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| 1Contractor’s Environmental Protection Plan (EPP) TemplateFaro Mine Remediation Project (FMRP)Prepared For:(COMPANY NAME)AddressPrepared By:(COMPANY NAME)AddressFile No.: 00583-01(DATE) |

Environmental Protection Plan

This Environmental Protection Plan (EPP) was prepared for [Company] employees performing a specific, limited scope of work on the Construction of the [Project Name] (“the Project”).

It was prepared based on the best available information regarding environmental risks known or suspected to be present on the project site, and [Company Name] construction methodology proposed at the time of writing. While it is not possible to discover, evaluate, and protect in advance against all possible risks that may be encountered during the completion of this project, adherence to the EPP will reduce the potential for environmental impacts resulting from project activities.

By signing below, I acknowledge that I have reviewed and understand the EPP for the [Company Name] at the Faro Mine Remediation Project. The plan is written for specified site conditions, dates, personnel, and proposed construction methodology and must be amended if these conditions change. Modifications to the EPP require the approval the Construction Manager (i.e., Owner’s Representative)

TEMPLATE

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1. INTRODUCTION AND PURPOSE

The purpose of the Project specific EPP is to ensure adherence to the Faro Mine Remediation Project (FMRP) Environmental Management Plan (EMP). Through the development of project specific EPPs it allows the “constructor” to develop their project in alignment with the FMRP EMP. The FMRP EMP ensures that the activities are being developed in accordance with federal and territorial regulations and legislation.

This Project Specific Environmental Protection Plan (EPP) has been created for the construction of the **[Project Name]** at the Faro Mine Complex in the Yukon Territory. The location of the construction is the area **[Location]** as shown on the project drawings. The **[Project Name]** construction is part of the Faro Mine Remediation project.

The objective of the **[Construction Project]** is to **[Example]** **construct a temporary groundwater collection and conveyance system that is connected to three existing groundwater collection wells. The system is intended to capture metal-contaminated groundwater originating from the Rose Creek Tailings Facility to prevent it from seeping into surface water and reaching fish bearing streams.** The **[Project]** is part of the larger Faro Mine Complex Remediation Project being undertaken by Team Canada (PSPC & CIRNAC) Parsons has been retained by CIRNAC to manage the Project and act as the Main Construction Manager (MCM).

The purpose of this EPP is to describe the environmental protection measures that will be implemented by **[Company Name]** during the Project. The content of the EPP is based the environmental sensitivities and environmental protection requirements described in the Team Canada (PSPC & CIRNAC) Environmental Management Plan (EMP).

As part of the EPP **[Company]** is committed to:

* Implementing environmental protection measures identified within the EPP.
* Training and educating crews to be aware of environmental sensitivities and how to best implement the protection measures.
* Issuing stop-work orders if unknown or unanticipated environmental hazards or work conditions evolve and develop strategies to mitigate or eliminate them.
* Communicating with Main Construction Manager (MCM) related to the environmental protection measures at the site about any issues or concerns.
* Maintaining records and documents in accordance with the EPP, individual environmental monitoring plans, and project specifications.
1. ROLES AND RESPONSIBILITIES

This section describes the roles and responsibilities for the development, implementation, and maintenance of this EPP.

|  |  |  |
| --- | --- | --- |
| Name, Company, and Contact Info | Role | Responsibilities for EPP |
| John SmithNorthern Reach Contracting+1-867-111-1111John.smith@nrc.com | Enviro Tech | Sampling, monitoring, etc. |
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Parsons Project Contacts

|  |  |  |
| --- | --- | --- |
| Name | Role | Contact Information |
| Jenna Pratt | Operations Manager | +1-867-111-1111Jenna.pratt@parsons.com |
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1. ORIENTATION AND TRAINING

All personnel entering the site will have indoctrination to this EPP. This will be completed at the same time as the H&S indoctrination for personnel entering the site. A record of EPP indoctrination is provided in Attachment 1.

[Contractor] will implement the orientation and training procedures listed below.

