

Kimberley Murray

From: Morton, Tim (AADNC/AANDC) <tim.morton@canada.ca>
Sent: Tuesday, March 17, 2020 11:46 AM
To: Dumas, Daphnée (AADNC/AANDC)
Cc: Shannon Allerston; Tyree Mullaney; Kimberley Murray; Roesch, Michael (AADNC/AANDC); DeCoste, Candace (AADNC/AANDC); David Hango; Plato, Natalie (AADNC/AANDC); Duffy, Curtis (AADNC/AANDC); Markey, Andrea (AADNC/AANDC); Hayes, Doug
Subject: Re: Notice to Land Use Inspector - Contaminated Soils 2020 Drilling Sampling and Investigation - Mill Pond Area

Thank you for the update and the continuous communication regarding the project.

Sent from my Bell Samsung device over Canada's largest network.

----- Original message -----

From: "Dumas, Daphnée (AADNC/AANDC)" <daphnee.dumas@canada.ca>
Date: 2020-03-17 11:19 AM (GMT-07:00)
To: "Morton, Tim (AADNC/AANDC)" <tim.morton@canada.ca>
Cc: sallerston@mvlwb.com, tyree@mvlwb.com, kmurray@mvlwb.com, "Roesch, Michael (AADNC/AANDC)" <michael.roesch@canada.ca>, "DeCoste, Candace (AADNC/AANDC)" <candace.decoste@canada.ca>, David Hango <David.Hango@pwgsc-tpsgc.gc.ca>, "Plato, Natalie (AADNC/AANDC)" <natalie.plato@canada.ca>, "Duffy, Curtis (AADNC/AANDC)" <curtis.duffy@canada.ca>, "Markey, Andrea (AADNC/AANDC)" <andrea.markey@canada.ca>, "Hayes, Doug" <Doug.Hayes@parsons.com>
Subject: Re: Notice to Land Use Inspector - Contaminated Soils 2020 Drilling Sampling and Investigation - Mill Pond Area

Good afternoon,
we have decided to postpone the drilling at Mill Pond (which was scheduled to take place tomorrow). In light of the recent communication from NWT requesting to limit non-essential travel, it was decided not to mobilize a crew.
Thank you
Daphnee Dumas

On Feb 28, 2020, at 3:19 PM, Morton, Tim (AADNC/AANDC) <tim.morton@canada.ca> wrote:

Thanks Daphnée. Are there any plans to use drilling additives?

Tim Morton
(867) 669-2442

From: Dumas, Daphnée (AADNC/AANDC) <daphnee.dumas@canada.ca>
Sent: Friday, February 28, 2020 1:17 PM
To: Morton, Tim (AADNC/AANDC) <tim.morton@canada.ca>; sallerston@mvlwb.com; tyree@mvlwb.com; kmurray@mvlwb.com; Roesch, Michael (AADNC/AANDC) <michael.roesch@canada.ca>
Cc: DeCoste, Candace (AADNC/AANDC) <candace.decoste@canada.ca>; David Hango <David.Hango@pwgsc-tpsgc.gc.ca>; Plato, Natalie (AADNC/AANDC) <natalie.plato@canada.ca>; Duffy, Curtis (AADNC/AANDC) <curtis.duffy@canada.ca>; Markey, Andrea (AADNC/AANDC) <andrea.markey@canada.ca>; Hayes, Doug <Doug.Hayes@parsons.com>
Subject: Notice to Land Use Inspector - Contaminated Soils 2020 Drilling Sampling and Investigation - Mill Pond Area

Good afternoon,

This email is to inform you of the plan to drill 10 boreholes as part of the Contaminated Soils 2019/2020 Field Program – Mill Pond Winter Drilling - at the Giant Mine Remediation Project. The work is being completed under land use permit **MV2016S0016**.

Program details

| Topics | Description | Attachments |
|--|--|------------------------|
| Introduction | The purpose of this scope of work is to confirm the environmental quality and vertical extent of soil/sediment contamination within the channel of former Reach 4 (Mill Pond). The boreholes are required to supplement the historical air photo review and shallow soil quality data collected in August 2019. The field program is currently planned for the week of March 15th, 2020 and is anticipated to take two days to complete. | |
| Flooding of Mill Pond to Increase Ice Thickness | Drilling will be taking place over the Mill Pond and it has been calculated that a minimum ice thickness of 55cm is required to support the equipment while it is drilling. There are currently 3 out of the 10 planned drill hole locations that do not have the required ice thickness (holes labeled 6, 8 and 9 on the attached map). It is therefore planned to build up ice thickness by building pads and flooding these areas of the Mill Pond using trucked potable water. The quantity of water used shall not exceed 100m3 and the volumes will be recorded and reported to the land use inspector on a daily basis. It is planned to begin creating the ice pads on Monday, March 2nd and that the ice pads will take one week to complete. | Mill Pond Drilling Map |
| Archeological sites | Based on the findings in the Archeological Impact Assessment (Golder, Draft 2018), no archeological sites will be impacted by drilling activities. | |
| Schedule | Notice will be given prior to access construction and drilling activities in accordance with this submitted Land Use Authorization Request. <ul style="list-style-type: none"> • Begin building of ice pads in order to increase ice thickness - March 2nd • Complete ice pad and achieve 55cm thickness at drill locations – March 8th • Mobilize drill to site – Week of March 15th • Complete drilling of 10 holes (estimated 2 days of drilling) – Week of March 15th | |
| Drilling Equipment | All drilling activities will be completed using an M4CT track mounted limited access drill rig equipped with direct push capabilities operated by Mobile Augers and Research Ltd. (Mobile Augers) from Edmonton, Alberta. Target hole depth will be 6m (0.5m of ice and 5.5m of sediment/soil) | M4CT Drill Info |

