APPENDIX 9-N WASTE (REFUSE AND EMISSIONS) MANAGEMENT PLAN

BW GOLD LTD
a subsidiary company of Artemis Gold Inc

Blackwater Gold Project

Waste (Refuse and Emissions) Management Plan

November 2021

CONTENTS

List of Tables

ACRONYMS AND ABBREVIATIONS

Aboriginal Groups or Indigenous nations	Ulkatcho First Nation, Lhoosk'uz Dené Nation, Nadleh Whut'en First Nation, Stellat'en First Nation, Saik'uz First Nation, and Nazko First Nation as defined in Environmental Assessment Certificate #M-19-01
Artemis	Artemis Gold Inc.
BC	British Columbia
Blackwater	Blackwater Gold Project
BW Gold	BW Gold LTD.
CEA Agency	Canadian Environmental Assessment Agency
CEO	Chief Executive Officer
CM	Construction Manager
COO	Chief Operating Officer
CSR	Contaminated Site Regulation
DS	Decision Statement
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
EC	Environment Canada
EM	Environmental Manager
EMLI	Energy, Mines and Low Carbon Innovation
EMPR	Ministry of Energy, Mines and Petroleum Resources
EMP	Environmental Management Plan
EMS	Environmental Management System
EPCM	Engineering, Procurement and Construction Management
ENV	Ministry of Environment and Climate Change Strategy
GM	General Manager
km	kilometre
MOE	Ministry of Environment
MOH	Ministry of Health
Mtpa	Million tonnes per annum

New Gold	New Gold Inc.
POC	Parameters of concern
Project	Blackwater Gold Project
t	Tonnes
TSF	Tailings Storage Facility
WMP	Waste (Refuse and Emissions) Management Plan
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 124.5. The Kluskus FSR joins Highway 16 approximately 10 km west of Vanderhoof. A new, approximately 142 km road (Mine Access Road) will be built to replace the existing exploration access road, which will be decommissioned. The new planned access is at km 124.5. 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 (LDN), Ulkatcho First Nation (UFN), 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 (NWFN), Saik'uz First Nation (SFN), and Stellat'en First Nation (StFN; collectively, the Carrier Sekani First Nations) as well as the traditional territories of the Nazko First Nation (NFN), NeeTahiBuhn Band, Cheslatta Carrier Nation and Yekooche First Nation (EAO 2019a and 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 20,000 Mtpa in Year 11 until the end of the 23-year mine life. The Closure phase is 24 years to approximately 45 years, ending when the Open Pit has filled and the TSF is allowed to passively discharge to Davidson Creek, and the Post-closure phase is 46+ years.

New Gold Inc. (New Gold) received Environmental Assessment Certificate EAC #M19-01 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 Waste (Refuse and Emissions) Management Plan (WMP) describes waste management strategies to be followed during the Blackwater Project's Construction, Operations, Closure, and Post-closure phases. Its objective is to outline all discharges that are within the scope of the WMP. The WMP is required by Section 9.17 of the Joint Application Information Requirements for *Mines Act*/*Environmental Management Act* Permits (JAIR; EMPR & ENV 2019).

The WMP does not consider the following discharges as they are addressed in other plans in the Application or separate permit applications:

- Air contaminant discharge and associated mitigation measures and monitoring, as they are considered in the Air Quality and Fugitive Dust Management Plan (Appendix 9-O).
- Domestic wastewater discharge from the plant site to the TSF. This discharge is considered in the Mine Site Water and Discharge Management and Monitoring Plan (Appendix 9-E).
- Domestic wastewater discharge from the existing exploration camp. This discharge is permitted under *Municipal Wastewater Regulation* Authorization #105882.
- Domestic wastewater discharge associated with the construction laydown area and offices, as this discharge is considered in a separate application under the *Sewerage System Regulation*.
- Stormwater runoff as this discharge is considered in the Mine Site Water and Discharge Monitoring and Management Plan (Appendix 9-E).
- Hazardous waste, cyanide and fuel management are considered in other plans, including the Fuel Management and Spill Control Plan (Appendix 9-L); Chemicals and Materials Storage, Transfer and Handling Plan (Appendix 9-M); and Cyanide Management Plan (Appendix A in Appendix 9-M).

The current mine plan (and this WMP) does not include an on-site solid waste landfill. BW Gold is planning to permit a landfill under the *Environmental Management Act* to dispose of material produced during construction, operations and closure. The WMP will be revised to incorporate permit conditions once a landfill is permitted, particularly with respect to the closure and post-closure waste management strategy.

2.1 Related Documents

The WMP is linked (shares common elements or is intended to be read in conjunction with the Surface Erosion Prevention and Sediment Control Plan (Appendix 9-A), Construction Environmental Management Plan (Appendix 9-C), and Wildlife Mitigation and Monitoring Plan (Appendix 9-H). The EMP is also linked to the Mine Site Water and Discharge Monitoring and Management Plan (Appendix 9-E) which provides details on the Project's groundwater quality and flow monitoring program. This monitoring program has been designed, in part, to identify and characterize potential groundwater contamination resulting from mine infrastructure.

3. ROLES AND RESPONSIBILITIES

BW Gold has the obligation of ensuring that all commitments are met and that all 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 all phases of the mine 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, Independent Tailings Review Board, TSF qualified person, and other qualified persons and qualified professionals.

Table 3-1: Blackwater Roles and Responsibilities

Position	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 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, 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, Environmental Management System (EMS) implementation, overall environmental performance and protection, and permit compliance. The Mine Manager may delegate their responsibilities to qualified personnel. Reports to GM.
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. Reports to Mine Manager.
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 EM.
Community Relations Advisor	Community Relations Advisor is responsible for managing the Community Liaison Committee and Community Feedback Mechanism. Reports to Mine Manager.

Position	Responsibility
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 Monitors	Aboriginal Monitors are required by EAC #M19-01 Condition 17 and will be responsible for monitoring the Project's potential effects on Aboriginal interests. Aboriginal Monitors will be involved in adaptive management and follow-up monitoring programs.
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 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 a consulting team of subject matter experts in the fields of environmental science and engineering.

During the Construction phase, the EPCM contractor and sub-contractors, will report to the CM. The EPCM contractor will 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, the Company 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 has been addressed and concerns 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 and 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 Managers (e.g., mining, milling, and plant/site services) will be directly responsible for implementation of the EMS and MPs/standard operating procedures) relevant to their areas. All employees and contractors are responsible for daily implementation of the practices and policies contained in the EMS.

During closure and post-closure staffing levels will be reduced to align with the level of activity associated with these phases. Prior to initiating closure activities, BW Gold will revisit environmental and health and safety roles and responsibilities to ensure the site is adequately resourced to meet permit monitoring and

reporting requirements. The Mine Manager will have overall responsibility for Closure and Post-closure activities.

Pursuant to Condition 19 of the EAC, BW Gold has established an Environmental Monitoring Committee 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), UFN, LDN, NWFN, StFN, SFN, NFN, Ministry of Energy, Mines and Low Carbon Innovation (EMLI), ENV Ministry of Environment and Climate Change Strategy (ENV) and Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

Pursuant to Condition 17 of the EAC, Aboriginal Group Monitor and Monitoring Plan, BW Gold will retain or provide funding to retain a monitor for each Aboriginal Group prior to commencing construction and through all phases of the mine life. The general scope of the monitor's activities will be related to monitoring for potential effects from the Project on the Aboriginal Group's Aboriginal interests.

