



Mackenzie Valley Land and Water Board  
7th Floor - 4910 50th Avenue  
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FILE NUMBER: MV2014X0011

Date: January 4, 2016  
To: Distribution List  
Organization: Various  
Fax Number: Various  
Copied To: \_\_\_\_\_  
From: Elaine for Miki Ehrlich, Regulatory Officer

Number of pages including cover 23

**Remarks:**

Request for review and comment on Amendment  
request submitted by Apache Canada

\*\* Application is attached

- ☐ Enclosures
- ☐ As requested
- ☒ For your information
- ☒ For your comment
- ☐ For your approval

**Delivered by** **Date**

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## Permits

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**From:** ORS Administrator <lwbors@yk.com>  
**Sent:** Thursday, December 24, 2015 5:15 PM  
**To:** Undisclosed Recipients  
**Cc:** Miki Ehrlich; Jen Potten; Lynn.Huntley@apachecorp.com; sam.bird@worleyparsons.com  
**Subject:** Request for Comments on MVLWB Item - Apache Canada Ltd. - Land Use Permit Amendment (MV2014X0011)

The Mackenzie Valley Land and Water Board invites reviewers to submit comments on **Apache Canada Ltd. - Land Use Permit Amendment (MV2014X0011)** via the LWB Online Review System.

- To access **Apache Canada Ltd. - Land Use Permit Amendment (MV2014X0011)**, please follow this link: [LWB Online Review System](#).
- The deadline for reviewers to submit comments is Jan 14 at 9:59pm Mountain Time.
- The deadline for the proponent to submit responses is Jan 20 at 9:59pm Mountain Time.
- The User Manual for the LWB Online Review System is available [here](#).

This request is being distributed by email only. If you require materials to be mailed or faxed, or require other assistance, please contact the Mackenzie Valley Land and Water Board.

- Jen Potten: 867-766-7468 [jpotten@mvlwb.com](mailto:jpotten@mvlwb.com)
- Miki Ehrlich: 867-766-7469 [mehrlich@mvlwb.com](mailto:mehrlich@mvlwb.com)

Please sign in to update your notification preferences and note that this is a system generated email, so any feedback should be directed to [permits@mvlwb.com](mailto:permits@mvlwb.com).



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**Application for:**

**New Land Use Permit** ☐ **Amendment** ☒ to **MV2014X0011**

1. Applicant's name and mailing address: Lynn Huntley (Senior Environmental Coordinator) Apache Canada Ltd. Suite 2800, 421 - 7th Ave SW Calgary, AB T2P 4K9	Fax number: 403 261 1350
	Telephone number: 403 817 5077
2. Head office address: Same as above  Field supervisor: Boyd Stewart Radiotelephone: (no radiotelephone)	Fax number: 403 261 1350
	Telephone number: 780 608 5225
3. Other personnel (subcontractor, contractors, company staff etc.)  Contractors and subcontractors have not been selected at the time of this application.  TOTAL: (Number of persons on site)  Unchanged from the original application.	
4. Eligibility: (Refer to section 18 of the <i>Mackenzie Valley Land Use Regulations</i> )  a)(i) X    a)(ii)    a)(iii)    b)(i)X    b)(ii)	
5. a) Summary of operation (Describe purpose, nature and location of all activities.)  The purpose of this application is to amend the timeframe of planned operations originally submitted in the application for Land Use Permit MV2014X0011. The original application sent to the Mackenzie Valley Land and Water Board on April 16, 2014 outlined a plan to conduct environmental assessments, remediation, road maintenance and well abandonment activities in summer months between March 31 and October 1. Land Use Permit (LUP) MV2014X0011 was granted by the MVLWB in June 2014 based on that application. Apache is currently evaluating an opportunity to complete a portion of the remediation work at Pointed Mountain from January to April 2016. If this work proceeds, it would be scheduled to coincide with activities that Westcoast Energy intends to undertake at its pipeline facilities located at and near Pointed Mountain. The conditions of the existing permit do not restrict Site activities to the summer season and therefore no amendments to specific conditions are being requested at this time. A letter sent to the MVLWB on December 23, 2015 outlines the activities being considered and additional mitigation measures that Apache will incorporate into its original plans to facilitate effective and environmentally safe operations in winter. The reasons for this requested change are outlined in the same letter.  b) Please indicate if a camp is to be set up. (Please provide details on a separate page, if necessary.) A camp will not be set up during winter operations.	

