



MVLWB – Standard Land Use Permit Template

Introduction

The Land Use Permit Conditions Team, formed jointly by the Gwich'in, Sahtu, Wek'èezhii, and Mackenzie Valley Land and Water Boards, is pleased to present an update to the *Standard Land Use Permit Conditions Template* (the Template). The Template has been approved by the Mackenzie Valley Land and Water Board (MVLWB) for staff to use when developing draft land use permits.

The standard conditions forming part of the Template have been established by the Team based on information from an Inspectors workshop and a public workshop held in March 2011, input from Board staff, and comments from Inspectors. Conditions have been evaluated by the Team and reviewed by legal counsel against the following five characteristics of an ideal condition:

1. Clearly part of Land and Water Board authority;
2. Has a clear purpose and rationale;
3. Is practical and enforceable;
4. Matches the scale of the project; and
5. Does not conflict with existing legislation (i.e. is not less stringent).

Some common conditions are not found on this list because either: a) they are currently under review (e.g., by multi-agency working groups), or b) they are not considered 'standard conditions' and are catalogued on a separate list. These conditions may still be used at the discretion of the Board provided they meet the characteristics listed above. New or revised conditions may also be used following evaluation through the *Standard Process for New Conditions* (a public document available on Land and Water Board Websites).

This template will be used during the review and approval process for new permits, renewals (i.e. new permits for ongoing projects), requests to amend conditions of existing permits, and amendments to conditions that may be made upon assignment of permits. Changes may be made to the template under the direction of the Executive Directors of the Land and Water Boards; the up-to-date Template will be maintained on the LWB websites.

Reviewers are encouraged to refer to the conditions and rationale on this list when making recommendations to the Board regarding mitigation measures for specific projects. The Team also welcomes feedback from applicants and reviewers regarding specific conditions and rationale at any time.

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

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) "SCOPE OF OPERATION"
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 [INSERT NAME OF REGIONAL PANEL] 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.

Dogleg - the clearing of a line, trail, or right-of-way that is curved sufficiently so that no part of the clearing beyond the curve is visible when approached from either direction.

Drilling Fluids - any liquid mixture of water, sediment, drilling muds, chemical additives or other wastes that are pumped down hole while drilling and are specifically related to drilling activity.

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.

Flowback - the flow of Fracturing Fluid back to the wellbore after fracture treatment is completed.

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.

Fracturing Fluid - the fluid injected at high pressure to perform a hydraulic fracturing treatment, including the applicable base fluid and all additives.

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.

Oil-Based Drilling Muds - Drilling Fluids that are commonly formulated with diesel, mineral oil, or low-toxicity linear olefins and paraffins.

Oil and Gas Drilling Sump - a surface excavation, constructed of material that exhibits low permeability (hydraulic conductivity of less than 10^{-6} cm/s), for the purpose of depositing and containing Drilling Waste.

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.

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

| | Condition | Category | Rationale |
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| | 26(1)(a) Location and Area | | |
| 1. | The Permittee shall not conduct any part of the land-use operation within ___ metres of any privately owned or leased land or structure, unless otherwise authorized in writing by the Board. | PRIVATE PROPERTY | <p>The condition is included in a Permit where there is a possibility that the land-use operation will infringe upon a person’s private property. The infringement may be in the form of noise, vegetation disturbance, soil stability from borrow or quarry operation, etc. “Privately owned or leased land or structure” includes cabins used for traditional activities, such as trapping, hunting, or fishing.</p> <p>A setback of 300m has sometimes been used in the past, but any number may be used at the discretion of the Board.</p> |
| 2. | The Permittee shall not conduct any part of the land-use operation within ___ metres of a cabin used for traditional activities, including trapping, hunting, or fishing, unless otherwise authorized in writing by the Board. | AVOID CABINS | <p>This condition may not be fully covered by the Private Property condition. The intent here is to protect traditional cabins particularly in cases in which ownership of the land or structure is not clear. Note: land use plans may provide specific buffer/setback distances.</p> <p>A setback of 300m has sometimes been used in the past, but any number may be used at the discretion of the Board.</p> |
| 3. | The Permittee shall locate all camps on Durable Land or previously cleared areas. | CAMP LOCATION | <p>The intent is to minimize disturbance by locating camps, which are heavy use areas, on Durable Land that will endure repeated use. In addition, sites that have no vegetative ground cover can better withstand surface disturbance without the Permafrost melting and the ground surface settling. Durable land is defined in the definitions section.</p> <p>This is consistent with best practices outlines in the Department of Fisheries and Ocean’s <i>Operational Statement on Mineral Exploration</i>.</p> |
| 4. | The Permittee shall use an existing campsite, as described in the complete application. | EXISTING CAMP | <p>The intent of this condition is to minimize land disturbance. Whenever possible, it is preferable to use an existing site rather than to</p> |

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| | | | disturb land for a new campsite. This condition could be used where old campsites are known to exist, for example, in an area where many historic exploration projects have occurred. |
| 5. | 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 | Final drill target locations are often not known at the time the Permit application is submitted, but an Inspector and the Board and an Inspector need to be informed of final drill target locations in order to: ensure that other conditions related to drilling are adhered to, keep a record on the public registry, and inspect drilling locations. |
| 6. | The Permittee shall not conduct a quarry operation within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | QUARRY SETBACK | Inspector authorization as per MVLUR section 6(b). The intent of this condition is to prevent the deposition of sediment from quarrying that, if occurring near Watercourses, could affect water quality and fish Habitat. MVLUR paragraph 6(b) states that, “Unless expressly authorized by a Permit or in writing by an Inspector, no Permittee shall excavate land within 100 metres of a Watercourse at a point that is below its Ordinary High Water Mark”. The wording of this condition is more protective since it includes all land within 100 m of a Watercourse, not only “points below its Ordinary High Water Mark.” Note – quarrying near a Watercourse may require specific mitigation measures or authorization from DFO if there are potential impacts on fish. |
| 7. | The Permittee shall not construct parallel lines or roads, unless an existing line or road cannot be used . | PARALLEL ROADS | This condition applies to both treed and barren ground regions to eliminate unnecessary parallel roads. MVLUR paragraph 10(a) states that “Unless expressly authorized by a Permit, no Permittee shall clear a new line, trail or right-of-way where an existing line, trail or right-of-way can be used.” The Permittee may construct parallel detours, lines, or trails where the original detour, line, or trail cannot be used due to flooding, landslides, washouts, snowdrifts, etc. This condition is necessary, in addition to Location of Activities , because small |

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| | | | <p>lines or trails (particularly temporary winter roads) may not have precise locations defined at the time of the application.</p> <p>Inspector discretion can be used to evaluate whether or not an existing trail can be used.</p> |
| 8. | 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 | <p>The intent of this condition is to avoid or reduce erosion of soil into Watercourses. Natural erosion would be accelerated if trees and other vegetation are cleared near shorelines, particularly for streams.</p> <p>MVLUR section 10 addresses the clearing of lines, trails, and right-of-ways, but does not address required distancing from water.</p> <p>MVLUR section 6 addresses <u>excavations within 100m of a Watercourse</u> (i.e. prohibited unless authorized by a Permit or in writing by an Inspector), but does not address removal of vegetation.</p> |
| 9. | The Permittee shall not conduct this land-use operation on any lands not designated in the complete application. | LOCATION OF ACTIVITIES | The Permittee must submit, for approval, a written request, along with maps, for an amendment to this condition when changes to the area of operation are necessary. Private land, mineral claims, land claims, cultural sites, or other interests in land could be affected. |
| 10. | Prior to the commencement of the land-use operation, the Permittee shall mark each corner of the land-use area. | MARK AREA | The intent of this condition is to inform Inspectors and other people in the area of the land-use area associated with the Permit. This is normally used only when operations are adjacent to each other and there may be conflicts; for example, multiple Permittees accessing the same quarry or adjacent quarries. |
| 11. | The Permittee shall maintain the corner markings until the area is reclaimed. | CORNER POSTS | Used with the Mark Area condition above. |