| | |
|--|--|
| | <p>Approximate 5 cm diameter hollow sample rods will be advanced using the static weight of the drill rig and the standard penetration test (SPT) hammer to “push” the rods into the subsurface creating a core sample. A sample catcher will be pre-installed in the base of the lead sample rod to prevent the core from escaping upon extraction.</p> <p>Environmental Mitigation Measures: Mine Wildlife monitoring program & monthly enviro reports.</p> |
| Equipment Type & Site Access | <p>The Mill Pond will be accessed from the ramp located along to the eastern boundary. The drill rig will be removed from the Mill Pond at the end of each workday and stored at a nearby location on Site. In addition, prior to the drilling activities, an ice thickness survey will be completed to confirm that the drill rig may be supported and operated safely. Based on the weight of the drill rig, a minimum ice thickness of 55cm is required. No other vehicles or equipment will be permitted to access the Mill Pond during the drilling program.</p> <p>Environmental Mitigation Measures: Removal of vegetation will not be required for this program.</p> |
| Residual Sample/Waste Disposal Plan | <p>The direct push methodology produces a very limited volume of residual sample. Residual sediment/soil samples will be placed in pails and disposed in the Central Tailings Containment Area. In addition, any waste produced as part of the drilling activities (i.e., nitrile gloves, paper towel, waste sample catchers, etc.) will be placed in garbage bags and disposed on Site as municipal waste.</p> |
| Other Pertinent Information | <p>As the drill rig is powered by diesel fuel and contains a hydraulic oil system to power the SPT hammer, all fueling and maintenance activities will occur away from the Mill Pond. Any fueling or maintenance activities will occur in either one of the vehicle/equipment maintenance facilities located within the Mill Area or off-Site in Yellowknife.</p> <p>The drill rig will be cleaned prior to arriving at the Site and drilling will occur over approximately two days during daylight hours. At the start of each workday, prior to accessing the Mill Pond, a pre-work inspection of the drill rig will be completed, including an inspection of the hydraulic oil system. Any deficiencies noted will be addressed/repared prior to accessing the Mill Pond. The drill rig will also be equipped with a spill kit at all times.</p> <p>In the event of a release or spill, the drill rig will be turned off, the spill kit applied, and the Site spill contingency plan will be followed.</p> |

| BOREHOLE_ID | EASTING (UTM 11) | NORTHING (UTM11) | EASTING (GRMP) | NORTHING (GRMP) |
|-------------|------------------|------------------|----------------|-----------------|
| 1 | 635,856 | 6,932,617 | 35,855.940 | 32,616.822 |
| 2 | 635,853 | 6,932,636 | 35,852.939 | 32,635.826 |
| 3 | 635,901 | 6,932,661 | 35,900.949 | 32,660.831 |
| 4 | 635,895 | 6,932,706 | 35,894.947 | 32,705.839 |
| 5 | 635,918 | 6,932,752 | 35,917.952 | 32,751.849 |
| 6 | 635,938 | 6,932,784 | 35,937.956 | 32,783.855 |
| 7 | 635,977 | 6,932,790 | 35,976.964 | 32,789.856 |

| | | | | |
|----|---------|-----------|------------|------------|
| 8 | 635,985 | 6,932,830 | 35,984.965 | 32,829.864 |
| 9 | 635,985 | 6,932,879 | 35,984.965 | 32,878.874 |
| 10 | 636,027 | 6,932,921 | 36,026.974 | 32,920.882 |

Key Site Contacts and Alternates

| Name | Project Title and Organisation | Contact Details |
|-------------------------------|--------------------------------|--|
| Doug Hayes | MCM Mine Manager | Doug.Hayes@parsons.com Mobile (867) 688-1036 |
| Mark Schmalz Norlito Cezar | MCM Field Representatives | Mark.Schmalz@parsons.com 867-688-3297 Norlito.Cezar@parsons.com 867-688-3352 |
| Rebecca Boyce | Golder Field Representative | Email: Rebecca.Boyce@golder.com Mobile: 780-983-7289 |

If you have any concerns or questions regarding the Contaminated Soils 2019/2020 Field Program – Mill Pond Winter Drilling you can contact me at the email or numbers listed below.

Kind Regards,

Daphnée Dumas, P.Eng

Senior Engineer / Ingénieure Principale

Giant Mine Remediation Project / Projet d'Assainissement de la Mine Giant

Northern Contaminated Sites Branch / Direction générale des sites contaminés du Nord

Crown-Indigenous Relations and Northern Affairs Canada/Ministère des Relations Couronne-

Autochtones et des Affaires du Nord Canada

15 Eddy Street, 10th floor – Gatineau, QC K1A 0H4

Tel. 819-994-2075

Cell 819-775-1902

Email daphnee.dumas@canada.ca