



Stantec Consulting Ltd.
500-311 Portage Avenue, Winnipeg MB R3B 2B9

February 2, 2021
File: 11473012

Attention: Chief Clarence Easter
Chemawawin Cree Nation
Box 9, Easterville, MB R0C 0V0

Dear Chief Clarence Easter,

Reference: Response to Comments on Lynn Lake Gold Project

Thank you for your October 9, 2020 comments, which Chemawawin Cree Nation provided to the Impact Assessment Agency of Canada (IAAC).¹ Alamos Gold Inc. (Alamos) has carefully considered the 131 comments Chemawawin Cree Nation made about the Environmental Impact Statement (EIS) for the Lynn Lake Gold Project (the Project). In Alamos' view, many of the comments raise the same general themes. As such, we have decided to respond to these themes in this letter. Some of Chemawawin Cree Nation's comments raise technical issues. Here, Alamos has responded to each of these comments in the attached document.²

EIS METHODOLOGY

The EIS for the Project was conducted in accordance with applicable federal legislation and guidelines at the time of filing the Project Description: the former *Canadian Environmental Assessment Act, 2012* (CEAA 2012) and the *Guidelines for the Preparation of an Environmental Impact Statement Pursuant to the Canadian Environmental Assessment Act, 2012* (EIS Guidelines) that were issued for the Project by the former CEA Agency (now the Impact Assessment Agency of Canada [IAAC]). These EIS Guidelines, which were provided in draft in September 2017 and finalized in November 2017, identify the Indigenous Nations potentially affected by the Project. The public, including Indigenous Nations, had the opportunity to comment on the EIS Guidelines.

Alamos recognizes that Chemawawin Cree Nation holds Treaty rights under Section 35 of the *Constitution Act* and may exercise these rights throughout the province of Manitoba, under the terms of the *Natural Resource Transfer Agreement* of 1930. The assessment of the potential effects of the Project on the ability of Indigenous peoples to exercise their Indigenous and Treaty rights was developed in accordance with the EIS Guidelines for the Project and was also informed by best environmental assessment practices, feedback received from the identified Indigenous Nations potentially affected by the Project, Crown consultation and accommodation reports for recent Projects, and IAAC policy statements (See EIS Chapter 19, Section 19.9.1.5).

The information sources for the EIS and its assessment of the potential effects of the Project on the ability of Indigenous peoples to exercise their Indigenous and Treaty rights include information from the Indigenous engagement program for the Project, traditional land and resource use (TLRU) studies submitted to Alamos, the results of a review of publicly available sources, and the results of relevant

¹ IAAC was formerly the Canadian Environmental Assessment Agency (CEA Agency).

² This document is entitled "Lynn Lake Gold Project Environmental Impact Statement: Responses to Technical Comments from Chemawawin Cree Nation".

Reference: Response to Comments on Lynn Lake Gold Project

biophysical and socio-economic valued components (VCs), as directed by the EIS Guidelines, as well as prior project experience. The EIS is not intended to define or delimit existing or asserted Indigenous or Treaty rights within a given traditional territory or occupancy area, nor is it intended to provide a complete depiction of the dynamic way of life and systems of knowledge maintained by Indigenous Nations engaged on the Project.

Chemawawin Cree Nation is located approximately 750 km south of the Project by road, and the CEA Agency (now IAAC) did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward, and throughout the life of the Lynn Lake Gold Project.

Finally, Alamos understands that Chemawawin Cree Nation also has concerns with respect to the methods for the assessment of current use presented in Chapter 17 of the EIS. The EIS adopted a conservative approach that assumes that current use of lands and resources for traditional purposes (current use) may occur near the Project, even though these activities are not specifically identified by participating Indigenous Nations. The assessment also assumes that the exercise of traditional activities depends on the health and abundance of traditionally harvested species and the continued availability of and access to traditionally used resources, sites and areas. Therefore, the assessment of potential Project-related effects on fish, heritage, wildlife, vegetation, and other VCs linked to traditional activities informed the assessment of potential Project-related effects on current use and on the ability to exercise Indigenous and Treaty rights, but were not used as a proxy for the assessment of those rights.

By way of example, the assessment of effects on fish and fish habitat provided baseline data for the assessment of effects on current use, in consideration of the availability of and access to fish for harvesting, which informed the assessment of effects on the ability to exercise Indigenous and Treaty rights to harvest fish, in the context of the information learned through engagement and the sharing of TLRU information. Information from Indigenous Nations engaging with the Project and sharing TLRU was included in the EIS.

INDIGENOUS PARTICIPATION AND CAPACITY FUNDING

With respect to capacity funding, Alamos recognizes that Chemawawin Cree Nation has stated that lack of funding is to be a barrier to providing community-specific information to Alamos. Prior to completing the EIS, capacity funding for TLRU studies was made available to Indigenous Nations that identified current use in the Project area, and therefore whose exercise of rights could be potentially affected by the Project. Additional capacity funding is available to Indigenous Nations through IAAC to participate in the regulatory review process of the Project.

Alamos would be pleased to work with Chemawawin Cree Nation to better understand the nature and extent of their exercise of rights in the Project area, including those rights associated with TLRU. A supplemental filing will be submitted to IAAC in 2021 that includes new information provided by Chemawawin Cree Nation and other Indigenous Nations from recent engagement activities (May 2020-December 2020).

FOLLOW-UP AND MONITORING

With respect to future engagement, Alamos will work with Indigenous Nations in the design and implementation of Project follow-up and environmental monitoring programs, including evaluation of program results, and subsequent updates to the program. Opportunities will be provided to members of

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directly affected Indigenous Nations to participate in these follow-up and monitoring programs. As described in Chapter 23, Section 23.3 of the EIS, as results become available from the follow-up and monitoring program, a standard communication procedure will be established to provide data, distribute information, and accept inquiries from Indigenous Nations. Alamos currently maintains a local office/presence in Lynn Lake that facilitates ongoing communications. During operations, Alamos will maintain an office at the MacLellan site and will consider maintaining a smaller office in Lynn Lake during Project operation to further facilitate communication.

CLOSURE

Alamos thanks Chemawawin Cree Nation for its comments. Please feel free to contact the undersigned should you have any additional questions.

Regards,

Stantec Consulting Ltd.

<original signed by>

Karen Mathers M.Sc., P.Geo. FGC, PMP

Principal, Environmental Services

Direct: <personal information removed>

Mobile: <personal information removed>

<email address removed>

Attachment: Lynn Lake Gold Project Environmental Impact Statement: Responses to Technical Comments from Chemawawin Cree Nation



ALAMOS GOLD INC.

**Lynn Lake Gold Project
Environmental Impact Statement**

**Responses to Technical Comments
from Chemawawin Cree Nation**



Prepared by:

Stantec Consulting Ltd.

February 2, 2021

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APPENDIX A ATTACHMENTS A.1



**LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
Responses to Technical Comments from Chemawawin Cree Nation**

RESPONSE TO CCN-4

ID:	CCN-4
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 Table 1-2 Summary of Key Potentially Relevant Federal Legislation Page 1.9 (PDF Page 92)
Information Request:	<p>CCN members exercise their Section 35 Rights according to Treaty No.5 2 ("Her Majesty further agrees with Her said Indians, that they, the said Indians, shall have right to pursue their avocations of hunting and fishing throughout the tract surrendered and hereinbefore described..." Treaty No. 5, 1875) and under the protection of the Constitution Act, 1982. This includes the activity of fishing. The Project is a risk to fish and fish habitat and CCN's Section 35 Rights. As such, CCN requires in depth consultation on any conditions of approval related to Fish and Fish Habitat compensation plans that may be required as part of the paragraph 34.4(2)(b) and 35(2)(b) authorizations.</p> <p>In addition, due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>Alamos is committed to engaging with potentially affected Indigenous Nations, to identify fish habitat enhancement, restoration, or creation opportunities that could be included in the Fish Habitat Offsetting Plan for the proposed Project. Alamos will use this suite of opportunities to select those habitat enhancement, restoration, or creation projects that best counterbalance the unavoidable harmful alteration, disruption, or destruction (HADD) of fish habitat caused by the Project. These projects would be prioritized based on those that:</p> <ol style="list-style-type: none"> 1) provide the greatest benefit for the fish populations most directly affected by the HADD of fish habitat; 2) have the least uncertainty of success and shortest time lag before becoming fully functional; 3) are most likely to provide a "net gain" of fish habitat and/or fish production; 4) are supported by the greatest number of Indigenous Nations; and 5) best address the factors that Fisheries and Oceans Canada (DFO) must consider prior to authorizing the unavoidable HADD of fish habitat (as per DFO's Fish and Fish Habitat Protection Policy Statement 2019). <p>The former Canadian Environmental Assessment Agency (CEA Agency), now the Impact Assessment Agency of Canada (IAAC), did not identify Chemawawin Cree Nation in their 2017 <i>Guidelines for the Preparation of an Environmental Impact Statement</i> for the Project (EIS Guidelines). As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. It is acknowledged that Chemawawin Cree Nation was subsequently added to the list of affected Indigenous Nations by IAAC and Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward, and throughout the life of the Lynn Lake Gold Project.</p> <p>With respect to capacity funding, Alamos recognizes that many of the concerns submitted by CCN indicate that this continues to be a barrier to providing community-specific information to Alamos. Capacity funding for traditional land and resource use</p>



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	<p>(TLRU) studies was made available to communities that identified current use of lands and resources for traditional purposes in the Project area. Additional capacity funding is available to Indigenous Nations through IAAC to participate in the regulatory review process of the Project. In addition, Alamos has been corresponding with CCN to better understand the nature and extent of CCN's exercise of rights in the Project area, including those rights associated with the current use of lands and resources for traditional purposes. A supplemental filing will be submitted to IAAC in 2021 that includes new information provided by CCN and other Indigenous Nations from recent engagement activities (May 2020- December 2020), including applicable changes to the Environmental Impact Statement (EIS) as a result of new information provided.</p>
Attachment:	No



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RESPONSE TO CCN-6

ID:	CCN-6
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 2.2.3 Environmental Protection, Mitigation and Management Page 2.2 (PDF Page 114)
Information Request:	<p>CCN was not engaged or provided capacity to identify sensitive areas. Given that CCN has been so far excluded from engagement, the Nation's information is not considered or included in the development of mitigation measures.</p> <p>Further, this section appears to show a pan- Indigenous view. This is inappropriate and does not demonstrate the unique information provided by engage Nations, nor the gaps of information not gathered from Nations such as CCN who were not engaged by Alamos. Please identify specifically which Indigenous nations were engaged and how each Nation's information was included in the section.</p>
Response:	<p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward, and throughout the life of the Lynn Lake Gold Project.</p> <p>With respect to capacity funding, Alamos recognizes that many of the concerns submitted by CCN indicate that this continues to be a barrier to providing community-specific information to Alamos. Capacity funding for traditional land and resource use (TLRU) studies was made available to Nations that identified current use of lands and resources for traditional purposes in the Project area, and therefore whose exercise of rights could be potentially affected by the Project. Additional capacity funding is available to Indigenous Nations through IAAC to participate in the regulatory review process of the Project. In addition, Alamos has been corresponding with CCN to better understand the nature and extent of CCN's exercise of rights in the Project area, including those rights associated with the current use of lands and resources for traditional purposes. A supplemental filing will be submitted to IAAC in 2021 that includes new information provided by CCN and other Indigenous Nations from recent engagement activities (May 2020 – December 2020), including applicable changes to the EIS as a result of new information provided.</p> <p>A total of twelve Indigenous Nations were identified by IAAC as potentially affected by the Project. Seven were identified as “most affected” and another five were identified as potentially affected “to a lesser degree” and were engaged based on the identification and classification described in the 2017 EIS Guidelines for the Project.</p>
Attachment:	No



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RESPONSE TO CCN-8

ID:	CCN-8
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 Air Contaminants Page 2.24 (PDF Page 136)
Information Request:	Chemical dust suppressants may impact vegetation harvested by CCN members. Further, the use of chemical dust suppressants may create avoidance behaviours of CCN harvesters who would otherwise use the area in the exercise of their Section 35 Rights. Please note, due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.
Response:	Dust control will primarily be conducted using water. Chemical dust suppressants will only be used during high wind periods or when ambient particulate matter concentrations are in exceedance of the <i>Manitoba Ambient Air Quality Criteria</i> and further application of water is determined ineffective or unfeasible. Chemical suppressants will only be applied to mine haul and access roads as an alternative option to watering, and their application will be limited to within the Project Development Area (PDA) where public access is restricted and roads will be designed and constructed to withstand vehicle traffic, reducing the need for dust suppressants. Only suppressants approved for use by Manitoba Transportation (2019) will be used. Given that chemical dust suppressants will only be applied within the PDA, where public access is restricted, the use of chemical dust suppressants will not affect the use of lands and resources in areas that members of Chemawawin Cree Nation have access to. Reference: Manitoba Transportation. 2019. Specifications for the approval, supply, and application of dust control. Specification No. 1280. 10 pgs.
Attachment:	No



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RESPONSE TO CCN-14

ID:	CCN-14
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 3.3.4.7 Tours Page 3.23 (PDF Page 190)
Information Request:	CCN was neither offered nor provided capacity to participate in a tour of the Project sites. A tour offers practical, on-the-ground experience to nations and should be offered to CCN.
Response:	The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, since having been advised by IAAC of Chemawawin Cree Nation's interest in the Project, Alamos has undertaken engagement with Chemawawin Cree Nation to understand the nature and extent of their exercise of rights in relation to the Project. The request for a site tour can be discussed as part of ongoing engagement with Chemawawin Cree Nation.
Attachment:	No



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RESPONSE TO CCN-19

ID:	CCN-19
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 4.1 Introduction and throughout Volume 1, 2,3, 4, and 5 Page 4.2 (PDF Page 430)
Information Request:	CCN notes that beyond being a community, it is a Nation. CCN peoples, as Indigenous peoples of Canada, have the right to self-determination. While some aspects of this governance have been impaired through imposition of colonial structures, CCN is a Nation to this day. As such, CCN prefers the use of the term Indigenous Nation rather than Indigenous community. Please update references to CCN accordingly.
Response:	Future filings and references to First Nations and Métis will use the term Indigenous Nations when referring to more than one First Nation or Métis Nation.
Attachment:	No



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RESPONSE TO CCN-23

ID:	CCN-23
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 5.4.7.1 Current Land and Resource Use Land Use and Development Page 5.21 (PDF Page 536)
Information Request:	CCN members are able to exercise Section 35 Rights on Unoccupied Crown lands without restriction or the requirement to seek permission. Should the Project be approved, it will require the taking up and disturbance of currently Unoccupied Crown lands. CCN requests that Alamos provide a calculation of the total amount of Unoccupied Crown land taken up by the Project areas (e.g., land to with disturbance or land to be placed under visible and incompatible use through fencing or signage).
Response:	The total amount of unoccupied Crown land taken up by the PDAs for the Gordon and MacLellan sites, which include Project-related physical disturbance and land taken up for mine components, fencing, and signage, is approximately 269 ha (Gordon site) and 938 ha (MacLellan site), respectively. The Project was designed to limit the amount of unoccupied Crown land taken up within the Local Assessment Area (LAA) (1.3% for Gordon, 4.6% for MacLellan) and Regional Assessment Area (RAA) (less than 1%).
Attachment:	No



