

Conditions Annexed to and Forming Part of Land Use Permit # MV2018C0023

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) Mineral Exploration including diamond drilling;
 - b) Use of equipment, vehicle, and machines;
 - c) Use and storage of fuel;
 - d) Construction and maintenance of camp(s); and
 - e) Construction and maintenance of winter road and access road.
2. This Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, item 1 of this Permit.
3. Compliance with the terms and conditions of this Permit does not excuse the Permittee from its obligation to comply with the requirements of any applicable Federal, Territorial, Tłıchǫ, or Municipal laws.

Part B: Definitions (defined terms are capitalized throughout the Permit)

Act - the *Mackenzie Valley Resource Management Act*.

Archaeological Overview - as defined by the Prince of Wales Northern Heritage Centre – *Guidelines for Developers for the Protection of Archaeological Sites in the Northwest Territories*.

Archaeological Impact Assessment - as defined by the Prince of Wales Northern Heritage Centre – *Guidelines for Developers for the Protection of Archaeological Sites in the Northwest Territories*.

Board - the Mackenzie Valley Land and Water Board established under Part 4 of the Act, or the Mackenzie Valley Land and Water Board established under Part 3 of the Act, as the case may be.

Borehole - a hole that is made in the surface of the ground by drilling or boring.

Drilling Waste - all materials or chemicals, solid or liquid, associated with drilling, including drill cuttings and Drilling Fluids.

Durable Land - land that is able to withstand repeated use, such as gravel or sand with minimal vegetative cover.

Engagement Plan - a document, developed in accordance with the Board's *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the project.

Flowing Artesian Well - a well in which water:

- a) Naturally rises above the ground surface or the top of any casing; and
- b) Flows naturally, either intermittently or continuously.

Fuel Storage Container - a container for the storage of petroleum or allied petroleum products with a capacity of less than 230 litres.

Fuel Storage Tank - a closed container for the storage of petroleum or allied petroleum products with a capacity of more than 230 litres.

Greywater - all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

Habitat - the area or type of site where a species or an individual of a species of wildlife naturally occurs or on which it depends, directly or indirectly, to carry out its life processes.

Inspector - an Inspector designated by the Minister under the Act.

Minister - the Minister of Indian Affairs and Northern Development Canada or the Minister of the Government of the Northwest Territories – Department of Lands, as the case may be.

Ordinary High Water Mark - the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the “active channel/bank-full level” which is often the 1:2 year flood flow return level. In inland lakes, wetlands, or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

Permittee - the holder of this permit.

Permafrost - ground (soil or rock) that remains at or below 0°C for at least two consecutive years.

Secondary Containment - containment that prevents liquids that leak from Fuel Storage Tanks or containers from reaching outside the containment area and includes double-walled Tanks, piping, liners, and impermeable barriers.

Sewage - all toilet wastes and Greywater.

Sewage Disposal Facilities - Sump(s) and/or Sewage collection tank(s) and/or storage containers designed to hold Sewage.

Spill Contingency Plan - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada’s *Guidelines for Spill Contingency Planning* (April 2007), that describes the set of procedures to be implemented to minimize the effects of a spill.

Sump - a man-made pit or natural depression in the earth's surface used for the purpose of depositing Waste that does not contain Toxic Material, such as non-toxic Drilling Waste or Sewage, therein.

Toxic Material - any substance that enters or may enter the environment in a quantity or concentration or under conditions such that it:

- a) Has or may have an immediate or long-term harmful effect on the environment or its biological diversity;
- b) Constitutes or may constitute a danger to the environment on which life depends; or
- c) Constitutes or may constitute a danger in Canada to human life or health.

Waste - any garbage, debris, chemical, or Toxic Material to be used, stored, disposed of, or handled on land, and also as defined in section 51 of the Act.

Waste Management Plan - a document, developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan*, that describes the methods of Waste management from Waste generation to final disposal.

Watercourse - a natural body of flowing or standing water or an area occupied by water during part of the year, and includes streams, springs, swamps and gulches but does not include groundwater.

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Part C: Conditions Applying to All Activities (headings correspond to subsection 26(1) of the Mackenzie Valley Land Use Regulations)

