July 31, 2013

Mr. Willard Hagen, Chair Mackenzie Valley Land and Water Board 7TH FLOOR – 4910 50TH AVENUE YELLOWKNIFE, NT X1A 2P6

RE: Semi -Annual Report for Water Licence, MV2012L8-0010, Part B, Item 1

Dear Mr. Hagen:

Aboriginal Affairs and Northern Development Canada (AANDC) was issued a Water Licence MV2012L8-0010 (the Licence) on March 28, 2013 for water use and waste disposal associated with roaster complex deconstruction and underground stabilization at Giant Mine. Part B, Item 1 of the Licence requires that the Licensee file semi-annual reports with the Mackenzie Valley Land and Water Board. Furthermore, the semi-annual report is to contain information as laid out in Schedule 1, Item 1.

Attached is the first semi-annual report prepared for the Licence covering the reporting period of March 28 to April 30, 2013. If there are any questions or concerns, please contact the undersigned at (867) 669-2425 or Adrian.Paradis@aandc-aadnc.gc.ca.

Sincerely

Adrian Paradis

Regulatory Manager

Giant Mine Remediation Plan

cc. Clint Ambrose, AANDC Inspector
Jane Amphlett, AANDC Giant Mine Operations Manager
Parties

Encl.



GIANT MINE ROASTER COMPLEX DECONSTRUCTION AND UNDERGROUND STABILIZATION

WATER LICENCE MV2012L8-0010 – SCHEDULE 1, ITEM 1

SEMI-ANNUAL REPORT

March 28 – April 30, 2013

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INTRODUCTION

Water Licence MV2012L8-0010 (the Licence) was issued to Aboriginal Affairs and Northern Development Canada (AANDC) on March 28, 2013 for water use and waste disposal associated with roaster complex deconstruction and underground stabilization at the Giant Mine. Part B, Item 1 of the Licence requires semi-annual reports to be filed with the Mackenzie Valley Land and Water Board as outlined below:

REPORTING PERIOD	SEMI-ANNUAL REPORT SUBMISSION DATE
May 1 – October 31 each year	January 31 each year
November 1 – April 30 each year	July 31 each year

Schedule 1, Item 1 appended to the Licence identifies the information that must be contained within the semi-annual reports.

This is the first semi-annual report prepared for the Licence and is for the period from March 28 to April 30, 2013. As issuance of the Licence occurred approximately a month prior to the end of the reporting period and workers have not mobilized to the Giant Mine site, a number of the information requirements are not applicable at this time. The requirements of Schedule 1, Item 1 that are not applicable at this time include the following:

- Schedule 1, Item 1a The monthly and semi-annual quantities in cubic metres of fresh water obtained from all sources.
- Schedule 1, Item 1b The monthly and semi-annual quantities in cubic metres of recycled water obtained from all sources.
- Schedule 1, Item 1d A list of unauthorized discharges, including any clean-up actions taken and preventative measures implemented to prevent future discharges.
- Schedule 1, Item 1e An outline of any spill training and communications exercises carried out.
- Schedule 1, Item 1I Details on the types and quantities of hazardous materials removed from the Roaster Complex deconstruction.
- Schedule 1, Item 1m Details on the types and quantities of packaging used for storing waste at the Temporary Waste Storage Area, including non-hazardous and arsenic-containing hazardous waste.
- Schedule 1, Item 1n Details on the volume of each type of backfill material used in each stope or chamber during the reporting period.
- Schedule 1, Item 10 Completed "As-Built Statement of Risk Mitigation" letters stamped by a professional engineer that confirm the mitigation of risks associated with the Underground Stabilization Work Area.

Expanded on below are those topics for which data is available. Relevant sub-items from Schedule 1, Item 1 for each topic are shown in *blue*.

WATER LICENCING

Although not required by Schedule 1, Item 1, a brief licensing history for the reporting period is provided in the table below for reference purposes.