* The **Site Superintendent** will ensure that each new employee or contractor is properly introduced and instructed on the procedures established by the project's Environmental Protection Plan (EPP).
* Each employee will be required to complete the EPP orientation before being permitted on Site.
* Environmental protection issues will be discussed at daily safety meetings. In addition, at the start-up of all work activities that require specific environmental protection measures, all employees will receive instruction on specific procedures to implement the EPP measures.
* All employees will be made aware of the emergency reporting procedure as it relates to environmental protection, erosion and sediment control, and spill response.
1. SITE DESCRIPTION AND ENVIRONMENTAL SENSITIVITIES

# Site Description

The Project is located on the Faro Mine Site in the Yukon, which is located in an east-west oriented mountain valley. The Project area is located east of the mine and down valley from the existing Cross Valley Pond and Intermediate Pond. There is a drainage channel that flows east from the water management ponds and adjacent to the construction site. This channel eventually flows to the Pelly River. The project area is located adjacent to existing infrastructure including roads, drainage channels (NWID and X-13), existing pipelines and tailings ponds.

# Environmental Sensitivities

The Environmental Sensitivities for the project as highlighted in the EMP are:

* Erosion and generation of sediment
* Waste Management
* Wildlife and Habitat
* Dust Generation
* Metal Leaching and Acid Rock Drainage (ARD)
* Heritage Resources
* Fish and Fish Habitat

The location of the Site in a relatively remote means that encounters with wildlife are likely. The work will be undertaken within the bird nesting window, which is in effect from May 4 to August 22. The project works may not disturb birds or active nests. It is understood that bird nest surveys and marking of buffer zones around identified nests will be completed by Parsons. Planning for such surveys must be completed at least one week in advance of work to allow sufficient time to coordinate and schedule the bird biologist.

The drainage channels NWID and X-13 drain to downstream streams and rivers and the release of sediments or other deleterious substances into the channels can result in negative impacts in downstream fish bearing streams. The planned works for the sump and pump house occur in close proximity to X-13.

Generation of wastes and dust is an environmental concern and [Contractor] will mitigate these impacts in accordance with EMP and standard practices implemented at the Faro Mine Site. Dusts may contain contaminants that causes impacts to plants and small mammals.

1. SCOPE OF WORK

The scope of work (SOW) is to construct the Faro Mine Short Term Down Valley Seepage Interception System (DV-SIS). Work will consist of the following activities that require environmental management:

* Clearing, grubbing, and stripping of the Works in required areas.
* Development and management of borrow areas and borrow access roads. Including the excavation and production of construction materials specified in the Specifications and on the Drawings. Aggregate will be screened using a Keestack K6 Screening Plant to produce eight aggregate types.
* Excavation and construction of a sump, access road, and Pumphouse pad as specified in the Specification and on the Drawings. Dewatering will be required to support sump construction.
* Excavation and construction of the pipeline trenches, pipe casings for creek and access road crossings, access manholes, earthen berms, lock block piping supports, interception well housekeeping pads, and outfall protection at IP and CVP as specified in these specifications and drawing references.
* Installation of rig mats to support and the prefabricated pump house and e-house, including the specified anchoring.
* Installation of six power poles and associated electrical lines and tied into the existing systems.
* Project Closure including demobilization and the reclamation and clean-up of the construction areas, borrow areas, and stockpile areas.
1. REGULATORY REQUIREMENTS

# Legislation

The Site is managed by the Faro Mine Complex, located within Yukon Territory land is therefore under Territory Jurisdiction. The relevant legislation is listed below.

### Federal:

* Species at Risk Act
* Migratory Birds Convention Act

### Yukon Territory:

* Yukon First Nations Umbrella Final Agreement (UFA)
* Yukon Historic Resources Act
* Yukon Wildlife Act
* Territory Lands (Yukon Act)
	+ Land Use Regulation
* Placer mining Act
* Quartz Mining Act
* Yukon Lands Act
	+ Quarry Regulations

# Permits, Guidelines and Other Applicable Documents

The Faro Mine Complex abides by and holds several permits and guidelines. Permits and guidelines may affect this project include:

* Fisheries and Oceans Canada, May 25, 2021, Letter of Advice – Seepage Interception System, Northwall Interceptor Ditch, Faro – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat
* Crown-Indigenous Relations and Northern Affairs Canada Contract/FA# 1819-HQ-000107 and ICM 1819-HQ-00187, Site Instruction - Faro Mine Complex
* Waste Management Permit 81:001, Yukon Environment
* Operational Policy for Heritage Resources Management on Yukon Lands, Yukon Government
* Guidelines respecting the Discovery of Human remains and First Nation Burial Sites, Yukon government
* FMRP Ground Disturbance Permit (FMRP-FRM-0003).