26(1)(a) Location and Area

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| 1. | The Permittee shall not conduct any part of the land-use operation within <input type="text"/> metres of any privately owned or leased land or structure, unless otherwise authorized in writing by the Board. | PRIVATE PROPERTY |
| 2. | The Permittee shall locate all camps on Durable Land or previously cleared areas. | CAMP LOCATION |
| 3. | The Permittee shall use an existing campsite, as described in the complete application. | EXISTING CAMP |
| 4. | Prior to the commencement of drilling, the Permittee shall submit the drill target locations on a 1:50,000-scale map with coordinates and map datum to the Board and an Inspector. | DRILL LOCATIONS |
| 5. | The Permittee shall not construct parallel lines or roads, unless an existing line or road cannot be used | PARALLEL ROADS |
| 6. | The Permittee shall locate all lines, trails, and right-of-ways to be constructed parallel to any Watercourse a minimum of 100 metres from the Ordinary High Water Mark, except at crossings. | PARALLEL WATERCOURSE |
| 7. | The Permittee shall not conduct this land-use operation on any lands not designated in the complete application. | LOCATION OF ACTIVITIES |
| 8. | The Permittee shall confine the width of the right of way to a maximum of ten (10) metres, unless otherwise authorized in writing by a Land Use Inspector. The Permittee shall not clear a right-of-way that is wider than 12 metres. | WIDTH RIGHT-OF-WAY |

26(1)(b) Time

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| 9. | At least 48 hours prior to the commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 797-9188. | CONTACT INSPECTOR |
| 10. | At least 48 hours prior to commencement of the land-use operation, the Permittee shall provide the following information, in writing, to the Board and an Inspector: | IDENTIFY AGENT |
| | a) the name(s) of the person(s) in charge of the field operation; | |
| | b) alternates; and | |
| | c) all methods for contacting the above person(s). | |

Commented [JH1]: Board staff seeking input.

In Permit MV2016C0038, the setback was 300 m. There was not a private property condition in Permit MV2014C0005. TerraX has requested a setback of 50 m. Board staff is seeking all reviewer's input on TerraX's request for a setback of 50 m from private properties.

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| <p>11. At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:</p> <p>a) the plan for removal or storage of equipment and materials; and</p> <p>b) when final cleanup and reclamation of the land used will be completed.</p> | <p>REPORTS BEFORE
REMOVAL</p> |
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| <p>12. The Board, for the purpose of this operation, designates April 15, as spring break-up.</p> | <p>SPRING
BREAK-UP</p> |
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26(1)(c) Type and Size of Equipment

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| <p>13. The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application.</p> | <p>ONLY APPROVED
EQUIPMENT</p> |
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| <p>14. The Permittee shall maintain fire-fighting equipment at the site in accordance with the <i>Government of the Northwest Territories' Forest Fire Prevention and Suppression Guidelines for Industrial Activities</i>.</p> | <p>FIRE-FIGHTING
EQUIPMENT</p> |
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26(1)(d) Methods and Techniques

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| <p>15. The Permittee shall Dogleg lines, trails and right-of-ways that approach Watercourses or public roads.</p> | <p>DOGLEG APPROACHES</p> |
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| <p>16. Prior to the movement of any vehicle that exerts pressure on the ground in excess of 35 kPa, the Permittee shall scout proposed lines and routes to select the best location for crossing streams and avoiding terrain obstacles.</p> | <p>DETOURS AND
CROSSINGS</p> |
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| <p>17. Immediately upon completion of operations at each Borehole, the Permittee shall remove or cut off and seal each drill casing at ground level.</p> | <p>MINERAL
EXPLORATION DRILL
CASINGS</p> |
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| <p>18. The Permittee shall construct and maintain the overland portion of winter roads with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation.</p> | <p>WINTER ROADS</p> |
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| <p>19. The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse.</p> | <p>STORAGE ON ICE</p> |
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| <p>20. The Permittee shall leave a buffer strip of undisturbed vegetation at least 30 metres in width between cleared areas and public roads.</p> | <p>TREE SCREEN</p> |
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26(1)(e) Type, Location, Capacity, and Operation of All Facilities

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| <p>21. The Permittee shall ensure that the land use area is kept clean at all times.</p> | <p>CLEAN WORK AREA</p> |
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| <p>22. The Permittee shall not locate any Sump within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.</p> | <p>SUMPS FROM WATER</p> |
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26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