6. Summary of potential environmental and resource impacts (Describe the effects of the proposed land-use operation on land, water, flora & fauna and related socio-economic impacts. Use separate page if necessary.)

No adverse environmental impacts are expected to occur from conducting the work in the winter months instead of summer months. As with the original application, there may be economic benefits for contractors within the local community. To reduce possible increased traffic impacts to the community, vehicles are planned to be routed around the Hamlet of Fort Liard on the Bypass road near the airstrip.

7. Proposed restoration plan (please use a separate page if necessary).

This application is requesting a change in the season of operation for the remediation activities. A remediation plan which constitutes the restoration plan was submitted to the MVLWB for approval as part of the existing LUP on June 30, 2015.

8. Other rights, licences or permits related to this permit application (mineral rights, timber permits, water licences, etc.)

Land Use Permit MV2014X0011

Roads: Is this to be a pioneered road? No. Has the route been laid out or ground truthed? Yes.

Roads will be on existing roadways and over ice bridges being built by Westcoast Energy. The route has been ground truthed.

9. Proposed disposal methods.

To complete this section of the application form, a Waste Management Plan for the proposed activities is to be developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan* (click [here](#) to access) and submitted as an attachment to the application form. A template for this Plan is provided in the *Guidelines*.

a) Garbage:

c) Brush & trees:

b) Sewage (Sanitary & Grey Water):

d) Overburden (Organic soils, waste material, etc.):

Not applicable for this amendment application. A waste management plan has already been submitted to the MVLWB.


10. Equipment (includes drills, pumps, etc.) (Please use separate page if necessary.)

A list of additional equipment is in the letter sent to the MVLWB on December 23, 2015 and an updated complete list was included in Appendix 1 of the letter.