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| 12. | Prior to the commencement of the land-use operation, the Permittee shall accompany an Inspector during an inspection of the proposed land use area. | INSPECT LOCATIONS | Locations to be disturbed should be inspected to determine the condition of the land use area prior to disturbance [e.g. the locations for any new well sites, Sumps, campsites, quarries, and access road locations as described in the complete application]. This will help determine the appropriate level of cleanup and reclamation work that is necessary when the land-use operation is completed. This condition is only used after consultation with an Inspector. |
| 13. | 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 | In order for the Proponent to be compliant with section 10(c) of the Mackenzie Valley Regulations, the scope of the issued land use permit must authorize the construction, use and maintenance of road right-of-ways up to 12 metres |
| 14. | 26(1)(b) Time | | |
| 15. | At least 48 hours prior to the commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) _____. | CONTACT INSPECTOR | An Inspector must be notified in order to facilitate inspections to ensure that the Permittee is in compliance with the Terms and Conditions of the Permit. This initial contact is important to establish regular communication between the Permittee and an Inspector, as well as to confirm contact information for numerous other conditions that will require communication between the Permittee and an Inspector. The Board should also be notified, but it may not always be possible for the Permittee to contact the Board (e.g. depending on office hours, weekends, etc.) within specific timelines. The Identify Agent condition requires notification in writing to both the Board and an Inspector. |
| 16. | At least 48 hours prior to commencement of the land-use operation, the Permittee shall | IDENTIFY AGENT | This condition would be used where the applicant has not given the contractor's or field supervisor's names on the application because |

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| | <p>provide the following information, in writing, to the Board and an Inspector:</p> <ul style="list-style-type: none"> 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). | | <p>he does not know who they will be at the time of placing the application. Sometimes contracts are awarded after the LUP is issued, so the operating conditions can become part of the contract. Also, this information may change and must be updated with the Board and an Inspector.</p> <p>This written notice must be provided to both the Board and an Inspector.</p> |
| 17. | <p>At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:</p> <ul style="list-style-type: none"> a) the plan for removal or storage of equipment and materials; and b) when final cleanup and reclamation of the land used will be completed. | REPORTS BEFORE REMOVAL | <p>The intent of this condition is to inform an Inspector that the land-use operation is in the final stages of completion, as he/she may want to conduct an inspection before the Permittee leaves the work area and after final cleanup and restoration have been completed.</p> |
| 18. | <p>The Permittee shall not conduct any activity associated with the land-use operation between ___ and ___ [dates].</p> | SHUT DOWN PERIOD | <p>This condition could be used to prohibit all activity during certain periods in order to minimize impacts, for example, on Permafrost, critical wildlife, or fish Habitat.</p> |
| 19. | <p>The Board, for the purpose of this operation, designates ___, as spring break-up.</p> | SPRING BREAK-UP | <p>This condition is normally used in every Permit where other conditions refer to spring break-up, such as shut down dates or removal of snow fills.</p> <p>An Inspector does not have legal authority to change this particular condition, therefore, it does not state 'unless otherwise authorized in writing by an Inspector. However, as stated in conditions titled V-Notch Ice Bridges, Remove Snow Fills, and Sumps/Spring Break-up, an Inspector does have authority to waive or delay the requirement for debris removal (e.g. ice bridges/snow fills) and reclamation of Sumps, depending on the situation from year to year, as per MVLUR 9(2) and 8.</p> <p>The date should be set in consultation with an Inspector. A date of March 31 has sometimes been used in the past, but any date may be</p> |

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| | | | used at the discretion of the Board, considering the climate of the region and the local terrain. |
| 20. | 26(1)(c) Type and Size of Equipment | | |
| 21. | The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application. | ONLY APPROVED EQUIPMENT | <p>This condition ensures that the potential impact on the land with respect to equipment type, size, and number, as listed in the application, are considered when selecting the Permit conditions and approving the Permit.</p> <p>Board staff, an Inspector, and the applicant should work together to see how likely changes in equipment are and whether such changes in equipment would trigger any other requirements (e.g. a water licence), change the environmental impacts and mitigations, and/or change the scope of the project, etc. Board staff should consult with an Inspector and the applicant to decide whether it is appropriate to include “type” and/or “size” and/or “number” – e.g. it some cases it may not be practical to include “number”. Using the word “similar” reduces enforceability (according to legal advice) but may be a practical solution for giving some amount of flexibility to Permittees, within reason, and relying on an Inspector’s discretion.</p> |
| 22. | The Permittee shall use portable ramps during loading or unloading of ships or barges. | PORTABLE RAMPS | The intent of this condition is to minimize disturbance and erosion of stream banks. Portable ramps eliminate the need for dirt push-outs or earth ramps that may cause erosion and sedimentation into streams, harming fish or fish Habitat. Construction of earth ramps may require approval from the Department of Fisheries and Oceans. |
| 23. | 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> . | FIRE-FIGHTING EQUIPMENT | This condition is applicable where there is risk of a land use operation starting a fire. For example, . where the Permittee proposes to dispose of timber, brush, and/or debris by burning during the forest fire season (generally, May 15 to October 1, as described by GNWT). This condition or sections thereof should be used with discretion considering fire risk and fire priority zone, as well as risk to human life, property, natural resources, and cultural resources). |

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| 24. | 26(1)(d) Methods and Techniques | | |
| 25. | The Permittee shall Dogleg lines, trails and right-of-ways that approach Watercourses or public roads. | DOGLEG APPROACHES | The intent of this condition is to maintain and preserve aesthetic values along navigable streams and public roads. This may also be used as an erosion control technique. |
| 26. | 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. | DETOURS AND CROSSINGS | The intent of this condition is to eliminate the use of heavy machines, such as bulldozers, to explore for creek crossings and detours around other obstacles encountered on the proposed lines or routes, as considerable vegetation and trees are disturbed or destroyed in the process. Reconnaissance using light track vehicles, ATV's, aircraft, or by walking will result in less damage to the land and vegetation. It is also more cost effective for the operator. |
| 27. | As the land-use operation progresses, the Permittee shall refill and restore craters caused by explosives. | REFILL CRATERS | Craters resulting from the use of explosives can be a safety hazard to people and animals. |
| 28. | Immediately upon completion of operations at each Borehole, the Permittee shall remove or cut off and seal each drill casing at ground level. | MINERAL EXPLORATION DRILL CASINGS | This condition applies to both small- and large-diameter mineral exploration drilling. The intent is to reduce the potential safety hazard for wildlife and humans, and to maintain aesthetic values. The wording "upon completion of operations at each drill hole" is intended to allow casing removal to be delayed if the Permittee intends to re-enter the drill hole. |
| 29. | Immediately upon completion of operations at each Borehole, the Permittee shall remove or cut off and seal each drill casing below ground level. | OIL AND GAS DRILL CASINGS | This condition applies to oil and gas drilling operations . The intent is to reduce the potential safety hazard for wildlife and humans, to maintain aesthetic values, and to plan ahead for potential ground subsidence. |
| 30. | The Permittee shall remove all wire from the land as the land-use operation progresses. | REMOVE WIRE | The intent of this condition is to prevent obstructions to wildlife Habitat and injuries to wildlife. This condition is often used for activities such as seismic and road blasting. |
| 31. | The Permittee shall construct and maintain the overland portion of | WINTER ROADS | The intent of this condition is to protect mosses, grasses, and small shrubs on the |