4. COMPLIANCE OBLIGATIONS, GUIDANCE, AND BEST MANAGEMENT PRACTICES

4.1 Legislation

Federal legislation applicable to the WMP includes:

- *Canadian Environmental Protection Act*, 1999;
- *Impact Assessment Act*; and
- *United Nations Declaration on the Rights of Indigenous Peoples Act*.

Provincial legislation applicable to the WMP includes:

- *Declaration on the Rights of Indigenous Peoples Act*;
- *Environmental Assessment Act*;
- *Environmental Management Act*:
  - *Contaminated Sites Regulation*;
  - *Municipal Wastewater Regulation*;
  - *Waste Discharge Regulation*;
- *Mines Act*;
  - Health, Safety and Reclamation Code for Mines in British Columbia (Code; EMLI 2021a)
    - Part 2, Section 2.3 (Hazardous Materials and Waste)
    - Part 10, Section 10.5.6 (Spontaneous Combustible Material)
- *Public Health Act*:
  - *Industrial Camps Regulation*; and
- *Wildlife Act*.

4.2 Environmental Assessment Certificate and Federal Decision Statement Conditions

There are no conditions in the EAC or DS relating to waste management covered by the WMP.

4.3 Existing Permits

BW Gold is permitted to operate a diesel-fuel fired, double chamber incinerator (*Environmental Management Act* Authorization #106530; Appendix A). The Authorization allows a maximum discharge rate of 110 m^3/minute and maximum waste feed of 1.1 tonnes/day. Authorized waste for incineration includes putrescible camp waste, paper, cardboard and lumber scraps that cannot be recycled. Condition 2.1.3 of the Authorization requires that every effort be made to minimize incineration of plastics. The capacity of the incinerator will be evaluated during construction. In the event there is insufficient capacity, BW Gold will apply to increase incinerator capacity.

Under *Municipal Wastewater Regulation* Authorization #105882 (Appendix A), BW Gold is authorized to discharge domestic wastewater (57.5 m^3/day) from the 250-person exploration camp.

4.4 Guidelines and Best Management Practices

Guidance relevant to refuse management and applicable to the Project include:

- Technical Document for Batch Waste Incineration (EC 2010);
- Applicable authorizations required to dispose of various waste streams provided in the Industrial Camp Fact Sheet - Industrial Camps Waste Authorizations and Best Practices (ENV 2018); and
- Garbage disposal guidance provided in Section 22 of the Guidelines for Industrial Camps Regulation (MOH 2017).

5. ADAPTIVE MANAGEMENT FRAMEWORK

The WMP is a living document that will evolve over time in response to monitoring results and regulatory changes. The plan incorporates adaptive management as follows:

- **Plan**
  - Identification of potential and actual waste discharges.
  - Identification of waste management strategies.
- **Do**
  - Schedule for implementation and operation of control measures.
  - Description of record keeping procedures for tracking all wastes (recycled or otherwise disposed) taken off site.
  - Provide proper containers for segregation of waste to safeguard against human exposure to waste materials and prevent wildlife attractants and encounters.
  - Training procedures.
- **Monitor**
  - Execution of monitoring programs to ensure appropriate waste levels are not exceeded.
  - Inspection of waste management areas and facilities.
  - Implementation of WMP.
- **Adjust**
  - Reviews of effectiveness of management measures by the EM.
  - Updates made to WMP as required.

6. SUPPORT

6.1 Training and Education

Employees and contractors will receive training in waste management and wildlife management on their arrival on site through an environmental on-boarding training session and prior to the start of work as part of the Site Orientation. The purpose of this training is to provide all site personnel with a basic level of environmental awareness and an understanding of their obligations regarding compliance with regulatory requirements, commitments, and best practices. At a minimum, the Site Orientation will include the following topics with respect to waste management:

- An overview of the Project's waste management approach;
- Employee responsibilities with respect to proper waste management; and
- An awareness of wildlife attractants.

Condition 2.1.3 of Authorization #106530 (Appendix A) requires that every effort be made to minimize incineration of plastics. Therefore, the Site Orientation will also include content on the importance of segregating plastics from putrescible wastes destined for incineration.

Signage is an important part of waste management education. BW Gold will install and maintain signage to help direct waste management implementation strategies (ex. garbage, recycling, and putrescible waste streams) at all receptacles and waste transfer areas.

Site supervisors will be provided with a copy of the WMP and will receive additional training with respect to the requirements that are outlined in the form of operational SOPs. Targeted training related to waste management will be provided to individuals and/or groups of workers assuming a specific authority or responsibility related to waste handling, storage, and disposal. This training will be delivered by means of classroom instruction, toolbox/tailgate meetings or other means as appropriate.

BW Gold will regularly review and update the training and awareness plan based on changes in training needs and regulatory requirements.

7. WASTE MANAGEMENT APPROACH

Waste generated over the life of the Project will include food and other putrescible; combustible (non-putrescible); non-combustible; recyclable; and hazardous (dealt with in separate management plans as noted in Section 2). Industrial waste includes inert bulk wastes other than mining wastes generated by ore extraction (overburden rock) and processing (tailings), which are dealt with in Chapter 3 (Section 3.5.3 and 3.5.4). Waste will be incinerated or backhauled off site approved waste and recycling facilities.

Management of the waste will apply a waste hierarchy procedure as follows:

- Avoid/Reduce – take action to reduce or avoid waste generation;
- Reuse/Recycle – reuse or recycle wastes where practical; and
- Treat/Dispose of wastes appropriately – treat or dispose of waste in an environmentally responsible manner that meets regulatory requirements and manages environmental liabilities appropriately.

7.1 Recycling Policy

Recyclables will be disposed of as follows:

- Scrap iron and steel will be placed in designated and marked bins.
- Scrap copper will be segregated if practicable and stockpiled separately, as it is of greater value than steel and iron. Copper wire and brass scrap will be placed in designated and marked scrap copper bins.
- Mixed recyclables include glass, tins, aluminum cans and plastics. These will be segregated to the degree possible at source by means of placing specially marked bins inside to prevent them becoming wildlife attractants throughout the camp, offices, and operational areas and then transferring to larger designated bins. Soiled cardboard that cannot be recycled will be disposed of by means of onsite permitted incinerator or strictly controlled open burning (assuming permits are obtained and conditions are favourable).
- Plastics with the recycling marks 1, 2, 3, 4, 5, 6, and 7 will be recycled to the degree practicable and placed in designated and marked recycling bins located throughout the site. Minimal plastic incineration (see Authorization #106530; Appendix A1) will be achieved by separating plastics from putrescible wastes destined for incineration. Waste may contain food residues despite best efforts in rinsing, thus these bins will be stored inside buildings to prevent wildlife access. These bins will be closely monitored for the presence of wildlife and the recycling policy for plastics with food residue will be reviewed and adjusted in the event of wildlife interactions.
- Plastic drums with a recycling mark numbered 1, 2, 4, or 5 will be placed in designated and marked recycling bins.
- Vehicle tires can be used as impact barriers. Excess tires to be stored neatly in a designated area prior to off-site shipping/recycling.
- Vehicle wet batteries (lead, acid) are considered hazardous and regulated under the *Transportation of Dangerous Goods Regulations*. As such, they will be stored on containment pallet(s) or in designated containers and held for pickup by a licensed contractor.
- General, domestic use battery types (alkaline, NiCad, etc.) will be segregated at source by means of placing specially marked 20L pails throughout the camp, offices, and shops and then transferred to designated and marked open-topped drums.
- Printer or toner cartridges will be placed in designated and marked containers in various office locations.