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RESPONSE TO CCN-25

ID:	CCN-25
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 6.1.4.1 Spatial Boundaries Page 6.11 (PDF Page 572)
Information Request:	If public access is prohibited or discouraged once the mine is under construction or operation, this will result in an exclusion of CCN members from an area of Treaty No.5 lands that was previously accessible for the exercise of Section 35 Rights. Please identify how Alamos intends to discourage or prohibit access to the Mine site. Further, please describe how Alamos considered how CCN's right of access to the Unoccupied Crown land on which the Project is situated will be impacted by activities to discourage or prohibit access.
Response:	As stated IAAC-07: Access to the PDA access roads from Provincial Road 391 (PR 391) will be restricted during construction, operation, and decommissioning/closure of the Gordon and MacLellan sites. Both access roads are currently gated as both are existing historical mines, so no new access modifications are planned for the access roads, simply a continuation of the current restrictions. Map 1-1 (EIS Chapter 1) shows the location of gates on the access roads for the Gordon and MacLellan sites. The spatial extent of access restrictions includes the access roads beyond the gates and the Gordon and MacLellan site PDAs. Maps 2-1 and 2-2 (Chapter 2, EIS) show the spatial extent of the Gordon and MacLellan site PDAs, to which access will be restricted until post-closure. No fencing is planned for the perimeter of the Gordon or MacLellan sites. Chapter 2, Sections 2.3.1.2 and 2.3.2.3 of the EIS, describe the existing access infrastructure and planned upgrades. Exclusive rights for usage refers to Alamos' right to restrict traffic to mine-related vehicles on the mine access roads from PR 391 to the Gordon and MacLellan sites. Care and control refers to Alamos' responsibility to maintain the mine access roads from PR 391 and to control access to unauthorized traffic by maintaining gates and on-site security at the Gordon and MacLellan sites. Indigenous and public use of these roads will be restricted during construction, operation, and decommissioning. During that time, Indigenous peoples and the public may have to use alternative means other than the mine access roads to enter areas beyond the gates, just as they currently do with the existing gates. After mine closure, access will no longer be restricted. Although there is no planned fence line to enclose the Gordon or MacLellan PDAs, and both gates were in place before the Project, indirect implications for access may result from sensory disturbances such as noise and dust during construction, operation, and decommissioning as indicated in Chapter 17, Section 17.4.3 of the EIS. These disturbances may result in Indigenous peoples choosing not to conduct traditional practices within a certain distance from the PDA in the LAA due to the altered experience of traditional practices near an active mining operation. Sensory disturbances such as noise may alter wildlife movement patterns and dust may affect vegetation extending into the LAA resulting in Indigenous peoples choosing not to harvest these resources in the indirectly affected portion of the LAA. Section 8.1 of the Project Conceptual Closure Plan indicated that specified closure activities aim to promote the re-establishment of



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	<p>vegetation and animal habitats on site. The site will remain open to the public after final closure, and activities such as hunting, trapping, and snowmobiling will be permitted to the extent feasible. Access roads from PR 391 will remain; however, the site will otherwise be left to naturally revegetate. A boulder fence around the open pit crests will remain indefinitely for safety reasons. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible.</p> <p>While the EIS makes no reference to a prohibited zone, access will be restricted to authorized vehicles and personnel on the mine access roads beyond the existing gates and on the Gordon and MacLellan sites. Alamos recognizes that Indigenous peoples can exercise Indigenous and Treaty rights recognized under Section 35 of the constitution on unoccupied Crown land. The Gordon and MacLellan sites will occupy 269 ha and 938 ha of Crown land respectively. The EIS considered the effect of these restrictions on the exercise of Section 35 rights in Chapters 17, Section 17.4.3.1 and 19, Section 19.4.6. of the EIS and identified that restricted access has the potential to affect access to traditional use areas in the PDA extending to the LAA. Indigenous peoples may have to find alternate means to access lands and resources, for hunting, trapping, fishing, plant harvesting and other traditional practices, beyond these gates during construction, operation, and decommissioning. Hunters will be required to observe provincial regulations regarding the lawful discharge of a firearm within a certain distance of the Gordon and MacLellan sites and roads during construction, operation, and decommissioning. Chapter 17, Section 17.4 indicates that there will be an increase in sensory disturbance throughout the duration of the Project that may affect the experience of conducting traditional practices within the LAA. Alamos will post informational signs on the access roads and around the Gordon and MacLellan sites regarding access and safety. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible. Alamos will use ongoing engagement to notify of restriction or access modifications, if applicable.</p> <p>Alamos will monitor access by maintaining the existing gates on the mine access roads and with on-site security at the Gordon and MacLellan sites.</p>
Attachment:	No



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RESPONSE TO CCN-26

ID:	CCN-26
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 6.1.4.1 Spatial Boundaries Page 6.12 (PDF Page 573)
Information Request:	Please identify how Alamos intends to notify CCN of the prohibited zone. Please describe how Alamos considered impacts to CCN's Section 35 Rights in identifying the prohibited zone.
Response:	As stated in IAAC-07: While the EIS makes no reference to a prohibited zone, access will be restricted to authorized vehicles and personnel on the mine access roads beyond the existing gates and on the Gordon and MacLellan sites. Alamos recognizes that Indigenous peoples can exercise Indigenous and treaty rights recognized under Section 35 of the constitution on unoccupied Crown land. The Gordon and MacLellan sites will occupy 269 ha and 938 ha of Crown land respectively. The EIS considered the effect of these restrictions on the exercise of Section 35 rights in Chapters 17, Section 17.4.3.1 and 19, Section 19.4.6. and identified that restricted access has the potential to affect access to traditional use areas in the PDA extending to the LAA. Indigenous peoples may have to find alternate means to access lands and resources, for hunting, trapping, fishing, plant harvesting and other traditional practices, beyond these gates during construction, operation, and decommissioning. Hunters will be required to observe provincial regulations regarding the lawful discharge of a firearm within a certain distance of the sites and roads during construction, operation, and decommissioning. Chapter 17, Section 17.4 of the EIS indicates that there will be an increase in sensory disturbance throughout the duration of the Project that may affect the experience of conducting traditional practices within the LAA. Alamos will post informational signs on the access roads and around the Gordon and MacLellan sites regarding access and safety. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible. Alamos will use ongoing engagement to notify of restriction or access modifications, if applicable.
Attachment:	No

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RESPONSE TO CCN-27

ID:	CCN-27
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 6.4.1.2 Project Pathways
Information Request:	Odour does not appear to be considered in the Atmospheric Environment. Given that the presence of odour and other sensory disturbances can result in avoidance behaviours of CCN members while exercising their Section 35 Rights it is important for Alamos to address this gap. Please include assessment of odour in Atmospheric Environment.
Response:	The EIS Guidelines for the Project (CEA Agency 2017) describe the environmental effects that must be considered in the assessment. Assessing the change to odour levels as a result of the Project is not a requirement of the EIS Guidelines. Reference: CEA Agency (formerly the Canadian Environmental Assessment Agency; now the Impact Assessment Agency of Canada). 2017. Guidelines for the Preparation of an Environmental Impact Statement. Pursuant to the Canadian Environmental Assessment Act, 2012. Lynn Lake Gold Project, Alamos Gold Inc. Version 2: November 2017.
Attachment:	No



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RESPONSE TO CCN-28

ID:	CCN-28
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 6.4.1.3 Page 6.51 (PDF Page 612)
Information Request:	<p>Chemical dust suppressant may contaminate lands and resources such as water sources and vegetation species. The real or perceived contamination of land and resources should awareness or evidence of chemical dust suppressants be identified would displace potential CCN members who would otherwise use the area in the exercise of their Section 35 Rights.</p> <p>Chemical dust suppressants must be evaluated for potential effects on Section 35 Rights, as well as potential impacts to lands and resources including underground water sources, and vegetation.</p>
Response:	<p>Dust control will primarily be conducted using water. Chemical dust suppressants will only be used during high wind periods or when ambient particulate matter concentrations are in exceedance of the <i>Manitoba Ambient Air Quality Criteria</i> and further application of water is determined ineffective or unfeasible. Chemical suppressants will only be applied to mine haul and access roads as an alternative option to watering, and their application will be limited to within the Project Development Area (PDA) where public access is restricted and roads will be designed and constructed to withstand vehicle traffic, reducing the need for dust suppressants. Only suppressants approved for use by Manitoba Transportation (2019) will be used.</p> <p>Given that chemical dust suppressants will only be applied within the PDA, where public access is restricted, the use of chemical dust suppressants will not affect the use of lands and resources in areas that members of Chemawawin Cree Nation have access to.</p> <p>Reference:</p> <p>Manitoba Transportation. 2019. Specifications for the approval, supply, and application of dust control. Specification No. 1280. 10 pgs.</p>
Attachment:	No



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RESPONSE TO CCN-38

ID:	CCN-38
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 6.0 Assessment of Potential Effects on the Atmospheric Environment Map No. 6-1 (PDF Page 658)
Information Request:	<p>Please describe how the potential Indigenous receptors were identified and how they relate to locations of importance in the exercise of Section 35 Rights (i.e., not characterized by Current Use). Please describe how these receptors are inclusive of CCN's Section 35 Rights.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>Information provided through the Indigenous engagement program for the Project, including Project-specific TLRU studies, as well as a review of publicly available TLRU information sources, was used to select receptor locations relative to current use of lands and resources for traditional purposes. Through engagement, Alamos recorded community concerns with respect to air quality (presented in Table 19-1), learned of active trapping and fishing areas, and identified potential receptors accordingly to characterize air quality at locations where Indigenous peoples are likely to practice additional harvesting. The receptor locations are identified on Map 18-1 (Chapter 18 of the EIS).</p> <p>As noted in Chapter 6 of the EIS, due to the length of time required to conduct air quality modelling, Indigenous receptors were selected early in the assessment process and represent potential receptor locations rather than individual use sites. The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines for the Project. After the EIS was finalized and submitted, IAAC advised Alamos that CCN had been added to the list of Indigenous Nations to be engaged on the Project. Since that time, Alamos has initiated a dialogue with CCN to understand the nature and extent of the exercise of Section 35 rights in relation to the Project.</p> <p>Alamos is committed to on-going engagement with Indigenous Nations affected by the Project. Alamos will consider air quality monitoring of newly identified sensitive receptors as part of the follow-up and monitoring, applying the adaptive management process described in Chapter 23, Section 23.2 during the construction, operation and decommissioning phases of the Project.</p>
Attachment:	No

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RESPONSE TO CCN-40

ID:	CCN-40
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 7.2.1.2 Overview Page 7.9 (PDF Page 677)
Information Request:	Please identify whether any receptor locations were representative of the exercise of Section 35 Rights as the listed remote area receptors (First Nation traplines, First Nation trapper areas, First Nation fishing camps) are not inclusive of all Section 35 Rights-based activities.
Response:	Noise and Vibration receptor locations include Indigenous Nations and areas currently used for traditional purposes. Indigenous receptor locations were incorporated into the atmospheric environment, acoustic environment, human health, and Indigenous peoples assessments (Chapters 6, 7, 18 and 19 of EIS Volume 2, respectively). The selection of these receptors was informed by Alamos' engagement with Indigenous Nations and publicly available sources of information regarding the current use of lands and resources for traditional purposes. Indigenous receptors were selected early in the assessment process and represent potential receptor locations rather than individual use sites. These potential locations (e.g., First Nation traplines, First Nation trapper areas, First Nation fishing camps) focus on permanent and seasonally occupied dwelling locations where the occupancy is not transient and mobile in nature, and are considered representative of Indigenous rights.
Attachment:	No



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RESPONSE TO CCN-41

ID:	CCN-41
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 7.4.2.4 Project Residual Effects Construction Page 7.30 (PDF Page 698)
Information Request:	Why were no receptors selected in closer proximity to the Project area than 1 km? If the area surrounding the Project is unoccupied Crown land or land where CCN have a right of access, then rights have the potential to be exercised in that area now and in the future.
Response:	Noise and Vibration receptor locations include Indigenous Nations and lands and resources used for traditional purposes. Traditional land and resource use areas focus on potential Indigenous receptor locations rather than individual use sites. These potential locations include First Nation traplines, First Nation trapper areas, First Nation fishing camps where the occupancy is not transient and mobile in nature.
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-53

ID:	CCN-53
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 1 9.4.2.3 Mitigation Page 9.71 (PDF Page 929)
Information Request:	Please provide details on whether remediation of historical exceedances was considered as a potential mitigation for surface water quality. Particularly as POPCs assessed for residual effect were often contributed to by the existing exceedances.
Response:	<p>Baseline monitoring upstream (e.g., site AQM4) and downstream of the historical MacLellan mine (e.g., AQM7 and AQM8) does not show substantial differences in analyte concentrations in the Keewatin River, indicating it is unlikely that historical features at this site contribute to baseline exceedances (EIS Volume 4, Appendix I). Therefore, remediation of historical exceedances is not required.</p> <p>At the Gordon site, exceedances of long-term water quality guidelines (WQG) in Gordon and Farley lakes are primarily related to natural sources such as phosphorus. For some analytes (e.g., arsenic), exceedances of long-term WQG could be related to former mining activities, but these exceedances were infrequently observed and limited to the open pit lakes (EIS Volume 4, Appendix I). As a result, additional mitigation of historical exceedances may not be required. However, the mine plan considers the relocation of a portion of the historical South Mine Rock Storage Area (MRSA) to a new mine rock facility located farther from the receiving environment.</p> <p>The former East Tailings Management Area (ETMA) associated with three now-closed copper, gold, and nickel mines is located immediately east of the Town of Lynn Lake and adjacent to the Lynn River and Eldon Lake; the Lynn River drains into the Keewatin River downstream of the MacLellan site. The ETMA stored tailings for three mines that operated between 1953 and 1975. Prior to reclamation (including capping of the ETMA) in 2013, run-off and seepage from the ETMA entered the Lynn River and Eldon Lake untreated. Despite reclamation efforts, some leaching from the ETMA continues to enter Lynn River and potentially Eldon Lake. Baseline water quality sampling indicates that the ETMA continues to affect water quality in the Keewatin River (and other waterbodies) downstream of the confluence of Lynn River. These effects to surface water are the result of historical mining unrelated to the proposed Project, and Alamos is not responsible for monitoring or mitigating effects of the ETMA on surface water quality. However, the influence of the ETMA is implicitly captured in the predictive modelling for Project-related effects as existing conditions water quality data were used as modelling source terms.</p> <p>Because the Gordon site will expand the existing historical pits at the site to form the Gordon site open pit, Alamos is committed to mitigating sources of past mining contamination in addition to the potential effects associated with the expanded Gordon site open pit. These mitigation measures include, but are not necessarily limited to, the following;</p> <ul style="list-style-type: none"> • Design of water management facilities to collect and treat (as required) contact water such that effluent meets applicable federal and provincial regulatory requirements, including the authorized limits of deleterious substances specified in Schedule 4 of the MDMER (amended), prior to discharge to the environment.