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| | winter roads with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation. | | overland portions of winter roads. A layer of snow, packed in place, will help reduce the amount of winter kill of vegetation. Snow cover also adds to the life of the winter road by reflecting the sun's heat. Snow insulates the road surface preventing heat from penetrating the frost in the road bed. Ice may also be used, particularly where sufficient snow is not available. |
| 32. | The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse. | STORAGE ON ICE | The intent of this condition is to reduce the risk of pollution of Watercourses by not allowing camps or stockpiling of materials on ice. 'Watercourse', as defined in the MVLUR, includes all moving and standing water bodies. |
| 33. | Prior to the expiry date of this Permit, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector. | EXCAVATED MATERIAL | Inspector authorization as per MVLUR section 8, which requires excavated material to be replaced, unless otherwise authorized in a Permit or in writing by an Inspector. Safety for people and wildlife is the primary purpose of the condition. Backfilling all holes, including: Sumps, trenches, etc., eliminates the hazard that open holes pose. |
| 34. | The Permittee shall leave a buffer strip of undisturbed vegetation at least 30 metres in width between cleared areas and public roads | TREE SCREEN | The primary reason for this condition is aesthetics, as well as reduced risk of snow blowing/drifted on the road. In some cases, an exception clause may be included in the condition, for example ".... 30 metres in width between cleared areas and public roads <i>except at location _____, where a minimum buffer strip of 10 metres must be maintained.</i> " |
| 35. | 26(1)(e) Type, Location, Capacity, and Operation of All Facilities | | |
| 36. | The Permittee shall ensure that the land use area is kept clean at all times. | CLEAN WORK AREA | The intent of this condition is to instruct the Permittee to keep the land use area generally clean at all times. Cleanup should occur |

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| | | | throughout the land-use operation, not only when the operation is complete. |
| 37. | The Permittee shall mark all seismic lines at least once every 1.5 km indicating the Land Use Permit's number and provide GPS coordinates of each marker to the Board and an Inspector. | MARKERS/ SEISMIC LINES | The intent of this condition is to provide the land use Inspector with a means of identifying who cleared the seismic lines or who the users are on existing seismic lines. In barren regions, the stakes are a visual aid for the land use Inspector. |
| 38. | The Permittee shall provide an electronic copy of all shot and receiver points, for all seismic lines surveyed during the operation, to the Board and an Inspector. | SEISMIC SURVEY DATA | This condition requires all survey information to be provided to an Inspector and may be used at the request of an Inspector. |
| 39. | 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. | SUMPS FROM WATER | Inspector authorization is as per Paragraph 6(b) of the MVLUR, which states that, "Unless otherwise authorized in writing by a Permit or an Inspector....no Permittee shall excavate land within 100 metres of a Watercourse at a point that is below its Ordinary High Water Mark". The intent of this condition is to prevent Waste from entering Watercourses and affecting water quality, fish and other aquatic life, and downstream users. |
| 40. | 26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land | | |
| 41. | The Permittee shall install and maintain culverts such that scouring does not occur. | CULVERT SIZE | The installation of culverts, if not done correctly, can change the flow of water through and downstream of the culvert, resulting in scouring and erosion leading to the release of sediment into the water. Sediment deposited in water can affect water quality, fish, and other aquatic life. Elevated culvert entrances can cause scouring which may create an obstruction for migrating fish and result in destruction or fragmentation of fish Habitat. Wording of this condition is based on the DFO <i>Fact Sheet on Culvert Installations</i> . |

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| 42. | <p>The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:</p> <ul style="list-style-type: none"> a) any vegetation present from being removed; b) the melting of Permafrost; and c) the ground settling and/or eroding. | PERMAFROST PROTECTION | <p>This condition applies especially to operations conducted during summer in Permafrost regions and particularly where there are unstable soils having a high ice content that are covered with vegetation. The intent is for a mat to be laid down to protect the ground on which buildings, equipment, and for materials to be placed or stored, particularly buildings or structures that are heated.</p> |
| 43. | <p>The land-use operation shall not cause obstruction to any natural drainage.</p> | NATURAL DRAINAGE | <p>The intention of this condition is to prevent the impoundment of water, unless this is the intent of the undertaking for which a water licence has been obtained, such as in the case of construction of reservoirs to generate electricity, a water supply for towns and cities, or industrial use such as hydraulic mining. This condition is intended to prevent ponding, flooding, erosion, damage to fish Habitat, and other potential impacts of obstructed/modified drainages. It applies to any and all types of obstructions; for example, those caused by ice bridges, snow fills, inadequate erosion control measures, excessive vegetation clearing, and improper culvert design/installation, etc.</p> |
| 44. | <p>The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses.</p> | PROGRESSIVE EROSION CONTROL | <p>This requires the Permittee to prevent and mitigate erosion throughout the life of the project. Inspectors will use their discretion to determine whether the efforts of the Permittee are satisfactory and consistent with best practices - e.g. a focus on preventing erosion rather than trying to stop or clean up sediment that has already been eroded.</p> |
| 45. | <p>The Permittee shall, where flowing water from a Borehole is encountered:</p> <ul style="list-style-type: none"> 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. | FLOWING ARTESIAN WEL | <p>Flowing artesian wells resulting from drilling programs may affect adjacent land owners or cause erosion. Water flowing from bore holes could transport sediment or additives to surrounding lands or water bodies. The groundwater level may be affected, which could affect vegetation and/or impact surrounding well water levels.</p> <p>Inspectors can take immediate action if necessary, such as a field inspection to ensure that LUP conditions are being adhered to and</p> |

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| | | | <p>that any risk to people or the environment is mitigated.</p> <p>The Board must also be notified to ensure that information is posted to the public registry and is available to inform future Board decisions and/or LUP conditions regarding development in the area</p> |
| 46. | The Permittee shall not conduct off-road vehicle travel in areas without snow-covered surfaces. | OFF-ROAD VEHICLE TRAVEL | This condition applies where repeated use of a single route will damage the surface of the land or vegetation during winter or summer. |
| 47. | The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface. | PREVENTION OF RUTTING | The intent of this condition is to prevent damage to vegetation and rutting of the ground with heavy machinery, especially during summer in Permafrost regions where there are unstable soils with high ice content. It requires the use of some type of supporting and insulating pad or mat or geotextile, or a snow/ice pad, and requires that the Permittee be proactive in preventing rutting. |
| 48. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting. | SUSPEND OVERLAND TRAVEL | This condition would apply to land-use operations carried out during summer where machinery and vehicles make repeated trips over lines and trails, eventually rutting the ground and damaging the vegetation, especially in wet areas. This condition could also apply to spring break-up and fall freeze-up when the ground may not be sufficiently frozen for vehicles to travel without damaging the soil and vegetation. |
| 49. | 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. | VEHICLE MOVEMENT FREEZE-UP | This condition puts the onus on the Permittee to determine whether or not the ground is dry and firm enough or sufficiently frozen to support machinery and vehicles. The intent is to prevent damage to the land surface and vegetation. |
| 50. | The Permittee shall not use any material other than clean water and snow in the construction of ice bridges. | ICE BRIDGE MATERIALS | The intent of this condition is to keep Waste out of Watercourses. Logs, planks, sawdust, soil, etc. are prohibited because when frozen into the ice bridge, they become difficult, if not impossible, to remove before spring break-up. |

