

LUPIN MINES INCORPORATED

ADDENDUM

CARE AND MAINTENANCE AND CLOSURE PHASE PLAN

Project Name:	Lupin Mine		
Plan / Version	Care and Maintenance and Closure Phase Plan	Rev 4, June 26, 2021	
NWB Requirement	2AM-LUP2032	Condition: Part B, Item 1(k)	
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Updated	Care and Maintenance and Closure Phase Plan; June 2021
Executive Summary	Second	Updated	This Plan is designed to outline management and monitoring measures on site while the Lupin Mine is under care and maintenance and closure phase with respect to the requirements within Water License Number 2AM- LUP2032. This includes guidance on the management of waste, fuel storage, as well as water and tailings management and monitoring.
Executive Summary	Third	Updated	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.

1.	First	Updated	Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Mandalay Resources Corporation, has prepared an updated Care and Maintenance Plan and Closure Phase (the Plan) with respect to the requirements within Water License Number 2AM-LUP2032. This Monitoring and Inspection Schedule (Schedule) is a supplement to the Care and Maintenance Plan and Closure Phase Plan and outlines LMI's plan to provide site coverage during periods when the mine site is un-occupied.
1.	Second	Updated	An annual review of the Plan, its appendices and supplements takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until February 27, 2032 .
1.1	First	Updated	[Removed reference to the Ulu Project]
1.1	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.1	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032 . Removed reference to closed water licence for exploration.
1.1		Updated	Company: LMI Project: Lupin Mine, Nunavut

			<div>Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1</div> <div>Telephone: 778-386-7340</div> <div>Email: k.lewis@mandalayresources.com</div> <div>Attention: Karyn Lewis, Project Manager</div> <div>Effective Date: June 26, 2021</div> <div>Distribution List:</div> <div><div>Karyn LewisProject Manager</div><div>Discovery Mining ServicesSite Contractor</div><div>Golder AssociatesSite Consultant</div><div>StantecSite Consultant</div></div>
1.1	Fourth	Updated	Additional copies of this Plan are available from the Project Manager. This Plan will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.
2.	Third	Updated	People are accommodated on site in the guesthouse, the 1300 wing of the accommodation complex, and additional wing(s) of the accommodation complex, depending on the number of personnel on site. In 2012 and 2013, 150 rooms were refurbished. Accommodations that were not refurbished were removed and disposed of in the landfill in 2020. The domestic water supply is Contwoyto Lake. Sewage and grey water are conveyed to the Sewage Lakes system (Figure 2).
3.	First	Updated	While under care and maintenance and closure phase, LMI shall conduct appropriate solid waste identification, segregation, and disposal as outlined in the Waste Management Plan (Solid and Hazardous) and its appendices the Incineration Operation and Maintenance Procedure, Landfill Management Plan and Landfarm Management Plan are appended (Appendix 3). All wastes generated by its activities will be managed by appropriately trained personnel. LMI has a waste generator number (NUG

			100047) and waste shipment off site will be manifested as required. Appropriate and approved waste receivers will be utilized.
4.2	First	Updated	Water within the TCA is contained in Cell 4, Cell 5, Pond 1 and Pond 2. All of this water is periodically transferred downstream to maintain a 1 m freeboard at all times at the perimeter dams. The water in Cell 4 is transferred to Pond 1 via gated valve, from here the water is transferred from Pond 1 to Pond 2 by way of siphon. Cell 5 water is transferred directly to Pond 1 or Cell 4 via siphon. Pond 2 is the largest pond; here, water is treated with lime or soda ash and eventually discharged to the environment by way of siphon.
4.2.1	Second	Updated	Water in the TCA is treated and tested prior to discharge to the environment to ensure it is in compliance with Part E(5) of the Water Licence and the Metal Mining Effluent Regulations (MMER). If compliant, water is discharged at LUP-10 (Figure 4, UTM NAD83, Zone 12N, coordinates: 485911E 7289875N). In accordance with Part E(2) and Part E(3) of the Water Licence. Discharge can commence no sooner than July 15 of any calendar year and the volume discharged cannot exceed 125,000 m ³ per day. More detailed information is available in the <i>Liquid Waste Management Plan</i> and its appendix the <i>Water Quality Monitoring Plan and Quality Assurance/Quality Control Plan</i> are appended (Appendix 2).
4.3	First	Updated	There are approximately 154,000 m ² of tailings within the TCA that have yet to be covered. It is understood that there is approximately 95,000 m ² of Cell 5 and 59,600 m ² of Cell 3 remaining to be covered. The tailings contained in Cell 5 and Cell are currently covered with water therefore eliminating any potential for dust contamination. A study conducted to assess the presence of windblown tailings adjacent to the TCA detected no deposition of tailings material on surface (SRK 2015).
6.	First	Updated	The <i>Liquid Waste Management Plan</i> (June 2021) has been developed to outline water and liquid waste management practices currently in place at Lupin (Appendix 2). The

