ARTEMIS GOLD INC

Blackwater Mine

Waste (Refuse and Emissions) Management Plan

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Replaces	F.1
Creation Date	30/04/2025
Scheduled Review Date	
Review Date	
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Related Documents:	
Key Contacts:	
Change Requests:	

Acronyms and Abbreviations

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
ELoMC	Environmental Life of Mine Monitoring Committee
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
MCM	Ministry of Mining and Critical Minerals
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
QRP	Qualified Registered Professional
SOP	Standard Operating Procedure
t	Tonnes
TSF	Tailings Storage Facility
WMP	Waste (Refuse and Emissions) Management Plan
VP	Vice President

1.0 Mine Overview

The Blackwater Gold Mine 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 Mine is accessed via the Kluskus Forest Service Road (FSR), the Kluskus-Ootsa FSR and an exploration access road, which connects to the Kluskus-Ootsa Forest Service Road (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) will be built to replace the existing exploration access road, which will be decommissioned. The new planned access is at km 124.5 of the Kluskus FSR. Driving time from Vanderhoof to the mine site is about 2.5 hours.

Major mine components include an open pit, 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 is supplied by a new 135 km, 230 kilovolt (kV) overland transmission line that connects 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 took approximately two years. In Q4 2024 Mine operations commenced in the open pit and first ore was fed through the crushing circuit. The 225 kV power line connecting to the provincial grid is now electrified. The Tailing Storage Facility (TSF) construction is complete and ready for mine production as planned. 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 Year +24 to approximately Year +36 and is defined by the duration required to fill the Open Pit with water to the target closure level, and the TSF is allowed to passively discharge to Davidson Creek via a closure spillway. The Post-closure phase is estimated to begin in Year +37.

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 EA 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.

BW Gold received *Mines Act* Permit M-246 on June 22, 2021, and *Environmental Management Act* Permit PE-110602 on June 24, 2021, authorizing early construction works for the Project. *Mines Ac*t Permit M-246 was amended on March 8, 2023, authorizing full mine construction and Operations, and most recently on October 30, 2024, superseding the previous versions of the permit. BW Gold received *Environmental Management Act* Permit PA-110650 on May 2, 2023 (most recent amendment on September 9, 2024) authorizing the discharge of air contaminants to the atmosphere from the Blackwater Mine.

2.0 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 a requirement under condition 3.1 of Permit 110650 of the *Environmental Management Act*. With completion of the Construction phase, the focus of the plan is now on the Operations, Closure and Post-closure phases.

The WMP does not consider the following discharges as they are addressed in other management plans or separate permits:

- Air contaminant discharge and associated mitigation measures and monitoring, as they are considered in the Air Quality and Fugitive Dust Management Plan.
- 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.
- 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.
- Hazardous waste, cyanide and fuel management are considered in other plans, including the Fuel Management and Spill Control Plan; Chemicals and Materials Storage, Transfer and Handling Plan; and Cyanide Management Plan.

This WMP considers the following mine facilities at which waste management infrastructure will be utilized as described in this plan: incinerator, operations camp, Plant Site, laydown areas, and Waste Transfer Area. The current mine plan (and this WMP) does not include an onsite solid waste landfill. BW Gold may consider a future landfill under the *Environmental Management Act* to dispose of material produced during operations and closure. The WMP would need to be revised to incorporate permit conditions should a landfill be permitted, particularly with respect to the closure and post-closure waste management strategy.

2.1 Related Documents

The WMP shares common elements with the following plans:

- Incinerator Operating Plan
- Surface Erosion Prevention and Sediment Control Plan
- Construction Environmental Management Plan
- Wildlife Mitigation and Monitoring Plan
- Spill Control and Emergency Response Plan
- Mine Site Water and Discharge Monitoring and Management Plan

Standard Operating Procedures (SOPs) are managed onsite by the project team and may be subject to frequent revisions to adapt to changing needs at site. However, the SOPs will continue to be aligned with and governed by the mitigations in the management plan. Appendix B contains the current version of the Waste Management SOP (BWG-0000-ENV-SOP-0005 Revision 0) dated December 27, 2023.

3.0 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 that will provide supporting roles include independent environmental monitors, an Engineer of Record for each tailings storage facility and dam, an Independent Tailings Review Board, TSF qualified person, geochemistry qualified registered professional (QRP), and other qualified persons and QRPs.

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 the 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 the COO.
General Manager (GM) Development	The GM is responsible for managing permitting, ongoing construction activities, the Mine'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 Operations Management and Financial Discipline. Reports to the 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 the GM.
Environmental Manager (EM)	The EM is responsible for the day-to-day management of the Mine's environmental programs and compliance with environmental permits, updating EMS and Management Plans. 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. The EM informs the Environmental Monitors of current site conditions that may influence monitoring programs. Supports the CM and reports to the Mine Manager.
Departmental Managers	Departmental Managers are responsible for implementation of the EMS relevant to their areas. Report to the Mine Manager.

Position	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 the VP Environment & Social Responsibility.
Community Relations Advisor	Community Relations Advisor is responsible for managing the Community Liaison Committee and Community Feedback Mechanism. Reports to the Indigenous Relations Manager.
Environmental Monitors	Environmental Monitors (Environmental Specialists and Technicians) are responsible for tracking and reporting on environmental permit obligations through field-based monitoring programs. Report to the EM.
Aboriginal Monitors	Aboriginal Monitors are required under EAC #M19-01 Condition 17 and will be responsible for monitoring for potential effects from the Mine on the Indigenous interests. Aboriginal Monitors will be involved in the adaptive management and follow-up monitoring programs. Report to the EM.
Employees and Contractors	Employees are responsible for being aware of permit requirements specific to their roles and responsibilities. Report to Departmental Managers.
Qualified Registered Professionals and Qualified Persons	Qualified registered professionals and qualified persons will be retained to review objectives and conduct various aspects of environmental and social monitoring, plans review, updates and signoff as specified in Environmental and Social Management Plans.

BW Gold will employ a qualified person as an EM who will ensure that the EMS requirements are established, implemented and maintained, and that environmental performance is reported to management for review and action. The qualified EM will have prior experience implementing Waste Management Plans on construction and/or operating mining sites. The EM is responsible for retaining the services of qualified persons or QRPs with specific scientific or engineering expertise to provide direction and management advice in their areas of specialization. The EM will be supported by 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.

BW Gold maintains overall responsibility for management of Operations and is 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 completion of the construction phase.

