LUPIN MINES INCORPORATED
RESPONSES TO PARTIES' COMMITMENTS TO SUPPLY ADDITIONAL INFORMATION ARISING FROM TELECONFERENCE

Nunavut Water Board – Teleconference Meeting August 18, 2016
2AM-LUP1520 Type "A" – INAC Request for Amendment

Party Responsible	Agenda Topic	Commitment	LMI Responses
LMI	3.a.(ii) Remedial/waste management work completed	Provide clarification regarding volumes of hazardous wastes removed from site in 2015 and 2016	**2015:** 130,000lbs of waste was backhauled, of which approx. 90,000lbs was hazardous waste. These amounts were included in our 2015 annual report. **2016:** 150,000lbs of waste has been backhauled as of August 2016 of which approx. 130,000lbs was hazardous waste. The hazardous waste storage area is now empty.
LMI	3.a.(ii) Remedial/waste management work completed	Provide photographs of hazardous waste storage areas showing current status now that removal activities have been completed for 2016	Please see Appendix A for site photos from 2015 vs 2016 showing the hazardous waste storage area in now empty.
LMI	3(e) Fuel left on-site	Provide listing of storage tanks on-site that are currently in use and storage tanks on-site that have been taken out of service	Please see Appendix B for a list from FIRSTS of storage tanks on-site, both in-service and out of service.
LMI	3(e) Fuel left on-site	Provide estimate of volume of fuel currently stored at site	There is currently approx. 1.8 million litres of fuel on-site
LMI	3(e) Fuel left on-site	Provide certification demonstrating that fuel currently at site is of sufficient quality to be fit for use	Certification demonstrating that the fuel at site is of sufficient quality to be fit for use will be finalized and submitted to the NWB by the end of the week.
LMI	3(e) Fuel left on-site	Provide confirmation that no liens or other encumbrances applicable to the fuel that is currently stored on-site that would limit its use during reclamation if the site were to be abandoned by LMI	Please see Appendix C

LMI	3(f) Tailings Cover	Provide confirmation of the area that has been covered and the area of cover that is still remaining	LMI confirms 1,280,000 m2 of the tailings area has been covered. There is only 241,000 m2 still remaining to be covered. LMI will include in their 2016 annual report the updated area of tailings cover remaining. LMI will not have their final number until the 2016 season is completed.
INAC	3(f) Tailings Cover	Revisit basis for cover estimate (whether drill, blast, load and haul was the basis for the selection of a higher unit rate for the cover, as no esker material that is used does not require blasting)	
INAC	3(g) Changes to Unit Rates	Provide information from Public Works (publicly available sources only) that support the increased/updated unit rates included in RECLAIM 7	
LMI	3(h) Chemical and waste management requirements	Resend asbestos study table provided during Public Hearing	Please see Appendix D
LMI	3(i) Mobilization/ Demobilization	Demonstrate that there is an agreement in place with the diamond mines to use the Tibbitt to Contwoyto winter road for mobilization/demobilization	Addressed during the call with NWB/INAC on August 24, 2016
LMI	3(i) Mobilization/ Demobilization	Confirmation that LMI commits to updating the list of equipment on the mobilization/de-mobilization list so that if equipment currently on-site becomes unusable it would be deleted from the on-site inventory and would be added to the list of equipment to be brought on-site	LMI confirms to updating the list of equipment on the mobilization/ demobilization currently on-site if it becomes unsuable it would be deleted from the on-site inventory and would be added to the list of equipment to be brought to site in it estimate.
LMI or INAC	3(j) Contingency Amount	Supply the description from the RECLAIM User Guide that outlines the basis for the selection of a 20% contingency	Please see Appendix E
INAC	3(j) Contingency Amount	To address whether a lack of detailed design Drawings has resulted in the higher contingency amount being adopted; and if so, whether review of detailed design drawings available on-site could result in adoption of lower contingency	

INAC	3(k) Building Dismantling and Decommissioning	Revisit the INAC unit rates used with respect to building dismantling/decommissioning to assess whether choice of higher LMI unit rate has resulted in "double counting" or overlap in accounting for some costs under this item	