			<i>Water Quality Monitoring Plan and Quality Assurance/Quality Control Plan</i> (April 2021) is an appendix of the <i>Liquid Waste Management Plan</i> . It provides a set of standardized procedures for sampling, analysis and reporting for the water quality monitoring program.
6.	Second	Updated	Drinking water is obtained from Contwoyto Lake at LUP-01. It is currently pumped from the lake and trucked to the storage tanks at the accommodation complex. An eight (8) inch insulated pipeline are in place to provide water from a pumphouse at Contwoyto Lake. A maximum quantity of 250,025 m ³ /year can be withdrawn for all uses during the current Care and Maintenance and Closure Phase of the Project and 5,000 m ³ /year, during the Post Closure Phase, as stipulated by the Water Licence.
6.	Fifth	Updated	Water accumulating in secondary containment of fuel storage facilities is tested prior to discharge to the environment to ensure it is in compliance with Part E(11) of the Water Licence. Water that is not in compliance is pumped to storage containers where it is held until it can be treated and subsequently released to the environment at LUP-27. Snow that is contaminated with hydrocarbons is collected and melted. The hydrocarbon portion is skimmed of the water using sorbent towels. The water is then tested and either discharged or stored prior to treatment and release to the environment.
7.	First	Updated	A <i>Fuel Containment Management Strategy</i> was developed early in 2012, for maintenance and upgrades to the fuel containment facilities. Work on the fuel systems was conducted in 2014 as reported in the 2014 annual report to bring the systems into compliance. As LMI is currently carrying out the final closure and reclamation plan, this Strategy for maintenance and upgrades is no longer required.

LUPIN MINES INCORPORATED

ADDENDUM

CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 1 - WASTE MANAGEMENT PLAN (SOLID AND HAZARDOUS)

Project Name:	Lupin Mine		
Plan / Version	Waste Management Plan (Solid and Hazardous)	Rev 4, June 26, 2021	
NWB Requirement	2AM-LUP2032	Condition: Part B, Item 1(k)	
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Update	(Care and Maintenance and Closure Phase Plan); June 2021
Executive Summary	Second	Update	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.
Executive Summary	Third	New	This Plan is an appendix to the Care and Maintenance and Closure Phase Plan. This Plan is designed to address waste management criteria established in Water Licence 2AM-LUP2032. The Plan provides information for identification, segregation, handling and disposal of solid and hazardous waste at Lupin during Care and Maintenance and

			Closure Phase.
Executive Summary	Fourth	New	The objectives of the Plan are to provide guidance for solid and hazardous waste management at Lupin; and describe the responsibility and tasks involved with waste management.
1.	Second	Updated	An annual review of the Plan, its appendices and supplements takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until February 27, 2032.
1.1	First	Updated	[Removed reference to the Ulu Project]
1.1	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.1	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032. Removed reference to facilities upgrades and reference to closed water licence for exploration.
1.1		Updated	Company: LMI Project: Lupin Mine, Nunavut Company Address: Suite 330, 76 Richmond Street East,