Environmental management during Operations 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 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 management plans 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, management plans, and 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 #M19-01, Conditions A(10)(a-c) of the M-246 *Mines Act* Permit, Condition 3.7 of *Environmental Management Act* Permit #110652, BW Gold has established an Environmental Life of Mine Monitoring Committee (ELoMC) to facilitate information sharing and provide advice on development and Operations, and the implementation of ELoMC conditions, in a coordinated and collaborative manner. Committee members include representatives of the BC EAO, UFN, LDN, NWFN, StFN, SFN, NFN, BC EMLI, BC ENV, and BC MOF/WLRS.

Pursuant to Condition 17 of the EAC #M19-01, Aboriginal Group Monitor and Monitoring Plan, BW Gold will retain or provide funding to retain a monitor for each Indigenous nations defined in the EAC #M19-01 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 Operations on Indigenous nations' interests.

4.0 Compliance Obligations, Guidance, and Best Management Practices

4.1 Legislation

Federal legislation which is broadly applicable to the WMP includes:

- *Canadian Environmental Protection Act*, 1999:
  - An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development.
- *Impact Assessment Act*:
  - An Act outlining a process to assess the impacts of major projects and establish approvals and conditions for matters under federal jurisdiction.
- *United Nations Declaration on the Rights of Indigenous Peoples Act:*
  - Canada adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), a framework that outlines the minimum standards for the survival, dignity, and well-being of Indigenous peoples worldwide.
- *Fisheries Act*:
  - The Act provides a framework for a) the proper management and control of fisheries, and b) the conservation and protection of fish and fish habitat.

Provincial legislation applicable to the WMP which is directly linked to or guides the implementation of the WMP includes:

- *Declaration on the Rights of Indigenous Peoples Act*:
  - The Act establishes the framework in BC for consulting with Indigenous People on resource management decisions
- *Environmental Assessment Act*:
  - Establishes the legal basis for the EAC and project approval conditions
- *Environmental Management Act;*
  - The Act provides authority for issuance of permits to discharge waste to the environment (air, solid, or effluent waste) and is supported by specific Regulations relevant to this WMP:
    - Contaminated Sites Regulation;
    - Municipal Wastewater Regulation;
    - Waste Discharge Regulation;
- *Mines Act*:
  - Provides the Chief Inspector of Mines and Chief Permitting Officer the authority to manage the health, safety and environmental aspects of Mines, primarily through the Health, Safety and Reclamation Code for Mines in BC (2024), and including the requirement for a WMP and the siting of waste management facilities on a mine site.
- Health, Safety and Reclamation Code for Mines in British Columbia (Code; EMLI 2024):
  - Part 2, Section 2.3 (Hazardous Materials and Waste)

  - Part 10, Section 10.5.6 (Spontaneous Combustible Material)
- *Public Health Act:*
  - Authority for maintaining best practices concerning Industrial Camps health practices including waste management.
- Industrial Camps Regulation; and
- *Wildlife Act:*
  - Guidance and requirements for avoiding or minimizing wildlife – industrial interactions

4.2 Environmental Assessment Certificate and Federal Decision Statement Conditions

There are no conditions in the Environmental Assessment Certificate (EAC) or federal Decision Statement (DS) relating to waste management covered by the WMP scope. However, Table 9.1-1 of the Construction Environmental Management Plan (EAC #M19-01 Condition 13c) provides waste management mitigation measures and best management practices that will be implemented to mitigate environmental impacts and help keep employees and contractors safe during construction.

4.3 Existing Permits

*Environmental Management Ac*t Authorization PE # 110650:

PE #110650 Section 1.12 authorizes BW Gold to discharge air from the operation of a diesel-fuel fired, double chamber incinerator (reference number E328685). The Authorization allows a maximum discharge of 1,584 standard cubic metres per hour to a maximum of 4380 hours per year, and discharge must not exceed a total particulate matter concentration of 30 mg/m^3 (standard volume). Authorized waste for incineration includes putrescible camp waste, paper, cardboard, and lumber scraps that cannot be recycled. Invasive plants removed from site may be included in the organic waste stream for incineration.

BW Gold must regularly inspect the authorized works and appurtenances, maintain them in good working order, in accordance with the manufacturer's recommended maintenance schedule. Inspections and maintenance records must be kept on site and available to an ENV Officer on request.

Section 3 of PE # 110650 specifies the Operating Requirements for Incinerators including:

- s 3.1 the preparation of the WMP
- s 3.2 Waste Reduction and Management of Recyclable Materials
- s 3.3 Incinerator Operating Plan
- s 3.4 Incinerator Attendant
- s 3.5 Incinerator Operation
- s 3.6 Disposal of Ash
- s 3.7 Containment of Putrescible Waste and Ash
- Section 6 outlines Reporting Requirements, including the preparation of Annual Reports and Evaluation, including:
- s 6.1.k A summary of the data collected for the Incinerator Operating Plan as required in section 3.3
- s 6.1.n A summary of inspection and maintenance activities of the Authorized Works

- s 6.1.o A summary of all non-compliances, details and remedial actions to prevent recurrence (see also Section 6.3 Non-compliance Notification, and 6.4 Non-compliance Reporting)
- s 6.1.p Occurrences or observations of wildlife accessing waste and mitigation measures taken
- s 6.1.q Spill summary of volumes greater than the Spill Reporting Regulations
- s 6.1.r The Annual Status Form required by Section 6.5

Municipal Wastewater Regulation Authorization # 105882:

Registration under the *Municipal Wastewater Regulation* as authorization #105882 (Appendix A), allows BW Gold to discharge (57.5 m^3/day) secondary treated effluent (Class C) to a septic field from the 250- person mining exploration camp. Operating plans and operations and maintenance manuals pertinent to the Municipal Wastewater Regulation are maintained onsite to ensure waste streams associated with the registration comply with the *Environmental Management Act* and the *Municipal Wastewater Regulation.*

Mines Act Permit: M-246

Permit M-246 Part C (1) requires BW Gold to maintain an Environmental Management System (EMS) consisting of Environmental Management Plans (EMPs) and Standard Operating Procedures (SOPs).

The Permittee must ensure the EMS references relevant policies and establishes proactive procedures to provide direction for effective operational management and monitoring on-site.

The WMP is a component plan of the EMS. It is to be reviewed annually, revised as required and made available to the Inspector of Mines on request. Permit M-246 requires mine site employees and contractors to be knowledgeable and accountable to act consistently with the requirements of the EMPs and SOPs forming the EMS. The M-246 Annual Reclamation report guidelines require documentation of hazardous waste management on site during reclamation and closure.