DATE	DESCRIPTION OF LICENSING ACTIVITY
March 28, 2013	Issuance of Water Licence MV2012L8-0010 by the MVLWB.
April 17, 2013	Submission of an amendment request by the Giant Mine Project Team to have the wording of Schedule 1, Item 1c changed as it is not possible to measure in the field the volume of bleed water generated by the curing process for the tailings paste used in underground stabilization.
April 25, 2013	The MVLWB approves the amendment request and changes the wording of Schedule 1, Item 1c to the following: The monthly and semi-annual quantities in cubic metres of each and all Waste discharged, including, but not limited to, the total volume of water pumped from the underground workings to the Northwest Tailings Pond each month.

MANAGEMENT PLAN REVISIONS

Schedule 1, Item 1g – A summary of any revisions to the approved General Contingency and Emergency Spill Response Plans.

Schedule 1, Item 1h – A summary of any revisions to the approved Waste Management Plans for Roaster Complex Deconstruction and Underground Stabilization.

As the Licence was issued in late March, the focus during the reporting period was on the initial development of the required plans. The status of the plans is provided in the table below.

PLAN	STATUS
Roaster Complex Deconstruction Spill	Submitted to the MVLWB for approval on May 1, 2013. Review
Contingency Plan	process was ongoing throughout the reporting period. Approval
	received in subsequent reporting period on June 6, 2013
Roaster Complex Waste Management Plan	Submitted to the MVLWB for approval on April 19, 2013. Review
(includes the Deconstruction Plan)	process was ongoing throughout the reporting period1. Approval
	received in subsequent reporting period on June 6, 2013
Underground Stabilization Spill Contingency	The Emergency and Spill Response Plan approved through the
Plan	licensing process was adhered to throughout the reporting period.
Underground Stabilization Waste	Plan development is linked to the procurement process which
Management Plan and Work Plan	remained ongoing throughout the reporting period.

ROASTER COMPLEX DECONSTRUCTION - PROGRESS UPDATE

Schedule 1, Item 1i – Details of all work completed or the Roaster Complex, including but not limited to the actual deconstruction sequence of the associated structures.

The contract for deconstruction of the roaster complex was awarded to Parsons Canada Ltd. of Calgary on March 12, 2013. During the reporting period, mobilization to the Giant Mine site had not yet occurred.

UNDERGROUND STABILIZATION - PROGRESS UPDATE

Schedule 1, Item 1j – Details of all work completed for the Underground Stabilization Work Area.

The tendering process for the underground stabilization contractor remains ongoing.

FORECASTED WORK

Schedule 1, Item 1k – Details of any anticipated activities for the upcoming reporting period for the Roaster Complex deconstruction and the Underground Stabilization Work Area, including the proposed sequence in which the structures of the Roaster Complex will be deconstructed.

The table below summarizes the major work planned for the next reporting period (May 1 – October 31, 2013). Changes to this work plan may occur to accommodate unforeseen circumstances or circumstances outside of the Giant Mine Remediation Team's control (e.g., weather delays). Actual work completed will be summarized in future semi-annual reports as required by the Licence.

Астічіту	TARGET START DATE	TARGET COMPLETION DATE
Underground Stabilization		
Procurement process	Or	ngoing
Field paste test conducted within the North-South Tailings Pond Basin (subject to regulatory approvals)	Early August	Expected to last approximately 1-2 weeks
Submission of management plans requiring approval under the WL	Early August	Mid-September
Drilling under LUP MV2012S0019 to support underground stabilization activities	Mid-August	Ongoing
Underground geometry updates, access improvements and fill barricade construction	Late August	End of September
Paste tailings preparation and delivery (B1-18)	Mid-September	End of October
Roaster Complex Monitoring		
Mobilization to the Giant Mine Site by Parsons Canada	Week of May 13	Seasonal demobilization is