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| 51. | The Permittee shall not use any materials other than clean snow and water in the construction of snow fills. | SNOWFILL MATERIALS | The intent of this condition is to keep Waste out of Watercourses. Logs, planks, sawdust, soil, etc. are prohibited because they become difficult, to remove before spring break up. If not removed, they would be deposited into the Watercourse. |
| 52. | 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. | REMOVE OR V-NOTCH SNOWFILLS | <p>Inspector authorization as per MVLUR section 9, which also requires cleanup and restoration of natural drainage.</p> <p>The intent of this condition is to prevent pollution and the alteration of drainage in streams. An Inspector can decide when and whether removal is necessary, or whether v-notching is preferable. In some cases, removal could damage the stream bank, thus v-notching would be preferable.</p> <p>This condition is consistent with the DFO <i>Operational Statement on Ice Bridges and Snow Fills</i>, which recommends that: “Compacted snow should be removed from snow fills prior to the spring freshet”.</p> <p>Timing of cleanup and v-notching is provided by the Spring Break – Up condition.</p> |
| 53. | 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. | V-NOTCH ICE BRIDGES | <p>Inspector authorization as per MVLUR section 9, which also requires cleanup and restoration of natural drainage.</p> <p>The intent of this condition is to prevent pollution and the alteration of drainage in streams. V-notching of ice bridges is a best practice recommended by DFO. Timing of cleanup and v-notching is provided by the Spring Break – Up condition.</p> |
| 54. | The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector. | STREAM BANKS | Inspector authorization as per MVLUR Paragraph 6(b), which requires any cutting of a stream bank to be authorized within a Permit or by an Inspector. If authorization to cut a stream bank is given to the Permittee, then mitigation of erosion and slumping should be coordinated with a Fisheries Officer and an Inspector. |

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| | | | <p>The intent of this condition is to ensure that stream crossings are established at locations where both banks are low in order to prevent bank-cutting and subsequent erosion. This is especially important where there is flowing water.</p> <p>This condition is consistent with best practices, as outlined in the DFO <i>Operational Statement on Temporary Stream Crossings</i>, which recommends that, “Grading of the stream banks for the approaches should not occur. If the stream bed and banks are steep and highly erodible (e.g., dominated by organic materials and silts) and erosion and degradation are likely to occur as a result of equipment fording, then a temporary bridge should be used in order to protect these areas”.</p> |
| 55. | The Permittee shall minimize approach grades on all Watercourse crossings. | MINIMIZE APPROACH | <p>The intent of this condition is to prevent erosion of stream banks and potential impacts to fish Habitat. The term “minimize” is somewhat vague, but it allows an Inspector to use his/her discretion to ensure that low-grade crossings are selected and erosion is prevented.</p> |
| 56. | The Permittee shall not ford wet streams. | NO FORDING OF STREAMS | <p>The intent of this condition is to prevent erosion of stream banks and stream beds and the deposition of sediment into streams. Sediment can affect water quality and harm fish and other aquatic life and their Habitat.</p> <p><i>DFO Operational Statement on Temporary Stream Crossings</i> recommends: “The use of temporary bridges or dry fording is preferred over fording in flowing waters due to the reduced risk of damaging the bed and banks of the Watercourse and downstream sedimentation caused by vehicles.”</p> |
| 57. | The Permittee shall slope the sides of Waste material piles, excavations, and embankments — except in solid rock — to a minimum ratio of 2:1 vertical, unless otherwise authorized in writing by an Inspector. | EXCAVATION AND EMBANKMENTS | <p>Inspector authorization as per MVLUR section 8, which requires that excavated material be replaced unless otherwise authorized by a Permit or Inspector.</p> <p>This condition is applicable on public roads and in areas accessible by the public. Safety, aesthetics, and erosion prevention are the main</p> |

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| | | | factors. Sloping the sides of cuts, fills, and piles aids in stabilizing the soil and reducing erosion. |
| 58. | The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse. | WATERCOURSE BUFFER | <p>The intent of this condition is to control erosion and to avoid sediment deposition into water-bodies where it can affect water quality and fish Habitat. It also protects sensitive riparian Habitat.</p> <p>The condition places additional requirements on the Permittee; in addition to MVLUR section 6 requirements regarding excavations.</p> <p>If activities within 100 metres of a Watercourse are an approved part of the project – for example at crossings – an exception should be added to this condition – e.g. “....except as described in the application” or “except at crossings”.</p> |
| 59. | The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | EXCAVATE NEAR WATERCOURSE | <p>Inspector authorization as per MVLUR section 6.</p> <p>The intent of this condition is to prevent erosion and sediment deposition within a Watercourse. This condition is based on MVLUR paragraph 6(b) which states that no Permittee shall, “Excavate land within 100 metres of a Watercourse at a point that is below its Ordinary High Water Mark”. However, this condition is more stringent, since it prohibits excavation on all land within 100 metres of a Watercourse and not only land that is <i>below</i> its Ordinary High Water Mark’.</p> <p>Note: work in or near a Watercourse may require a water licence and/or DFO authorization.</p> |
| 60. | 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material | | |
| 61. | The Permittee shall not use any Drilling Fluids, or additives that were not identified in the complete | DRILLING CHEMICALS | The intent of this condition is to ensure that chemicals used in oil and gas drilling and hydraulic fracturing operations are reviewed |

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| | <p>application, unless the MSDSs are provided to the Board and Inspector and usage of the chemical(s) is authorized in writing by the Board.</p> | | <p>and approved by the Board. Depending on the chemical's composition and characteristics, different management and mitigation measures may be required. Please see the detailed rationale for the general Chemicals conditions.</p> <p>The Board authorization process during the life of a project includes input from an Inspector and may include input from other parties.</p> |
| 62. | <p>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.</p> | <p>CHEMICALS</p> | <ul style="list-style-type: none"> • Authority: the Board has authority to make conditions related to chemical use and disposal, as per MVLUR 26(1)(g) • Purpose and rationale: this condition allows Board and Inspector to review the chemical and take action if they are concerned that its use may impact the environment. If appropriate, the Board may require the Permittee to update his/her management or mitigation measures or the Spill Contingency Plan. • The condition should match the scale of the project, be practical, and enforceable: <ul style="list-style-type: none"> ○ Board approval of every chemical is not practical for all operations. Inspectors note that mineral exploration projects may change Drilling Fluids 10 or more times over a few years, always using some type of biodegradable, non-toxic fluid. For this type of operation, direct approval of individual chemicals is not necessary because conditions for Waste disposal already prevent deposit of any Toxic Material (defined in definitions section). ○ For hydraulic fracturing or other activities that may use Toxic Material, the Board may wish to use the Drilling Chemicals condition to require Board authorization prior to use of any new chemicals. ○ Seven days notice does not significantly delay the Permittee (since they need time to order and ship a Drilling Fluid or other chemical). • No conflicts with legislation: Inspector authorization of specific chemicals is not |