			<p>Toronto, ON M5C 1P1</p> <p>Telephone: 778-386-7340</p> <p>Email: k.lewis@mandalayresources.com</p> <p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <p>Karyn Lewis Project Manager</p> <p>Discovery Mining Services Site Contractor</p> <p>Golder Associates Site Consultant</p> <p>Stantec Site Consultant</p>
1.1	Fourth	Updated	<p>Additional copies of this Plan are available from the Project Manager. This Plan will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.</p>
1.3	First	Updated	<p>This Plan is an appendix to the Care and Maintenance and Closure Phase Plan. This Plan is designed to address waste management criteria established in Water Licence 2AM-LUP152032 and Crown Indigenous Relations Canada (CIRNAC) Surface Leases 76E/14-1-9(2) (mine site) and 76E/14-2-10 (airport). The Plan provides information for identification, segregation, handling and disposal of solid and hazardous waste at Lupin during Care and Maintenance and Closure Phase.</p> <p>[Removed wording for closed water licence for exploration.]</p>
2.0	Second	Updated	<p>All wastes generated by LMI's activities are classified by appropriately trained personnel. Common knowledge can be used to determine that materials such as paper, untreated wood, concrete and food scraps are not hazardous waste. LMI conducts site inspections and observe waste periodically. All Site workers are instructed to call the on-site Mine Manager or their on-site designate if uncertain about waste products and their storage</p>

			and disposal methods.
5.2	First	Updated	<p>Water Licence 2AM-LUP2032 authorizes LMI to use the existing on-site Landfill facility to dispose of non- hazardous and non-combustible waste generated by the Site. Landfill seepage managed as required under the Water Licence is described in the Lupin Mine <i>Liquid Waste Management Plan</i>. The waste items acceptable for landfilling are listed in the Lupin Mine <i>Landfill Management Plan</i> (Appendix 2) along with the landfill deposition protocol.</p> <p>[Removed wording for building that have been demolished.]</p>
6.0	Third	Update	<p>The incinerator is operational and is used to burn the domestic and kitchen waste.</p> <p>[Wording updated above to be current, removed the word new]</p>
7.1	First	Updated	<p>Hydrocarbon impacted soil, that has resulted from gasoline and diesel fuel spills during care and maintenance, can be remediated in the landfarm facility. Operating guidance or the landfarm is provided in the <i>Landfarm Management Plan</i> (Appendix C). For spills of oil and grease during care and maintenance; once spill response measures described in the <i>Spill Contingency Plan</i> have been completed the impacted soil will be remediated or placed underground during final closure and reclamation of the site. The final closure and reclamation plan also allows for contaminated soil to be placed underground or removed from site for treatment.</p>
			<p>All references to Operations and Maintenance Procedures for the incinerator (Appendix A) are changed to Operations and Maintenance Procedures for the incinerator (Appendix 1).</p>
			<p>All references to Landfill Management Plan (Appendix B) or Landfill Management Plan (Appendix A) are changed to Landfill Management Plan (Appendix 2) throughout the Plan.</p>
			<p>All references to Landfarm Management Plan (Appendix C) are changed to Landfarm</p>

			Management Plan (Appendix 3) throughout the Plan.
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CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 1 - WASTE MANAGEMENT PLAN (SOLID AND HAZARDOUS)

APPENDIX 2 – LANDFILL MANAGEMENT PLAN

Project Name:	Lupin Mine		
Plan / Version	Landfill Management Plan	Rev 3, June 26, 2021	
NWB Requirement	2AM-LUP2032	Condition: Part B, Item 1(k)	
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Updated	(Care and Maintenance and Closure Phase Plan); June 2021
Executive Summary	New First	New	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.
Executive Summary	New Second (formerly First)	Updated and New	This Landfill Management Plan (LMP) has been prepared by Lupin Mines Incorporated (LMI), a wholly owned subsidiary of Mandalay Resources Corporation (Mandalay) for the Lupin Gold Mine to support the Water Licence 2AM-LUP2032 (Licence). The

			<p>Project site is located in the Kitikmeot Region, Nunavut, 400 km north of Yellowknife, Northwest Territories and 285 km southeast of Kugluktuk, Nunavut. The site is on the western shore of Contwoyto Lake, approximately 60 km south of the Arctic Circle. The site has been in a state of care and maintenance since 2006. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.</p> <p>[Removed wording referring feasibility to return to operations.]</p>
1.	Third	Updated	<p>The landfill is required for the disposal of non-salvageable, non-hazardous wastes from standard mining activities that cannot be incinerated or openly burned. Landfills are a common requirement of remote mining operations and help mitigate effects of wind-blown debris. The landfill at the Mine has operated since the early 1980s when mining commenced and continued to operate periodically through to 2005 when the Mine was last put in care and maintenance. In the past, it is understood that non-hazardous items were designated as landfill waste and buried within the surface waste rock piles. The landfill is required during operations, care and maintenance, and closure phases. Once the Mine commences permanent closure and reclamation, demolition materials will also be deposited in the underground workings as noted in the Final Closure and Reclamation Plan. The landfill will be closed and restored towards the end of closure activities.</p>
1.	Fifth	Updated	<p>An annual review of the LMP will take place and revisions will be submitted as necessary with the Annual Report to the Nunavut Water Board (NWB).</p> <p>[Removed wording of last approval date.]</p>
2	Second	New	<p>Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020,</p>