- Mobile phones and electronic equipment (e-waste) will be placed in designated and marked containers for recycling.
- Metal drums that cannot be reused (e.g., to store used fuel filters) will be crushed and disposed of as scrap metal.

Kitchen grease/oil is collected in closed top drums which are stored near the camp kitchen in a seacan prior to off-site shipping. Some recyclables may be backhauled off site in outgoing delivery vehicles and donated to a local charity. A designated recycling program will be established to accommodate this, and will include separation of key recyclables that are part of the BC deposit/refund program.

7.2 Mine Facilities

Mine facilities will include designated temporary waste storage and collection areas, located near to areas where waste is produced including the plant site, laydown areas, camps, and other areas.
Specific locations will be identified by the Construction and Departmental Managers, as necessary for the various Project phases with input and approval of the EM.

7.2.1 Waste Transfer Areas

Waste transfer areas (WTA) will be established to manage material destined for offsite disposal until a qualified contractor(s) transports it to the appropriate facility(ies). Two WTAs will be established: one at the operations camp site to manage kitchen waste and recyclables, and another at the plant site to manage hazardous and non-hazardous waste. Contractor pickup frequency will vary depending on quantity of waste at the WTAs, but it is anticipated that pickup of general refuse and recycling waste streams will be weekly.

Each WTA will be designed to adequately and safely store a sufficient quantity of waste over a prescribed time period of between one and three months. WTAs will be bear-proof and secure to prevent attraction of wildlife, leaching of material into soils or waterways, and to provide protection from weather. Additionally, hazardous waste disposal facility at the plant site WTA will be adequately designed to contain spills with construction of lined berms.

- **Incineration:** This zone will store the waste stream to be incinerated.
- **Recycling**: This zone will store items that can be recycled. Inert materials to be stored in this area include camp-related recyclables, rubber, metals, plastics, papers and cardboard. These items will be placed in separate designated containers or areas within the recycle area. Once these containers or areas become full, the contents will be shipped offsite for recycling at an approved facility.
- Waste sorting guidelines and SOPs related to waste flow (generation points, waste collection/handling, operation of waste sorting and processing facilities) will be developed in accordance with the WMP and implemented prior to the start of construction.

8. DISCHARGES DURING CONSTRUCTION AND OPERATIONS

8.1 Refuse

Discharges associated with refuse are presented in Table 8.1-1. Under the *Environmental Management Act*, "*refuse" means discarded or abandoned materials, substances or objects*. It includes domestic and industrial non-hazardous waste.

Table 8.1-1: Refuse Discharge Sources during Construction and Operations

	Construction	Operations
Refuse	■ Domestic non-hazardous waste (including food waste and packaging) originating from all Project facilities. ■ Industrial waste resulting from construction and maintenance of Project infrastructure and equipment/vehicle maintenance.	■ Domestic non-hazardous waste originating from all Project facilities. ■ Industrial waste resulting from construction and maintenance of Project infrastructure, process plant operation, water and wastewater treatment, and equipment/vehicle maintenance.

8.1.1 Industrial Waste

Combustible (non-putrescible) wastes such as clean, untreated wood waste will be incinerated or burned through strictly controlled open burning (assuming permits are obtained and conditions are favourable) consistent with provincial authorizations. Pallets will be stockpiled and reused wherever possible. Pallets that cannot be reused will be incinerated or burned through strictly controlled open burning (assuming permits are obtained and conditions are favourable). If burning is prohibited during extreme fire years, for example, combustible materials will be incinerated if capacity allows or sent to an offsite landfill (stockpiling onsite is not permitted in accordance with *Environmental Management Act* Permit #106530; Appendix A).

Non-combustible solid wastes are those that cannot readily burn and those that are not suitably disposed of through burning (e.g., conveyor belts and tires). These materials will be stored in designated and marked areas/bins located throughout the site. Wastes such as scrap metal, and unsalvageable equipment will be sorted in steel recycle bins for either onsite reuse or offsite recycling / disposal.

Bulk wastes that cannot be recycled, or incinerated will be hauled to an approved offsite landfill. This waste may consist of treated wood, rubber, non-recyclable scrap metal and machinery parts (cleaned of any petroleum residues), building construction debris, and plastic. Table 8.1-2 identifies options for disposal of these materials.

Table 8.1-2: Non-combustible Solid Wastes

Waste Description	Storage Actions and Location	Disposal Method
Conveyor belts and tires	■ Store in storage yard outside of truck shop.	■ Reuse and recycle (e.g., reuse tires for haul road berms, turning area, road protection, and as bunks for laydown of stock material).
Unusable vehicles	■ Stored in designated laydown area.	■ Driven or backhauled for refurbishment or recycling.
Glass	■ Stored in labelled bins.	■ Reuse and recycle. ■ Non-reusable and non-recyclable glass (windows etc.) will hauled to an approved landfill.

Waste Description	Storage Actions and Location	Disposal Method
Plastics (including food waste packaging)	■ Stored in labelled bins.	■ Reuse and recycle. ■ Non-reusable and non-recyclable plastic containers that originally contained non-hazardous materials, not including food products, will be hauled to an approved landfill.
Car and truck wash sump sludge	■ Hauled to TSF.	■ Dewater and deposit in TSF.
Scrap metal	■ Restock and reuse scrap metal pieces for other projects where possible. ■ Stored in a designated laydown.	■ Reuse, recycle, and resale where possible.
Welding rods	■ Stored in labelled scrap steel bins.	■ Recycle via an approved offsite facility.
Electronic and electrical equipment	■ Electronics waste will be collected and stored in watertight containers. ■ Placed in dry storage.	■ Reuse and recycle.

8.1.2 Domestic Waste

Domestic (kitchen) wastes will be treated similarly in all mine phases. Domestic wastes will be incinerated daily or periodically, subject to Authorization #106530. Plastics will be separated at source where possible and not incinerated to minimize dioxin and furan emissions and to ensure compliance with the Canada Wide Standard for dioxins/furans. Ash disposal will be in accordance with Authorization #106530.

Food, food-covered packaging, and other combustible (non-recyclable) office wastes will be collected and stored in sealed, wildlife-resistant containers. Options for disposal of these wastes are shown in Table 8.1-3 and Table 8.1-4**.**

Table 8.1-3: Putrescible Waste

Waste Description	Storage Actions and Location	Disposal Method
Food waste and packaging	■ Dedicated steel bins and dumpsters (wildlife proof) for the collection of food waste and packaging will be provided at the camp kitchen and in remote offices and lunchroom trailers. ■ Kitchen oil and grease will be stored in the kitchen for incineration or a secure seacan for shipment offsite for disposal.	■ Employees and contractors will be required to use reusable bottles for water, coffee and beverages (pending COVID protocols). ■ Bag lunches and kitchen food waste and packaging will be stored in plastic bags, collected, and either incinerated or transported to an offsite landfill to minimize attracting wildlife.
General camp wastes (collected from offices, camp rooms and leisure and recreation areas	■ Sort general waste into specific containers provided for recyclables or for substances requiring additional processing. ■ Use clear trash bags to allow cleaning staff and supervisory staff to perform regular cursory inspections of camp waste and confirm sorting.	■ Incinerated or recycled to offsite facility (if possible).