Details regarding the above-mentioned documents can be found in the Faro Mine Complex Environmental Management Plan.

[Contractor] will adhere to the requirements of the above listed legislation and permits. [Contractor] understands that no additional permits are required.

1. ENVIRONMENTAL PROTECTION PROCEDURES

The EPP considers the following environmental sensitivities that are present at the Site and aims to minimize risk to them. Scope specific procedures for environmental protection are provided in this section.

# Erosion and Sediment Control

Erosion and sediment control measures will be implemented on the Site for three primary purposes:

1. Prevent erosion during site works.
2. Control run-off from the work area; and
3. Prevent inputs of sediment into waterbodies.

Prior to commencing work the site will be assessed for potential areas of concern (slopes, fine materials, nearby waterbodies/watercourses) and the appropriate mitigation measures implemented. Faro Mine Complex Ground disturbance permits are also required prior to initiating work.

Erosion during site works will be managed in accordance with the following table.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***Clearing and Grubbing*** |
| All clearing and grubbing | Generation of sediment. Removal of stabilizing vegetation. | * Clearing and grubbing will be kept to an absolute minimum and will be completed only to the extent required to allow project vehicles to access the Site, while acknowledging that all areas slated for clearing require clearance from a bird biologist prior to work starting
* When possible, stumps and roots will be retained to maintain ground stability and control erosion. This includes areas cleared for the purpose of habitat removal (described in EMP as a method for limiting the nesting potential of migratory birds).
* Vegetation buffers between the work area and watercourses will be retained.
* Areas that slope away from the construction area will not be cleared or grubbed.
* If practicable and approved by the CM, grubbed materials will be placed in disturbed areas to reduce the potential for erosion.
 |
| Clearing and removal of detritus and topsoil | Loss of topsoil and detritus | * Detritus and topsoil will be placed in stockpiles for potential re-use
* If erosion and sediment generation is observed, stockpiles will be covered when not in use and overnight by poly sheets
* Silt fencing will be installed on the downslope side to contain sediment
 |
| ***Borrow Pit Operation*** |
| Stockpiling of materials (aggregate, soils, etc...). | Erosion, generation of sediment and run-off. | * Sediment fencing will be installed on downhill sides of the borrow pit area prevent run-off from entering the environment.
* Generated stockpiles will be sloped at a maximum steepness of 2 V to 1H to reduce erosion potential
* If erosion and sediment generation is observed, stockpiles will be covered with poly sheeting when not in use and overnight each day.
 |
| Aggregate Crushing | Generation of fine materials that may enter run-off | * Appropriate dust suppression will be utilized as described in Section 7.5.
 |
| ***Fill for Pipeline Construction*** |
| Construction of permanent soil piles | Erosion and generation of sediment from soil piles | * The permanent covering material will be placed as soon as possible.
* If erosion is observed, soils will be covered with poly sheeting until the permanent ground covering is placed. Cleared vegetation may also be used as a temporary covering to control erosion.
* Silt fence will be installed to contain sediment on the downslope sides of soil piles if there is no existing vegetation or berm between the soil pile and the drainage channels.
 |
| ***Excavation for Pipeline Construction and Sumps*** |
| Excavating materials | Destabilizing local ground | * Silt fencing will be installed on the downslope side of excavation works.
* Disturbed areas will be stabilized with vegetation or the specified permanent ground cover as soon as practicable after the initial disturbance
* Trafficked areas will be covered with gravel aggregate to reduce erosion.
 |
| ***Installation of Rig Mats for Pump Station*** |
| Stockpiling of unsuitable materials | Run off and erosion from construction area | * Sediment fencing will be installed on downhill sides of pump station area to prevent sediment from entering the environment.
* Gravel will be placed in the high traffic areas around the pump station to reduced potential for sediment generation.
 |
| ***Backwater Prevention Berm*** |
| Instillation of Backwater Prevention Berm | Introduction of sediment to channels | * If possible, the berm will be installed while there is no flow in the channel.
* If flow is present during construction, a silt curtain will be deployed in the channel downstream of the berm.
 |