4.4 Guidelines and Best Management Practices

Guidance relevant to refuse management and applicable to the Mine 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).

Waste incineration process will follow the guidance provided in the “Technical Document for Batch Waste Incineration” by controlling combustion so that complete combustion occurs to minimize the formation and release of products of incomplete combustion such as dioxins and furans, operating the incinerators according to the manufacturer’s recommendations and ensuring combustion temperature is reached to complete combustion, the length of time the gases remain at elevated temperatures is attained, proper mixing of air and gases is achieved; and ensuring there is adequate oxygen to permit complete combustion (EC 2010).

In support of Mine requirements BW Gold may augment or replace incinerators from time to time to remain in compliance with the EMA Permit PE # 110650.

Refuse management will allow for a recycling program (refer to Section 7) at the mine site. Putrescible (Organic) waste will be incinerated in a properly designed incinerator or disposed of at an authorized municipal landfill. Storage of putrescible waste will follow methods to avoid encounters with bears and

other wildlife. Animal-proof containers will be utilized for such waste. Non-putrescible (non-organic) waste is to be disposed of at an authorized landfill (BC ENV 2018).

As specified under Section 22 of the Guidelines for Industrial Camp Regulation (MOH 2017), the site team will:

- Provide an adequate quantity and size of leak-proof, pest-proof, durable containers with tight-fitting tops capable of excluding bears and other wildlife in convenient locations.
- Provide legible and visible labels on all containers.
- Maintain garbage containers so that they do not become foul-smelling, unsightly or a breeding place for pests by ensuring a regular emptying schedule is kept.
- Implement visual inspections of the grounds on a regular basis to prevent the camp site from being littered with garbage or other waste.
- Ensure all garbage and other waste is disposed by burial, incineration, or an approved method.

5.0 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
  - A schedule for implementation and operation of control measures.
  - Description of record keeping procedures for tracking all wastes (recycled or otherwise disposed) taken offsite.
  - Provision of 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
  - The Environment Department reviews the effectiveness of management measures. The responsibility to review the effectiveness of the WMP may also fall to a health and safety representative or a shop manager/steward, as required. The responsible person will be expected to read and understand the requirements outlined in the WMP and is expected to have prior experience with construction/mining waste management.
  - Updates made to WMP as required.

6.0 Training and Education

Employees and contractors will receive training in waste management and wildlife management on their arrival onsite through 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 Mine's waste management approach;
- Employee responsibilities with respect to proper waste management;
- Promote workplace cleanliness by reinforcing the expectation to keep areas free of uncontained refuse and placing litter, including cigarette butts, into appropriate waste containers;
- An awareness of wildlife attractants; and
- The importance of segregating plastics from putrescible wastes destined for incineration to comply with the site recycling requirements.

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

Site supervisors will be provided with a copy of the WMP and will receive additional instruction with respect to the requirements that are outlined in the form of operational standard operating procedures (SOPs). Targeted instruction 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 instruction will be delivered prior to conducting work and if required update SOPs and ensure site departments have access to required documents.

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

7.0 Waste Management Approach

The Mine will employ a structured and disciplined waste management approach. Management of 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 – treat or dispose of waste in an environmentally responsible manner that meets regulatory requirements.
- The Waste Management SOP is included in Appendix B.

7.1 Avoid /Reduce

Actions will be undertaken to avoid waste generation, or where this is infeasible, reduce waste generation as practicable.

Mine procurement of materials and supplies is rigorously managed to avoid ordering of un-needed or surplus materials which then risk entering the waste stream. Optimal use of materials and supplies contributes to reduction in waste streams, the need for additional waste storage containment and transfer facilities, and cost of shipping waste offsite for disposal.

7.2 Reuse /Recycle

- Actions will be undertaken to re-purpose or recycle waste 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 bins marked scrap copper.
- 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 as food waste, by means of the onsite permitted incinerator, or strictly controlled open burning (assuming permits are obtained, and conditions are favourable). Offsite disposal will also be an option if incineration is not possible due to permitted volume limits.
- 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. Incineration of plastic and other recyclable material (defined in Authorization #110650) are prohibited and 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 or in secured bins to prevent wildlife access. These bins will be 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.
- Tires can be re-purposed on site. Excess tires which cannot be re-purposed onsite are to be stored neatly in a designated area prior to offsite 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, Lithium-ion, etc.) will be segregated at source by means of placing in specifically marked cardboard boxes to be recycled.
- Printer or toner cartridges will be placed in designated and marked containers in various office locations.
- Light bulbs and fluorescent tubes 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.
- Packaging materials will be segregated (metal or plastic strapping, cardboard, bubble or plastic sheet wrap, Styrofoam, wood) and directed to material specific locations.
- Metal drums that cannot be reused (e.g., to store used fuel filters) will be crushed and disposed of as scrap metal or transported and removed offsite by a licensed transporter and received at an approved waste management facility if they cannot be crushed onsite.
- Kitchen grease/oil is collected in closed top drums or storage vessel which will be stored in a manner that is inaccessible to wildlife prior to offsite shipping.
- Some recyclables may be backhauled offsite 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.

7.3 Treat /Dispose

Actions will be undertaken to treat and/or dispose of waste onsite, or shipment to designated offsite recycling or disposal locations:

Refer to Section 8 and Table 8.1-1 and 8.1-2 for a listing of industrial and domestic mine discharges during Operations and the intended disposal method or methods.

7.4 Mine Facilities

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

Appendix C illustrates the general location mine waste facilities with potential to be wildlife attractants.

7.5 Waste Transfer Areas

Waste transfer areas (WTA) will be established to manage material destined for on-site incineration, recycling, and for offsite disposal until a qualified contractor(s) is scheduled to transport waste material to the appropriate offsite facility(ies). Contractor pickup frequency will vary depending on quantity of waste.

During Operations, WTAs will be established to serve operational needs for kitchen waste and recyclables, and hazardous and non-hazardous waste. Each WTA will be designed to adequately and safely store a sufficient quantity of waste over a prescribed time period.

Hazardous waste disposal facilities at the plant site WTA will be designed and constructed in accordance with the type of material being held and the *Hazardous Waste Regulation* requirements, and operated in accordance with the Chemicals and Materials Storage, Transfer and Handling Plan to prevent leaching of material into soils or waterways and to provide protection from weather.