Table 8.1-4: Combustible (Non-putrescible) Wastes

Waste Description	Storage Actions and Location	Disposal Method
Corrugated cardboard	■ Use bulk-shipped when possible to reduce cardboard packaging volumes.	■ Reused as packaging for backhauled materials. ■ Recycled. ■ If soiled, incinerated or transported to offsite landfill.
Paper	■ Have printers set to use both sides of paper when printing or photocopying. ■ Encourage use of online viewing. ■ Specific containers will be set up in offices and common rooms on site to collect waste paper.	■ Collected and incinerated or burned through strictly controlled open burning (assuming permits are obtained and conditions are favourable).
Waste lumber	■ Promote restocking and reusing lumber products for future projects or as backhaul packaging. ■ Place in appropriate collection bin.	■ Collected and incinerated or burned through strictly controlled open burning (assuming permits are obtained and conditions are favourable).

8.2 Contaminated Soil Management

There are currently no contaminated soils on the Project site. During construction, operation, and closure, there is potential for spills of hydrocarbons, anti-freeze, solvents, lubricants and/or glycol. Spill response is addressed in the Spill Response Plan (Fuel Management and Spill Control Plan, Appendix 9-M). Depending on the size of the spill, excavation may require heavy equipment.

Contaminated snow will be processed through the truck wash bay oil/water separator. Hydrocarbon--impacted soils will be processed through the primary crusher and processing plant for encapsulation in tailings in the TSF. This will also be the process for removal of contaminated soils upon completion of the Project should contaminated soils be present at that time, and in accordance with the Reclamation and Closure Plan (Chapter 4).

Records will be maintained of all spills during construction and operation such that the final Reclamation and Closure Plan will address any final clean-up concerns.

Monitoring associated with potential contaminated sites will be addressed in the Post-closure monitoring plan in Chapter 7 of the Application.

9. DECOMMISSIONING OR REMEDIAL ACTIVITIES

Pursuant to Section 3, Part 1 of the *Contaminated Site Regulation* (CSR), an owner of real property described in section 40 (2) (b) of the *Environmental Management Act* must provide a site profile not less than 10 days before the time the owner dismantles a building or structure, or otherwise decommissions a site which was used for an industrial or commercial purpose or activity listed in Schedule 2 of the regulation. Mining and milling of non-ferrous metals is included in Schedule 2; as such it is anticipated that completion and submission of a site profile will be required as part of Closure activities.

During the Closure phase, a site investigation (Stage 1 preliminary site investigation and if necessary, Stage 2 detailed site investigation; BC MOE 2016a, 2016b) will be completed to support the site profile to identify any areas of environmental concern where concentrations of parameters are greater than the standards prescribed under the CSR (BC MOE 2009). The CSR identifies standards for soil, groundwater, and surface water quality for various categories of land use and different biological receptors. The applicable standards will be based on the proposed end land and water use(s) for the Project.

Key components and infrastructure that could be sources of parameters of concern (POC) include:

- open pit and dewatering system;
- explosives manufacturing facility;
- process plant and associated facilities (mill, reagent, adsorption, primary crusher, cone crusher and screen, and gold room);
- tailings storage facility, spillways, and seepage collection system, including the environmental control dam;
- waste stockpiles;
- low grade ore stockpile, including diversion channel, low permeability foundation, and seepage collection system;
- contact water management infrastructure;
- water treatment plants, ponds, pumps and piping;
- borrow areas and quarries;
- sewage treatment system, incinerator (existing), and solid waste facilities; and
- haul and service roads and the mine access road.

If concentrations of parameters of potential concern[1] are found to be higher than the applicable BC CSR standards (or are higher than background concentrations, when background is higher than the applicable BC CSR standard), the parameter will be identified as a POC. Additional site reclamation, remediation (e.g., removal of contaminated environmental media, onsite or *in situ* treatment), and/or human health and ecological risk assessment may be required to further characterize or address the areas of environmental concern.

[1] BC ENV Contaminated Sites Division often uses the terminology “potential contaminants of concern (PCOC)”, while the conceptual site model in Section 5.2 of the Joint Application uses the terminology “parameters of potential concern (POPC)” which is used by BC ENV Environmental Protection Division. These terms have the same meaning and, for consistency with the CSM in Section 5.2, POPC is used here.

10. MONITORING

Waste monitoring includes the visual inspection of the main components of the waste management system and the measurement and recording of all wastes (recycled or otherwise disposed) taken off site including: type and quantities of waste transported; location and name of disposal or recycling facility; and, the date that each was hauled offsite. Wastes shipped off site will be recorded using an offsite disposal log or equivalent that will be developed prior to the start of construction.

Inert solid wastes will be stored in a manner that minimizes the opportunity for windblown debris and animal attraction.

Monthly visual inspections of waste management facilities will be conducted by the EM or designate to ensure proper operation and adequate environmental/health and safety controls are in place, and to confirm overall conformance with the requirements of the WMP and companion SOPs and Waste Sorting Guidelines. Compliance monitoring forms will be developed prior to the start of construction and used to document the findings and required actions. These reports will be developed as an internal operational monitoring tool to promote continuous improvement in environmental performance and stewardship. Checklists will be used as internal operational monitoring and compliance tools. These checklists will be integrated into the SOPs.

Waste audits will be undertaken quarterly at generation points to ensure waste streams are properly segregated.

11. REPORTING AND RECORD KEEPING

11.1 Reporting

11.1.1 Environmental Management Act

Environmental Management Act permits for mine projects require annual reports be submitted to the Ministry of Environment and Climate Change Strategy. Annual reports are public documents and include a summary of environmental incidents, all monitoring under permits, an assessment of the data by a qualified professional, and recommendations as appropriate. Separate reports or sections of the annual report are expected for air, refuse and water/receiving environment. In some cases, a separate biological effects report or water quality report may be required (BC MOE 2016c).

Reporting requirements will follow Technical Guidance 4 (BC MOE 2016c) and any amendments or updates thereto.

11.1.2 Annual Reclamation Report

Data will be entered in a standardized format and program that will allow for comparison between years. Monitoring data will be stored for the life of mine. Vegetation monitoring results and management activities will be reported in the Annual Reclamation Report submitted to the Ministry of Energy, Mines and Low Carbon Innovation. Results and monitoring activities will be reported until further monitoring and management is not required, as determined by the EM.

The Annual Reclamation Report will be submitted to EMLI and provided to Aboriginal Groups on or before March 31 each year. Additionally, the VMP will be reviewed annually and any updates to the Plan will be proposed in the Annual Reclamation Report.

11.2 Record Keeping

The EM is responsible for data management and reporting related to waste management. The data management system will include conducting inspections and monitoring, and providing these results to appropriate parties as required. The EM will also report key results of waste management monitoring and related environmental, health and safety incidents to the Blackwater Environment Committee and Aboriginal Groups during routine meetings.

Monitoring data will be entered into an electronic database and have quality control checks completed upon receipt of results. Data will be entered into a standard format that allows for data reporting and analyses. Data and data comparisons will be stored in a single file format for each type of survey or monitoring activity. Monitoring data will be stored for the life of the mine and will be made available for review upon request.

12. EVALUATION AND ADAPTIVE MANAGEMENT

The WMP will be reviewed annually by the BW Gold EM to assess its effectiveness and evaluate waste management strategies. The strategy employed by BW Gold will be regular monitoring as described in Section 10, supported by operational change and adoption of other mitigating measures as warranted.

