.000185518	0.000127469	0.000227298	0.000167555	9.88221E-05	8.14092E-05	9.76831E-05	0.000121999	0.000198864	0.00014136	0.000132749
T_Cr	Care & Maintenance	P95	0.000220588	0.000214009	0.000218978	0.000284587	0.000226485	0.000215449	0.000199423	0.000196048	0.000220685	0.000264109	0.000228697	0.000213718
T_Cu	Care & Maintenance	P95	0.000295	0.000309559	0.000303786	0.000351027	0.000408428	0.000365594	0.000381032	0.000311475	0.00030762	0.000321115	0.00029743	0.000294835
T_Fe	Care & Maintenance	P95	0.091553994	0.097633503	0.121108331	0.115215763	0.107236959	0.106265239	0.09633249	0.097685874	0.109151699	0.114221133	0.11062669	0.087999418
T_Hg	Care & Maintenance	P95	5.18084E-06	5.37765E-06	4.71441E-06	8.14042E-06	6.4338E-06	4.88491E-06	4.06721E-06	3.99351E-06	4.70716E-06	6.46585E-06	5.59391E-06	4.8443E-06
T_K	Care & Maintenance	P95	1.522729993	1.485448956	1.318208456	2.165612221	1.537881374	1.274200797	1.113221288	1.405357242	1.480347395	2.017617464	1.607362866	1.455717087
T_Li	Care & Maintenance	P95	0.012166214	0.014018568	0.010251974	0.020844134	0.015127604	0.006705711	0.004809961	0.004491405	0.006930367	0.01474135	0.011322124	0.009277658
T_Mg	Care & Maintenance	P95	4.954931259	4.971309662	5.078261852	5.003643036	4.794163227	4.414168358	4.305582047	4.463839531	4.579761982	4.805307388	4.763127804	5.017429829
T_Mn	Care & Maintenance	P95	0.028578565	0.02681441	0.022998098	0.031029871	0.023024671	0.026658405	0.022763036	0.02520369	0.027505839	0.035573572	0.053203508	0.029304348
T_Mo	Care & Maintenance	P95	0.000710905	0.000777034	0.000728275	0.000852429	0.000739211	0.000550117	0.000547706	0.000605603	0.000673074	0.000703012	0.000618812	0.000630306
T_Na	Care & Maintenance	P95	6.12431097	6.191758633	5.666723728	8.957759857	7.096206188	4.921366692	4.277861118	4.279760838	5.268552303	7.107398033	6.173859596	5.700876236
T_Ni	Care & Maintenance	P95	0.000402798	0.000392682	0.000361958	0.000548345	0.000441226	0.000360173	0.000314632	0.000327571	0.000378988	0.000490842	0.000442922	0.000396356
T_P	Care & Maintenance	P95	0.028907804	0.028139826	0.032953247	0.030862048	0.026079351	0.023710214	0.021070577	0.019329851	0.018721676	0.020251675	0.029368624	0.02845885
T_Pb	Care & Maintenance	P95	0.000289587	0.000368548	0.000242733	0.000510033	0.000371603	0.000156667	0.000113424	0.000107167	0.000156579	0.000329561	0.000236096	0.000220518
T_S	Care & Maintenance	P95	1.299442291	1.345866799	1.241134405	1.546010017	1.20401454	1.111948013	1.139859676	1.227169514	1.100180984	1.339178562	1.125204563	1.334164977
T_Sb	Care & Maintenance	P95	0.000286574	0.000265829	0.000157135	0.000352349	0.000204184	0.000236712	0.000191309	0.000219442	0.000244288	0.000383732	0.000293459	0.000245812
T_Se	Care & Maintenance	P95	9.01066E-05	8.95938E-05	0.000125289	0.000103198	9.25314E-05	8.14902E-05	8.27342E-05	7.89782E-05	7.6303E-05	9.07411E-05	8.79116E-05	8.68275E-05
T_Si	Care & Maintenance	P95	5.208331585	5.339297771	5.17509222	5.256894588	5.118305683	4.599490166	4.391219139	4.378476143	4.564373493	4.812111855	5.26429987	5.120640755
T_Sn	Care & Maintenance	P95	5.07243E-05	5.06139E-05	5.03709E-05	5.06429E-05	5.21705E-05	5.03472E-05	5.05343E-05	5.01013E-05	5.02915E-05	5.05037E-05	5.23437E-05	5.04546E-05
T_Sr	Care & Maintenance	P95	0.103965513	0.104580551	0.103683591	0.095909066	0.096074812	0.090585381	0.087766677	0.092449747	0.098455049	0.095853657	0.097717986	0.104360074
T_Ti	Care & Maintenance	P95	0.003501646	0.002590556	0.002728752	0.00352407	0.003211705	0.002797615	0.00395034	0.003511572	0.003019987	0.004872928	0.005025247	0.003900109
T_Tl	Care & Maintenance	P95	5.38364E-05	5.63753E-05	4.59591E-05	0.000101482	7.30909E-05	3.79123E-05	2.38329E-05	2.50139E-05	3.79797E-05	6.86916E-05	5.3372E-05	5.03049E-05
T_U	Care & Maintenance	P95	0.000127251	0.000139314	0.000138224	0.000176823	0.000137928	0.000124635	0.000107958	0.000116054	0.00013103	0.00014579	0.000139525	0.000130374
T_V	Care & Maintenance	P95	0.002237421	0.002557755	0.001696843	0.003327211	0.002389375	0.001230116	0.001014183	0.001206452	0.001504594	0.002664508	0.002029639	0.001726798
T_Zn	Care & Maintenance	P95	0.002083923	0.002320495	0.002109584	0.002676921	0.002424913	0.002162377	0.00193709	0.001816573	0.001930078	0.002146527	0.002064463	0.001891204
D_Ag	Care & Maintenance	P95	1.37121E-05	1.53142E-05	1.5901E-05	2.29553E-05	1.79852E-05	1.7067E-05	1.15219E-05	1.10548E-05	1.14604E-05	1.5416E-05	1.33089E-05	1.54114E-05
D_Al	Care & Maintenance	P95	0.004344471	0.0036	0.0027	0.017900245	0.042493697	0.037500001	0.026000001	0.014611999	0.007	0.011899999	0.020400001	0.008254056
D_As	Care & Maintenance	P95	0.000624879	0.000591476	0.000603301	0.000701134	0.000623016	0.00055747	0.000559085	0.000585163	0.000644546	0.000677088	0.000607588	0.000599979
D_B	Care & Maintenance	P95	0.01655139	0.018559279	0.013037095	0.025792764	0.019837255	0.010045859	0.008685377	0.00834719	0.010936946	0.019006686	0.015261869	0.012743501
D_Ba	Care & Maintenance	P95	0.0067628	0.006632242	0.006451379	0.00637068	0.006157419	0.005933938	0.005811963	0.006130499	0.006757646	0.006675364	0.006314517	0.006227267
D_Bi	Care & Maintenance	P95	2.64744E-05	2.65099E-05	2.63077E-05	2.81002E-05	2.73065E-05	2.64545E-05	2.57271E-05	2.58031E-05	2.6604E-05	2.76304E-05	2.73137E-05	2.66772E-05
D_Be	Care & Maintenance	P95	6.3249E-05	6.35589E-05	6.0803E-05	7.39212E-05	6.66743E-05	5.65771E-05	5.45729E-05	5.33688E-05	5.59653E-05	6.26292E-05	6.14263E-05	5.9675E-05
D_Ca	Care & Maintenance	P95	21.00523949	20.80495834	20.31296539	18.70999527	17.95901489	17.64636993	17.9602356	18.66645622	19.11582375	18.93744087	19.22501945	19.94417191
D_Cd	Care & Maintenance	P95	8.39499E-06	8.64697E-06	8.18729E-06	1.19404E-05	1.0779E-05	8.42792E-06	8.20359E-06	7.53521E-06	8.13419E-06	1.0237E-05	8.22722E-06	8.07944E-06
D_Co	Care & Maintenance	P95	0.000163244	0.000185352	0.0001273	0.000226115	0.000165549	9.58953E-05	8.10555E-05	9.65557E-05	0.000121285	0.000198499	0.000141194	0.000130779
D_Cr	Care & Maintenance	P95	0.000166849	0.000158461	0.000159646	0.000245517	0.000164014	0.000151067	0.000148347	0.000157576	0.000178867	0.000218812	0.000176849	0.00016564
D_Cu	Care & Maintenance	P95	0.00030066	0.000340538	0.000301403	0.000332592	0.000378923	0.0003535	0.000396199	0.000319151	0.000313607	0.000319526	0.000304895	0.000311085
D_Fe	Care & Maintenance	P95	0.053722601	0.054474697	0.058554042	0.056729056	0.05980609	0.059747048	0.058626991	0.060472999	0.067398503	0.067017138	0.06064586	0.056500293
D_Hg	Care & Maintenance	P95	5.17748E-06	5.37306E-06	4.70254E-06	8.13316E-06	6.38508E-06	4.84351E-06	3.99222E-06	3.89996E-06	4.6456E-06	6.34896E-06	5.58448E-06	4.85232E-06
D_K	Care & Maintenance	P95	1.511032104	1.476241589	1.299931169	2.151496887	1.523980618	1.232129812	1.077876925	1.373761058	1.459528327	1.977735162	1.616872072	1.453412056
D_Li	Care & Maintenance	P95	0.012166214	0.014018568	0.010251974	0.020844134	0.015127604	0.006705711	0.004809961	0.004491405	0.006930367	0.01474135	0.011322124	0.009277658
D_Mg	Care & Maintenance	P95	5.140673161	4.926102161	5.16720295	4.946846485	4.76705265	4.275311947	4.322623253	4.361092091	4.518723488	4.771719933	4.636289597	4.846980095
D_Mn	Care & Maintenance	P95	0.025023282	0.023800291	0.017410856	0.026110547	0.013715245	0.019186821	0.015875524	0.018733788	0.022360941	0.030862877	0.027076481	0.023535119
D_Mo	Care & Maintenance	P95	0.000670449	0.000724861	0.000693112	0.000815417	0.000701583	0.000526855	0.000542228	0.000576864	0.000663974	0.000669374	0.000583999	0.000583547
D_Na	Care & Maintenance	P95	6.136179447	6.148459435	5.622526169	8.891860962	7.072101116	4.874228954	4.273308277	4.268371582	5.218429565	6.995927811	6.100277424	5.609627247
D_Ni	Care & Maintenance	P95	0.000402747	0.000392611	0.000358678	0.000546104	0.000436107	0.000356487	0.000313407	0.000327483	0.000378484	0.000490449	0.000442843	0.000391621
D_P	Care & Maintenance	P95	0.059706859	0.056125898	0.051404737	0.059955381	0.048306245	0.035192505	0.057761837	0.103885405	0.068051443	0.143799037	0.150655389	0.06562376
D_Pb	Care & Maintenance	P95	0.000287067	0.000366549	0.000239923	0.00050518	0.000359577	0.000145756	0.000108082	0.000101919	0.000151501	0.000323419	0.00022956	0.000217901
D_S	Care & Maintenance	P95	1.180892348	1.372638345	1.366479039	1.26383388	1.132284641	1.10546577	1.19290638	1.163311481	1.139992833	1.255230308	1.209723592	1.315748811
D_Sb	Care & Maintenance	P95	0.000286564	0.000265795	0.000157062	0.000353118	0.000204051	0.000236499	0.000191275	0.000219434	0.000244267	0.00038371	0.000293434	0.000245795
D_Se	Care & Maintenance	P95	0.00012129	8.67143E-05	0.000121446	9.89018E-05	8.57179E-05	7.5504E-05	7.7152E-05	8.28352E-05	7.71935E-05	8.44262E-05	8.42271E-05	7.96457E-05
D_Si	Care & Maintenance	P95	5.121754646	5.154271126	5.002200127	5.077648163	4.793423653	4.380605221	4.156209946	4.216083527	4.418823242	4.641996384	5.176433563	5.02986908
D_Sn	Care & Maintenance	P95	5.07243E-05	5.06139E-05	5.03709E-05	5.06429E-05	5.21705E-05	5.03472E-05	5.05343E-05	5.01013E-05	5.02915E-05	5.05037E-05	5.23437E-05	5.04546E-05
D_Sr	Care & Maintenance	P95	0.104274489	0.104715586	0.104162082	0.094801046	0.095211811	0.088187113	0.088274248	0.092108957	0.097917922	0.094767131	0.094714127	0.100400783
D_Ti	Care & Maintenance	P95	0.001653086	0.001462938	0.001339279	0.001702864	0.001426874	0.001389189	0.001237768	0.003280627	0.001970995	0.004809963	0.005007593	0.001896794
D_Tl	Care & Maintenance	P95	5.38364E-05	5.63753E-05	4.59591E-05	0.000101482	7.30321E-05	3.79082E-05	2.38329E-05	2.50139E-05	3.79797E-05	6.86916E-05	5.3372E-05	5.03049E-05
D_U	Care & Maintenance	P95	0.000121692	0.000131495	0.000129343	0.000169705	0.000131494	0.000116489	0.000102719	0.000111155	0.000124667	0.000140748	0.000130742	0.000123449
D_V	Care & Maintenance	P95	0.002206088	0.002539414	0.001582578	0.003269765	0.002324783	0.001150716	0.000899531	0.001138534	0.001389827	0.002624612	0.001978162	0.001679379
D_Zn	Care & Maintenance	P95	0.001752255	0.001831102	0.001733375	0.002327996	0.002180028	0.001811699	0.001418126	0.001309049	0.001384045	0.001722829	0.001493698	0.00132252

Appendix B.6.10: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, Chedakuz Midway

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.021507962	0.021100249	0.021918016	0.045574695	0.029313728	0.014021276	0.010846792	0.013557335	0.014061892	0.019334864	0.013978579	0.012268275
NO3_N	Care & Maintenance	P95	0.261333376	0.259558022	0.236041367	0.554445028	0.390216827	0.147631377	0.103513762	0.095509797	0.139594078	0.336350411	0.240270987	0.221232787
NO2_N	Care & Maintenance	P95	0.002373896	0.003120777	0.001895313	0.004189675	0.003311394	0.001898923	0.001428607	0.001371122	0.001552054	0.002847044	0.001978813	0.002402914
Br	Care & Maintenance	P95	0.029745245	0.030978473	0.029888188	0.036502112	0.033108033	0.027738998	0.027008213	0.026377443	0.027723638	0.031590898	0.029279366	0.029509015
Cl	Care & Maintenance	P95	0.353456795	0.373697579	0.353570014	0.492287517	0.42420125	0.328648388	0.363282561	0.317472428	0.326166451	0.397111654	0.347118914	0.34531039
F	Care & Maintenance	P95	0.088732488	0.09507101	0.0908731	0.128346711	0.101453349	0.073683567	0.071095362	0.069510825	0.078790359	0.102783091	0.087431498	0.089768104
TDP	Care & Maintenance	P95	0.014933113	0.011811425	0.013873367	0.01718818	0.012201206	0.008677092	0.00817195	0.009767768	0.008250428	0.009027329	0.009973177	0.013018304
SO4	Care & Maintenance	P95	7.693038464	7.431307793	6.265099049	11.10967445	7.678497791	6.239541054	6.256128788	7.678686619	7.986371517	10.18301392	8.148028374	7.690324306
T_CN	Care & Maintenance	P95	0.002514251	0.002521084	0.0025106	0.002523021	0.002581416	0.002511275	0.002511353	0.002502598	0.002509034	0.002506771	0.00256654	0.002506875
WAD_CN	Care & Maintenance	P95	0.002514251	0.002521084	0.002509799	0.002522622	0.002581416	0.002511275	0.002511353	0.002502598	0.002509034	0.002506771	0.00256654	0.002506875
T_Ag	Care & Maintenance	P95	1.00531E-05	1.02712E-05	1.79172E-05	1.88174E-05	1.55516E-05	1.70312E-05	1.22524E-05	9.98854E-06	9.74839E-06	1.24766E-05	1.01168E-05	1.17627E-05
T_Al	Care & Maintenance	P95	0.045705829	0.026731078	0.038448013	0.05519424	0.091364421	0.086026721	0.07306955	0.054691583	0.044502895	0.046807524	0.047764037	0.034338783
T_As	Care & Maintenance	P95	0.000665984	0.000625593	0.000623719	0.000713773	0.000645455	0.00059719	0.000626002	0.000649813	0.000681298	0.000692285	0.000647878	0.000638178
T_B	Care & Maintenance	P95	0.011037338	0.01185832	0.009883638	0.021052076	0.016256709	0.008267027	0.007665505	0.007362246	0.008966361	0.014930872	0.010965765	0.010010397
T_Ba	Care & Maintenance	P95	0.007363692	0.006942994	0.007256471	0.007711845	0.006715771	0.00642819	0.006523149	0.006669511	0.00732233	0.007463875	0.007144515	0.006818419
T_Bi	Care & Maintenance	P95	2.60231E-05	2.59546E-05	2.57895E-05	2.74582E-05	2.67669E-05	2.59293E-05	2.55287E-05	2.55366E-05	2.59417E-05	2.67467E-05	2.63624E-05	2.60442E-05
T_Be	Care & Maintenance	P95	5.70788E-05	5.74499E-05	5.64579E-05	6.77055E-05	6.24008E-05	5.45843E-05	5.33071E-05	5.2115E-05	5.39173E-05	5.89854E-05	5.66151E-05	5.63195E-05
T_Ca	Care & Maintenance	P95	20.51475143	21.20222473	20.60029793	19.32393074	17.86540794	17.56533051	17.96432114	18.78557396	19.02866554	19.76087952	19.16875076	21.09130859
T_Cd	Care & Maintenance	P95	5.4359E-06	6.65318E-06	6.79194E-06	9.61326E-06	8.07886E-06	7.25259E-06	7.02418E-06	5.22961E-06	5.72314E-06	8.93083E-06	5.50817E-06	6.59997E-06
T_Co	Care & Maintenance	P95	0.000109369	0.000117992	9.61871E-05	0.000180502	0.000139165	8.26812E-05	7.27396E-05	8.38228E-05	9.61241E-05	0.000155583	0.000100906	9.95934E-05
T_Cr	Care & Maintenance	P95	0.00019625	0.000166367	0.000189599	0.000259435	0.000222497	0.000201013	0.000186998	0.000182265	0.000191257	0.000226206	0.000198235	0.000183989
T_Cu	Care & Maintenance	P95	0.000277936	0.000317261	0.000281275	0.000326319	0.000468906	0.000370267	0.000393488	0.000350831	0.000313997	0.000296407	0.000278815	0.000307028
T_Fe	Care & Maintenance	P95	0.136706561	0.117154717	0.141180545	0.15172334	0.130383164	0.112854779	0.104332685	0.120976515	0.140903175	0.158354998	0.15427351	0.103744872
T_Hg	Care & Maintenance	P95	4.04376E-06	4.07473E-06	3.91999E-06	6.60967E-06	5.50545E-06	4.19826E-06	3.62482E-06	3.52407E-06	3.94639E-06	5.18862E-06	4.3641E-06	4.31141E-06
T_K	Care & Maintenance	P95	1.253698945	1.170289993	1.193327665	1.876969337	1.384386182	1.070820093	1.012750268	1.152815461	1.259718895	1.644330859	1.231946349	1.225879312
T_Li	Care & Maintenance	P95	0.007000344	0.007332575	0.005779056	0.016247166	0.011291228	0.004441765	0.00362033	0.003551273	0.004866436	0.010616755	0.006485252	0.005934388
T_Mg	Care & Maintenance	P95	4.879423141	4.870842934	5.012013912	4.94756031	4.619368076	4.198348045	4.233136177	4.430317402	4.535784721	4.674247265	4.64807272	4.879335403
T_Mn	Care & Maintenance	P95	0.028749958	0.022852959	0.023345226	0.032996695	0.022395864	0.023672203	0.022266021	0.026992906	0.029113589	0.035889041	0.048392102	0.027793627
T_Mo	Care & Maintenance	P95	0.000660789	0.000681645	0.000686613	0.000822464	0.000669856	0.000537806	0.000560117	0.000623848	0.000673634	0.000690258	0.000589477	0.000618294
T_Na	Care & Maintenance	P95	5.150470734	5.008952141	4.98019886	7.669213295	6.150929928	4.176381111	3.999218702	4.069125175	4.61326313	5.903077126	4.981273174	4.988677025
T_Ni	Care & Maintenance	P95	0.000337539	0.000328904	0.000323079	0.000478494	0.000405787	0.000322461	0.000297129	0.000306344	0.000337652	0.000414202	0.000366237	0.000347449
T_P	Care & Maintenance	P95	0.028223347	0.027597724	0.030297812	0.030875091	0.025478818	0.022698347	0.019546172	0.017949561	0.018035622	0.019569119	0.028195623	0.027456047
T_Pb	Care & Maintenance	P95	0.000163677	0.000197364	0.00015597	0.000382017	0.000280819	0.000119779	8.89684E-05	8.02218E-05	0.000110167	0.00023123	0.000151245	0.000147537
T_S	Care & Maintenance	P95	1.311973453	1.398532987	1.235384941	1.530079842	1.167796373	1.113016605	1.131296396	1.186555505	1.092714071	1.402644396	1.17565906	1.339683771
T_Sb	Care & Maintenance	P95	0.000173707	0.000157005	0.000113728	0.000278407	0.000164806	0.00016081	0.000147202	0.000155563	0.000180024	0.00027183	0.000198322	0.000174858
T_Se	Care & Maintenance	P95	8.69646E-05	8.13857E-05	0.000104804	9.66573E-05	8.85253E-05	7.71641E-05	8.48032E-05	7.64428E-05	7.5016E-05	9.23261E-05	8.13141E-05	7.87262E-05
T_Si	Care & Maintenance	P95	5.204014778	5.138492584	5.130647659	5.224267483	4.967167377	4.408452034	4.339849949	4.250060558	4.429395676	4.826375484	5.207796097	5.12722683
T_Sn	Care & Maintenance	P95	5.04946E-05	5.04211E-05	5.02332E-05	5.04601E-05	5.16503E-05	5.0233E-05	5.04498E-05	5.00586E-05	5.01854E-05	5.03621E-05	5.13429E-05	5.02765E-05
T_Sr	Care & Maintenance	P95	0.104977459	0.104254141	0.103560522	0.095686376	0.093541063	0.0885612	0.087758906	0.093254671	0.099004038	0.095506981	0.097149618	0.103721425
T_Ti	Care & Maintenance	P95	0.004206253	0.002771379	0.003063084	0.003969429	0.003663477	0.002814049	0.003962327	0.003337926	0.003104493	0.004901802	0.005009613	0.003657963
T_Tl	Care & Maintenance	P95	3.0517E-05	3.26523E-05	3.07957E-05	7.94362E-05	5.6657E-05	3.17209E-05	1.87192E-05	1.97475E-05	2.66124E-05	5.01376E-05	3.38396E-05	3.51246E-05
T_U	Care & Maintenance	P95	0.000124162	0.000123642	0.000134431	0.000169993	0.000128187	0.0001149	0.000102516	0.000111703	0.000119643	0.000130718	0.000123185	0.000120994
T_V	Care & Maintenance	P95	0.001313743	0.001416918	0.0011222	0.00267571	0.001959981	0.000985967	0.000895497	0.000991128	0.001119346	0.001967425	0.001234138	0.001172416
T_Zn	Care & Maintenance	P95	0.001837237	0.001915906	0.001861207	0.002376362	0.002155237	0.002028553	0.001840587	0.001874281	0.001782843	0.001951498	0.001839158	0.001748474
D_Ag	Care & Maintenance	P95	9.84502E-06	1.01738E-05	1.13251E-05	1.88112E-05	1.44536E-05	1.63734E-05	1.09041E-05	9.331E-06	9.14912E-06	1.20345E-05	9.77849E-06	1.15152E-05
D_Al	Care & Maintenance	P95	0.00426767	0.003117808	0.002600139	0.016437648	0.04201214	0.036487825	0.026000001	0.013287527	0.007	0.011899999	0.018073831	0.007588965
D_As	Care & Maintenance	P95	0.000612795	0.000575398	0.000563293	0.000666707	0.000594437	0.000535888	0.000570152	0.000614307	0.000640702	0.000624722	0.000583755	0.00058666
D_B	Care & Maintenance	P95	0.011037338	0.01185832	0.009834956	0.021040184	0.016256709	0.007963284	0.007665505	0.007362246	0.008966361	0.014930872	0.010965765	0.010010397
D_Ba	Care & Maintenance	P95	0.006977677	0.006656659	0.00687588	0.006936039	0.006191511	0.005987631	0.006150082	0.006396567	0.007056447	0.007081946	0.006562826	0.006646296
D_Bi	Care & Maintenance	P95	2.60231E-05	2.59546E-05	2.57895E-05	2.74582E-05	2.67669E-05	2.59293E-05	2.55287E-05	2.55366E-05	2.59417E-05	2.67467E-05	2.63624E-05	2.60442E-05
D_Be	Care & Maintenance	P95	5.70788E-05	5.74499E-05	5.64579E-05	6.77055E-05	6.24008E-05	5.45843E-05	5.33071E-05	5.2115E-05	5.39173E-05	5.89854E-05	5.66151E-05	5.63195E-05
D_Ca	Care & Maintenance	P95	21.25357819	20.73304749	20.22574043	19.05335999	17.364645	17.34591293	17.88339043	18.69997787	19.25148773	18.90386963	18.70309067	19.47787476
D_Cd	Care & Maintenance	P95	5.67167E-06	5.7096E-06	5.98951E-06	9.62932E-06	8.69583E-06	7.40051E-06	7.21535E-06	6.24272E-06	6.17317E-06	7.73627E-06	5.87122E-06	6.09058E-06
D_Co	Care & Maintenance	P95	0.000109286	0.000117909	9.60864E-05	0.000179632	0.000137798	7.79674E-05	7.2464E-05	8.31109E-05	9.5576E-05	0.000155325	0.000100806	9.83897E-05
D_Cr	Care & Maintenance	P95	0.000160369	0.000118387	0.000121252	0.000203991	0.000155957	0.000144786	0.000134649	0.000137829	0.000141331	0.000195407	0.000150149	0.000127137
D_Cu	Care & Maintenance	P95	0.000283314	0.000323056	0.000280656	0.000312321	0.000397317	0.00032753	0.00036586	0.000303748	0.000291436	0.000296945	0.00028261	0.00031629
D_Fe	Care & Maintenance	P95	0.060292732	0.0631129	0.057299163	0.073587023	0.0652356	0.060216192	0.065841809	0.076816604	0.089143656	0.081474513	0.073450282	0.068735756
D_Hg	Care & Maintenance	P95	4.04174E-06	4.07411E-06	3.91594E-06	6.60607E-06	5.45097E-06	4.16684E-06	3.58024E-06	3.43515E-06	3.8898E-06	5.12605E-06	4.35842E-06	4.31676E-06
D_K	Care & Maintenance	P95	1.249083042	1.164378524	1.139029384	1.849920869	1.372683167	1.040294528	0.976948202	1.128602028	1.235155821	1.616962314	1.254863977	1.221045971
D_Li	Care & Maintenance	P95	0.007000344	0.007332575	0.005779056	0.016247166	0.011291228	0.004441765	0.00362033	0.003551273	0.004866436	0.010616755	0.006485252	0.005934388
D_Mg	Care & Maintenance	P95	5.035912991	4.858396053	5.080216408	4.901119709	4.588365555	4.077970505	4.258216381	4.320453644	4.462270737	4.597088337	4.436811924	4.722137451
D_Mn	Care & Maintenance	P95	0.022692366	0.019743219	0.01655617	0.027777329	0.012684454	0.016075356	0.015529928	0.020208731	0.023821648	0.029449193	0.026975133	0.022782473
D_Mo	Care & Maintenance	P95	0.000614572	0.000640342	0.000647472	0.000784593	0.000637812	0.00050986	0.00055026	0.000587735	0.000659389	0.00064348	0.000561452	0.000575741
D_Na	Care & Maintenance	P95	5.147144794	5.006401539	4.958388805	7.590041637	6.137187958	4.153766632	3.995857716	4.03796339	4.537327766	5.795606613	4.937911034	4.912878513
D_Ni	Care & Maintenance	P95	0.00033751	0.000328855	0.000320929	0.000476096	0.000401671	0.000319823	0.000296222	0.00030626	0.000337299	0.000413929	0.000366189	0.000344299
D_P	Care & Maintenance	P95	0.050126374	0.070393793	0.064994052	0.068057224	0.045293003	0.029578187	0.075526327	0.099716112	0.07603588	0.145251006	0.150191545	0.071766287
D_Pb	Care & Maintenance	P95	0.000162351	0.000196362	0.00015388	0.000378445	0.000271084	0.000111459	8.5081E-05	7.72859E-05	0.000107334	0.000227096	0.000147947	0.000145554
D_S	Care & Maintenance	P95	1.172545314	1.347773194	1.460610032	1.315491676	1.115990758	1.094244838	1.182671905	1.106954694	1.151204348	1.28826046	1.173162341	1.297317386
D_Sb	Care & Maintenance	P95	0.000173701	0.000156988	0.000113646	0.000278873	0.000164706	0.000159036	0.000147176	0.000155535	0.00018001	0.000271816	0.000198307	0.000174847
D_Se	Care & Maintenance	P95	0.000112264	7.48983E-05	9.869E-05	9.11288E-05	7.76333E-05	7.40826E-05	7.39929E-05	7.85038E-05	7.13238E-05	7.75768E-05	7.77307E-05	7.54573E-05
D_Si	Care & Maintenance	P95	5.078258038	4.910970688	4.920312881	4.974493027	4.671576023	4.206035137	4.092122555	4.127922535	4.302783489	4.5723176	5.07654047	4.996599674
D_Sn	Care & Maintenance	P95	5.04946E-05	5.04211E-05	5.02332E-05	5.04601E-05	5.16503E-05	5.0233E-05	5.04498E-05	5.00586E-05	5.01854E-05	5.03621E-05	5.13429E-05	5.02765E-05
D_Sr	Care & Maintenance	P95	0.106209174	0.104348406	0.10500367	0.095883548	0.092871204	0.085930131	0.088026814	0.092421345	0.098298132	0.094185919	0.09422373	0.099677756
D_Ti	Care & Maintenance	P95	0.001286665	0.001970304	0.001782086	0.001968949	0.001380891	0.001204102	0.00171338	0.003119214	0.002268182	0.004854097	0.00499821	0.002081503
D_Tl	Care & Maintenance	P95	3.0517E-05	3.26523E-05	3.07957E-05	7.94362E-05	5.66122E-05	3.17179E-05	1.87192E-05	1.97475E-05	2.66124E-05	5.01376E-05	3.38396E-05	3.51246E-05
D_U	Care & Maintenance	P95	0.000116818	0.000117305	0.000127458	0.000159719	0.000120759	0.000106038	9.93302E-05	0.000107234	0.000114297	0.00012623	0.000114236	0.000112681
D_V	Care & Maintenance	P95	0.001273522	0.001407682	0.001052373	0.002551681	0.001821449	0.000853674	0.000719929	0.000885554	0.00098378	0.001939053	0.001204	0.001146034
D_Zn	Care & Maintenance	P95	0.001479109	0.001416752	0.001266865	0.001933705	0.001959036	0.001574454	0.001214483	0.001157344	0.001064418	0.001328558	0.001106734	0.001022019

Appendix B.6.11: Tables, Predicted Water Quality Concentrations, Variable Climate Case (VCC) with Base Case Source Terms, C&M Scenario 3