Hazardous waste will be kept in containment containers appropriately labelled for each material type in accordance with requirements specified in the Chemical and Materials Storage, Transfer and Handling Plan.

Kitchen waste and recyclables will be held at camp(s) in bear-proof secure containment to prevent attraction of wildlife.

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.

Final WTAs locations will be described in applicable sections of the Waste Management SOP.

8.0 Discharges during 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 address construction projects during Operations.

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

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

8.1.1 Industrial Waste

Debris and unused material from work areas will be removed upon completion of work to designated areas described below. Combustible (non-putrescible) wastes such as clean, untreated wood waste may be incinerated or burned through strictly controlled open burning (assuming permits are obtained and conditions are favourable), or transferred to an offsite facility, consistent with provincial authorizations. Pallets will be stockpiled and reused wherever possible. Pallets that cannot be reused may 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 sent to an offsite landfill (stockpiling onsite is not permitted in accordance with *Environmental Management Act* Permit #106530).

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 re-use or offsite recycling / disposal.

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

8.1.2 Domestic Waste

Domestic, putrescible kitchen wastes will be incinerated, subject to Authorization #110650. Domestic waste that cannot be incinerated will be hauled to an approved offsite disposal facility. 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 #110650.

Table 8.1-2: Waste Categories and Disposal Methods

Waste Category	Waste Products	Destination/Fate[1]
Food Waste	Food waste and food packaging	Incinerated or landfill
	Kitchen grease	Incinerated or landfill
	Juice boxes	Recycled
	Bottles	Recycled
	Cans	Recycled
Non-Food Non-Hazardous Waste	Wood	Reused or incinerated/open burned/ transported offsite for processing
	Office waste (combustible/non-recyclable	Sorted, packed, incinerated or transported offsite for processing or landfilling
	Cardboard (including corrugated cardboard)	Reuse/Recycle or incinerated/Open Burned/Offsite or landfill
	Plastics	Recycled or landfill
	Rubber, Conveyor Belts, Tires	Reused/recycled or landfill
	Plywood	Restocked/reused or incinerated/open burned/transported offsite for processing
	Incinerated waste	Landfill
Hazardous Waste	Oily solids	Transported offsite for processing
	Oil filters	Transported offsite, turned into scrap metal
	Used oils	Transported offsite, refined, reused
	Aerosols	Transported offsite, processed, turned into scrap metal
	Batteries	Packed, transported offsite, recycled
	Grease	Transported offsite for processing
	Contaminated soil	Placed and encapsulated within the tailings storage facility or transported offsite
Metal	Scrap metal	Offsite recycling or disposal
	Electronic waste	Packed, transported offsite, recycled

[1] At the date of this version of the WMP there is no onsite landfill permitted, although an onsite landfill may be permitted during Operations in the future.

8.2 Contaminated Soil and Snow Management

During Operation and Closure, there is potential for spills of hydrocarbons, solvents, lubricants and/or glycol. Spill response is addressed in the Spill Response Plan (Fuel Management and Spill Control Plan). Depending on the size of the spill, excavation may require mechanized equipment.

Hydrocarbon-contaminated soils recovered during Operations will be placed within the TSF footprint for encapsulation in tailings in the TSF or transported offsite. This will also be the process for removal of contaminated soils upon completion of Operations should contaminated soils be present at that time, and in accordance with the Reclamation and Closure Plan. Treatment of hydrocarbon-contaminated soils through the mill during Operations is another option to be considered.

Hydrocarbon contaminated snow will be recovered, and either processed through the truck wash with hydrocarbons recovered via the oil-water separator or alternatively trucked to an offsite suitable disposal facility. Treatment of hydrocarbon-contaminated snow through the mill during Operations is another option to be considered.

Records will be maintained of all spills, including remediation actions, 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 the approved final Reclamation and Closure Plan.

9.0 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 (i.e., Schedule 3.1, Schedule 3.2, and Schedule 3.4). The applicable standards are based on two of the proposed end land and water use(s) for the Mine:

Objective 2 Self-sustaining vegetation that will progress to plant communities similar to pre-disturbance ecosystems as supported by the results of the ecohydrological modelling.

Objective 5 Water quality and flow that support aquatic life and fish habitat downstream from the mine site and reclamation objectives.

Key components and infrastructure that could be sources of parameters of potential concern (POC) [1] 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;
- Truck and equipment repair shop; and
- Haul and service roads and the mine access road.

If concentrations of parameters of potential concern 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

[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.

and ecological risk assessment may be required to further characterize or address the areas of environmental concern. The Annual Reclamation Report will detail the comparison to standards and the report will be provided to Indigenous nations for review.

10.0 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 offsite 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 offsite will be recorded using an offsite disposal log or equivalent. Inert solid wastes will be stored in bins with secured lids to avoid windblown debris and animal attraction.

Monthly visual inspections of waste management facilities will be conducted by the Environment department to oversee 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 used to document the findings and required actions. These completed forms will be developed as an internal operational monitoring tool to promote continuous improvement in environmental performance and stewardship.

Formal waste audits will follow quality procedures during Operations, and corrective actions will be applied if opportunities for improvement or non-conformances are reported. Corrective actions will be specific to the waste stream but could include additional training and education, or an increase in monitoring frequency as part of the adaptive management response.

11.0 Reporting and Record Keeping

11.1 Reporting

11.1.1 *Environmental Management Act*

Environmental Management Act permits for mine projects require annual reports to be submitted to the Ministry of Environment and Parks. 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 (see Section 4.3). 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.

The Waste Management Plan will be reviewed annually in accordance with EMA Permit 110650 and any updates to the Plan will be proposed in the Annual Reclamation Report.

11.1.2 Annual Reclamation Report

Mines Act Permit M-246 requires the submission of an Annual Reclamation Report by 31 March annually. The report will detail waste management activities on the mine site. 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. The EMLI guide to the preparation of Annual Reclamation Reports lists the types of information required to be summarized for specific monitoring programs in the report. Results and monitoring activities will be reported throughout mine life and during post-closure, until further monitoring and management is not required, as determined by the MCM and ENV.

The Annual Reclamation Report will be submitted to MCM and provided to Indigenous nations on or before March 31 each year.

11.2 Record Keeping

The Environment Department 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 Life of Mine Committee and Indigenous nations during routine meetings.

Monitoring data will have quality control checks completed upon receipt of results. Data will be entered into a standard format that allows for data analysis and reporting. Monitoring data will be stored for the life of the mine and will be made available for review upon request.