			LMI commence the final closure and reclamation program which is scheduled to be completed in 2021.								
2	Third	Updated	<p>General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032.</p> <p>[Removed reference to facilities upgrades and reference to closed water licence for exploration.]</p>								
2		Updated	<p>Company: LMI</p> <p>Project: Lupin Mine, Nunavut</p> <p>Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1</p> <p>Telephone: 778-386-7340</p> <p>Email: k.lewis@mandalayresources.com</p> <p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <table><tr><td>Karyn Lewis</td><td>Project Manager</td></tr><tr><td>Discovery Mining Services</td><td>Site Contractor</td></tr><tr><td>Golder Associates</td><td>Site Consultant</td></tr><tr><td>Stantec</td><td>Site Consultant</td></tr></table>	Karyn Lewis	Project Manager	Discovery Mining Services	Site Contractor	Golder Associates	Site Consultant	Stantec	Site Consultant
Karyn Lewis	Project Manager										
Discovery Mining Services	Site Contractor										
Golder Associates	Site Consultant										
Stantec	Site Consultant										
4.	First	Update	In accordance with the Waste Management Plan (2016) approved by the NWB, the approach for the disposal of solid waste is to first identify and segregate waste streams for appropriate handling. Acceptable items that can be landfilled are those that are non-hazardous, non-putrescible, with a low leachate and heat generation potential. All								

			other materials will either be incinerated, open burned, placed in the underground working, or backhauled offsite. Limiting the materials that can be placed in the landfills greatly reduces the concentration of constituents in leachate. Water Licence requirements for seepage management from the landfill is described in the <i>Liquid Waste Management Plan</i> .
8.	Second	Updated	Additional details on the closure and reclamation of the landfill area are included in the approved Final Closure and Reclamation Plan.

LUPIN MINES INCORPORATED

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CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 1 - WASTE MANAGEMENT PLAN (SOLID AND HAZARDOUS)

APPENDIX 3 – LANDFARM MANAGEMENT PLAN

Project Name:	Lupin Mine		
Plan / Version	Landfarm Management Plan	Rev 3, June 26, 2021	
NWB Requirement	2AM-LUP2032	Condition: Part B, Item 1(k)	
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Updated	(Care and Maintenance and Closure Phase Plan); June 2021
Executive Summary	New First	New	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.
Executive Summary	New Second (formerly First)	Updated and New	This Landfarm Management Plan has been prepared by Lupin Mines Incorporated (LMI), a wholly owned subsidiary of Mandalay Resources Corporation for the Lupin Gold Mine to support the Water Licence 2AM-LUP2032 (Licence). The Project site is

			located in the Kitikmeot Region, Nunavut, 400 km north of Yellowknife, Northwest Territories and 285 km southeast of Kugluktuk, Nunavut. The site is on the western shore of Contwoyto Lake, approximately 60 km south of the Arctic Circle. The site has been in a state of care and maintenance since 2006. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.	Fifth	Updated	An annual review of the Landfarm Management Plan will take place and revisions will be submitted as necessary with the Annual Report to the Nunavut Water Board (NWB). [Removed wording of last approval date.]
2	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commenced the final closure and reclamation program which is scheduled to be completed in 2021.
2	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032. [Removed reference to facilities upgrades and reference to closed water licence for exploration.]
2		Updated	Company: LMI Project: Lupin Mine, Nunavut Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1 Telephone: 778-386-7340 Email: k.lewis@mandalayresources.com