APPENDIX A

PHOTOS OF HAZARDOUS WASTE STORAGE AREA

Photo 1 – August 2015

Photo 2 – August 2016

Photo 3 – August 2016

APPENDIX B

FIRSTS LIST OF STORAGE TANKS ON-SITE

TankID	TankSystemII	TankDescription	InternalNumber	TankCapacit	TankContentE
9090	4535	Vertical AST	#1	836250	Diesel
9091	4535	Vertical AST	#2	836250	Diesel
9092	4535	Vertical AST	#3	836250	Diesel
9093	4535	Gem Steel '82 ser no 82-133-1	#4	1597314	Diesel
9094	4535	Vertical AST	#5	1575075	Diesel
9095	4535	Vertical AST	#6	1601342	Diesel
9096	4535	Gem Steel '82 ser no 89-33-001	#7	1597314	Diesel
9097	4535	Gem Steel '82 ser no 82-133-5	#8	1597314	Diesel
9098	4535	Gem Steel '82 ser no 82-133-3	#9	1597314	Diesel
9099	4535	Gem Steel '82 ser no 82-133-4	#10	1597314	Diesel
9100	4535	Gem Steel '89 ser no 89-33-001	#11	1575075	Diesel
9101	4535	Gem Steel '86 ser no 86023-001	#12	1575075	Diesel
9102	4535	GLM '88 ser no J-8716	#13	1619940	Diesel
9103	4535	Gem Steel Serial# 92-050	#14	1601342	Diesel
9162	4549	Vertical AST		63594	Diesel
30691	18406	Discarded tank in bone yard	N/A	9000	Unknown-System permanently withdrawn from service
30696	18411	Lupin Mine Satelite Tank 15	Lupin S-15	9000	Unknown-System permanently withdrawn from service
42904	25361	Small tank adjacent Jet Fuel tank	MTF-1	2307	Diesel
42905	25362	Brown tank loacted behind mechanic shop	IND-07	2000	Diesel
42907	25364	Incinerator day tank	IND-08	2290	Diesel
42917	25368	Emergency Gen tank behind kitchen.	IND-03	2134	Diesel
53673	31780	Lupin Generating Plant Waste Oil Tank 1	Lupin WO-1	90920	Used oil
53674	31780	Lupin Generating Plant Waste Oil Tank 2	Lupin WO-2	90920	Used oil
53675	31781	Emergency Powerhouse Horizontal AST Tank	EG1	2000	Diesel
53676	31781	Horizontal AST Tank	EG2	2000	Diesel
54515	32150	Lupin Satelite Tank Farm SE corner Tank 1 - P40	Lupin SA-1	90920	Diesel
54516	32150	Lupin Satelite Tank Farm Tank 2 - P40	Lupin SA-2	90920	Diesel
54517	32150	Lupin Satelite Tank Farm Tank 3 - P40	Lupin SA-3	90920	Diesel
54518	32150	Lupin Satelite Tank Farm Tank 4 - P40	Lupin SA-4	90920	Diesel
54519	32150	Lupin Satelite Tank Farm Tank 5 - P40	Lupin SA-5	90920	Diesel
54520	32150	Lupin Satelite Tank Farm SW corner Tank 6 - P40	Lupin SA-6	90920	Diesel
54521	32150	Lupin Satelite Tank Farm NW corner Tank 7 - P50	Lupin SA-7	90920	Diesel
54522	32150	Lupin Satelite Tank Farm Tank 8 - P50	Lupin SA-8	90920	Diesel
54523	32150	Lupin Satelite Tank Farm Tank 9 - P50	Lupin SA-9	90920	Diesel
54524	32150	Lupin Satelite Tank Farm Tank 10 - P50	Lupin SA-10	90920	Diesel
54525	32151	Lupin Satelite Tank Farm Tank 11 - Gasoline	Lupin SA-11	22730	Gasoline
54526	32151	Lupin Satellite Tank Farm Tank 12 - Gasoline	Lupin SA-12	22730	Gasoline
54797	32354	Lupin Main Tank Farm Tank 23 - Generic Above Ground Horizontal Fuel Tank	Lupin LM-23	6000	Diesel
54798	32355	Lupin Main Tank Farm Tank 22 - Generic Horizontal Above Ground Storage Tank	LM-22	90200	Diesel
54799	32356	Lupin Main Tank Farm Tank 21 - Marclin Industries '85	Lupin M-21	63594	Diesel
54800	32357	Lupin Main Tank Farm Tank 20 - Marcil Industries '86 Serial No. 958	LM-20	63594	Diesel
54801	32358	Lupin Main Tank Farm Tank 19 - Marclin Industries '86 Serial No. 1184	LM-19	63594	Diesel
54803	32360	Lupin Main Tank System Tank 17 - Marclin Industries '86 Serial No. 957	Lupin M-17	63594	Diesel
54804	32361	Lupin Main Tank Farm Tank 16 - Marclin Industries '86 Serial No. 954	Lupin M-16	63594	Diesel
54825	32374	Lupin Mine Main Tank Farm Tank 18 - Marclin Industries '86 Serial No. 960	Lupin M-18	63694	Diesel
54826	32375	Vertical AST constructed by GEM Steel in 1992	M-15	1530000	Jet fuel
70143	41017	2290 liter enviro tank	Campsite Powerhouse 1	2290	Diesel
70144	41017	2290 liter enviro tank	Campsite Powerhouse 1	2290	Diesel