Waste volumes leaving the site are tracked by BWG Warehouse and Logistics Department based on invoices provided by waste bin providers.

12.0 Evaluation and Adaptive Management

The WMP will be reviewed annually by the Environment Department and QRP 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. BW Gold will be proactive in its approach to waste management, identifying needs and responses in advance of new or modified activities which may result in altered waste streams.

Housekeeping and operational measures will be instituted as described in this plan. Work procedures will be continuously adapted to target measures that: 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 oversee 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 Operation (e.g., other management plans) and that necessary adjustments are implemented as required.

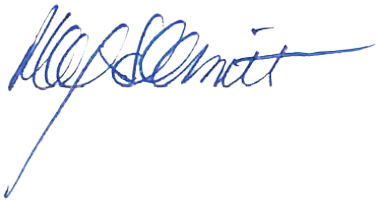
The timing of plan updates may be informed by changes to other relevant management plans, the types of waste generated on site, monitoring results, and regulatory changes.

13.0 Plan Revision

The WMP is a “living” document and it will be reviewed annually as required by Permit PE 110650. Changes to the WMP, including additions or updates to site specific prescriptions, mitigation measures or monitoring programs, will be driven largely by revisions to discipline-specific management plans and adaptive management responses. Proposed changes will be documented via the provision of a change log document including rationale for changes, which will be provided at the same time (where possible) or following resubmission of the WMP. Revised versions of the WMP will be dated, version controlled, QRP-signed and filed with MCM through Mine Space, the Environmental Assessment Office via ePic, and Aboriginal Groups via email and posted to BW Gold’s website in accordance with EAC Condition 42(c). Upon submissions of updated Management plans, reviewers will be invited to share and direct any comments, questions or concerns on the WMP updates through the ELoMC. Regular presentations of implementation of management plans including the WMP will also be provided to reviewers per the ELoMC annual schedule of topics/development of monthly meeting agendas.

14.0 Qualified Registered Professionals

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

Reviewer Role	Name	Signature	Date
Reviewed by:	Rolf Schmitt, P.Geo. Technical Director EGBC Licence No. 19824 ERM Permit to Practice No.: 1001271		29 April 2025

15.0 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. 2024. *Health, Safety and Reclamation Code of Mines in British Columbia.*

BC EMLI. 2022b. *Mines Act PERMIT Annual Reclamation Report – General Information and Format Requirement*. Prepared by EMLI. December 2022.

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.*

Appendix A 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

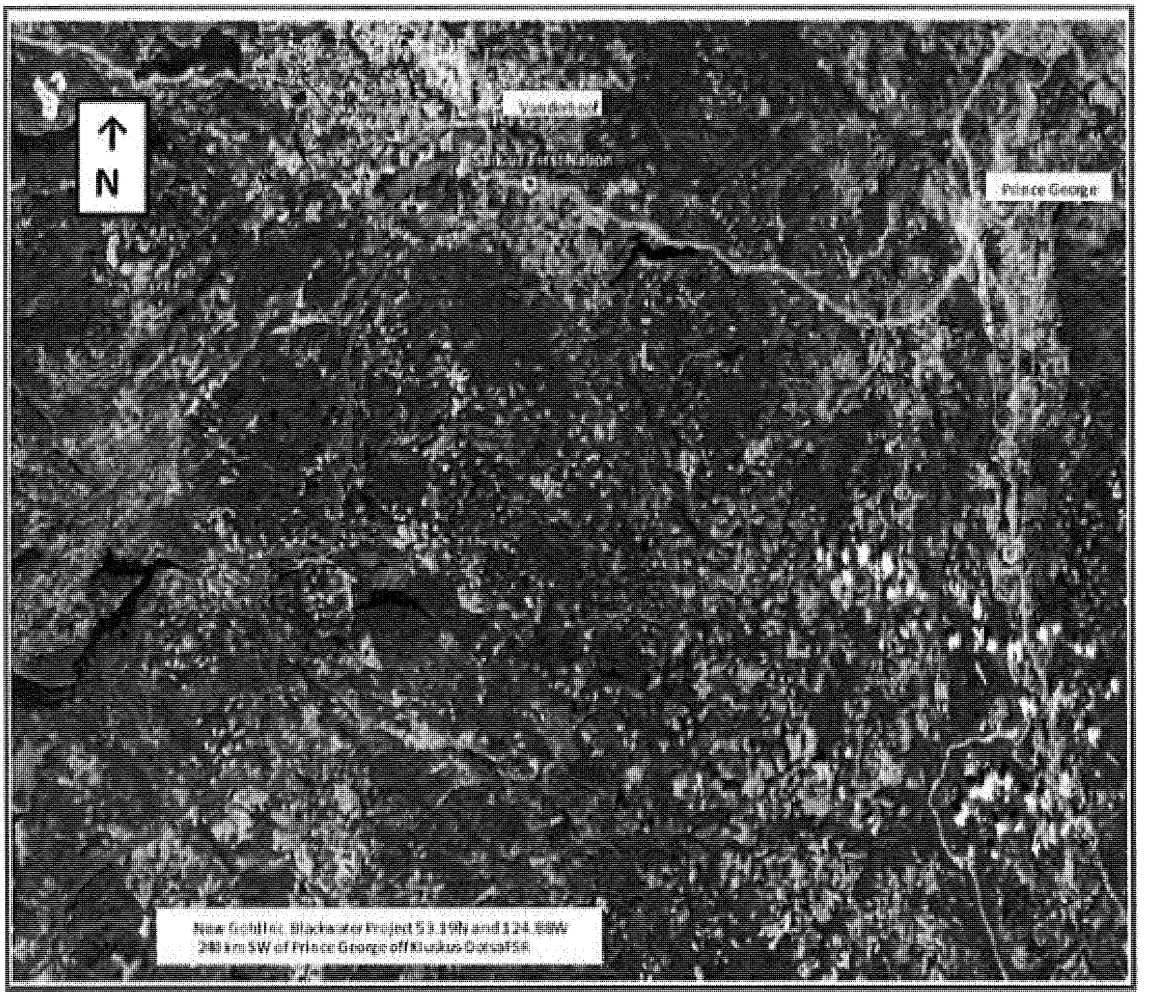
The permittee must provide the Director with a Refuse Incinerator Management Plan (RIMP) by July 1, 2013. The RIMP shall include, but not be limited to: (a) management of wildlife attraction , (b) a tracking system to document the type and volume of wastes incinerated, (c) a plan to minimize the amount 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