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	<ul style="list-style-type: none"> • Aerating the existing pit lakes to encourage precipitation of elements that form oxides (e.g., iron oxide) and to break down of thermal stratification prior to dewatering. • Aerating groundwater from groundwater interceptor wells to encourage precipitation of elements that form oxides (e.g., iron oxide) and to increase dissolved oxygen concentrations prior to discharge to Gordon and Farley lakes. • Sediment and erosion control measures during construction to limit the release of total suspended solids and turbidity. • Expediting the re-filling of open pit during closure to reduce exposure of pit walls. <p>In summary, remediation or mitigation measures for effects associated with historical mining are either not warranted (MacLellan site), not the responsibility of Alamos (the ETMA), or already captured by the proposed measures associated with the Project (Gordon site).</p>
Attachment:	No



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RESPONSE TO CCN-54

ID:	CCN-54
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.0 Assessment of Potential Effects on Fish and Fish Habitat
Information Request:	<p>There is no identified linkage with Section 19 within in this portion of the EIS pertaining to Indigenous peoples or Section 35 Rights. Fish and fish habitat are integral in supporting CCN's Section 35 Rights and interests related to fish. This should be connected and assessed.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>The fish and fish habitat assessment considers potential effects of changes in fish habitat and changes in fish health, growth, or survival. While the fish and fish habitat assessment acknowledges fish and fish habitat are valued by Indigenous peoples and provide cultural, economic, recreational, and aesthetic values to the Indigenous Nations, the fish and fish habitat assessment itself does not assess or predict effects on other valued components. However, conclusions of the fish and fish habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 of the EIS and the exercise of Indigenous rights in Chapter 19 of the EIS.</p> <p>Chapter 17 (Current Use of Lands and Resources for Traditional Purposes [current use]), Section 17.4.2, elaborates on the interaction of effects on fish and fish habitat and current use; the direct and indirect change to fish habitat including changes to water quality affecting fish health. Changes to availability of fish is assessed relative to the changes identified in Chapter 10. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5, assesses these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance. The indirect effects on habitat (i.e., habitat alteration) including alteration of habitat perception is expected to vary depending on the Project component, pathway, and measurable parameter. The conclusions of the assessment of effects on current use as described in Chapter 17 support the assessment of Indigenous and Treaty rights presented in Chapter 19, Section 19.9.3. An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the fish and fish habitat assessment, among other VCs (i.e., water quality assessment) are presented in Table 19-1 and described in Section 19.1.2.2.</p> <p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward, and throughout the life of the Lynn Lake Gold Project</p>
Attachment:	No



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RESPONSE TO CCN-57

ID:	CCN-57
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 Table 10-1 Potential Effects, Effects Pathways and Measurable Parameters for Fish and Fish Habitat Page 10.11 to 10.12 (PDF Page 18 to 19)
Information Request:	An effect pathway should be added to the potential environmental effect of change in fish health, growth, or survival. To ensure specific consideration, the effect pathway should be based on the following wording: <ul style="list-style-type: none"> • Loss of fish species that support the exercise of Indigenous rights.
Response:	Alamos understands the importance of avoiding and mitigating potential project-effects on the exercise of Indigenous rights to fish. As such, potential effects on Indigenous rights to harvest fish for traditional purposes was assessed in Chapter 19 of the EIS (Assessment of Potential Effects to Indigenous Peoples). Chapter 10 (Assessment of Potential Effects on Fish and Fish Habitat) assesses potential effects on fish and fish habitat and includes consideration of avoidance, mitigation, and offsetting measures to reduce or limit these potential effects. Residual effects to fish and fish habitat identified in Chapter 10 are carried forward into Chapter 19 where those potential residual effects are assessed for their potential effect on Indigenous rights to fish.
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-58

ID:	CCN-58
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume2 10-4 Definition of Terms used to Characterize Residual Effects on Fish and Fish Habitat Page 10.16 (PDF Page 23)
Information Request:	See comment 57. A quantitative measure should be added to magnitude to characterize the above noted effect pathway. This quantitative measure should be for low, moderate and high which assesses the loss within the LAA and RAA of species that support the exercise of Section 35 Rights.
Response:	Chapter 10 of the EIS (Assessment of Potential Effects on Fish and Fish Habitat) is limited to the assessment of potential effects on fish habitat and potential effects on fish health, growth, and survival (i.e., potential effects to the streams and lakes that fish live and to the fish themselves). Chapter 10 of the EIS does not assess how predicted changes in fish habitat or fish health, growth, or survival could affect the use of streams, lakes, or fish by Indigenous or non-Indigenous peoples. Potential effects on the use of fisheries resources by Indigenous peoples is addressed in Chapter 19 (Assessment of Potential Effects on Indigenous Peoples) and considers potential residual effects to the fish habitat and fish health, growth, and survival identified in Chapter 10. Alamos does not consider it necessary to revise the magnitude criteria in the manner suggested; the definitions conform to CEA 2012 and the EIS Guidelines for the Project, as well as Agency guidance for assessing effects. These definitions reflect standard environmental assessment methods previously accepted by the former CEA Agency (now IAAC) on other projects (e.g., Greenstone Gold Mine, Manitoba-Minnesota Transmission Project, Springbank Off-Stream Reservoir Project).
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-59

ID:	CCN-59
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.1.6 Significance Determination Page 10.17 to 10.18 (PDF Page 24 to 25)
Information Request:	A significance threshold should be added to define a significant adverse effect based on the above noted effect pathways and characterizations (comment 57 and 58). It should specify that a significant adverse environmental effect is defined as: <ul style="list-style-type: none"> • Project conditions that threaten fish species that support the exercise of Indigenous rights in the RAA; or effects that are inconsistent with the exercise of indigenous rights.
Response:	Chapter 10 of the EIS (Assessment of Potential Effects on Fish and Fish Habitat) is limited to the assessment of potential effects on fish habitat and fish health, growth, and survival. Potential effects of predicted changes to fish habitat or fish health, growth, and survival on the use of fisheries resources by Indigenous peoples is addressed in Chapter 19 of the EIS (Assessment of Potential Effects on Indigenous Peoples).
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-61

ID:	CCN-61
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.1.4 Project Residual Effects Page 10.67 (PDF Page 74)
Information Request:	Habitat offsetting, while important and crucial for continuation of species does interact with Section 35 Rights in a negative way. CCN members who may use the existing diversion channel for harvesting, for example, cannot be directed elsewhere in the exercise of their Section 35 Rights. The conditions of the new locale may be suitable for fish, however, there is no consideration of whether the conditions are suitable for the exercise of rights. Further, the loss of cultural connection to the original locale can result in disruptions to teaching and transmission activities to the next generation. This was not considered.
Response:	<p>As stated in IAAC-53:</p> <p>Alamos understands the importance of avoiding and mitigating potential project-effects on the exercise of Indigenous rights to fish. As such, potential effects on Indigenous rights to harvest fish for traditional purposes was assessed in Chapter 19 of the EIS (Assessment of Potential Effects to Indigenous Peoples). Chapter 10 (Assessment of Potential Effects on Fish and Fish Habitat) assesses potential effects on fish and fish habitat and includes consideration of avoidance, mitigation, and offsetting measures to reduce or limit these potential effects. Residual effects to fish and fish habitat identified in Chapter 10 are carried forward into Chapter 19 where those potential residual effects are assessed for their potential effect on Indigenous rights to fish.</p> <p>Effects to Indigenous people exercising Section 35 Rights of the <i>Constitution Act</i>, 1982 were considered in the proposed fish habitat offsetting plan by including funding of a “lake sturgeon research and assessment program” in the Hughes River as a complementary measure. This program is designed to:</p> <ol style="list-style-type: none"> 1) assess the status of juvenile lake sturgeon recruitment in the Hughes River; 2) assess the genetic composition of Hughes River lake sturgeon; and 3) compare results to other lake sturgeon Management Units in the Churchill River basin and elsewhere in Manitoba. <p>The fish habitat offsetting plan has not been finalized and, therefore, has not yet been implemented. Members of local Indigenous Nations will be engaged to assist in the construction of the habitat enhancement, restoration, and creation projects included in the fish habitat offset plan and with field work required for the lake sturgeon field work on the Hughes River once the Project has received its federal Decision Statement under the <i>Impact Assessment Act</i> and its <i>Fisheries Act</i> authorization</p>
Attachment:	No

LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-62

ID:	CCN-62
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.1.4 Project Residual Effects Page 10.68 (PDF Page 75)
Information Request:	See comment 58
Response:	<p>Chapter 10 of the EIS (Assessment of Potential Effects on Fish and Fish Habitat) is limited to the assessment of potential effects on fish habitat and potential effects on fish health, growth, and survival (i.e., potential effects to the streams and lakes that fish live and to the fish themselves). Chapter 10 of the EIS does not assess how predicted changes in fish habitat or fish health, growth, or survival could affect the use of streams, lakes, or fish by Indigenous or non-Indigenous peoples. Potential effects on the use of fisheries resources by Indigenous peoples is addressed in Chapter 19 (Assessment of Potential Effects on Indigenous Peoples) and considers potential residual effects to the fish habitat and fish health, growth, and survival identified in Chapter 10.</p> <p>Alamos does not consider it necessary to revise the magnitude criteria in the manner suggested; the definitions conform to the <i>Canadian Environmental Assessment Act, 2012</i> (CEAA 2012) and the EIS Guidelines for the Project, as well as Agency guidance for assessing effects. These definitions reflect standard environmental assessment methods previously accepted by the former CEA Agency (now IAAC) on other projects (e.g., Greenstone Gold Mine, Manitoba-Minnesota Transmission Project, Springbank Off-Stream Reservoir Project).</p>
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-63

ID:	CCN-63
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.1.4 Project Residual Effects Page 10.80 (PDF Page 87)
Information Request:	Please provide details on whether options to mitigate potential effects to fish and fish habitat in Farley Creek will be identified in a supplemental filing. Please include details on whether potential effects will be identified prior to approval, or whether they will be considered as part of a condition for approval.
Response:	<p>As stated in IAAC-48:</p> <p>A 1-D HEC-RAS hydraulic model of a representative reach of Farley Creek is currently being developed to predict potential changes to water depths and water velocities due to the predicted changes in flow in Farley Creek in the different mine phases. Model scenarios will include the additional mitigation measures identified in sub-heading "Farley Creek" in Section 10.4.1.4 of the EIS. The predicted changes in channel hydraulics will be used to assess potential geomorphological changes in the modeled reach of Farley Creek. A stand-alone technical report will be provided as a supplemental filing that describes the methods, inputs, and assumptions of the model, summarizes model results, and provides an assessment of the predicted changes in channel hydraulics on fish and fish habitat in Farley Creek.</p> <p>Channel hydraulics will be modelled with and without the presence of beaver dams. However, modelling of channel hydraulics under ice will not be conducted due to the large uncertainties associated with channel hydraulics in winter; ice formation causes variable amounts of channel constriction through the winter, a process that cannot be modelled accurately with HEC-RAS or other open-channel hydraulics software.</p> <p>The HEC-RAS model currently being developed will be used to determine the effectiveness and necessity of the additional mitigation measures identified in Section 10.4.1.4 of the EIS to reduce potential adverse effects to fish and fish habitat in Farley Creek. This information will be provided in the stand-alone technical report currently being prepared with the HEC-RAS model.</p>
Attachment:	No



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RESPONSE TO CCN-64

ID:	CCN-64
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.2.4 Residual Effects Page 10.107 (PDF page 114)
Information Request:	<p>There must be a consideration of subsistence consumption of fish and increases in total arsenic concentrations in terms of perceptive effects. While levels may be within toxicity benchmarks for fish and aquatic biota, there must be consideration of how this may impact the exercise of Section 35 Rights in the vicinity through negative perceptions.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>The surface water quality assessment (EIS Chapter 9) indicates that water quality will be adversely affected due to changes in concentrations of parameters of potential concern (POPC) to fish and aquatic biota including phosphorus, aluminum, arsenic, cadmium, copper, and fluoride downstream of the Gordon and MacLellan sites.</p> <p>The assessment of fish and fish habitat (Chapter 10) indicates that these water quality effects will be negligible, limited to fish and fish habitat within the LAA, and are not expected to affect fish biota health, growth, or survival. While the fish and fish habitat assessment acknowledges fish and fish habitat are valued by Indigenous peoples and provide cultural, economic, recreational, and aesthetic values to the Indigenous Nations, the fish and fish habitat assessment itself does not assess or predict effects on other valued components. However, conclusions of the fish and fish habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19.</p> <p>Alamos recognizes that though wastes and emissions are not expected to measurably change availability of resources including fish currently used for traditional purposes, there may be the perception that resources may no longer be appropriate for use in some areas (Chapter 17). The results from the assessments of surface water (Chapter 9), fish and fish habitat (Chapter 10) and current use (Chapter 17) were incorporated into the assessment of Indigenous and Treaty rights in Chapter 19, Section 19.9.3. An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the fish and fish habitat assessment, among other VCs are presented in Table 19-1 and described in Section 19.1.2.2.</p> <p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward, and throughout the life of the Lynn Lake Gold Project.</p>
Attachment:	No

LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-65

ID:	CCN-65
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.2.4 Residual Effects Page 10.109 (PDF page 116)
Information Request:	<p>There must be a consideration of subsistence consumption of fish and increases in dissolved cadmium concentrations in terms of perceptible effects. While levels may be within toxicity benchmarks for fish and aquatic biota, there must be consideration of how this may impact the exercise of Section 35 Rights in the vicinity through negative perceptions.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>Chapter 10 of the EIS (Assessment of Potential Effects on Fish and Fish Habitat) is limited to the assessment of potential effects on fish habitat and fish health, growth, and survival (i.e., potential effects to the streams and lakes that fish live and to the fish themselves). Chapter 10 does not assess how predicted changes in fish health, growth, or survival could affect the health of Indigenous peoples who consume fish potentially affected by the Project. Potential effects of the Project on human health, including the ingestion of fish near the Project, is addressed in Chapter 18 (Assessment of Potential Effects on Human Health).</p> <p>Section 17.4.2 of Chapter 17 of the EIS (Assessment of Potential Effects on Current Use of Lands and Resources for Traditional Purposes by Indigenous Peoples) assesses the interaction of potential effects on fish and fish habitat and current use of lands and resources by Indigenous peoples, including the effect of potential changes in water quality on fish health, growth, and survival.</p> <p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. However, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward and throughout the life of the Lynn Lake Gold Project.</p> <p>With respect to capacity funding, Alamos recognizes that many of the concerns submitted by CCN indicate that this continues to be a barrier to providing community-specific information to Alamos. Capacity funding for TLRU was made available to communities that identified current use of lands and resources for traditional purposes in the Project area and, therefore, whose exercise of rights could be potentially affected by the Project. Additional capacity funding is available to Indigenous Nations through IAAC to participate in the regulatory review process of the Project. In addition, Alamos has been corresponding with CCN to better understand the nature and extent of CCN's exercise of rights in the Project area, including those rights associated with the current use of lands and resources for traditional purposes. A supplemental filing will be submitted to IAAC in 2021 that includes new information provided by CCN and other Indigenous Nations from recent engagement activities (May 2020 to December 2020), including applicable changes to the EIS as a result of new information provided.</p>
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-66

ID:	CCN-66
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 10.4.2.4 Residual Effects Page 10.109 (PDF page 116)
Information Request:	<p>There must be a consideration of subsistence consumption of fish and increases in total copper through perceptive effects. While levels may be within toxicity benchmarks for fish and aquatic biota, there must be consideration of how this may impact the exercise of Section 35 Rights in the vicinity through negative perceptions.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>Chapter 10 of the EIS (Assessment of Potential Effects on Fish and Fish Habitat) is limited to the assessment of potential effects on fish habitat and fish health, growth, and survival (i.e., potential effects to the streams and lakes that fish live and to the fish themselves). Chapter 10 does not assess how predicted changes in fish health, growth, or survival could affect the health of Indigenous peoples who consume fish potentially affected by the Project. Potential effects of the Project on human health, including the ingestion of fish near the Project, is addressed in Chapter 18 (Assessment of Potential Effects on Human Health).</p> <p>Section 17.4.2 of Chapter 17 of the EIS (Assessment of Potential Effects on Current Use of Lands and Resources for Traditional Purposes by Indigenous Peoples) assesses the interaction of potential effects on fish and fish habitat and current use of lands and resources by Indigenous peoples, including the effect of potential changes in water quality on fish health, growth, and survival.</p> <p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. However, Alamos is committed to open and transparent engagement with Chemawawin Cree Nation moving forward and throughout the life of the Lynn Lake Gold Project.</p> <p>With respect to capacity funding, Alamos recognizes that many of the concerns submitted by CCN indicate that this continues to be a barrier to providing community-specific information to Alamos. Capacity funding for TLRU was made available to communities that identified current use of lands and resources for traditional purposes in the Project area and, therefore, whose exercise of rights could be potentially affected by the Project. Additional capacity funding is available to Indigenous Nations through IAAC to participate in the regulatory review process of the Project. In addition, Alamos has been corresponding with CCN to better understand the nature and extent of CCN's exercise of rights in the Project area, including those rights associated with the current use of lands and resources for traditional purposes. A supplemental filing will be submitted to IAAC in 2021 that includes new information provided by CCN and other Indigenous Nations from recent engagement activities (May 2020 to December 2020), including applicable changes to the EIS as a result of new information provided.</p>
Attachment:	No

LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-69

ID:	CCN-69
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.2.2 Mitigation Page 11.26 (PDF Page 229)
Information Request:	Where effects to landscape diversity relate to Section 35 Rights, CCN requests involvement in the development of mitigation measures and relate Project activities. Where the effects do not appear to relate to Section 35 Rights, CCN requires review of adaptive management procedures prior to their implementation. Determining what effects to landscape diversity relate or do not relate to CCN's Section 35 Rights have yet to be determined. This must occur prior to the above request actions can take place.
Response:	The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases; however, since having been advised by IAAC of Chemawawin Cree Nation's interest in the Project, Alamos has undertaken engagement with Chemawawin Cree Nation to understand the nature and extent of their exercise of rights in relation to the Project. Alamos is committed to on-going engagement with Indigenous Nations as part of the follow-up and monitoring program, applying the adaptive management process described in Chapter 23, Section 23.2 during the construction, operation and decommissioning phases of the Project.
Attachment:	No



LYNN LAKE GOLD PROJECT ENVIRONMENTAL IMPACT STATEMENT
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RESPONSE TO CCN-70

ID:	CCN-70
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.3.2 Mitigation Page 11.32 (PDF Page 235)
Information Request:	CCN holds knowledge of the lands and resources that extend beyond a western science approach to mitigation. Consultation with CCN on the native seed mix is required to ensure that plants seeded are reflective of plants used in the exercise of CCN Section 35 Rights and CCN's traditional knowledge is appropriately considered.
Response:	Detailed design of the Project and mitigation strategies is currently ongoing. Mitigation measures will be refined in consideration of environmental assessment approval conditions and permit stipulations, which will be incorporated into environmental management planning. Alamos Gold Inc. will engage interested affected Indigenous Nations regarding the reclamation native seed mix and desired species composition. Plants of interest to Indigenous Nations that are commercially available will be included in the mine closure reclamation seed mixes.
Attachment:	No



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RESPONSE TO CCN-71

ID:	CCN-71
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.4.2 Mitigation Page 11.36 to 11.37 (PDF Page 239 to 240)
Information Request:	<p>This Project Pathway is intended to assess direct and indirect loss of traditional use species, however, there is no specific mitigation measures proposed to address those direct and indirect effects. Instead, mitigation focuses on SOCC.</p> <p>Please update with specific mitigation for direct and indirect loss of traditional use species of CCN.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS. This includes identification of important traditional use species to CCN.</p>
Response:	<p>Implementation of the mitigation measures identified in Section 11.4.3 (Community Diversity) and Section 11.4.5 (Change in Wetland Functions) of Volume 2 of the EIS will reduce direct and indirect effects to traditional use plant species. These measures will help reduce potential introduction and spread of weeds that could outcompete traditional use plant species, will avoid unplanned disturbance to native land cover types, including wetlands and uplands, and will support revegetation of disturbed areas following Project closure, including establishment of traditional use plants. Detailed design of the Project and mitigation strategies is ongoing. Mitigation measures will be refined in consideration of environmental assessment approval conditions and permit stipulations, which will be incorporated into environmental management planning. Plants of interest to Indigenous Nations that are commercially available will be included in mine closure reclamation seed mixes.</p>
Attachment:	No



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RESPONSE TO CCN-72

ID:	CCN-72
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.4.3 Project Residual Effect Gordon Site Page 11.38 (PDF Page 241)
Information Request:	As noted in comment 69, there are no specific mitigation measures for direct or indirect loss of traditional use species. This, in conjunction with a lack of information about traditional use species abundance in the RAA requires a high magnitude rating.
Response:	<p>Effects to species diversity, including plants of interest to Indigenous Nations, from the Gordon site were assessed as moderate to high in magnitude as most of the plants are common species, however, there is uncertainty in the abundance of some infrequently-observed plant species of interest to Indigenous Nations in the LAA and RAA (EIS Volume 2, Section 11.4.4). Land cover types affected by the Project are common in the RAA and changes in the abundance of land cover types from the Project are small. Due to the limited changes in cover type abundance in the RAA and largely intact condition of the RAA, the Project is unlikely to result in the loss of a plant species of interest to Indigenous Nations. See Table 11-2 (EIS Volume 11, Section 11.1.5) for effects characterization definitions, including magnitude.</p> <p>Detailed design of the Project and mitigation strategies is ongoing. Mitigation measures will be refined in consideration of environmental assessment approval conditions and permit stipulations, which will be incorporated into environmental management planning. Plants of interest to Indigenous Nations that are commercially available will be included in mine closure reclamation seed mixes.</p>
Attachment:	No



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RESPONSE TO CCN-73

ID:	CCN-73
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.4.3 Project Residual Effect MacLellan Site Page 11.39 (PDF Page 242)
Information Request:	<p>The changes spatial distribution of traditional use species should be explored as a potential impact as the location-based nature of the exercise of Section 35 Rights for gathering can be important. Further, these locales are access to teach younger generations and share knowledge, language, culture, skills, and history.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>Table CCN-73-1 shows the land cover types in which each plant species of interest to Indigenous Nations are expected to occur as well as the number of observations of each plant species by land cover type. Finer scale information on habitat associations of plants of interest to Indigenous Nations (e.g., soils, hydrology, topography) are not available and cannot be identified from remote sensed information. See the EIS Volume 11, Section 11.2.2, Table 11-4 for a list of plants of interest to Indigenous Nations identified during Project engagement. Plants of interest to Indigenous Nations are expected to occur in the land cover types present in the PDA, LAA, and RAA, including anthropogenically disturbed land. Conifer, bog and mixedwood land cover types provide most of the habitat for plants of interest to Indigenous Nations. Conifer and bog land cover types each provide habitat for 14 plants and mixedwood provides habitat for 10 plants. In addition, more than one land cover type provides habitat for many of the plants of interest to Indigenous Nations.</p> <p>Plant collection areas identified by information provided through the Indigenous engagement program for the Project, including Project-specific traditional land and resource use (TLRU) studies include shorelines and surrounding areas of the following locations:</p> <ul style="list-style-type: none"> • Anson Lake • Black Sturgeon Lake • Cockeram Lake • Frances Lake (north end of lake) • Goldsand Lake • Hughes Lakes • Jackson Lake (medicinal plants) • Moses Lake • Muskeg Lake • Russel Lake • The portage from Eden Lake to Granville Lake and Churchill River to Pukatawagan • Churchill River • Laurie River

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	<ul style="list-style-type: none"> • small rivers • boggy areas and shorelines • area between Zed and Little Brightsand Lake • Eden Lake • Glad Lake • Gold Lake • Lynn Lake • Ralph Lake, Gap Lake • shore of Burge Lake • Zed Lake <p>The plant collection locations identified by Project-specific TLRU studies are not intersected by the PDAs or the vegetation and wetland LAAs, and therefore will not be directly or indirectly affected by the Project. Undocumented plant collection locations may occur elsewhere in the LAAs and RAA.</p> <p>Table CCN-73-2 and Table CCN-73-3 show the areas of land cover types and expected changes to land cover type abundance from direct effects in the LAA and RAA during construction and operations, and decommissioning and closure of the Gordon and MacLellan PDAs, including percent change.</p> <p>Direct effects from the Gordon site will reduce the abundance of land cover types during construction and operations and after site decommissioning and closure by a minimum of 1.2% (swamp treed) to a maximum of 14.7% (mixedwood dense) compared to existing conditions in the LAA, and by a minimum of <0.1% (bog treed, fen treed, swamp treed and water) to a maximum of 1.3% (mixedwood dense) compared to existing conditions in the RAA (Table CCN-73-2).</p> <p>Direct effects from the MacLellan site will reduce the abundance of land cover types during construction and operations and after site decommissioning and closure by a minimum of 1.4% (water) to a maximum of 36.2% (conifer open) compared to existing conditions in the LAA, and by a minimum of <0.1% (shrubland and water) to 1.2% (fen patterned) compared with existing conditions in the RAA (Table CCN-73-3).</p> <p>Mixedwood dense and fen shrubby are the only land cover types reduced by more than 10% in the Gordon LAA. Ten land cover types (conifer open, conifer dense, conifer sparse, bog shrubby, bog treed, fen graminoid, fen patterned, fen treed, swamp shrubby and swamp treed) will be reduced by more than 10% in the MacLellan LAA. The affected land cover types are widely distributed in the LAAs and the RAA. Following decommissioning and closure, 1008 ha will be reclaimed, with 763.9 ha reclaimed to native upland. Reclaimed native upland will be seeded with native plant species, including commercially available plant species of interest to Indigenous Nations.</p> <p>Indirect effects may occur from weed introduction and spread, dust deposition and groundwater drawdown. These indirect effects will likely be greatest close to the Project sites and mitigation is expected to be effective at limiting changes to land cover types and plants of interest to Indigenous Nations.</p> <p>See EIS Chapter 11, Section 11.4 and Section 11.5 for a full list of mitigation measures.</p> <p>Construction and operation at the Gordon site will require dewatering of the open pit and will result in groundwater drawdown of at least 1 m within 800 m of the open pit. Construction and operation at the MacLellan site will require dewatering of the open pit and will result in groundwater drawdown of at least 1 m within 1,200 m of the open pit. Changes in wetland conditions due to groundwater drawdown may favour plants adapted to drier conditions, such as blueberries (<i>Vaccinium spp.</i>) and spruce (<i>Picea</i></p>
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	<p><i>spp.</i>), and may result in localized losses or reduced abundance of plants better suited to wetter conditions, such as sweet flag/muskrat root (<i>Acorus calamus</i>) and rat root (<i>Acorus americanus</i>). Indirect effects to bogs from groundwater drawdown are not expected as they typically receive water only from precipitation (Halsey et al. 1997). The land cover types supporting plant species of interest to Indigenous Nations will also remain abundant in the LAAs and RAA following Project construction, operation and closure and reclamation.</p>
<p>Attachment:</p>	<p>Refer to the following attachments in Appendix A:</p> <ul style="list-style-type: none"> • Table CCN-73-1 Plants of Interest to Indigenous Nations Identified During Engagement • Table CCN-73-2 Vegetation and Wetland Land Cover Type Abundance in the Gordon PDA, LAA and the RAA and Changes Due to Project Development • Table CCN-73-3 Change in Vegetation and Wetland Land Cover Types in the MacLellan PDA, LAA and the RAA and Changes Due to Project Development

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RESPONSE TO CCN-74

ID:	CCN-74
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.4.3 Project Residual Effect MacLellan Site Page 11.39 (PDF Page 242)
Information Request:	See comment 72
Response:	<p>Effects to species diversity, including plants of interest to Indigenous Nations, from the MacLellan site were assessed as moderate to high in magnitude as most of the plants are common species, however, there is uncertainty in the abundance of some infrequently-observed plant species of interest to Indigenous Nations in the LAA and RAA (EIS Volume 2, Section 11.4.4). Land cover types affected by the Project are common in the RAA and changes in the abundance of land cover types from the Project are small. Due to the limited changes in cover type abundance in the RAA and largely intact condition of the RAA, the Project is unlikely to result in the loss of a plant species of interest to Indigenous Nations. See Table 11-2 (EIS Volume 11, Section 11.1.5) for effects characterization definitions, including magnitude.</p> <p>Detailed design of the Project and mitigation strategies is ongoing. Mitigation measures will be refined in consideration of environmental assessment approval conditions and permit stipulations, which will be incorporated into environmental management planning. Plants of interest to Indigenous Nations that are commercially available will be included in mine closure reclamation seed mixes.</p>
Attachment:	No



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RESPONSE TO CCN-77

ID:	CCN-77
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.4.6 Project Residual Effects Page 11.42 (PDF Page 245)
Information Request:	<p>The amount of wetland, as well as the duration of loss, will have subsequent impacts on the exercise of Section 35 Rights. This must be considered. As reported in this section, restoration of wetlands can take upwards of 50 years to occur. This timeline will constitute a significant interruption in the exercise of CCN's Section 35 Rights and potential intergenerational disruption of knowledge of the Project area. These impacts could displace CCN members from this area permanently. This potential effect must be considered.</p> <p>Please note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.</p>
Response:	<p>The vegetation and wetlands assessment considers potential effects of the Project on the distribution and abundance of native plant communities and species of conservation concern, traditional use plants, and wetlands function. While the vegetation and wetlands assessment acknowledges vegetation and wetlands are valued by Indigenous peoples and assesses effects on plants of interest to Indigenous peoples identified through the engagement program for the Project, the vegetation and wetlands assessment itself does not assess or predict effects on other valued components. However, conclusions of the vegetation and wetlands assessment have been incorporated in the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19 of the EIS.</p> <p>Chapter 17 of the EIS (Current use of lands and resources for traditional purposes [current use]), Section 17.4.2, elaborates on the interaction of effects on vegetation and wetlands and current use including direct and indirect change to vegetation species, community diversity, and wetland function. Changes to availability of and access to resources and harvesting areas are assessed relative to the changes identified in Chapter 11 of the EIS. No changes to vegetation species, communities or wetland function are anticipated beyond the LAA for the vegetation and wetlands valued component. As such there are no anticipated effects extending to the RAA. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5, assessed these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance. The indirect effects on habitat (i.e., habitat alteration) including alteration to habitat perception is expected to vary depending on the Project component, pathway, and measurable parameter but the effects are limited to within 1 km of the Project development area. The conclusions of this assessment supported the assessment of Indigenous and Treaty rights presented in Chapter 19, Section 19.9.3. An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the vegetation and wetlands assessment, among other VCs (i.e., current use of lands and resources for traditional purposes) are presented in Table 19-1 and described in Section 19.1.2.2.</p>

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	<p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in their 2017 EIS Guidelines. Consequently, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. However, since the EIS was filed, Alamos has been made aware that IAAC has identified Chemawawin Cree Nation as an Indigenous Nation that may be affected by the Project. Alamos is currently working with Chemawawin Cree Nation to understand the nature and extent of their exercise of Indigenous and Treaty rights in relation to the Project.</p>
Attachment:	No



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RESPONSE TO CCN-78

ID:	CCN-78
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 11.54 Change in Species Diversity and 11.5.5 Change in Wetland Function Page 11.49 to 11.50 (PDF page 252 to 253)
Information Request:	There is no discussion within these two sections about the displacement of CCN members' ability either to access species which are disrupted in the LAA or to access wetland which will not be functioning until between 10-50 years following closure. This includes the preference of rights holders and perceptions. The cumulative effects assessment cannot be deemed complete without consideration of these impacts to CCN's Section 35 Rights and interests being evaluated on a regional basis.
Response:	The vegetation and wetlands assessment considers potential effects of the Project on distribution and abundance of native plant communities and species of conservation concern, traditional use plants, and wetlands function. While the vegetation and wetlands assessment acknowledges vegetation and wetlands are valued by Indigenous peoples and assessed effects on plants of interest to Indigenous peoples identified through the engagement program for the Project, the vegetation and wetlands assessment itself does not assess or predict effects on other valued components. However, conclusions of the vegetation and wetlands assessment have been incorporated in the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19. Chapter 17 of the EIS, current use of lands and resources for traditional purposes (current use), Section 17.4.2 elaborates on the interaction of effects on vegetation and wetlands and current use including direct and indirect change to vegetation species, community diversity, and wetland function. Changes to availability of and access to resources and harvesting areas are assessed relative to the changes identified in Chapter 11 of the EIS. No changes to vegetation species, communities or wetland function are anticipated beyond the LAA for the vegetation and wetlands valued component. As such there are no anticipated effects extending to the RAA and, therefore, no anticipated overlap with residual effects of other projects in the RAA. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5 assessed these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance. The indirect effects on habitat (i.e., habitat alteration) including alteration to habitat perception is expected to vary depending on the Project component, pathway, and measurable parameter but the effects are limited to within 1 km of the Project development area. The conclusions of this assessment supported the assessment of Indigenous and Treaty rights presented in Chapter 19, Section 19.9.3. An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the vegetation and wetlands assessment, among other VCs (i.e., current use of lands and resources for traditional purposes) are presented in Table 19-1 and described in Section 19.1.2.2.
Attachment:	No