Receiving Stream Nodes, Chedakuz Outlet

			Concentration (mg/L)											
Parameter	**Phase**	**Metric**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
NH3_N	Care & Maintenance	P95	0.01967462	0.01899812	0.019602863	0.041979436	0.026643762	0.01338328	0.010551909	0.013080016	0.013041955	0.017672893	0.013247533	0.011353504
NO3_N	Care & Maintenance	P95	0.226719275	0.223599836	0.208546042	0.510289788	0.356078267	0.127957091	0.090311348	0.084052593	0.119330309	0.290696561	0.202903673	0.195019335
NO2_N	Care & Maintenance	P95	0.00217005	0.002888678	0.001674665	0.003925786	0.003018595	0.001776621	0.001307197	0.001270164	0.001425489	0.002649293	0.001713236	0.002247165
Br	Care & Maintenance	P95	0.028944211	0.029710967	0.029028341	0.035295211	0.032044739	0.027413024	0.02674518	0.026230229	0.027303945	0.030566698	0.02848031	0.028738368
Cl	Care & Maintenance	P95	0.335251004	0.347318888	0.335196882	0.466889471	0.40042606	0.319592893	0.356475353	0.309656531	0.315589309	0.377110124	0.329487205	0.329316586
F	Care & Maintenance	P95	0.083338298	0.087532677	0.085942432	0.120903432	0.095484398	0.070675172	0.06905432	0.067131631	0.075824112	0.096170388	0.082488179	0.084772632
TDP	Care & Maintenance	P95	0.014595481	0.011573968	0.01299124	0.017000889	0.011924461	0.008376716	0.007837818	0.009722505	0.008211584	0.008702383	0.009564267	0.012331649
SO4	Care & Maintenance	P95	7.016185284	6.713475227	5.943440437	10.33710861	7.238075256	5.675783157	6.030566216	6.983190536	7.3040061	9.255859375	7.252219677	7.048385143
T_CN	Care & Maintenance	P95	0.002512109	0.002518006	0.002508813	0.002520004	0.00257116	0.002509563	0.002510149	0.002502091	0.00250754	0.002505962	0.002553999	0.002505778
WAD_CN	Care & Maintenance	P95	0.002512109	0.002518006	0.002508143	0.002519683	0.00257116	0.002509563	0.002510149	0.00250209	0.00250754	0.002505962	0.002553999	0.002505778
T_Ag	Care & Maintenance	P95	9.21911E-06	9.16339E-06	1.66151E-05	1.79171E-05	1.44786E-05	1.67137E-05	1.17357E-05	9.33608E-06	9.05563E-06	1.13544E-05	9.15814E-06	1.07013E-05
T_Al	Care & Maintenance	P95	0.047527518	0.025373885	0.036931526	0.056846753	0.09904673	0.084116079	0.06880004	0.05157987	0.041835088	0.044212252	0.04643837	0.032677256
T_As	Care & Maintenance	P95	0.000661412	0.000622876	0.000618652	0.000704712	0.000636809	0.00059368	0.000631578	0.000652285	0.000681058	0.000686908	0.000639306	0.000633851
T_B	Care & Maintenance	P95	0.009910624	0.010404402	0.009020435	0.019277833	0.014951313	0.007596132	0.007316396	0.007095482	0.008392273	0.013573082	0.009856099	0.009238338
T_Ba	Care & Maintenance	P95	0.007460248	0.006926948	0.007317596	0.007985313	0.006771959	0.00647212	0.006638164	0.006774412	0.007413618	0.007577143	0.007265594	0.00692536
T_Bi	Care & Maintenance	P95	2.58769E-05	2.57927E-05	2.56616E-05	2.71817E-05	2.66106E-05	2.57727E-05	2.54604E-05	2.54521E-05	2.57685E-05	2.64767E-05	2.61131E-05	2.58735E-05
T_Be	Care & Maintenance	P95	5.58342E-05	5.6112E-05	5.52886E-05	6.57397E-05	6.0958E-05	5.40021E-05	5.28739E-05	5.18419E-05	5.33353E-05	5.77659E-05	5.53833E-05	5.53745E-05
T_Ca	Care & Maintenance	P95	20.55253792	21.11652946	20.57730293	19.36336327	17.66426849	17.4737606	17.97655296	18.75590134	19.05475807	19.70133781	19.07353973	20.94669724
T_Cd	Care & Maintenance	P95	4.90937E-06	6.1892E-06	6.28011E-06	8.69851E-06	7.56651E-06	7.04849E-06	6.83512E-06	4.94956E-06	5.22907E-06	8.64067E-06	4.97268E-06	6.27813E-06
T_Co	Care & Maintenance	P95	9.71775E-05	0.000103484	8.81027E-05	0.000164126	0.000128792	7.76972E-05	7.03826E-05	8.04259E-05	8.85956E-05	0.000141118	9.13951E-05	9.11196E-05
T_Cr	Care & Maintenance	P95	0.000189765	0.00015599	0.000180651	0.000250318	0.000221057	0.000197334	0.000182933	0.000175773	0.000182848	0.000214207	0.000189711	0.000174882
T_Cu	Care & Maintenance	P95	0.000274016	0.000318914	0.000276522	0.000321977	0.000490775	0.000371729	0.000398444	0.000361837	0.00031583	0.000289949	0.000273962	0.000310197
T_Fe	Care & Maintenance	P95	0.14539668	0.120745532	0.145853043	0.166496858	0.1383297	0.11451266	0.106993608	0.127354696	0.148948833	0.172559306	0.163884804	0.107778594
T_Hg	Care & Maintenance	P95	3.77362E-06	3.7933E-06	3.68493E-06	6.16656E-06	5.21066E-06	3.99681E-06	3.50295E-06	3.41752E-06	3.73093E-06	4.79237E-06	4.03227E-06	4.14792E-06
T_K	Care & Maintenance	P95	1.196418047	1.112489223	1.155870438	1.797882915	1.32648921	1.006607652	0.981938541	1.086656451	1.190631032	1.522575021	1.140247703	1.160171866
T_Li	Care & Maintenance	P95	0.00581185	0.005870836	0.004891499	0.014783909	0.009967159	0.003903198	0.00321257	0.003238368	0.004218656	0.009239196	0.005413865	0.005103586
T_Mg	Care & Maintenance	P95	4.856385708	4.838226318	4.992387295	4.908300877	4.550546646	4.158728123	4.216157436	4.418988228	4.522058487	4.624279976	4.620919228	4.839508057
T_Mn	Care & Maintenance	P95	0.028784055	0.022012647	0.023448976	0.033651415	0.022172803	0.022902487	0.022134762	0.027709767	0.029574847	0.035991319	0.047298227	0.027315246
T_Mo	Care & Maintenance	P95	0.000651581	0.000664692	0.000676776	0.000809994	0.000647777	0.000534438	0.00056457	0.000628733	0.000673788	0.000686051	0.000582171	0.000614845
T_Na	Care & Maintenance	P95	4.951499939	4.739583492	4.779876709	7.24499321	5.852230072	4.035215378	3.902908564	3.993108034	4.448012829	5.527606487	4.668043613	4.770165443
T_Ni	Care & Maintenance	P95	0.00032149	0.000314629	0.000310069	0.000455358	0.000391707	0.00031107	0.000291076	0.000300481	0.000324666	0.000389983	0.000345105	0.000332442
T_P	Care & Maintenance	P95	0.027984785	0.027393803	0.029610096	0.030880844	0.025244588	0.022391234	0.018990949	0.01755596	0.017780254	0.019356005	0.027783236	0.02713152
T_Pb	Care & Maintenance	P95	0.000137222	0.000160585	0.000133096	0.000337217	0.0002524	0.00010855	8.05945E-05	7.3655E-05	9.69176E-05	0.000200454	0.000127687	0.000126571
T_S	Care & Maintenance	P95	1.316011429	1.420077562	1.233516335	1.520836592	1.152908325	1.113336802	1.127577424	1.174767733	1.089967251	1.423329353	1.190007687	1.341329932
T_Sb	Care & Maintenance	P95	0.000147377	0.00013451	0.000103759	0.000250887	0.000150791	0.000140562	0.000136245	0.000137063	0.000160292	0.000237593	0.000172292	0.000155779
T_Se	Care & Maintenance	P95	8.5956E-05	7.95002E-05	9.90774E-05	9.45553E-05	8.71114E-05	7.5915E-05	8.55253E-05	7.56845E-05	7.46244E-05	9.27766E-05	7.87865E-05	7.61442E-05
T_Si	Care & Maintenance	P95	5.202217579	5.100874901	5.123996258	5.212937355	4.919456482	4.364748478	4.322150707	4.218197346	4.391314507	4.833411694	5.193309307	5.1292243
T_Sn	Care & Maintenance	P95	5.04218E-05	5.03596E-05	5.0194E-05	5.03998E-05	5.1433E-05	5.01976E-05	5.04164E-05	5.00472E-05	5.01548E-05	5.03157E-05	5.10898E-05	5.02282E-05
T_Sr	Care & Maintenance	P95	0.105289884	0.104147561	0.103536375	0.095614478	0.092604972	0.08806482	0.087755419	0.093525469	0.099203974	0.095391832	0.096982315	0.103506289
T_Ti	Care & Maintenance	P95	0.004386211	0.002831885	0.003152808	0.004134816	0.00382805	0.002820015	0.003966528	0.003291108	0.003128026	0.004913941	0.005006315	0.003577495
T_Tl	Care & Maintenance	P95	2.57507E-05	2.80696E-05	2.67318E-05	7.03827E-05	5.06659E-05	2.92356E-05	1.70526E-05	1.81917E-05	2.34754E-05	4.39603E-05	2.92143E-05	3.04746E-05
T_U	Care & Maintenance	P95	0.000123405	0.000119928	0.000133327	0.000166035	0.000124877	0.000112285	0.000101065	0.000110057	0.000116295	0.000125949	0.0001186	0.00011828
T_V	Care & Maintenance	P95	0.001110746	0.001169479	0.00097008	0.002458423	0.001803431	0.000914298	0.000854855	0.000918535	0.00100871	0.001734208	0.001049903	0.001019007
T_Zn	Care & Maintenance	P95	0.001781257	0.001852609	0.001801619	0.002285025	0.002088062	0.001968553	0.001808023	0.001889706	0.001736491	0.001889484	0.001779649	0.001707495
D_Ag	Care & Maintenance	P95	9.01929E-06	9.06963E-06	1.03317E-05	1.79113E-05	1.36508E-05	1.61613E-05	1.06948E-05	8.72285E-06	8.55033E-06	1.10085E-05	8.8831E-06	1.04569E-05
D_Al	Care & Maintenance	P95	0.004238685	0.002923415	0.002490746	0.015770635	0.041850094	0.035494879	0.024836369	0.012732409	0.007	0.011899999	0.017103558	0.007324165
D_As	Care & Maintenance	P95	0.000608622	0.000570187	0.000550791	0.000654729	0.00058395	0.00052984	0.000574117	0.000622792	0.000639676	0.000611418	0.000576724	0.000582566
D_B	Care & Maintenance	P95	0.009910624	0.010404402	0.008980473	0.01926722	0.014951313	0.007258675	0.007316396	0.007095482	0.008392273	0.013573082	0.009856098	0.009238338
D_Ba	Care & Maintenance	P95	0.007032411	0.006661011	0.006975435	0.007118776	0.006201896	0.00600336	0.006269439	0.006461181	0.007144917	0.007202552	0.006629507	0.006767614
D_Bi	Care & Maintenance	P95	2.58769E-05	2.57927E-05	2.56616E-05	2.71817E-05	2.66106E-05	2.57727E-05	2.54604E-05	2.54521E-05	2.57685E-05	2.64767E-05	2.61131E-05	2.58735E-05
D_Be	Care & Maintenance	P95	5.58342E-05	5.6112E-05	5.52886E-05	6.57397E-05	6.0958E-05	5.40021E-05	5.28739E-05	5.18419E-05	5.33353E-05	5.77659E-05	5.53833E-05	5.53745E-05
D_Ca	Care & Maintenance	P95	21.33775139	20.70952225	20.20619583	19.23243523	17.19878578	17.25281906	17.85277557	18.7114296	19.28985214	18.89056396	18.5621891	19.32452583
D_Cd	Care & Maintenance	P95	5.19109E-06	5.2412E-06	5.51605E-06	8.79322E-06	7.97613E-06	7.16261E-06	6.98216E-06	5.71918E-06	5.61116E-06	7.02234E-06	5.30809E-06	5.53386E-06
D_Co	Care & Maintenance	P95	9.71114E-05	0.000103418	8.80192E-05	0.000163365	0.000127582	7.24315E-05	7.00233E-05	7.97787E-05	8.8136E-05	0.000140895	9.13142E-05	9.01214E-05
D_Cr	Care & Maintenance	P95	0.00015861	0.000108941	0.000110241	0.000191072	0.000153024	0.000143365	0.000131013	0.00013075	0.000131017	0.000188256	0.000142993	0.000115293
D_Cu	Care & Maintenance	P95	0.000278591	0.000319045	0.000277139	0.000305536	0.000402523	0.000318681	0.000358867	0.000299031	0.000285897	0.000290407	0.000277441	0.000317753
D_Fe	Care & Maintenance	P95	0.061590254	0.064781629	0.056970477	0.079184592	0.067414239	0.060349505	0.067974061	0.082207471	0.094696589	0.085580721	0.076583065	0.072253466
D_Hg	Care & Maintenance	P95	3.76755E-06	3.79234E-06	3.68367E-06	6.16303E-06	5.16144E-06	3.96305E-06	3.4633E-06	3.33648E-06	3.68293E-06	4.73923E-06	4.0276E-06	4.15244E-06
D_K	Care & Maintenance	P95	1.195002437	1.107424617	1.085356355	1.766396165	1.31609273	0.976269603	0.949617445	1.06441009	1.164891958	1.500104904	1.16698885	1.154678106
D_Li	Care & Maintenance	P95	0.00581185	0.005870836	0.004891499	0.014783909	0.009967159	0.003903198	0.00321257	0.003238368	0.004218656	0.009239196	0.005413865	0.005103586
D_Mg	Care & Maintenance	P95	5.00599432	4.836464882	5.054444313	4.879360199	4.518680096	4.029689312	4.236603737	4.30867672	4.445067406	4.534034729	4.387009144	4.684678078
D_Mn	Care & Maintenance	P95	0.02216268	0.018883144	0.016349707	0.028329585	0.012318888	0.015283662	0.015415207	0.020868137	0.024247052	0.029020486	0.026945908	0.022568241
D_Mo	Care & Maintenance	P95	0.000604275	0.000625103	0.000636805	0.000772138	0.000618666	0.000505329	0.000553231	0.000590564	0.000658001	0.000634936	0.000555627	0.000573519
D_Na	Care & Maintenance	P95	4.934152126	4.745998383	4.764714718	7.138408661	5.844194889	3.998545885	3.899966717	3.954848766	4.361149311	5.421329498	4.632746696	4.699108601
D_Ni	Care & Maintenance	P95	0.000321466	0.000314589	0.000308382	0.000453569	0.000387983	0.00030906	0.000290281	0.000300406	0.000324362	0.000389749	0.000345073	0.000329777
D_P	Care & Maintenance	P95	0.047407757	0.074454509	0.068860285	0.070998192	0.043961536	0.027787447	0.081198692	0.098249957	0.078315876	0.145785347	0.150094196	0.073848061
D_Pb	Care & Maintenance	P95	0.000135595	0.000159796	0.000131354	0.000334094	0.000242452	0.00010121	7.72092E-05	7.16496E-05	9.45398E-05	0.000197561	0.000125267	0.000124923
D_S	Care & Maintenance	P95	1.169679403	1.339431882	1.486627698	1.333932638	1.108887196	1.089755893	1.178295016	1.088286161	1.156757474	1.298083901	1.158850074	1.291621447
D_Sb	Care & Maintenance	P95	0.000147372	0.000134462	0.00010369	0.0002513	0.000150704	0.000138365	0.000136222	0.00013704	0.00016028	0.000237581	0.00017228	0.000155771
D_Se	Care & Maintenance	P95	0.000109405	7.17586E-05	9.3224E-05	8.90797E-05	7.55452E-05	7.37113E-05	7.28174E-05	7.71483E-05	6.96732E-05	7.567E-05	7.5862E-05	7.44828E-05
D_Si	Care & Maintenance	P95	5.064819336	4.864665985	4.903993607	4.938798904	4.629894733	4.157044888	4.071835518	4.10390377	4.271388054	4.550770283	5.051029682	4.986540318
D_Sn	Care & Maintenance	P95	5.04218E-05	5.03596E-05	5.0194E-05	5.03998E-05	5.1433E-05	5.01976E-05	5.04164E-05	5.00472E-05	5.01548E-05	5.03157E-05	5.10898E-05	5.02282E-05
D_Sr	Care & Maintenance	P95	0.106798105	0.104228526	0.105277926	0.096219838	0.092071705	0.085375838	0.087933265	0.092526414	0.098440461	0.093968928	0.094086118	0.099477157
D_Ti	Care & Maintenance	P95	0.001191767	0.002109212	0.001933912	0.002081365	0.001367302	0.001147773	0.001874251	0.00306459	0.002344181	0.004870393	0.004996654	0.002146391
D_Tl	Care & Maintenance	P95	2.57507E-05	2.80696E-05	2.67318E-05	7.03827E-05	5.06262E-05	2.9233E-05	1.70526E-05	1.81917E-05	2.34754E-05	4.39603E-05	2.92143E-05	3.04746E-05
D_U	Care & Maintenance	P95	0.000115601	0.000114032	0.000126871	0.000154893	0.000117607	0.000103232	9.81476E-05	0.00010614	0.000111248	0.00012168	0.000109654	0.000109566
D_V	Care & Maintenance	P95	0.001072251	0.001162208	0.000912217	0.002311025	0.001639224	0.000770328	0.000658425	0.000790901	0.000870841	0.001709691	0.001025402	0.000996794
D_Zn	Care & Maintenance	P95	0.001421968	0.001327786	0.001190127	0.001853797	0.001899651	0.001502003	0.001153705	0.001116166	0.000978005	0.001201856	0.00101727	0.000947081

Appendix C: Water Quality Plots

APPENDIX C.1: CARE AND MAINTENANCE SCENARIO 1

APPENDIX C.2: CARE AND MAINTENANCE SCENARIO 2

APPENDIX C.3: CARE AND MAINTENANCE SCENARIO 3

Appendix C.1: Care and Maintenance Scenario 1

C.1.1 Scenario 1 TSF C Pond

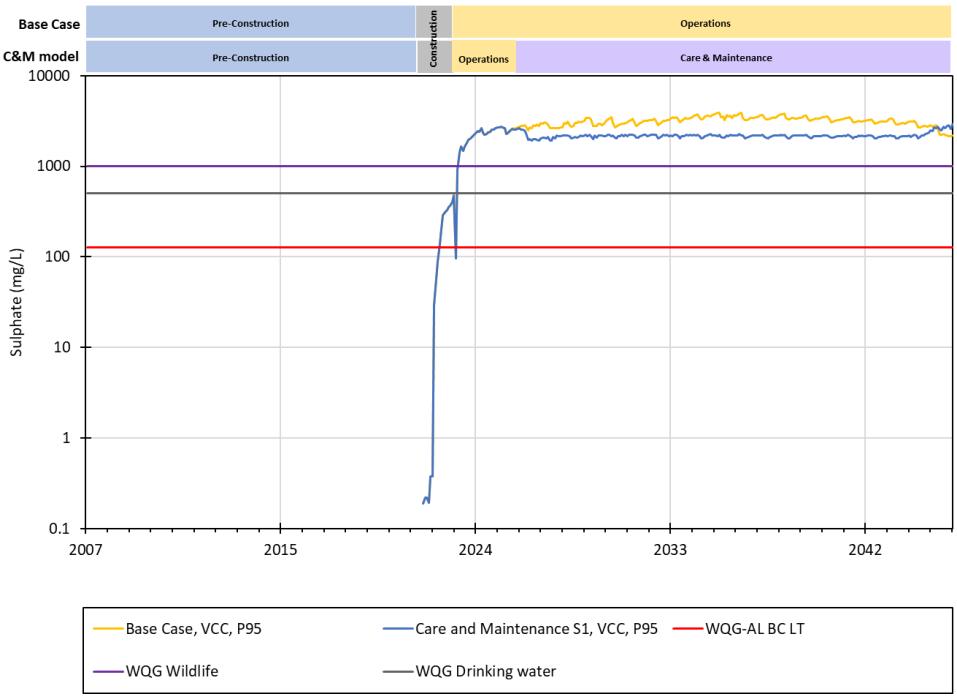


Figure C.1.1-1: Scenario 1 TSF C Pond Predicted Concentrations, Sulphate.

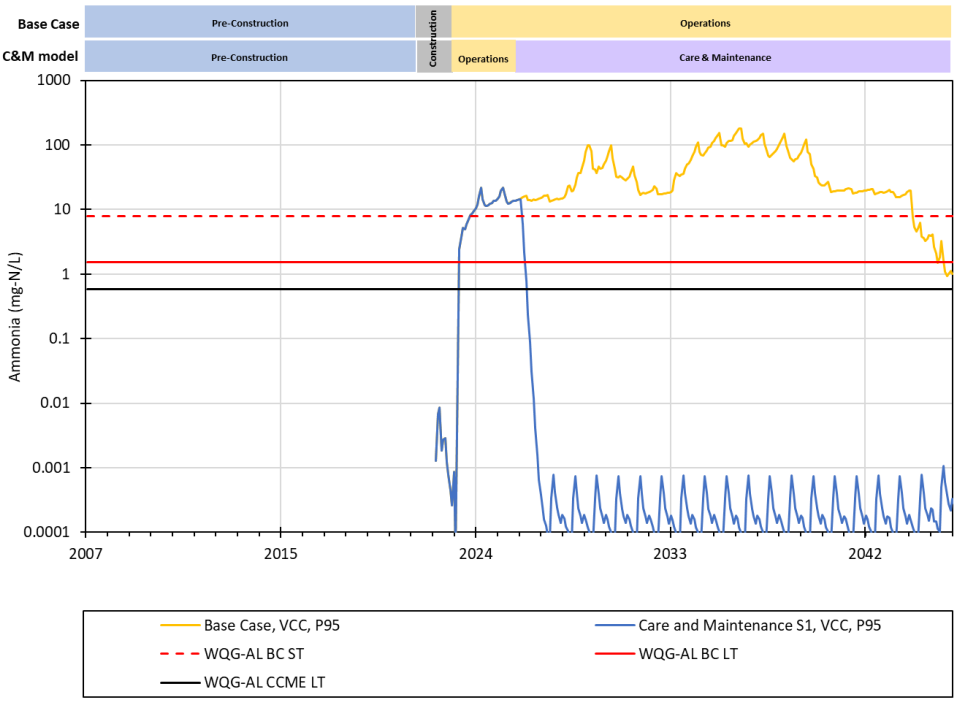


Figure C.1.1-2: Scenario 1 TSF C Pond Predicted Concentrations, NH_4

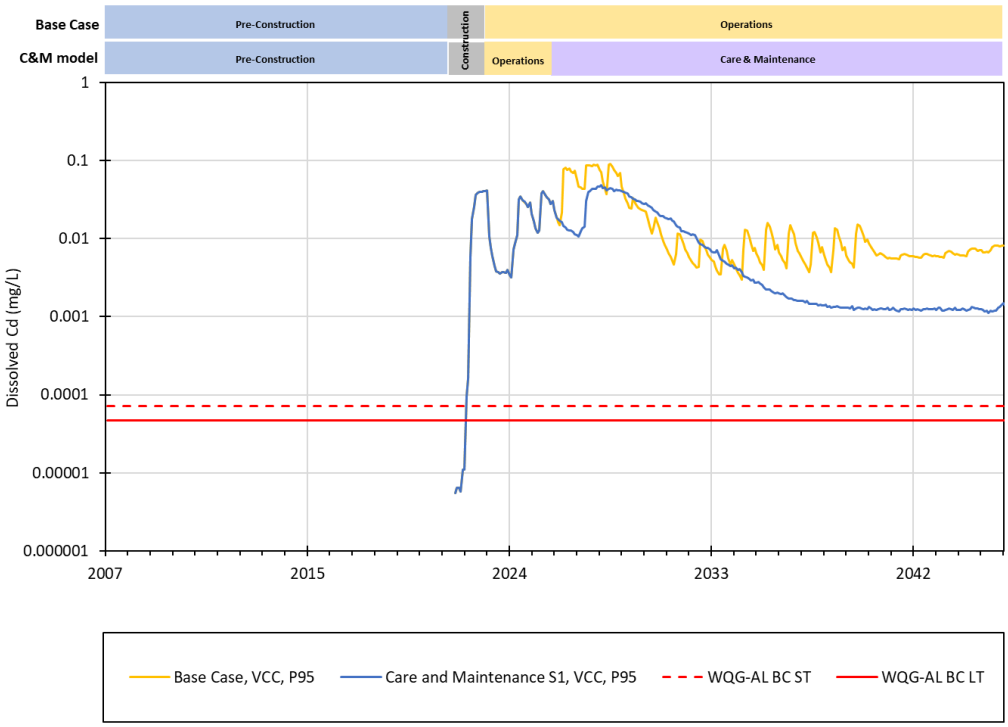


Figure C.1.1-3: Scenario 1 TSF C Pond Predicted Concentrations, D-Cd

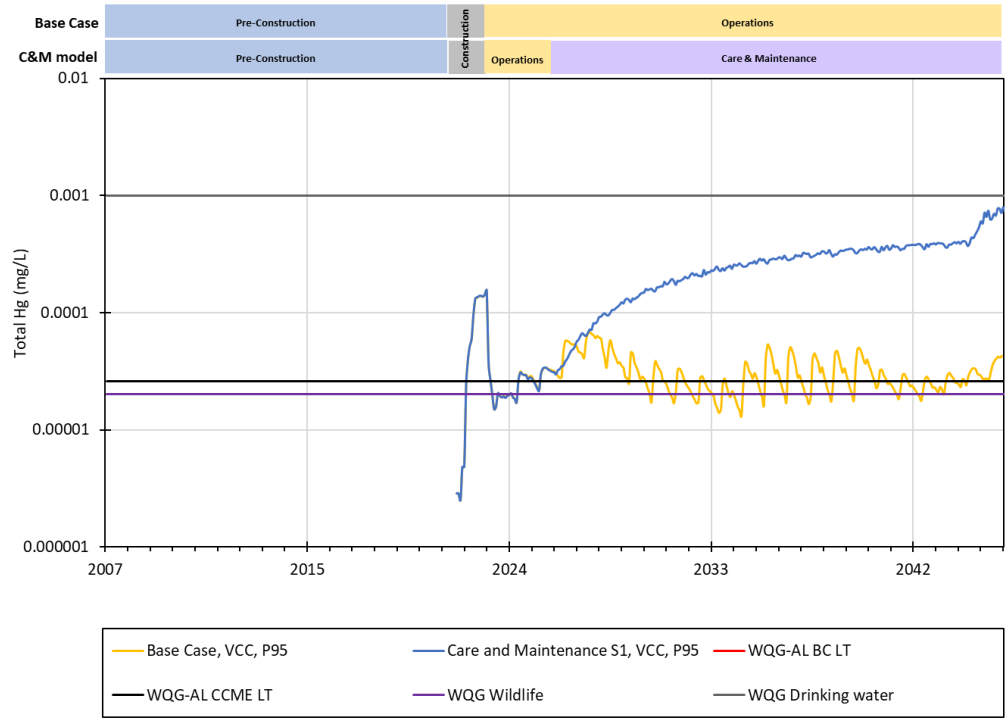


Figure C.1.1-4: Scenario 1 TSF C Pond Predicted Concentrations, T-Hg

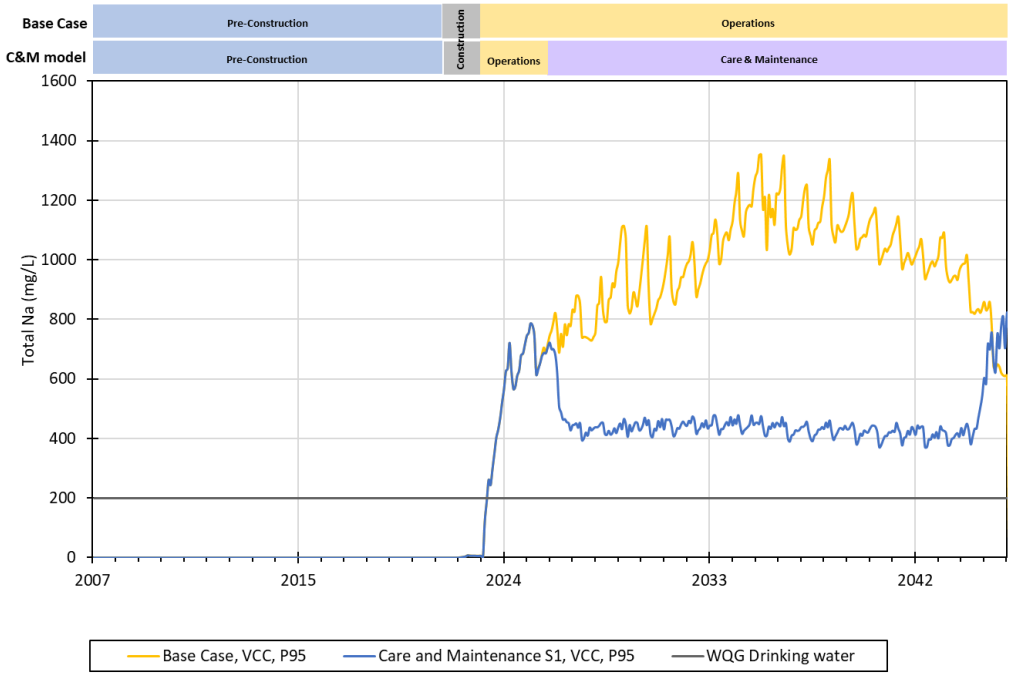


Figure C.1.1-5: Scenario 1 TSF C Pond Predicted Concentrations, T-Na

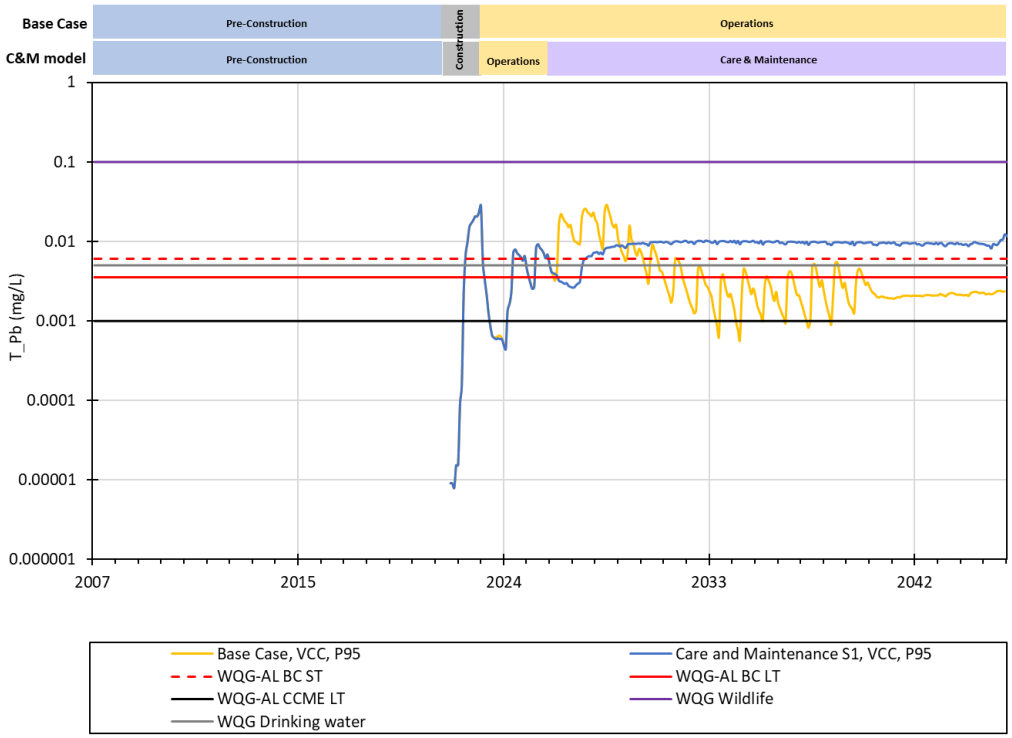


Figure C.1.1-6: Scenario 1 TSF C Pond Predicted Concentrations, T-Pb



Figure C.1.1-7: Scenario 1 TSF C Pond Predicted Concentrations, T-Sb

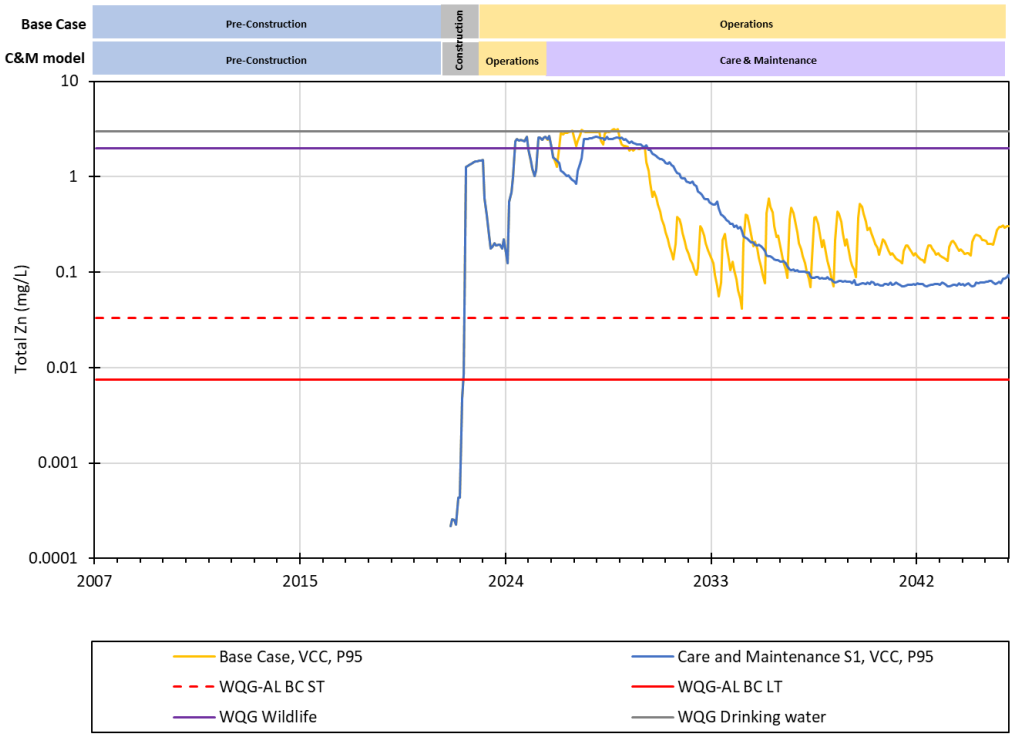


Figure C.1.1-8: Scenario 1 TSF C Pond Predicted Concentrations, T-Zn

C.1.2 Scenario 1 Pit Sump

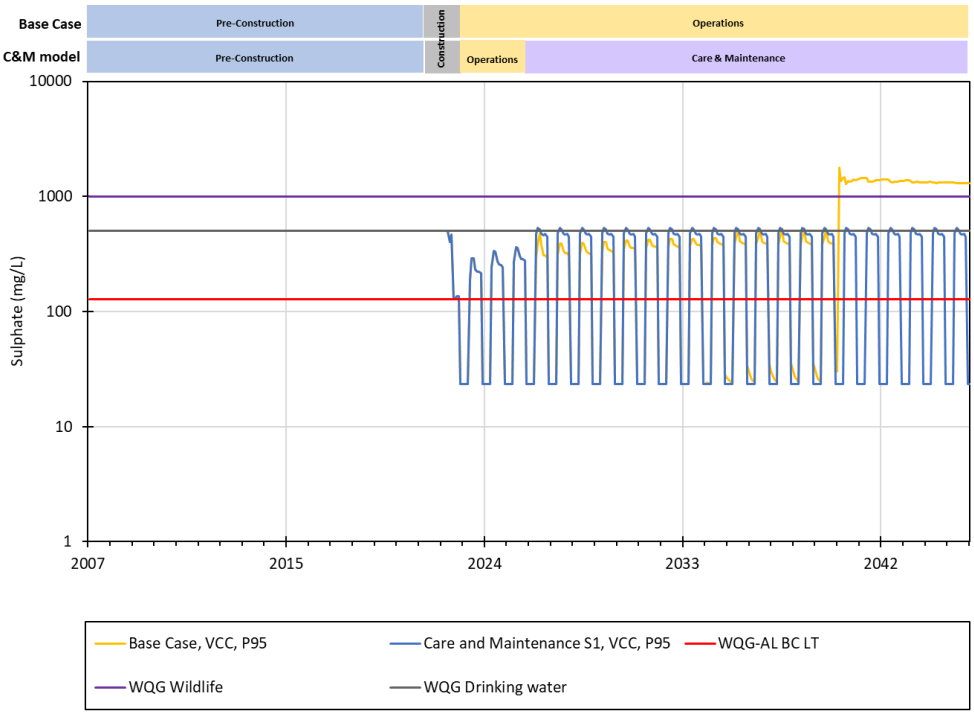


Figure C.1.2-1: Scenario 1 Pit Sump Predicted Concentrations, Sulphate.