Ltd. (completed)		weather dependent and will
		occur in early-mid fall.
Soil and vegetation surveys requested by MVEIRB	Data collection was initiated on June 3, 2013.	Analysis presented in semi annual reports on an ongoing basis as needed
Arsenic and PM ₁₀ correlation study	June 24 (data collection start)	Analysis presented in semi annual reports on an ongoing basis as needed
Monitoring at the roaster perimeter air quality stations	June 24 (actual operational start)	Ongoing during active operations
Monitoring at the community air quality monitoring stations	June 24 (actual operational start)	Ongoing during active operations
Monitoring at the fenceline air quality monitoring stations	June 24 (actual operational start)	Ongoing during active operations
Installation of webcams	Webcam 1 installation began on June 17	.2 second time lapse photos currently available on website*. Feed will remain in place until seasonal shutdown of roaster work.
	Webcam 2 installation began on July 11	Testing period remains ongoing. Late August.
Set-up of web-based weekly reporting of air quality data collected at the fenceline monitoring stations	July 4 (actual)	Ongoing during active operations. • One community station (Marina) doubles as a fenceline station and will be operated year round.
Set-up of live reporting of air quality data collected at the community monitoring stations	July 22 (actual)	Year round.
Set-up of web-based weekly reporting of air quality data collected at the roaster perimeter	July 24 (actual)	Ongoing during active operations
Roaster Complex Decontamination and Deconstruction S	Schedule	
Decontamination of Fan House	June 25, 2013 (actual)	July 22, 2013
Decontamination of AC Roaster Building	June 25, 2012 (actual)	October 12, 2013
Decontamination of stack	June 28, 2013 (actual)	August 27, 2013
Decontamination of exterior flues	June 28, 2013 (actual)	October 5, 2013
Decontamination of Cottrell Precipitators	June 28, 2013 (actual)	October 10, 2013
Decontamination of Bag House	July 1, 2013 (actual)	August 1, 2013
Decontamination of Arsenic Silo	July 4, 2013 (actual)	August 6, 2013
Decontamination of Scale House	July 6, 2013 (actual)	September 27, 2013
Roaster Stack removal	July 12, 2013 (actual)	September 23, 2013
Deconstruction of Fan House	July 13, 2013 (actual)	July 15, 2013 (actual)

Deconstruction of exterior flues	July 22, 2013	July 25, 2013
Deconstruction of Bag House	August 2, 2013	August 10, 2013
Deconstruction of Scale House	August 7, 2013	August 10, 2013
Deconstruction of Arsenic Silo	August 7, 2013	August 10, 2013
Deconstruction of AC Roaster Building	October 12, 2013	July 5, 2014

^{*}Link to webcam feed: giantmineroastercomplexdeconstructionparsons.com

WASTE MANAGEMENT AND HANDLING

Schedule 1, Item 1c¹ – The monthly and semi-annual quantities in cubic metres of each and all waste discharged, including, but not limited to the total volume of water pumped from the underground workings to the Northwest Tailings Pond each month.

No waste materials were generated by either the deconstruction or stabilization programs during the reporting period as on-the ground work had not occurred during the reporting period.

Mine water from the underground workings is pumped to the Northwest Tailings Pond throughout the year. The table below provides the monthly and semi-annual quantities of pumped underground mine water for the reporting period.

Монтн	VOLUME OF UNDERGROUND MINE WATER PUMPED TO THE NORTHWEST TAILINGS POND	
March	36,956 m ³	
April	43,562 m ³	

ENGAGEMENT and COMMUNICATION ACTIVITIES

Schedule 1, Item 1f – A summary of any engagement and consultation activities completed during the reporting period and an outline of any activities anticipated for the upcoming reporting period.

The approved *Communication Plan for Duration of Site Stabilization Activities* (Part B, Item 7 of the Licence) describes the minimum engagement and communications activities required during roaster complex deconstruction and underground stabilization.

Engagement and Communication Activities Completed During the Reporting Period

DATE	То	COMMUNICATION Type	TOPICS / CONCERNS	RESPONSES / FOLLOW-UP
ipril 5	Aboriginal Peoples Television Network	Media interview and site tour	Site update and work plan for the summer.	Not applicable

¹ The wording of Item 1c was formally changed by the MVLWB on April 25, 2013 as described under the Water Licensing section on page 3.

