

**CEAA Environmental Screening Report
Sarcee Asphalt Plant
Tsuu T'ina Indian Reserve #145**

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EXECUTIVE SUMMARY

Sarcee Gravel Products is proposing to develop and operate a semi-portable asphalt plant on the northeast quarter of Tsuu T’ina Nation lands.

The project involves the installment of semi-permanent facilities, permanent concrete pilings and operating machinery to bring gravel aggregate to the plant where it will be processed into hot mix asphalt and transported off reserve. This business venture will provide an economic opportunity for the Nation which will allow them to compete in the current construction business market.

Sarcee Gravel Products developed and conducted a preliminary environmental assessment and created an environmental assessment report for the Sarcee Asphalt Plant titled “**Environmental Assessment, Sarcee Asphalt Plant on the Tsuu T’ina Reserve #145, Sarcee Gravel Products, August 30, 2006**”. This report, hereinafter referred to as the EA has been reviewed by Indian and Northern Affairs Canada (INAC). As a result of the review and ongoing consultation with the proponents a number of recommendations and mitigation have been identified.

INAC has conducted an Environmental Screening Assessment on the project to determine the potential adverse environmental effects that may result from the construction and operation of the Sarcee Asphalt Plant.

Biological, physical and human environmental impacts resulting from the project are expected to be minimal when recommended mitigation measures are implemented and a final screening report has been completed. The mitigation measures represent best practices and will be implemented as part of the project to reduce the chances of an environmental impact from occurring or a violation of applicable legislation.

In accordance with Section 20(1)(a) of the Canadian Environmental Assessment Act and conditional on the mitigation measures and specific conditions in this report, it is likely that the Sarcee Asphalt Plant project could proceed without causing significant adverse environmental effects.

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1.0 INTRODUCTION

Sarcee Gravel Products is proposing to construct and operate a semi-portable asphalt plant in the northeastern area of Tsuu T'ina nation lands in the area that was formally known as the DND firing range. The legal land description is NE ¼, Sec. 26, Range 2, Twp 23, W of the 5th meridian.

Under the *Canadian Environmental Assessment Act* S.C. 1992 (CEAA) construction of a physical work should be assessed under the regulations of CEAA to assess potential adverse environmental impacts that may result from its construction and operation. The requirement for an assessment of this project was triggered under Section 5(1)(d) CEAA. A project triggered under this section requires an environmental assessment prior to a federal authority issuing a permit or licence, granting an approval or taking any other action for the purpose of enabling the project to be carried out in whole or in part. The asphalt plant operation requires a permit under Section 18(2) of the *Indian Act*.

A federal authority carrying out functions to enable a project to proceed is a Responsible Authority (RA) as set out in Section 11(1) of CEAA. An RA is required to ensure that, prior to exercising its authority, an environmental assessment is completed and no un-mitigatable significant adverse environmental effects will result from the project. Although there were no other RA's identified for this review, both Health Canada and Environment Canada participated as Federal Authorities under Section 12 of CEAA, having specialist or expert information or knowledge relating to the project. Any comments received from other agencies have been considered/incorporated into this determination.

In accordance with Section 17(1) of CEAA, INAC, as the RA, delegated the preparation of the environmental assessment to Sarcee Gravel Products. Sarcee Gravel Products prepared and submitted an environmental assessment report titled "Environmental Assessment, Sarcee Asphalt Plant on the Tsuu T'ina Indian Reserve #145" and dated August 30, 2006. This report has been reviewed by INAC. As a result of the review and ongoing consultation with the proponents a number of recommendations and mitigation measures have been identified.

This screening report is based on the information provided to INAC by Sarcee Gravel Products.

2.0 SCOPE OF WORK

2.1 Background Information

The Tsuu T'ina Nation has seen an increase in their population and recognizes the need for the development of new revenue making entities within the nations

businesses. The development and operation of an asphalt plant is a venture that would create opportunities to compete in the current construction market.

2.2 Project Description

The purpose of the project is to process a finished aggregate product into hot mix asphalt. The proposed asphalt plant project consists of the following components:

- Semi-permanent batch mix asphalt plant;
- Permanent concrete pilings for the truck scale and the silos;
- Truck scale;
- Scale house;
- Silos;
- Earthen berms constructed for emergency spill planning;
- Baghouse;
- Highway heater;
- Portable screener;
- Maintenance office (portable trailer);
- Above ground fuel storage tanks; and
- Materials stockpiles.

3.0 ENVIRONMENTAL OVERVIEW

3.1 Physical Environment Overview

The project site is located at the northeast end of the Tsuu T'ina Nation in the area once used as a firing range by the Department of National Defense. It is located approximately 2km south of the Elbow River and measures approximately 220 m by 240 m. The nearest resident is located on reserve approximately 1.1 km south of the site. The City of Calgary is located approximately 3.8 km east of the site. There are a number of existing roads in the project area and the area has high gravel content.