			<p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <p>Karyn Lewis Project Manager</p> <p>Discovery Mining Services Site Contractor</p> <p>Golder Associates Site Consultant</p> <p>Stantec Site Consultant</p>
5.	Second	Updated	<p>In general if there are any openings in the surrounding 1.0 m wall, a new section of bund wall will be cast in place or an earthen berm will be established that will be lined with Reinforced Linear Low Density Polyethylene (RLLDPE) geomembrane liner. Drawings LMI-LF-001 and 002 show both a plan view and cross sectional view of the conceptual design. As required under Part G(4) of the water licence, sixty (60) days prior to the construction of the landfarm facility, the-construction design drawings and specifications prepared by a qualified Engineer were submitted to the NWB.</p>
5.	Third	Updated	<p>The conditions applying to construction under the Water Licence (Part G) were followed during construction. Final as-built construction drawings and a construction summary report were prepared by a qualified Engineer and submitted within ninety (90) days following the completion of the landfarm as required under Part G(3) of the Water Licence.</p>

LUPIN MINES INCORPORATED

ADDENDUM

CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 2 -LIQUID WASTE MANAGEMENT PLAN

Project Name:	Lupin Mine		
Plan / Version	Liquid Waste Management Plan		Rev 4, June 26, 2021
NWB Requirement	2AM-LUP2032		Condition: Part B, Item 1(k)
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Update	(Care and Maintenance and Closure Phase Plan); June 2021
Executive Summary	Second	Update	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.
Executive Summary	Third	New	The purpose of this Plan is to provide the necessary information pertaining to liquid waste management during routine care and maintenance at the Lupin Mine. Liquid waste management planning is necessary to ensure waste water is appropriately stored, treated and discharged to the environment in compliance with the Water

			Licence and the <i>Metal Mining and Effluent Regulation</i> (MMER).
Executive Summary	Fourth	New	The objectives of the Plan are to describe source and fate of waste water on the Lupin site, and outline measures in place to mitigate impacts to the environment resulting from waste water discharge.
1.	Second	Updated	An annual review of the Plan, its appendices and supplements takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until February 27, 2032.
1.1	First	Updated	[Removed reference to the Ulu Project]
1.1	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.1	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032. [Removed reference to facilities upgrades and reference to closed water licence for exploration.]
1.1		Updated	Company: LMI Project: Lupin Mine, Nunavut Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1

			<p>Telephone: 778-386-7340</p> <p>Email: k.lewis@mandalayresources.com</p> <p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <p>Karyn Lewis Project Manager</p> <p>Discovery Mining Services Site Contractor</p> <p>Golder Associates Site Consultant</p> <p>Stantec Site Consultant</p>
1.1	Fourth	Updated	Additional copies of this Plan are available from the Project Manager. This Plan will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.
1.4	First	Updated	The purpose of this Plan is to provide the necessary information pertaining to liquid waste management during routine care and maintenance and closure phase at the Lupin Mine. Liquid waste management planning is necessary to ensure waste water is appropriately stored, treated and discharged to the environment in compliance with the Water Licence and the <i>Metal Mining and Effluent Regulation</i> (MMER).
2.3	First	Updated	There is a substantial amount of water present within the tailings containment area (TCA) (Figure 2). The containment is divided into three main components: solids retention cells (Cells 1, 2, 3, and 5), polishing ponds (Cell 4, Pond 1 and Pond 2) and the End Lake area (not used). All of this water is periodically transferred downstream to maintain a 1 m freeboard at all times at the perimeter dams. The water in Cell 4 is transferred to Pond 1 via gated valve, from here the water is transferred from Pond 1 to Pond 2 by way of siphon. Cell 5 water is transferred directly to Pond 1 or Cell 4 via siphon. Pond 2 is the largest pond; here, water is treated with lime or soda ash and