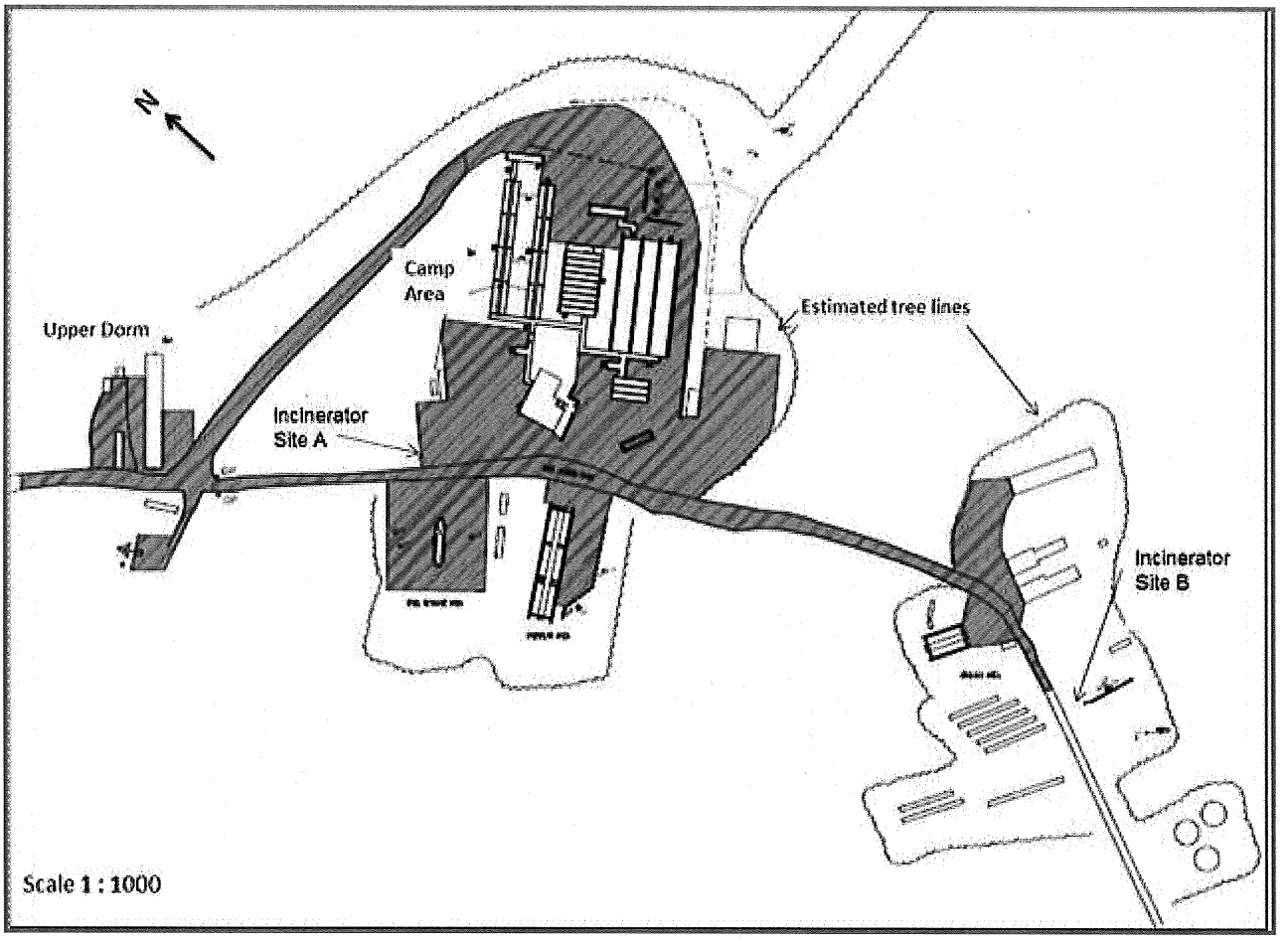


Julie Orban

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

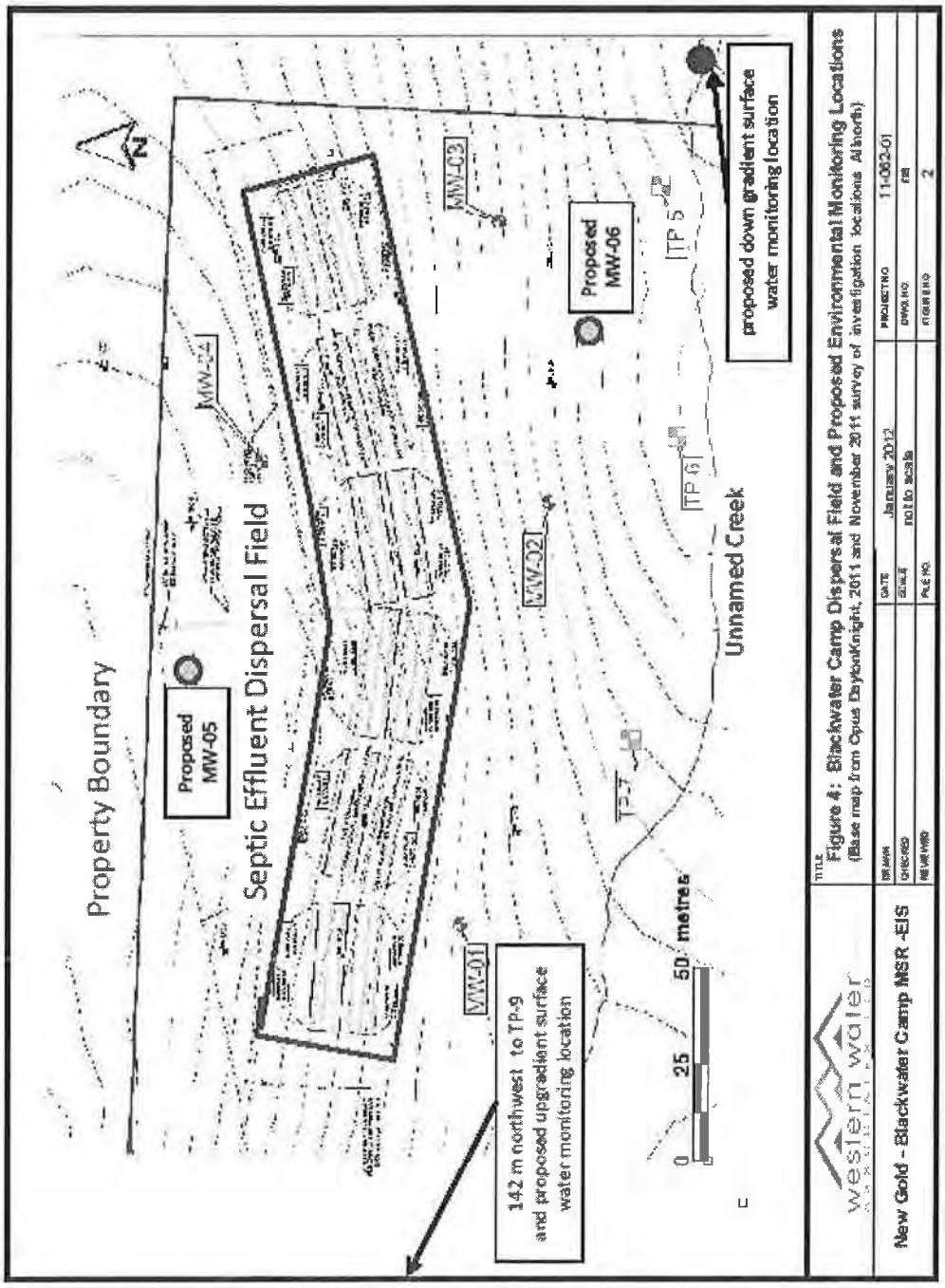
CC: Environment Canada
Northern Health, Public Health Protection, 4th Floor - 1600 Third Ave, Prince George BC V2L 3G6
Scott Bilbrough, Opus DaytonKnight, #101 – 2700 Queensway St, Prince George BC V2L 1N2
Arleigh Noden, New Gold Inc., PO Box 440, Vanderhoof BC V0J 3A0