Type & number

Size

Proposed use


11. Fuels	( )	Number of containers	Capacity of containers	Location								
Diesel	Not applicable for this amendment application. No additional fuel will be brought to Site that was not listed in the original application.											
Gasoline												
Aviation fuel												
Propane												
Other												
<p>12. Containment fuel spill contingency plans.  A spill contingency plan for the proposed activities is to be developed in accordance with INAC's <i>Guidelines for Spill Contingency Planning, April 2007</i> (accessible <a href="#">here</a>). This plan is to be submitted as an attachment to the application form.</p> <p>A spill contingency plan has previously been submitted to the MVLWB. An updated spill contingency plan will be submitted to the MVLWB in the first week of January.</p>												
<p>13. Methods of fuel transfer (to other tanks, vehicles, etc.)</p> <p>Same as original application.</p>												
<p>14. Period of operation (includes time to cover all phases of project work applied for, including restoration)</p> <p>This amendment application seeks to extend the operating season from the original March 31 to October 1 timeframe to include possible work during winter months from January to March 31.</p>												
<p>15. Period of permit (up to five years, with maximum of two years of extension).</p> <p>Not applicable for this amendment application. Existing five year permit expires on June 5, 2019.</p>												
<p>16. Location of activities by map co-ordinates (attach maps and sketches) - NAD83 (Map submitted with original Application)</p> <table border="1"> <tr> <td>Minimum latitude (degrees, minutes, seconds) 60° 11' 19"</td> <td>Maximum latitude (degrees, minutes, seconds) 60° 27' 30"</td> </tr> <tr> <td>Minimum longitude (degrees, minutes, seconds) 123° 39' 18"</td> <td>Maximum longitude (degrees, minutes, seconds) 123° 59' 00"</td> </tr> </table>					Minimum latitude (degrees, minutes, seconds) 60° 11' 19"	Maximum latitude (degrees, minutes, seconds) 60° 27' 30"	Minimum longitude (degrees, minutes, seconds) 123° 39' 18"	Maximum longitude (degrees, minutes, seconds) 123° 59' 00"				
Minimum latitude (degrees, minutes, seconds) 60° 11' 19"	Maximum latitude (degrees, minutes, seconds) 60° 27' 30"											
Minimum longitude (degrees, minutes, seconds) 123° 39' 18"	Maximum longitude (degrees, minutes, seconds) 123° 59' 00"											
<p>Map Sheet no. Not applicable for this amendment application.</p>												
<p>17. Applicant  Print name in full: Lynn Huntley</p> <div style="text-align: center;">  </div> <p style="text-align: center;">Signature</p> <p style="text-align: right;">Date December 24, 2015</p>												
<p>18. Fees</p> <table> <tr> <td>Type A - \$150.00 **</td> <td>Type B - \$150.00 **</td> <td colspan="2">(**Application Fees are Non-Refundable**)</td> </tr> <tr> <td>Land use fee: <u>N/A</u> hectares @ \$50.00/hectare</td> <td>Assignment fee \$50.00</td> <td>\$ <u>N/A</u></td> <td>Total application \$ <u>N/A</u></td> </tr> </table> <p style="text-align: center;"><b><i>Please make all cheques payable to "Receiver General of Canada"</i></b></p>					Type A - \$150.00 **	Type B - \$150.00 **	(**Application Fees are Non-Refundable**)		Land use fee: <u>N/A</u> hectares @ \$50.00/hectare	Assignment fee \$50.00	\$ <u>N/A</u>	Total application \$ <u>N/A</u>
Type A - \$150.00 **	Type B - \$150.00 **	(**Application Fees are Non-Refundable**)										
Land use fee: <u>N/A</u> hectares @ \$50.00/hectare	Assignment fee \$50.00	\$ <u>N/A</u>	Total application \$ <u>N/A</u>									



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23 December 2015

Proj. No.: 407074-00349-100  
File Loc.: Calgary

Mackenzie Valley Land and Water Board  
7th Floor, 4922 - 48 Street  
Yellowknife, NT  
X1A 2P6

Attention: Miki Ehrlich, Regulatory Officer

Dear Ms. Ehrlich:

**RE: MV2014X0011 - APPLICATION TO AMEND PLANNED TIMING OF SITE ACTIVITIES**

## **1. INTRODUCTION**

This letter has been sent on behalf of Apache Canada Ltd. (Apache), to amend the timeframe of planned operations originally submitted in the application for Land Use Permit MV2014X0011 (WorleyParsons 2014).

The original application sent to the Mackenzie Valley Land and Water Board on April 16, 2014 outlined a plan to conduct environmental assessments, remediation, road maintenance and well abandonment activities in summer months between March 31 and October 1. Land Use Permit (LUP) MV2014X0011 was granted by the MVLWB in June 2014 based on that application.

Apache would like to inform the MVLWB that it is currently evaluating an opportunity to complete a portion of the remediation work at Pointed Mountain from January to April 2016. If this work proceeds, it would be scheduled to coincide with activities that Westcoast Energy intends to undertake at its pipeline facilities located at and near Pointed Mountain.

The conditions of the existing permit do not restrict Site activities to the summer season and therefore no amendments to specific conditions are being requested at this time.

The purpose of this letter is to outline the activities being considered and additional mitigation measures that Apache will incorporate into its original plans to facilitate effective and environmentally safe operations in winter.





## 2. PLANNED WORK

Winter options currently under consideration include:

- well inspection and abandonment at the Plant Site and other accessible well sites;
- excavation, transportation and off site disposal of contaminated soil; and
- road maintenance to support the winter work activities.

If the work does proceed, in an effort to minimize the impact of traffic to the Hamlet of Fort Liard, Apache is evaluating the use of the Bypass Road east of the airstrip as the transportation route for trucks involved in transporting soil to a landfill in Fort Nelson, BC.