Housekeeping and operational measures will be instituted as described in this plan. Work procedures will be continuously adapted with the goal to: Avoid/Reduce, Reuse/Recycle, and Treat/Dispose. Regular scheduled inspections of waste management facilities along with non-compliance reporting system described in Section 10 will ensure continuous improvement and adaption of waste management strategies throughout the mine life.

BW Gold will conduct and document management reviews of the WMP on a regular basis. Such reviews will ensure the integration of monitoring results with other aspects of the Project (e.g., other management plans) and that necessary adjustments are implemented as required.

The timing of plan updates may be informed by changes to other relevant management plans, the types of waste generated on site, monitoring results; and regulatory changes.

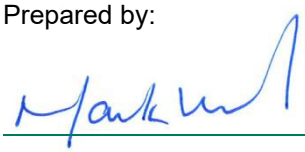
13. PLAN REVISION

Proposed revisions will be reviewed and discussed with the Blackwater Environment Committee prior to adopting and implementing the changes to the WMP. Revised draft and final versions of the plan will be filed with ENV and EMLI and provided to Aboriginal Groups.

14. QUALIFIED PROFESSIONALS

This management plan has been prepared and reviewed by the following qualified professionals:

Prepared by:



Mark Welsh, M.Sc.
Senior Consultant

Reviewed by:

Rolf Schmitt, P.Geo
Technical Director

15. REFERENCES

Definitions of the acronyms and abbreviations used in this reference list can be found in the Acronyms and Abbreviations section.

Legislation

Canadian Environmental Protection Act, 1999, SC 1999, c. 33.

Contaminated Sites Regulation, BC Reg. 6/2021.

Environmental Assessment Act, SBC 2018, c. 51.

Environmental Management Act, SBC 2003, c. 53.

Impact Assessment Act, RSC 2019, c. 28.

Industrial Camps Regulation, BC Reg. 70/2012.

Mines Act, RSBC 1996, c. 293.

Public Health Act, SBC 2008, c. 28.

Waste Discharge Regulation, BC Reg. 320/2004.

Wildlife Act, RSBC 1996, c. 488.

Secondary Sources

BC EAO. 2019a. *Assessment Report for Blackwater Gold Mine (Blackwater) Project Assessment Report With respect to the Application by New Gold Inc. for an Environmental Assessment Certificate pursuant to the* Environmental Assessment Act*, S.B.C. 2002, c.43*.

BC EAO. 2019b. *Summary Assessment Report for Blackwater Gold Mine Project (Blackwater) With respect to the application by New Gold Inc. for an Environmental Assessment Certificate pursuant to the* Environmental Assessment Act, *S.B.C. 2002, c. 43*.

BC EAO. 2019c. *In the matter of the* Environmental Assessment Act *S.B.C. 2002, c. 43 (the Act) and in the matter of an Application for an Environmental Assessment Certificate (Application) by New Gold BC*.

BC EMLI. 2021a. *Health, Safety and Reclamation Code of Mines in British Columbia.*

BC EMLI. 2021b. MINES ACT PERMIT *Annual Reclamation Report – General Information and Format Requirement*. Prepared by EMLI. January 2021

BC EMPR & ENV. 2019. *Joint Application Information Requirements for* Mines Act *and* Environmental Management Act *Permits*. Government of BC. Victoria, BC. September. Victoria.

BC ENV. 2018. *Fact Sheet - Industrial Camps Waste Authorizations and Best Practices*.

BC MOE. 2009. *An Introduction to Contaminated Sites in British Columbia (Fact Sheet 1 on Contaminated Sites).* Available online at: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/fact-sheets/fs01.pdf. Accessed April 27, 2020.

BC MOE. 2016a. *Technical Guidance 10: Guidance for a Stage 1 Preliminary Site Investigation.* BC Ministry of Environment. Available online: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/technical-guidance/tg10.pdf. Accessed June 2021.

BC MOE. 2016b. *Technical Guidance 11 on Contaminated Sites: Guidance for a Stage 2 Preliminary Site Investigation and Detailed Site Investigation.* Available online: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/technical-guidance/tg11.pdf. Accessed June 2021.

BC MOE. 2016c. *Technical Guidance 4. Environmental Management Act Authorizations. Annual Reporting Under the* Environmental Management Act*. A Guide for Mines in British Columbia. Version 1.3.*

BC MOH. 2017. *BC Guidelines for Industrial Camps Regulation*. Prepared by Health Protection Branch, Ministry of Health. https://www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/industrial-camps/bc_guidelines_for_industrial_camps_regulation.pdf.

CEA Agency. 2019. *Decision Statement Issued under Section 54 of the Canadian Environmental Assessment Act, 2012* to New Gold Inc. c/o Ryan Todd, Director, Blackwater Project Sunlife Plaza Suite 610, 1100 Melville Street Vancouver, British Columbia V6E 4A6 for the Blackwater Gold Project.

EC. 2010. *Technical Document for Batch Waste Incineration*.

EMLI. 2021. *Health, Safety and Reclamation Code for Mines in British Columbia.*

APPENDIX A EXISTING PERMITS

Appendix A1 *Environmental Management Act* Authorization #106530

Appendix A2 Municipal Wastewater Regulation Authorization #105882

BRITISH COLUMBIA

May 9, 2013

Tracking Number: 274873
Authorization Number: 106530

REGISTERED MAIL

New Gold Inc.
3110-666 Burrard Street
Vancouver, BC V6C 2X8

Dear Permittee:

Enclosed is Permit 106530 issued under the provisions of the *Environmental Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the permit.

This permit does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the permit holder. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the permit holder to ensure that all activities conducted under this authorization are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Administration of this permit will be carried out by staff from the Omineca and Peace Regions. Plans, data and reports pertinent to the permit are to be submitted to the Regional Director, Environmental Protection, at Ministry of Environment, Regional Operations, Omineca and Peace Regions, 325 - 1011 Fourth Avenue Prince George, BC V2L 3H9.

Yours truly,

Julie Orban

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

Ministry of Environment | Environmental Protection Division | 325 - 1011 Fourth Avenue Prince George BC V2L 3H9 | Northern Region - Omineca Telephone: (250) 565-6459 Facsimile: (250) 565-6629

Enclosure

cc:
1) Environment Canada
2) Victor Koyanagi, EMNG (email: Victor.Koyanagi@gov.bc.ca)

BRITISH COLUMBIA

MINISTRY OF ENVIRONMENT

PERMIT

106530

Under the Provisions of the Environmental Management Act

New Gold Inc.

3110-666 Burrard Street
Vancouver, BC V6C 2X8

is authorized to discharge emissions to the air from a Camp Incinerator at the New Gold Inc., Blackwater Exploration Camp located in the Kluskus area approximately 100 km southwest of Vanderhoof, British Columbia, subject to the terms and conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may lead to prosecution.

1. AUTHORIZED DISCHARGES

1.1 This section applies to the discharge of contaminants from a diesel fuel fired putrescible refuse incinerator. The site reference number for this discharge is E288529.

1.1.1 The maximum authorized rate of discharge is 110 m^3/minute. The volume of waste fed to the incinerator is a maximum of 1.1 tonnes/day.

1.1.2 The authorized discharge period is 12 hours per day, 7 days per week.

1.1.3 Discharge smoke opacity must not exceed 20% for periods longer than 3 minutes in a 30 minute period. Discharge smoke opacity must not exceed 40% at any time.

1.1.4 The wastes authorized for burning in the incinerator are: putrescible camp waste, paper, cardboard and lumber scraps that cannot be recycled.