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| | | | <p>supported by MVLUR, therefore, either Board authorization or no authorization should be used.</p> <ul style="list-style-type: none"> • |
| 63. | 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 | <p>The intent of this condition is to prevent the deposit of Drilling Waste into Watercourses.</p> <p>These four conditions on drilling near water and Drilling Waste are always used together.</p> |
| 64. | 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 | <p>The intent of this condition is to prevent drill Waste from entering water bodies where it could affect water quality and fish Habitat. This condition states that it is acceptable to dispose of non-toxic Waste on the land; removal is not required. If it is safe to do so, an Inspector may authorize a Sump that is less than 100 metres from a Watercourse, as per MVLUR section 6.</p> <p>These four conditions on drilling near water and Drilling Waste should always be used together.</p> |
| 65. | The Permittee shall remove all Drilling Waste containing Toxic Material to an approved disposal facility. | DRILLING WASTE DISPOSAL | <p>Waste containing Toxic Material must be removed to prevent contamination of soil, groundwater, and surface water. An approved facility means a facility that is certified by the relevant regulatory body (e.g. federal, provincial, territorial) to accept the Waste/substances that are to be removed.</p> <p>These four conditions on drilling near water and Drilling Waste should always be used together.</p> |
| 66. | The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses. | DRILLING WASTE CONTAINMENT | <p>The intent of this condition is to contain Drilling Waste. If Drilling Waste is allowed to spread to adjoining lands or into streams, water quality, vegetation, and wildlife and fish Habitat could be seriously affected.</p> <p>These four conditions on drilling near water and Drilling Waste should always be used together.</p> |
| 67. | The Permittee shall ensure that all Drilling Fluids, Flowback, and Produced Water wastes are | OIL AND GAS WASTEWATER CONTAINMENT | <p>The intent of this condition is to contain liquid Drilling Waste generated during hydraulic fracturing operations.</p> |

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| | contained in storage tank(s) located within a bermed area with leak detection and a synthetic liner that is considered impermeable and is capable of containing 110% of the total volume of the largest storage tank(s) employed within the bermed area. | | If Drilling Waste is allowed to spread to adjoining lands or into streams, water quality, vegetation, and wildlife and fish Habitat could be seriously affected. |
| 68. | Prior to rig removal, the Permittee shall supply, to the Board and an Inspector, a list of mud components used during the drilling operation. | OIL AND GAS MUD COMPONENTS | Waste containing Toxic Material must be removed to an approved facility to prevent contamination of soil, groundwater, and surface water. An approved facility means a facility that is certified by the relevant regulatory body (e.g. federal, provincial, territorial) to accept the Waste/substances that are to be removed. This condition applies to oil and gas operations. |
| 69. | Prior to spring break-up, the Permittee shall reclaim all Sumps, unless otherwise authorized in writing by an Inspector. | RECLAIM SUMPS | Inspector authorization is consistent with MVLUR section 8, which requires that excavated material be replaced, unless otherwise authorized by a Permit or Inspector. This condition is intended primarily for Sumps associated with oil and gas drilling activities. Sump reclamation prior to spring break-up is of particular concern in Permafrost areas where melt-out of ground ice and snow may cause the Sump to overflow. |
| 70. | 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 | Inspector authorization is consistent with MVLUR section 8, which requires that excavated material be replaced, unless otherwise authorized by a Permit or Inspector. The intent of this condition is to have Sumps and pits backfilled so that: a) buried materials remain in place and do not spread to surrounding lands or waters; b) the land when restored is close to its original state; and c) aesthetics of the site are improved. |
| 71. | At least ten days prior to backfilling any Oil and Gas Drilling Sump the Permittee shall notify an Inspector. | NOTIFICATION OF OIL AND GAS SUMP BACKFILLING | The intent of this condition is to allow an Inspector the opportunity to inspect the Sump before backfilling and/or to observe the backfilling operation to determine: |

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| | | | <p>(a) the nature and level of contents (freeboard); (b) if liquid is totally frozen; and (c) if there is overflow during backfilling.</p> <p>This condition only applies to oil and gas Sumps.</p> <p>It is not normally necessary to notify an Inspector prior to the backfilling of a Sewage/grey water Sump or a diamond drill cuttings Sump.</p> |
| 72. | <p>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:</p> <p>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.</p> | REPORT SPILLS | <p>Spills must be reported in order to ensure adequate cleanup occur, necessary mitigation measures are implemented, and records are maintained. In addition to reporting spills to the spill report line, this condition also explicitly requires the Permittee to maintain records of all spills, to report each 'reportable' spill to an Inspector within 24 hours, and to submit reports to the Board and Inspector within 30 days regarding the spill and the Permittee's cleanup efforts.</p> |
| 73. | <p>The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.</p> | WASTE CHEMICAL DISPOSAL | <p>The Permittee's Waste Management Plan must describe the disposal methods for all Toxic Material. The methods and techniques for disposal will be subject to the approval of the Board, and there should be consultation with other agencies. This is a general condition that refers to all Toxic Material, other than substances for which there are specific conditions (e.g. Drilling Waste). Toxic Material may include brine, antifreeze, equipment fluids, Drilling Fluids/additives, etc.</p> |
| 74. | <p>The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility.</p> | WASTE PETROLEUM DISPOSAL | <p>This is the general condition for Waste petroleum disposal. Petroleum products can pollute soil and streams if disposed of indiscriminately.</p> |

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| 75. | The Permittee shall dispose of all Waste petroleum products by removal to an approved disposal facility or by incineration in a device designed for this purpose, as described in the approved Waste Management Plan. | WASTE PETROLEUM DISPOSAL | Petroleum products can pollute soil and streams if disposed of indiscriminately. This condition applies only if the Permittee has proposed to incinerate Waste petroleum in the Waste Management Plan submitted with the application, and if the Board has approved incineration as described in the plan – if so the Waste Petroleum Disposal condition above would not be used. Waste petroleum can be used in specially designed furnaces or boilers to heat buildings, thus reducing the need to ship and consume petroleum, while minimizing air emissions from incineration. |
| 76. | 26(1)(h) Wildlife and Fish Habitat | | |
| 77. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT DAMAGE | The intent of this condition is to instruct the Permittee to take care when using machinery and vehicles so as to do the least damage possible to vegetation and other Habitat components. This is a general condition that applies to all land-use operations; specific measures to protect Habitat are required under conditions for Waste management, erosion control, etc. |
| 78. | 26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage | | |
| 79. | 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 | A Waste Management Plan must be submitted with the application. This condition requires implementation of the plan. Any proposed changes to Waste management must be submitted to the Board for approval in a revised plan. |
| 80. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE CONTAINER | This condition applies mainly to very small camps where the volume of garbage produced each day is not enough to warrant daily burning or removal. The purpose of containment is to stop wildlife from getting into the garbage. This condition can be used in conjunction with daily burning, but it is especially necessary if burning |

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| | | | is not done every day. Examples of a secure container may include: any container inside a building, a covered metal container, etc. Inspector will use his/her discretion to determine whether a container is adequate or not. |
| 81. | 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 | Inspector authorization as per MVLUR subsection 14(1), although the MVLUR refers specifically to garbage from a 'campsite'. The intent of this condition is to keep the land use area clean and to reduce pollution and associated impacts on land, water, fish, and wildlife. |
| 82. | The Permittee shall dispose of all Sewage and Greywater into a Sump at least 100 metres from the Ordinary High Water Mark of any Watercourse. | SEWAGE DISPOSAL - SUMP | The intent of this condition is to prevent contamination of land and water from Sewage and Greywater. If Sewage is not contained, it may affect water quality and be a risk to human health. Sewage is considered to degrade naturally over time in the environment; therefore, disposal in a Sump is often acceptable. |
| 83. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | SEWAGE DISPOSAL - PLAN | The intent of this condition is to prevent contamination of land and water from Sewage and Greywater. If Sewage is not contained, it may affect water quality and be a risk to human health. This is a more generic version of the Sewage Disposal - Sump condition above, since some Permittees do not use Sump disposal (they may use incinerating toilets, dispose of Greywater and Sewage separately, etc.). If Sewage is to be deposited in a Sump, the general condition, Sumps From Water (in section e), would also apply; it specifies a 100-metre setback for all Sumps from any Watercourse. |
| 84. | 26(1)(j) Protection of Historical, Archaeological, and Burial Sites | | |
| 85. | The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected | ARCHAEOLOGICAL BUFFER | The intent of this condition is to protect cultural sites, whether known or suspected (pursuant to MVLUR section 6, which states that a buffer of |