April 19	Distribution list	e-newsletter	Announcement of public forum, water licence acquirement and contract award	Not applicable
April 20	General public	Website update	Announcement of public forum, water licence acquirement and contract award	Not applicable
April 30- May 7	General public via radio and posters	Public service announcement	Announcement of public forum	Not applicable
April 30	CJCD	Media interview	Upcoming public forums and work required for roaster	Not applicable

Planned Engagement and Communication Activities during the Upcoming Reporting Period

Report submission occurs during subsequent reporting periods. As such some activities listed in the table below have occurred and are denoted by "(completed)".

DATE	COMMUNICATION Type	DISCUSSION TOPICS
May 3	Meet and greet	Provide an opportunity to answer general questions from the public.
(completed)	at Javaroma	 Community business put in contact with PWGSC Office of Small and Medium Enterprises.
		Site updates provided to multiple private citizens
May 6	Meet and greet	Provide an opportunity to answer general questions from the public.
(completed)	at Javaroma	Site updates provided to multiple private citizens
May 7 (completed)	In-person meeting	Emergency response preparedness with City emergency services personnel (fire, police, ambulance). There were approximately 10 community first responder organizations present that were informed of the technical details of the project and the specific hazards that could be encountered where help/support could be needed.
May 8 (completed)	Media site tour	Local media were given a general overview of the roaster deconstruction and advanced underground work required and the monitoring programs that will be in place for both activities.
May 8 (completed)	Monthly Giant Mine Community Alliance (GMCA) committee meeting	The Project Team provided an update on site activities; an overview of the roaster deconstruction community meetings held on May 8 and 9, 2013; and informed GMCA that the Project Team has been working with YKDFN on the Healing the Land Ceremony scheduled for June 8, 2013. GMCA requested that mine heritage artifacts be located in a visible place in preparation for the Minister's tour scheduled for end of August 2013.
May 8 (completed)	Community meeting – N'Dilo	Introduction of the Roaster deconstruction team, including Parsons. The presentation outlined the worker safety, community and environmental protection plans, decontamination and deconstruction procedures, and the project schedule.
		Topics of discussion raised by participants included: • Water treatment for the greater Giant Mine Remediation Project • Compensation and apology • Final storage solution for the underground arsenic trioxide