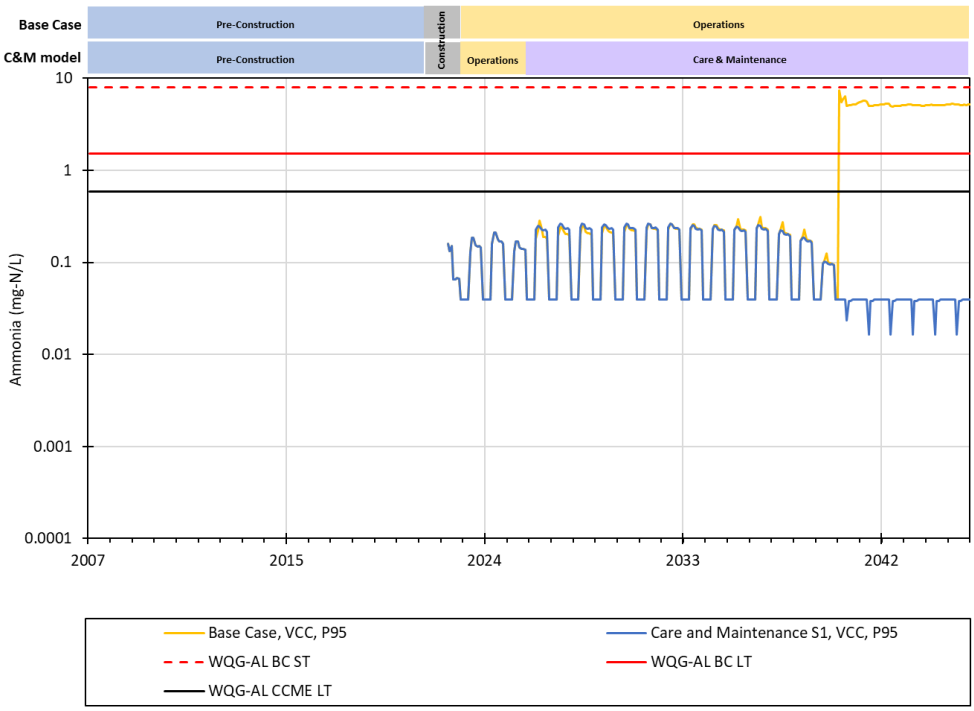


Figure C.1.2-2: Scenario 1 Pit Sump Predicted Concentrations, NH_4

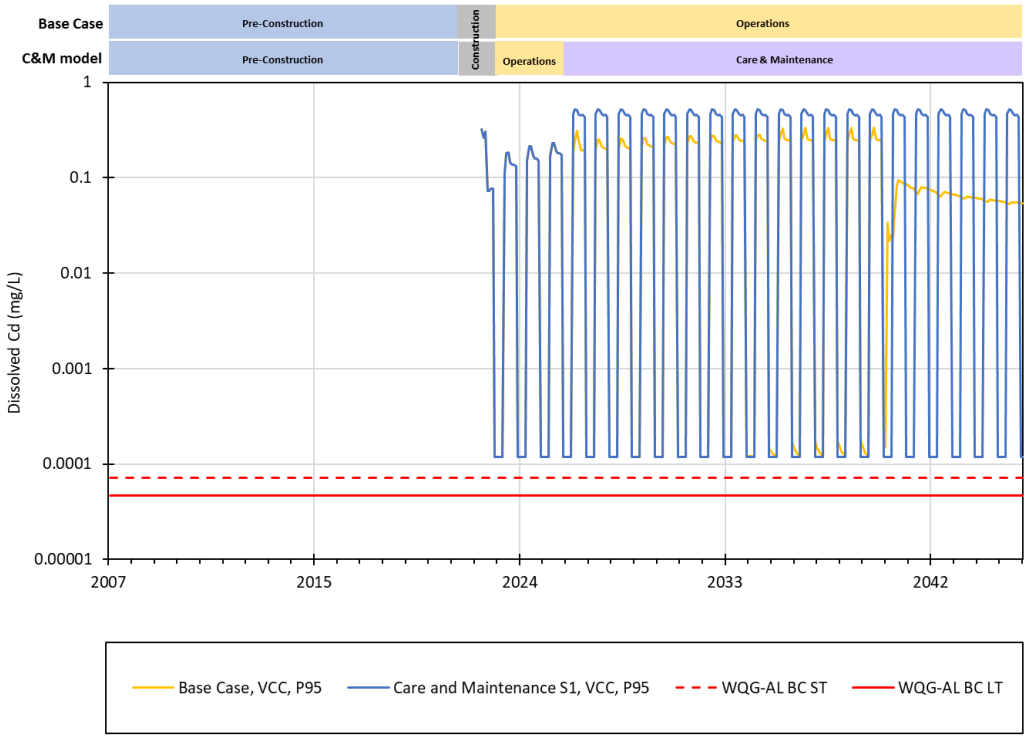


Figure C.1.2-3: Scenario 1 Pit Sump Predicted Concentrations, D-Cd

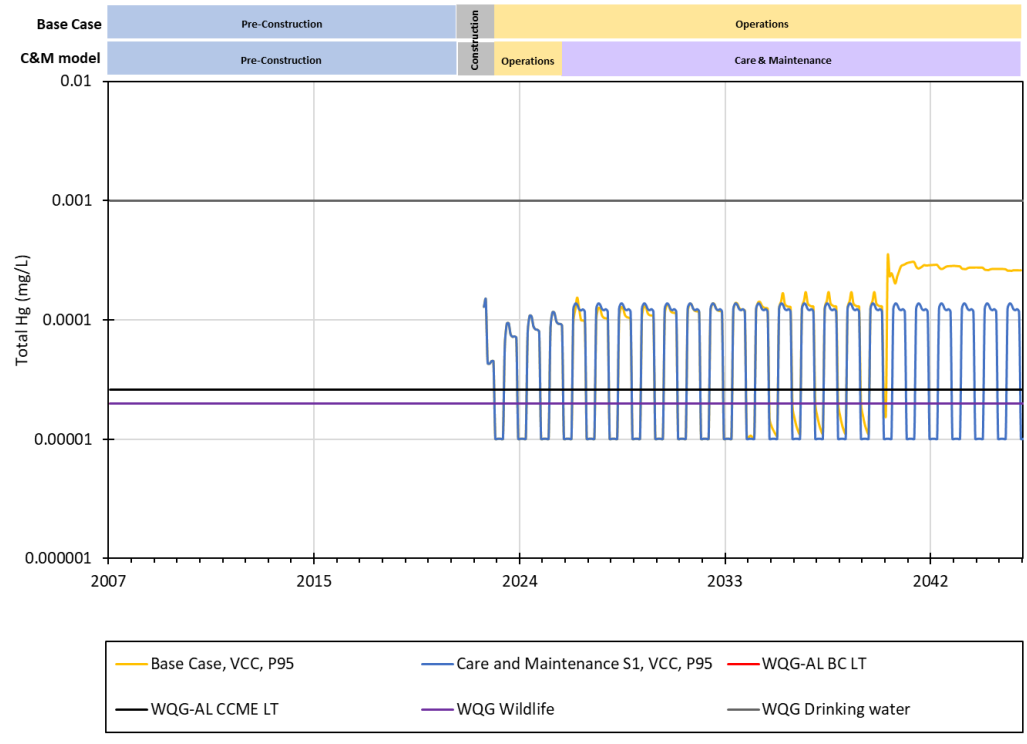


Figure C.1.2-4: Scenario 1 Pit Sump Predicted Concentrations, T-Hg

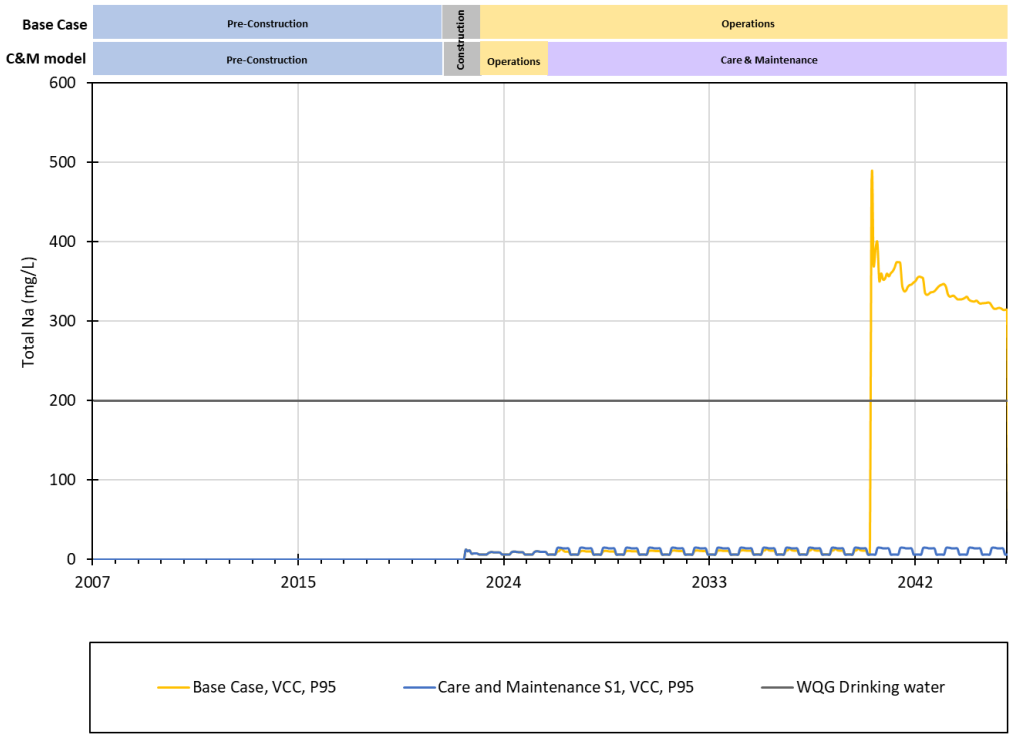


Figure C.1.2-5: Scenario 1 Pit Sump Predicted Concentrations, T-Na

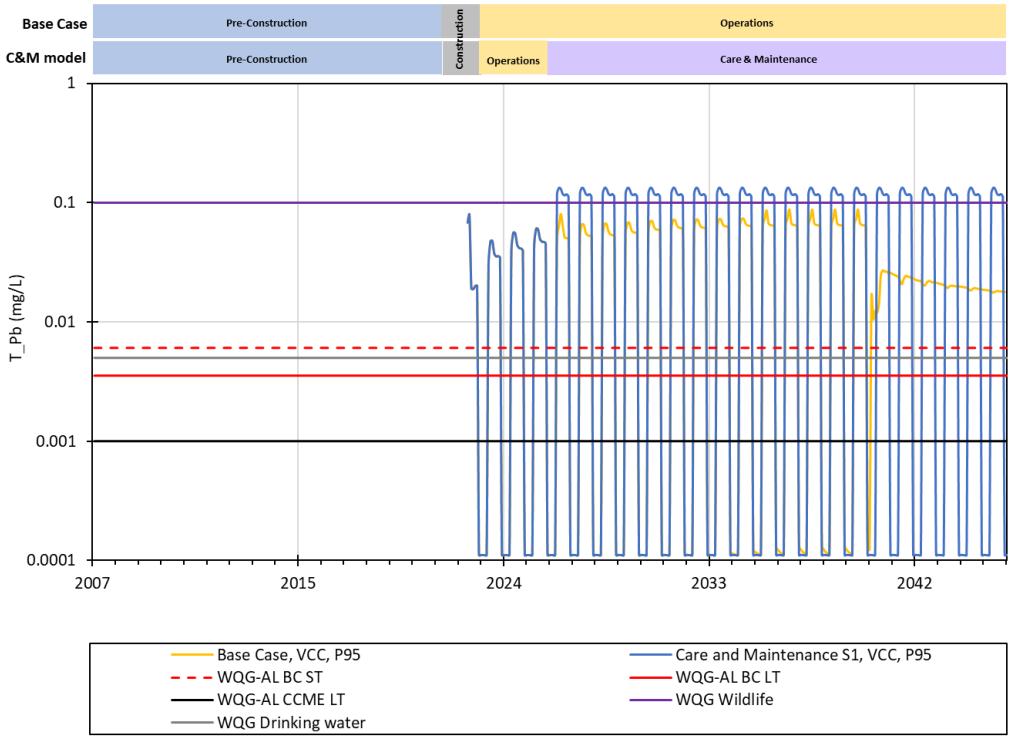


Figure C.1.2-6: Scenario 1 Pit Sump Predicted Concentrations, T-Pb

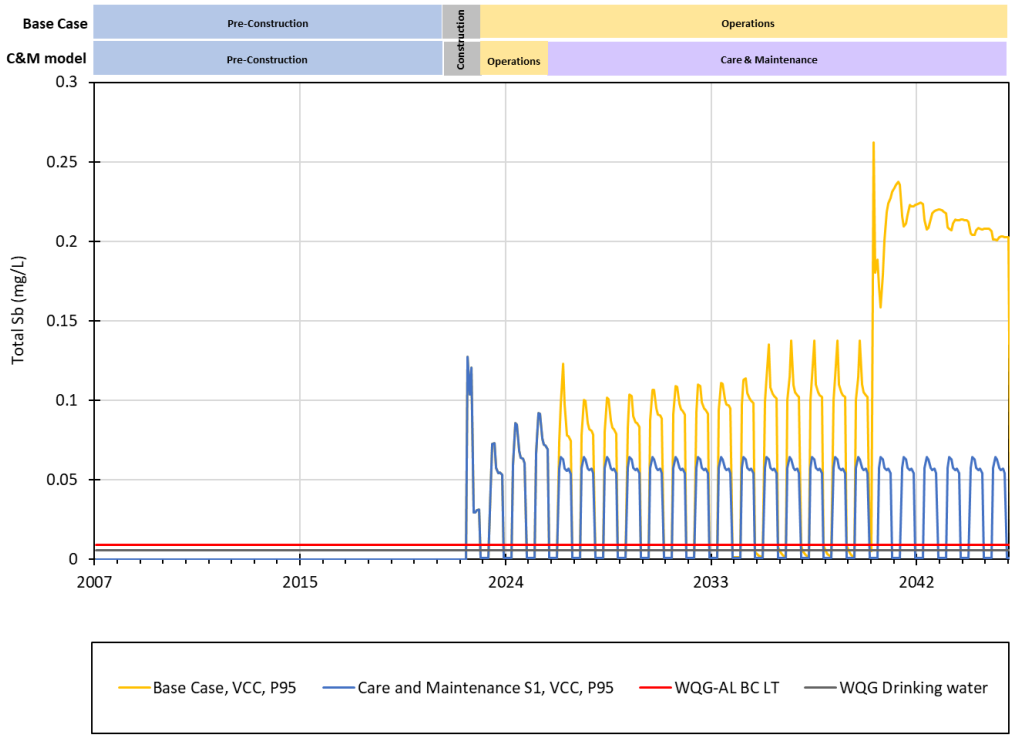


Figure C.1.2-7: Scenario 1 Pit Sump Predicted Concentrations, T-Sb

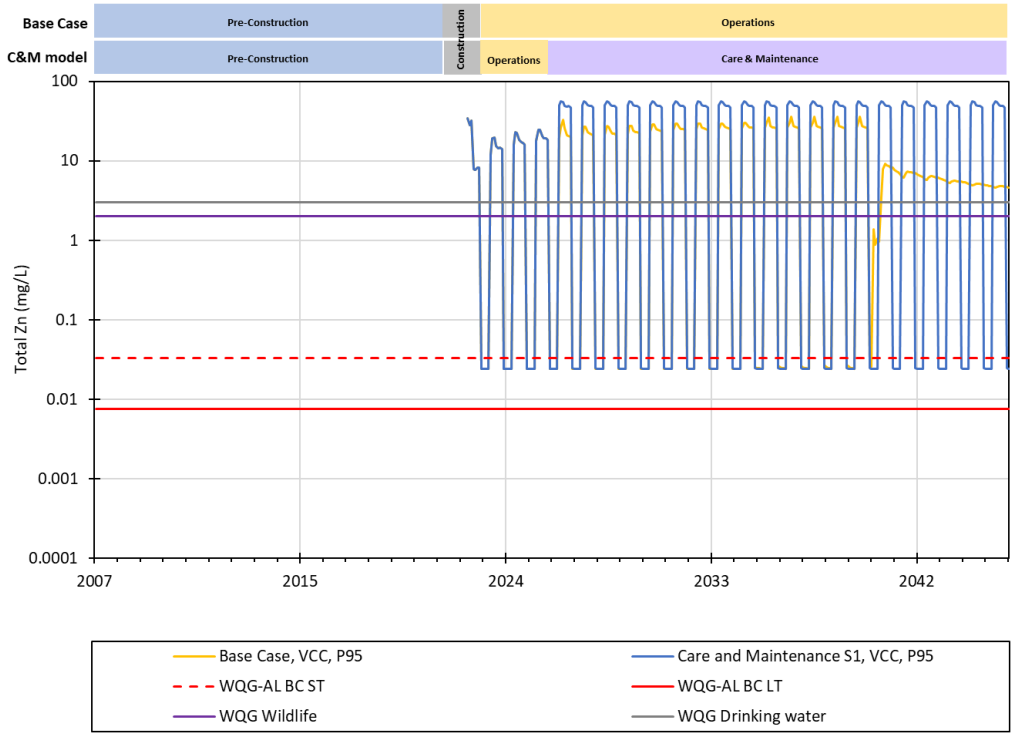


Figure C.1.2-8: Scenario 1 Pit Sump Predicted Concentrations, T-Zn

C.1.3 Scenario 1 WQ28

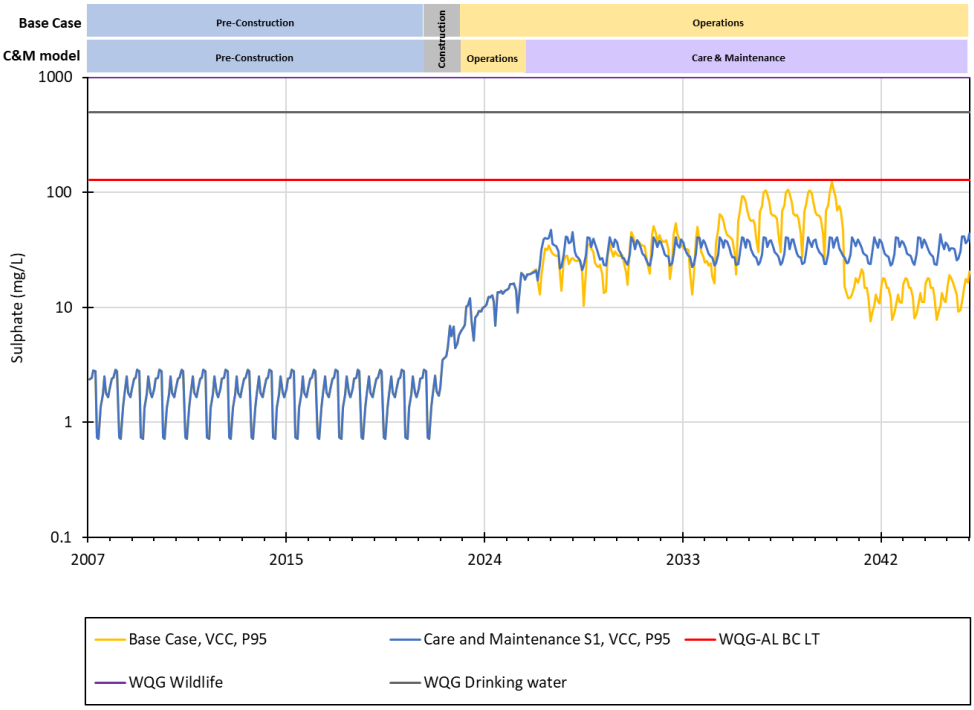


Figure C.1.3-1: Scenario 1 WQ28 Predicted Concentrations, Sulphate.

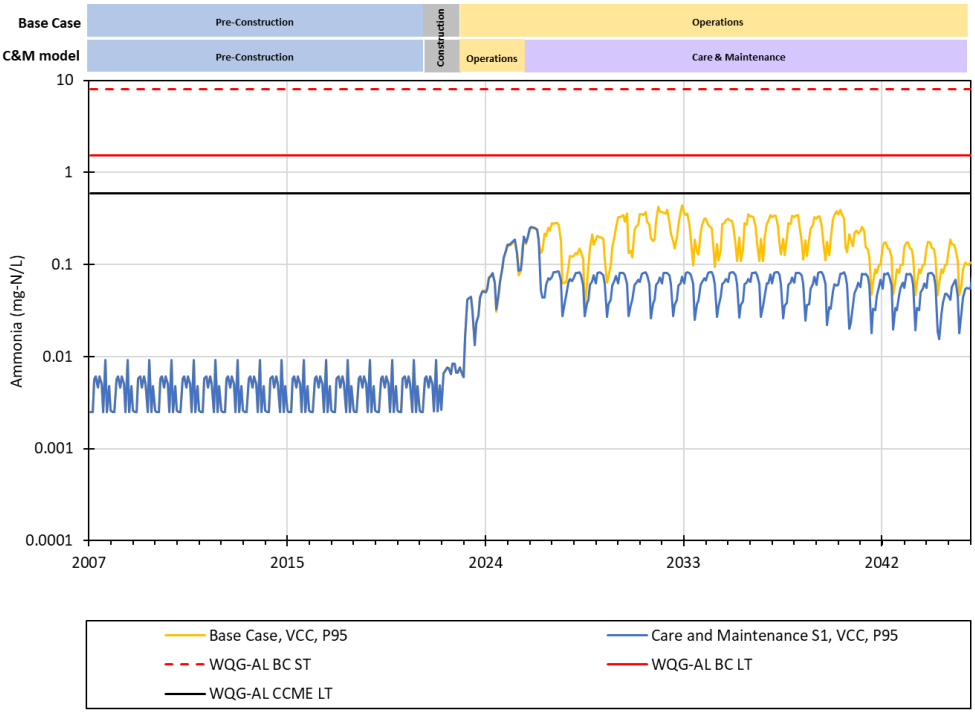


Figure C.1.3-2: Scenario 1 WQ28 Predicted Concentrations, NH_4

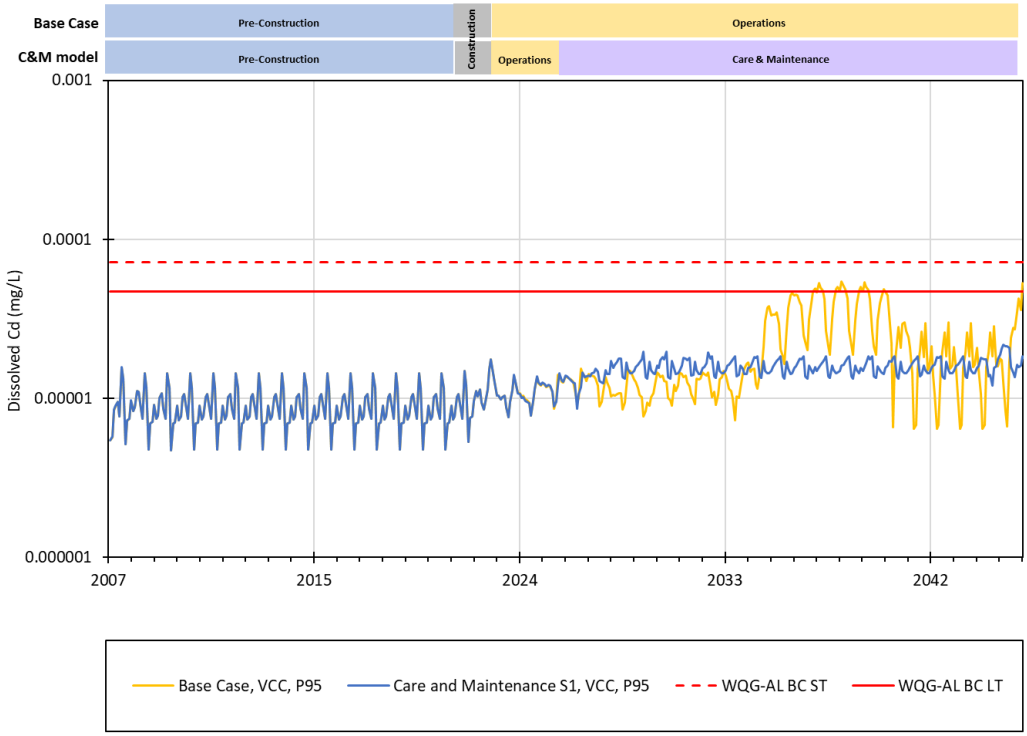


Figure C.1.3-3: Scenario 1 WQ28 Predicted Concentrations, D-Cd

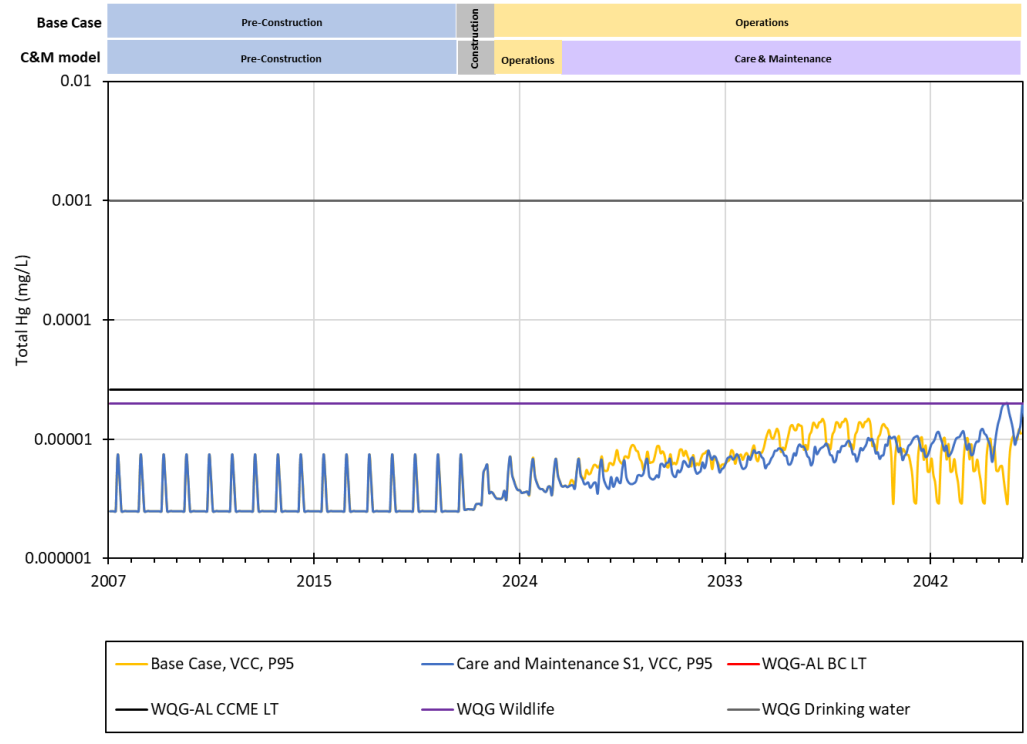


Figure C.1.3-4: Scenario 1 WQ28 Predicted Concentrations, T-Hg

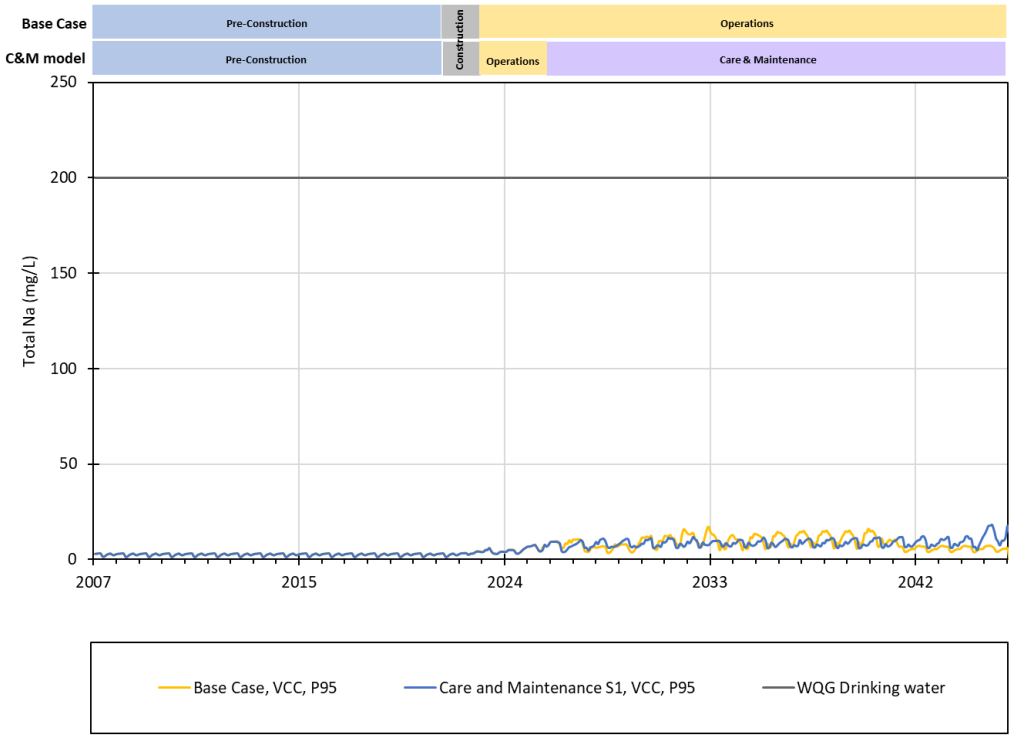


Figure C.1.3-5: Scenario 1 WQ28 Predicted Concentrations, T-Na

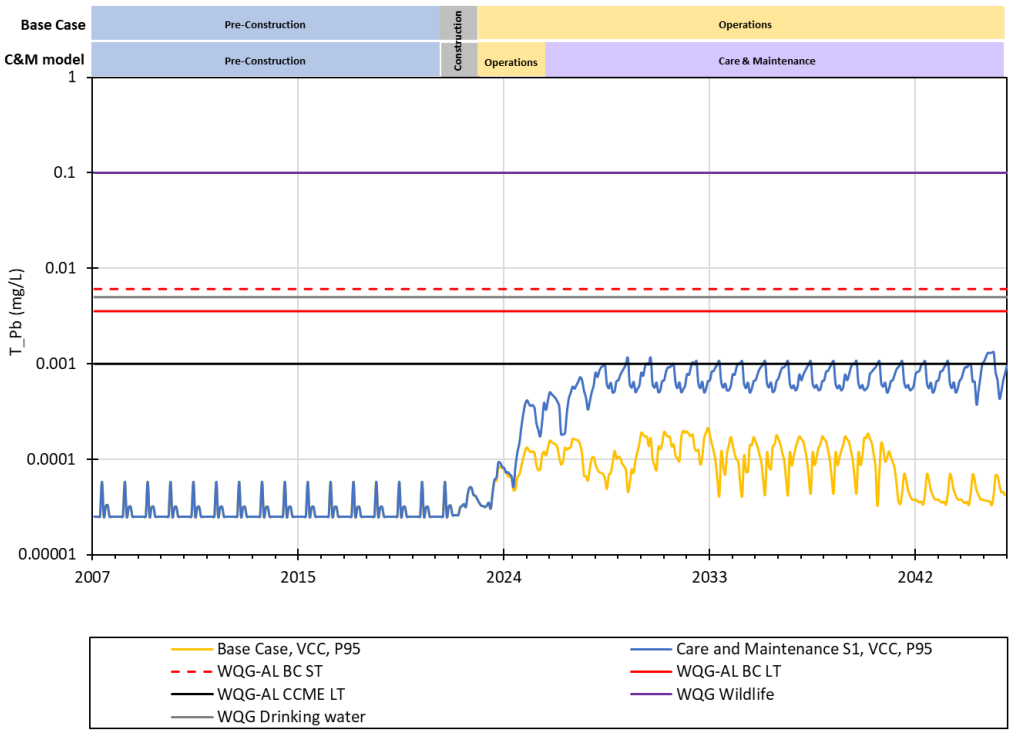


Figure C.1.3-6: Scenario 1 WQ28 Predicted Concentrations, T-Pb

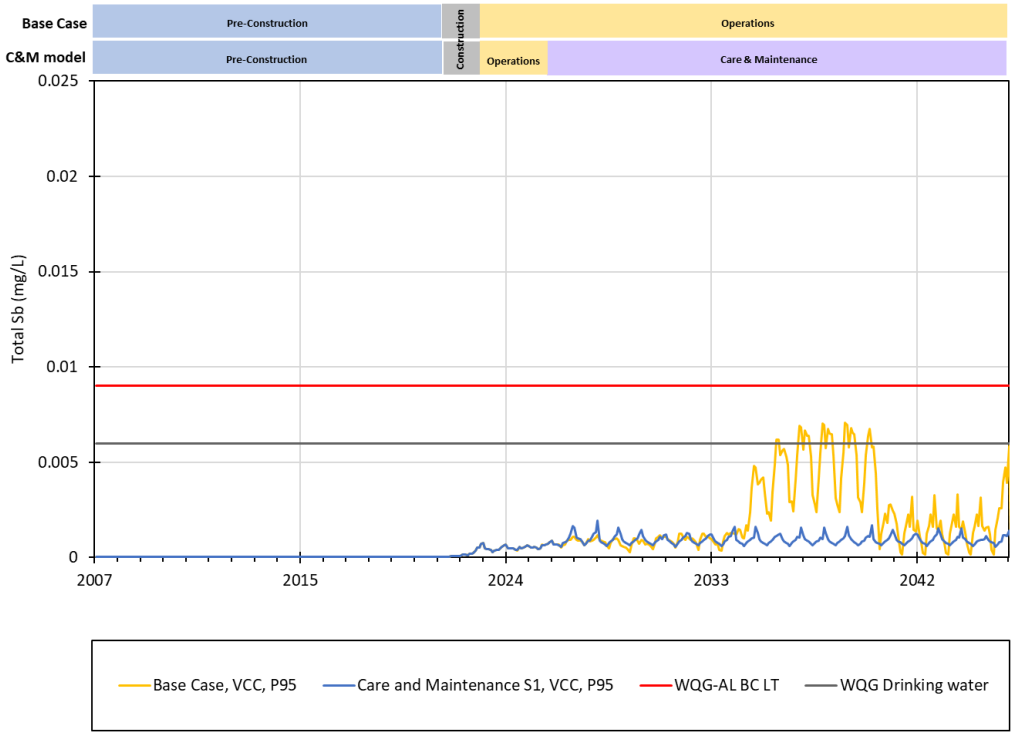


Figure C.1.3-7: Scenario 1 WQ28 Predicted Concentrations, T-Sb

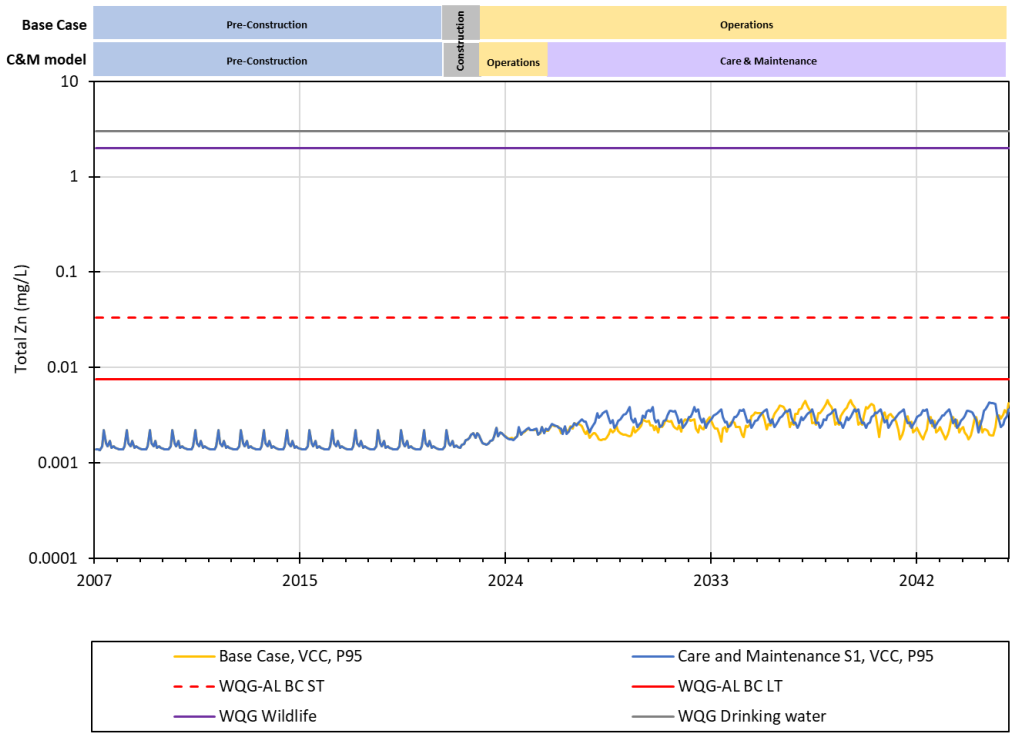


Figure C.1.3-8: Scenario 1 WQ28 Predicted Concentrations, T-Zn

APPENDIX C.2: CARE AND MAINTENANCE SCENARIO 2

C.2.1 Scenario 2 TSF C Pond

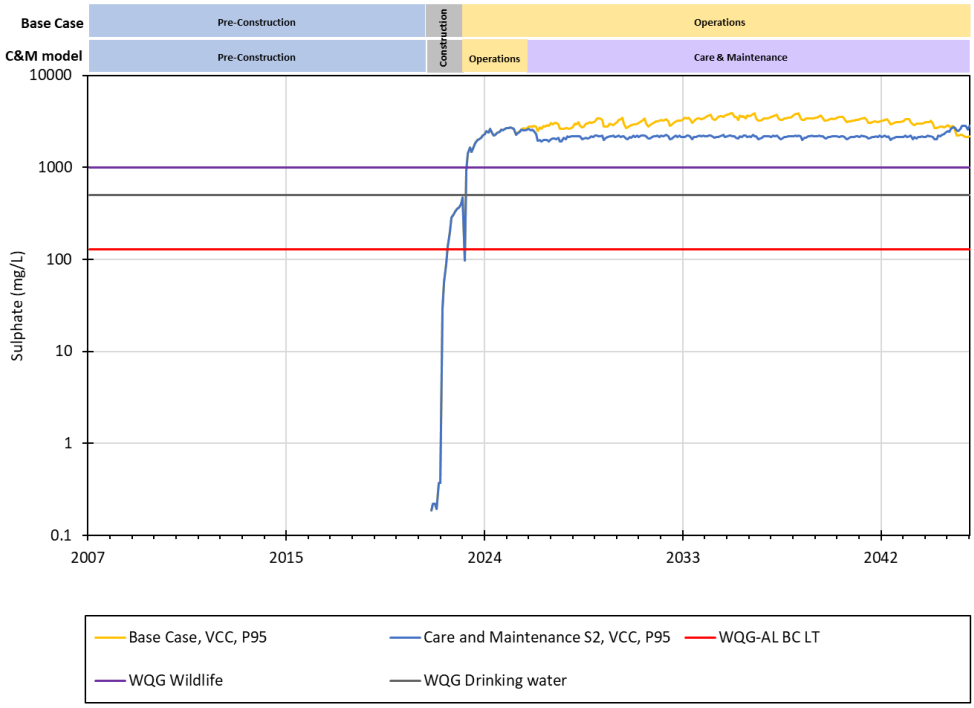


Figure C.2.1-1: Scenario 2 TSF C Pond Predicted Concentrations, Sulphate.