1.1.5 The works authorized are a double chamber, refractory lined, auxiliary fuel-fired incinerator equipped with a combustion control system, and related appurtenances.

Julie Orban

Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

1.1.6 The authorized works will be located at either Incinerator Site A or Incinerator Site B, as indicated in Site Plan B, Appendix B until June 30, 2013. After June 30, 2013 the authorized works will be operated at Incinerator Site B only.

1.1.7 The location of the facilities from which the discharge originates is a mining exploration camp located approximately 100 kilometres southwest of Vanderhoof, British Columbia. The camp incinerator locations are at map coordinates: Incinerator Site A: 53.194148N and 124.88383W; Incinerator Site B: 53.178570N and 12485670W.

2. INCINERATOR OPERATING REQUIREMENTS

2.1 Incinerator Operation

2.1.1 The incinerator authorized in sub-section 1.1 must incorporate auxiliary fuel and be equipped with a combustion control system and a stack spark arrester.

2.1.2 All putrescible and combustible wastes must be treated by incineration prior to incorporation into the landfill operation.

2.1.3 Every effort must be made to minimize plastics from being incinerated.

2.1.4 Incineration operation must be limited to trained personnel selected by the Permit Holder to perform the incineration duties.

2.1.5 Open burning is prohibited.

2.1.6 Stockpiling of putrescible and combustible wastes is prohibited.

2.1.7 An adequate firebreak must be maintained around the incinerator.

2.1.8 As a safeguard against accidental fires and to ensure proper operation, an attendant must be on duty at the site when the incinerator is in use.

Julie Orban

Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

2.2 Disposal of Combustion Residue

2.2.1 The residue of combustion (ash) must be removed from the incinerator regularly and must be disposed of on a site and in a manner acceptable to the Director.

2.2.2 Once a suitable ash disposal location has been chosen, the permittee must provide the Director with details on the location of ash disposal and must ensure the ash disposal operation is in accordance with Section 2.2.3 and 2.2.4.

2.2.3 Ash must be buried with a minimum of 0.2 metres (8") of soil cover applied at least once every 2 months. The Director may vary the frequency of covering when adverse freezing weather conditions make covering impractical. The final soil cover must be 0.6 metres (24") thick and graded to promote runoff

2.2.4 The ash must not be buried at a location within 50 meters from a surface water feature, and the bottom most portion of the landfill must be at least 1.25 meters above the seasonal high water table.

3. GENERAL REQUIREMENTS

3.1 Maintenance of Works and Emergency Procedures

The authorized works must be inspected regularly and maintained in good working order. In the event of an emergency or condition beyond the control of the Permit Holder which prevents effective operation of the authorized works or leads to an unauthorized discharge, the Permit Holder must take appropriate remedial action and notify the Director within 60 hours. The Director may reduce or suspend operations to protect the environment until the authorized works have been restored, and/or corrective steps have been taken to prevent unauthorized discharges.

3.2 Bypasses

Any bypass of the authorized works is prohibited unless the permission of the Director is obtained and confirmed in writing.

Julie Orban

Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

3.3 Wildlife Nuisance

The subject discharge is of concern due to the possibility of a nuisance or hazard being caused by bears or other animals attracted to the site. Additional works or other operating instructions may be required by the Director if such problems arise.

3.4 Discharge Monitoring

Visual monitoring of the incinerator emissions authorized by Section 1 will be carried out by staff from the Regional Environmental Protection office.

3.5 Odour Control

Should objectionable odours, attributable to operations of the facilities, occur beyond the property boundary, measures or additional works will be required to reduce odour to acceptable levels.

3.6 Refuse Incinerator Management Plan

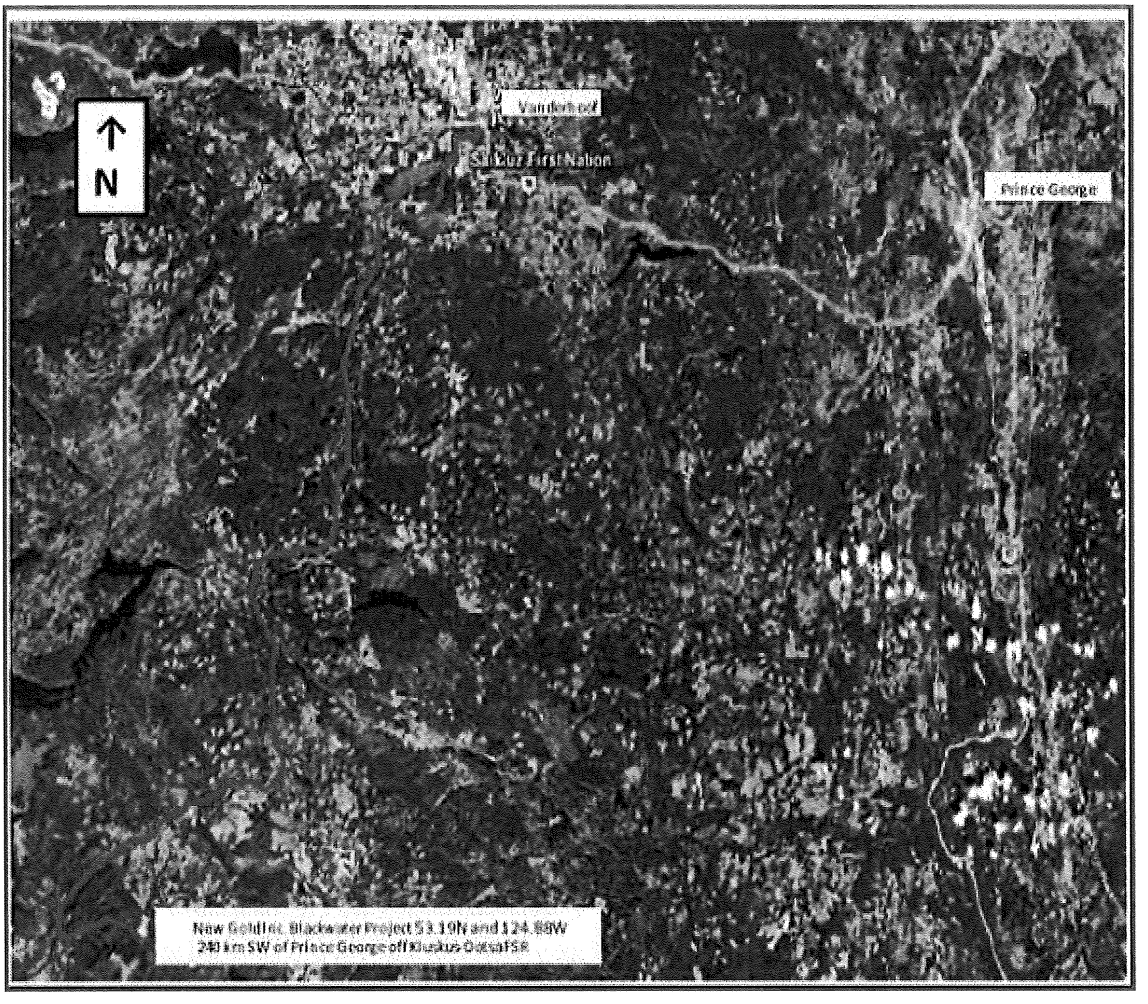
The permittee must provide the Director with a Refuse Incinerator Management Plan (RIMP) by July 1, 2013. The RIMP shall include, but not be limited to: (a) management of wildlife attraction , (b) a tracking system to document the type and volume of wastes incinerated, (c) a plan to minimize the amount of plastic being incinerated (d) an operator training plan, (e) a contingency plan in the event the incinerator is not functional, and (f) an ash removal and disposal plan. The RIMP must be to the satisfaction of the Director.