			eventually discharged to the environment by way of siphon.
3.1 – Mine Site Area	First	Updated	<p>The mine site area referred to in this Plan includes: mine; shop; accommodations; laydown areas; storage facilities; landfill; landfarm; and bulk fuel storage facilities. Surface runoff from these areas flows either towards the main tank farm area, the sewage pond system or access roads to the airstrip, burn pit or crusher as described above.</p> <p>[Removed wording for building that have been demolished.]</p>
3.3	Second	Update	<p>Water accumulating in secondary containment of fuel storage facilities is tested prior to discharge to the environment to ensure it is in compliance with Part E(11) of the Water Licence as listed below in Table 1. Samples for testing are collected in accordance with the <i>Water Quality Monitoring Plan and Quality Assurance/ Quality Control Plan</i> (the Monitoring Plan) found in Appendix A. Water that is not in compliance is stored until it can be treated and subsequently released to the environment at LUP-27 (Figure 4, UTM coordinates: 7293609N 489072E). Snow that is contaminated with hydrocarbons is collected and melted. The hydrocarbon portion is removed and the water is then tested and either discharged or stored for further treatment. The hydrocarbon portion and water that cannot be treated on site is shipped off site for treatment and disposal.</p>
3.4	First	Updated	<p>Part of LMI's progressive reclamation plan can be achieved with the operation of a Landfarm Facility.</p> <p>[Removed wording that was historical and updated to be current.]</p>
3.4	Second	Updated	<p>Water accumulating in the sump of the facility is applied to the soil undergoing treatment during dry periods or tested and treated if necessary prior to discharge to ensure compliance with Part E(11) of the Water Licence as listed above in Table 1. Water is discharged at LUP-28 and is monitored with a leak detection system under</p>

			Modification No.1.
3.5	First	Updated	Seepage from the Landfill Facility is tested to ensure it is in compliance with Part E(13) of the Water Licence as listed below in Table 2. Samples for testing are collected in accordance with the Monitoring Plan found in Appendix A. Water that is not in compliance is pumped to a storage tank where it is held until it can be treated and subsequently released to the environment.
Table 3	Second Row	Updated	0.50
4.1	First	Updated	The sewage facilities consist of several lift stations within the camp and an 800 m long 6" diameter insulated steel pipeline to the first of two sewage lakes. Alternatively, when camp capacity requirements during care and maintenance do not warrants its use; sewage and grey water are collected in a sewage tank at the accommodation buildings. The tank is then hauled to the Upper Sewage Lake wherein waste is deposited. A sewage line to convey camp sewage directly to the Upper Sewage Lake may be utilized. Grey water originating from office cabin use may be deposited in a leaching pit adjacent to the guesthouse. Under Part E(9) of the Water Licence, all sewage is to be discharged to the Sewage Lakes Disposal Facilities.
5.1	Second	Updated	Water in the TCA is treated and tested prior to discharge to the environment to ensure it is in compliance with Part E(5) of the Water Licence and the Metal Mining Effluent Regulations (MMER). If compliant, water is discharged at LUP-10 (Figure 4, UTM NAD83, Zone 12N, coordinates: 485911E 7289875N). In accordance with Part E(2) and Part E(3) of the Water Licence. Discharge can commence no sooner than July 15 of any calendar year and the volume discharged cannot exceed 125,000 m ³ per day.
5.1	Four	Updated and New	The TCA is also managed in compliance with Part E(7)(11)(12) of the Water Licence, which stipulates the following:

			<p>6. The TCA shall be constructed, operated and maintained to engineering standards such that:</p> <ul style="list-style-type: none"> a. A freeboard limit of 1.0 m shall be maintain at all times or as recommended by a Geotechnical Engineer and as approved by the Nunavut Water Board (the Board) in writing; b. Seepage from the TCA is minimized; c. Any seepage that occurs is collected and returned immediately to the TCA; d. Erosion of constructed facilities is addressed immediately; e. The solids fraction of the mill Tailings shall be permanently contained within the TCA or underground as Backfill; f. Implement measures to ensure that the TCA is adequately covered or managed, including the use of approved binding agents, so as to prevent windblown tailings from impacting other areas of the project site; g. Transduces are installed and maintained within existing stand pipes, to collect water level data and ensure tailings saturation. <p>11. The Licensee shall undertake inspections of the Tailings Containment Area, to include at a minimum:</p> <ul style="list-style-type: none"> a. During active Closure Phase and Care and Maintenance Phase, inspections shall be carried out on a bi-weekly basis during freshet (approx. May and June), and monthly during the remainder of the open water period (approx. July to October) of the following: <ul style="list-style-type: none"> i. Seepage from Dams; ii. Water levels in ponds/cells; iii. General surface erosion, tension cracks, and/or anomalies on dams; and iv. Records of these inspections shall be kept for review upon the request of an Inspector, or as otherwise approved by the Board. More frequent inspections shall be performed at the request of an Inspector.
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			<p>b. More frequent inspections shall be performed at the request of an Inspector</p> <p>12. The Licensee shall, during active Closure Phase and prior to Post Closure, undertake annual inspection of the Tailings Containment Area, during ice free, open-water conditions by a Geotechnical Engineer. The Engineer's report shall be submitted to the Board within sixty (60) days following the inspection, and shall include a cover letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations.</p>
5.2	First	New	[Removed this section as it is no longer a requirement under water licence – was left in as an error in the previously approved plans.]
New 5.2.1 (formerly 5.3.1)		New	New section number
New 5.2.2 (formerly 5.3.2)		New	New section number