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RESPONSE TO CCN-79

ID:	CCN-79
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume2 11.7.1 Significance of Project Residual Effects Page 11.53 (PDF page 256)
Information Request:	There must be consideration of the significant interruption of wetland function (upwards of 10 years for the Gordon site and 50 years for the Macl ellan site). By the definition of significance, th is effect should be considered significant. Additionally, with the consideration of the above noted effects on CCN's Section 35 Rights and interests with respect to vegetation, there is potential for there to be residual effects from the Project on the long-term viability of wetland functions. If wetland functions are impacted, there is potential for secondary impacts to vegetation species of imoortance to CCN.
Response:	A significant residual adverse environmental effect on wetland function is defined in Volume 2, Section 11.1.6 of the EIS as a residual effect that threatens the long-term persistence or viability of wetland functions in the RAA. Project effects to wetland functions were determined to be not significant as the Project is not expected to threaten the long-term persistence or viability of functions in the RAA. Changes to large existing vegetation patches, including wetlands, are small (<1% change) and most effects are to small patches of vegetation. Wetland functions will be reduced in the LAA due to the direct loss of wetland area and the alteration of wetland conditions due to groundwater drawdown. However, no wetland type affected by the Project will be lost from LAA and the affected wetland types will remain abundant in the RAA following Project construction and reclamation.
Attachment:	No



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RESPONSE TO CCN-80

ID:	CCN-80
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 12.0 Assessment of Potential Effects on Wildlife and Wildlife Habitat Page 12.1 (PDF page 314)
Information Request:	Through changes to species of cultural importance, through changes in perception, changes in preferred conditions and changes in sense of place changes to the distribution and abundance of wildlife species has the potential to adversely impact CCN's Section 35 Rights. Please update language and assessment within this section to reflect these considerations.
Response:	<p>The wildlife and wildlife habitat VC (Chapter 12 of the EIS) considers potential effects of change in wildlife habitat, change in wildlife mortality risk, and change in wildlife health. This assessment applies knowledge gained through Indigenous engagement specific to wildlife and wildlife habitat including traditional ecological knowledge regarding the past and present abundance and distribution of wildlife such as woodland caribou, barren-ground caribou, moose, hunted bird species and trapped furbearers in the Project region as well as observations regarding general environmental trends over time. Concerns raised by Indigenous Nations relating to potential Project-related environmental effects include the loss or alteration (e.g., fragmentation) of wildlife habitats and how this will affect wildlife populations, particularly as it relates to traditionally harvested species; the increased mortality of wildlife, resulting primarily from vehicle collisions; and the quality of terrestrial and aquatic environments resulting from potential degradation and contamination of resources. These concerns influenced baseline data collection efforts and the assessment of potential Project-related environmental effects on wildlife and wildlife habitat, including species of cultural and subsistence importance such as moose and furbearers.</p> <p>While results of the Indigenous engagement have helped guide baseline data collection efforts and the assessment of potential Project-related environmental effects on wildlife and wildlife habitat, including species of cultural and subsistence importance, the wildlife and wildlife habitat assessment itself does not assess or predict effects on other valued components. However, conclusions of the wildlife and wildlife habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19.</p> <p>Chapter 17 of the EIS (Current Use of Lands and Resources for Traditional Purposes [current use]), Section 17.4.2, further elaborates on the interaction of effects on wildlife and wildlife habitat with current use including direct and indirect change to wildlife habitat and mortality risk. Changes to availability and access to wildlife are assessed relative to the predicted residual effects on wildlife habitat and mortality risk described in Chapter 12. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5 assessed these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance. The indirect effects on habitat (i.e., habitat alteration) including alteration to habitat perception is expected to vary depending on the Project component, pathway, and measurable parameter; however, effects are predicted to be within 1 km of the PDA. Mitigation measures to reduce potential changes to the abundance and distribution of</p>

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	<p>culturally important species include those recommended by participating Indigenous Nations and those described in Chapter 12 and Chapter 17.</p> <p>Indigenous and Treaty rights are assessed in Chapter 19 and include the conclusions of the assessment of current use (Chapter 17), which incorporated the results of the assessment of wildlife and wildlife habitat (Chapter 19, Section 19.9.3). An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the wildlife and wildlife habitat assessment, are presented in Table 19-1 and described in Section 19.1.2.2.</p>
Attachment:	No



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RESPONSE TO CCN-81

ID:	CCN-81
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 Table 12-2 Potential Effects, Effects Pathways and Measurable Parameters for Wildlife and Wildlife Habitat Page 12.7 (PDF Page 320)
Information Request:	Similar to how avoidance is calculated for wildlife in relation to changes in habitat, avoidance of Indigenous peoples during the exercise of Section 35 Rights in relations to changes in preferred conditions can be assessed.
Response:	<p>The wildlife and wildlife habitat assessment (Chapter 12 of the EIS) considers potential effects of change in wildlife habitat, change in wildlife mortality risk, and change in wildlife health. While results of the Indigenous engagement have helped guide baseline data collection efforts and the assessment of potential Project-related environmental effects on wildlife and wildlife habitat, including species of cultural and subsistence importance, the wildlife and wildlife habitat assessment itself does not assess or predict effects on other valued components. However, conclusions of the wildlife and wildlife habitat assessment have been incorporated in the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19.</p> <p>Chapter 17 of the EIS (Current Use of Lands and Resources for Traditional Purposes [current use]), Section 17.4.2 elaborates on the interaction of effects on wildlife and wildlife habitat with current use including direct and indirect change to wildlife habitat and mortality risk. Changes to availability and access to wildlife are assessed relative to the predicted residual effects on wildlife habitat and mortality risk described in Chapter 12. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5 assessed these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance.</p> <p>The conclusions of the assessment of current use, which incorporated the results of the assessment of wildlife and wildlife habitat, supported the assessment of Indigenous and Treaty rights (Chapter 19, Section 19.9.3). An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters, such as the wildlife and wildlife habitat assessment, among other VCs are presented in Table 19-1 and described in Section 19.1.2.2.</p>
Attachment:	No

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RESPONSE TO CCN-82

ID:	CCN-82
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 Table 12-2 Potential Effects, Effects Pathways and Measurable Parameters for Wildlife and Wildlife Habitat Page 12.7 (PDF Page 320)
Information Request:	An effect pathway should be added to the potential environmental effect of change in wildlife health. The effect pathway should be based on the following wording: <ul style="list-style-type: none"> • Loss of wildlife species that support the exercise of Indigenous rights. This would ensure specific consideration.
Response:	<p>The wildlife and wildlife habitat VC (Chapter 12) considers potential effects of change in wildlife habitat, change in wildlife mortality risk, and change in wildlife health. This assessment applies knowledge gained through Indigenous engagement specific to wildlife and wildlife habitat including traditional ecological knowledge regarding the past and present abundance and distribution of wildlife such as woodland caribou, barren-ground caribou, moose, hunted bird species and trapped furbearers in the Project region as well as observations regarding general environmental trends over time. Concerns raised by Indigenous Nations relating to potential Project-related environmental effects include the loss or alteration (e.g., fragmentation) of wildlife habitats and how this will affect wildlife populations, particularly as it relates to traditionally harvested species; the increased mortality of wildlife, resulting primarily from vehicle collisions; and the quality of terrestrial and aquatic environments resulting from potential degradation and contamination of resources. These concerns influenced baseline data collection efforts and the assessment of potential Project-related environmental effects on wildlife and wildlife habitat, including species of cultural and subsistence importance such as moose and furbearers.</p> <p>While results of the Indigenous engagement have helped guide baseline data collection efforts and the assessment of potential Project-related environmental effects on wildlife and wildlife habitat, including species of cultural and subsistence importance, the wildlife and wildlife habitat assessment itself does not assess or predict effects on other valued components. However, conclusions of the wildlife and wildlife habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19.</p> <p>Chapter 17 of the EIS (Current Use of Lands and Resources for Traditional Purposes [current use]), Section 17.4.2, further elaborates on the interaction of effects on wildlife and wildlife habitat with current use including direct and indirect change to wildlife habitat and mortality risk. Changes to availability and access to wildlife are assessed relative to the predicted residual effects on wildlife habitat and mortality risk described in Chapter 12. Chapter 17, Sections 17.1.4, 17.4.2, and 17.5.5, assesses these changes in the context of effects on the experience of Indigenous peoples which adversely alter the perceived values of current use resources, sites or areas that may result in avoidance. The indirect effects on habitat (i.e., habitat alteration) including alteration to habitat perception is expected to vary depending on the Project component, pathway, and measurable parameter; however, effects are predicted to be within 1 km of the Project</p>

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	<p>development area. Mitigation measures to reduce potential changes to the abundance and distribution of culturally important species include those recommended by participating Indigenous Nations and those described in Chapter 12.</p> <p>The conclusions of the assessment of current use, which incorporated the results of the assessment of wildlife and wildlife habitat, supported the assessment of Indigenous and Treaty rights (Chapter 19, Section 19.9.3). An overview of the effects that were incorporated into the assessment of Indigenous and Treaty rights from other VC chapters (i.e., current use of lands and resources for traditional purposes) are presented in Table 19-1 and described in Section 19.1.2.2.</p>
Attachment:	No



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RESPONSE TO CCN-83

ID:	CCN-83
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 12.1.4.1 Spatial Boundaries Page 12.8 (PDF Page 321)
Information Request:	The LAA is defined as a 1 km buffer surrounding each component, however, there will be a continuously defined prohibited zone around the Project as a whole in which the exercise of rights will be prohibited. Please identify whether the selected LAA encompasses the prohibited zone or whether there are areas outside of the LAA where prohibition will occur.
Response:	<p>As stated in IAAC-07:</p> <p>While the EIS makes no reference to a prohibited zone, access will be restricted to authorized vehicles and personnel on the mine access roads beyond the existing gates and on the Gordon and MacLellan sites.</p> <p>Alamos recognizes that Indigenous peoples can exercise Indigenous and Treaty rights recognized under Section 35 of the constitution on unoccupied Crown land. The Gordon and MacLellan sites will occupy 269 ha and 938 ha of Crown land respectively. The EIS considered the effect of these restrictions on the exercise of Section 35 rights in Chapters 17, Section 17.4.3.1 and 19, Section 19.4.6. and identified that restricted access has the potential to affect access to traditional use areas in the PDA extending to the LAA. Indigenous peoples may have to find alternate means to access lands and resources for hunting, trapping, fishing, plant harvesting and other traditional practices, beyond these gates during construction, operation, and decommissioning. Hunters will be required to observe provincial regulations regarding the lawful discharge of a firearm within a certain distance of the Gordon and MacLellan sites and roads during construction, operation, and decommissioning. Chapter 17, Section 17.4 indicates that there will be an increase in sensory disturbance throughout the duration of the Project that may affect the experience of conducting traditional practices within the LAA. Alamos will post informational signs on the access roads and around the Gordon and MacLellan sites regarding access and safety.</p> <p>Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible. Alamos will use ongoing engagement to notify of restriction or access modifications, if applicable.</p>
Attachment:	No

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RESPONSE TO CCN-84

ID:	CCN-84
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 12-3 Characterization of Residual Effects on Wildlife and Wildlife Habitat Page 12.9 (PDF Page 322)
Information Request:	See comment 83. Added to magnitude should be a quantitative measure to characterize the above noted effect pathway. This quantitative measure be defined as low, moderate, or high to assesses the loss of species that support the exercise of Section 35 Rights within the LAA and RAA.
Response:	Chapter 12 of the EIS (Assessment of Potential Effects on Wildlife and Wildlife Habitat) considers potential effects of change in wildlife habitat, change in wildlife mortality risk, and change in wildlife health. Conclusions of the wildlife and wildlife habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19 as described in detail in the responses provided to other comments. For the wildlife and wildlife habitat assessment (Chapter 12), the magnitude of residual effect measures the degree of change in wildlife habitat and the change in wildlife abundance and/or distribution. For the current use assessment (Chapter 17) the magnitude of residual effect measures the amount of change in the current use of lands and resources for traditional purposes relative to existing conditions. Both of these definitions conform to CEAA 2012 and the EIS Guidelines for the Project, as well as CEA Agency/IAAC guidance for assessing effects. These definitions reflect standard environmental assessment methods previously accepted by the former CEA Agency on other projects (e.g., Greenstone Gold Mine, Manitoba-Minnesota Transmission Project, Springbank Off-Stream Reservoir Project). Alamos does not consider it necessary to revise magnitude criteria in the manner suggested.
Attachment:	No



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RESPONSE TO CCN-85

ID:	CCN-85
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 12.1.6 Significance Determination Page 12.10 (PDF Page 323)
Information Request:	<p>A significance threshold should be added to define a significant adverse effect based on the above noted effect pathways and characterizations (comment 83 and 84). It should specify that a significant adverse environmental effect is defined as:</p> <ul style="list-style-type: none"> • Project conditions that threaten wildlife species that support the exercise of Indigenous rights in the RAA; or effects that are inconsistent with the exercise of indigenous rights.
Response:	<p>Chapter 12 of the EIS (Assessment of Potential Effects on Wildlife and Wildlife Habitat) considers potential effects of change in wildlife habitat, change in wildlife mortality risk, and change in wildlife health. Conclusions of the wildlife and wildlife habitat assessment are incorporated into the assessment of Project effects on current use by Indigenous peoples in Chapter 17 and the exercise of Indigenous rights in Chapter 19.</p> <p>Chapter 17, Section 17.6 describes the determination of significance for the assessment of residual environmental effects and considers traditional knowledge (TK) / traditional land and resource use (TLRU) data from TK information sharing (Project-specific TLRU studies), applicable literature review, review of significance determination for assessment of residual effects of related biophysical and socio-economic VC assessments, review of detailed biophysical existing conditions work conducted in the Project development area, outcomes of Project engagement activities, past project experience, and professional judgment.</p> <p>A significant adverse effect on current use is defined as a long-term loss of availability of traditional use resources or access to lands relied on for current use practices or current use sites and areas that will be substantially diminished or lost from the regional assessment are (RAA). This may include disruption to current use activities and practices where biological resources or physical sites are not significantly affected in the RAA. With mitigation measures described throughout the biophysical VCs, the residual environmental effects from the Project on the current use are anticipated to be not significant because they do not result in the long-term loss of availability of traditional use resources or access to lands relied on for traditional use practices or the permanent loss of traditional use sites and areas in the LAA and RAA. The ability of Indigenous Nations to continue traditional practices outside of the PDA will be maintained.</p> <p>For the wildlife and wildlife habitat assessment, a significant adverse residual effect on wildlife and wildlife habitat is defined as one that threatens the long-term persistence or viability of a wildlife species in the RAA, including effects that are contrary or inconsistent with the goals, objectives, and activities of recovery strategies, action plans, and management plans.</p> <p>Both of these significance definitions conform to CEAA 2012 and the EIS Guidelines for the Project, as well as CEA Agency/IAAC guidance for assessing effects. These definitions reflect standard environmental assessment methods previously accepted by the former CEA Agency on other projects (e.g., Greenstone Gold Mine, Manitoba-Minnesota Transmission Project, Springbank Off-Stream Reservoir Project). Alamos</p>



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	does not consider it necessary to revise significance definitions in the manner suggested.
Attachment:	No