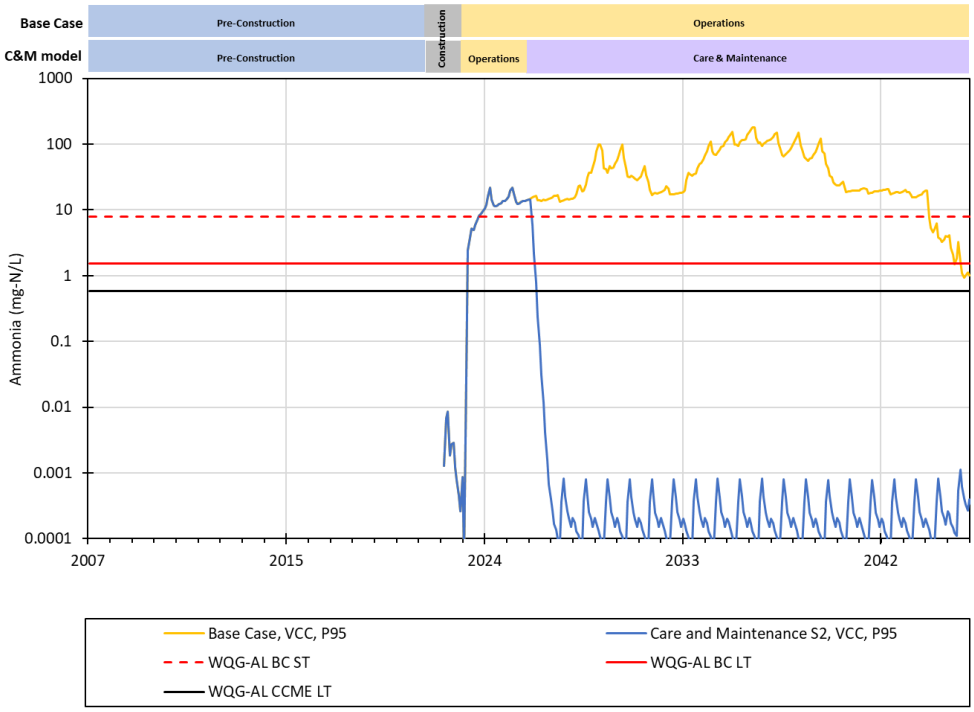


Figure C.2.1-2: Scenario 2 TSF C Pond Predicted Concentrations, NH_4

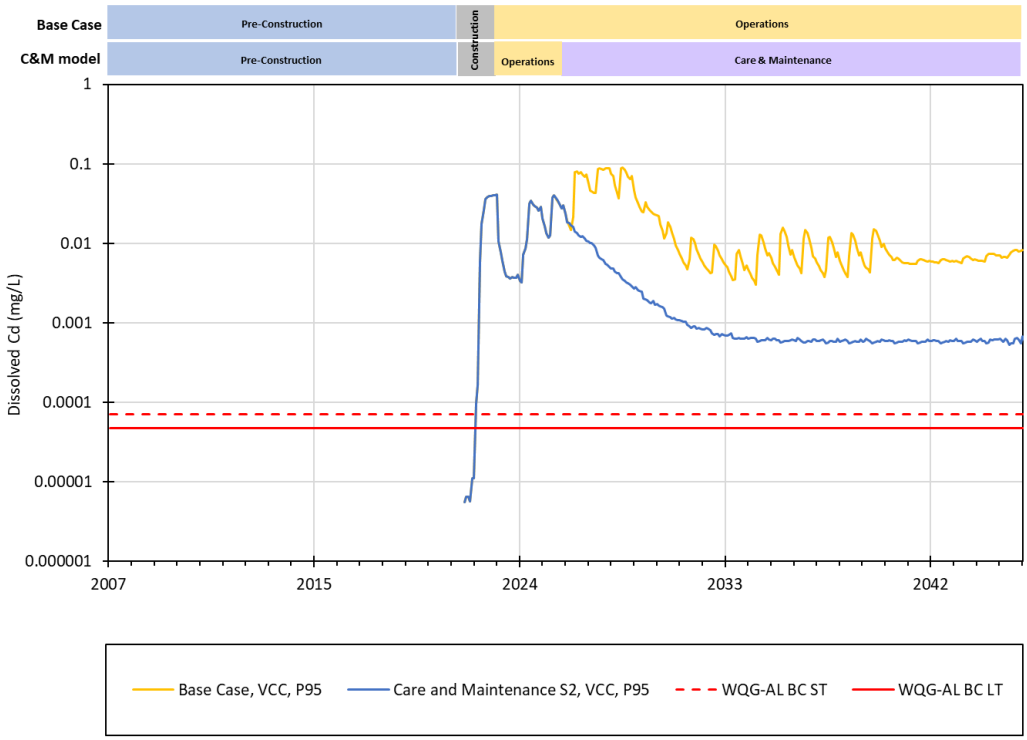


Figure C.2.1-3: Scenario 2 TSF C Pond Predicted Concentrations, D-Cd

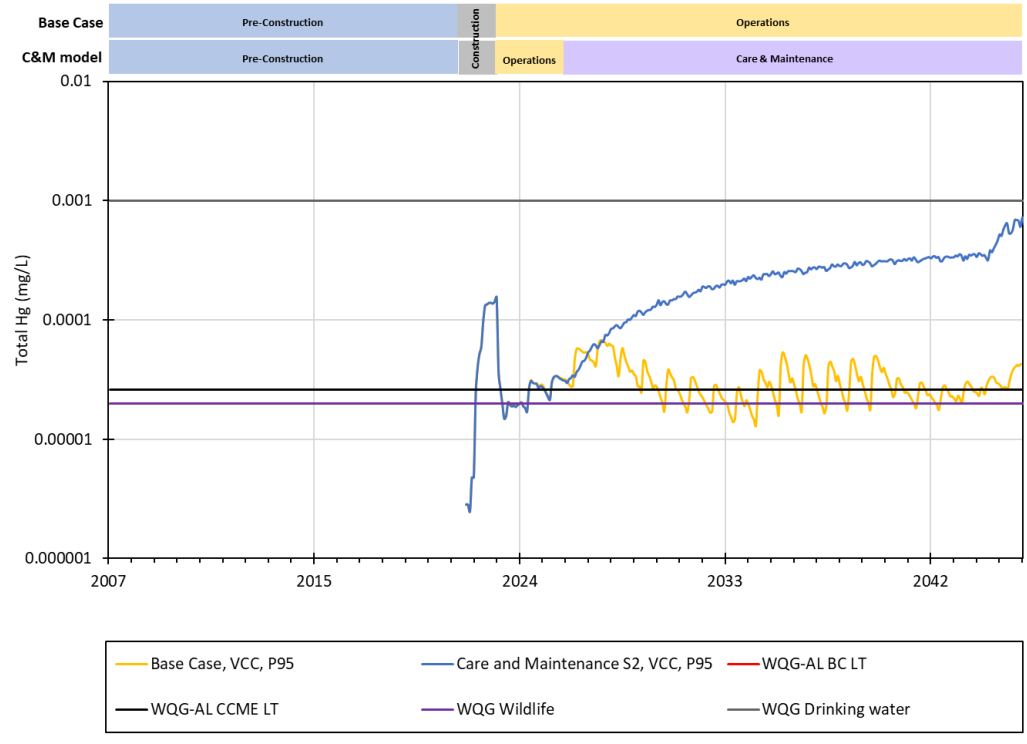


Figure C.2.1-4: Scenario 2 TSF C Pond Predicted Concentrations, T-Hg

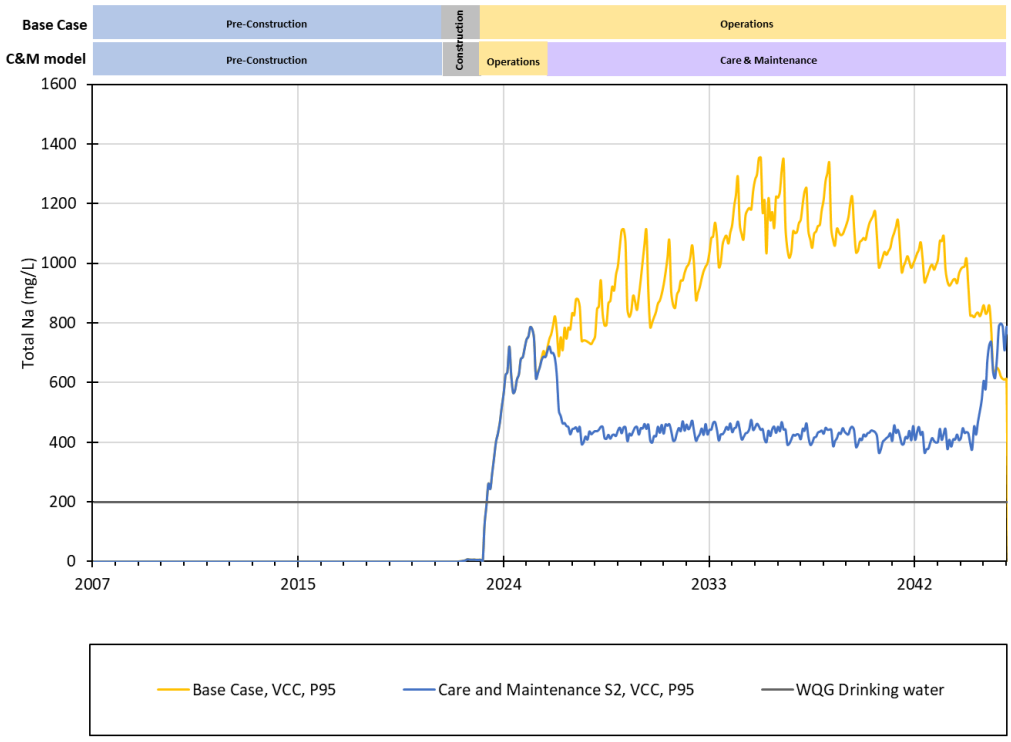


Figure C.2.1-5: Scenario 2 TSF C Pond Predicted Concentrations, T-Na

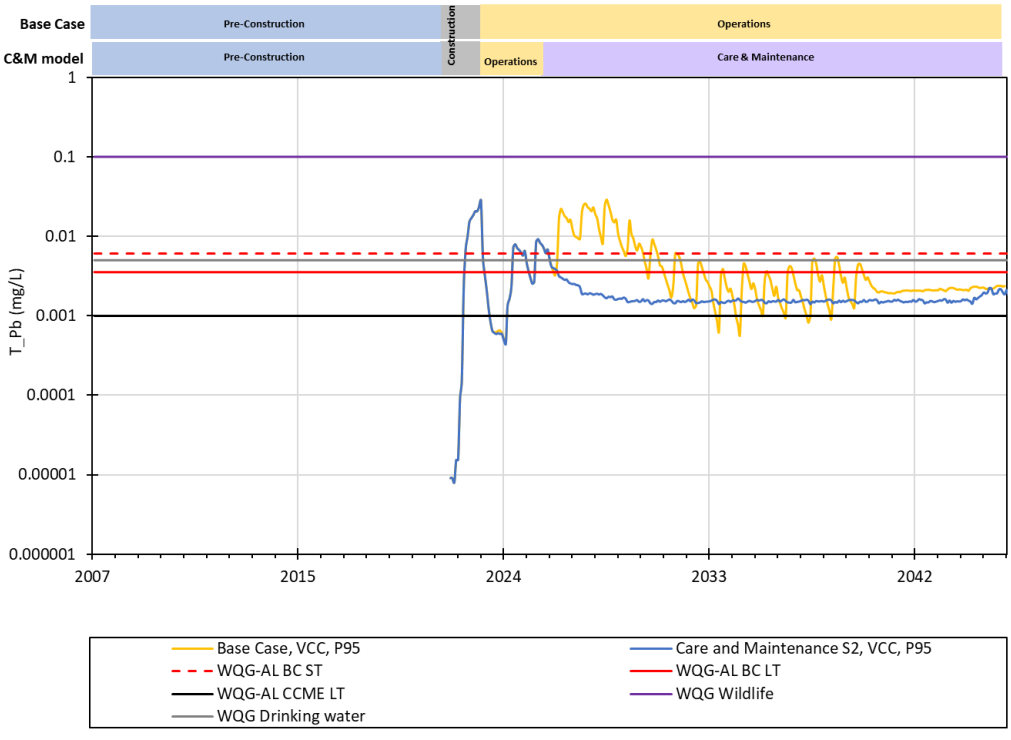


Figure C.2.1-6: Scenario 2 TSF C Pond Predicted Concentrations, T-Pb

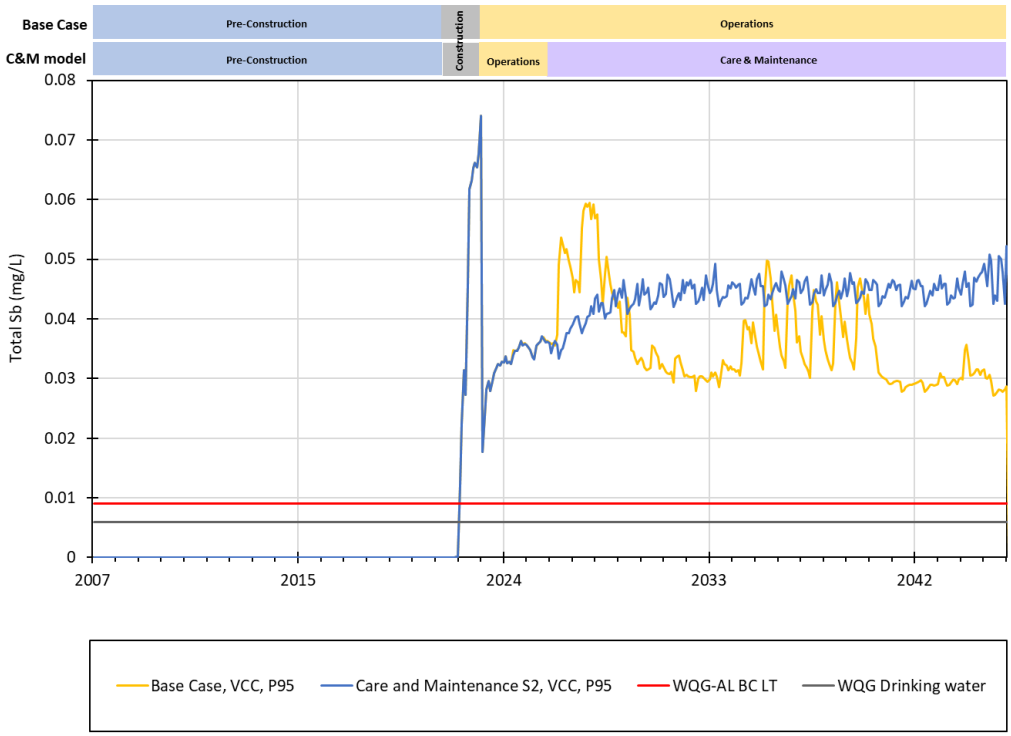


Figure C.2.1-7: Scenario 2 TSF C Pond Predicted Concentrations, T-Sb

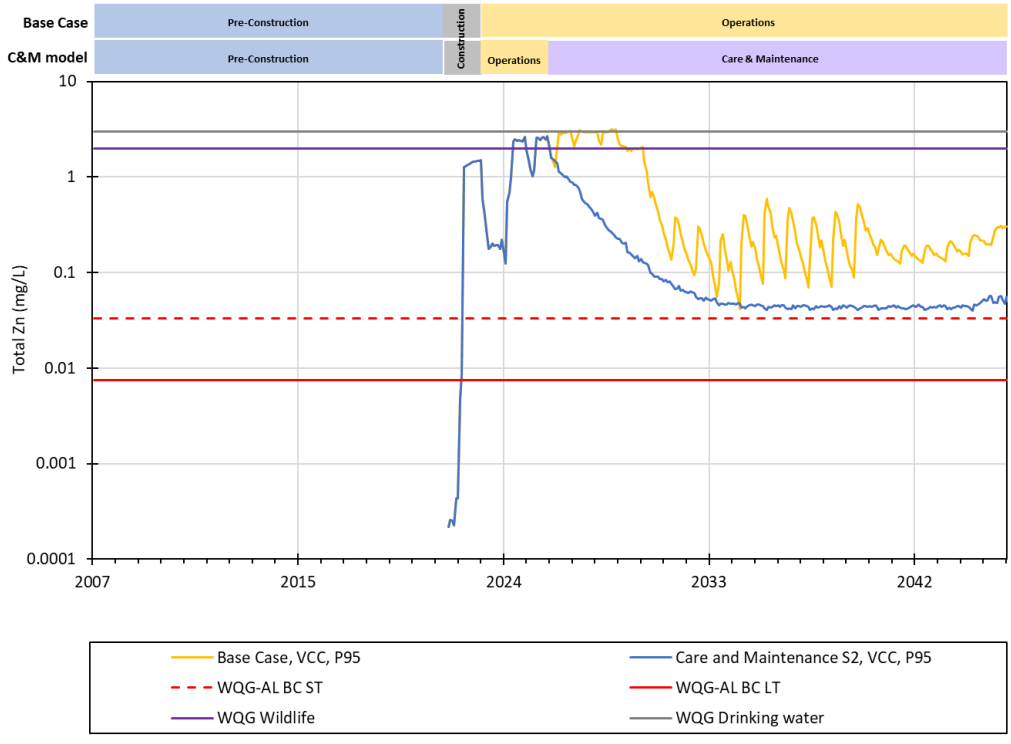


Figure C.2.1-8: Scenario 2 TSF C Pond Predicted Concentrations, T-Zn

C.2.2 Scenario 2 Pit Sump

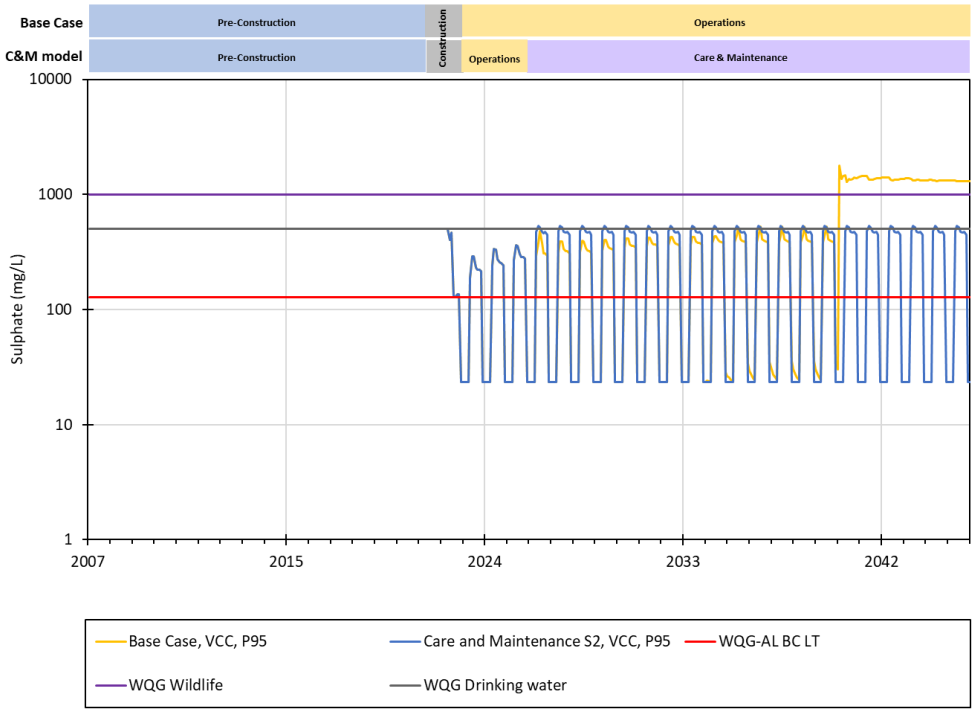


Figure C.2.2-1: Scenario 2 Pit Sump Predicted Concentrations, Sulphate.

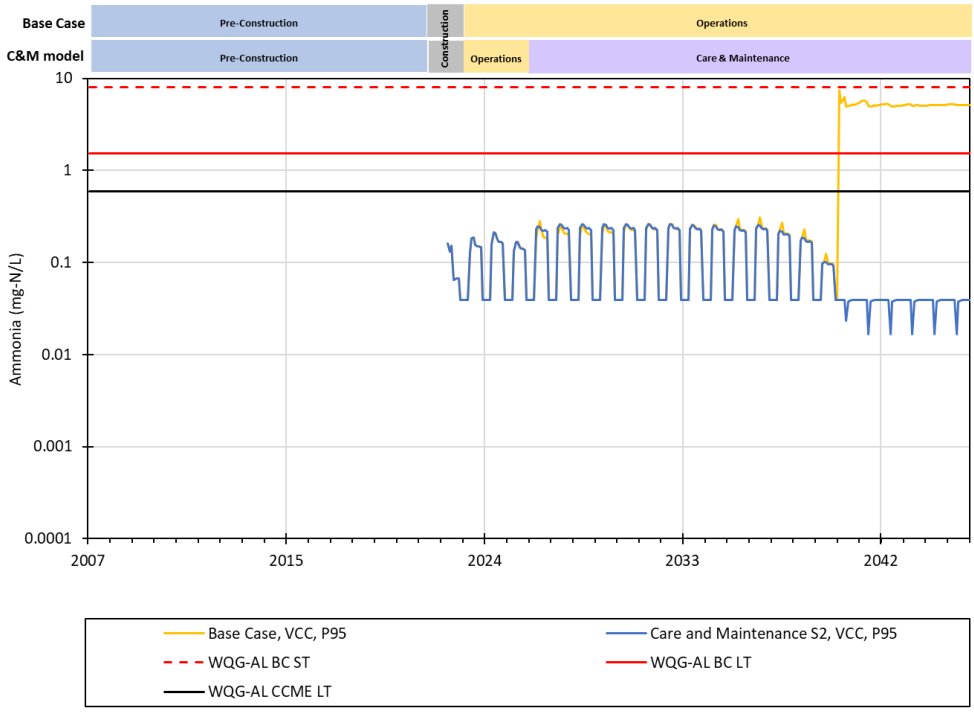


Figure C.2.2-2: Scenario 2 Pit Sump Predicted Concentrations, NH_4



Figure C.2.2-3: Scenario 2 Pit Sump Predicted Concentrations, D-Cd

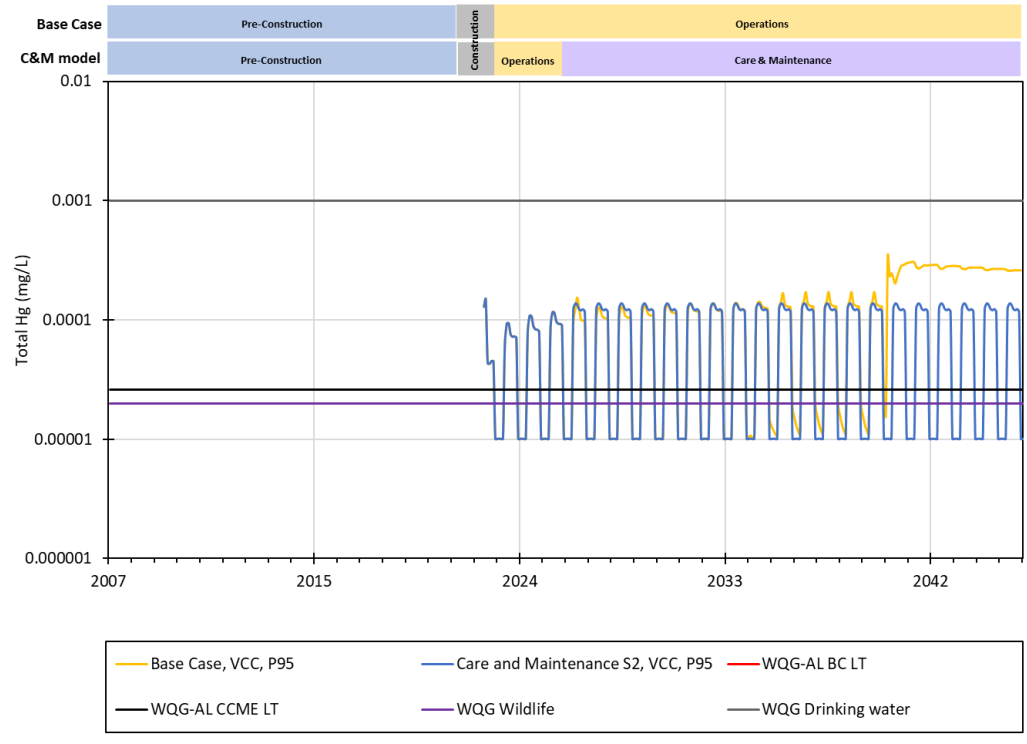


Figure C.2.2-4: Scenario 2 Pit Sump Predicted Concentrations, T-Hg

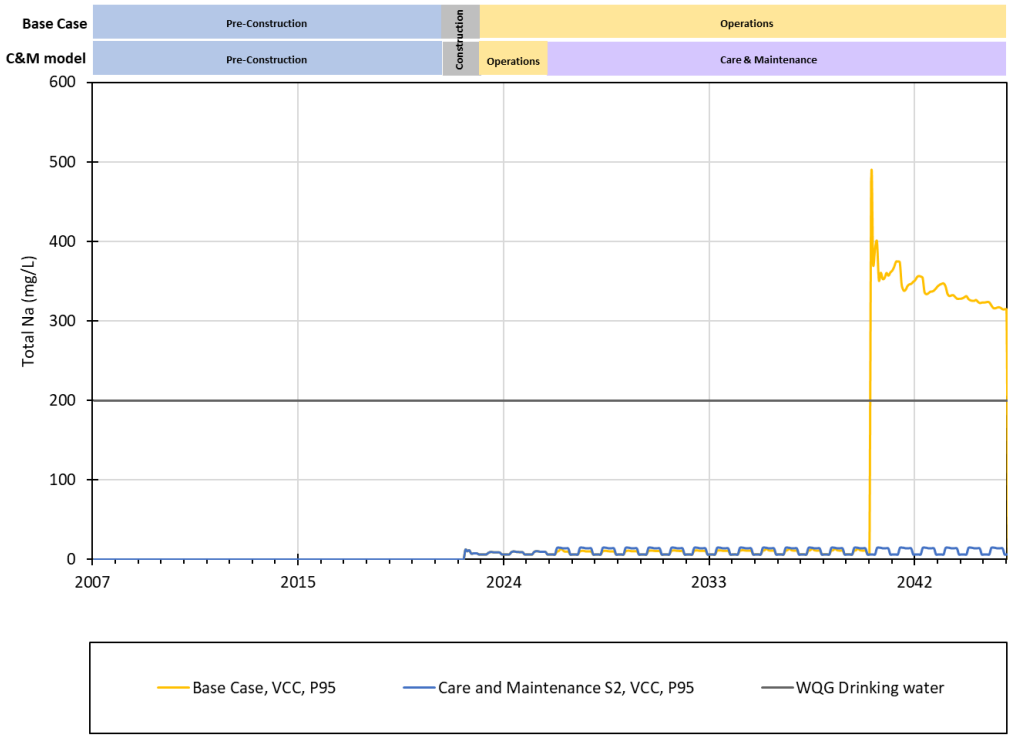


Figure C.2.2-5: Scenario 2 Pit Sump Predicted Concentrations, T-Na

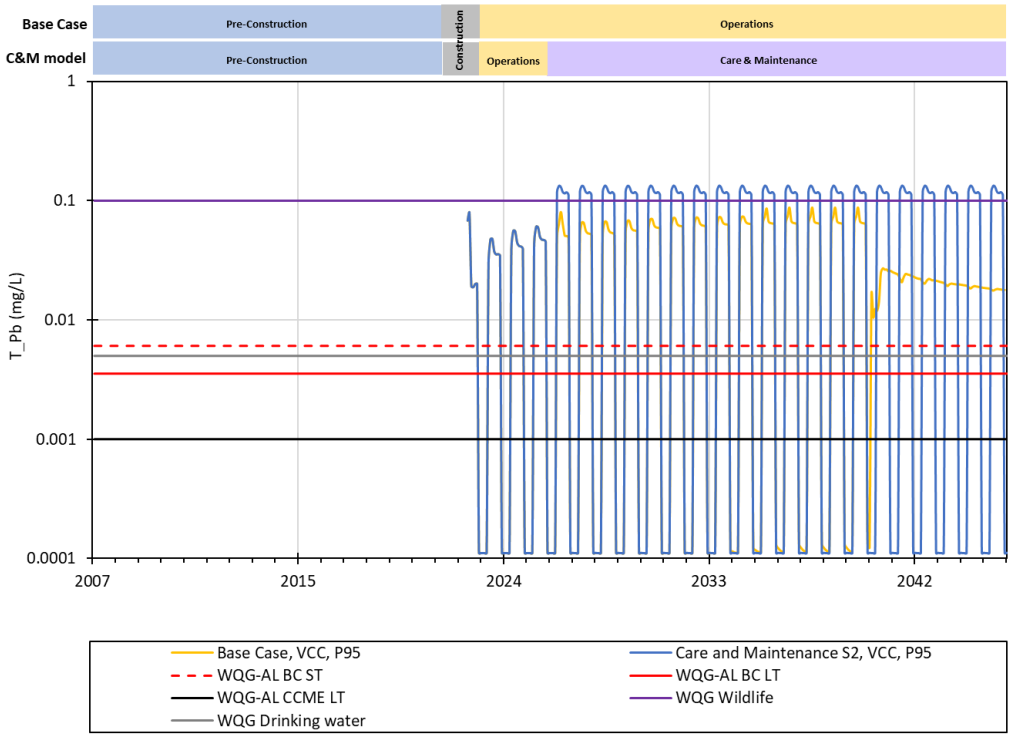


Figure C.2.2-6: Scenario 2 Pit Sump Predicted Concentrations, T-Pb

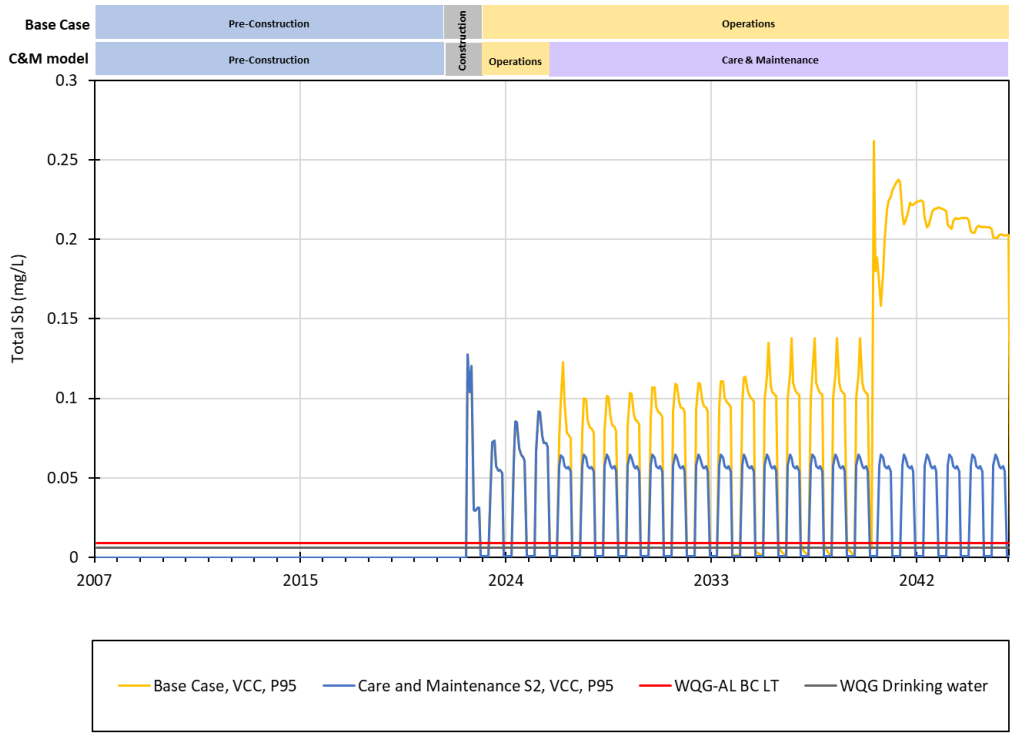


Figure C.2.2-7: Scenario 2 Pit Sump Predicted Concentrations, T-Sb

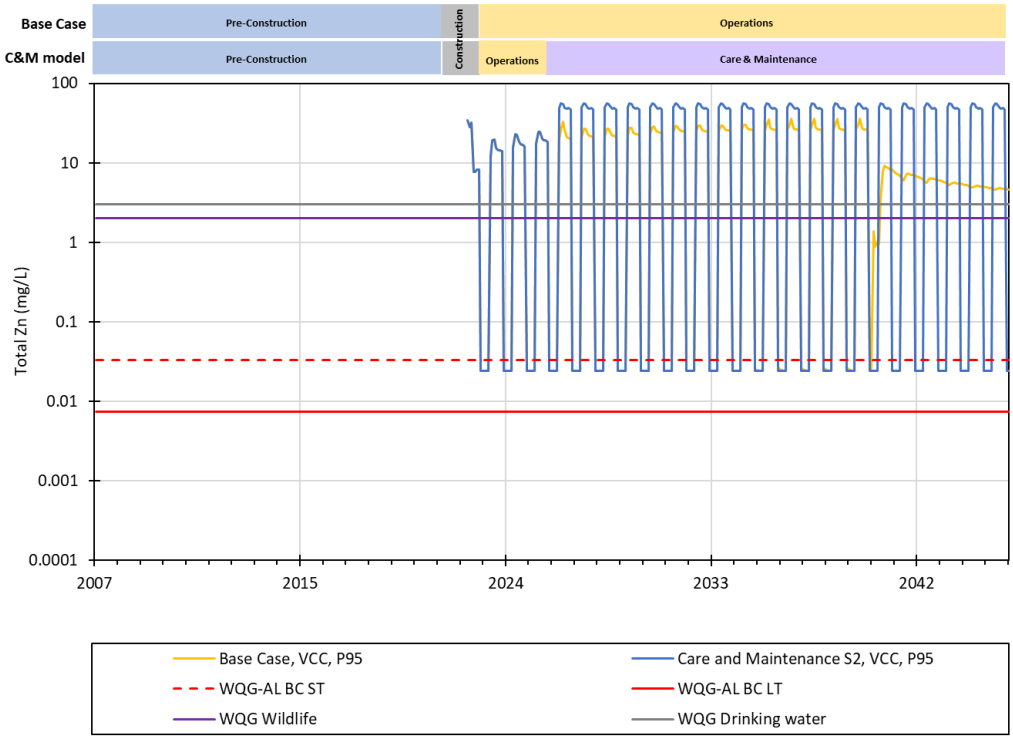


Figure C.2.2-8: Scenario 2 Pit Sump Predicted Concentrations, T-Zn

C.2.3 Scenario 2 WQ28

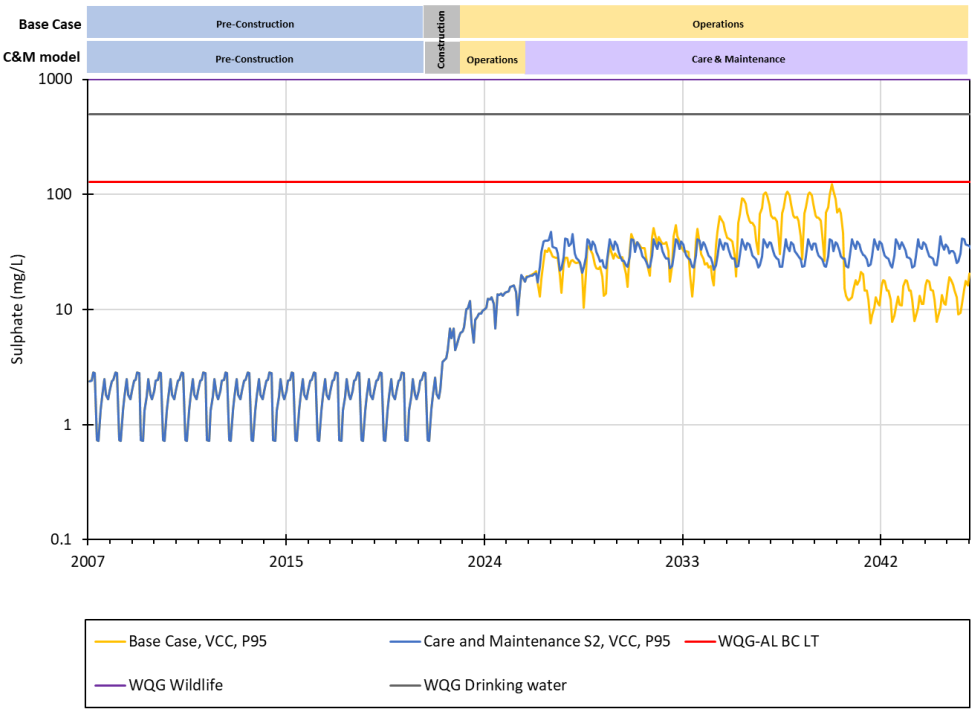


Figure C.2.3-1: Scenario 2 WQ28 Predicted Concentrations, Sulphate.