## 3. RATIONALE

The potential sharing of a winter road with Westcoast Energy has created an opportunity to conduct remediation activities during the first three months of 2016. Winter access roads planned for construction and use by Westcoast Energy in January, February and March of 2016 will provide access between Fort Liard and Apache's Pointed Mountain Plant Site.

The timeline being considered for this task is ahead of the schedule outlined in the remediation plan (WorleyParsons 2015) that is currently under review by the MVLWB but is in keeping with the overall remediation goals for the Former Pointed Mountain Gas Field (Site).

### 3.1 Environmental Remediation

The January to March work period would be optimized by concentrating excavation efforts on a limited number of locations that contain impacted soil which cannot be treated on site.

#### 3.1.1 Primary Objective

As described in the remediation plan (WorleyParsons 2015), the Plant Site contains salt impacted soil that is not practical to treat on site. The preferred remediation strategy for this soil is to remove the contaminant source (surge pond area) to an off site landfill.

Water within the surge pond will be sampled and analysed for parameters in Schedules 1 and 2 of the Guideline for Industrial Waste Discharges in the NWT (Environment and Natural Resources [ENR] 2004). Discrete samples will be collected from near the bottom of the ice surface and from approximately 1 m above the bottom of the pond. A sample of the ice will also be collected and analysed as a water sample. The analytical results will be provided to the Inspector with a request to discharge the pond water (and ice) at the Site in such a manner as to avoid erosion. In the event that the water does not meet discharge criteria, the water would be trucked to an off site licensed disposal facility.

In compliance with Condition 59 of the existing LUP, organic top soil would be stripped from the excavation and borrow areas, stockpiled and replaced as cover material over the disturbed areas following backfill.



In the event that some of the salt impacted source material soil must remain in situ at the end of the winter work season, an impermeable barrier would be placed in the excavation to separate clean fill from remaining contaminants and the excavation would be contoured to avoid ponding and promote positive drainage. Removal of remaining source material would be scheduled to coincide with planned future remediation activities at the Site.

Unimpacted backfill for the excavation would likely be sourced from the land surrounding the surge pond. Soil would be moved from elevated areas and sloped towards the excavation. The resulting landscape would resemble a drainage basin that is blended into the natural slope below. If additional backfill material is required to produce stable slopes and prevent future ponding, it may be sourced from the former airstrip or an off site location. Backfill from any off site source would be sampled and analysed prior to being transported to Site to ensure contaminants are not brought to the Site or used as backfill.

The backfilled area would be inspected in the spring to assess for potential settling and slumping prior to seeding the disturbed area. In keeping with recommendations that ENR provided based on the remediation plan, Apache would seek ENR's approval of a seed mix and will be developing a weed management plan that will incorporate a strategy for newly disturbed areas.

### 3.2 Infrastructure Removal

The opportunity to use an existing ice bridge will allow well abandonment equipment efficient access to the Site. Timing well abandonment with other remediation activities will allow for an efficient environmental assessment, and possible source removal by soil excavation, around any well heads as they are exposed for abandonment.

## 4. SEDIMENT AND EROSION CONTROL

Westcoast Energy will open and maintain the winter roads and ice bridge crossing between Fort Liard and the Plant Site and has submitted an erosion and sediment control plan to the MVLWB to cover these operations (Triton 2015).

Apache will manage sediment and erosion control for the following conditions: watercourse crossings, discharge of ponded water and loose soil at disturbed excavations/borrow sources.

For all sites except the road to the A2 and A4 well sites, established bridges or culverts are already in place at locations where roads cross waterbodies. Additional erosion and sediment control measures will not be required where bridges and culverts exist.

If access to the A2 and A4 well sites is required, and the road to the A2 and A4 well site has been flooded due to beaver activity, the following mitigation measures will be used:

- a snow or ice road will be built over any flooded/marshy road surface to avoid rutting. Snow and water placed over the road bed would be free of debris to avoid sedimentation from melting water in the spring; and
- at the end of the winter activities, V-notches would be dug through the ice road bed to facilitate spring runoff along watercourses.