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RESPONSE TO CCN-87

ID:	CCN-87
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 12.4.2.3 Mitigation for Change in Habitat Page 12.39 (PDF Page 352)
Information Request:	This mitigation measure will result in additional impacts to Section 35 Rights. Restricting access of Indigenous peoples to habitat adjacent to the PDA restricts them from unoccupied Crown land to which they have a right of access; exacerbating the amount of lands taken up by the Project and rendered inaccessible for the exercise of rights. This must be considered, calculated and assessed.
Response:	<p>As stated in IAAC-07:</p> <p>Access to the PDA access roads from PR 391 will be restricted during construction, operation, and decommissioning/closure of the Gordon and MacLellan sites. Both access roads are currently gated as both are existing historical mines, so no new access modifications are planned for the access roads, simply a continuation of the current restrictions. Map 1-1 (Chapter 1, EIS) shows the location of gates on the access roads for the Gordon and MacLellan sites. The spatial extent of access restrictions include the access roads beyond the gates and the Gordon and MacLellan site PDAs. Maps 2-1 and 2-2 (Chapter 2, EIS) show the spatial extent of the Gordon and MacLellan site PDAs, to which access will be restricted until post-closure.</p> <p>No fencing is planned for the perimeter of the Gordon or MacLellan sites.</p> <p>Chapter 2, Sections 2.3.1.2 and 2.3.2.3 of the EIS describe the existing access infrastructure and planned upgrades. Exclusive rights for usage refers to Alamos' right to restrict traffic to mine-related vehicles on the mine access roads from PR 391 to the Gordon and MacLellan sites. Care and control refers to Alamos' responsibility to maintain the mine access roads from PR 391 and to control access to unauthorized traffic by maintaining gates and on-site security at the Gordon and MacLellan sites. Indigenous and public use of these roads will be restricted during construction, operation, and decommissioning. During that time, Indigenous peoples and the public may have to use alternative means other than the mine access roads to enter areas beyond the gates, just as they currently do with the existing gates. After mine closure, access will no longer be restricted.</p> <p>Although there is no planned fence line to enclose the Gordon or MacLellan PDAs, and both gates were in place before the Project, indirect implications for access may result from sensory disturbances such as noise and dust during construction, operation, and decommissioning as indicated in Chapter 17, Section 17.4.3 of the EIS. These disturbances may result in Indigenous peoples choosing not to conduct traditional practices within a certain distance from the PDA in the LAA due to the altered experience of traditional practices near an active mining operation. Sensory disturbances such as noise may alter wildlife movement patterns and dust may affect vegetation extending into the LAA resulting in Indigenous peoples choosing not to harvest these resources in the indirectly affected portion of the LAA.</p> <p>Section 8.1 of the Project Conceptual Closure Plan indicated that specified closure activities aim to promote the re-establishment of vegetation and animal habitats on site. The site will remain open to the public after final closure, and activities such as hunting,</p>



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	<p>trapping, and snowmobiling will be permitted to the extent feasible. Access roads from PR 391 will remain; however, the site will otherwise be left to naturally revegetate. A boulder fence around the open pit crests will remain indefinitely for safety reasons. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible.</p> <p>While the EIS makes no reference to a prohibited zone, access will be restricted to authorized vehicles and personnel on the mine access roads beyond the existing gates and on the Gordon and MacLellan sites. Alamos recognizes that Indigenous peoples can exercise Indigenous and Treaty rights recognized under Section 35 of the constitution on unoccupied Crown land. The Gordon and MacLellan sites will occupy 269 ha and 938 ha of Crown land respectively. The EIS considered the effect of these restrictions on the exercise of Section 35 rights in Chapters 17, Section 17.4.3.1 and 19, Section 19.4.6. of the EIS and identified that restricted access has the potential to affect access to traditional use areas in the PDA extending to the LAA.</p> <p>Indigenous peoples may have to find alternate means to access lands and resources, for hunting, trapping, fishing, plant harvesting and other traditional practices, beyond these gates during construction, operation, and decommissioning. Hunters will be required to observe provincial regulations regarding the lawful discharge of a firearm within a certain distance of the Gordon and MacLellan sites and roads during construction, operation, and decommissioning. Chapter 17, Section 17.4 indicates that there will be an increase in sensory disturbance throughout the duration of the Project that may affect the experience of conducting traditional practices within the LAA. Alamos will post informational signs on the access roads and around the Gordon and MacLellan sites regarding access and safety. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible. Alamos will use ongoing engagement to notify of restriction or access modifications, if applicable.</p> <p>Alamos will monitor access by maintaining the existing gates on the mine access roads and with on-site security at the Gordon and MacLellan sites.</p>
Attachment:	No



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RESPONSE TO CCN-88

ID:	CCN-88
Commenter:	CCN
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 15.2.2.1 Land Use Page 15.13 (Page PDF 606)
Information Request:	Please provide a calculation of the amount of Unoccupied Crown land that will be converted to Occupied Crown land by the Project, if approved. Mechanisms which can result in this change include permits, leases, dispositions, physical disturbance or prohibition of use that are incompatible with the exercise of CCN's Section 35 Rights. This calculation specifically relates to Section 35 Rights and it is important to note that due to a lack of capacity and an unwillingness by Alamos to engage with CCN, an impact assessment of CCN's Section 35 Rights and Interests has not been completed and is therefore not part of this EIS.
Response:	The total amount of unoccupied Crown land taken up by the PDAs for the Gordon and MacLellan sites, which include Project-related physical disturbance and land taken up for mine components, fencing, and signage, is approximately 269 ha (Gordon site) and 938 ha (MacLellan site), respectively. The Project was designed to limit the amount of unoccupied Crown land taken up within the LAA (1.3% for Gordon, 4.6% for MacLellan) and RAA (less than 1%).
Attachment:	No



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RESPONSE TO CCN-89

ID:	CCN-89
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 15.4.2.3 Project Residual Effects Gordon Site Page 15.29 (PDF Page 622)
Information Request:	There is no consideration of how the conversion of 269 ha of Unoccupied Crown land to Occupied Crown land as a result of the Project will impact CCN and the exercise of CCN's Section 35 Rights and interests. This must be considered, assessed and further discussed.
Response:	As stated in Chapter 19, Section 19.9.1, the Project is mainly situated on previously disturbed land. The Gordon site PDA will disturb approximately 269 ha of provincial unoccupied Crown land. The results of the assessment determined that effects of the Project will not cause the long-term loss of availability of traditional use resources or access to lands relied on for traditional use practices or the permanent loss of traditional use sites and areas affected by the Project. Given that the Project will occupy only a small amount of land available in the RAA (less than 1%), it is expected that the ability of Indigenous Nations to continue traditional practices outside of the Gordon site PDA will be maintained.
Attachment:	No



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RESPONSE TO CCN-90

ID:	CCN-90
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 15.4.2.3 Project Residual Effects MacLellan Site Page 15.30 (PDF Page 623)
Information Request:	There is no consideration of how the conversion of 938 ha, with approximately 10 ha of land for the power distribution line ROW of Unoccupied Crown land to Occupied Crown land as a result of the Project will impact CCN and the exercise of CCN's Section 35 Rights and interests. This must be considered, assessed and further discussed.
Response:	As stated in Chapter 19, Section 19.9.1, the Project is mainly situated on previously disturbed land. The MacLellan site PDA contains approximately 938 ha of municipally administered Unoccupied Crown land area. The results of the assessment determined that effects of the Project will not cause the long-term loss of availability of traditional use resources or access to lands relied on for traditional use practices or the permanent loss of traditional use sites and areas affected by the Project. Given that the Project will occupy only a small amount of land available in the RAA (less than 1%), it is expected that the ability of Indigenous Nations to continue traditional practices outside of the MacLellan site PDA will be maintained.
Attachment:	No



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RESPONSE TO CCN-91

ID:	CCN-91
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume2 15.4.3.2 Mitigation Page 15.35 (PDF Page 628)
Information Request:	This mitigation measure will exacerbate an impact to Section 35 Rights. Signs and fences are generally not preferred conditions for the exercise of Section 35 Rights. As such, CCN members may experience increased avoidance behaviours and negative perceptions related to the Project and its facilities. This must be considered, calculated and assessed.
Response:	<p>Access to the PDA access roads from PR 391 will be restricted during construction, operation, and decommissioning/closure of the Gordon and MacLellan sites. Both access roads are currently gated as both are existing historical mines, so no new access modifications are planned for the access roads, simply a continuation of the current restrictions. Map 1-1 (Chapter 1, EIS) shows the location of gates on the access roads for the Gordon and MacLellan sites. The spatial extent of access restrictions includes the access roads beyond the gates and the Gordon and MacLellan site PDAs. Maps 2-1 and 2-2 (Chapter 2, EIS) show the spatial extent of the Gordon and MacLellan site PDAs, to which access will be restricted until post-closure.</p> <p>No fencing is planned for the perimeter of the Gordon or MacLellan sites.</p> <p>Chapter 2, Sections 2.3.1.2 and 2.3.2.3 of the EIS describe the existing access infrastructure and planned upgrades. Exclusive rights for usage refers to Alamos' right to restrict traffic to mine-related vehicles on the mine access roads from PR 391 to the Gordon and MacLellan sites. Care and control refers to Alamos' responsibility to maintain the mine access roads from PR 391 and to control access to unauthorized traffic by maintaining gates and on-site security at the Gordon and MacLellan sites. Indigenous and public use of these roads will be restricted during construction, operation, and decommissioning. During that time, Indigenous peoples and the public may have to use alternative means other than the mine access roads to enter areas beyond the gates, just as they currently do with the existing gates. After mine closure, access will no longer be restricted.</p> <p>Although there is no planned fence line to enclose the Gordon or MacLellan PDAs, and both gates were in place before the Project, indirect implications for access may result from sensory disturbances such as noise and dust during construction, operation, and decommissioning as indicated in Chapter 17, Section 17.4.3 of the EIS. These disturbances may result in Indigenous peoples choosing not to conduct traditional practices within a certain distance from the PDA in the LAA due to the altered experience of traditional practices near an active mining operation. Sensory disturbances such as noise may alter wildlife movement patterns and dust may affect vegetation extending into the LAA resulting in Indigenous peoples choosing not to harvest these resources in the indirectly affected portion of the LAA.</p> <p>Section 8.1 of the Project Conceptual Closure Plan indicated that specified closure activities aim to promote the re-establishment of vegetation and animal habitats on site. The site will remain open to the public after final closure, and activities such as hunting, trapping, and snowmobiling will be permitted to the extent feasible. Access roads from</p>

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	<p>PR 391 will remain; however, the site will otherwise be left to naturally revegetate. A boulder fence around the open pit crests will remain indefinitely for safety reasons. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible.</p> <p>While the EIS makes no reference to a prohibited zone, access will be restricted to authorized vehicles and personnel on the mine access roads beyond the existing gates and on the Gordon and MacLellan sites. Alamos recognizes that Indigenous peoples can exercise Indigenous and Treaty rights recognized under Section 35 of the constitution on unoccupied Crown land. The Gordon and MacLellan sites will occupy 269 ha and 938 ha of Crown land respectively. The EIS considered the effect of these restrictions on the exercise of Section 35 rights in Chapters 17, Section 17.4.3.1 and 19, Section 19.4.6. of the EIS and identified that restricted access has the potential to affect access to traditional use areas in the PDA extending to the LAA.</p> <p>Indigenous peoples may have to find alternate means to access lands and resources, for hunting, trapping, fishing, plant harvesting and other traditional practices, beyond these gates during construction, operation, and decommissioning. Hunters will be required to observe provincial regulations regarding the lawful discharge of a firearm within a certain distance of the Gordon and MacLellan sites and roads during construction, operation, and decommissioning. Chapter 17, Section 17.4 indicates that there will be an increase in sensory disturbance throughout the duration of the Project that may affect the experience of conducting traditional practices within the LAA. Alamos will post informational signs on the access roads and around the Gordon and MacLellan sites regarding access and safety. Alamos will continue to engage with Indigenous Nations throughout the life of the Project, and concerns with respect to access to the sites will be addressed to the extent possible. Alamos will use ongoing engagement to notify of restriction or access modifications, if applicable.</p> <p>Alamos will monitor access by maintaining the existing gates on the mine access roads and with on-site security at the Gordon and MacLellan sites.</p>
Attachment:	No



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RESPONSE TO CCN-92

ID:	CCN-92
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 16.4.2.2 Mitigation Page 16.20 (PDF Page 695)
Information Request:	Please define specific protocol for notification of heritage resources which may be identified during construction by the professional archaeologist designated by Alamos.
Response:	Chapter 16 of the EIS (Heritage Resources) Section 16.4.2.2, describes the protocols proposed for the chance encounter of heritage resources during construction and operation of the Project. As there is potential for heritage resources to be found during ground disturbing activities, Alamos will develop a Heritage and Cultural Resource Protection Plan (HCRPP) to mitigate such discoveries. The HCRPP will be based on learnings from previous projects, knowledge of the existing heritage resource conditions within the Gordon and MacLellan sites, and recommendations from the Historic Resources Branch (HRB). The HCRPP will also incorporate TLRU information and will develop engagement protocols with participating Indigenous Nations.
Attachment:	No



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RESPONSE TO CCN-94

ID:	CCN-94
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 17.1.3 The Influence of Engagement on the Assessment Page 17.5 (PDF Page 716)
Information Request:	<p>CCN was not considered as 'most affected' or 'affected to a lesser degree' according to IAAC and Alamos. CCN disagrees with this assessment. CCN are signatories to Treaty No. 5 and adheres to the Natural Resources Transfer Agreement, 1930 which enabled the exercise of hunting, gathering, fishing and other Treaty rights on Unoccupied Crown lands throughout the Province of Manitoba. Further, CCN's rights are affirmed and protected under Section 35 of the Constitution Act, 1982.</p> <p>CCN's exercises Section 35 Rights including hunting, trapping, fishing, and gathering in the Project area. In addition, Project area may also include sacred or cultural site. These details should be identified through TLRU information gathering and impact assessment activities. CCN's connection to the area is historic and intergenerational. CCN uses the environment near and surrounding the location for economic opportunities, as part of the governance structure and is critical for CCN's cultural identity and for location-based language and knowledge transfer.</p> <p>The Project has the potential to impact preferred sites of the above noted uses as well as the preferred means of exercise. This could be through the change in priority rights on Crown land, changes in the physical attributes of the land (e.g., air, noise, visual quality), a change in the perception of land (increased avoidance by CCN members due to perceived environmental, aesthetic or safety concerns), or changes in access. The Project could also result in impacts to preferred species of harvest/culturally critical species.</p> <p>The Project also has the potential to impact biophysical resources of importance to CCN.</p>
Response:	The former CEA Agency, now IAAC did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines for the Project. As such, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. However, since the EIS was filed, Alamos has been made aware that IAAC has identified Chemawawin Cree Nation as an Indigenous Nation that may be affected by the Project. Alamos is currently working with Chemawawin Cree Nation to understand the nature and extent of their exercise of Indigenous and Treaty rights in relation to the Project.
Attachment:	No