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| <p>23. The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:</p> <p>a) any vegetation present from being removed;
 b) the melting of Permafrost; and
 c) the ground settling and/or eroding.</p> | <p>PERMAFROST
PROTECTION</p> |
| <p>24. The land-use operation shall not cause obstruction to any natural drainage.</p> | <p>NATURAL DRAINAGE</p> |
| <p>25. The Permittee shall, where flowing water from a Borehole is encountered:</p> <p>a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and
 b) immediately report the occurrence to the Board and an Inspector.</p> | <p>FLOWING ARTESIAN
WEL</p> |
| <p>26. The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.</p> | <p>PREVENTION OF
RUTTING</p> |
| <p>27. The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting.</p> | <p>SUSPEND OVERLAND
TRAVEL</p> |
| <p>28. The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.</p> | <p>VEHICLE MOVEMENT
FREEZE-UP</p> |
| <p>29. The Permittee shall not use any material other than clean water and snow in the construction of ice bridges.</p> | <p>ICE BRIDGE
MATERIALS</p> |
| <p>30. The Permittee shall not use any materials other than clean snow and water in the construction of snow fills.</p> | <p>SNOWFILL MATERIALS</p> |
| <p>31. Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all snowfills from stream crossings, unless otherwise authorized in writing by an Inspector.</p> | <p>REMOVE OR V-NOTCH
SNOWFILLS</p> |
| <p>32. Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and v-notch all ice bridges, unless otherwise authorized in writing by an Inspector.</p> | <p>V-NOTCH ICE BRIDGES</p> |
| <p>33. The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector.</p> | <p>STREAM BANKS</p> |
| <p>34. The Permittee shall minimize approach grades on all Watercourse crossings.</p> | <p>MINIMIZE APPROACH</p> |
| <p>35. The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse.</p> | <p>WATERCOURSE
BUFFER</p> |

26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material

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| 36. At least seven days prior to the use of any chemicals that were not identified in the complete application, the MSDS sheets must be provided to the Board and an Inspector. | CHEMICALS |
| 37. When drilling within 100 metres of the Ordinary High Water Mark of any Watercourse, and when drilling on ice, the Permittee shall contain all drill water and Drilling Waste in a closed circuit system for reuse, off-site disposal, or deposit into a land-based Sump or natural depression. | DRILLING NEAR WATER OR ON ICE |
| 38. The Permittee may deposit Drilling Waste that does not contain Toxic Material in a Sump or natural depression. Any Sumps or natural depressions used to deposit Drilling Waste must be located at least 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | DRILLING WASTE |
| 39. The Permittee shall remove all Drilling Waste containing Toxic Material to an approved disposal facility. | DRILLING WASTE DISPOSAL |
| 40. The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses. | DRILLING WASTE CONTAINMENT |
| 41. Prior to the expiry date of this Permit or the end of the land-use operation whichever comes first, the Permittee shall backfill and restore all Sumps, unless otherwise authorized in writing by an Inspector. | BACKFILL SUMPS |
| 42. The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the GNWT <i>Spill Contingency Planning and Reporting Regulations</i> , the Permittee shall:
a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130;
b) report each spill to an Inspector within 24 hours; and
c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days. | REPORT SPILLS |
| 43. The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan. | WASTE CHEMICAL DISPOSAL |
| 44. The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility. | WASTE PETROLEUM DISPOSAL |

26(1)(h) Wildlife and Fish Habitat

45. The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. **HABITAT DAMAGE**

26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage

46. The Permittee shall adhere to the **Waste Management Plan**, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. **WASTE MANAGEMENT**

47. The Permittee shall keep all garbage and debris in a secure container until disposal. **GARBAGE CONTAINER**

48. The Permittee shall dispose of all garbage, Waste, and debris as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector. **REMOVE GARBAGE**

49. The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. **SEWAGE DISPOSAL – PLAN**

26(1)(j) Protection of Historical, Archaeological, and Burial Sites

50. The Permittee shall not operate any vehicle or equipment within 30 metres of a known or suspected historical or archaeological site or burial ground. **ARCHAEOLOGICAL BUFFER**

Commented [JH2]: Board staff seeking input. TerraX has requested a setback of 30 m. The proposed setback is consistent with previous Permits.

51. The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. **SITE DISTURBANCE**

52. The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: **SITE DISCOVERY AND NOTIFICATION**

- a) immediately suspend operations on the site; and
- b) notify the Board at (867) 669-0506 or an Inspector at (867) 797-9188, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71250 or ext. 71251.

53. At least [] days prior to any new land disturbance, including new drill sites, the Permittee shall conduct an Archaeological Overview to identify areas of high and low potential for archaeological and burial sites and shall submit a summary report to the Board and the Prince of Wales Northern Heritage Centre. **ARCHAEOLOGICAL OVERVIEW**

Commented [JH3]: Board staff is seeking input on the timeline for this condition.

Permit MV2016C0038 has the timeline of "At least 30 days prior to any new land disturbance in areas outside the study area of the October 2016 Archaeological Impact Assessment"

Permit MV2014C0005 has the timeline of "At least 60 days prior to any new land disturbances"

54. Prior to disturbance in areas of high potential for archaeological or burial sites identified in the Archaeological Overview, the Permittee shall conduct an Archaeological Impact Assessment of the sites where disturbance is planned and shall submit a summary report to the Board and the Prince of Wales Northern Heritage Centre. **AIA – HIGH POTENTIAL**

26(1)(k) Objects and Places of Recreational, Scenic, and Ecological Value

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26(1)(l) Security Deposit

- 55. The Permittee shall deposit with the Minister a security deposit totaling \$231,252.00 based on the schedule set out below:
 - a) Prior to the commencement of drilling operations, the Permittee shall post and maintain a total security deposit of \$130,123.00;
 - b) Prior to the use of more than 6 diamond drills, the Permittee shall post and maintain an additional security deposit in the amount \$63,356.00 to maintain a total security deposit of \$193,479.00; and
 - c) Prior to the construction and operation of a camp, the Permittee shall post and maintain an additional security deposit in the amount of \$37,773.00 to maintain a total security deposit of \$231,252.00.
- 56. All costs to remediate the area under this Permit are the responsibility of the Permittee.