Diffusers would be used to prevent erosion if any water is released to surface at the Site.

Erosion and sediment issues during winter excavation activities are unlikely to pose a risk due to a lack of flowing water. Final backfill grades and contouring will be shaped to promote positive drainage, minimize surface flow velocities and facilitate the establishment of new vegetative growth. Silt fence, erosion control matting or other stabilization tools will be considered for use on a case by case basis. Disturbed areas will be inspected in the spring once snow cover has melted to assess settlement and erosion. The disturbed areas will be re-seeded with a seed mix approved by ENR.

## 5. COORDINATION OF ACTIVITIES

Apache has been discussing simultaneous operations on the winter roads with Westcoast Energy. Road use by Westcoast Energy will primarily be during the early morning and in the evening during daily mobilization and demobilization. The bulk of Apache's road use would occur between these periods and all traffic would be co-ordinated with Westcoast Energy.

## 6. ADDITIONAL EQUIPMENT

A camp and stationary fuel storage will not be required for the potential winter program. The equipment required to conduct the proposed scope of work is essentially the same as previously submitted to the MVLWB. The only changes required are the addition of:

- a Bombarider snow cat or similar machine for clearing snow and travelling unplowed areas (8,200 kg);
- snowmobiles for personnel transport;
- a D8 bull dozer (34,000 kg);
- an additional tracked excavator and water truck;
- two rock trucks (33,000 kg); and
- an increased number and variety of dump trucks may need to travel to and from the Site daily.

The complete list of equipment that is planned for use during the remediation program (including the proposed winter work) has been updated and is in Appendix 1. The additional equipment has also been added to the security template for ease of use by the MVLWB.

## 7. COMMUNITY ENGAGEMENT

Apache sent letters via email to the Acho Dene Koe, Metis Local 67, and the Hamlet of Fort Liard to inform the community of the winter activities being considered and to invite feedback from the community. An engagement log in Appendix 2 of this document contains a summary of the engagement activities undertaken.

Apache will make efforts to use companies and people that have working relationships with the local community.



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### 8. CLOSURE

We trust that this letter satisfies your current requirements and provides suitable documentation for your records. If you have any questions or require further details, please contact the undersigned at any time.

Sincerely,

Sam Bird, B.Sc.  
Environmental Scientist



Ron Thiessen, M.Sc.(Eng), P.Eng., EP  
Principal Engineer

NAPEG Permit to Practice P029



## 9. REFERENCES

ENR (Environment and Natural Resources), 2004. Guideline for Industrial Waste Discharges in the NWT. Available at:  
[http://www.enr.gov.nt.ca/sites/default/files/guidelines/industrial\\_waste\\_guidelines.pdf](http://www.enr.gov.nt.ca/sites/default/files/guidelines/industrial_waste_guidelines.pdf).  
April 2004.

Triton (Triton Environmental Consultants Ltd.), 2015 Sediment and Erosion Control Plan, Pointed Mountain Pipeline Removal at Kotaneelee River Crossing. Prepared for Westcoast Energy Inc., November 2015.

WorleyParsons (WorleyParsons Canada Services Ltd.), 2014, Mackenzie Valley Land and Water Board Land Use Permit Application – Former Pointed Mountain Gas Field. File No. 407074-00036-200. April 14, 2014.

WorleyParsons (WorleyParsons Canada Services Ltd.), 2015, Remediation Plan (Revision 2) - Former Pointed Mountain Gas Field. File No. 407074-00414-300. June 30, 2015.