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RESPONSE TO CCN-96

ID:	CCN-96
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 Table 17-1 Potential Effects, Effects Pathways and Measurable Parameters for Current Use of Lands for Traditional Purposes Page 17.11 to 17.12 (PDF Page 722 to 723)
Information Request:	This table does not include CCN-identified Potential Environmental Effects. Please see comment 92 for a detailed description. Further, the effect pathways are largely based on biophysical components previously assessed within the EIS. This is also evident in the measurable parameters. It is inappropriate to focus on biophysical components. Rather, the effects pathways should be focused on Section 35 Rights and the exercise of those rights specifically.
Response:	<p>The former CEA Agency, now IAAC, did not identify Chemawawin Cree Nation in the 2017 EIS Guidelines <i>for the Project</i> (the Guidelines). Consequently, engagement with Chemawawin Cree Nation was not undertaken in the early Project phases. However, since the EIS was filed, Alamos has been made aware that IAAC has identified Chemawawin Cree Nation as an Indigenous Nation that may be affected by the Project. Alamos is currently working with Chemawawin Cree Nation to understand the nature and extent of their exercise of Indigenous and Treaty rights in relation to the Project.</p> <p>The methods for the assessment of current use of lands and resources for traditional purposes by Indigenous peoples, including the identification of effects pathways, were developed in consideration of:</p> <ul style="list-style-type: none"> • results of the Indigenous engagement program for the Project, including Project-specific TLRU studies; • review of publicly available literature containing TLRU information for Indigenous Nations engaged on the Project; • conclusions of relevant biophysical and socioeconomic assessments; and • feedback on the assessment from participating Indigenous Nations. <p>The methodology applied for the assessment of potential effects of the Project on the current use of lands and resources for traditional purposes, including the assessment of potential effects on the ability of Indigenous peoples to exercise their Indigenous and Treaty rights, conforms to CEAA 2012 and the federal EIS Guidelines for the Project, as well as Agency guidance for assessing effects on current use (CEA Agency 2015a; CEA Agency 2015b). The methods applied reflect standard environmental assessment methods appropriate for the scope and nature of the Project. Effects on current use are assessed in Chapter 17 and effects on the exercise of rights are assessed in Chapter 19.</p> <p>References:</p> <p>CEA Agency (formerly the Canadian Environmental Assessment Agency; now the Impact Assessment Agency of Canada). 2015a. Considering Aboriginal traditional knowledge in environmental assessments conducted under CEAA -- Interim Principles.</p>



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	<p>https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/considering-aboriginal-traditional-knowledge-environmental-assessments-conducted-under-canadian-environmental-assessment-act-2012.html</p> <p>CEA Agency (formerly the Canadian Environmental Assessment Agency; now the Impact Assessment Agency of Canada). 2015b. Draft Technical Guidelines for assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012.</p> <p>https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/technical-guidance-assessing-current-use-lands-resources-traditional-purposes-under-ceaa-2012.html.</p>
Attachment:	No



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RESPONSE TO CCN-97

ID:	CCN-97
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 17.1.4 Potential Effects, Pathways and Measurable Parameters Page 17.12 (PDF Page 723)
Information Request:	<p>Please provide details on whether Indigenous Nations were informed of the process for evaluating intangible values based on identified related concerns.</p> <p>In some cases, intangible values can be difficult to quantify. However, there are ways that quantifying intangible values can occur. For example, surveys on perception, can, over time (e.g., baseline, project case and ongoing monitoring), conceptualize Indigenous nation members perceptions related to a project. This data can be directly related to harvesting outcomes through ongoing harvesting surveys. Additionally, avoidance behaviours can be quantified and reported on to determine avoidance of specific development types broken down by Section 35 Rights exercises.</p> <p>These intangible values are not addressed by standard biophysical mitigation measures, but there are measures that can be applied beyond standard mitigation measures. For example, if someone has a belief that vegetation is not safe to consume, ongoing community sessions reporting the results of vegetation health can, over time, alleviate concerns and act as an ongoing mitigation through Project operations.</p> <p>Further, CCN rejects the premise because assessing intangible values is unconventional, it can only be measured through concerns, described narratively and cannot be mitigated through creative and collaborative solutions.</p>
Response:	<p>Through engagement and Project-specific TLRU studies, participating Indigenous Nations shared cultural and experiential values that go beyond the traditional harvesting, occupancy, and travel. These were shared in open houses, one-to-one interviews, and in meetings with First Nations leaders. The context for expressing the effects on intangible values generally takes the form of concerns and issues regarding the Project's potential to adversely affect these values. Alamos is committed to ongoing engagement with Indigenous Nations regarding follow-up and monitoring and will work with participating Nations who wish to recommend mitigation measures regarding adverse effects on the intangible aspects of traditional practices.</p> <p>References:</p> <p>CEA Agency (formerly the Canadian Environmental Assessment Agency; now the Impact Assessment Agency of Canada). 2015a. Considering Aboriginal traditional knowledge in environmental assessments conducted under CEAA -- Interim Principles. https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/considering-aboriginal-traditional-knowledge-environmental-assessments-conducted-under-canadian-environmental-assessment-act-2012.html</p> <p>CEA Agency (formerly the Canadian Environmental Assessment Agency; now the Impact Assessment Agency of Canada). 2015b. Draft Technical Guidelines for</p>



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	assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012. https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/technical-guidance-assessing-current-use-lands-resources-traditional-purposes-under-ceaa-2012.html .
Attachment:	No

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RESPONSE TO CCN-100

ID:	CCN-100
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 17.2.3 References to Indigenous People in the Trade Post Journals Page 17.23 to 17.32 (PDF Page 734 to 743)
Information Request:	This section is purely based on a western-colonial post-contact perspective and is not inclusive of Indigenous perspectives or traditional knowledge from Indigenous nations who have inhabited this region, including CCN. This section should be updated with oral history from Indigenous nations.
Response:	The regional cultural context in Section 17.2 of the EIS applies the fur trade journals as a secondary source overlap between the pre-contact and early contact times, which, in northern Manitoba extend back over 300 years. These sources were considered in the context of the information provided in Project-specific TLRU studies and the oral tradition and map biographies of Elders whose trapping careers in turn overlap with the fur trade sources. Because information shared had restrictions on sharing individual information and participant names, the links between the families of those interviewed and those mentioned in the fur trade record could not be expressed in the EIS. The information was therefore kept at the level of context to establish a cultural continuity in the region by Dene and Cree peoples extending back over 6,000 years. The Indigenous Nations who completed Project-specific studies have versions of the TLRU that does provide the oral history information that establishes a link with the secondary source of fur trade journals and the tertiary evidence from the archaeological record.
Attachment:	No



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RESPONSE TO CCN-130

ID:	CCN-130
Commenter:	Chemawawin Cree Nation (CCN)
Guideline Reference:	Not Provided
EIS Reference:	Volume 2 19.10 Follow-up and Monitoring Page 19.122 (PDF Page 1172)
Information Request:	CCN requires to be consulted on potential involvement in the follow-up and monitoring program.
Response:	Alamos will work with Indigenous Nations in the design and implementation of follow-up programs, and evaluation of follow-up results and subsequent updates to the program. Alamos will further work with Indigenous Nations in monitoring on a go-forward basis, where appropriate.
Attachment:	No



Appendix A ATTACHMENTS



Table CCN-73-1 Plants of Interest to Indigenous Nations Identified During Engagement

Plants of Interest to Indigenous Nations	Scientific name of Potential Species in Manitoba	Species Recorded in RAA	Plant Conservation Status Rank (MBCDC 2018)	Number of Observations	Average Percent Cover	Min Percent Cover	Max Percent Cover	Standard Deviation of Percent Cover	Land Cover Class
<i>Acorus calamus</i> (sweet flag)/ muskrat root	<i>Acorus americanus</i>	-	S4S5	0	N/A	N/A	N/A	N/A	Swamp, Marsh, Water
bear root	<i>Hedysarum alpinum</i>	-	S4S5	0	N/A	N/A	N/A	N/A	Mixedwood, Development
beaver pineapple	<i>Matricaria discoidea</i>	-	SNA	0	N/A	N/A	N/A	N/A	Development
blueberries	<i>Vaccinium angustifolium</i> , <i>Vaccinium caespitosum</i> , <i>Vaccinium myrtilloides</i>	<i>Vaccinium myrtilloides</i>	S5	30	16.6	0.1	70	18.6	Conifer, Mixedwood, Shrubland, Bog
		<i>Vaccinium uliginosum</i>	S5	18	5.1	0.1	25	6.3	Conifer, Bog
birch	<i>Betula glandulosa</i> , <i>Betula neoalaskana</i> , <i>Betula occidentalis</i> , <i>Betula papyrifera</i> , <i>Betula pendula</i> , <i>Betula pumila</i>	<i>Betula glandulosa</i>	S5	21	9.2	0.1	30	10.4	Bog, Fen, Marsh, and Swamp
		<i>Betula papyrifera</i>	S5	23	6.7	0.1	25	7.3	Mixedwood, Deciduous
		<i>Betula pumila</i>	S5	3	25.3	1	45	18.3	Bog, Fen, Swamp
buffalo berries	<i>Shepherdia argentea</i> , <i>Shepherdia canadensis</i>	-	S3S4	0	N/A	N/A	N/A	N/A	Mixedwood, Deciduous, Shrubland
		-	S5	0	N/A	N/A	N/A	N/A	
chaga fungus	<i>Inonotus obliquus</i>	-	N/A	0	N/A	N/A	N/A	N/A	Mixedwood, Deciduous
choke cherries	<i>Prunus virginiana</i>	-	S5	0	N/A	N/A	N/A	N/A	Coniferous, Mixedwood, Deciduous
cloudberries	<i>Rubus chamaemorus</i>	<i>Rubus chamaemorus</i>	S5	19	3.2	0.1	20	5.7	Bog
cranberries	<i>Viburnum</i> species, <i>Vaccinium oxycoccos</i> , <i>Vaccinium vitis-idaea</i>	<i>Vaccinium oxycoccos</i>	S5	29	0.4	0.1	3	0.6	Bog, Swamp, and Fen
		<i>Vaccinium vitis-idaea</i>	S5	46	2.7	0.1	15	3.7	Bog, Mixedwood, Barren
		<i>Viburnum edule</i>	S5	1	0.1	0.1	0.1	0	Mixedwood, Deciduous, Shrubland
frog ears moss	<i>unknown</i>	-	N/A	0	N/A	N/A	N/A	N/A	-
green birch	<i>Alnus viridis</i> , <i>Alnus incana</i> , <i>Alnus viridis</i> ssp. <i>crispa</i> , <i>Alnus incana</i> ssp. <i>rugosa</i>	<i>Alnus viridis</i>	S5	15	15.5	1	50	15.1	Deciduous, Mixedwood, Shrubland
jack pine	<i>Pinus banksiana</i>	<i>Pinus banksiana</i>	S5	27	22.1	1	60	18.2	Conifer, Mixedwood
Labrador tea	<i>Rhododendron groenlandicum</i>	<i>Rhododendron groenlandicum</i>	S5	48	34.2	0.1	80	20.5	Bog, Swamp, Mixedwood



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Plants of Interest to Indigenous Nations	Scientific name of Potential Species in Manitoba	Species Recorded in RAA	Plant Conservation Status Rank (MBCDC 2018)	Number of Observations	Average Percent Cover	Min Percent Cover	Max Percent Cover	Standard Deviation of Percent Cover	Land Cover Class
mint	Mentha canadensis, Mentha spicata	-	S5	0	N/A	N/A	N/A	N/A	Marsh
			SNA	0	N/A	N/A	N/A	N/A	
moss	Dicranum groenlandicum, dicranum species, Pleurozium schreberi, Hylocomium splendens, Ptilium crista-castrensis, Tomentypnum nitens, sphagnum species, Sphagnum fuscum	Dicranum polysetum	S4S5	38	0.3	0.1	1	0.4	Barren, Mixedwood, Conifer
		Dicranum polysetum	S4S5	38	0.3	0.1	1	0.4	Barren, Mixedwood, Conifer
		Pleurozium schreberi	S4S5	35	21	0.1	90	26.2	Conifer, Mixedwood, Deciduous
		Tomentypnum nitens	S4S5	5	0.7	0.1	2	0.7	Fen, Swamp
		Hylocomium splendens	S4S5	13	10.3	0.1	70	18.8	Conifer, Mixedwood, Deciduous
		Ptilium crista-castrensis	S4S5	1	0.1	0.1	0.1	0	Conifer, Mixedwood, Deciduous
		Sphagnum fuscum	S4S5	20	26.4	0.1	80	24.8	Bog, Fen
		Sphagnum angustifolium	S4S5	23	14.6	0.1	70	19	Bog, Fen
		Sphagnum capillifolium	S4S5	4	6.8	1	20	7.8	Bog, Fen
		Sphagnum magellanicum	S4S5	9	8.1	0.1	40	11.8	Bog
		Sphagnum majus	SNR	1	0.1	0.1	0.1	0	Fen
		Sphagnum squarrosum	S4S5	10	7.9	0.1	20	7.5	Fen, Swamp
		Sphagnum teres	S4S5	2	0.1	0.1	0.1	0	Fen, Swamp
		Sphagnum warnstorffii	S4	9	4.2	0.1	10	4.3	Fen
pin cherries	Prunus pensylvanica	-	S5	0	N/A	N/A	N/A	N/A	Development, Mixedwood, Deciduous, Conifer
pineapple root	Matricaria discoidea	-	SNA	N/A	N/A	N/A	N/A	N/A	Development



Table CCN-73-1 Plants of Interest to Indigenous Nations Identified During Engagement

Plants of Interest to Indigenous Nations	Scientific name of Potential Species in Manitoba	Species Recorded in RAA	Plant Conservation Status Rank (MBCDC 2018)	Number of Observations	Average Percent Cover	Min Percent Cover	Max Percent Cover	Standard Deviation of Percent Cover	Land Cover Class
pond lily	<i>Nuphar microphylla</i> , <i>Nuphar variegata</i> , <i>Nymphaea leibergii</i> , <i>Nymphaea loriانا</i> , <i>Nymphaea odorata</i> , <i>Nymphaea tetragona</i> *	<i>Nuphar variegata</i>	S5	2	0.1	0.1	0.1	0	Water
		<i>Nymphaea tetragona</i> *	S2?	N/A	N/A	N/A	N/A	N/A	Water
poplar	<i>Populus alba</i> , <i>Populus balsamifera</i> , <i>Populus deltoides</i> , <i>Populus grandidentata</i> , <i>Populus tremuloides</i>	<i>Populus tremuloides</i>	S5	7	3.5	0.1	15	5	Mixedwood, Deciduous
raspberries	<i>Rubus species</i> , <i>Rubus arcticus</i> , <i>Rubus idaeus</i> , <i>Rubus pubescens</i>	<i>Rubus arcticus</i>	S5	8	0.3	0.1	1	0.4	Bog, Fen, Swamp
		<i>Rubus idaeus</i>	S5	1	1	1	1	0	Conifer, Mixedwood, Deciduous, Shrubland, Development
rat root	<i>Acorus americanus</i>	-	S4S5	0	N/A	N/A	N/A	N/A	Swamp, Marsh
saskatoon	<i>Amelanchier alnifolia</i>	-	S5	0	N/A	N/A	N/A	N/A	Conifer, Mixedwood, Deciduous
seneca root	<i>Polygala senega</i>	-	S4	0	N/A	N/A	N/A	N/A	Mixedwood, Barren, Development
spruce	<i>Picea glauca</i> , <i>Picea mariana</i>	<i>Picea mariana</i>	S5	53	36.2	0.1	105	25.9	Bog, Swamp, Conifer, Mixedwood
strawberries	<i>Fragaria vesca</i> , <i>Fragaria virginiana</i>	<i>Fragaria virginiana</i>	S5	1	1	1	1	0	Mixedwood, Deciduous, Development
true tinder fungus	<i>Inonotus obliquus</i>	-	N/A	0	N/A	N/A	N/A	N/A	Mixedwood, Deciduous
wild carrot	<i>Daucus carota</i>	-	SNA	0	N/A	N/A	N/A	N/A	Development
willows	<i>Salix species</i>	<i>Salix species</i>	N/A	33	13.7	0.1	66	16.2	Shrubland, Fen, Swamp, Mixedwood, Deciduous
		<i>Salix arbusculoides</i> *	S2S3	4	16.3	3	40	14.4	Conifer, Mixedwood, Shrublands, Bog, Fen, Swamp
willows	<i>Salix species</i>	<i>Salix bebbiana</i>	S5	6	8.2	0.1	20	8.5	Conifer, Mixedwood, Shrublands, Bog, Fen, Swamp, Development
		<i>Salix candida</i>	S5	2	5	5	5	0	Conifer, Mixedwood, Shrublands, Fen, Swamp, Developed



Table CCN-73-1 Plants of Interest to Indigenous Nations Identified During Engagement

Plants of Interest to Indigenous Nations	Scientific name of Potential Species in Manitoba	Species Recorded in RAA	Plant Conservation Status Rank (MBCDC 2018)	Number of Observations	Average Percent Cover	Min Percent Cover	Max Percent Cover	Standard Deviation of Percent Cover	Land Cover Class
		<i>Salix discolor</i>	S5	3	9.3	1	20	7.9	Conifer, Mixedwood, Shrublands, Fen, Swamp
		<i>Salix lutea</i>	N/A	1	5	5	5	0	Mixedwood, Shrublands, Swamp
		<i>Salix maccalliana</i>	S4	15	11.6	0.1	45	12.4	Marsh, Bog, Fen, Swamp
		<i>Salix myrtillifolia</i>	S5	9	2.7	0.1	10	3.2	Conifer, Bog, Fen, Swamp
		<i>Salix pedicellaris</i>	S5	4	4.3	1	10	3.7	Bog, Fen, Swamp
		<i>Salix planifolia</i>	S5	3	7.3	2	15	5.6	Mixedwood, Conifer, Bog, Fen
		<i>Salix pseudomonticola</i>	S4S5	1	5	5	5	0	Conifer, Mixedwood, Deciduous, Bog, Fen, Swamp, Shrubland
		<i>Salix pyrifolia</i>	S4S5	1	0.1	0.1	0.1	0	Bog, Fen, Swamp
		<i>Salix scouleriana</i>	S4	4	11.5	0.1	40	16.5	Conifer, Mixedwood, Bog, Swamp, Developed

NOTE:

Berry picking, medicinal plants, and variety of herbs were also mentioned by Indigenous Nations, but insufficient information was available to identify plant species. -

species not recorded in the RAA.