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 11-082-01
DWG NO
REVISION
New Gold - Blackwater Camp MSR -EIS

Appendix B Waste Management SOP

ARTEMIS GOLD INC

Blackwater Mine

Waste Management

BWG-0000-ENV-SOP-0005

Revision 0

Contents

Policy Effective Date: 2023-12-27	*Policy Approved By:* Samantha Lynch
Review Date:	*Date:*

Document history

Version	Date	Name	Comments
a	2023-12-25	Matt Davis	
0	2023-12-27	Samantha Lynch	

Revision control:

All controlled documents shall include a revision as follows:

Revision	Applicability
Open	Working documents / draft / not yet formally issued (internally or externally)
A, B, C…	Issued for Review / Approval / Information, etc.
0, 1, 2…	Approved for Use/ Issued for Construction / Record / Purchase, etc.

Only documents issued for their final purpose shall include a numeric revision.

1.0 PURPOSE

To define a standard operating procedure (SOP) to ensure all commitments related to waste segregation, waste generation, management and disposal are met, and all relevant obligations are made known to mine personnel and site contractors.

2.0 SCOPE

This SOP applies to all employees, contractors, and subcontractors/vendors at the Blackwater Gold Mine (Blackwater) during all phases of the mine life.

3.0 RESPONSIBILITIES

Mine Manager

Shall;

- Ensure this procedure is reviewed regularly and implemented.
- Ensure that adequate resources are available for the development and implementation of this procedure.

Environmental Manager (EM)

Shall;

- Ensure all employees are aware of, understand, trained and deemed competent to comply with the requirements of this standard
- ensure observations, inspections, and monitoring of waste management is completed within their area of responsibility, and in any area which may affect their area or responsibility.
- If procedures are seen to be impracticable or ineffective in achieving objectives, deficiencies are raised, and alternative adequate measures taken promptly.

Superintendent

Shall;

- Understand, follow, and enforce the requirements of this standard
- Lead or assist with the development of procedures as needed
- Report and investigate any issues, concerns, or non-conformances in regard to this standard
- Ensure anyone in their area of responsibility, who may be required to monitor waste management is trained on this standard and aware of the obligations and management protocols.

Employees	Shall; • Understand and follow the standard • Participate in training and development of waste management methods • Keep accurate records of waste management observations

4.0 STANDARD OPERATING PROCEDURES

This SOP is to effectively manage waste at the site. Management of the waste on the Blackwater site will follow a waste hierarchy procedure:

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

It is everyone's responsibility to dispose of their waste properly and everyone on site must ensure that they are diligent with how their waste products are handled and where they end up. If you are not sure where to put your waste – Stop and Ask!

5.0 WASTE SEGREGATION

Several categories of different waste are managed on site, using different waste bins. It is important all employees and site contractors dispose of their waste correctly in order to adhere to site policy and government regulations.

Each waste category has multiple waste products which must be segregated (or separated) according to disposal method. The following sub-sections summarize waste categories and disposal methods.

5.1 Domestic Waste (Food/Organic/General)

Domestic waste has the highest potential to attract wildlife on site. To reduce the risk of attracting wildlife, all outdoor waste bins shall have closable lids and shall not be left open and accessible to wildlife.

Kitchen grease/oil will be collected in closed top drums and stored in the hazardous waste seacan at the BWG Warehouse for off-site disposal.

Food waste and general/non-hazardous waste shall be disposed of in the proper domestic waste bins. Items to be disposed of in the general waste bins include:

- Food waste
- Soiled/used food packaging
- Cardboard with food residue
- Take out containers
- Used coffee cups
- Toiletries packaging
- Plastics
- Styrofoam

- General household waste


General waste bins are currently located at the Construction Camp and the Exploration Camp.

5.2 Recycling (Mixed Recyclables)

Mixed recyclables shall be segregated by marked bins to a practicable degree. These bins will be managed to prevent the materials from becoming wildlife attractants.

All attempts should be made to minimize the incineration of plastics. All employees and contractors must properly segregate plastics for disposal and recycling.

Blue recycling bins (see image above) shall be kept indoors and inaccessible to wildlife.

Items to be disposed of in the mixed recycling bins include:

- Plastic water bottles
- Pop cans
- Juice boxes
- Milk cartons
- Other recyclable plastics marked with 1, 2, 3, 4, 5, 6, or 7)

Mixed recycling bins are currently located at Construction Camp and Exploration Camp.

5.3 Recycling (Cardboard)

Cardboard shall be broken down and flattened before going into the cardboard waste bin. Cardboard with food residue shall not be placed into the cardboard recycling bin and should be disposed of into the general waste bins. In addition to cardboard being returned to a recycling facility, at times, non-contaminated cardborrad will be burned in a controlled manner.