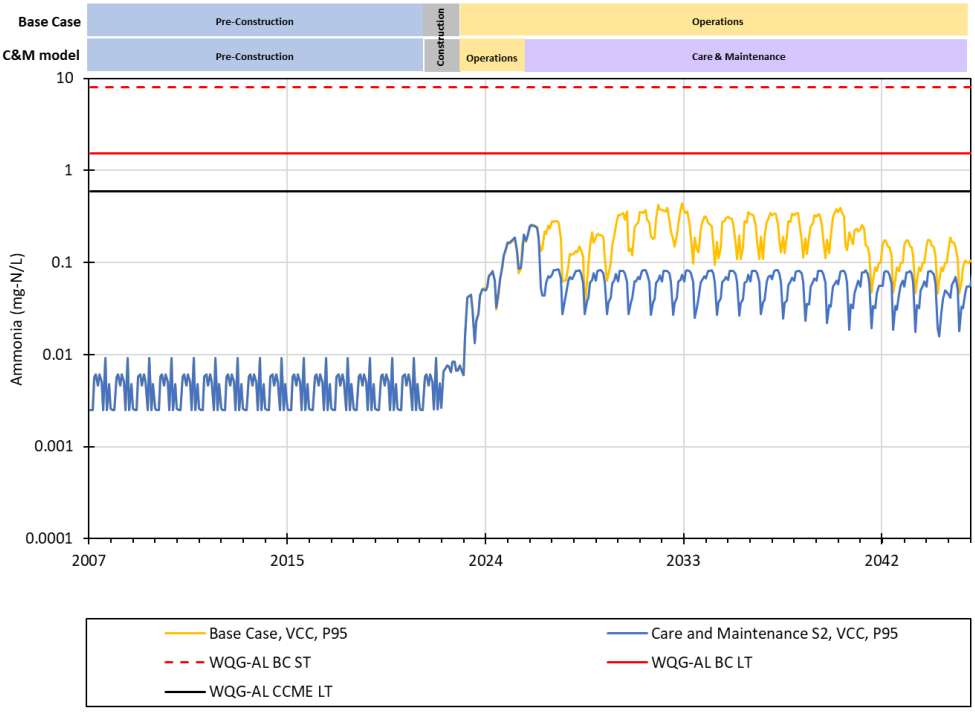


Figure C.2.3-2: Scenario 2 WQ28 Predicted Concentrations, NH_4

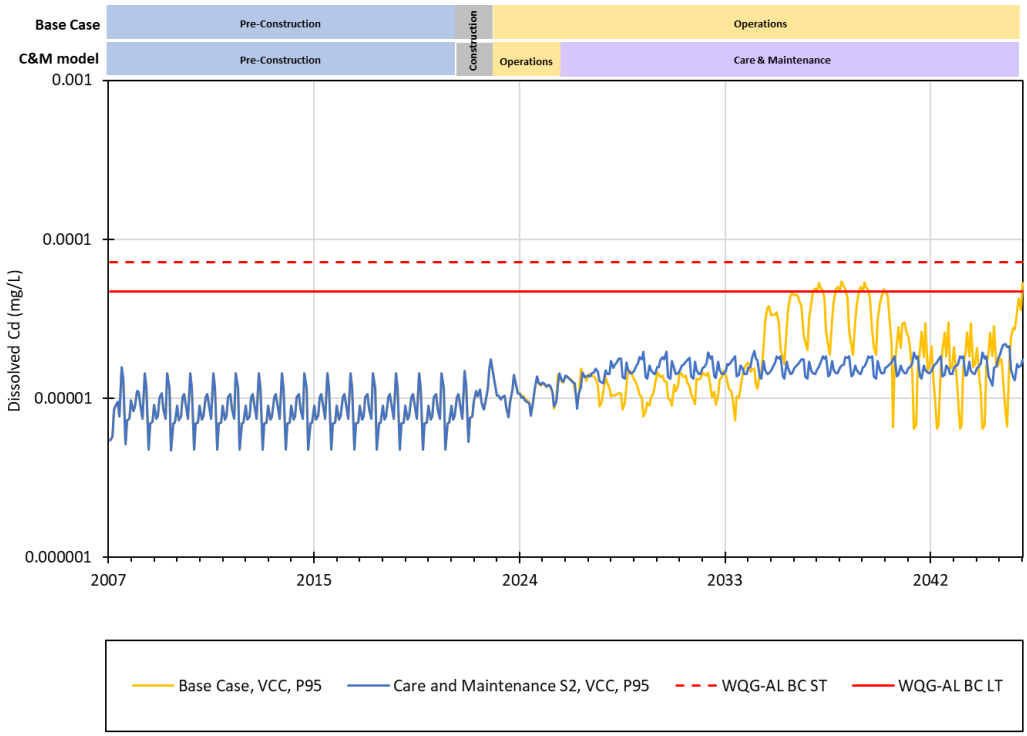


Figure C.2.3-3: Scenario 2 WQ28 Predicted Concentrations, D-Cd

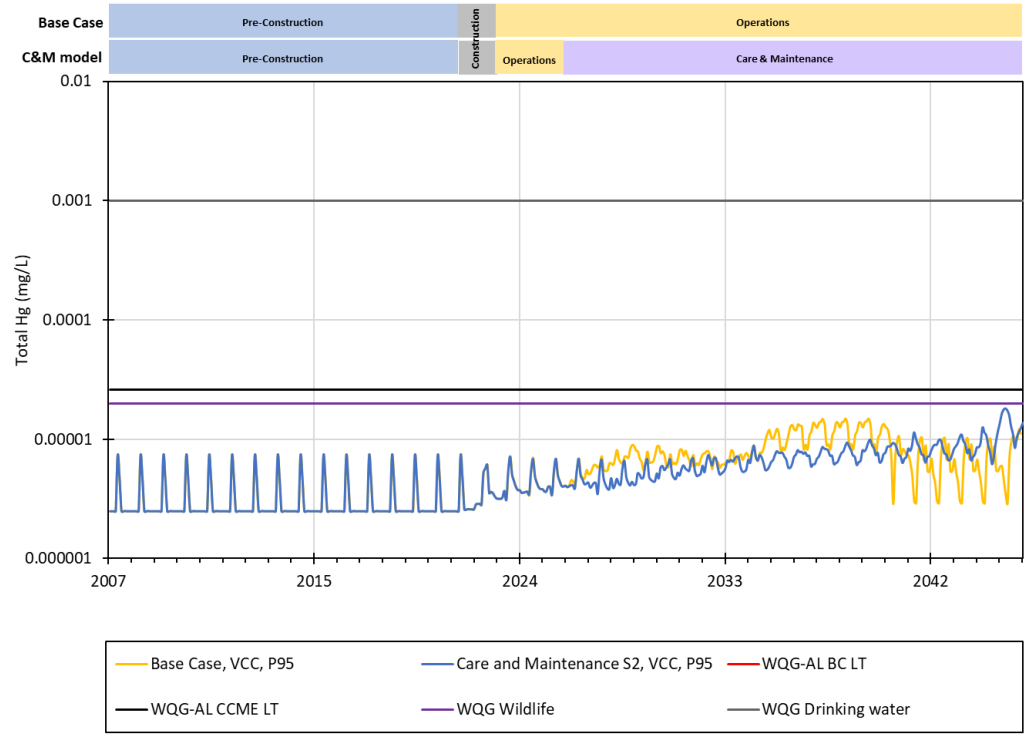


Figure C.2.3-4: Scenario 2 WQ28 Predicted Concentrations, T-Hg

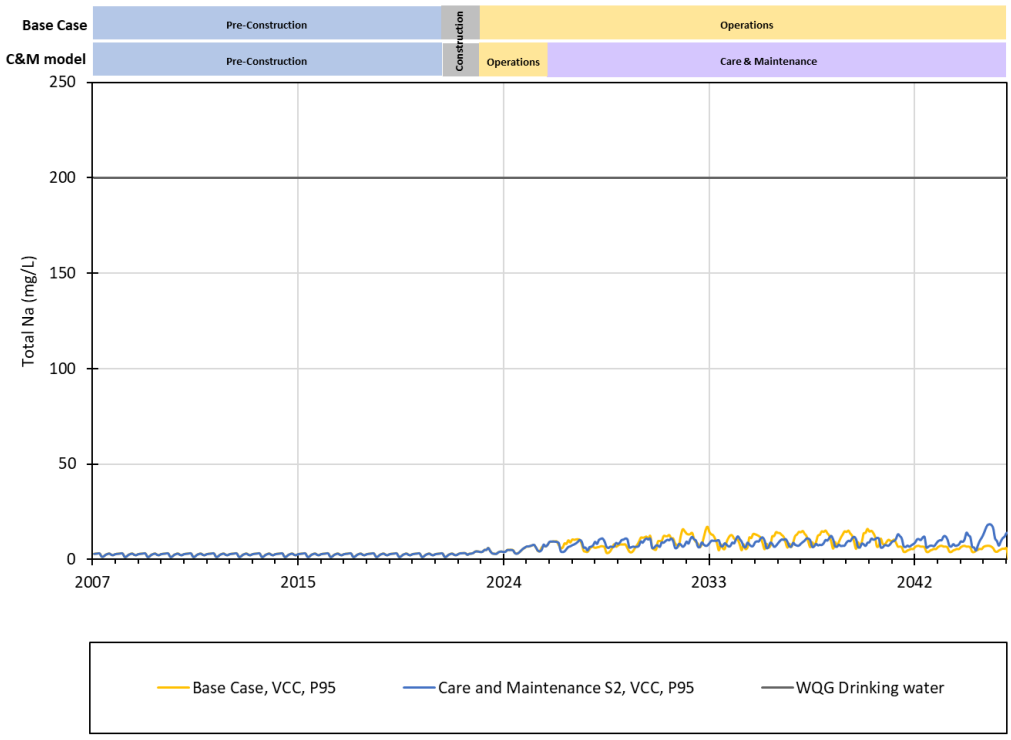


Figure C.2.3-5: Scenario 2 WQ28 Predicted Concentrations, T-Na

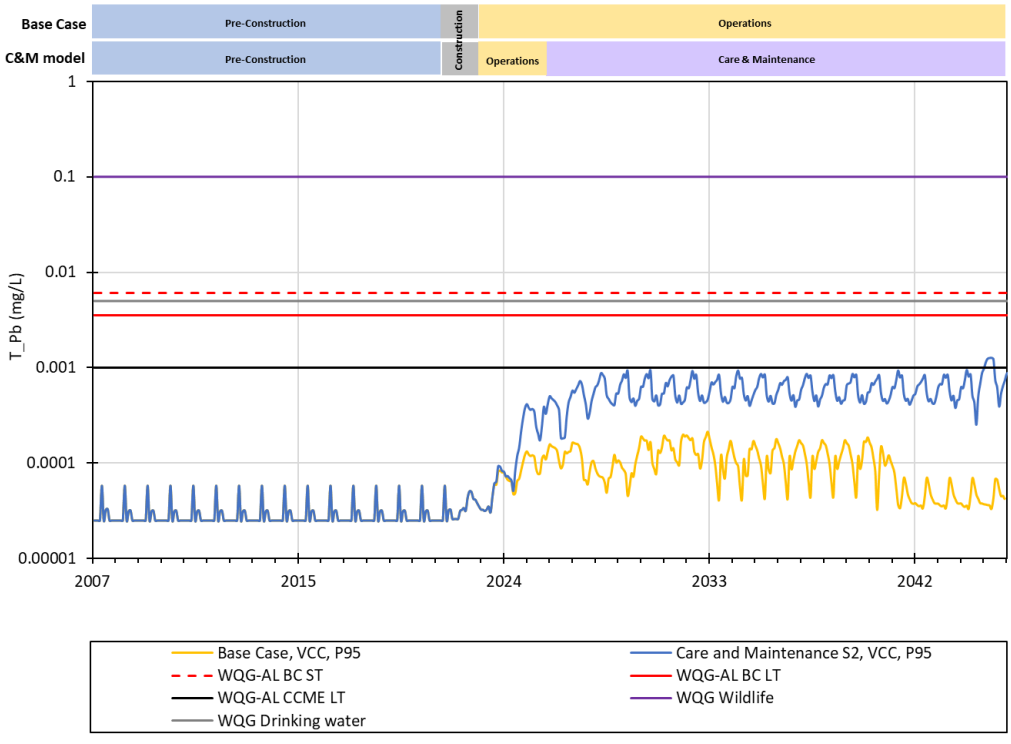


Figure C.2.3-6: Scenario 2 WQ28 Predicted Concentrations, T-Pb

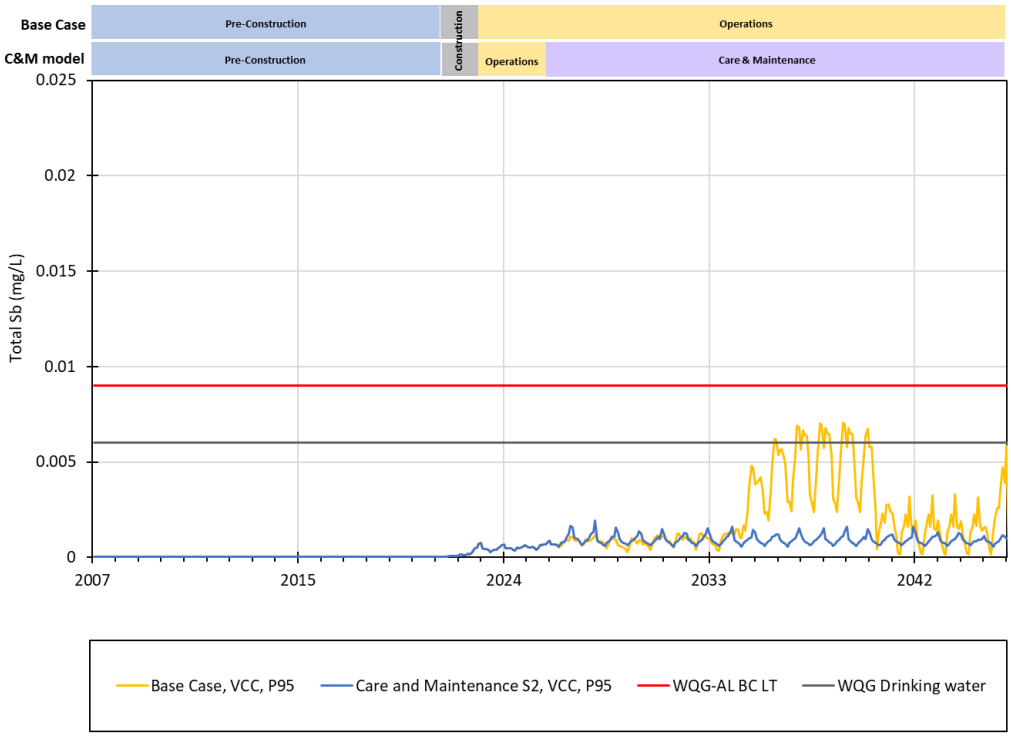


Figure C.2.3-7: Scenario 2 WQ28 Predicted Concentrations, T-Sb

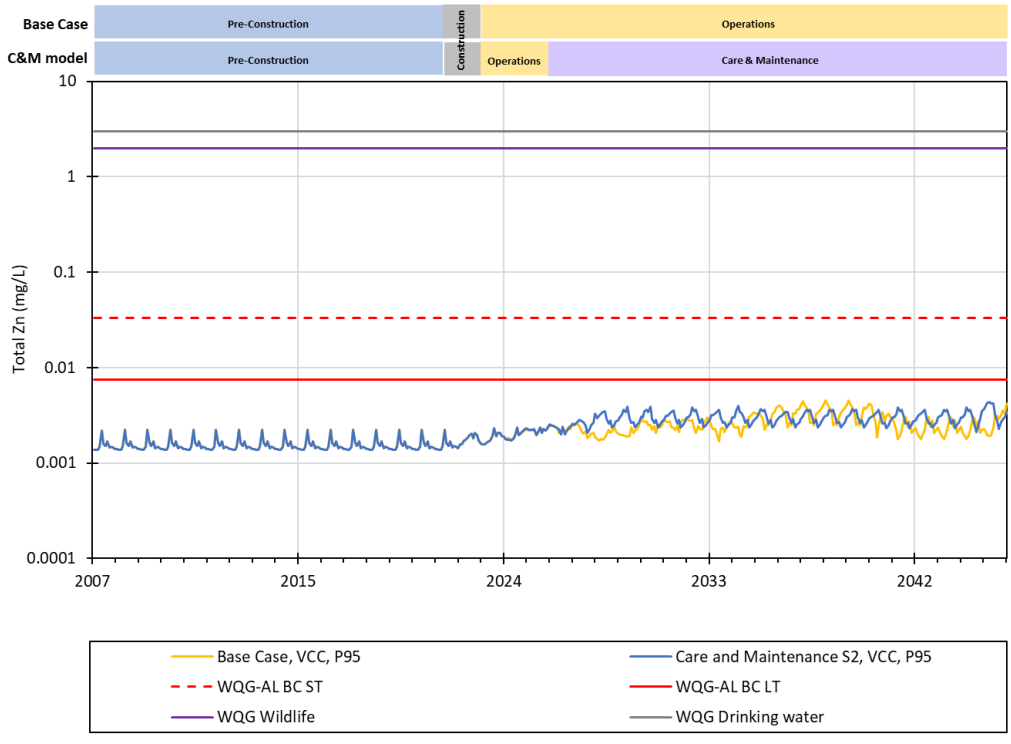


Figure C.2.3-8: Scenario 2 WQ28 Predicted Concentrations, T-Zn

APPENDIX B.3: CARE AND MAINTENANCE SCENARIO 3

C.3.1 Scenario 3 TSF C Pond

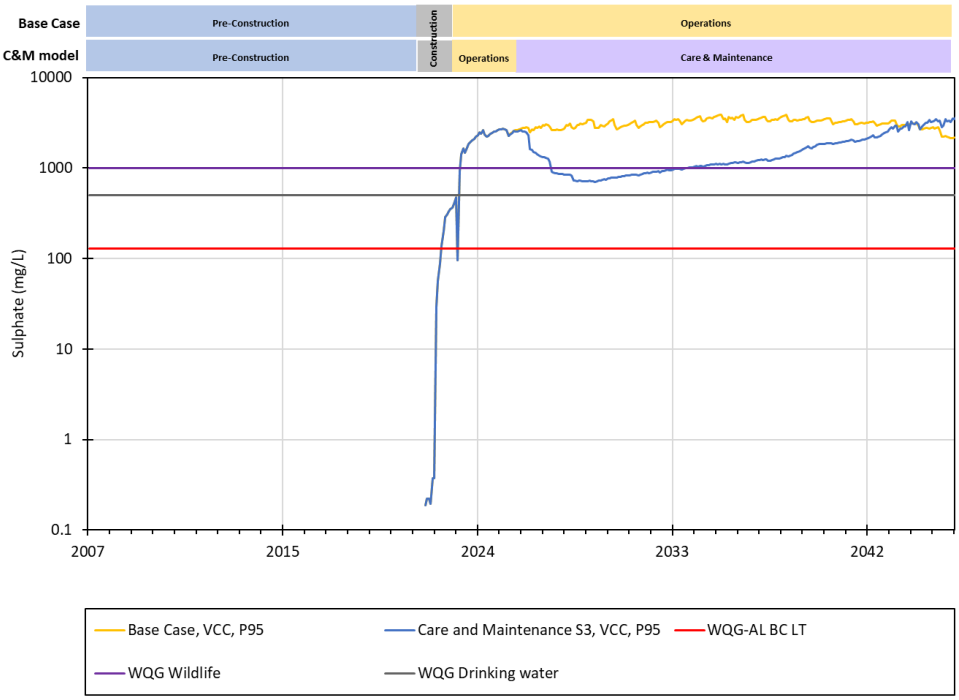


Figure C.3.1-1: Scenario 3 TSF C Pond Predicted Concentrations, Sulphate.

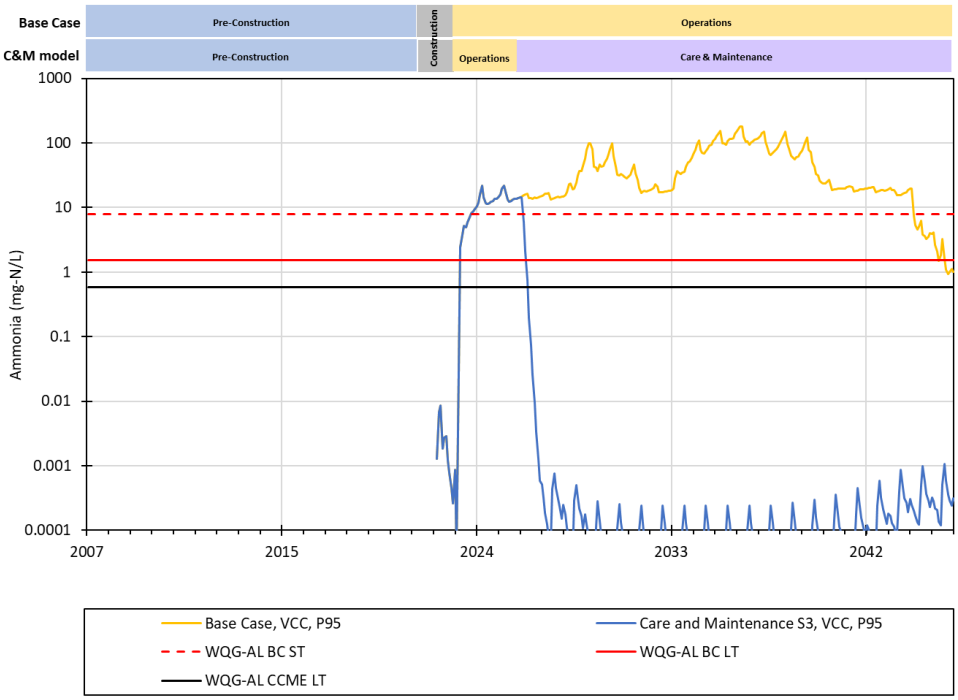


Figure C.3.1-2: Scenario 3 TSF C Pond Predicted Concentrations, NH_4



Figure C.3.1-3: Scenario 3 TSF C Pond Predicted Concentrations, D-Cd

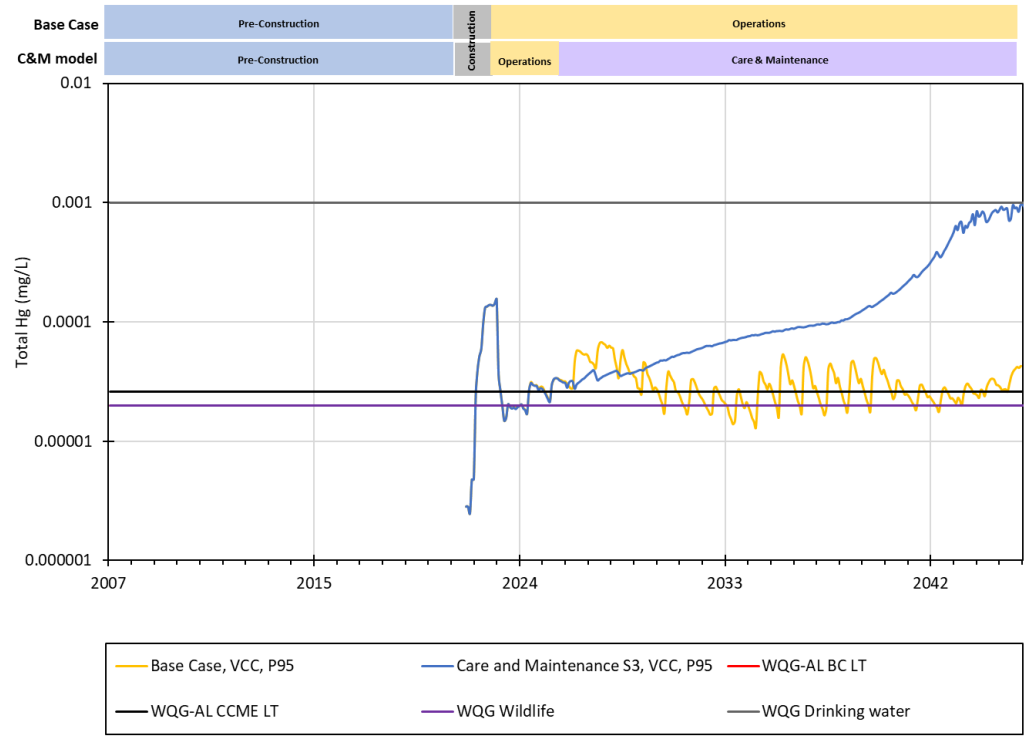


Figure C.3.1-4: Scenario 3 TSF C Pond Predicted Concentrations, T-Hg

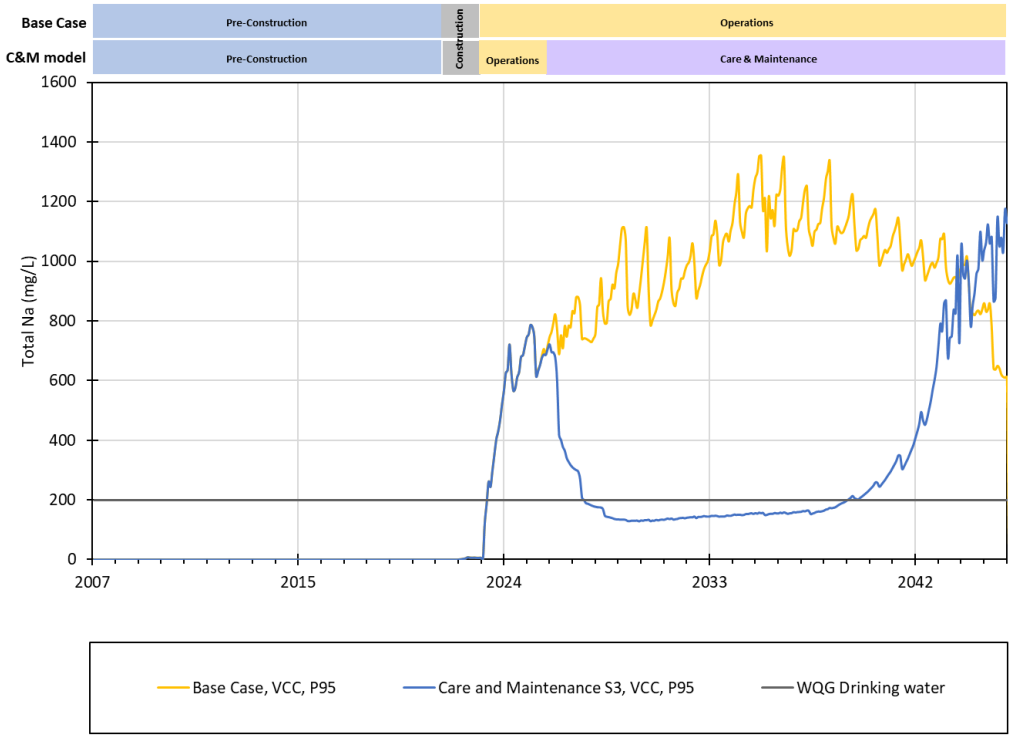


Figure C.3.1-5: Scenario 3 TSF C Pond Predicted Concentrations, T-Na

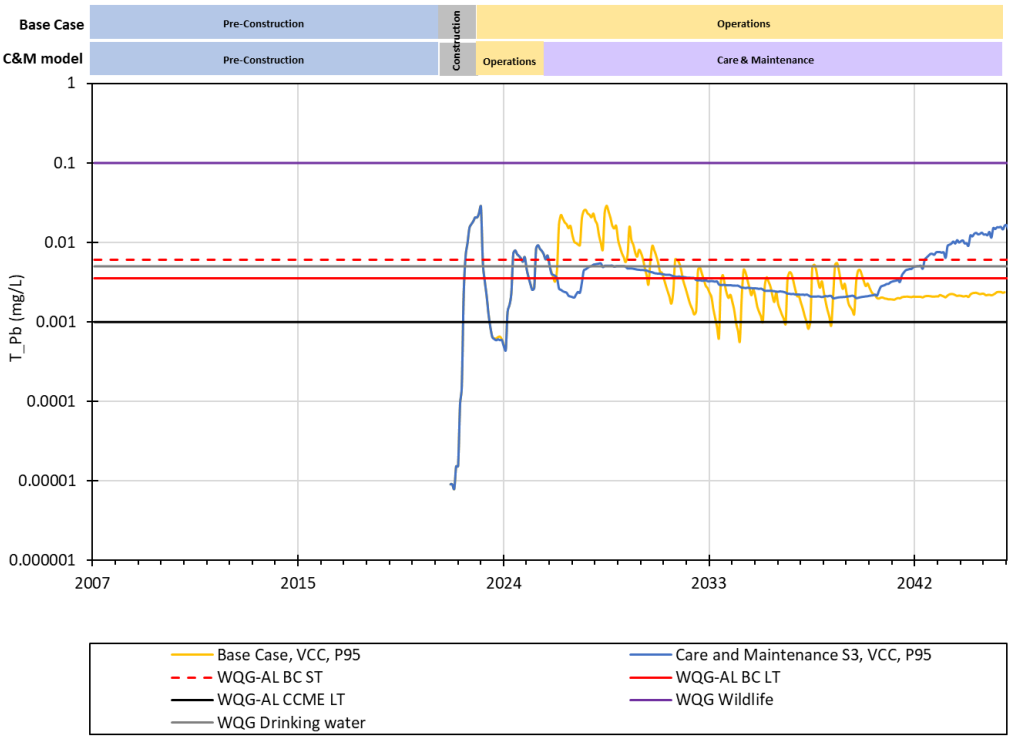


Figure C.3.1-6: Scenario 3 TSF C Pond Predicted Concentrations, T-Pb

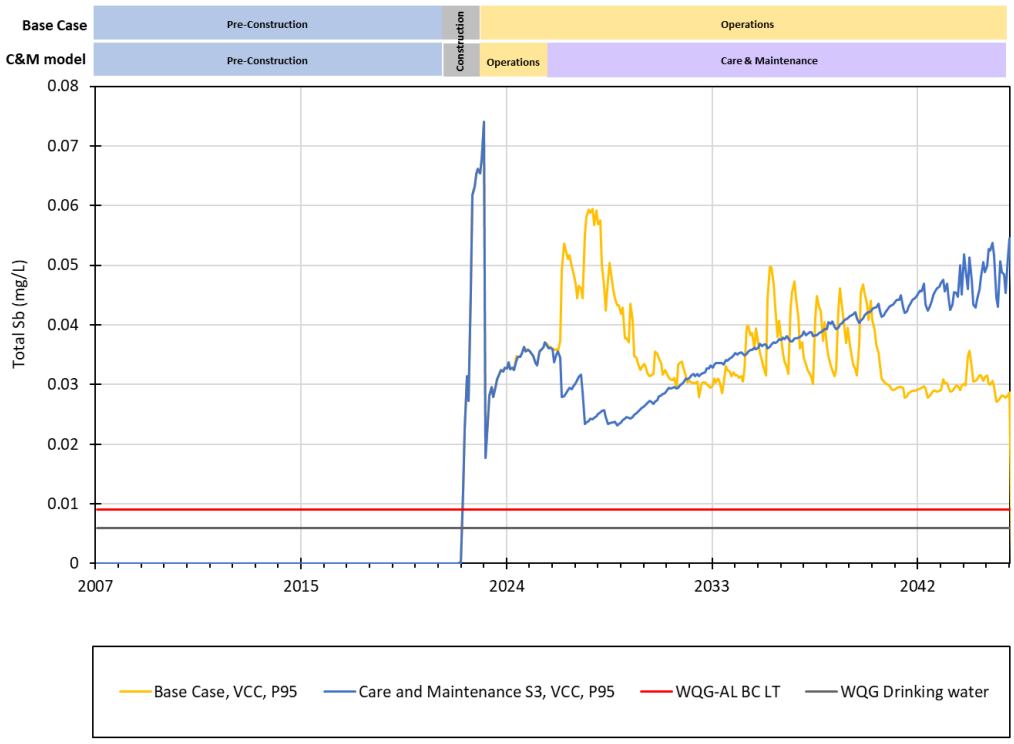


Figure C.3.1-7: Scenario 3 TSF C Pond Predicted Concentrations, T-Sb



Figure C.3.1-8: Scenario 3 TSF C Pond Predicted Concentrations, T-Zn

C.3.2 Scenario 3 Pit Sump

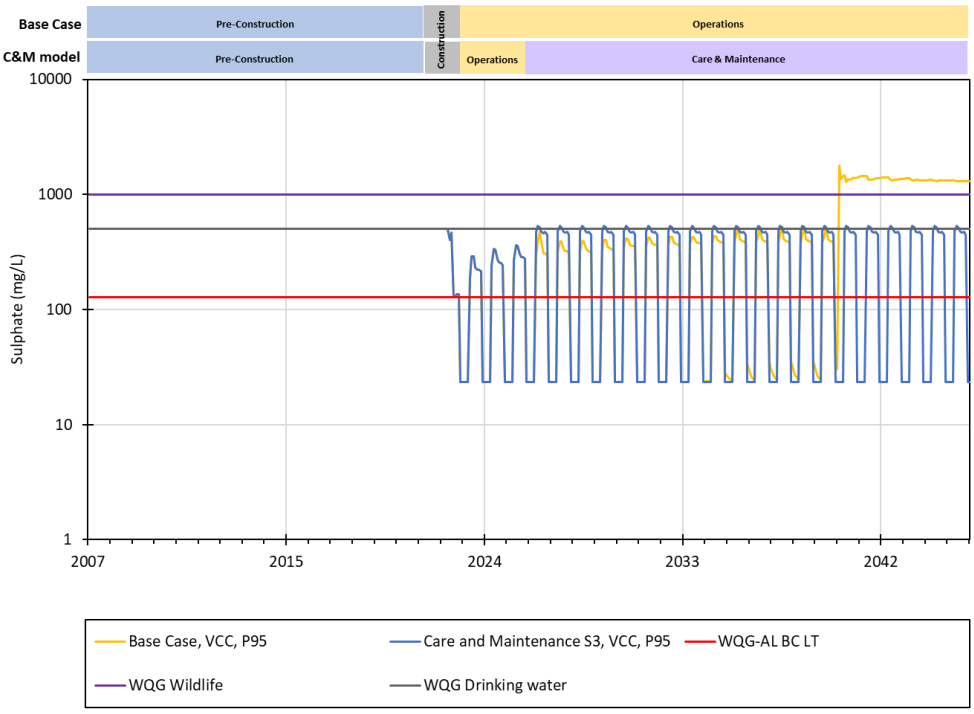


Figure C.3.2-1: Scenario 3 Pit Sump Predicted Concentrations, Sulphate.