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| Specific Work Activity | Potential Risk | Mitigation |
| ***Site Remediation*** |
| Seeding and Planting | Potential for erosions and generation of sediment. | * Newly disturbed areas will be properly sloped and revegetated as soon as practical.
* Grubbed materials may be used as ground cover to reduce erosion and sedimentation with CM approval
 |
| Reclamation of work areas | Ground Compaction | * Where practicable, leave soils rough and loose to allow for plant establishment and water infiltration into the soils.
 |
| ***Demobilization*** |
| Remove all temporary sediment and erosion control measures | Leaving sediment and erosion control measures can lead to waste being introduced into the environment | * All temporary sediment and erosion control measures will be removed.
* Wastes will be segregated and disposed of in accordance with Section 7.3
 |
|  ***All Activities*** |
| All activities | Heavy rainfall generating sediment | * [Contractor] will stop work and discuss the management strategy with the CM.
* Overland flows will be directed towards vegetated areas and away from watercourses.
* Flows will also be directed towards the sump for emergency containment.
* In the case that sump is not yet constructed, water will be collected as practicable and discharged to the Cross Valley Pond or Intermediate Pond.
* Riprap, silt fencing, and poly sheeting will be available to construct diversions if required.
 |

# Working Around Watercourses

Crossings pose a risk to watercourses by introducing sediment into the watercourse. A watercourse crossing over the North Wall Interceptor may be required when accessing PW18-03. The location and methods implemented may vary depending on the flow present at the time of the crossing.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***Discharge Pipeline & Collection Systems*** |
| Watercourse Crossings | Damage to watercourses and increased turbidity within the watercourse | * All crossings will be conducted during dry or low flow periods.
* No In stream works will be allowed and the subcontractor will follow DFO regulations for safely working in and around a stream.
 |
| Installing pipeline above watercourses | Potential for unintended deposit of materials into the watercourse | * Work occurring directly on the bank edge will be limited to necessary tasks
* A silt curtain will be deployed downstream of instream construction.
 |

# Waste Management

The table below addresses waste management.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***All Activities*** |
| Garbage Management | Introduction of garbage to the work site. | * Materials will be used efficiently to minimize waste
* Materials less harmful to the environment will be selected over equal counterparts
* Waste materials will be properly segregated at the end of each work shift
* Non-organic wastes will be segregated and stored in designated areas. Wastes will be removed at the conclusion of the project or during the project if required/practical.
* Recyclable materials such as aluminum and tin cans, and plastic and glass beverage bottles will be transported to the Faro Bottle Depot.
* Other solid wastes will be disposed of at the permitted operations dump at the Faro Mine Complex.
* [Contractor] will adhere to Faro Mine Complex Waste Management Practices and utilize the Faro Mine garbage management system as appropriate
 |
| Wildlife attractant wastes | Attract wildlife to the site and create hazardous wildlife: human interactions | * Waste products will be stored in suitable wildlife proof containers
* Food wastes are not to be left out in the work area as to prevent wildlife attractions
* All organic and food- wastes will be collected for transport to the Faro dump daily in accordance with the Faro Mine Complex waste management practices.
 |
| Special Wastes (in accordance with Yukon Special Waste Regulations) | Special wastes may contain potential contaminants of concern | * [Contractor] will work with the CM to facilitate the management of the special waste in accordance with transportation and disposal requirements that apply to the Faro Mine Complex.
* Special wastes will not be mixed in a container
* Safety data sheets (SDS) will be referred to for proper storage
* All containers containing Special wastes will be properly identified and marked
* All Special wastes will be properly closed / sealed and stored temporarily above ground
* The residue at the bottom of Special waste containers will be segregated and treated as special waste
* Special wastes and all liquid wastes will be stored within secondary containment areas.
 |

All waste transportation will be completed in compliance of the Transportation of Dangerous Goods Regulations, Yukon regulation, the EMP and this EPP. The CM will be consulted if Special wastes are generated during the project.