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| | historical or archaeological site or burial ground. | | <p>30 metres must be maintained). These archaeological conditions are all related to overlapping jurisdiction, but paragraph 26(1)(j) and section 6 of MVLUR give specific authority to the Board and the MVLUR to protect these sites. These three conditions (Archaeological Buffer, Site Disturbance, and Site Discovery and Notification) are normally included in all permits.</p> <p>The distance noted in this condition should be set in consultation with the PWNHC, land claim groups, and an Inspector. Minimum normal buffers established in regulations or recommended by PWNHC and land claim groups are as follows: MVLUR section 6 (30m), Sahtu Settlement Area (150m), Wek’eezhii (150m). Sahtu area requires 500m buffer for burial grounds.</p> <p>Exceptions can be added if there is an approved activity within the normal buffer – e.g. “...The Permittee shall not operate any vehicle or equipment within 70 metres of sites x12 and x14.”</p> |
| 86. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | SITE DISTURBANCE | The intent of this condition is to protect cultural sites, whether known or suspected, consistent with condition below and with MVLUR paragraph 12(a). |
| 87. | <p>The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered:</p> <p>a) immediately suspend operations on the site; and</p> <p>b) notify the Board at (867) _____ or an Inspector at (867) _____, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71250 or ext. 71251.</p> | SITE DISCOVERY AND NOTIFICATION | This condition is intended to protect newly discovered archaeological sites and ensure they are registered with the Prince of Wales Northern Heritage Centre (PWHNC). MVLUR paragraph 12(a) requires notification of the Board or an Inspector but not direct notification of GNWT. Notification of PWHNC (GNWT) is an extra requirement, which is not in the MVLUR, that the Boards can use if desired. Inspectors are responsible for informing the Board if they are notified. |
| 88. | At least _____ days prior to any new land disturbance, including new drill sites, the Permittee shall conduct an | ARCHAEOLOGICAL OVERVIEW | 1) Authority – MVLUR 6 and 26(1)(j) outline the authority within the MVLUR and of the Board with regard to archaeological, historical, and |

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| | <p>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.</p> | | <p>burial sites. Historical sites are not explicitly included in the condition because the definition of “archaeological sites” in the NWTASR includes historical sites (i.e. sites that are greater than 50 years old).</p> <p>2)Purpose - Other standard LUP conditions and the NWT Archaeological Sites Regulations prohibit disturbance of an archaeological site; this condition requires an overview or assessment to facilitate the identification of new sites. Archaeological Overview and Impact Assessment are defined in the Guidelines for Developers for the Protection of Archaeological Sites in the NWT (PWNHC) – an overview generally does not involve fieldwork or require an archaeological permit; an assessment does involve fieldwork, and thus must take place when the ground is not snow-covered, and does require an archeological permit. Summary reports (excluding precise locations of archaeological sites) submitted to the Board will be placed on the public registry and Board staff will be responsible for notifying aboriginal organizations and other interested or impacted parties when new information is submitted.</p> <p>3)Practical and enforceable</p> <ul style="list-style-type: none"> • Practical –The archaeological overview requirement provides an opportunity for the permittee to proceed with relatively small land disturbances (e.g. 100 10m x 10m mineral exploration drill locations equals 1ha of disturbance over a 10km x 10km area vs large disturbances for roads or mine infrastructure) without conducting archaeological fieldwork in areas of low archaeological potential, while being more protective of areas with obvious high archaeological potential. The Permittee must be aware that fieldwork required for an Archaeological Impact Assessment must occur when the ground is snow-free, and plan their drill program and other disturbances accordingly. Note: other archaeological conditions (i.e. Archaeological Buffer, Site Disturbance, Site Discovery and Notification) apply to |
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| | | | <p>all land use areas regardless of their potential.</p> <ul style="list-style-type: none"> • Enforceable - Enforcement would be administered by the Board, through distribution of and review of reports submitted by the Permittee. <p>4)Matches scale of project – This condition requires reporting on archaeological work that is conducted for planned disturbances; the requirement is therefore proportionate to the amount of disturbance the Permittee plans to undertake and to the archaeological potential of the areas in which disturbance is planned. For projects with relatively small land disturbances (e.g. 100 mineral exploration drill holes), the chance that a drill site will be placed on an archaeological site is already low, and avoidance of areas of high potential (e.g. types of terrain where known sites are common, such as eskers) through the Archaeological Overview requirement further minimizes the risk of impacts. For large disturbances like roads or mine sites, an Archaeological Impact Assessment will normally be required for the entire disturbance area (not just for areas of high potential).</p> <p>5)No conflicts with existing leg/regs –The NWT Archaeological Sites Regulations prohibit disturbance of an archaeological site. There is nothing in the Archaeological Sites Regulations that conflicts with the land use permit condition and the Archaeological Impact Assessment required under this condition provides a means of finding artifacts and identifying sites. Permits for archaeological fieldwork and detailed reporting of archaeological information to PWNHC are required, as described in the Guidelines for Developers for the protection of archaeological sites in the NWT.</p> <p>Condition always used together with AIA – High Potential,</p> |
| 89. | Prior to disturbance in areas of high potential for archaeological or burial sites identified in the | AIA – HIGH POTENTIAL | See rationale for Archaeological Overview. |

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| | 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. | | Condition always used together with Archaeological Overview . |
| 90. | Prior to any new land disturbance, 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 | See rationale for Archaeological Overview , and: <u>For larger projects with significant land disturbance</u> (i.e. a mine site, road, etc.), it is often appropriate to require an Archaeological Impact Assessment prior to any disturbance, rather than only an Overview to determine high/low potential. |
| 91. | 26(1)(k) Objects and Places of Recreational, Scenic, and Ecological Value | | |
| 92. | The Permittee shall not conduct any activity within _____. [a buffer zone, e.g. 500 m from Jackfish lake, or predefined area, e.g. the Yellowknife River watershed] | BUFFER / NO ACTIVITY | The intent of this condition is to protect Habitat in sensitive locations or times of year, for example, related to vegetation, nesting or den areas, calving, incubation of eggs, and rearing of young. The condition may also be used to limit or prevent impacts on important cultural, spiritual, recreational, and/or scenic values. |
| 93. | 26(1)(l) Security Deposit | | |
| 94. | Prior to the commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$_____. | SECURITY DEPOSIT | Security may be required by the Board and should be calculated based on the security spreadsheet formulas, which are intended to estimate the cost for a third party to access and restore the site if the Permittee abandons it (pursuant to MVLUR section 32). |
| 95. | All costs to remediate the area under this Permit are the responsibility of the Permittee. | RESPONSIBILITY FOR REMEDIATION COSTS | This condition is a basic statement of responsibility for costs to restore site. It is in accordance with MVLUR sections 29 (final clearance requirements) and 15 (restoration of Permit area). |
| 96. | 26(1)(m) Fuel Storage | | |