## Disclaimer

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*Any questions concerning the information or its interpretation should be directed to Sam Bird.*



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## Appendices





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## **Appendix 1      Possible Equipment Used On Site**

APACHE CANADA LTD.  
EQUIPMENT LIST FOR LAND USE PERMIT MV2014X0011  
Pointed Mountain

Type	Number	Size	Approximate Weight in kg	Proposed Use
Service rig (rig)	1		45,000	Pull tubing, conduct downhole abandonment
pump and tank (service rig)	1		26,500	
CCU/accumulator and junk skid (service rig)	1		32,600	
Cement trucks	2		25000	Remedial cementing
Vacuum truck	1		30,000	Haul waste fluids
Pressure truck	1		30,000	Test well head cementing
Water trucks	2		20,000	Haul water for service rigs, dust suppression and winter road construction.
Ambulance vehicle	1		4,000	For emergencies
Wireline trucks	1		18,000	Wellbore work
Borehole logging truck	1		15,000	Logging for cement tops, location of gas leaks
Quad trailer (dump truck)	25	Various	40,000	Hauling soil
End dump (dump truck)	10		40,000	Hauling soil
Trucks (pick-ups, vans)	10	½ or ¾ ton	3,200	Transporting personnel
Side by Side ATV	4	2-4 person	500	Transporting personnel
ATV	2		350	Transporting personnel
Snowmobile	2		225	Transporting personnel
Welding truck	1	1 ton	5,000	Cap wells and pipelines
Hydrovac unit	1		20,000	Underground facility exposures
Dozer	1	D8	34,000	Ripping and moving soil
Dozer	1	D6	20,000	Moving soil
Dozer	1	D3	8,000	Moving soil, re-contouring
Track hoe	2	200-345	45,000	Environmental assessment activities
Rubber tired hoe	1		8,000	Environmental assessment activities
Environmental drill rig (weight includes all supplies and trailer)	2		6,000 and 55000	Environmental assessment activities
Small boat	1		500	Surface water sampling
Low boy trailer	4		40,000	Transport materials and heavy equipment
Flatbed truck	1	5 T	14,000	Transport materials
Fuel truck	1	5 T	25,000	Fueling heavy equipment
Snowcat (Bombardier or similar)	1		8,200	Moving snow
Rock Truck	2	730 to 740	33,000	Hauling soil on-Site

## Land Use Permit Security Worksheet

Application Number:

Input  
Amount Multiplier

### Camp (C1)

#### Temporary Structures

Input number of tent frames or weather haven (3.5m x 4.2m)	0	\$200.00	\$0.00
Input number of trailers (3.5m x 15.2m)	2	\$300.00	\$600.00
Input total square metres of other temporary structures (i.e. core shacks)	0	\$2.50	\$0.00

#### Fixed Structures

Input total square metres of fixed structures	0	\$25.00	\$0.00
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#### Solid Waste

For non-burnable material, input # of person days per season	60	\$1.00	\$60.00
For burnable material, input # of person days per season	60	\$0.50	\$30.00

**Total C1** \$690.00

### Regulated / Hazardous Materials (R1)

Based upon on site volume

Explosives; up to 500 kg (~pallet) dry explosives input 1, if none, input 0	0	\$500.00	\$0.00
Additional Explosives; input total kg >500	0	\$0.50	\$0.00
Drilling Muds (oil based); enter number of 63 m <sup>3</sup> (or equivalent) containers	0	\$1,000.00	\$0.00
Used Oil, Lubes and Antifreeze: enter number of pieces of heavy equipment	5	\$500.00	\$2,500.00
Other; Approximately 35 dump trucks may be used for transporting soil from the Site to an off-Site landfill. It is expected that each dump truck will not be on-Site for more than 6 hours per day.			