Julie Orban

Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

SITE PLAN A

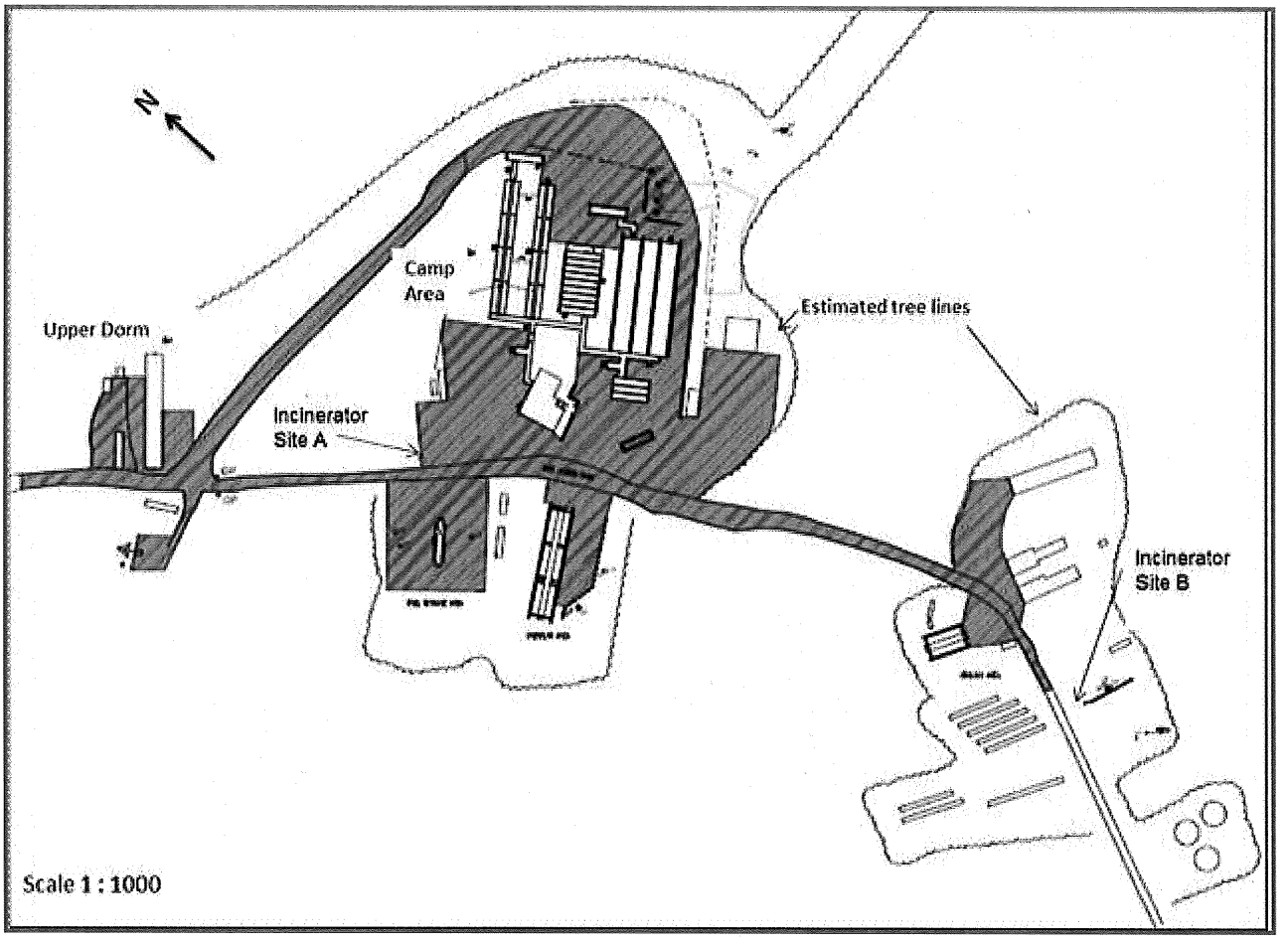


Julie Orban

Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

SITE PLAN B



Date issued: May 9, 2013

Julie Orban P. Geo
for Director, *Environmental Management Act*
Omineca – Peace Regions

BRITISH COLUMBIA
The Best Place on Earth

May 31, 2012

Tracking Number: 231705
Authorization Number: 105882

RICHFIELD VENTURES CORP.
310-666 BURRARD ST
VANCOUVER BC V6C 2X8

Dear Richfield Ventures Corp.,

Re: Registration under the Municipal Wastewater Regulation

Receipt of your completed registration under the Municipal Sewage Regulation is acknowledged. The effective date of registration under the Municipal Sewage Regulation was December 19, 2011. On and following the effective date of registration you were exempt from section 6(2) and 6(3) of the *Environmental Management Act* and could discharge waste to the environment from this facility provided all conditions and requirements of the Municipal Sewage Regulation were met.

On April 20, 2012, the Municipal Sewage Regulation was repealed and the Municipal Wastewater Regulation came into effect. As per Section 121 of the Municipal Wastewater Regulation, your facility is now deemed to be registered under the Municipal Wastewater Regulation and you continue to be exempt from section 6(2) and 6(3) of the *Environmental Management Act* provided all conditions and requirements of the Municipal Wastewater Regulation are met.

Please indicate the ministry authorization number shown above on all future correspondence with the Ministry regarding this facility.

The registration is for a discharge of 57.5 m3/d of secondary treated effluent (Class C) to a septic field from a 250 person mining exploration camp located approximately 165 km southwest of Vanderhoof via the Kluskus Main Forest Service Road.

Acceptance of this registration under the Regulation is based on the following documents:

- Registration Form dated December 19, 2011
- Environmental Impact Study revised February 6, 2012, prepared by Western Water Associates Ltd.
- Operating Plan dated April 2012, prepared by Opus DaytonKnight Consultants Ltd.
- Operations and Maintenance Manual dated April 2012, prepared by Opus DaytonKnight Consultants Ltd.

In accordance with Part 4, Sections 53 to 57, of the Regulation the discharger shall

undertake the discharge and receiving environmental monitoring program as specified in the attached Appendix A and site map, for a period of at least two years.

Your attention is respectfully directed to the terms and conditions specified in the Municipal Wastewater Regulation. Contravention of any of the conditions is a violation of the *Environmental Management Act* and may result in prosecution. If the Municipal Wastewater Regulation does not cover all waste streams at the site, additional authorizations may be required under the *Environmental Management Act*.

The Director, as per Section 8 (2) of the Municipal Wastewater Regulation, is allowing a substitution of the Environmental Operator Certification Program requirement under Section 47 of the Municipal Wastewater Regulation, with the supervision, training, examination and reporting program proposed by Opus DaytonKnight in their letter of May 10, 2012. This substitution is allowed until November 30, 3012, provided that oversight and reporting of operator performance by a qualified registered professional is continued until then, or until the operators are fully certified under the Environmental Operator Certification Program (whichever is first).

This decision under the Municipal Waste Regulation may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

An annual registration fee will be determined according to the Permit Fees Regulation and you will be receiving an annual invoice from the ministry for payment of this fee. Payment of all fees due is necessary to comply with the Municipal Wastewater Regulation.