LUPIN MINES INCORPORATED

ADDENDUM

CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 3 – WILDLIFE MANAGEMENT PLAN

Project Name:	Lupin Mine		
Plan / Version	Wildlife Management Plan		Rev 4, June 26, 2021
NWB Requirement	2AM-LUP2032		Condition: Part B, Item 1(k)
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Update	(Care and Maintenance and Closure Phase Plan); June 2021
Executive Summary	Second	Update	A review of the Plan takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine or the Site) is valid until February 27, 2032.
Executive Summary	Third	New	This Plan is an appendix to the Care and Maintenance Plan and Closure Phase Plan. Wildlife encounters may occur at any time and it is everyone's responsibility to ensure the safety of people and animals on Site.
1.	Second	Updated	An annual review of the Plan, its appendices and supplements takes place and revisions are submitted as necessary with the annual report. The current Type A water licence

			2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until February 27, 2032.
1.1	First	Updated	[Removed reference to the Ulu Project]
1.1	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.1	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032. Removed reference to closed water licence for exploration.
1.1		Updated	<p>Company: LMI</p> <p>Project: Lupin Mine, Nunavut</p> <p>Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1</p> <p>Telephone: 778-386-7340</p> <p>Email: k.lewis@mandalayresources.com</p> <p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <p>Karyn Lewis Project Manager</p> <p>Discovery Mining Services Site Contractor</p>

			Golder Associates Stantec Site Consultant Site Consultant
1.1	First	Updated	Additional copies of this Plan are available from the Project Manager. This Plan will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.
1.4	Third	Updated	This Plan is an appendix to the Care and Maintenance Plan and Closure Phase Plan. Wildlife encounters may occur at any time and it is everyone's responsibility to ensure the safety of people and animals on Site. A General Site Map is attached for reference (Figure 2). [Removed reference to closed water licence for exploration.]

LUPIN MINES INCORPORATED

ADDENDUM

CARE and MAINTENANCE and CLOSURE PHASE PLAN

APPENDIX 4 – MONITORING AND INSPECTION SCHEDULE

Project Name:	Lupin Mine		
Plan / Version	Monitoring and Inspection Schedule	Rev 3, June 26, 2021	
NWB Requirement	2AM-LUP2032	Condition: Part B, Item 1(k)	
ADDENDUM			
Section Change	Paragraph	Updated or New	Details
Title Page		Updated	(Care and Maintenance and Closure Phase) June 2021
1.	First	Updated	Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Mandalay Resources Corporation, has prepared an updated Care and Maintenance Plan and Closure Phase (the Plan) with respect to the requirements within Water License Number 2AM-LUP2032. This Monitoring and Inspection Schedule (Schedule) is a supplement to the Care and Maintenance Plan and Closure Phase Plan and outlines LMI’s plan to provide site coverage during periods when the mine site is un-occupied.
1.	Second	Updated	An annual review of the Plan, its appendices and supplements takes place and revisions are submitted as necessary with the annual report. The current Type A water licence

			2AM-LUP2032 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until February 27, 2032.
1.1	First	Updated	[Removed reference to the Ulu Project]
1.1	Second	New	Mandalay purchased Elgin Mining Inc., which owns LMI and the Lupin Mine, in September 2014. Lupin was in operation from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The mine resumed production in March 2004 until February 2005. Since 2005, the Site has remained in Care and Maintenance. In 2020, LMI commences the final closure and reclamation program which is scheduled to be completed in 2021.
1.1	Third	Updated	General site maintenance is underway at the Lupin Mine to assess operational requirements. The activities underway were screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under Water Licence 2AM-LUP2032. Removed reference to closed water licence for exploration.
1.1		Updated	<p>Company: LMI</p> <p>Project: Lupin Mine, Nunavut</p> <p>Company Address: Suite 330, 76 Richmond Street East, Toronto, ON M5C 1P1</p> <p>Telephone: 778-386-7340</p> <p>Email: k.lewis@mandalayresources.com</p> <p>Attention: Karyn Lewis, Project Manager</p> <p>Effective Date: June 26, 2021</p> <p>Distribution List:</p> <p>Karyn Lewis Project Manager</p> <p>Discovery Mining Services Site Contractor</p>