# Wildlife and Habitat Management

## Nesting Birds and Wildlife

The table below addresses nesting birds and wildlife.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***Clearing and Grubbing*** |
| Site wide grubbing | Disturbance of wildlife | * Areas that require grubbing, will be monitored for wildlife prior to, and during, grubbing activities. If wildlife or a nest is observed, grubbing will be suspended until approval is provided by the CM
* Previously identified nests and wildlife setbacks, set by the CM will be respected
* If the CM does not create a setback, [Contractor] will mark a 10-metre exclusion zone around identified nests.
* Works will not encroach into nest and wildlife setback areas and works will commence no later than 24 hours after receiving confirmation of wildlife and nesting sweeps from the CM.
 |
| Grubbing access road. | Removal of stabilizing vegetation. | * Clearing and grubbing will be kept to an absolute minimum and will be completed only to the extent required to allow construction works and to be completed in a safe manner, that is, acknowledging that all areas slated for clearing require clearance from a bird biologist prior to work starting.
 |
| Grubbing in laydown area. | Disturbance of active bird nests. | * Clearing and grubbing will be kept to an absolute minimum and will be completed only to the extent required to allow construction works and to be completed in a safe manner, that is, acknowledging that all areas slated for clearing require clearance from a bird biologist prior to work starting.
* Chance find nests and habitat features will be flagged with a 10-metre exclusion zone.
* Work will not be undertaken inside the 10-metre exclusion zone.
 |
| ***Access Road Use and Maintenance*** |
| Driving Access Roads | Potential Animal Encounters | * [Contractor] will set an onsite speed limit of 20 km/hour
* [Contractor] will communicate to other road users and the CM if wildlife is observed
* All wildlife possesses the right of way, [Contractor] will stop and wait for wildlife to leave roads before proceeding.
 |
| ***Borrow Pit Operations*** |
| Test Pit Creation | Test pits creating hazards to wildlife | * In accordance with direction from the CM, test pits will be backfilled or recontoured to the original topography or a 2:1 slope ratio when no longer required
 |
| ***All Activities*** |
| All construction activities | Disturbance of active bird nests. | * If active nests are identified during work, work will cease, and the CM will be notified. Work will be continued when the CM has provided approval.
 |
| All construction activities | Disturbance of wildlife | * If wildlife is observed within the work area, work will be suspended until the CM approves continuation of the work. A setback distance of at least 25 meters will be observed.
* Upon observing wildlife, [Contractor] personnel will immediately communicate the sighting to other workers, the [Contractor] Foreman, and the CM
* Food wastes and other garbage that may attract bears, cougars or wolves will be removed from the site daily. Food and food waste are not to be stored outside. Food will be kept inside of trucks or camp during the day.
 |

## Vegetation Management

The table below addresses vegetation management.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***Clearing and Grubbing*** |
| Clearing and grubbing site wide. | Generation of waste vegetation. | * Cleared and grubbed vegetation will be segregated and stockpiled within 1.5 km of the work site and as approved by the CM.
* Clearing of vegetation will be kept to a minimum and undertaken only when necessary.
* Trees greater than 10 cm diameter at the butt of the tree will be salvaged in accordance with the Faro Mine Complex Site Instruction.
 |
| Salvage Tree Stockpiling | Tree clearing | * Salvageable trees will be stockpiled in the location designated by the CM, or be used in a CM approved manner or work plan mitigation measure
* Tree clearing will be kept to a minimum and undertaken only when necessary
 |
| Clearing detritus and topsoil | Loss of detritus and topsoil | * Topsoil and detritus will be stockpiled to allow a minimum 15 cm of soil to be spread across the final reclamation surface in accordance with the Faro Mine Complex Site Instruction.
* Topsoil and detritus will be stockpiled or placed in windrows, and have their stockpiles documented.
 |
| ***Remediation of Work Areas*** |
| Remediation of work areas | Delayed remediation may result in increased erosion and sedimentation | * [Contractor] will remediate newly disturbed areas as soon as possible including proper sloping and revegetating the area.
* Grubbed vegetation will be used as ground cover to reduce erosion potential as soon as practicable.
 |