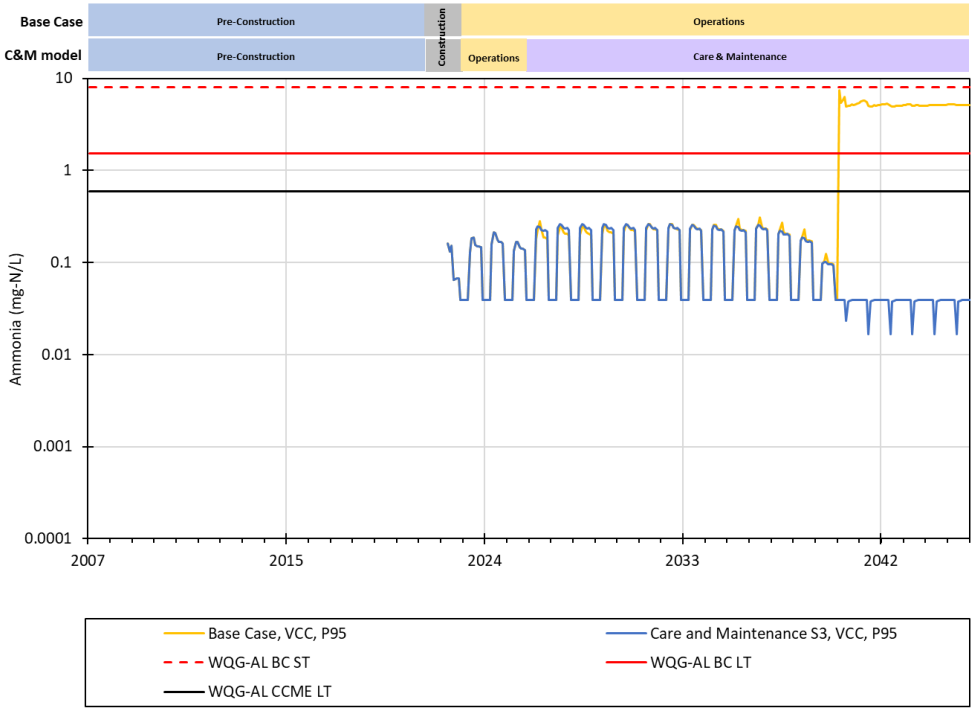


Figure C.3.2-2: Scenario 3 Pit Sump Predicted Concentrations, NH_4

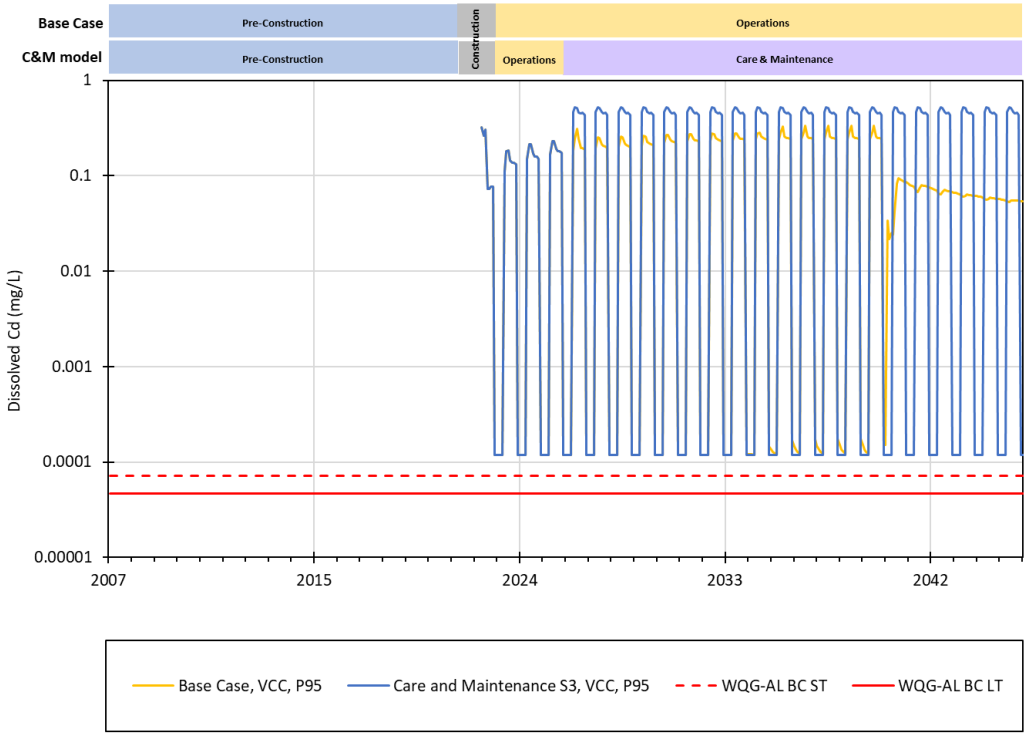


Figure C.3.2-3: Scenario 3 Pit Sump Predicted Concentrations, D-Cd

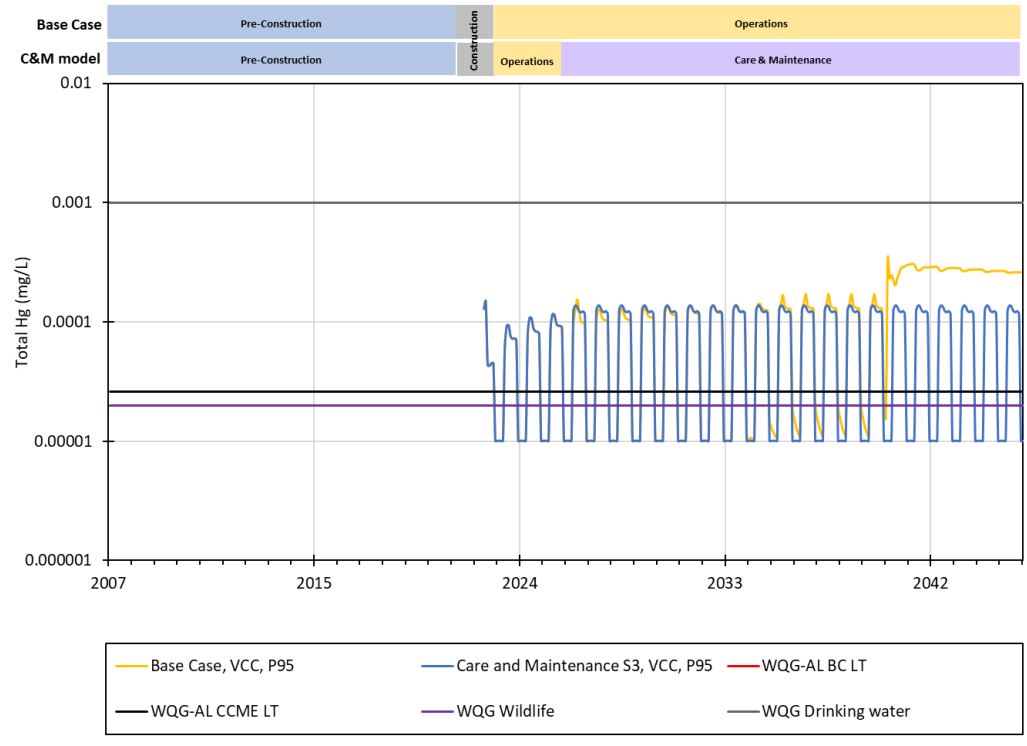


Figure C.3.2-4: Scenario 3 Pit Sump Predicted Concentrations, T-Hg

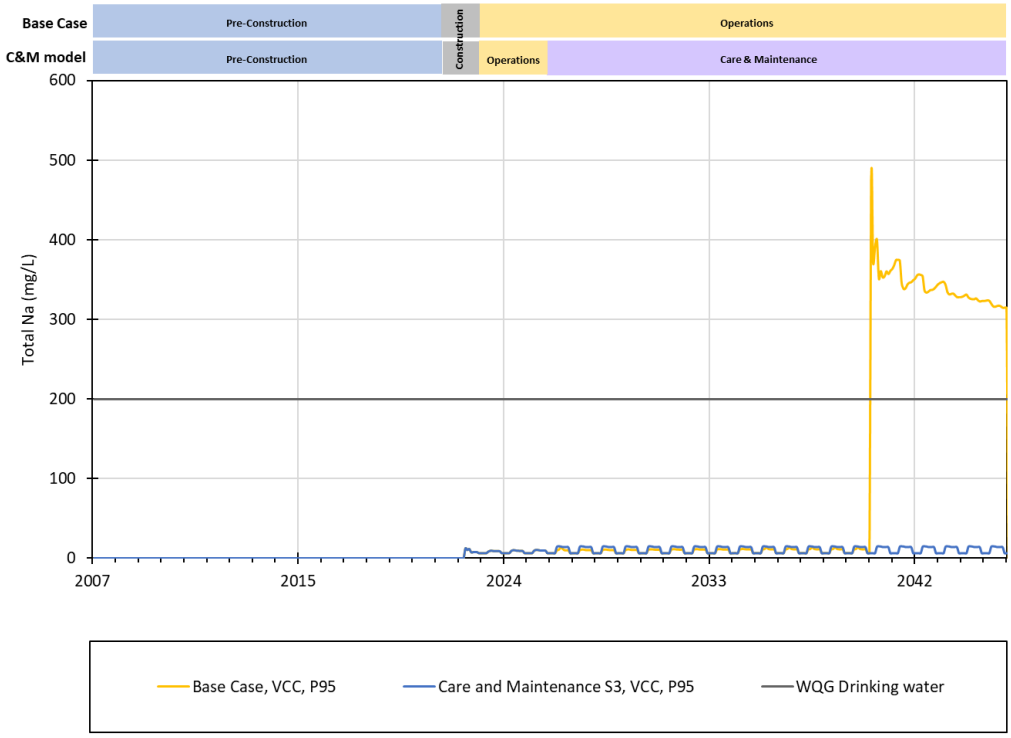


Figure C.3.2-5: Scenario 3 Pit Sump Predicted Concentrations, T-Na

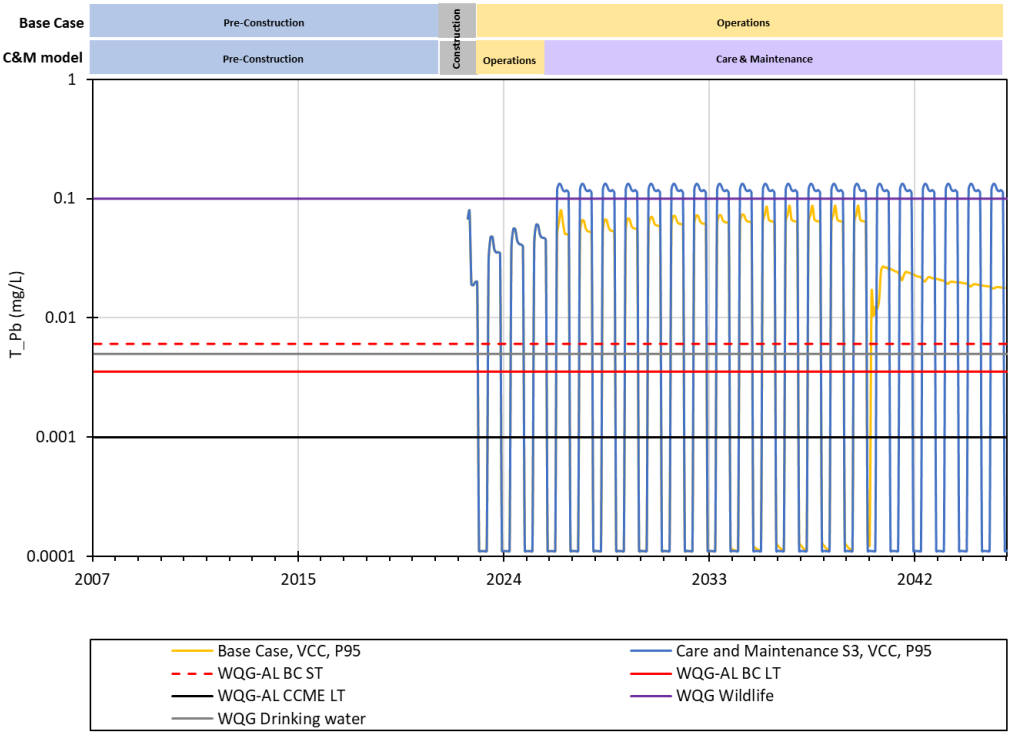


Figure C.3.2-6: Scenario 3 Pit Sump Predicted Concentrations, T-Pb

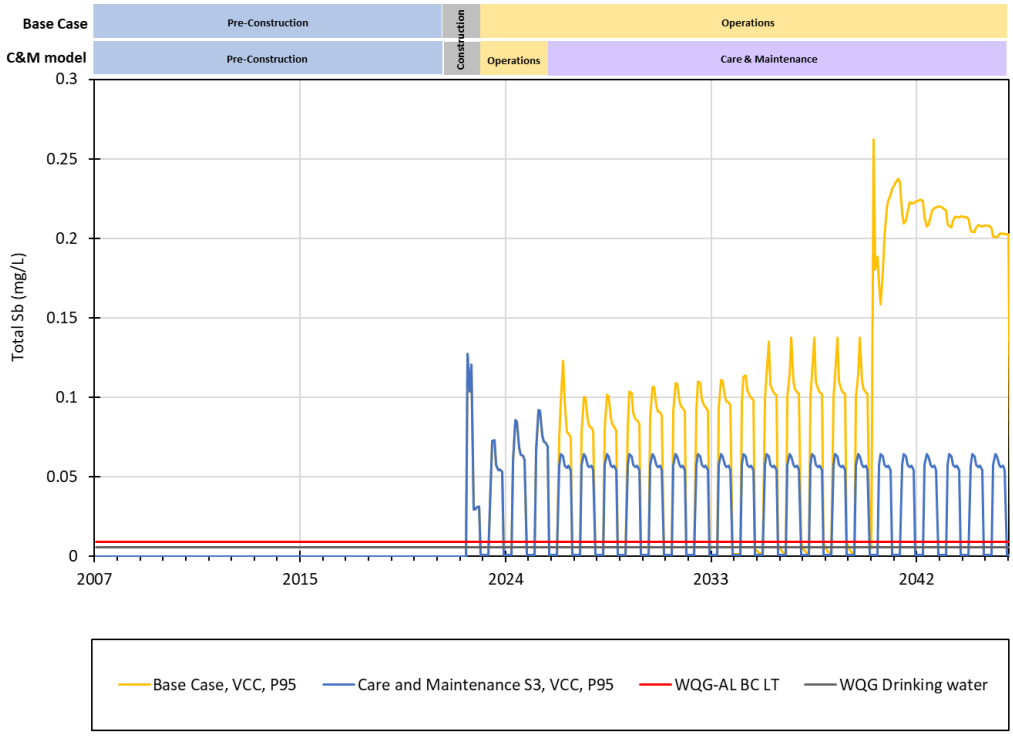


Figure C.3.2-7: Scenario 3 Pit Sump Predicted Concentrations, T-Sb

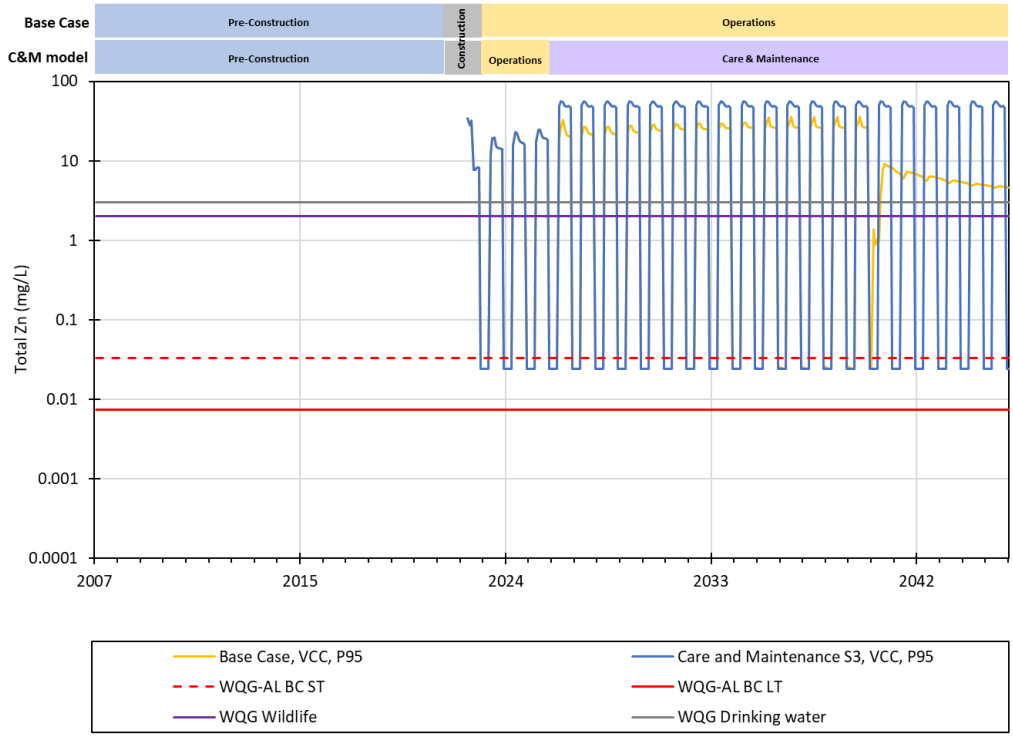


Figure C.3.2-8: Scenario 3 Pit Sump Predicted Concentrations, T-Zn

C.3.3 Scenario 3 WQ28

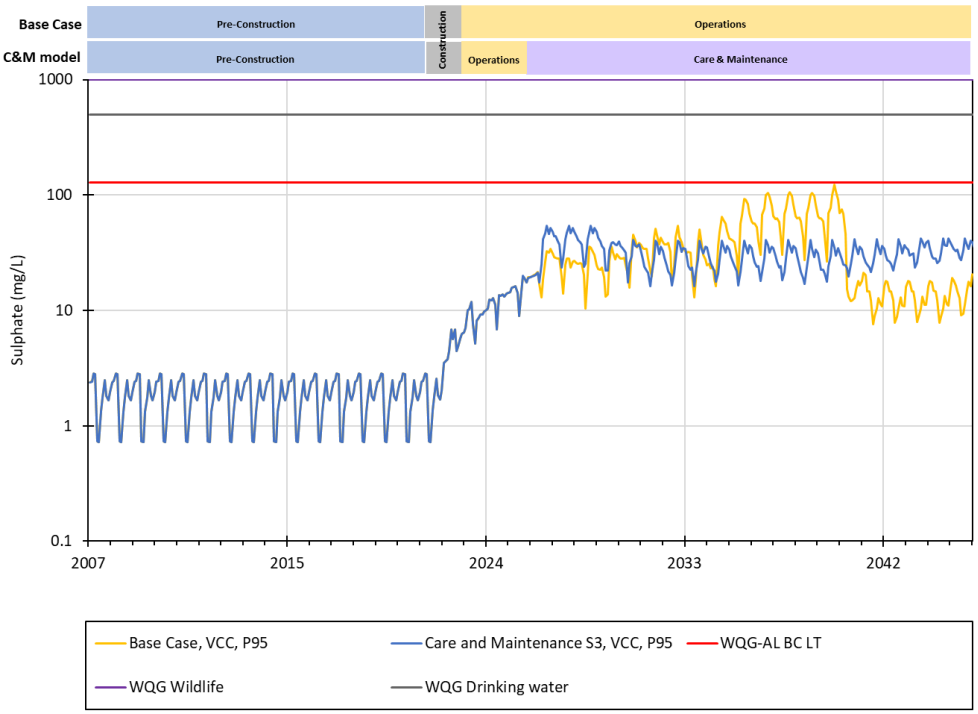


Figure C.3.3-1: Scenario 3 WQ28 Predicted Concentrations, Sulphate.

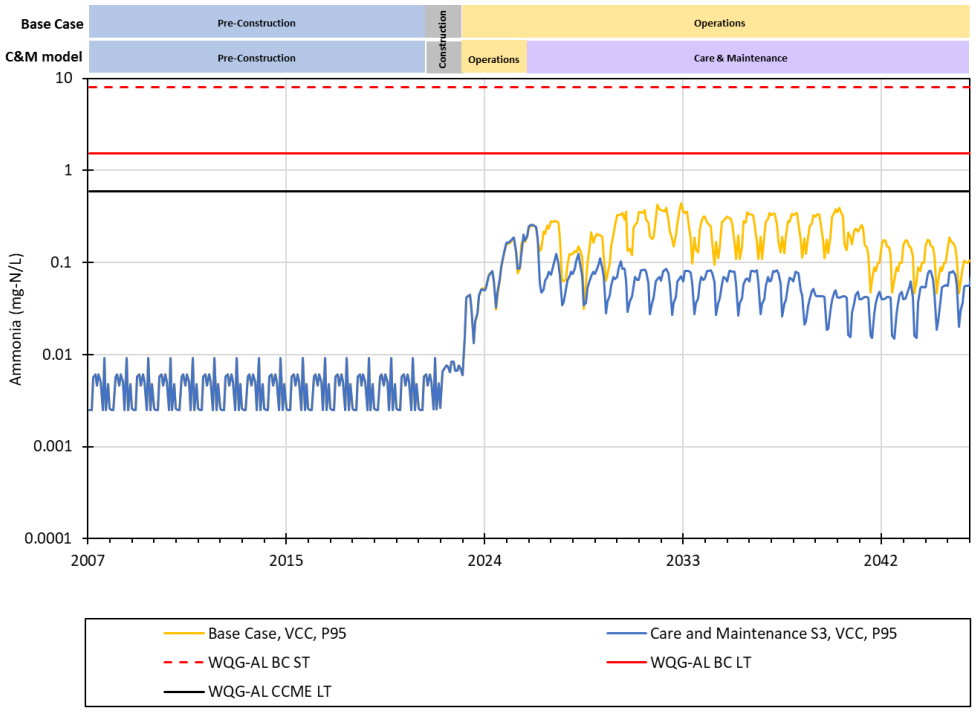


Figure C.3.3-2: Scenario 3 WQ28 Predicted Concentrations, NH_4

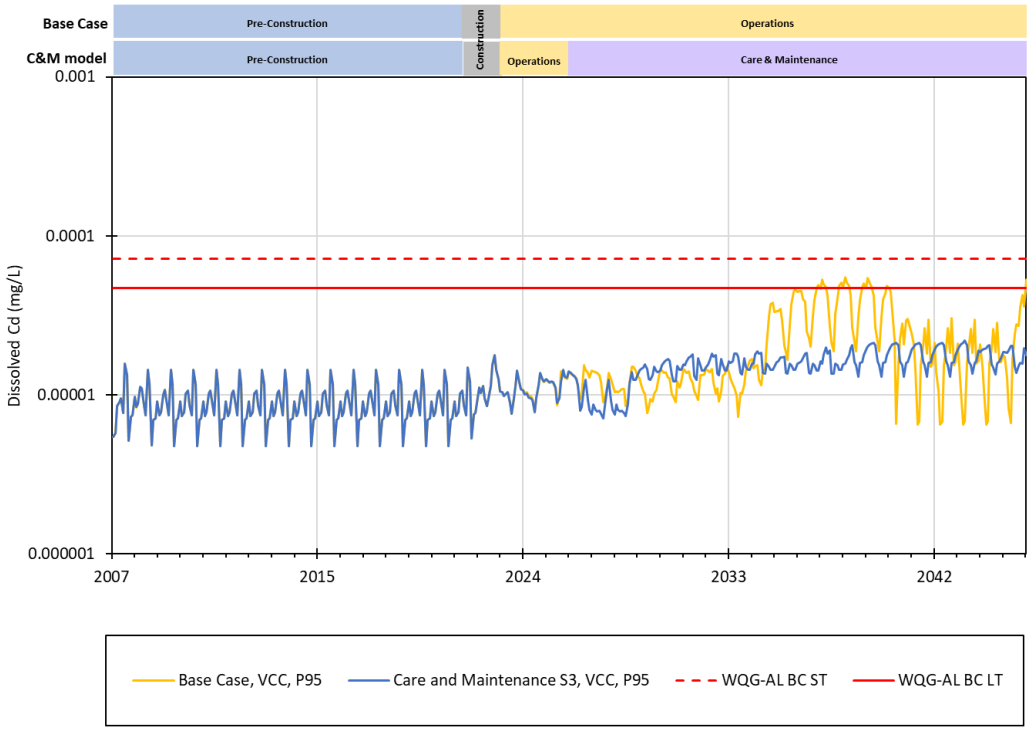


Figure C.3.3-3: Scenario 3 WQ28 Predicted Concentrations, D-Cd

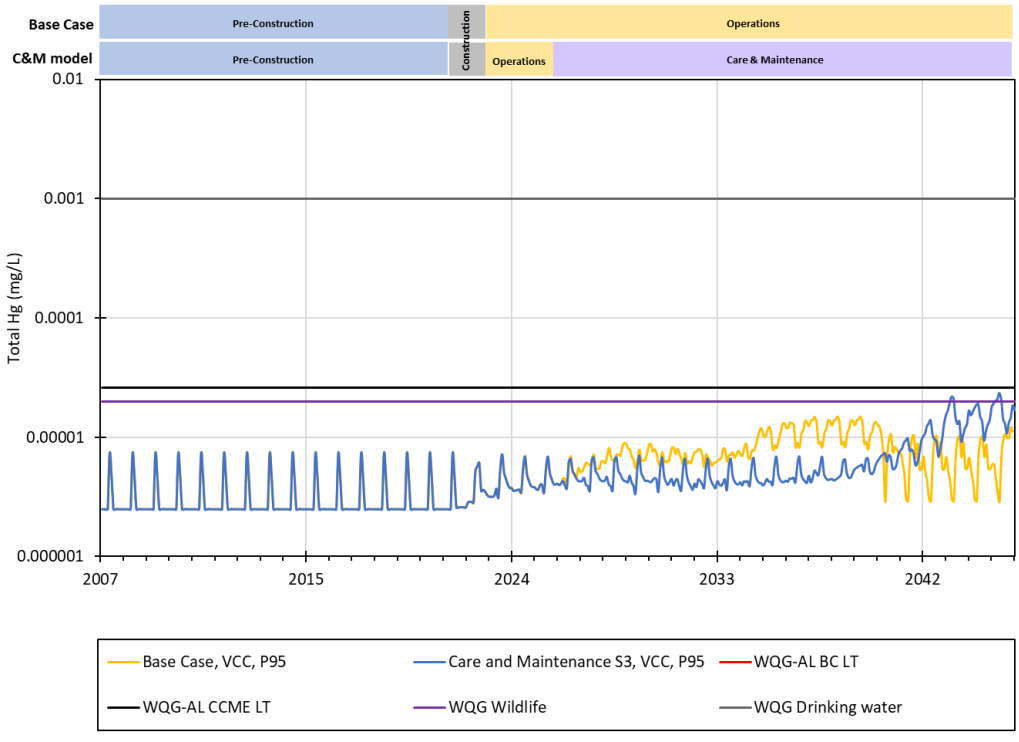


Figure C.3.3-4: Scenario 3 WQ28 Predicted Concentrations, T-Hg

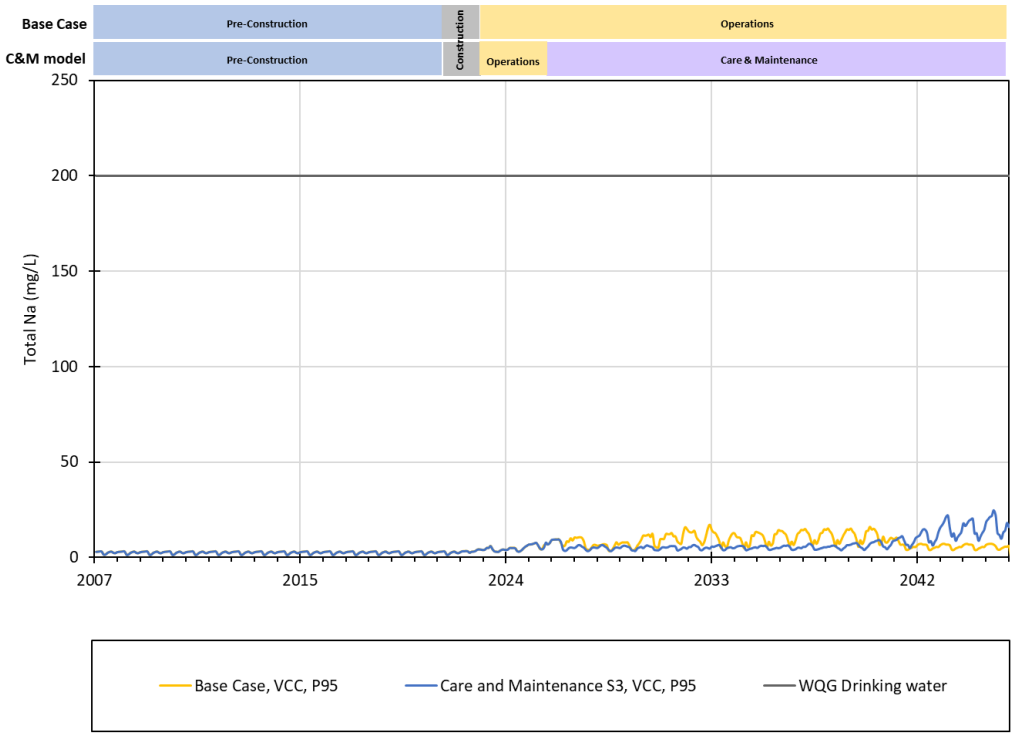


Figure C.3.3-5: Scenario 3 WQ28 Predicted Concentrations, T-Na

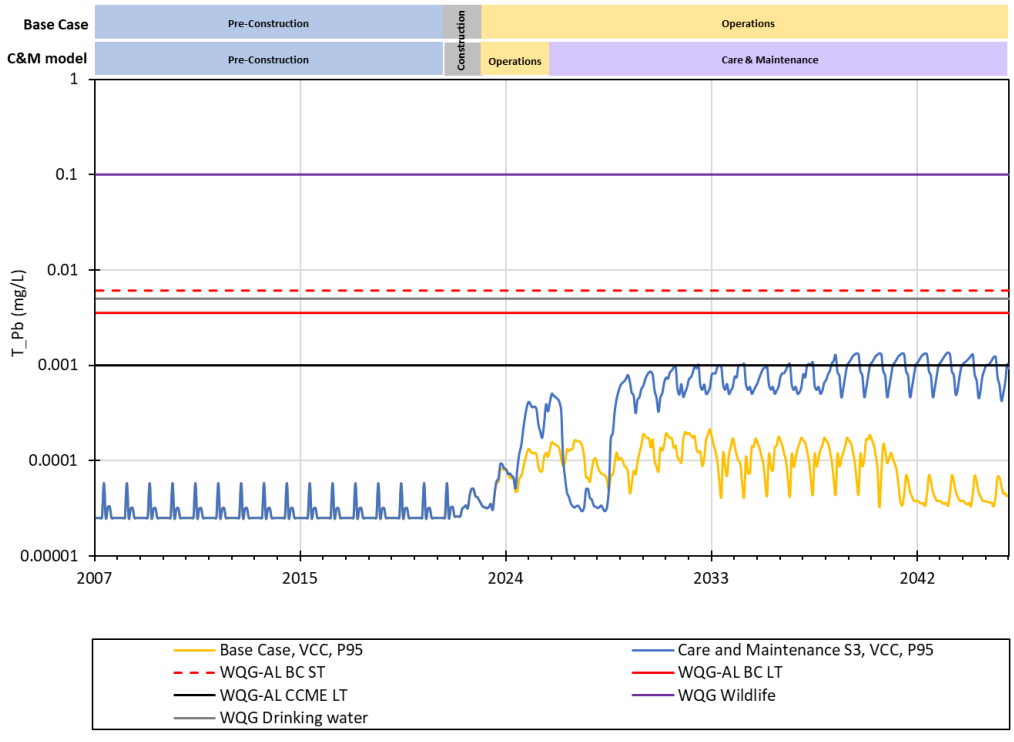


Figure C.3.3-6: Scenario 3 WQ28 Predicted Concentrations, T-Pb

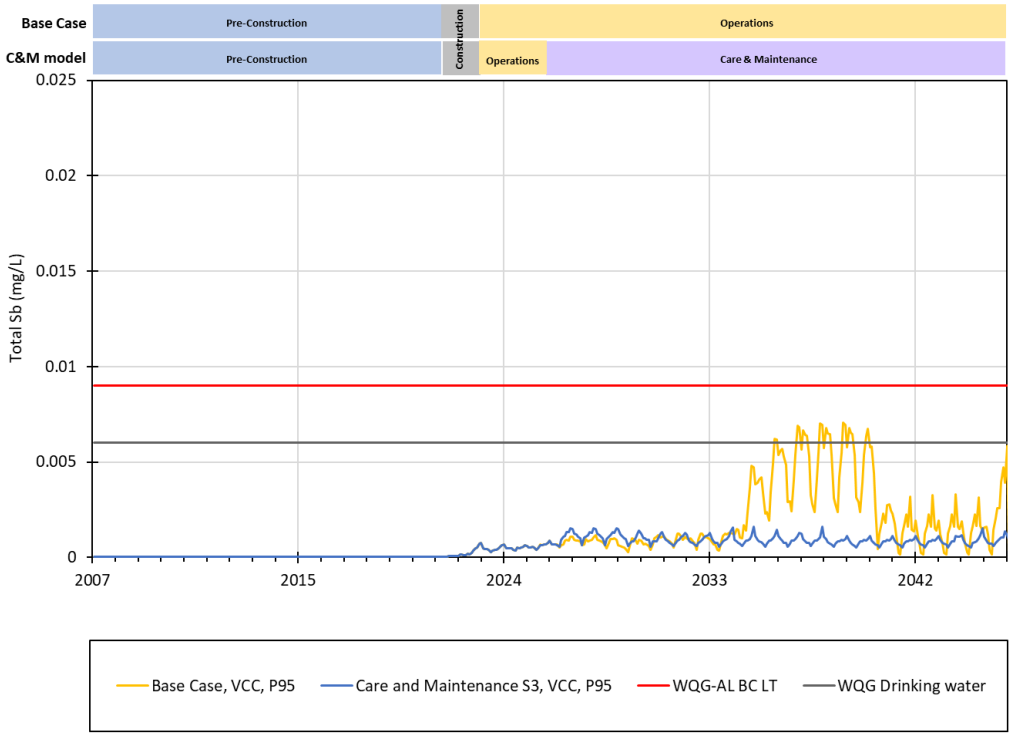


Figure C.3.3-7: Scenario 3 WQ28 Predicted Concentrations, T-Sb

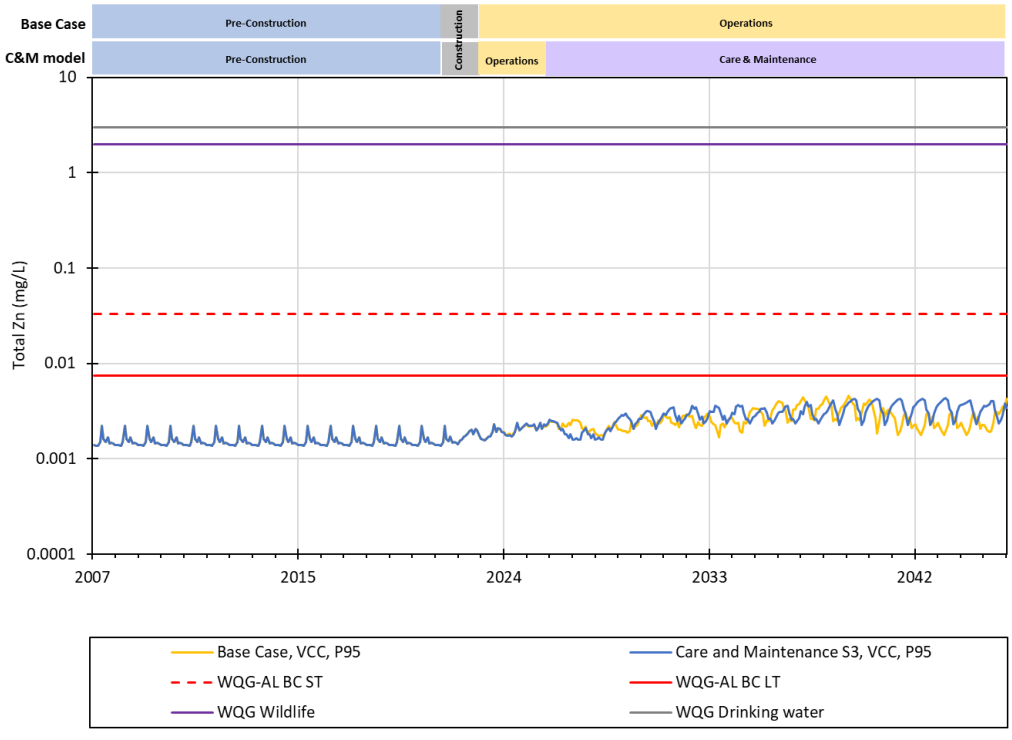


Figure C.3.3-8: Scenario 3 WQ28 Predicted Concentrations, T-Zn

APPENDIX F MEMORANDUM: OPERATIONS PHASE MEMBRANE WATER TREATMENT PLANT CAPACITY INCREASE

BQE Water

MEMORANDUM

TO:	Ryan Todd, Travis Desormeaux, Georges Moukodi
CC:	Insert name
FROM:	Veneil Sundar
DATE:	August 11, 2022
SUBJECT:	**Operations Phase Membrane WTP Capacity Increase**

Artemis Gold Inc. (Artemis) developed water balance and water quality models for a hypothetical care and maintenance (C&M) period starting in year 3+. One objective of the modelling exercise was to determine if there is sufficient membrane water treatment plant (WTP) capacity to prevent excess buildup in the tailings storage facility (TSF) during average and variable climate scenarios. The C&M modelling results indicate that treatment rates of 90 L/s and 110 L/s would be required for the average and variable climate scenarios respectively.

Artemis contracted BQE Water (BQE) to develop the design of the membrane WTP for the Blackwater Project. The membrane WTP is scheduled for construction in year -1 and the design is described in detail in the report titled ***WTP for Sulphate Control at Blackwater during Operation and Post-Closure***. The membrane WTP was designed to treat water at a rate of 72 L/s during the operations phase.

The purpose of this memo is to provide capital and operating cost estimates associated with increasing the treatment hydraulic flow rate through the operations phase membrane water treatment plant (WTP) from 72 L/s to 110 L/s, as well as provide lead time estimates for delivering the new equipment. Table 1 provides a summary of WTP treatment rates and their associated capital cost.

Table 1: Capital Cost Estimate

WTP Scenario	Feed, L/s	Discharge, L/s	Installed Capital Cost ($M CAD)
Operations, year 0-3	72	54	$8.41
Care & Maintenance, year 3+	110	83	$11.77

Water treatment plant capacity will need to be included to meet these additional throughput requirements. Key unit operations will require upgrades including multimedia filtration, cartridge filtration and reverse osmosis. The capital cost for the additional equipment is estimated at approximately $3.36M and will take 52 weeks to deliver to site based on current lead times being experienced on similar projects. BQE estimates an additional 12 weeks for installation, commissioning and start up. The existing building footprint is large enough to accommodate the additional equipment. The balance of the process equipment such as, process tanks, reagent systems and utility systems are adequately sized to accommodate the treatment rate increase and will not require any changes in the early-closure scenario.

Table 2 provides an operating cost summary for each treatment flow rate scenario.

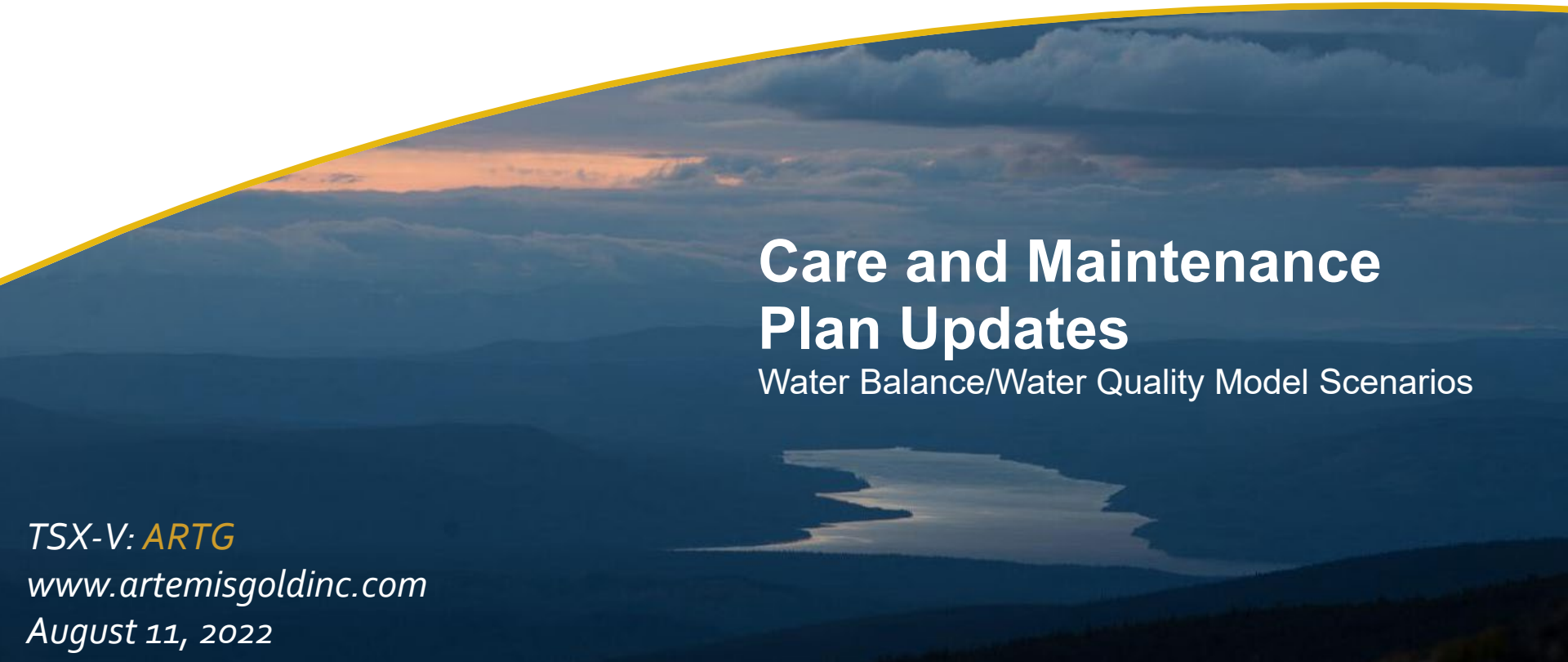
Table 2: Operating Cost Estimates

Reagent	72 L/s ($M CAD)	110 L/s ($M CAD)
Reagents	$0.45	$0.69
Power	$0.13	$0.16
Maintenance	$0.09	$0.15
Operating Consumables	$0.14	$0.22
Operating Labour	$0.64	$0.64
Assays	$0.02	$0.02
Annual Operating Cost	$1.47	$1.88

The increase in treatment flow rate does not affect operating labour and assay costs. Operating consumables cost increases include replacement media for multimedia filtration, replacement cartridge filters and reverse osmosis membranes. Reagent and power cost increases will also increase in line with the increased volume of water being treated. Additional annual operating cost of $0.41M/year is expected to be incurred due to the increase in the treatment flow rate in the early closure scenario.

APPENDIX G CARE AND MAINTENANCE PLAN UPDATES: WATER BALANCE/WATER QUALITY MODEL SCENARIOS

ARTEMIS GOLD INC | Blackwater Mine



Care and Maintenance Plan Updates

Water Balance/Water Quality Model Scenarios

TSX-V: ARTG
www.artemisgoldinc.com
August 11, 2022

Agenda

ARTEMIS GOLD INC | Blackwater Mine

- Objectives
- CSFN comments on C&M Plan
- Modelling Scenario Assumptions
  - C&M flow diagram for C&M period starting in Year 3 of Operations
- Modelling Scenario Assumptions
- WB outputs from 3 scenarios
- WQ outputs from 3 scenarios
- Increased Treatment Capacity on Membrane Treatment Plant
- Summary



Objectives



Objectives

- The purpose of this meeting is to provide a summary of the results of the water balance and water quality modelling representing a hypothetical Care and Maintenance (C&M) period. Several scenarios were assessed.
- BW Gold submitted a proposed scenario and rationale for the C&M modelling to CSFN on February 21, 2022 and met with CSFN to discuss the proposed modelling on March 1. BW Gold received CSFN comments on the plan March 17, 2022.
- C&M modelling is a commitment BW Gold made to validate the C&M Plan (frequency of modelling is every 5 years). This commitment was carried from the EAC into the MRC MW's application review. This is reflected in a letter from Lowell Constable with EMLI (April 11, 2022) .

CSFN Key Comments

ARTEMIS GOLD INC | Blackwater Mine

Water Treatment Capacity - Modelling to address: Is there sufficient water treatment capacity to prevent excess water buildup? If not, how much additional treatment capacity is required? What are the costs for expansion?

Pit Dewatering- Modelling to address: Can the water balance avoid surplus buildup without storing water in the Open Pit?

Brine Accumulation - Modelling to address: What is the impact of brine accumulation in the TSF and does it impact treatment efficiency?

Compliance with EAC Condition 33 - CSFN point to EAC Condition 33 and requirement for an “oxygen-preventing barrier” that does not allow for tailings/waste rock to become acidic. BW Gold proposes to evaluate a tailings material that is not covered by water.

CSFN Key Comments

Ramp Up Period- Modelling to consider: Is there risks in the water balance with the return to Operations in terms of the potential dewatering of the Open Pit?

PAG Tailings/Waste Rock Submergence Schedule - Agreement reached: How does PAG tailings/waste rock submergence schedule compare to the time of ARD onset? If modelling suggest tailings/waste rock will be exposed for longer than ARD onset, what are the mitigations planned?

Applicability of Operational Water Management and Treatment Strategies – Modelling to consider: Are operational water management strategies and/or treatment capabilities suitable for the C&M period?

TSF Water Quality - TSF water quality must be modelled for worst-case scenario periods of C&M for at least 20 years (the length of time BC mining projects are often in C&M).