Registration under the Municipal Wastewater Regulation should not be construed as a representation that the works are adequately designed or will satisfy the Regulation. It is the responsibility of the discharger to ensure that the works are adequately designed, constructed and operated and that the discharge quality complies with the regulation.

Registration under the Municipal Wastewater Regulation is without prejudice to any additional requirements that may be specified by the Director. The Director may also issue Orders under the *Environmental Management Act*.

Registration under the Municipal Wastewater Regulation does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the operator. It is also the responsibility of the operator to ensure that all activities conducted under the Municipal Wastewater Regulation are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force. The operator must also obtain any necessary approvals from other agencies.

Administration of this Regulation will be carried out by staff from the ministry regional office. Plans, data and reports pertinent to the Municipal Wastewater Regulation are to be submitted to the Regional Director, Environmental Protection, at the regional office indicated above.

Yours truly,

Julie Orban

Julie Orban, P.Geo.
for the Director, *Environmental Management Act*
Omineca and Peace Regions

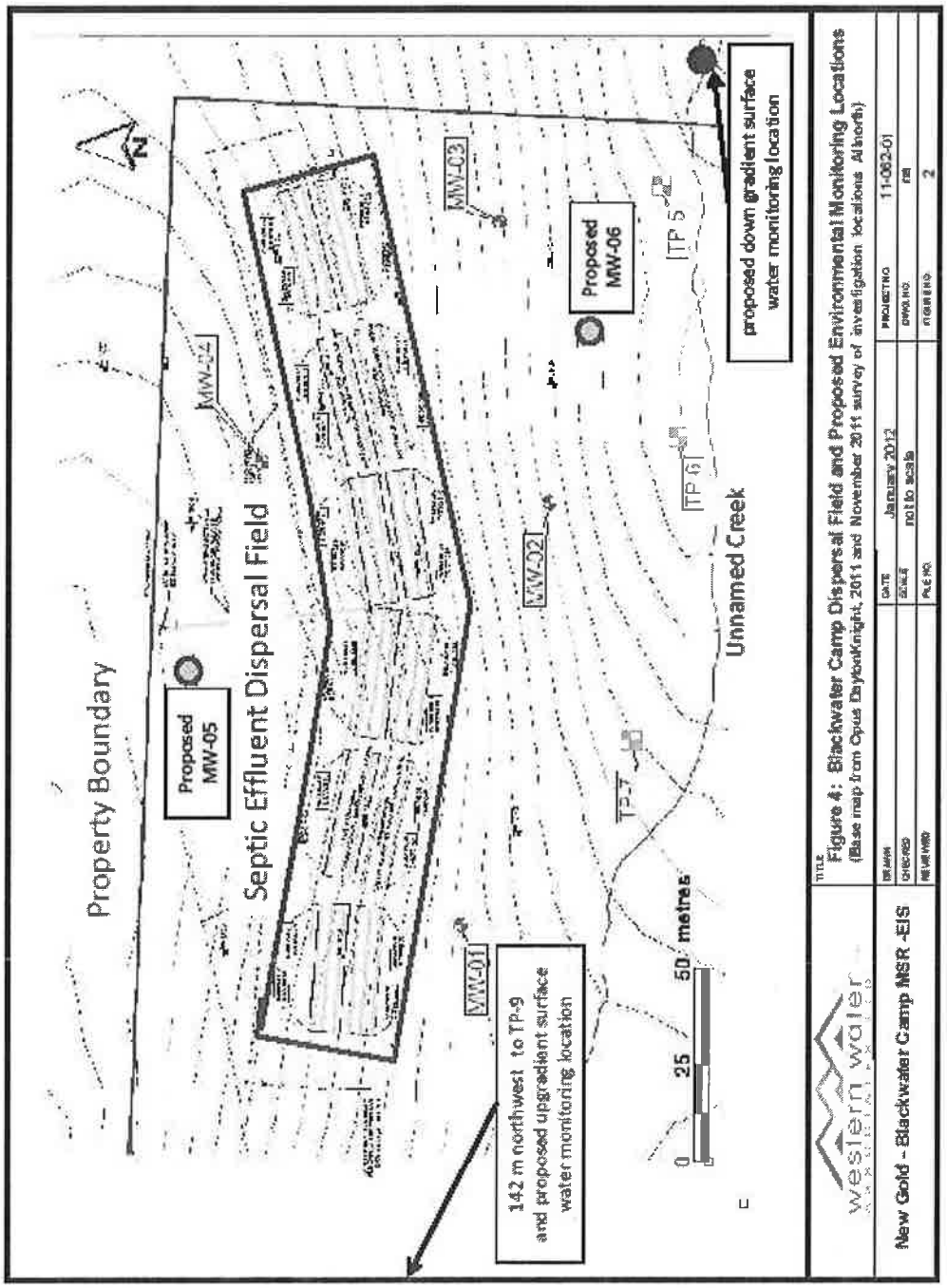
CC: Environment Canada
Northern Health, Public Health Protection, 4th Floor - 1600 Third Ave, Prince George BC V2L 3G6
Scott Bilbrough, Opus DaytonKnight, #101 – 2700 Queensway St, Prince George BC V2L 1N2
Arleigh Noden, New Gold Inc., PO Box 440, Vanderhoof BC V0J 3A0

ENCL: Appendix A

Appendix A
Monitoring Schedule for Authorization Number 105882

Sample Parameter	Location	Monitoring Frequency	Data Submission
Discharge Flow	Treated effluent before discharge to ground	Twice per week record the 24-hour flow	Twice per year
BOD		Sample once per month	
TSS		Sample once per month	
Groundwater: monitor for presence of groundwater and if groundwater is encountered, samples as follows: • groundwater elevation • field parameters (pH, temp. ORP, conductivity) • BOD5 • TSS • total nitrate, nitrite and ammonia • total and dissolved phosphorous • ortho phosphorous • choride • dissolved metals • total coliform, fecal coliform and E. coli.	4 Piezometers: • MW-01 • MW-02 • MW-03 • MW-04 2 drilled monitoring wells: • MW-05 • MW-06 4 Test Pits: • TP-5 • TP-6 • TP-7 • TP-9 Locations of above monitoring sites is shown on attached site map (Figure 4)	Sample three times per year as follows • freshet (May-June) • water level recession (Sept or Oct) • baseflow (Nov.)	Annually
Surface water: • field parameters (pH, temp. ORP, conductivity) • BOD5 • TSS • total nitrate, nitrite and ammonia • total and dissolved phosphorous • ortho phosphorous • choride • dissolved metals • total coliform, fecal coliform and E. coli.	Unnamed creek at one location upgradient of septic field and one location down gradient, as shown on attached site map (Figure 4).	Once per year • water level recession (Sept or Oct)	Annually

Site Map


Property Boundary
Septic Effluent Dispersal Field
Proposed MW-05
Proposed MW-06
MW-01
MW-02
MW-03
MW-04
TP-5
TP-6
TP-7
Unnamed Creek
142 m northwest to TP-9 and proposed upgradient surface water monitoring location
proposed down gradient surface water monitoring location
0 25 50 metres
N
Figure 4: Blackwater Camp Dispersal Field and Proposed Environmental Monitoring Locations
(Base map from Opus DaytonKnight, 2011 and November 2011 survey of investigation locations Allnorth)
DRAWN
CHECKED
REVIEWED
DATE January 2012
SCALE not to scale
PAGE NO 2
PROJECT NO 11-062-01
DWG NO
REVISION
New Gold - Blackwater Camp MSR -EIS