# Dust Management & Air Pollution

## Dust Management

Dust management will be conducted through best management practices and the execution of the air quality monitoring system. The table below addresses dust management environmental practices.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***Borrow Pitt Operation*** |
| Stockpiling materials | Dust produced form stockpiled materials | * Stockpiles will be placed with their length parallel to the prevailing winds.
* Surface wetting of fine-grained stockpile materials during dry periods.
* Stockpiles will be covered with poly sheeting if required for dust suppression.
 |
| Aggregate Production & Sampling | Dust produced during aggregate sampling | * [Contractor] will implement a work area specific visual air quality monitoring program.
* Aggregate production will be suspended during high winds.
* The aggregate production area will be wetted as necessary to reduce generation of dust.
* Procedures for potentially contaminated aggregates are provided in Section 7.6.
 |
| ***All Activities*** |
| Equipment Operation | Increased dust with ground disturbance | * Only the minimum necessary footprint will be disturbed.
* Ground disturbance will occur as early as possible in the construction season to work in higher moisture conditions.
* Work areas will be re-sloped, and the ground revegetated as soon as possible after disturbance.
* The distance materials are dropped from loading equipment will be minimized.
* Work will be stopped if high wind conditions are generating unacceptable dust.
 |
| Driving | Increased dust while driving | * [Contractor] will set an onsite speed limit of 20 km/hour.
* Vehicles and equipment will be washed regularly to reduce dust produced during use.
* Road surfaces will be wetted through fine spray to reduce dust on roadways when possible.
* Posted speed limits will be followed.
* The number of vehicles driving onsite will be minimized when possible.
* Roads will be regraded when possible.
 |

## Air Pollution

The table below describes mitigation measures for air pollution.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***All Activities*** |
| Equipment Operation | Generation of excessive exhaust fumes and or particulate matter. | * Vehicles will not be run idle unless required to complete the work.
* If work does require idling, the work procedure will be reviewed.
* The excavator and any other diesel equipment will be maintained according to maintenance checklists to minimize particulates in exhaust fumes.
 |

# Geochemical Sampling & Testing

It is [Contractor]’s understanding that all environmental quality testing for granular products will be performed by the CM. [Contractor] will assist the CM in collecting samples required for testing. If suspect aggregates are identified, the CM will be notified, and the aggregates will not be used. Suspect aggregates will not be used unless written approval is provided by the CM.

# Heritage Resources Management Plan

The purpose of the Heritage Resource Management Plan is to protect and preserve the historical findings. This project overlaps with First Nation Interim Protected Lands and Ross River Dena Council Lands. A Heritage Resource Assessment of the Area has been previously conducted and identified four areas to contain Historical Artifacts. The Known Heritage Sites are clearly flagged with Yellow No Work Zone. No work is permitted in these areas. The table below addresses Heritage Resource Management.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***All Activities*** |
| Equipment Operation and Ground Disturbance | Damage or destroy areas of Heritage Resources or Historical Artifacts  | * No work will be conducted in the Known Heritage Sites
* Staff will be trained and educated regarding the Known Heritage Areas, in identifying chance finds, and the procedure of a chance find.
* Planned ground disturbance works will be communicated to the CM and their qualified archeologist for information on previous efforts.
* If a chance find occurs all work will be ceased, and the CM will be notified immediately. Information regarding the chance find is described below and will be submitted to the CM. Work will resume with CM approval.
 |

If a chance find occurs, [Contractor] will record the following information and provide to the CM:

* The location (via GPS).
* The date and time identified.
* Approximate size and material of the find.
* Description of the activity and setting.
* Access to the location of the find.
* Digital photographs of the find and general area.

# Fueling and Equipment Maintenance

Fueling and equipment maintenance will occur within the fueling area, approved by the CM, in accordance with the table below. The fueling area will be located greater than 30 metres from any watercourse.

|  |  |  |
| --- | --- | --- |
| Specific Work Activity | Potential Risk | Mitigation |
| ***All Activities*** |
| Equipment Fueling | Fuel spills to ground or aquatic environment | * Fueling will be undertaken in the designated fueling area only, which will be located outside the 30 metre setbacks from all watercourses. The fueling location will be approved by CM prior to use.
* Fueling on site will be conducted from truck tidy tanks only. Site fuel will be obtained from a bulk fuel tank located at the main fueling area.
* Spills will be dealt with immediately in accordance with the spill response plan.
 |
| Equipment Operation | Fluid Leaks.  | * Equipment will be inspected for leaks daily.
* Drip trays will be placed beneath equipment when stationary. Trays will be placed beneath the oil and hydraulic fluid reservoirs.
* Generators will have secondary containment.
* Work will be immediately stopped if equipment is leaking fluid.
* All equipment leaks will repair prior to re-commencing work.
* Maintenance of equipment will be conducted in the fueling area.
* Damaged equipment will remain contained the in the fueling area until conclusion of the work.
 |