**Total R1** \$2,500.00

### Hydrocarbon Storage and Transfer (H1)

Based upon on site volume

#### Gasoline and Diesel

Enter total volume of gasoline and diesel <25,000 L	0	\$0.50	\$0.00
Enter total volume of gasoline and fuel >25,000 L	0	\$0.25	\$0.00

**Total Gasoline and Diesel** \$0.00

When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0 0 25% \$0.00

#### Aviation Fuel

Enter total volume of aviation fuel < 25,000 L	0	\$0.50	\$0.00
Enter total volume of aviation fuel > 25,000 L	0	\$0.25	\$0.00

**Total Aviation Fuel** \$0.00

When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0 0 25% \$0.00

**Total H1** \$0.00

### Land Disturbance (L1)

#### Disturbed Surface Area

(Developed surface area that may require restoration through the use of scarification, reseeding, fertilizing or other similar techniques)

Enter number of hectares disturbed	0	\$1,000.00	\$0.00
------------------------------------	---	------------	--------

#### Other Land Disturbances

Creek Crossings; enter number of creek crossings	0	\$500.00	\$0.00
Off-Road Activities; if any activities are likely, enter 1	0	\$500.00	\$0.00
Sump Factor; enter total area occupied by sumps in m <sup>2</sup>	0	\$10.00	\$0.00
Well Factor; enter number of wells.	0	\$25,000.00	\$0.00

**Total L1** \$0.00

## Land Use Permit Security Worksheet (continued)

Application Number:	Input Amount	Multiplier
<b>Equipment (E1)</b>		
Based upon type of equipment		
Enter number of pieces of heavy equipment (i.e. dozer, forklift, large gensets)	5	\$1,000.00      \$5,000.00
Enter number of drills	0	\$1,000.00      \$0.00
Enter number of light vehicles (trucks, ATVs, snowmobiles, boats)	2	\$250.00      \$500.00
Enter number of small generators or pumps	0	\$100.00      \$0.00
Enter number of empty fuel storage tanks	0	\$500.00      \$0.00
<b>Total E1</b>		<b>\$5,500.00</b>

<b>Security Calculation</b>		
<b>Preliminary Calculation</b>		
Enter amount from C1		\$690.00
Enter amount from R1		\$2,500.00
Enter amount from H1		\$0.00
Enter amount from L1		\$0.00
Enter amount from E1		\$5,500.00
Preliminary Calculation, total of above	A	\$8,690.00
<b>Multipliers</b>		
Site Access Multiplier. If the project has all weather road access enter 1, if ice road access enter 1.5, if air access enter 2	B	1.5
Performance Multiplier. If applicant has successfully completed the terms of a LUP enter 0.85, otherwise enter 1	C	0.85
Environmental Risk Factor. If location has high environmental value or unusual environmental risk enter 2. If location is previously disturbed enter 0.75. Otherwise enter 1.	D	0.75
<b>Calculated Security</b>		
Multiply preliminary calculation (A) by performance multipliers (B, C and D)	E	\$8,309.81
<b>Existing Securities</b>		
List existing associated permits and amount of overlapping security		
Permit: MV2014X0011		\$400,000.00
Permit:		
Permit:		
Permit:		
Overlapping Securities, total of above	F	\$400,000.00
<b>Final Security Determination</b>		
Subtract overlapping securities (F) from calculated security (E)		-\$391,690.19

<b>Comments</b>



**Advisian**

WorleyParsons Group

## **Appendix 2     Community Engagement Log**



ENT ACTIVITY TYPE	ISSUES RAISED BY AFFECTED PARTY	RECOMMENDATIONS FROM AFFECTED PARTY	PROPOSER RESPONSE TO ISSUE
Letter	No concerns with the plan.	Please go ahead with your application.	Letter sent by e-mail to inform ADK about possible winter remediation work that Apache is considering. Ask for feedback on plans. Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain.
Letter		No reply received as of December 23	Letter sent by e-mail to inform Metis about possible winter remediation work that Apache is considering. Ask for feedback on plans. Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain.
Letter		No reply received as of December 23	Letter sent by e-mail to inform Hamlet about possible winter remediation work that Apache is considering. Ask for feedback on plans. Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain.