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Water Balance Model Outputs

Knight Piésold

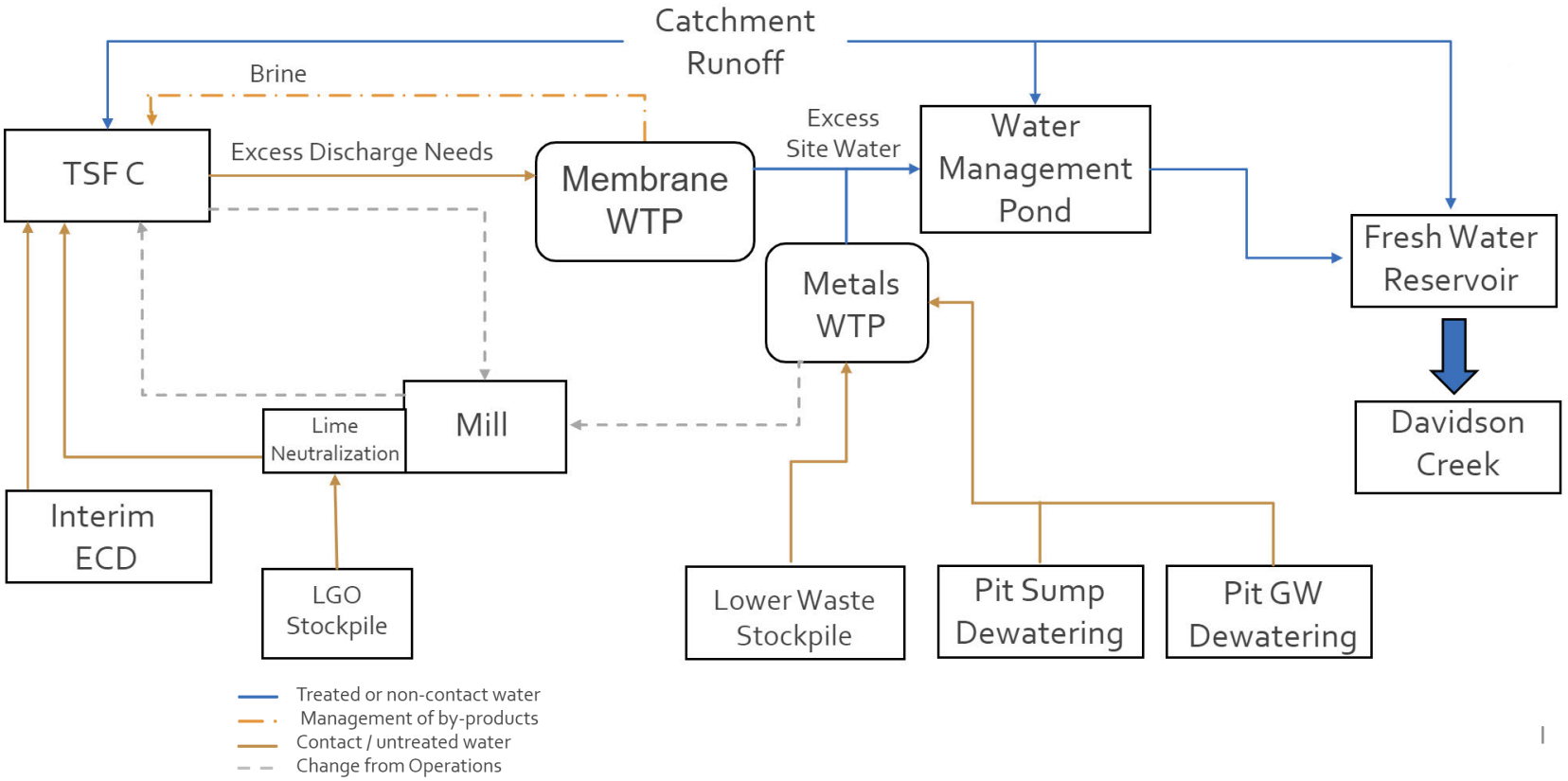
Scenario Assumptions

- C&M starts at end of Year 3 of Operations
  - Year 3 of Operations has the potentially largest exposed beach area (determined as the difference between the top of PAG and top of tailings elevation).
- C&M period lasts for 20 years
- Construction of Main Dam C for end of Year 2 of Operations (1,295 masl)
  - If moving into C&M in Year 3, Main Dam C would remain at the Year 2 crest elevation as this would be a more conservative condition from the perspective of less available storage capacity.
- Pit dewatering continues and pit is not allowed to fill

END OF YEAR	MAIN DAM C CREST EL.	PAG/NAG3 WASTE ROCK DUMP EL.	TAILINGS DISCHARGE POINT: WEST SIDE EL.	TAILINGS DISCHARGE POINTS: MAIN DAM C EL.	ESTIMATED SUPERNATANT POND EL.
	(masl)	(masl)	(masl)	(masl)	(masl)
-1	1,273	1,235	-	-	1,234
1	1,283	1,260	1,263	-	1,260
2	1,295	1,269	1,276	-	1,268
3	1,301	1,276	1,285	-	1,274
4	1,307	1,289	1,292	-	1,278
5	1,312	1,298	1,298	-	1,286

Care and Maintenance Water Management (Starting at end of Year 3)

ARTEMIS GOLD INC | Blackwater Mine

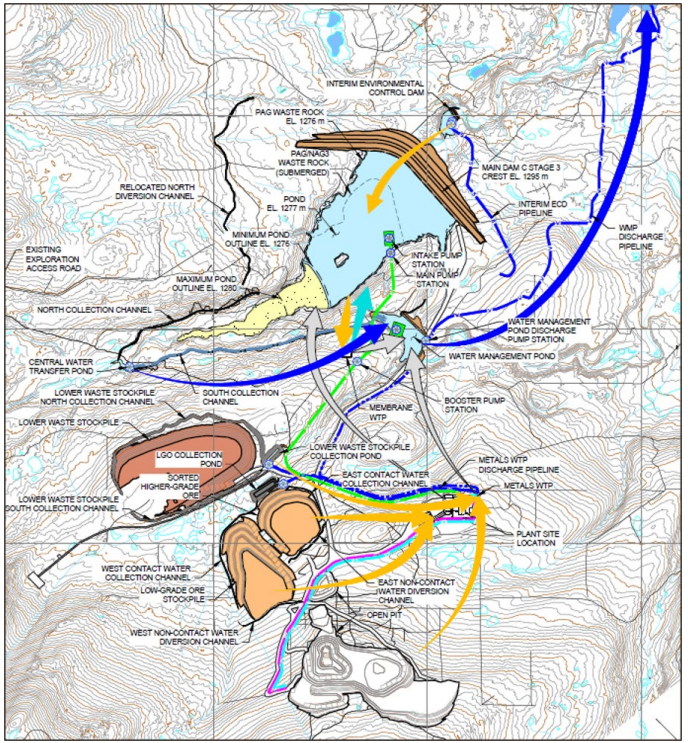


Care and Maintenance Water Management (Year 3 General Arrangement)

ARTEMIS GOLD INC | Blackwater Mine

Key Water Management

- LGO -> **Lime Neutralization** -> TSF
- Lower Waste Stockpile and Open Pit dewatering -> **Metals WTP** -> WMP
- Central Diversion -> WMP -> FWR
- Interim ECD ->TSF
- TSF -> **Membrane WTP** –>WMP -> FWR
- Brine -> TSF

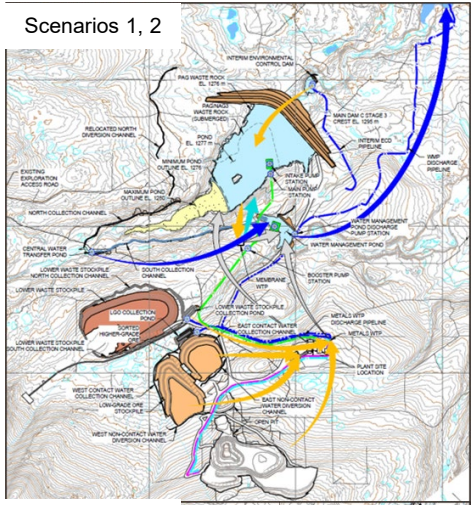


Water Balance Scenarios

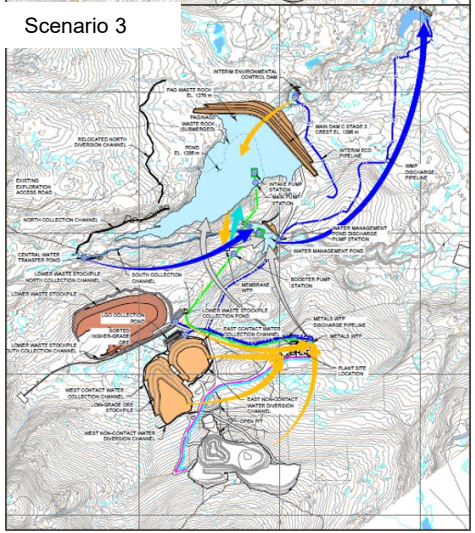
- Modelled 3 scenarios with different “cover” assumptions

Scenario	Description	TSF Cover Material
1	No temporary cover	Water covers PAG waste rock in TSF, tailings is sub-aerial
2	Same cover as full closure	Water covers PAG waste rock in TSF; soil cover placed over tailings
3	Full water cover	Water covers PAG waste rock and tailings in TSF

Scenarios 1, 2



Scenario 3



Water Balance Scenarios

- Scenario 1 and 2: Pond height = 1,277 masl (top of PAG)
- Scenario 3: Pond height = 1,285 masl (top of tailings). This pond elevation exceeds the maximum allowable pond elevation based on freeboard requirements for storage of the Inflow Design Flood (IDF) assuming a dam crest of 1295 masl. The modelled Scenario 3 pond elevation would not be acceptable unless on-going dam construction planned during Year 3 resulted in a higher dam crest elevation or if the TSF incorporated other means of managing the IDF during the C&M period.

END OF YEAR	MAIN DAM C CREST EL.	PAG/NAG3 WASTE ROCK DUMP EL.	TAILINGS DISCHARGE POINT: WEST SIDE EL.	TAILINGS DISCHARGE POINTS: MAIN DAM C EL.	ESTIMATED SUPERNATANT POND EL.
	(masl)	(masl)	(masl)	(masl)	(masl)
-1	1,273	1,235	-	-	1,234
1	1,283	1,260	1,263	-	1,260
2	1,295	1,269	1,276	-	1,268
3	1,301	1,276	1,285	-	1,274
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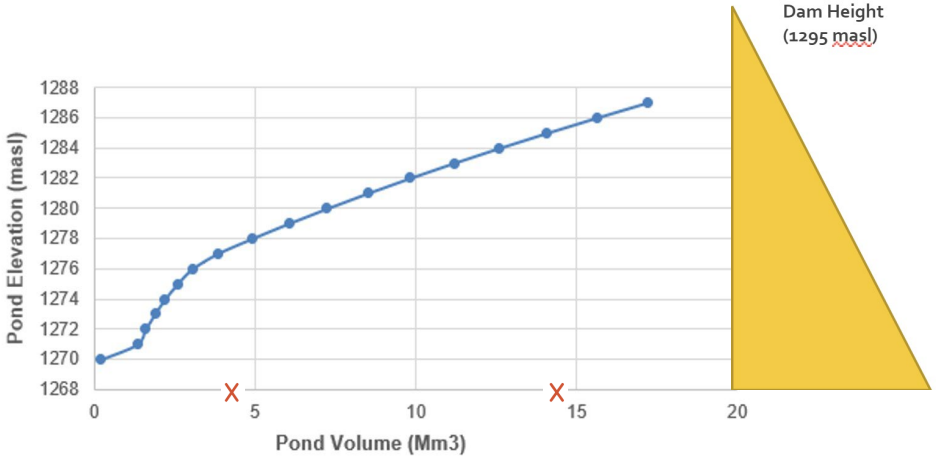


Water Balance Results – All Scenarios

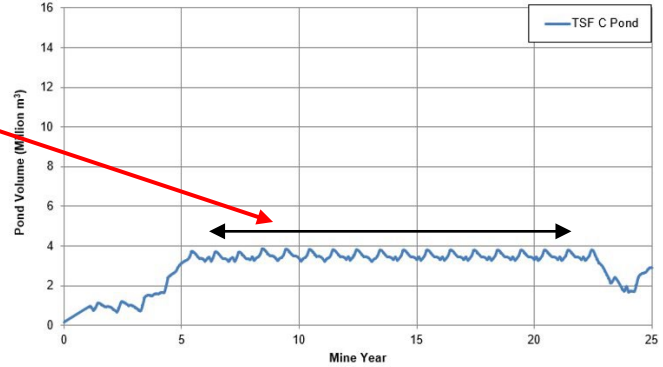
What treatment rate required during C&M?

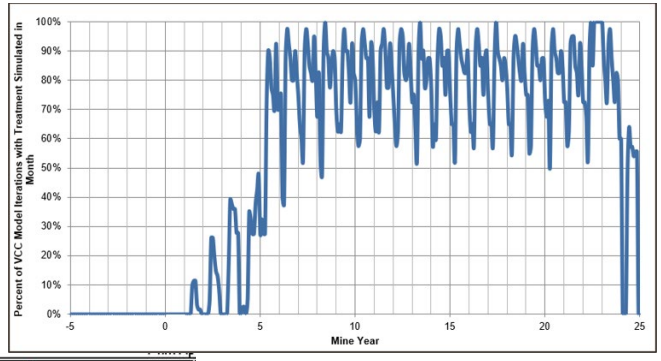
Operations treatment rate: **72 L/s** [up to 2.3 Mm3/yr]

Potential for greater water accumulation in TSF during C&M than Operations due to increased brine volume sent to TSF (~28 L/s)

Membrane WTP Treatment requirements to maintain a pond volume within optimum range:

- C&M: 90 L/s (average climate) [2.9 Mm3/yr]
- **C&M: 110 L/s** (variable climate) [3.5 Mm3/yr]





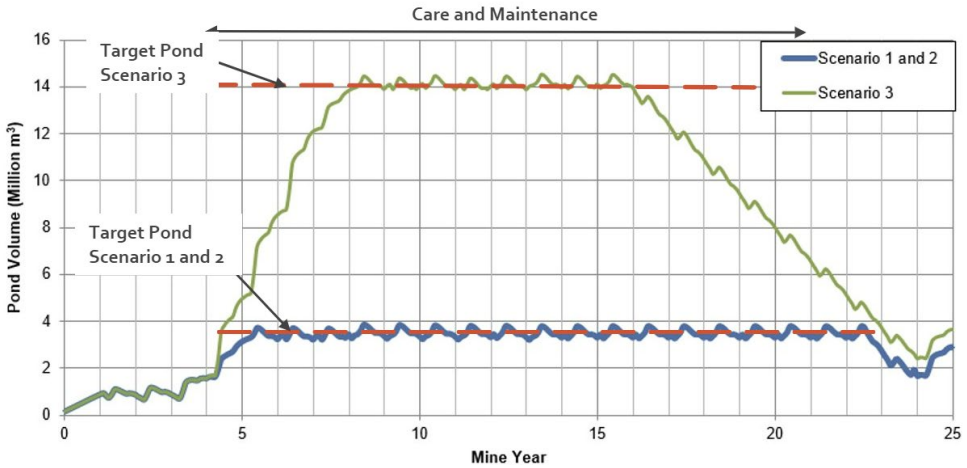
Model Year	Inputs (Mm³)							Losses (Mm³)			
	Precipitation on TSF C Pond	Precipitation on Tailings Beach, Waste Rock, and Upstream Embankments	SW & GW from Upgradient Catchment[1]	LGO from Lime Neutralization	Pumpback from Interim ECD	Brine from Membrane WTP	Total Inputs[4]	Seepage	Pond Evaporation	Surplus to WTP in Operations	Total Losses[4]
C&M	0.5	0.1	1.1	0.2	0.4	0.6	**3.1**	0.2	0.5	2.4	**3.1**

Water Balance Scenarios (Variable Climate)

- Treatment rate end of C&M needs to increase to draw down the pond volume
- Assumption: Increase Membrane WTP treatment rate by 50% prior to restarting Operations (increases to 165 L/s).

Scenario	Treatment Rate (L/s)	Time to achieve TSF Pond Height	Time to pump down TSF Pond
Scenario 1 and 2	165	1.2 yr	1.5 yr
Scenario 3	165	4 yr	6 to 8 yr

- Scenario 3: water from Central Diversion is also directed to TSF to assist in achieving target pond height



Water Balance Scenarios (Key Learnings)

- Treatment requirements at Membrane WTP during C&M period for TSF surplus are approximately **110 L/s** considering variable climate conditions (90 L/s for average climate conditions). This is increased from 72 L/s in Operations, attributed to brine inputs to TSF.

- **Scenario 1 and 2:** Pond covers the PAG waste rock in TSF (1,277 masl, 4 Mm3)
  - Requires approximately 1.2 years to achieve desired height
  - Would take 1.5 years to pump down assuming the treatment rate is increased by 50% from C&M period (to 165 L/s).
- **Scenario 3:** Pond covers tailings & PAG waste rock (1,285 masl, 14 Mm3)
  - Requires approximately 4 years to achieve desired height, assuming water from Central Diversion directed to TSF.
  - Would take 6 to 8 years to pump down the pond with same assumptions as above.

Scenario	Treatment Rate (L/s)	Time to achieve TSF Pond Height	Time to pump down TSF Pond
Scenario 1 and 2	165	1.2 yr	1.5 yr
Scenario 3	165	4 yr	6 to 8 yr

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Water Quality Model Outputs

Lorax

Care & Maintenance Summary

Three scenarios overview

- Scenario 1 → acidic tailings beach
- Scenario 2 → soil cover over tailings beach
- Scenario 3 → water cover over tailings beach

WQM Updates and Assumptions

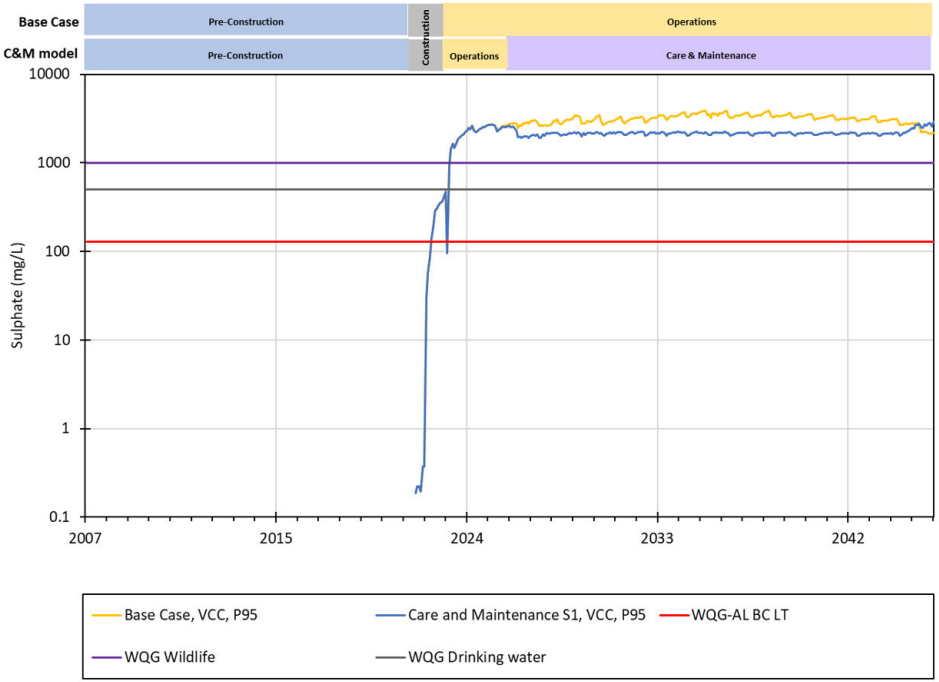
- Incorporates water balances provided by KP
- Generally consistent with v13e WQM assumptions for Construction and Operations
  - Brine assumptions
  - Treatment rates
- Developed an acidic tailings source term
- Added gypsum solubility cap in TSF C pond during C&M period
  - Applied in all scenarios
  - Accounts for brine input to TSF C pond
- Post-Closure assumptions for pit walls applied in C&M
  - All PAG1 assumed to be acidic
  - 26% of PAG2 assumed to be acidic

Acidic Tailings Source Term

- Loading rates for parameters without a pH-dependent relationship were calculated by multiplying the neutral-pH tailings loading rate by the ratio of PAG1 acidic to PAG1 neutral loading rates for waste rock
- Sulphide oxidation rate allowed to decay over time based on First Order reaction kinetics (oxidation rate declines as sulphide inventory decreases)
- Loading rates for parameters with a pH-dependent relationship (As, Cd, Co, Cu, Ni, Sb, Pb, Zn):
  - Updated calculation using the pH-dependent rate with a pH of 3.5 and the median metal content from the block model or static tests for parameters not included in the block model
  - Loading rates decrease over time in response to declining metal inventory (First Order reaction kinetics)
  - Lowest loading rate bounded by the neutral tailings source term loading rate
- Scaled using the same scaling factors as the neutral tailings source term

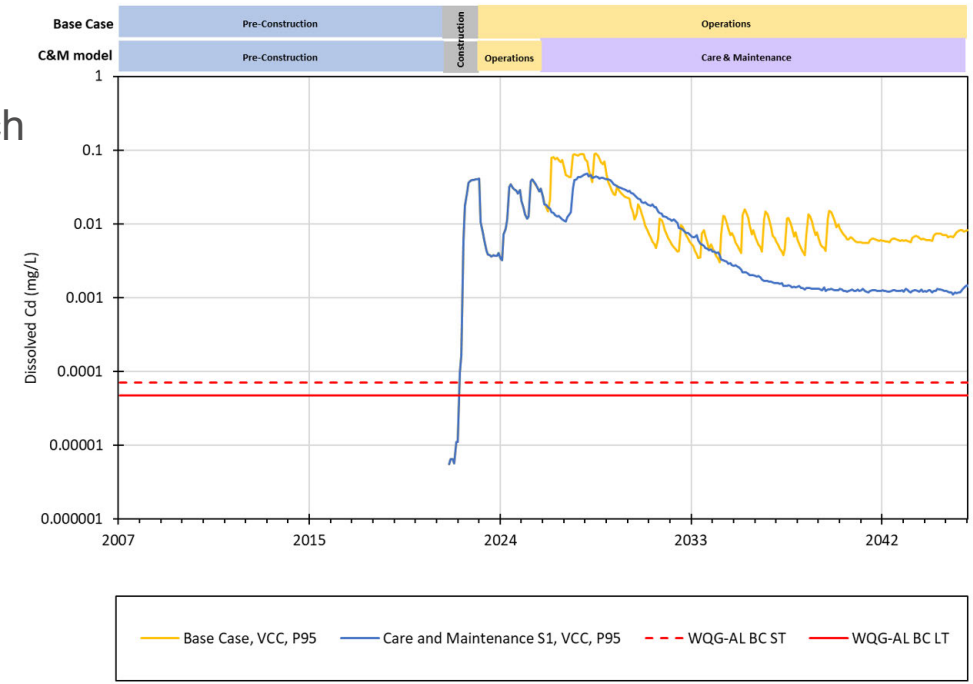
TSF C: Scenario 1

- **Sulphate**
  - Dominant load in C&M is from WTP brine
  - Lime treatment and Interim ECD are minor loading sources



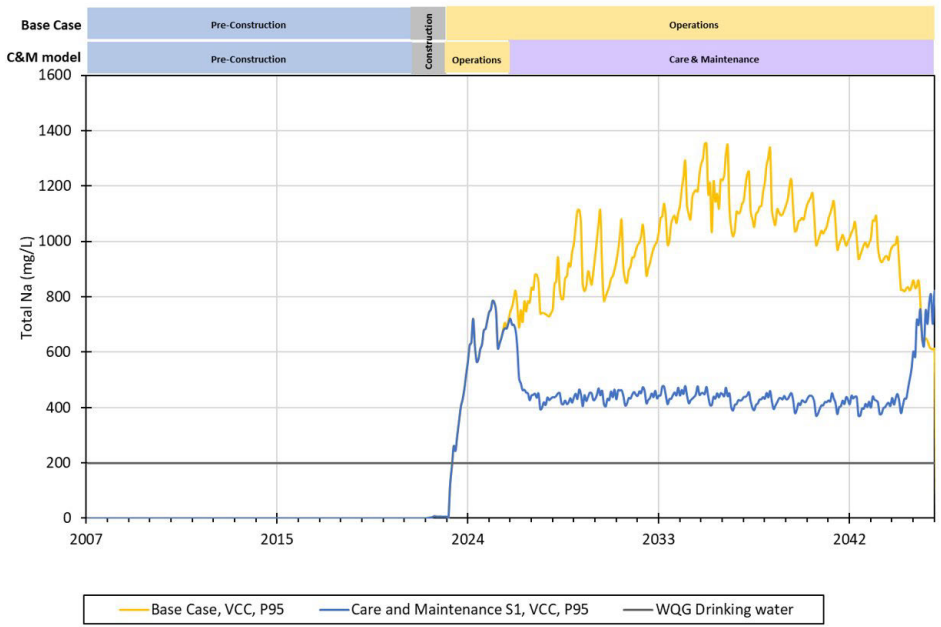
TSF C: Scenario 1

- **Dissolved Cd**
  - Dominant loads in C&M are from tailings beach runoff and tailings beach infiltration
  - Once load from tailings beach begins to decrease, interim ECD, lime treatment system, and WTP brine represent key loads



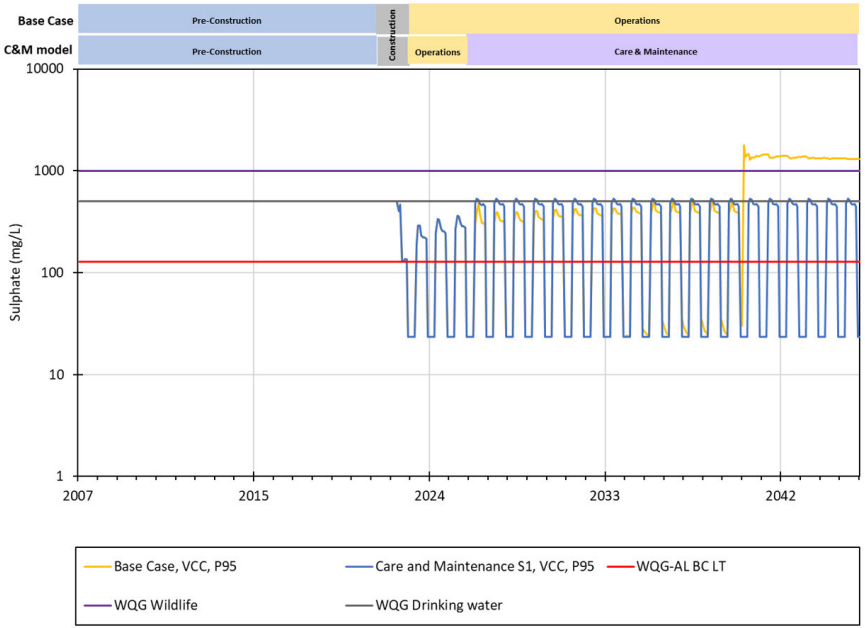
TSF C: Scenario 1

- **Total Na**
  - Dominant load in C&M is from WTP brine
  - Dominant load in Operations is mill reagent use (process water)
  - Background sources provide dilution within the pond (low Na concentrations)
  - Slight decrease is a result of presenting P95 results
  - Mean results show a slight increase over C&M



Pit: Scenario 1

- **Sulphate**
  - Dominant load in C&M is from pit wall



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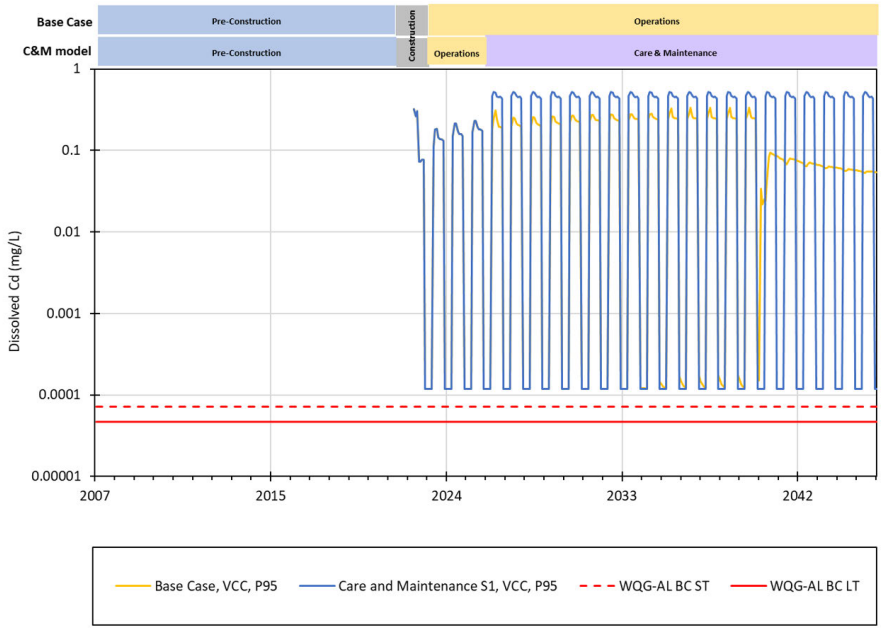
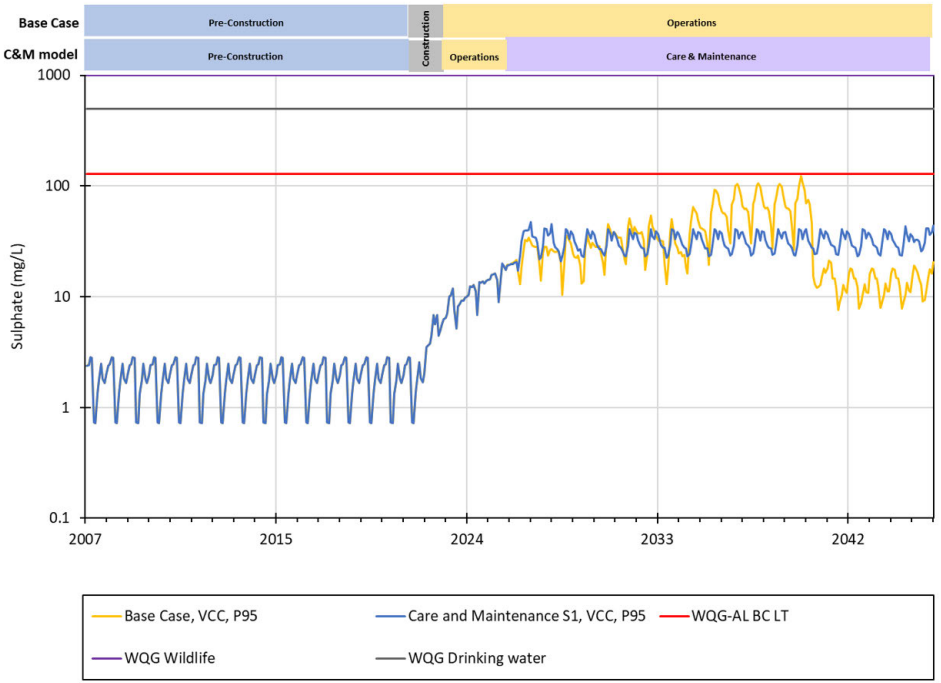


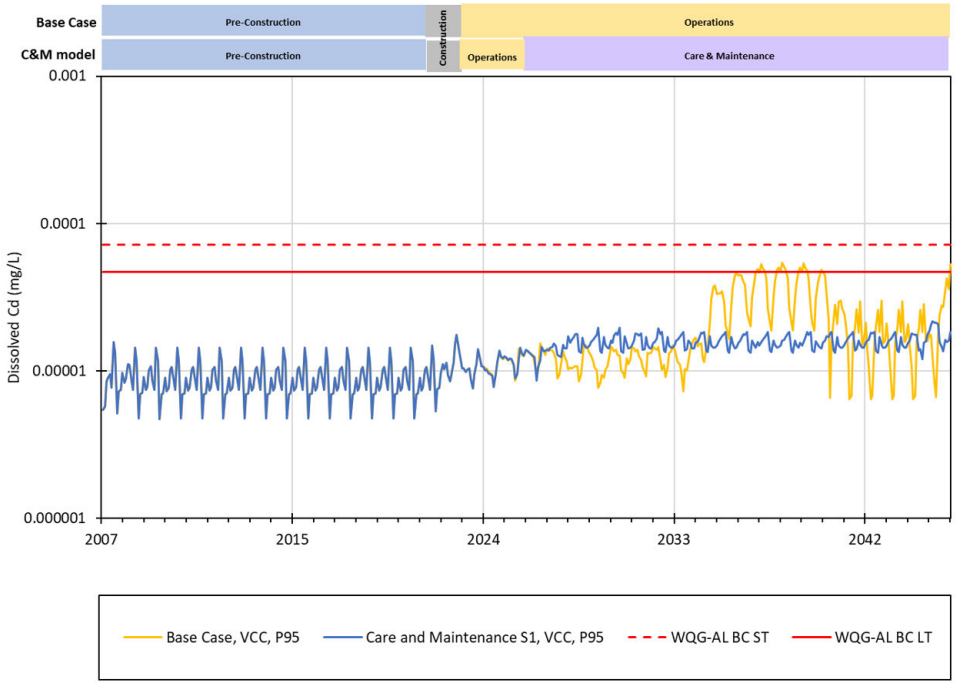
WQ28: Scenario 1

- **Sulphate**
  - Dominant loads in C&M are from the Metals WTP and the Membrane WTP (via WMP and FWR)

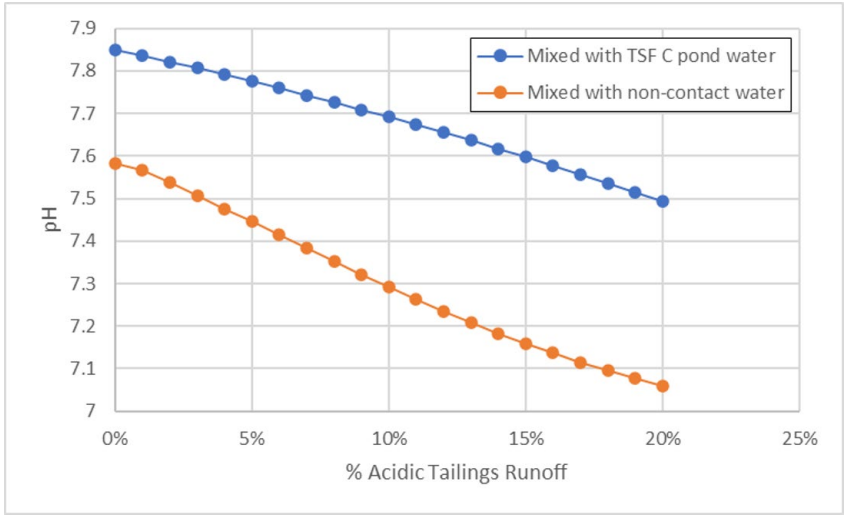


WQ28: Scenario 1

- **Dissolved Cd**
  - Dominant loads in C&M are from Membrane WTP and background sources (via WMP and FWR)



TSF C pond + Acidic Tailings Runoff



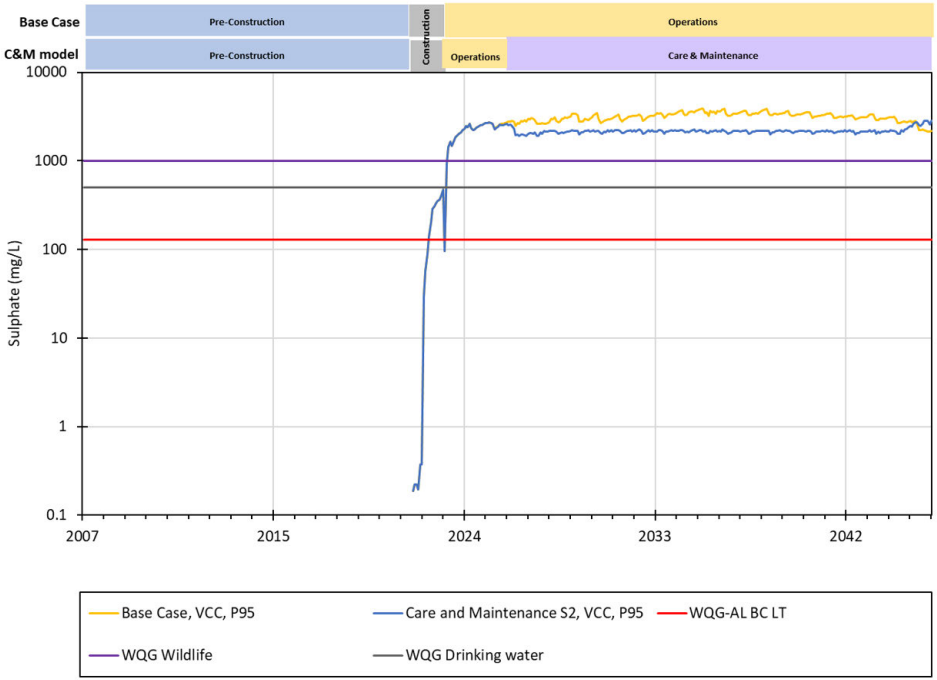
- Mixed acidic tailings water with:

1. TSF C pond water, using chemistry from the year prior to C&M (higher alkalinity); and
2. Non-contact water (lower alkalinity)

- pH remains neutral
- For average climate:
  - Acidic tailings runoff if ~1% of annual flow into TSF C pond
  - Total acidic tailings runoff over 20 year C&M period is 18% of pond volume

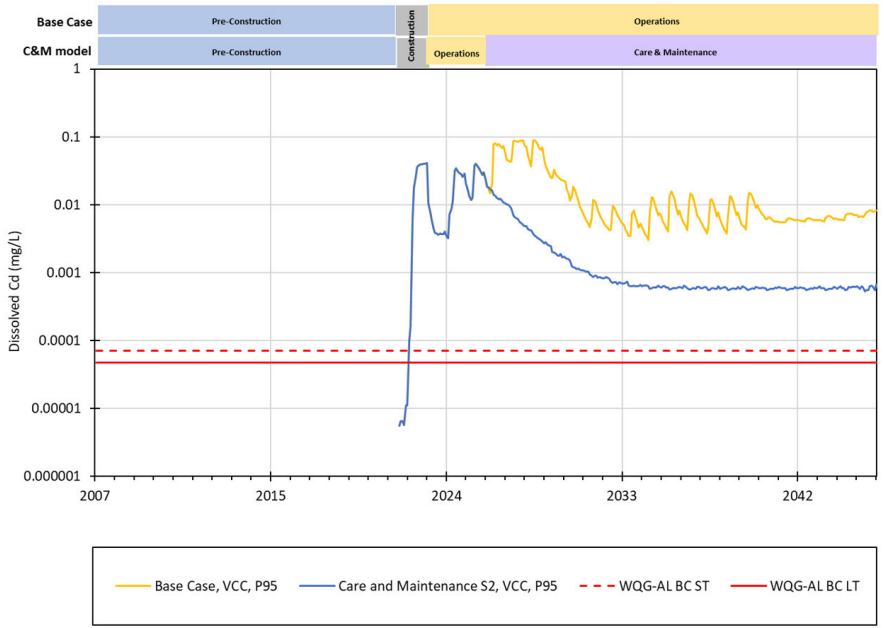
TSF C: Scenario 2

- **Sulphate**
  - Dominant load in C&M is from WTP brine
  - Lime treatment and Interim ECD are minor loading sources