			Golder Associates Stantec	Site Consultant Site Consultant
1.1	Fourth	Updated	Additional copies of this Plan are available from the Project Manager. This Plan will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.	
4.0	Second	Updated	LMI will continue to make bi-weekly site visits to monitor and inspect the site during freshet in accordance with Part D(5) of the Water Licence. LMI will undertake routine monitoring and inspection visits monthly thereafter until fall freeze up as stipulated in Part D(5) of the Water Licence. Additional site visits will be added if site conditions warrant it. LMI has on standby, a crew of operators, labourers, and supervisory staff that can and will be mobilized to site with minimal notification, should a situation occur that requires immediate attention.	
Appendix A		Updated	Please see new Appendix A attached.	

Appendix A: Fuel Containment Inspection Checklist – Tank Farms

Fuel Containment Inspection Logs		Date & Time:	
Bi-Weekly//Monthly		Inspector:	
Inspection Item	COMMENTS	OK ? (Y / N)	
Main Tank Farm			
Measured Depth of water in berm?? (Cm)	No water in any of the berms before freeze up	Y	
Main Pump Shack	out of service	Y	
Pump Station 1	out of service	Y	
Pump Station 2	out of service	Y	
Jet A Pump station	out of service	Y	
Tanks M3, M5 to M12, M14	All tanks empty, cleaned, and destroyed	Y	
Marclin tanks M16 - M21	All tanks empty, cleaned, and temporarily out of service.	Y	
Tank M22	Tank is empty, cleaned, and temporarily out of service	Y	
Tanks M15, M13, M1, M2 and M4	Only Tanks M2, M4, and M15 contain fuel. No leaks observed.M1 and M13 have been cleaned and destroyed.	Y	
IND-11 is a "pup" tanker trailer located in 3rd party berm.	It has been emptied, cleaned, and is temporarily out of service.	Y	
PM check Main Tank Farm			
Inspect fuel pumps & control systems at Main Pump Shack	out of service	Y	
Inspect active tanks for structure damage & leaks.	Only M15, M2 and M4 contain fuel	Y	
Inspect valves, piping & connections for damage & leaks.	Only M15, M2 & M4 are connected	Y	
Inspect fuel pumps & control systems at Pump Station 1 &	out of service	n/a	
Inspect line from transfer pump to underground line to Sat Farm	Permanently out of service	n/a	
Inspect liner and berm structure	Liner and berm in good condition	Y	
Inspect fuel line where it crosses the Tailings Service Road	Permanently out of service	n/a	
Satellite Tank Farm			
Measured Depth of water in berm?? (Cm)	Permanently out of service	n/a	
Fuel Truck Station	Permanently removed	n/a	
Powerhouse Pump Station	Permanently removed	n/a	
Fuel Dispensing Station DIESEL ONLY	Permanently removed	n/a	
Fuel Transfer Line to Powerhouse Pump stn	Permanently removed	n/a	
Fuel Transfer Line to Fuel Truck stn	Permanently removed	n/a	
S1 to S10	emptied, cleaned, and temporarily out of service	n/a	
S11 and S12	Emptied, cleaned, and destroyed. (Gasoline tanks	n/a	
PM check Satellite Tank Farm			
Inspect fuel inlet at Diesel dispensing Station	Permanently removed	n/a	
Inspect Diesel fuel delivery meter, nozzles & hose for leaks.	Permanently removed.	n/a	
S1 to S10 tank line valves, piping & connections for damage & leaks. Each tank has a valve and each jct of the tank line to delivery line has a valve	All tanks emptied, cleaned and temporarily taken out of service	n/a	
Inspect fuel storage tanks for structure damage & leaks.	Permanently removed	n/a	

Inspect line where it enters from the Tailings Service Road	Permanently out of service, valves closed	
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