3.2 Biological Environment Overview

The asphalt plant site location is situated in the Eastern Aspen Parkland Eco-region of Alberta. This particular eco-region serves as a transition zone between Rocky Mountains natural regions and Prairie regions. Vegetation in the area consists of both natural and introduced species. Wildlife utilize the riparian areas near the Elbow River and have been known to migrate through this area on occasion.

3.3 Human Environment Overview

The proposed project will provide business ventures and economic opportunities for the Nation. It is recognized that although several social and community development problems exist, continued development of the community will come from continued growth of the economy. Initiatives such as these have been widely supported by neighboring communities through the development of business ventures, partnerships and marketing support.

4.0 EVALUATION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

In order for the environment to be protected during the construction and operation of the asphalt plant project, it is critical that all recommended mitigation measures be followed so that potential environmental concerns are addressed. The asphalt plant is registered with the Alberta Environment Protection branch and must follow the *Codes of Practice for Asphalt Paving Plants* under the authority of the *Alberta Environmental Protection and Enhancement Act*. These have been attached to this report as Appendix "A".

4.1 Physical Environment Impacts

The project site is located in a pre-disturbed area with pre-existing roads and previously cleared lands. Reports have been recently prepared to address past DND activities and identify clean-up operations. These are available from the Nation upon request. There are no major topographical modifications or impacts to the physical environment expected as a result of the construction and operation of the asphalt plant

4.1M Mitigation Requirements

The proponent shall provide to INAC, site drawings or photographs clearly indicating where the project is located and site layout maps showing the location of all the project components and other areas of interest.

To insure that impacts to the natural environment are minimized, the proponent shall confine all activities to the 220 m by 240 m area of previous activity and as defined in Section 4.2 of the EA.

The proponent shall re-grade and re-vegetate any disturbance to the area to ensure restoration of the natural surface and minimize erosion.

The proponent shall conduct all clearing operations in a manner that will minimize erosion. Soils shall be stripped and stockpiled separately for use in future reclamation.

The proponent shall minimize impacts to areas of disturbances by operating in a manner that will minimize erosion and provide stability to the area.

4.2 Biological Environment Impacts

Impacts from the construction and operation of the asphalt plant to the biological environment are expected to be minimal, as per Section 5.3 of the EA, as a result of past disturbances to the area. There was no evidence of wildlife at the project site although wildlife has migrated through the site on occasion.

The following measures shall be implemented to mitigate impacts to wildlife and vegetation in the area:

4.2M Mitigation Requirements

The proponent shall confine all activities to the 220 m by 240 m area of previous activity and as defined in Section 4.2 of the EA.

The proponent shall avoid all impact to wildlife and wildlife habitat. If the event that the proponent identifies any Species of Concern listed under the Species at Risk Act (SARA) in the project area, operations will cease and the proponent will contact a professional biologist for assistance.

The proponent will re-vegetate and reclaim the disturbed area with native/indigenous plant species and in consultation with a qualified organization or person.

4.3 Human Environment Impacts

In accordance with the *Alberta Code of Practice for Asphalt Paving Plants* emissions testing is required on an annual basis, particulates must be controlled and there shall be no offensive odour as a result of operations. Compliance with the applicable emissions codes is essential. The following additional measures shall be implemented as required to mitigate impacts to humans.

4.3M Mitigation Requirements

The proponent shall comply with the applicable emissions codes and the Alberta Code of Practice for Asphalt Paving Plants.

The proponent shall develop a plan to address odour complaints from neighboring residents. The plan shall be provided to INAC for review and comment.

In controlling the odour from the operation of the asphalt plant, the proponent will:

- *Use cleaner fuels where possible;*
- *Ensure equipment is not idling for extended periods of time;*
- *Organize work schedule to minimize impacts to the public;*
- *Adjust operations according to atmospheric conditions and temperatures;*
- *Make structural changes to the plant and plant facilities;*
- *Investigate other options of odour control such as introducing odour neutralizers or other acceptable practices; or*
- *Implement other acceptable practices.*

The proponent shall store hazardous materials in a manner that is consistent with Workplace Hazardous Materials and Information System (WHMIS).

The proponent shall wet down exposed and dry soils to control dust from use of equipment on cleared land. The proponent will only obtain water from an approved source and in an approved manner.

The proponent shall cease operations immediately and contact the appropriate agency in the event that prehistoric, archaeological, cultural or palaeontological resources are identified.

4.4 Construction and Operation Impacts

The asphalt plant is expected to be constructed and operated in accordance with the *Alberta Code of Practice for Asphalt Paving Plants*. The following additional measures shall be implemented to mitigate impacts to the environment during construction and operational activities.