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| 97. | <p>The Permittee shall:</p> <p>a) examine all Fuel Storage Containers and Tank for leaks a minimum _____ [e.g. once per day]; and</p> <p>b) repair all leaks immediately.</p> | CHECK FOR LEAKS | <p>The frequency of checks would be designated by an Inspector or Board staff on the basis of quantity of fuel, type of container (e.g. top-fed vs. bottom-fed Tanks), location, etc. The frequency of checks for Fuel Storage Tanks/containers that are in use should be more often than for stored fuel, since they may be more likely to have leaks (due to being attached to hoses/fittings, container being temporarily out of Secondary Containment, etc). For example, checks could be required once per month for stored fuel that is not in use and once per day or week for fuel that is in use.</p> |
| 98. | <p>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.</p> | FUEL NEAR WATER | <p>Inspector authorization as per MVLUR 6.</p> <p>The intent of this condition is to provide a buffer in order to prevent fuel spills from impacting surface water. This is consistent with MVLUR paragraph 6 (b); however, this condition is more protective since MVLUR only prohibits fuel within 100 metres of a Watercourse below its Ordinary High Water Mark. The Board, when considering the application, and an Inspector, during the operation, may authorize fuel storage within 100 metres of water under specific conditions (e.g. if moving fuel further poses a risk of leaks/spills, if there is a hill separating fuel from water, etc.).</p> |
| 99. | <p>The Permittee shall ensure that all fuel caches have adequate Secondary Containment.</p> | FUEL CACHE SECONDARY CONTAINMENT | <p>The intent of this condition is to ensure that fuel does not contaminate surrounding lands and waters. Containers may leak, so Secondary Containment is meant to contain any leaks and protect the environment while repairs and cleanup take place. Secondary Containment for large caches of fuel drums (e.g. 500) may be impractical; however, such large amounts of fuel should be stored in a proper storage tank, which must meet Environment Canada regulations.</p> <p>An Inspector will determine what is “adequate” for any given project based on the type and amount of fuel, terrain, location and layout of fuel caches, etc.</p> |

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| 100. | The Permittee shall set up all refueling points with Secondary Containment. | SECONDARY CONTAINMENT – REFUELING | Purpose & Rationale: to prevent spills, leaks, and drips from impacting the land during refueling. Refueling is a situation when there is the potential for spills. Practical & Enforceable: it is only a small inconvenience for the Permittee to use secondary containment during refueling. This will assist with compliance with the Fuel Containment condition as well. |
| 101. | The Permittee shall only use stands approved by an Inspector for supporting Fuel Storage Containers that are in use. | FUEL CONTAINER STANDS | The intent of this condition is to reduce the likelihood of failure and spillage and to facilitate inspection of containers. |
| 102. | The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours. | FUEL ON LAND | The intent of this condition is to protect ice and water from fuel spills when mobile fuel equipment is in use on ice-covered Watercourses. This condition commonly applies to seismic operations and winter road construction. Storage of non-mobile fuel on ice is not permitted, except for immediate use, as stated in the general Storage on Ice condition. |
| 103. | The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name. | MARK CONTAINERS AND TANKS | The intent of this condition is to ensure that containers are marked so an Inspector can identify who is responsible for any containers both during operations and after cessation of operations. This condition normally applies to all activities, and particularly where two or more Permittees are carrying out operations using the same ground, such as winter roads, stockpiling/storage sites, etc. |
| 104. | 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 | The intent of this condition is to mark fuel caches so they are visible to equipment operators so they won't run their machinery over the fuel containers. This is especially important in tundra and barren regions and particularly where bladders are used. Also, the marking of fuel caches makes inspections easier. |
| 105. | The Permittee shall have a maximum of ____ litres of fuel stored on the land use site at any | MAXIMUM FUEL ON SITE | The intent of this condition is to ensure that the amount of fuel stored is consistent with the amount of fuel identified in the application. The liability on site, linked to the requirement |

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| | time, unless otherwise authorized in writing by the Board. | | for a security deposit, depends in part on the maximum amount of fuel on site at any time. In addition, the potential for impacts from spills, including worst-case scenarios, is sensitive to the maximum amount of fuel on site at any time. Board approval would be required for substantial changes to the maximum fuel storage (i.e. >10 percent change). |
| 106. | 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 | The intent of this condition is to inform an Inspector of all fuel caches the Permittee may have on the project site so that inspections can be conducted to ensure cleanup and restoration has been done when the operation is complete. MVLUR section 7 also requires small fuel caches to be reported to the Board. |
| 107. | 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 | The intent of this condition is to prevent leaking of petroleum fuel from container outlets, valves and nozzles, particularly where fuel caches are unattended. Small containers such as kegs, barrels, and cylinders, when not being used, should be stored with openings facing upwards to help prevent leaks. Inspectors have recommended that best practice is to have outlets of fuel drums/barrels at 3 and 9 o'clock, so that a worst case scenario would be a spill of half the container. |
| 108. | 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 | A Spill Contingency Plan must be submitted with the application. This condition requires that the Spill Contingency Plan be implemented in order to prevent contamination of land and water in case of any fuel spill. Any changes in fuel storage locations, volumes, container/tank types, chemicals to be used, etc. must be reflected in an updated Spill Contingency Plan. |
| 109. | 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 | In order to prevent contamination of land and water in case of any fuel spill, Spill Contingency Plans and spill cleanup kits must be in place prior to commencement of operations. |

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| 110. | All equipment that may be parked for two hours or more, shall have a haz-mat/drip tray under it or be sufficiently diapered. Leaky equipment shall be repaired immediately. | DRIP TRAYS | The purpose of this condition is to prevent small leaks/drips from contaminating a site, especially parking areas used frequently at remote sites. |
| 111. | The Permittee shall clean up all leaks, spills, and contaminated material. | CLEAN UP SPILLS | This is an explicit requirement to clean up all spills and leaks, whatever the size (e.g. drips on snow). This is a frequent item noted in inspection reports for drilling programs and winter roads. This is also related to the general requirement for adherence to a Spill Contingency Plan, as stipulated under the Spill Contingency Plan condition. |
| 112. | 26(1)(n) Methods and Techniques for Debris and Brush Disposal | | |
| 113. | 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 | Progressive disposal is necessary to keep a work area clean, particularly where there are aesthetic concerns, and it may assist with fire prevention. An Inspector will decide how much progressive disposal is necessary and satisfactory (in some cases disposal may be delayed), but final disposal is always required prior to the expiry of the Permit. |
| 114. | The Permittee shall not clear areas larger than identified in the complete application. | MINIMIZE AREA CLEARED | This condition would apply: a) In areas of unstable or high ice content soils where removal of vegetation may result in erosion or subsidence; b) In areas of merchantable or immature timber; and c) In areas visible to the public. d) The condition may also be used in a general way to minimize disturbed areas and impacts on environment. |
| 115. | The Permittee shall not clear any vegetation. | NO CLEARING | This condition is an alternative to the Minimize Area Cleared condition for cases where clearing was not identified in the application, where the environment is very sensitive, and/or no clearing is allowed. Sensitive environments may include discontinuous Permafrost areas where trees provide shade (insulation) or Habitat for species at risk or are of special |