		Healing the Land Ceremony
		Employment opportunities
		 Types of environmental and health and safety monitoring during deconstruction
May 9	Community	Introduction of the Roaster deconstruction team, including Parsons. The
(completed)	meeting -	presentation outlined the worker safety, community and environmental
	Yellowknife	protection plans, decontamination and deconstruction procedures, and the
		project schedule.
		Tanias of discussion union discussion and in a local discussion and discussion discussions.
		Topics of discussion raised by participants included: • City permitting requirements
		j .
		Community notification process in the event of a large release of arsenic
		Water treatment for the greater Giant Mine Remediation Project
		Capture of water used during roaster deconstruction
		Recycling of steel debris generated by deconstruction
		Waste management
May 23	Meeting with	Meeting between YKDFN and the Project Team to discuss logistics and select a
(completed)	YKDFN	location for the Healing the Land Ceremony.
May 27	City of	The Project Team met with City Council to answer their questions regarding
(completed)	Yellowknife	roaster deconstruction. Topics covered included permitting, future land use,
	Council Meeting	emergency preparedness and water treatment.
May 27	Madia interview	Dravided an undate an reactor deconstruction work to CDC
May 27 (completed)	Media interview	Provided an update on roaster deconstruction work to CBC.
June 4	Letter to the	Joint YKDFN/AANDC invitation to the Giant Mine Healing the Land Ceremony
(completed)	Distribution List	scheduled for June 8.
June 6	In-person	Meeting between AANDC and YKDFN to discuss and prepare for the Healing the
(completed)	Meeting	Land Ceremony.
June 6	Site Tour	Provided the Department of National Defense with a tour of the underground
(completed)		mine and an update on the roaster deconstruction work.
June 8	On-Site	YKDFN and AANDC jointly held a Giant Mine Healing the Land Ceremony. The
(completed)	Ceremony and	ceremony was followed by a public site tour to discuss the roaster
luno 12	Site Tour	deconstruction work.
June 12 (completed)	Monthly Giant Mine Community	The Project Team provided an update on site activities; an overview of the roaster deconstruction monitoring program; and an overview of the Healing
(completed)	Alliance (GMCA)	the Land Ceremony held on June 8. GMCA requested that a site tour be set up,
	committee	which was scheduled for June 28.
	meeting	
June 12	Site Tour	Provided a site tour and update on roaster deconstruction and air quality
(completed)		monitoring work to feral and provincial air quality experts from across Canada.
June 13	E-Newsletter	An E-Newsletter was emailed to the Giant Mine distribution list and posted to
(completed)		the Giant Mine website. Topics included Healing the Land Ceremony; roaster
		deconstruction update including contract award, air monitoring update,
lun - 17	Modiointerdicu	engagement update, and general on-site activities.
June 17	Media interview	Provided an update on roaster deconstruction and air monitoring work to CJCD radio station.
(completed) June 18	Email response to	Provided information regarding air monitoring specifically in relation to
(completed)	private residence	Ingraham Trail.
June 19	Newspaper	Notice of roaster work start up in the <i>Yellowknifer</i> .
(completed)	advertisement	
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June 20 (completed)	Media interview	Provided an update on roaster deconstruction and air monitoring work to CKLB.
June 21 (completed)	Newspaper advertisement	Notice of roaster work start up in the L'Aquilon.
June 26 (completed)	In-person meeting – Alternatives North	Provided Alternatives North with an updated on roaster deconstruction work and the process for reviewing the Report of Environmental Assessment for the Giant Mine Remediation Project.
June 27 (completed)	Media interview	Provided an update on roaster deconstruction, air monitoring and emergency preparedness to CJCD, CBC, Yellowknifer, Northern Journal and L'Aquilon.
June 28 (completed)	Site Tour	Provided a site tour and update on roaster deconstruction and monitoring to the Giant Mine Community Alliance.
June 28 (completed)	Giant Mine Working Group Meeting with the Parties	Presentation to the Giant Mine Working Group with the Parties on the air quality monitoring program and site activities update. Other discussion topics included Terms of Reference for the Working Group, organizational chart for Project Team personnel, and public reporting,
July 5 (completed)	In-person Meeting	Meeting with Memorial University researchers, YKDFN and Alternatives North representatives that are in partnership to study historical impacts of Giant Mine.
July 17 (completed)	Monthly Giant Mine Community Alliance (GMCA) committee meeting	WSCC involvement; worker health and safety; air quality; air quality monitoring (samples and lab turn around); roaster deconstruction.
July 23 (completed)	Giant Mine Working Group Meeting with the Parties	Discussions on the Air Quality Adaptive Management Plan, the Site Wide Air Quality Monitoring Program and Air Monitoring Weekly Reports.
July 31	Newsletter, web update	Monthly progress report and outcomes of environmental monitoring and inspections.
August 15	Giant Mine Working Group Meeting with the Parties	Discussion topics will include General site activities update, FOS update, UG update, outstanding air issues, and emergency response.
Ongoing	Monthly Giant Mine Community Alliance (GMCA) committee meeting	Monthly project updates to GMCA.
Ongoing	Compliance reporting	Reporting will continue throughout the reporting period as follows: • Live reporting of community monitoring data • Weekly reporting of air quality data • Monthly reports on work progress and outcomes of environmental monitoring and inspections
Ongoing Ongoing	Recurring Communications Crisis	 The following communications activities will continue throughout the reporting period as required by the SSP Communications Plan: Monthly E-newsletters to the Giant Mine distribution list and members of the public Web updates Monthly progress report and outcomes of environmental monitoring and inspections The Project Team and the City of Yellowknife are engaged in discussions to

Communications	clarify roles and responsibilities with relation to communicating with the public in the event of an emergency at the Giant Mine site. These discussions were initiated on May 17, 2013 to help address public concern over the need for coordinated emergency response raised during engagement events for roaster deconstruction. Subsequent communications have taken place on May 21 and 29, June 25, 26 and 27, and July 2, 4, 8, 9, 16, 17 and 25.
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ANY OTHER DETAILS

Schedule 1, Item 1p – Any other details on Water Use or Waste disposal requested by the Board three months prior to the semi-annual submission date.

No other details were requested by the MVLWB.