4.3M Mitigation Requirements

The proponent shall construct and operate the asphalt plant in accordance with the Alberta Code of Practice for Asphalt Paving Plants.

The proponent shall develop an Environmental Construction and Operation Plan (ECO Plan) that will address, but not be limited to, the following:

- *construction activities and schedules;*
- *operational procedures for the plant;*
- *regular maintenance programs for the plant;*
- *reporting procedures for environmental incidents;*
- *procedures for handling hazardous materials and waste disposal; and*
- *procedures for monitoring the compliance of the asphalt plant to current standards and applicable legislation.*

This plan shall be provided to INAC for review and comment.

The proponent shall ensure that waste oil used for the operation of the asphalt plant is obtained from a certified waste oil recycler.

The proponent shall provide to INAC, information on where any waste fuels are obtained and the appropriate company certification.

The proponent shall ensure that the Transportation of Dangerous Good Act and its regulations are followed.

The proponent shall ensure that a spill prevention and response plan is in place and spill response equipment is on site for the detection and handling of any accidental release of petroleum products and sediment. The plan shall also address the response procedures for emergency situations and events.

The proponent shall ensure their equipment is clean and in good working order at all times.

4.5 Deconstruction and Abandonment Impacts

The project design does not identify any decommissioning activities on the current project, however, an abandonment and restoration plan will be developed at least 6 months prior to the cease of operations and provided to INAC for review and comment.

5.0 CUMULATIVE EFFECTS

Although cumulative effects are a consequence of the construction of the asphalt paving plant, they are insignificant in terms of current standards. Nonetheless, the adverse cumulative effects should be minimized. Mitigation measures outlined in this environmental assessment will reduce or eliminate these impacts such that no substantial cumulative effects are expected from this project.

5.1 Non-Renewable Resources

The one identified source of the gravel used for the making of asphalt material at this plant will be taken from the previously disturbed 940 acres used by the Department of National Defense. Existing roads will be used. If any upgrades to the roads are proposed, the proponent shall consider the effects of the upgrades and discuss the proposal with INAC.

5.2 Habitat Reduction

The extent of habitat perturbation to this project should be insignificant. Mitigation measures identified in this report will help minimize any environmental impact and cumulative effects.

5.3 Waste Accumulation

Wastes generated as a result of this project are minimal. Non-hazardous waste will be deposited at an approved landfill, adding to accumulations of waste from other sources. The cumulative increases to the waste disposal site will have an effect on the carrying capacity of the lands, water and air associated with the area. The adverse effects of these wastes can be reduced through proper management of the wastes consistent with current regulatory requirements and standards.

5.4 Cumulative Effects Reduction

Although cumulative effects are a consequence of this project, they are insignificant in terms of this project. Nonetheless, the adverse cumulative effects should be minimized. This can be accomplished through acceptable recycling and minimizing wastes.

6.0 MONITORING AND FOLLOW-UP

Periodic inspections shall be carried out by the proponent during the project, to determine if unforeseen environmental effects occur and to ensure that mitigation measures recommended in this assessment are implemented. These inspections shall be reported to INAC in a written format. Similarly, the site should be monitored by INAC to ensure that mitigation measures in this assessment are implemented. If any public concern regarding this project is raised, these concerns should be addressed, documented and retained in the project file. INAC will be notified by the proponents whenever issues arise or have the potential to arise concerning the operation of the asphalt plant. All monitoring requirements are the responsibility of Sarcee Gravel Products.

6.0M Mitigation Requirements

The proponent shall ensure that proper procedures are in place for the monitoring of operations, maintenance and environmental components of the asphalt plant. The incorporation of the log documents in the Alberta Code of Practice for Asphalt Paving Plants is recommended.

The proponent shall make all monitoring documents available to INAC on a monthly basis and upon request.

7.0 CEAA DECISION RECORD

CANADIAN ENVIRONMENTAL ASSESSMENT ACT DECISION RECORD

Project Title: Tsuu T'ina Nation Asphalt Plant		Project No.
Public Registry No.:	CEAR: 05-01-16245	
Responsible Authorities	s5 Involvement	
Indian and Northern Affairs Canada	Section 5(1)(c)	
Public Concern: Public participation is appropriate	s18(3).	
Mitigating Measures: The mitigation measures identified in the Screening Report must be implemented.	s20(2).	
Follow-up Program: Follow-up measures identified in the Screening Report must be undertaken.	s14(c); 16(a).	
Comprehensive Study: No comprehensive study is required.	s21.	
Screening Decision:	s20(1).	
Responsible Authority for: Indian and Northern Affairs	s20(1).	
Name: Shannon Pagotto	Title: Environmental Officer	Date:
Signature:		
Approved by:		