* species is a SOCC.

N/A data not available.

Landcover types determined using Johnson et al. (2017) and Flora of North America (2020).



Table CCN-73-2 Vegetation and Wetland Land Cover Type Abundance in the Gordon PDA, LAA and the RAA and Changes Due to Project Development

Land Cover Type	Description	Existing Conditions			Construction & Operation		Decommissioning/ Closure		Change from Existing Conditions					
		PDA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	Construction & Operation			Decommissioning/ Closure		
									ha	% of LAA	% of RAA	ha	% of LAA	% of RAA
Barren	Naturally unvegetated (i.e., rock outcrop, beaches)	0.0	0.0	0.9	0.0	0.9	0.0	0.9	0.0	N/A	0.0	0.0	N/A	0.0
Conifer Dense ^a	>60% crown closure, with ≥75% coniferous tree cover	22.2	1,094.5	29,040.1	1,072.30	28,797.6	1,072.30	28,797.6	-22.2	-2.0	-0.1	-22.2	-2.0	-0.1
Conifer Open ^a	26-60% crown closure, with ≥75% coniferous tree cover	20.4	463.8	18,512.5	443.4	18,322.2	443.4	18,322.2	-20.4	-4.4	-0.1	-20.4	-4.4	-0.1
Conifer Sparse ^a	10-25% crown closure, with ≥ 75% coniferous tree cover	28.4	355.8	21,814.9	327.4	21,688.2	327.4	21,688.2	-28.4	-8.0	-0.1	-28.4	-8.0	-0.1
Mixedwood Dense ^a	>60% crown closure, with neither coniferous or deciduous trees comprising ≥ 75% total tree cover	40.0	272.7	2,969.7	232.7	2,929.6	232.7	2,929.7	-40.0	-14.7	-1.3	-40.0	-14.7	-1.3
Mixedwood Open ^a	26 - 60% crown closure, with neither coniferous or deciduous trees comprising ≥ 75% total tree cover	2.5	96.2	1,317.3	93.7	1,314.8	93.7	1,314.8	-2.5	-2.6	-0.2	-2.5	-2.6	-0.2
Deciduous ^a	>75% Deciduous tree cover	0.0	0.0	155.1	0.0	155.1	0	155.1	0.0	N/A	0.0	0.0	N/A	0.0
Shrubland ^a	≥ 20% shrub cover	5.9	141.6	6,778.6	135.7	6,770.7	135.7	6,770.7	-5.9	-4.2	-0.1	-5.9	-4.2	-0.1
Reclaimed Native Upland	Reclaimed upland planted with native trees and grasses	0.0	0.0	0.0	0	0.0	156.7	763.9	0.0	N/A	N/A	156.7	N/A	N/A
Reclaimed Upland	Reclaimed upland planted with reclamation species	0.0	0.0	0.0	0.0	0.0	0.0	236.9	0.0	N/A	N/A	0.0	0.0	N/A
Upland subtotal		119.4	2,424.6	80,589.1	2,305.2	79,979.1	2,461.9	80,980.0	-119.4	-4.9	-0.1	37.3	1.5	0.0
Water	Lakes, rivers, or streams	13.3	430.3	27,480.8	417.1	27,463.3	446.1	27,558.3	-13.3	-3.1	<0.1	15.8	3.7	0.1
Water subtotal		13.3	430.3	27,480.8	417.1	27,463.3	446.1	27,558.3	-13.3	-3.1	<0.1	15.8	3.7	0.1
Bog Shrubby ^{b,c}	Isolated from surface or groundwater influence with >40 cm peat accumulation, >25% shrub cover and tree cover that is ≤ 25%	10.7	194.6	13,266.9	183.9	13,214.3	183.9	13,214.3	-10.7	-5.5	-0.1	-10.7	-5.5	-0.1
Bog Treed ^{b,c}	Isolated from surface or groundwater influence with >40 cm peat accumulation, >25% tree cover by coniferous species	7.9	435.8	28,979.8	427.9	28,772.4	427.9	28,772.4	-7.9	-1.8	<0.1	-7.9	-1.8	0.0
Fen Graminoid ^b	Connected to surface or groundwater with >40 cm peat accumulation, ≤ 25% shrub and tree cover	0.0	0.0	532.0	0.0	527.0	0.0	527.0	0.0	N/A	0.0	0.0	N/A	0.0



Table CCN-73-2 Vegetation and Wetland Land Cover Type Abundance in the Gordon PDA, LAA and the RAA and Changes Due to Project Development

Land Cover Type	Description	Existing Conditions			Construction & Operation		Decommissioning/ Closure		Change from Existing Conditions					
		PDA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	Construction & Operation			Decommissioning/ Closure		
									ha	% of LAA	% of RAA	ha	% of LAA	% of RAA
Fen Pattern ^{b,c,d}	Connected to surface or groundwater with a pattern of strings and flarks, with >6% tree cover	0.0	0.0	442.7	0.0	437.6	0.0	437.6	0.0	N/A	0.0	0.0	N/A	0.0
Fen Shrubby ^{b,c}	Connected to surface or groundwater with >40 cm peat accumulation, >25% shrub and ≤ 25% tree cover	41.6	383.9	12,553.8	342.3	12,490.6	342.3	12,490.6	-41.6	-10.8	-0.3	-41.6	-10.8	-0.3
Fen Treed ^{b,c}	Connected to surface or groundwater with >40 cm peat accumulation, >25% tree cover	0.5	28.1	2,809.9	27.6	2,794.4	27.6	2,794.4	-0.5	-1.8	<0.1	-0.5	-1.8	0.0
Marsh ^{b,c}	< 40 cm peat accumulation with < 25% shrub and tree cover	0.0	10.2	383.6	10.2	383.6	10.2	383.6	0.0	0.0	0.0	0.0	0.0	0.0
Swamp Shrubby ^{b,c}	< 40 cm peat accumulation with >25% shrub cover and ≤ 25% tree cover	1.8	42.2	1,168.4	40.4	1,154.6	40.4	1,154.6	-1.8	-4.3	-0.2	-1.8	-4.3	-0.2
Swamp Treed ^{b,c}	< 40 cm peat accumulation with >25% tree cover	2.3	195.6	6,603.2	193.3	6,530.2	193.3	6,530.2	-2.3	-1.2	<0.1	-2.3	-1.2	0.0
Wetland Subtotal		64.8	1,290.4	66,740.3	1,225.6	66,304.7	1,225.6	66,304.7	-64.8	-5.0	-0.1	-64.8	-5.0	-0.1
Development	Disturbed land, settlements, roads, industrial development	72.0	119.5	1,568.7	316.8	2,631.6	131.1	1,535.7	197.3	165.1	12.6	11.7	9.8	0.7
Development Subtotal		72.0	119.5	1,568.7	316.8	2,631.6	131.1	1,535.7	197.3	165.1	12.6	11.7	9.8	0.7
Total		269.5	4,264.8	176,378.8	4,264.7	176,378.8	4,264.7	176,378.8	0.0	N/A	N/A	0.0	N/A	N/A

Note:
 N/A denotes no data.
 Numbers may not sum due to rounding.
 Source:
^a Canadian Forest Service (2003).
^b Alberta Environment and Sustainable Resource Development (2015).
^c National Wetland Working Group (1997).



Table CCN-73-3 Change in Vegetation and Wetland Land Cover Types in the MacLellan PDA, LAA and the RAA and Changes Due to Project Development

Land Cover Type	Description	Existing Conditions			Construction & Operation		Decommissioning/ Closure		Change from Existing Conditions					
		PDA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	Construction & Operation			Decommissioning/ Closure		
									ha	% of LAA	% of RAA	ha	% of LAA	% of RAA
Barren	Naturally unvegetated (i.e., rock outcrop, beaches)	0.0	0.0	0.9	0.0	0.9	0.0	0.9	0.0	N/A	0.0	0.0	N/A	0.0
Conifer Dense ^a	>60% crown closure, with ≥75% coniferous tree cover	220.3	696.3	29,040.1	476.0	28,797.6	476	28,797.6	-220.3	-31.6	-0.8	-220.3	-31.6	-0.8
Conifer Open ^a	26-60% crown closure, with ≥75% coniferous tree cover	169.8	469.2	18,512.5	299.4	18,322.2	299.4	18,322.2	-169.8	-36.2	-0.9	-169.8	-36.2	-0.9
Conifer Sparse ^a	10-25% crown closure, with ≥ 75% coniferous tree cover	98.3	295.8	21,814.9	197.5	21,688.2	197.5	21,688.2	-98.3	-33.2	-0.5	-98.3	-33.2	-0.5
Mixedwood Dense ^a	>60% crown closure, with neither coniferous or deciduous trees comprising ≥ 75% total tree cover	0.0	0.0	2,969.7	0.0	2,929.6	0.0	2,929.7	0.0	N/A	0.0	0.0	N/A	0.0
Mixedwood Open ^a	26 - 60% crown closure, with neither coniferous or deciduous trees comprising ≥ 75% total tree cover	0.0	0.0	1,317.3	0.0	1,314.8	0.0	1,314.8	0.0	N/A	0.0	0.0	N/A	0.0
Deciduous ^a	>75% Deciduous tree cover	0.0	0.0	155.1	0.0	155.1	0.0	155.1	0.0	N/A	0.0	0.0	N/A	0.0
Shrubland ^a	≥ 20% shrub cover	2.1	29.0	6,778.6	26.9	6,770.7	26.9	6,770.7	-2.1	-7.2	<0.1	-2	-6.9	0.0
Reclaimed Native Upland	Reclaimed upland planted with native trees and grasses	0.0	0.0	0.0	0.0	0.0	607.2	763.9	0.0	N/A	N/A	607.2	N/A	N/A
Reclaimed Upland	Reclaimed upland planted with reclamation species	0.0	0.0	0.0	0.0	0.0	236.9	236.9	0.0	N/A	N/A	236.9	N/A	N/A
Upland subtotal		490.5	1,490.3	80,589.1	999.8	79,979.1	1,843.9	80,980.0	-490.5	-32.9	-0.6	353.7	23.7	0.4
Water	Lakes, rivers, or streams	4.2	299.6	27,480.8	295.4	27,463.3	361.4	27,558.3	-4.2	-1.4	<0.1	61.8	20.6	0.2
Water subtotal		4.2	299.6	27,480.8	295.4	27,463.3	361.4	27,558.3	-4.2	-1.4	<0.1	61.8	20.6	0.2
Bog Shrubby ^{b,c}	Isolated from surface or groundwater influence with >40 cm peat accumulation, >25% shrub cover and tree cover that is ≤ 25%	41.9	207.7	13,266.9	165.8	13,214.3	165.8	13,214.3	-41.9	-20.2	-0.3	-41.9	-20.2	-0.3
Bog Treed ^{b,c}	Isolated from surface or groundwater influence with >40 cm peat accumulation, >25% tree cover by coniferous species	199.5	773.9	28,979.8	574.4	28,772.4	574.4	28,772.4	-199.5	-25.8	-0.7	-199.5	-25.8	-0.7
Fen Graminoid ^{b,c}	Connected to surface or groundwater with >40 cm peat accumulation, ≤ 25% shrub and ≤ 25% tree cover	5.0	32.2	532.0	27.2	527.0	27.2	527.0	-5.0	-15.5	-0.9	-5	-15.5	-0.9



Table CCN-73-3 Change in Vegetation and Wetland Land Cover Types in the MacLellan PDA, LAA and the RAA and Changes Due to Project Development

Land Cover Type	Description	Existing Conditions			Construction & Operation		Decommissioning/ Closure		Change from Existing Conditions					
		PDA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	LAA Area (ha)	RAA Area (ha)	Construction & Operation			Decommissioning/ Closure		
									ha	% of LAA	% of RAA	ha	% of LAA	% of RAA
Fen Pattern ^{b,c}	Connected to surface or groundwater with a pattern of strings and flarks, with >6% tree cover	5.1	15.9	442.7	10.8	437.6	10.8	437.6	-5.1	-32.1	-1.2	-5.1	-32.1	-1.2
Fen Shrubby ^{b,c}	Connected to surface or groundwater with >40 cm peat accumulation, >25% shrub and ≤ 25% tree cover	21.7	114.4	12,553.8	92.7	12,490.6	92.7	12,490.6	-21.7	-19.0	-0.2	-21.6	-18.9	-0.2
Fen Treed ^{b,c}	Connected to surface or groundwater with >40 cm peat accumulation, >25% tree cover	15.1	61.6	2,809.9	46.5	2,794.4	46.5	2,794.4	-15.1	-24.5	-0.5	-15	-24.4	-0.5
Marsh ^{b,c}	< 40 cm peat accumulation with < 25% shrub and tree cover	0.0	0.0	383.6	0.0	383.6	0.0	383.6	0.0	N/A	0.0	0	N/A	0.0
Swamp Shrubby ^{b,c}	< 40 cm peat accumulation with >25% shrub cover and ≤ 25% tree cover	12.0	36.8	1,168.4	24.8	1,154.6	24.8	1,154.6	-12.0	-32.6	-1.0	-12.1	-32.9	-1.0
Swamp Treed ^{b,c}	< 40 cm peat accumulation with >25% tree cover	70.7	342.4	6,603.2	271.7	6,530.2	271.7	6,530.2	-70.7	-20.6	-1.1	-70.6	-20.6	-1.1
Wetland Subtotal		371.0	1,584.8	66,740.3	1,213.9	66,304.7	1,213.9	66,304.7	-371.0	-23.4	-0.6	-370.9	-23.4	-0.6
Development	Disturbed land, settlements, roads, industrial development	72.4	143.9	1,568.7	1,009.40	2,631.6	99.2	1,535.7	865.5	601.5	55.2	-44.7	-31.1	-2.8
Development Subtotal		72.4	143.9	1,568.7	1,009.40	2,631.6	99.2	1,535.7	865.5	601.5	55.2	-44.7	-31.1	-2.8
Total		938.1	3,518.7	176,378.8	3,518.5	176,378.8	3,518.4	176,378.8	0.0	N/A	N/A	0.0	N/A	N/A

Note:
 N/A denotes no data.
 Numbers may not sum due to rounding.
 Source:
^a Canadian Forest Service (2003).
^b Alberta Environment and Sustainable Resource Development (2015).
^c National Wetland Working Group (1997).