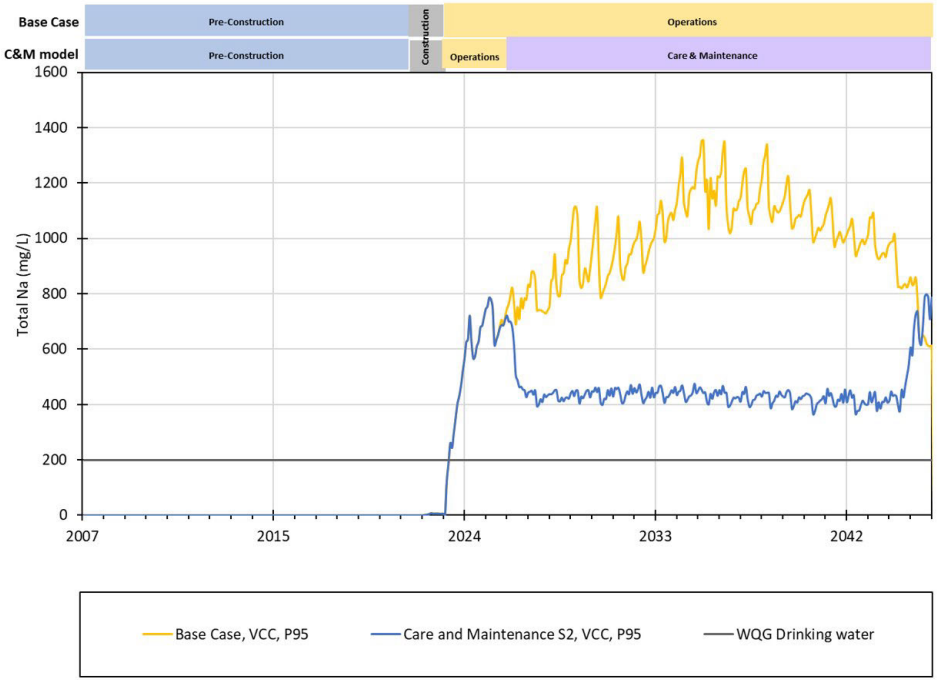
TSF C: Scenario 2

- **Dissolved Cd**
  - Dominant loads in C&M are Interim ECD, lime treatment system, and WTP brine



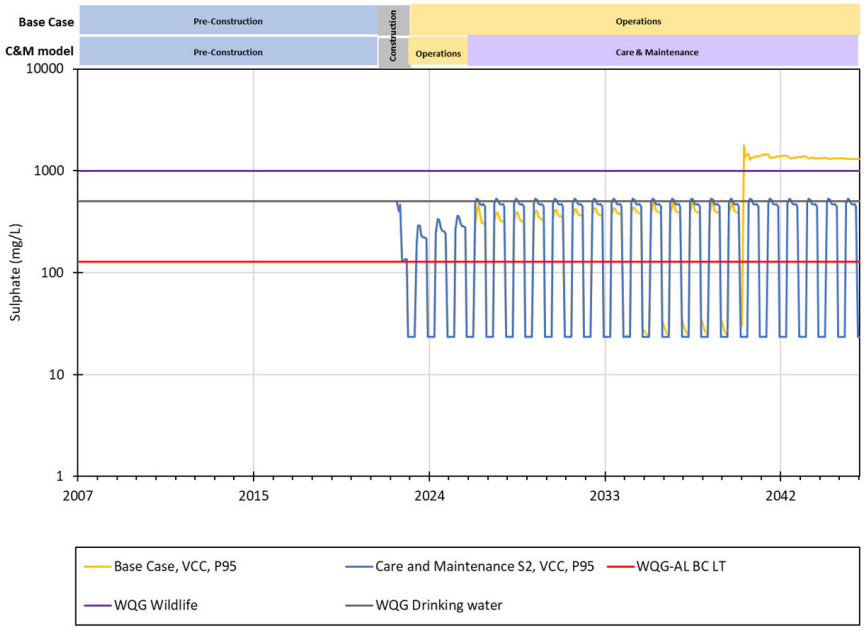
TSF C: Scenario 2

- **Total Na**
  - Dominant load in C&M is from WTP brine



Pit: Scenario 2

- **Sulphate**
  - Dominant load in C&M is from pit wall



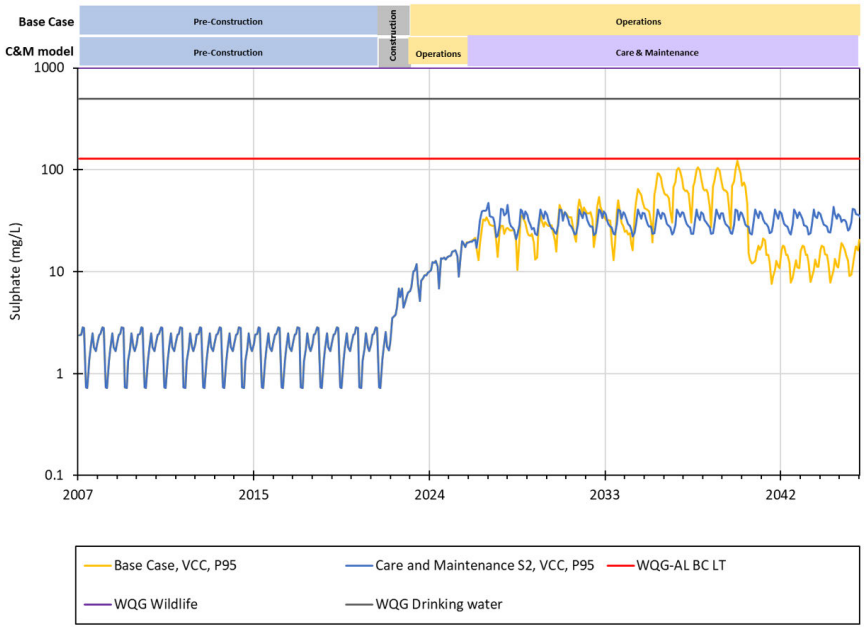
Pit: Scenario 2

- **Dissolved Cd**
  - Dominant load in C&M is from pit wall



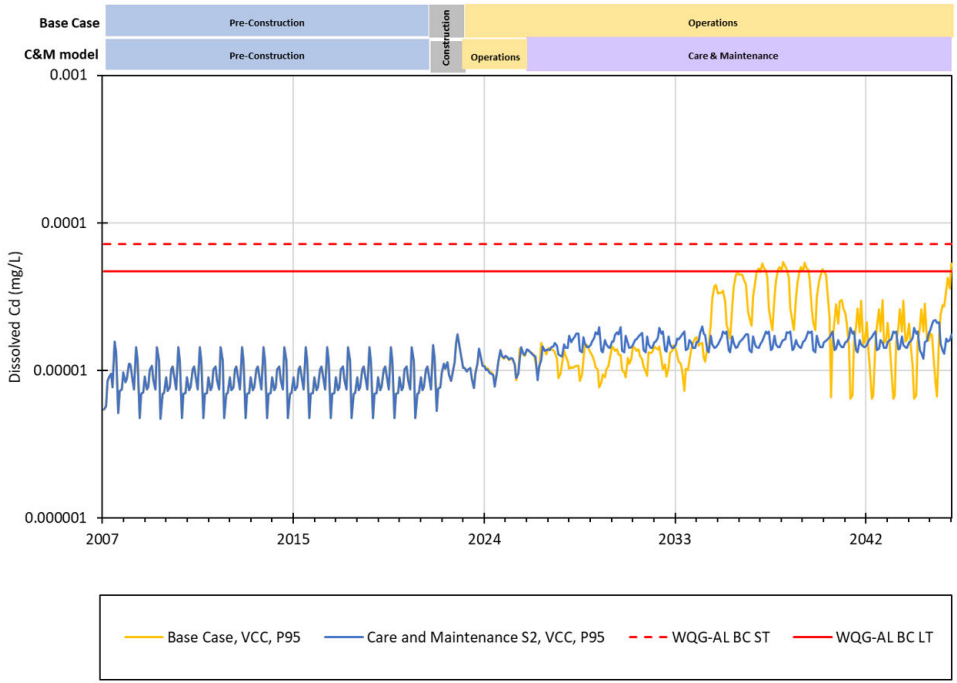
WQ28: Scenario 2

- **Sulphate**
  - Dominant loads in C&M are form the Metals WTP and the Membrane WTP (via WMP and FWR)



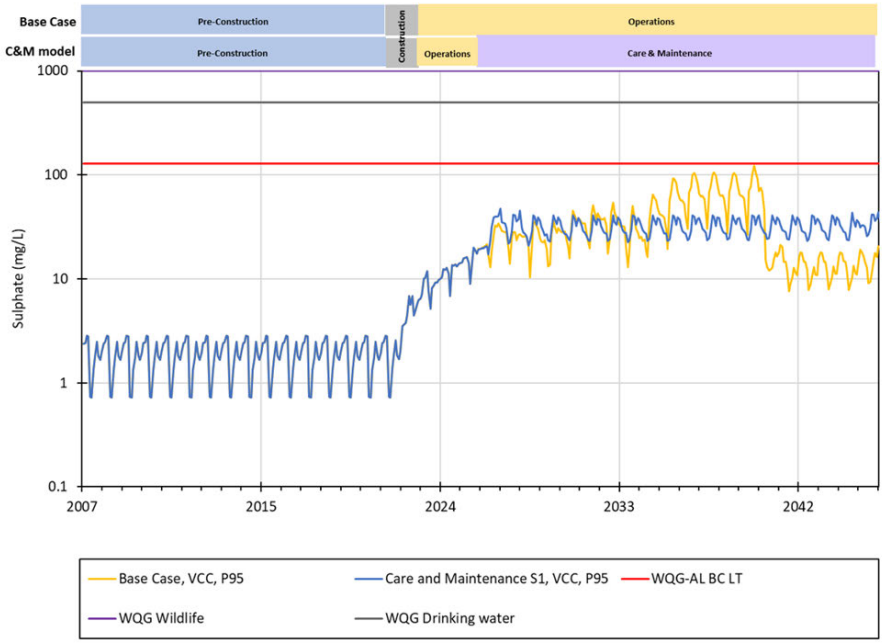
WQ28: Scenario 2

- **Dissolved Cd**
  - Dominant loads in C&M are from Membrane WTP and background sources (via WMP and FWR)

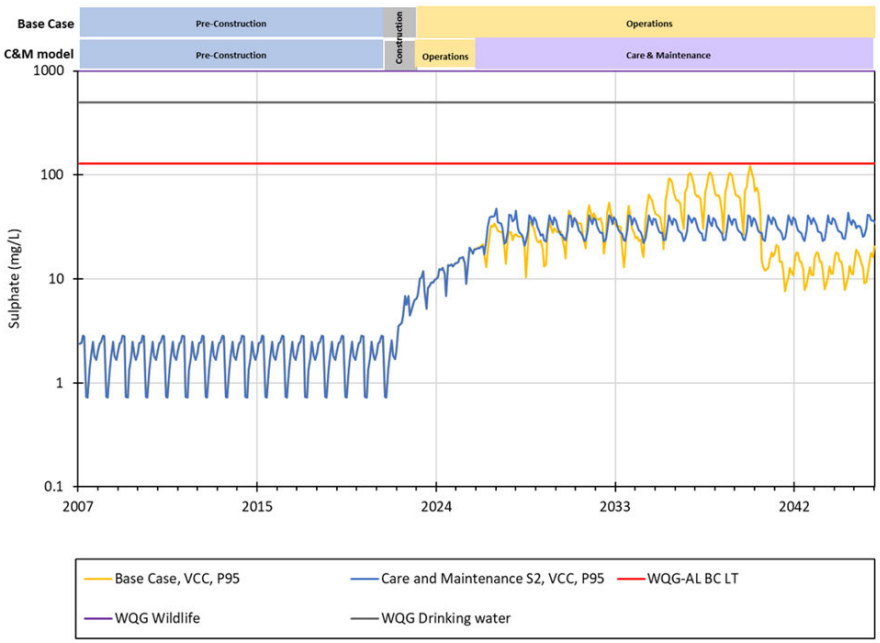


WQ28: Scenario 1 vs. Scenario 2

Scenario 1



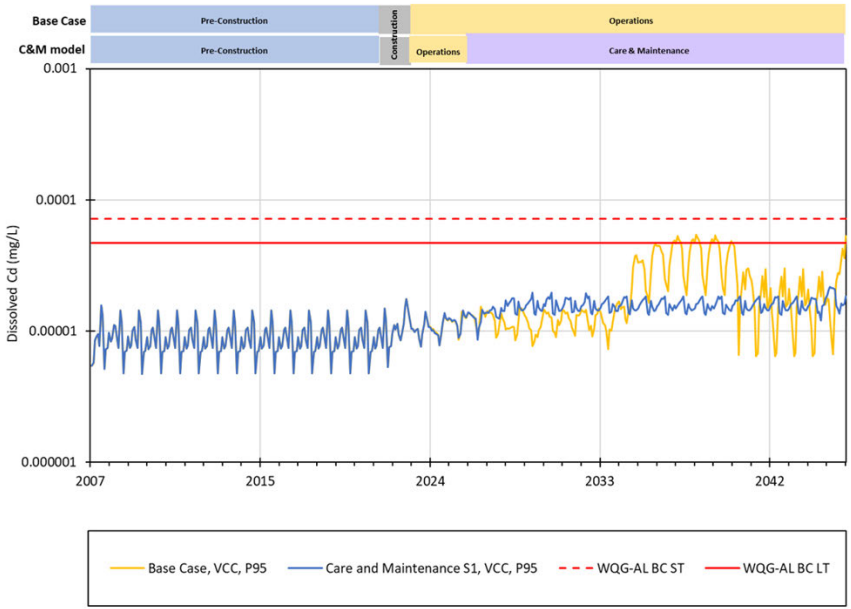
Scenario 2



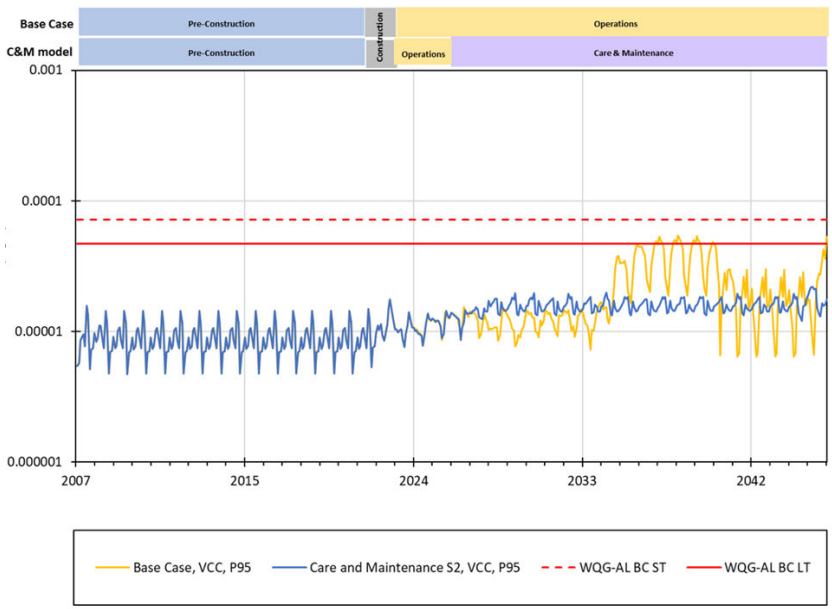
- Results are similar due to majority of load coming from the Metals WTP (treats pit water, pit predictions are consistent between scenarios); load from Membrane WTP is similar (treats TSF C pond water)

WQ28: Scenario 1 vs. Scenario 2

Scenario 1



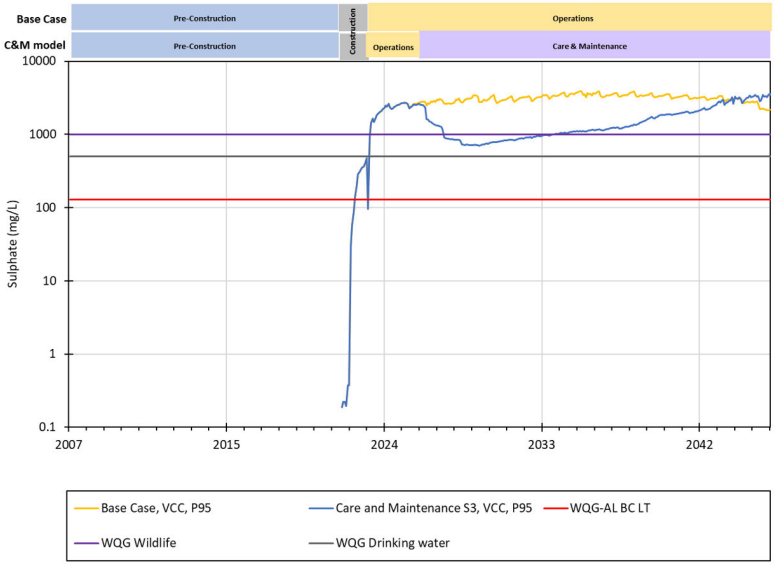
Scenario 2



- Results are similar due to Membrane WTP assumptions (constant concentration for Cd in effluent)

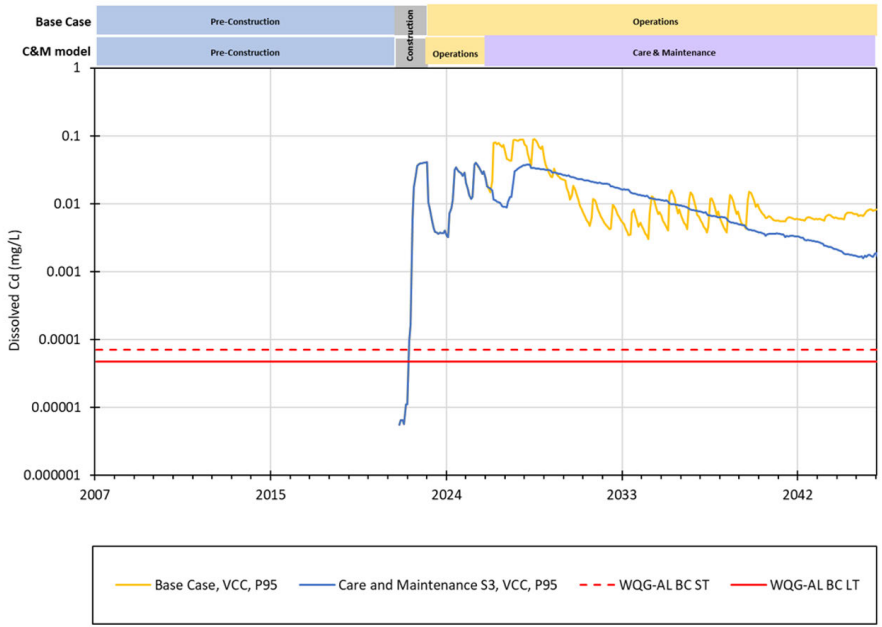
TSF C: Scenario 3

- **Sulphate**
  - Dominant load in C&M is from WTP brine
  - WTP brine load increases later in C&M due to increased treatment rate
    - 110 L/s to 165 L/s in last 6 to 8 years of C&M to dewater the pond (VCC)
  - Lime treatment and Interim ECD are minor loading sources



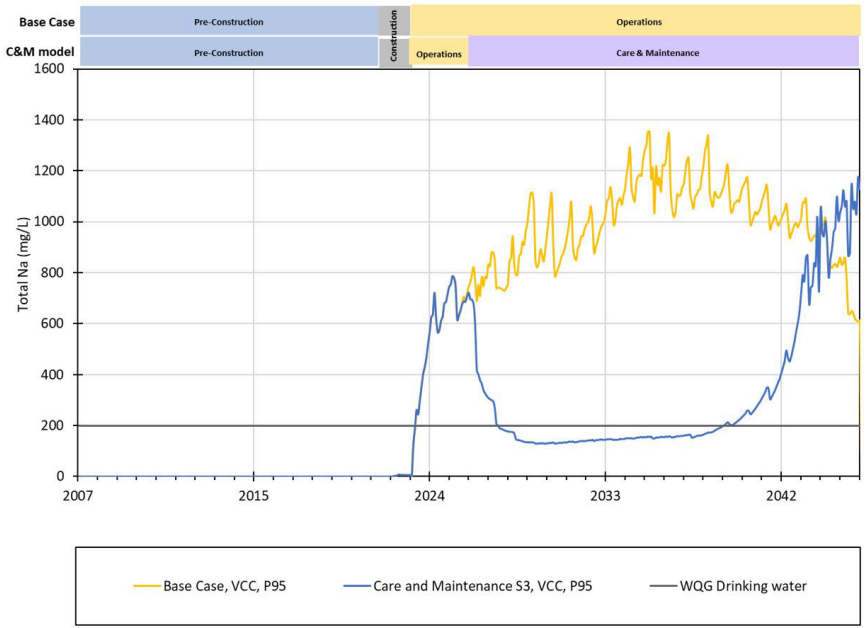
TSF C: Scenario 3

- **Dissolved Cd**
  - Dominant loads in C&M are from tailings beach runoff and tailings beach infiltration
    - Assumes tailings beach is acidic once exposed for >1 year as pond is filling
  - Once load from tailings beach begins to decrease, load from Interim ECD, lime treatment system, and WTP brine are also minor loads



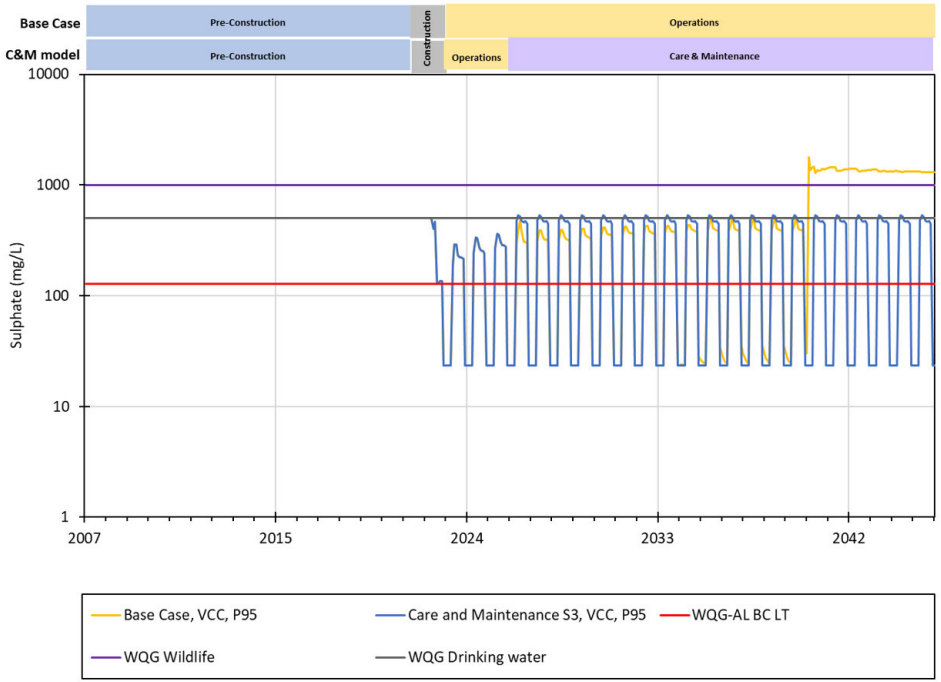
TSF C: Scenario 3

- **Total Na**
  - Dominant load in C&M is from WTP brine
  - WTP brine load increased later in C&M due to increased treatment rate
    - 110 L/s to 165 L/s in last 6 to 8 years of C&M to dewater the pond (VCC)



Pit: Scenario 3

- **Sulphate**
  - Dominant load in C&M is from pit wall



Pit: Scenario 3

- **Dissolved Cd**
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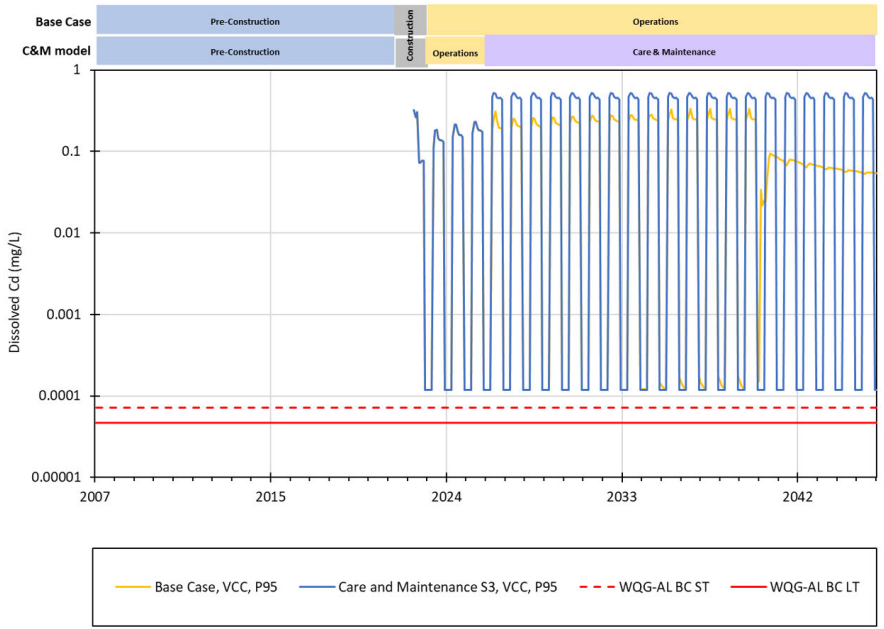
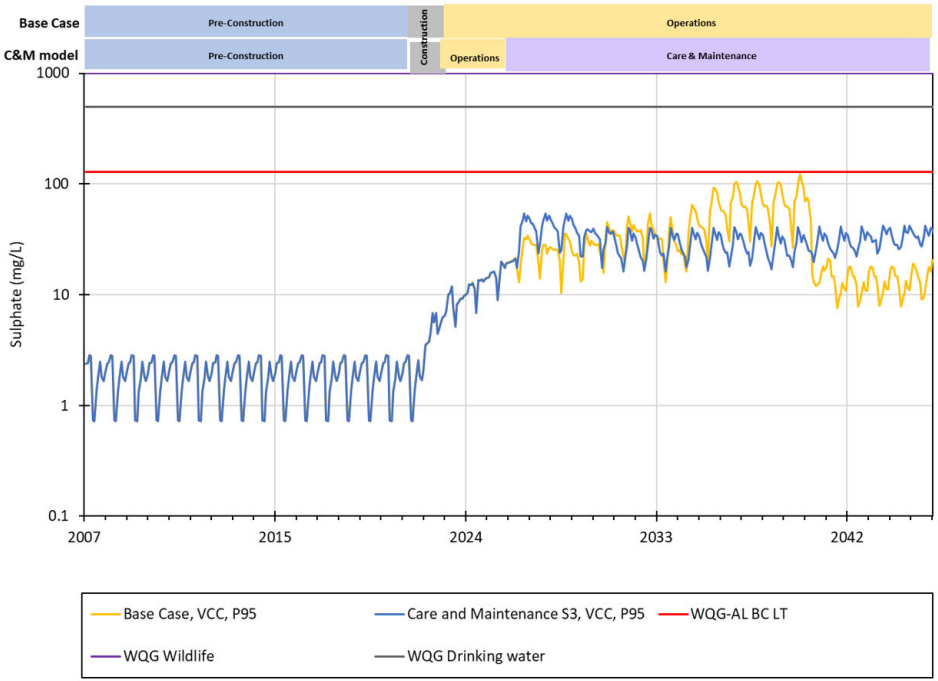


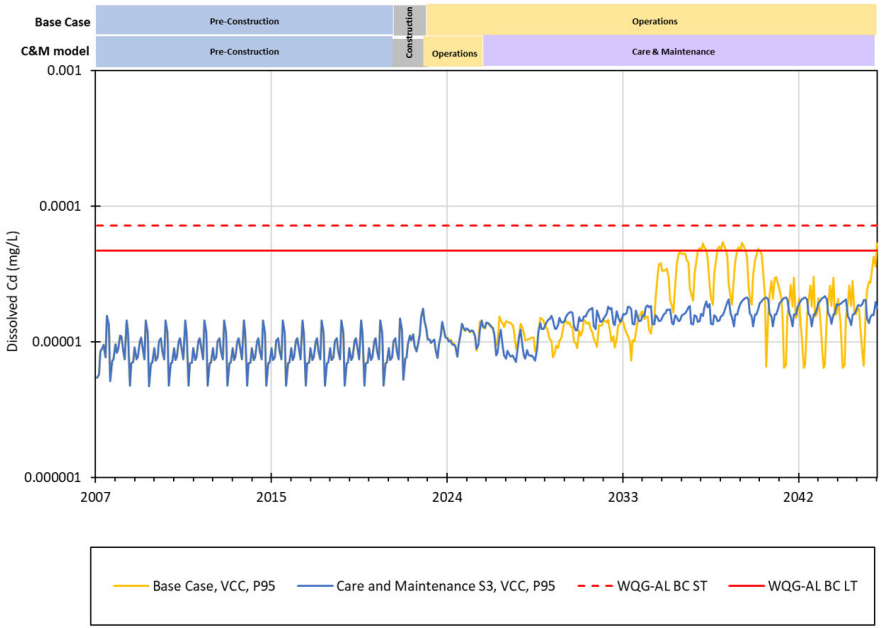
WQ28: Scenario 3

- **Sulphate**
  - Dominant loads in C&M are from the Metals WTP and the Membrane WTP (via WMP and FWR)

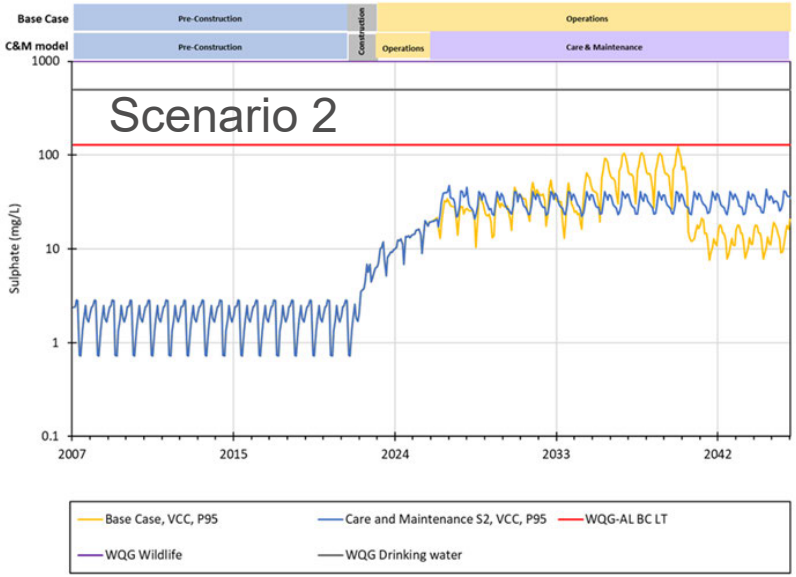


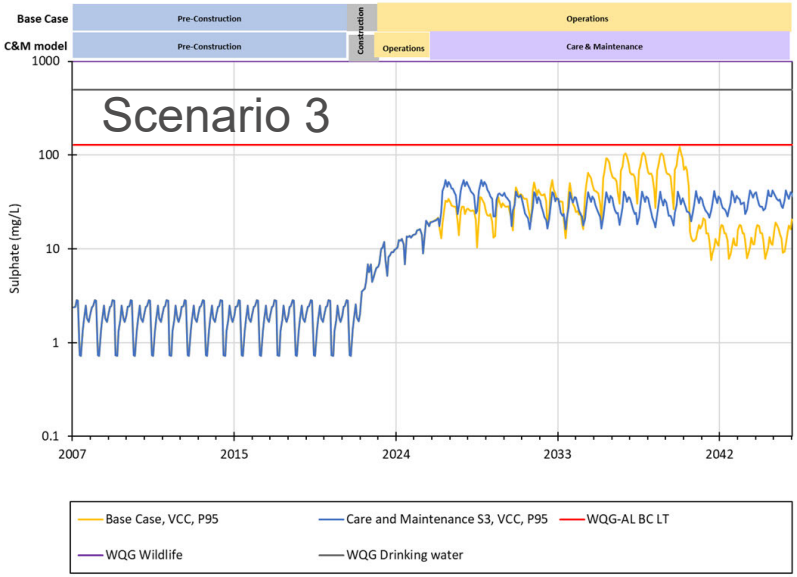
WQ28: Scenario 3

- **Dissolved Cd**
  - Dominant loads in C&M are from Membrane WTP and background sources (via WMP and FWR)



WQ28: Scenario 2 vs. Scenario 3





- Higher concentrations in Year 1-3 of C&M – higher load from WMP to FWR (less non-contact water diverted to WMP in these years)
- Slightly higher load from Membrane WTP in late C&M (higher TSF C concentrations due to brine input)

WQ28: Scenario 2 vs. Scenario 3

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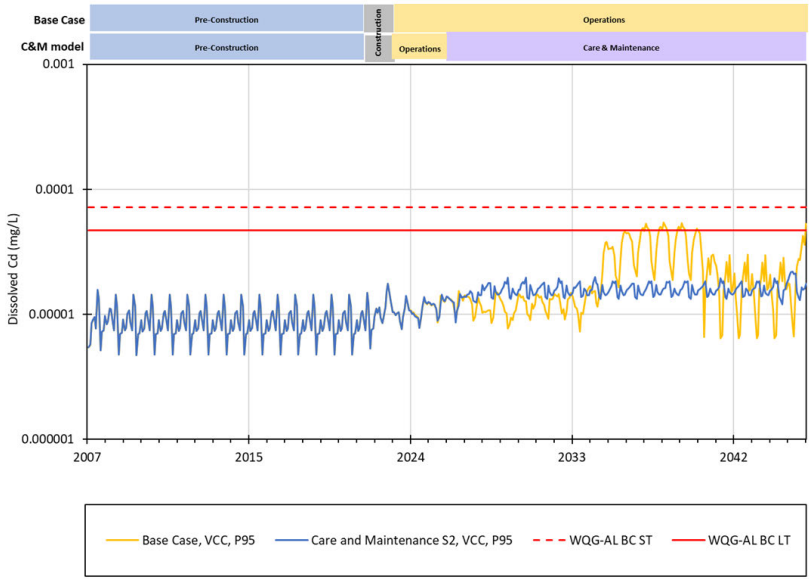
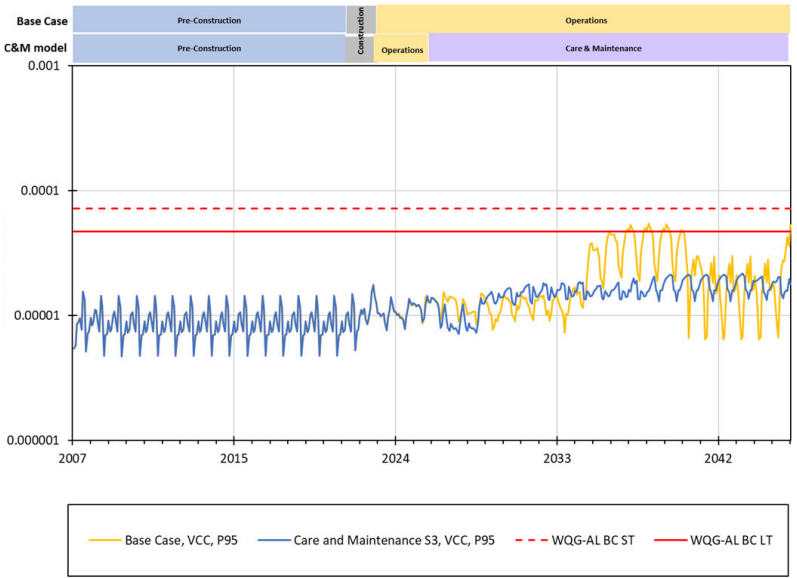
Scenario 2



Scenario 3



- Slight differences from 2039 (Year 16, or C&M Year 13) onwards due to increased Membrane WTP treatment rate applied to dewater the TSF C pond

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Increased Treatment Capacity on Membrane Treatment Plant to mitigate risks of Scenarios 1 or 2

Upgrading Membrane Treatment Plant Capacity from 72 L/s to 110 L/s

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- Capital cost is estimated at $3.4M and will take 52 weeks to deliver to site
- The existing building footprint is large enough to accommodate the additional equipment
- Process equipment (Process tanks, reagents systems, utility systems) are adequately sized to accommodate the new treatment rate increase
- The increase in flow rate does not affect operating labor and assay costs
- Operating consumable costs (replacement cartridges filters, RO membranes) will increase
- An overall additional annual operating cost of $0.41M/yr is expected to be incurred due to increase in treatment flow rate

Summary

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Evaluated three C&M Scenarios

- **Exposed tailings beach**
- **Soil cover on exposed tailings beach**
- **Water cover over all tailings**

Water balance results suggest that a WTP rate of 110 L/s would be required during C&M to manage the TSF pond volume using the variable climate water balance inputs; this rate is increased from the Operations WTP rate of 72 L/s. The treatment rate to dewater the pond at the end of C&M would have to be greater than 110 L/s (e.g. 165 L/s).

- **Scenarios 1 and 2 present a manageable pond volume, ramp-up costs and timelines**
- **Scenario 3 presents a potentially higher level of operational risk related to water storage and could be a time/cost-related barrier to ramp-up**
- **Water quality results show that the system is not very sensitive to changes between the three scenarios**

Existing mitigations in place can handle changes in load

Additional considerations:

Water Treatment Capacity - increased treatment capacity of the Membrane WTP within one-year, additional cost

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Questions?