Cardboard is the only acceptable item to be disposed of in the cardboard waste bins.

Cardboard recycling bins are currently located at Construction Camp, Exploration Camp, HEAP, and Mobile Maintenance.

5.4 General Construction Waste

General construction waste shall be disposed of into the general construction waste bins. Domestic waste (see section 5.1) shall NOT be disposed of in the general construction waste bins.

Examples of items to be disposed of in the general construction waste include but are not limited to:

- Equipment parts
- Flooring
- Drywall
- Scrap wood (not excessive)
- Insulation
- Particle board
- Construction plastics
- Construction liners
- Air filters
- Windows/Doors

General construction waste bins are currently located at Exploration Camp, Mobile Maintenance, A trail, Ball Mill, HEAP, Plant Site, Site Services, and Water Management Pond.

5.5 Wood Waste

Wood products, both treated and non-treated, shall be disposed of into the wood waste bins. Cardboard shall NOT be placed into wood waste bins. In addition to non-treated wood being returned to a recycling facility, at times, wood will be burned in a controlled manner.

Wood waste bins are currently located at Exploration Camp, Mobile Maintenance, HEAP, and the Plant Site.

5.6 Metals Waste

Items to be disposed of in the metals waste bins include but are not limited to:

- Scrap metal
- Rebar
- Damaged culverts,
- Pipes
- Metal signs & posts

Metal waste bins are currently located at Exploration Camp, A-trail, and the Plant Site.

5.7 Hazardous Waste

Hazardous waste bins will be labeled with appropriate signage for each designated hazardous waste material. Hazardous waste bins include but are not limited to:

- Contaminated soil
- Contaminated snow
- Oily rags
- Oil filters
- Aerosols
- E-Waste
- Toner cartridges
- Light bulbs
- Used oil containers
- Hydraulic hoses
- Batteries
- Paint

Hazardous waste Seacans are located at BWG Warehouse & Mobile Maintenance. Empty drums and totes can be collected from BWG Warehouse. Full totes awaiting offsite disposal to be placed in bermed/lined area near Plant Site fuel station.

5.8 Incinerator

An incinerator is located on site and will be operated by the Infrastructure Department. A separate Incinerator SOP exists. Non-contaminated carboard and non-treated wood will opportunistically be incinerated on site. Incinerated waste that does not contain wildlife attractants will be transferred to an offsite landfill.

6.0 WASTE REMOVAL SCHEDULE

Bin removal is scheduled by Warehouse & Logistics Department:

- Two (2) Food Waste bins swapped out each Tuesday & Thursday

- Minimum of Six (6) General Construction Waste/Wood/Cardboard/Recyclable bins exchanged every week, with ad hoc requests supported depending on bin levels.
- Scrap metal bins emptied on an ad hoc basis, depending on bin levels.
- Hazardous waste removed from site on ad hoc basis, depending on levels.

7.0 WASTE INSPECTION SCHEDULE

Waste bin inspections are completed twice weekly by Warehouse technicians (Monday & Thursday) and data (Waste type, bin location, bin level & bin number) is then forwarded to waste providers to schedule removal.

Ad hoc inspections are completed site wide by contractors and reported through the Blackwater Central QR code (below).

8.0 WASTE SIGNAGE AND POSTERS

All bins have removable signage on them to identify which waste streams can go in (see photo below).

Waste Management signage posted through camps and waste transfer areas.

9.0 DATA COLLECTION

Waste volumes leaving site are tracked by BWG Warehouse & Logistics department based on invoices provided by waste bin providers.

Example:

Date	Material	Total Waste in Tonn	Disposal Facility
1-Nov	GCW	4.55	Clearview
1-Nov	GCW	1.24	Clearview
2-Nov	Cardboard	0.64	Cascades
2-Nov	GCW	0.68	Clearview
2-Nov	GCW	2.04	Clearview
3-Nov	Wood	3.27	Clearview
7-Nov	GCW	1.72	Clearview
7-Nov	Cardboard	0.57	Cascades
7-Nov	Cardboard	0.96	Cascades
7-Nov	GCW	1.24	Clearview
8-Nov	Wood	5.73	Clearview
13-Nov	Cardboard	0.95	Cascades
13-Nov	Wood	2.29	Cascades
16-Nov	GCW	2.25	Clearview
16-Nov	GCW	1.17	Clearview
20-Nov	GCW	1.69	Clearview
20-Nov	Cardboard	1.3	Cascades
20-Nov	Wood	1.59	Clearview
27-Nov	Cardboard	0.91	Cascades
27-Nov	Wood	3.76	Cascades
28-Nov	Cardboard	0.71	Cascades
29-Nov	GCW	3.53	Clearview
30-Nov	Cardboard	0.7	Cascades
30-Nov	Cardboard	1.59	Clearview

10.0 RELATED DOCUMENTS & REFERENCES

- 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)
- Garbage disposal guidance provided in Section 22 of the Guidelines for Industrial Camps Regulation (MOH 2017)
- C ENV. 2018. Fact Sheet - Industrial Camps Waste Authorizations and Best Practices

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

Appendix C Mine Site Waste Transfer Areas Plan

Temporary Waste Transfer Area

To guarantee Blackwater Gold's (BWG) temporary waste transfer area is as environmentally responsible as possible, BWG has ordered several containment containers/units for use on-site. These containers/units will provide the measures BWG needs in place to prevent and control spills of any hazardous materials that are awaiting removal from site.

These units will ensure that BWG is in compliance with the Chemical and Materials Storage, Transfer, and Handling Plan, and the Waste Refuse and Emissions Management Plan. The containers/units will protect waste from the elements, be bear-proof and secure, have secondary containment (built in spill-tray with a capacity of 2,200L) to prevent contamination of the environment (soil/groundwater), have appropriate venting, and comply with the standard of safe storage and handling of flammable and combustible liquids.

The use of these units will allow BWG flexibility in placement as construction advances and until a more permanent transfer facility can be made/decided upon.

Examples of containment containers/units purchased by BWG

Additionally, BWG will continue to improve signage on containers/bins currently on-site so there is no further confusion surrounding what is hazardous waste and what is not. It is anticipated that these units will be on-site in roughly 4 weeks' time. In the meantime, BWG will ensure regular monitoring of the current waste transfer area for any signs of leaks/spills and timely removal when waste streams become full.