APPENDIX C

CONFIRMATION FROM LUPIN MINES

re: No liens or encumbrances on fuel on-site

LUPIN MINES INCORPORATED

August 23, 2016

Nunavut Water Board
P.O. Box 16
Gjoa Haven, NU X0A 1J0

Dear Sirs and Mesdames,

RE: Fuel at Lupin Mine Site

Lupin Mines Incorporated ("LMI") is responding to the parties' commitments to supply additional information arising from the teleconference between the Nunavut Water Board ("NWB"), Indigenous and Northern Affairs Canada and LMI held on August 18, 2016, with the commitment list being distributed by the NWB on August 19, 2016. The NWB requested that, under agenda item 3(e) Fuel left on-site, that LMI "*Provide confirmation that no liens or other encumbrances applicable to the fuel that is currently stored on-site that would limit its use during reclamation if the site were to be abandoned by LMI"* to the NWB on or before September 6, 2016.

LMI confirms that there are no liens or other encumbrances applicable to the fuel that is currently stored on-site that would limit its use during reclamation if the site were to be abandoned by LMI.

Please do not hesitate to contact me directly should you wish to discuss this letter.

Regards,

Karyn Lewis

Karyn Lewis
Lupin Mines Incorporated
778-386-7340

APPENDIX D

RESENDING ASBESTOS STUDY TABLE PROVIDED DURING THE PUBLIC HEARING

AANDC 3.2 Asbestos

> *AANDC: Background - Given the age of the structures, there is concern that asbestos could be present at the site (i.e., insulation, buildings, etc.) and if this was the case, the reclamation liability could increase. An investigation should be completed to confirm there is no asbestos present on the site. Should asbestos be present, a remedial cost estimate for mitigation and cleanup should be completed and the reclamation cost estimate should be adjusted accordingly.*

LMI Response:

Sufficient asbestos inventories have been taken at site in order for LMI to be confident that it has appropriately been accounted for in its reclamation and closure planning. In 2006 an asbestos survey was conducted by Morrow Environmental Consultants in anticipation of the demolition of buildings on site. The survey identified a number of the buildings that require specific procedures, prior to demolition, for the handling, abatement, demolition and disposal of asbestos materials. The presence of asbestos materials as identified in that report was communicated to the contractors providing quotes for demolition so that the rates reflect these procedures.

A more recent investigation was completed by Industrial Hygiene experts with Arctic Response at the Lupin site in August 2012. The assessment was completed in order to identify the presence of asbestos in materials not previously sampled and to recommend safe work procedures during the refurbishment of the site. Please see the table below for the results.

Sample #	Sample location	Material	Asbestos content
A-1	CEILING TILE BATHROOM NEAR THE RECOVERY PLANT VAULT ROOM	acoustical ceiling tile	**< 1%**
A-2	FLOOR TILE FROM ENTRANCE TO LABS	vinyl sheet flooring	**< 1%**
A-3	CEILING TILE 2 FLOOR OFFICE OUTSIDE RECOVERY	acoustical ceiling tile	**< 1%**
A-4	CEILING TILE UPSTAIRS LOCKER ROOM	acoustical ceiling tile	**< 1%**
A-5	TILE - BATH FLOOR-RECOVERY BUILDING BACK ROOMS	vinyl floor tile	**< 1%**

NOTE: The Federal Hazardous Product Act (HPA) defines asbestos containing materials as one that contains more than 1% asbestos fiber by weight or content.
The samples are all non asbestos containing

> *AANDC: Recommendation - AANDC recommends that the licence require LMI to conduct an investigation to confirm whether or not asbestos is present on site.*

LMI Response:

LMI has conducted investigations to confirm whether or not asbestos is present on site and the need for special handling of certain materials has been taken into consideration in the demolition plans.

APPENDIX E

DESCRIPTION FROM THE RECLAIM USER GUIDE OUTLINING BASIS FOR CONTIGENCY

Table 2. Selection of Appropriate Contingency for Security Estimate

Estimate Type	Description	Accuracy or appropriate contingency
Detailed or Project Control	Based upon detailed engineering take-offs and written quotes	+/- 5 %
Definitive or construction drawing phase	Engineering mostly complete, some written quotes	+/-10 %
Preliminary or budget level	Little detailed engineering and costs based upon verbal quotes	+/- 15 %
Feasibility or advanced conceptual	Engineering may be 10 % complete and costs based upon typical unit costs	+/- 20 %
Pre-feasibility, conceptual or trade-off study	Very basic engineering only and costs based upon typical unit costs	+/- 25 %