# Spill Response

[Contractor] will review the Special Waste Permit and Environmental Spills Procedure located near the waste oil furnace in the Faro Mine Mechanical Shop (described in the EMP). A standalone spill response plan that will be made available to all workers and posted in the site office and all spill kits is attached to the EPP (Attachment 2).

|  | Spill Response Execution Steps |
| --- | --- |
| 1 | ENSURE SAFETY – Notify the CM  |
| 2 | STOP THE FLOW – If safe and when possible |
| 3 | ISOLAE THE AREA |
| 4 | CLASSIFY AND CONTAIN THE SPILL – If the spill is to water, berms will be immediately deployed downstream of the spill if practical. |
| 5 | DECONTAMINATE AND CLEAN-UP |
| 6 | NOTIFY/REPORT – In accordance with regulatory requirements. Yukon Spill 867-667-7244. |

 In the event of a hazardous liquid spill or release all on-site equipment operation is to stop. The CM will be notified of all spills. Spill pads and absorbent material will be utilized to clean / collect the spill. Basic spill response materials are contained in the environmental services unit trailer and will be accessible to the work areas. Inventory will be monitored and re-stocked as required during the project.

Any soil impacted by the spill is to be excavated and disposed off-site at a licensed facility.

If the spill is a result of leaking and / or malfunctioning equipment, the equipment must be locked out and repaired prior to being put back in service.

In the event of a spill less than 100 litres in volume:

* [Contractor] will clean up the spill immediately using all resources required bringing the site back to pre-spill conditions.
* The designated representative will be contacted immediately.
* If any of the following applies, the Local / Provincial Authorities (MOE/Spill Action Centre) must be notified:
	+ The spill enters any surface water or water well directly or through drainage structures, or
	+ Causes an adverse effect other than those that are readily remediated through clean up and immediate restoration.

All spills, including those that are not reportable to Yukon Spill, will be documented using a Written Spill Report form and the CM will be notified. Records of spills and planned rectification measures will be included in [Contractor]’s daily reports. Further details are provided stand-alone spill response plan. The spill response plan will be easily accessible onsite.

In the event of a spill greater than 100 litres occurs, it will be dealt with in the following manner:

* [Contractor] will take all reasonable actions to prevent further release into the environment
* The designated representative will notify the Territorial Authorities and other appropriate agencies of a spill, immediately
* The sequence of the spill, notification, and actions taken will be documented on the appropriate incident documentation forms
* [Contractor] will take actions to prevent injury to non-authorized personnel by preventing entrance to the affected area
* [Contractor] will secure the spill by constructing containment berms using excavation equipment to control migration. If the spill enters a waterway, [Contractor] will deploy spill response supplies, and construct containment dams and/or a control dam, if necessary.

Spill kits will be kept in accessible locations to the work area. Each piece of equipment will also be equipped with a spill kit.

Table 1: Spill clean-up supplies

|  |  |
| --- | --- |
| Item | Quantity |
| Oil absorbent booms 5 inches diameter x 10 feet  | 2 Bails |
| Oil absorbent pads (17”x19”, 100 pads per bail) | 5 Bails |
| Large disposal bags (38”x60”) and zip ties | 8 |
| Rubber or nitrile gloves and safety glasses | 2 Pairs |
| Absorbent granules (“kitty litter”; 30 kg total) | 3 bags |
| Roll caution tape | 1 |

1. INSPECTIONS AND MONITORING

During the Project, activities will be monitored by the [Contractor] superintendent to confirm conformance with this EPP and the project requirements for all [Contractor] and sub-contractor staff. Activities and mitigation measures described in Section 7 above will be monitored by [Contractor] staff.

Status of the environmental protection measures will be monitored on a daily basis and reported in [Contractor]’s daily and weekly reporting. [Contractor] will work with the CM to ensure that all EPP measures are maintained and working to the standards of this document and other project commitments.

1. REFERENCES

Allnorth & SRK, 2021, Faro Mine Remediation Short Term DV-SIS Tender Drawings

Parsons, April 3 2020, Environmental Management Plan, Faro Mine Complex

Attachment 1

# Acknowledgement of EPP Review

Attachment 2

# Spill and Emergency Response Plan

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| --- |
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