

Shannon Allerston

From: Dumas, Daphnée (AADNC/AANDC) <daphnee.dumas@canada.ca>
Sent: Monday, February 24, 2020 9:12 AM
To: Morton, Tim (AADNC/AANDC); Shannon Allerston; Tyree Mullaney; Kimberley Murray; Roesch, Michael (AADNC/AANDC)
Cc: DeCoste, Candace (AADNC/AANDC); David Hango; Plato, Natalie (AADNC/AANDC); Duffy, Curtis (AADNC/AANDC); Markey, Andrea (AADNC/AANDC)
Subject: RE: Notice to Land Use Inspector - Borrow 2020 Drilling Sampling and Investigation - Addition of 3 drill holes

Good morning,

It is anticipated that the first of the three holes will be drilled Tuesday February 25th. The field program is consistently averaging one drill hole per day (including helicopter assisted set-up), and should therefore have completed all three additional holes by the end of the day on February 27th. The rig will subsequently be demobilized from site.

Thank you

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

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From: Morton, Tim (AADNC/AANDC) <tim.morton@canada.ca>
Sent: Monday, February 24, 2020 11:06 AM
To: Dumas, Daphnée (AADNC/AANDC) <daphnee.dumas@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>
Subject: RE: Notice to Land Use Inspector - Borrow 2020 Drilling Sampling and Investigation - Addition of 3 drill holes

The Inspector has no concerns. When is the anticipated start of these three holes?

Tim Morton
(867) 669-2442

From: Dumas, Daphnée (AADNC/AANDC) <daphnee.dumas@canada.ca>
Sent: Monday, February 24, 2020 7:10 AM
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>

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>

Subject: Notice to Land Use Inspector - Borrow 2020 Drilling Sampling and Investigation - Addition of 3 drill holes

Good morning,

This email is to inform you of the plan to add 3 drill holes to the **Borrow Investigation – Borrow Drilling program (Phase 2)** currently being completed at the Giant Mine Site under land use permit **MV2016S0016**.

Please find attached a map displaying the 3 new drill hole locations, above the A1 pit highwall.

BOREHOLE LOCATIONS				
BOREHOLE IDENTIFICATION	NORTHING (GMRP)	EASTING (GMRP)	NORTHING (UTM)	EASTING (UTM)
A1-BH-01	31510.2	35424.0	6931510.2	635424.0
A1-BH-02	31465.2	35418.1	6931465.2	635418.1
A1-BH-03	31383.9	35483.5	6931383.9	635483.5

It is now planned to have this drill program completed on February 27th , 2020.

If you have any concerns or questions regarding the Borrow Investigation –Drilling Program (Phase 2) 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

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From: Dumas, Daphnée (AADNC/AANDC)

Sent: Thursday, January 30, 2020 1:43 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>

Subject: Notice to Land Use Inspector - Borrow 2020 Drilling Sampling and Investigation

Good afternoon,

This email is to inform you of the **Borrow Investigation – Borrow Drilling (Phase 2)** being completed at the Giant Mine Site under land use permit **MV2016S0016**.