SECURITY DEPOSIT

Commented [KL4]: Board staff are seeking input on the security deposit Schedule. The phased security estimate presented here was proposed by TerraX in their application submission and was developed in consultation with the GNWT-ENR.

Please note this is only for the Land Use Permit portion of the RECLAIM estimate. Additional security is proposed under the draft Water Licence.

RESPONSIBILITY FOR REMEDIATION COSTS

26(1)(m) Fuel Storage

- 57. The Permittee shall:
 - a) examine all Fuel Storage Containers and Tank for leaks a minimum [redacted] [e.g. once per day]; and
 - b) repair all leaks immediately.
- 58. The Permittee shall not place any Fuel Storage Containers or Tanks within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.
- 59. The Permittee shall ensure that all fuel caches have adequate Secondary Containment.
- 60. The Permittee shall set up all refueling points with Secondary Containment.
- 61. The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses.
- 62. The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours.
- 63. The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name.

CHECK FOR LEAKS

Commented [JH5]: Board staff seeking input.

FUEL NEAR WATER

FUEL CACHE SECONDARY CONTAINMENT

SECONDARY CONTAINMENT – REFUELING

FUEL CONTAINMENT

FUEL ON LAND

MARK CONTAINERS AND TANKS

64. The Permittee shall mark all stationary fuel caches and fuel storage facilities with flags, posts, or similar devices so that they are at all times plainly visible to local vehicle travel.	MARK FUEL LOCATION
65. The Permittee shall have a maximum of 105,000 litres of fuel stored on the land use site at any time, unless otherwise authorized in writing by the Board.	MAXIMUM FUEL ON SITE
66. Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to the Board and an Inspector.	REPORT FUEL LOCATION
67. The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock, except for containers currently in use.	SEAL OUTLET
68. The Permittee shall adhere to the Spill Contingency Plan , once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval.	SPILL CONTINGENCY PLAN
69. Prior to commencement of the land-use operation the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills.	SPILL RESPONSE
70. All equipment that may be parked for two hours or more, shall have a hazmat/drip tray under it or be sufficiently diapered. Leaky equipment shall be repaired immediately.	DRIP TRAYS
71. The Permittee shall clean up all leaks, spills, and contaminated material.	CLEAN UP SPILLS
26(1)(n) Methods and Techniques for Debris and Brush Disposal	
72. Prior to the expiry date of this Permit, the Permittee shall progressively dispose of all brush and trees and shall complete all brush disposal; all disposal shall be completed.	BRUSH DISPOSAL/ TIME
73. The Permittee shall not clear areas larger than identified in the complete application.	MINIMIZE AREA CLEARED
26(1)(o) Restoration of the Lands	
74. The Permittee shall dispose of all overburden as instructed by an Inspector.	DISPOSAL OF OVERBURDEN
75. Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used.	FINAL CLEANUP AND RESTORATION
76. Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.	NATURAL VEGETATION

77. The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so. **PROGRESSIVE RECLAMATION**

78. The Permittee shall restore any trails impacted by the land-use operation by removing fallen trees and any other obstructions from the trails. **TRAILS RESTORATION**

26(1)(p) Display of Permits and Permit Numbers

79. The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation. **COPY OF PERMIT**

26(1)(q) Biological and Physical Protection of the Land

80. Prior to the commencement of the land-use operation, the Permittee shall submit a revised _____ Plan (e.g. *Waste Management or Spill Contingency or Engagement Plan*) in accordance with _____ Guidelines (e.g. *MVLWB's 2011 "Guidelines for Developing a Waste Management Plan" or Aboriginal Affairs and Northern Development Canada's 2007 "Guidelines for Spill Contingency Planning" or MVLWB's 2013 "Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits"*) to the Board for approval. **SUBMIT REVISED PLAN**

Commented [JH6]: Pending Board Decision on management plans.

81. If any plan is not approved by the Board, the Permittee shall revise the plan according to the Board's direction and re-submit it to the Board for approval. **RESUBMIT PLAN**

82. The Permittee shall adhere to the **Engagement Plan**, once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. **ENGAGEMENT PLAN**

83. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan. **SUMMARY OF CHANGES**