**APACHE CANADA LTD.  
ENGAGEMENT RECORD SUMMARY  
Pointed Mountain**

Name of Affected Party: Acho Dene Koe

ATTENDEES/REPRESENTATIVE	DATE	REASON FOR ENGAGEMENT	OVERVIEW OF ISSUES RESOLVED	OVERVIEW OF ISSUES UNRESOLVED
Chief Deneron	December 15, 2015	Letter to inform ADK about possible winter remediation work that Apache is considering. Ask for feedback on plans.	Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain.	
Chief Deneron	December 22, 2015	Reply to December 15 letter.	No concerns with the plan. Please go ahead with your application.	None.

Signature of Proponent Rep: \_\_\_\_\_

Signature of Affected Party Rep: \_\_\_\_\_

**APACHE CANADA LTD.**  
**PRE-SUBMISSION ENGAGEMENT RECORD SUMMARY**  
**Pointed Mountain**

Name of Affected Party: Metis

ATTENDEES	DATE	REASON FOR ENGAGEMENT	OVERVIEW OF ISSUES RESOLVED	OVERVIEW OF ISSUES UNRESOLVED
Ernie MacLeod	December 15, 2015	Letter to inform Metis about possible winter remediation work that Apache is considering. Ask for feedback on plans.	Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain.	No reply to date.
Kayly Deneron	December 21, 2015	E-mail to ask if there are any questions or concerns regarding the December 15 letter.		No reply to date.

Signature of Proponent Rep: \_\_\_\_\_

Signature of Affected Party Rep: \_\_\_\_\_

**APACHE CANADA LTD.  
PRE-SUBMISSION ENGAGEMENT RECORD SUMMARY  
Pointed Mountain**

Name of Affected Party: Fort Liard Community

ATTENDEES	DATE	REASON FOR ENGAGEMENT	OVERVIEW OF ISSUES RESOLVED	OVERVIEW OF ISSUES UNRESOLVED
Mayor Morris McLeod	December 21, 2015	E-mail to ask if there are any questions or concerns regarding the December 15 letter.	Letter states that winter work is being considered to coincide with an ice bridge that Westcoast Energy is building to the plant site at Pointed Mountain and that a transportation route on the east side of the Hamlet airstrip is being considered to reduce traffic through the community.	No reply to date.

Signature of Proponent Rep: \_\_\_\_\_

Signature of Affected Party Rep: \_\_\_\_\_

**DEHCHO REGION DISTRIBUTION LIST**

Organization	Contact Name	Contact Position/Title	Email
Fort Liard Metis Local #67	Ernie McLeod	President	(867)770-4573;
Fort Simpson Métis Local #52	Marie Lafferty	President	(867)695-2040;
Hay River Metis Council	Karen Lafferty	President	(867)874-4472; <a href="mailto:hmmc@northwestel.net">hmmc@northwestel.net</a> ;
[Liard First Nation if in asserted area]	Daniel Morris	Chief	(867)536-7910;
Northwest Territory Métis Nation	Garry Bailey c/o Tim Heron	NWTMN IMA Coordinator	(867)872-3586; <a href="mailto:rcc.nwtmn@northwestel.net">rcc.nwtmn@northwestel.net</a> ;



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YELLOWKNIFE NT X1A 2P6  
Phone (867) 669-0506  
FAX (867) 873-6610

FILE NUMBER: MV2014X0011

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Number of pages including cover 23

## Remarks:

Request for review and comment on Amendment  
request submitted by Apache Canada

\*\* Application is attached

- ☐ Enclosures  
☐ As requested  
☒ For your information  
☒ For your comment

☐ For your approval

Delivered by Date

☐ Courier  
Hand  
☐ Delivered

☒ Fax Jan. 4, 16  
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002	006	8676952040	09:44:20 a.m. 01-04-2016	00:02:57	23/23	1	EC	HS	CP28800
003	006	8678744472	09:44:20 a.m. 01-04-2016	00:03:11	23/23	1	EC	HS	CP31200
004	006	867 536 7910	09:44:20 a.m. 01-04-2016	00:03:15	23/23	1	EC	HS	CP21600
005	006	8678723586	09:44:20 a.m. 01-04-2016	00:03:29	23/23	1	EC	HS	CP24000