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| | | | cultural or other importance. The condition also applies to a situation in which a Permittee wants to (or is required to) use existing trails, the right-of-ways of which are not to be widened because doing so would infringe upon adjoining land claims blocks, private property, etc. This condition may also be used as a general Habitat/vegetation protection measure. |
| 116. | The Permittee shall not use any self-propelled machinery for clearing the brush. | HAND CREWS ONLY | The intent of this condition is to prevent erosion and maintain aesthetics, particularly in areas where there is Permafrost or in areas of unstable soils, such as along stream banks or steep slopes. The intent is to prevent disturbance or removal of the ground cover in order to prevent movement/erosion of soil caused from either Permafrost melt or exposure of unstable soils to water and wind. This is primarily for seismic activities and prohibits any mechanized clearing of brush (whereas the Clearing Sensitive Area condition applies only to specific locations). |
| 117. | The Permittee shall clear by hand all trees and brush a minimum distance of ____ metres from the top edge of all stream banks and top edge of slopes. | CLEARING SENSITIVE AREA | This is for prevention of erosion. Ten metres is suggested as a general distance but can be modified for site-specific considerations. |
| 118. | 26(1)(o) Restoration of the Lands | | |
| 119. | All areas affected by construction or removal activities shall be stabilized and landscaped to their pre-construction profiles, unless otherwise authorized in writing by an Inspector. | PRE-CONSTRUCTION PROFILES | Inspector authorization as per MVLUR section 8, which states that “Unless otherwise authorized by a Permit or in writing by an Inspector, every Permittee shall replace all materials removed by the Permittee in the course of excavating, other than rock trenching, and shall level and compact the area of the excavation”. The intent of this condition is to restore the land use area in order to prevent erosion, improve aesthetics, and allow for future uses. Application of this condition includes construction activities and it provides additional detail to MVLUR 8 regarding stabilization and landscaping to pre-construction profiles. |

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| 120. | The Permittee shall dispose of all overburden as instructed by an Inspector. | DISPOSAL OF OVERBURDEN | <p>Inspector authorization as per MVLUR section 8, which states that “Unless otherwise authorized by a Permit or in writing by an Inspector, every Permittee shall replace all materials removed ...”.</p> <p>Waste soil (overburden) removed to expose useable or needed material is generally deposited next to the quarry or borrow pit. The best arrangement is a sloped, round, or oblong pile. An Inspector should authorize placement of Waste piles where they are likely to cause the least damage to the environment and at the same time improve aesthetics. This condition is primarily for quarries, and it authorizes that excavated material need not be replaced, as per MVLUR section 8.</p> <p>This condition is an alternative to the Save and Place Organic Soil condition.</p> |
| 121. | The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector. | SAVE AND PLACE ORGANIC SOIL | <p>Inspector authorization as per MVLUR section 8, which states that “Unless otherwise authorized by a Permit or in writing by an Inspector, every Permittee shall replace all materials removed ...”.</p> <p>The intent of this condition is to help restoration of the land and to facilitate plant re-growth. This condition is consistent with requirements to replace excavated material, as per MVLUR section 8, but also specifies that the soil be maintained separately from other material. This condition is not generally used for quarry operations but for pipelines, Sumps, trenching, etc.</p> <p>This condition is an alternative to the Disposal of Overburden condition.</p> |
| 122. | Prior to the expiry date of this Permit, the Permittee shall level all stockpiles of granular material located within the land use area. | NO STOCKPILES | The intent of this condition is to maintain aesthetic values at quarrying sites; it may also improve safety and reduce mischief. |
| 123. | Prior to the expiry date of this Permit, the Permittee shall | FINAL CLEANUP AND RESTORATION | The intent of this condition is to ensure that final cleanup and restoration are completed within the term of the Permit. Any material left |

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| | complete all cleanup and restoration of the lands used. | | for future work must be approved by the Board through a Storage Authorization. Ideally, cleanup and restoration are done progressively and are complete when the Permit expires. MVLUR section 15 requires restoration of the Permit area “after completion of a land-use operation”. This condition clarifies the deadline for cleanup/restoration work. |
| 124. | 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 | <p>As noted by Inspectors, preparing the site for natural revegetation is sometimes preferable to active replanting.</p> <p>Natural revegetation is recommended when (Yukon Revegetation Manual, 2012):</p> <ul style="list-style-type: none"> • it has been decided there should be no risk of introducing foreign seeds or plants to the region, including cultivars of native species. Usually this applies to sites in or near a natural preserve or park. • a substantial layer of organic material can be spread on the site or when the organic soil has not been disturbed, such as when the site has been grubbed but not scraped. • there is a natural source of seeds and colonizing plants immediately adjacent to the site or in the soil. <p>Unless more specific criteria are specified by the Board in this condition, Inspector’s discretion will be used to determine the adequacy of site preparation.</p> <p>This condition is an alternative to the Active Revegetation condition.</p> |
| 125. | Prior to the expiry date of this Permit, the Permittee shall initiate active revegetation of disturbed areas. | ACTIVE REVEGETATION | <p>Active revegetation is preferred when (Yukon Revegetation Manual, 2012):</p> <ul style="list-style-type: none"> • there is an immediate or imminent threat of significant erosion at the site; this includes most sites with a slope over 15% grade; • the site has little or no organic content; <i>i.e.</i>, it is essentially bare mineral soil; • the site is so large that the centre will be too far from seed sources and colonizing plants; |

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| | | | <ul style="list-style-type: none"> • it is not acceptable to wait 10-20 years for significant natural vegetation to develop; or • populations of invasive plants are known to inhabit the area, because they will outcompete native colonizers; <p>Unless more specific criteria are specified by the Board in this condition, Inspector’s discretion will be used to determine whether this condition is satisfied.</p> <p>This condition is an alternative to the Natural Revegetation condition.</p> |
| 126. | The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so. | PROGRESSIVE RECLAMATION | The intent of this condition is to encourage progressive reclamation. ‘As soon as practical’ is vague, but an Inspector’s discretion can be used to determine what is practical on a case-by-case basis. |
| 127. | 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 | The intent of this condition is restoration and cleanup of any trapper trails that may have been followed or crossed by the Permittee when carrying out the land-use operation. Failure to restore trails could result in the trapper’s requesting compensation for damaged equipment such as snowmobiles or sleighs. The condition also applies to trails used for recreation and other purposes. |
| 128. | 26(1)(p) Display of Permits and Permit Numbers | | |
| 129. | The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. | DISPLAY PERMIT | The intent of this condition is to inform the Permittee how and where permits or copies are to be displayed. |
| 130. | The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation. | COPY OF PERMIT | The intent of this condition is to inform the Permittee how and where permits or copies are to be displayed. This condition is commonly used when there is no camp established in conjunction with the land-use operation and/or when it is desirable for the Permittee to be able to consult the Permit immediately. |
| 131. | 26(1)(q) Biological and Physical Protection of the Land | | |

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| 132. | <p>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.</p> | SUBMIT REVISED PLAN | <p>Condition to specifically require submission of a revised plan (Waste, Spill, Engagement) if the plan submitted with the original application is not approved at the time the LUP is issued. Normally, these plans are approved at the time an LUP is issued, but depending on the extent of revisions required, it is up to the Board to determine whether to issue the LUP with a condition such as this or to delay issuing the permit until the revisions are complete and plans are approved.</p> |
| 133. | <p>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.</p> | RESUBMIT PLAN | <p>Condition to provide clarity on the process for dealing with plans that are submitted after issuance of an LUP, but are not approved by the Board.</p> |
| 134. | <p>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.</p> | ENGAGEMENT PLAN | <p>To ensure the Permittee follows through on the intent of the commitments made in the Engagement Plan.</p> |
| 135. | <p>All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.</p> | SUMMARY OF CHANGES | <p>To facilitate efficient review and tracking of different versions of Plans.</p> |