Program details

Topics	Description	Attachments
Introduction	<p>Giant Mine is conducting a geotechnical investigation of potential coarse grained borrow areas with 20 holes planned to collect core, to depths of up to 20 m. Core will be logged and sampled for off-site geochemical testing. The work will be completed by Boart Long Year, contracted under Parsons as the Giant Mine Main Construction Manager (MCM) by 1 drill rig accessing the sites via helicopter.</p> <p>Figure 2 Testhole Location Plan shows the Site Plan for the 20 holes. The exact hole locations will be field fitted and may be modified as needed in ways to keep the environmental and economic impacts to a minimum.</p>	Location of Borrow Drill holes Plan
Archeological sites	<p>Based on the findings in the Archeological Impact Assessment (Golder, Draft 2018), no archeological sites will not be impacted by drilling activities.</p> <ul style="list-style-type: none"> • TU-1 – Identified as a traditional use site. The North Pond borrow source has been reshaped to avoid the area. • KdPh-1 – Remains of small exploration camp, site mapping, testing, and documentation has adequately mitigated the site and no further archaeological concerns • TU-7 – Evidence of a suitable camping area with no artifacts found during shovel tests, no archaeological concerns with the site 	Location of Known Archeological and Traditional Use Sites Map
Schedule	<p>Notice will be given prior to access construction and drilling activities in accordance with this submitted Land Use Authorization Request.</p> <ul style="list-style-type: none"> • Site orientation start date 31st January 2020 • Drilling Start date: 31st January 2020 • 6am to 6pm (12hrs shifts) • Anticipate 4 week duration • The planned hole sequence is to work from north to south <ol style="list-style-type: none"> 1) NWP3 area, Vee lake Road 2) NWP1/2 area, south of Akaitcho, east of NWP 3) NP area, north of ETP 4) BCPQ area, west of Baker Creek pond 	
Drilling Equipment	<p>All drilling activities will be completed using a LF 70 Sonic core drill rig equipped with direct diamond drilling capabilities operated by Boart Longyear.</p> <p>The drill rig will be equipped to install casing through any overburden. Approximate 45-47.6 mm diameter (NQ or NQ3) will be recovered by diamond drilling methods. The only drilling fluid planned to be used is potable water.</p> <p>Environmental Mitigation Measures: Mine Wildlife monitoring program & monthly enviro reports. Management of waste water.</p>	LF70 Fly Sonic Core Brochure
Equipment Type & Site Access	<p>To accommodate winter construction, a LF70 Fly Sonic Core Rig will be flown in by helicopter. The program consists of sites where the following activities will be required:</p> <ul style="list-style-type: none"> • Minor vegetation trimming or removal along access paths for personnel (no vehicles) from roads. • Access to site via helicopter. At these sites clearing and pad construction may be required. This may be required so that areas can be safely accessed by the drill rig. • Drilling by 1 x rig. <p>We will plan to preferentially access areas where vegetation clearing is not required. Clearing will be limited to minor brush clearing for staging equipment (timber/cribbing to land equipment). Work will be completed using the following equipment: Chainsaws, manual brush and tree removal, Helicopter, drill rig.</p> <p>In one location (Baker Pond Quarry) access roads may be able to be constructed. The location of the access roads can be seen in the below figure. The routes are subject to change based on conditions encountered on-site whilst minimizing tree clearing and need for gravel.</p>	

	<p>Environmental Mitigation Measures: Removal of vegetation and gravel use for access pad construction will be kept to a minimum to the extent practicable. Holes will be relocated to limit the impact of the programs. Helicopter access will be used to keep the environmental and economic impacts to a minimum.</p>	
<p>Residual Sample/Waste Disposal Plan</p>	<p>All waste water and cuttings will be disposed of in accordance with the Land Use Permit. 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 appropriately.</p>	
<p>Other Pertinent Information</p>	<p>As the drill rig is powered by diesel fuel and contains a hydraulic oil system to power the coring equipment, all fuelling and maintenance activities will occur away from waterways. The drill rig will be cleaned prior to arriving at the Site. At the start of the work day 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 work beginning. The drill rig will also be equipped with a spill kit at all times. 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. The surface care and maintenance contractor is available for additional spill response if required as well as any other emergency responses e.g. Fire, EMS, etc.</p>	

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
Derek Brillinger Khalid Mohamed	AECOM Field Representative s	derek.brillinger@aecom.com Mobile: 604-754-3087 khalid.mohamed1@aecom.com Mobile: 306-209-1816
Sarah Marsanich	AECOM Project Manager	Sarah.Marsanich@Aecom.com Mobile: 780-984-4445

If you have any concerns or questions regarding the Borrow Investigation –Drilling Program (Phase 2) you can contact me at the email or numbers listed below.

Kind Regards,

Daphnée Dumas, P.Eng
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