



Clearwater Aggregate Management Plan

Section A – Project Overview

The Thompson-Nicola Regional District (TNRD) is applying to amend License No. 337602 covering the Clearwater landfill to include a one hectare area along the current eastern tenure boundary. The soil in the area is required for final landfill closure and reclamation work which is planned to be complete by 2012.

In 1987 the TNRD was given tenure over the entire landfill area including the one hectare area currently being applied for. The one hectare area was removed in the past for the purpose of providing an area for private industry to develop septage pits. The septage pits were never constructed on the one hectare piece of land and consequently the TNRD constructed them in a different location on the landfill property.

The TNRD understands that a survey is needed in order to amend License No. 337602 and due to landfill closure preparation work, a survey has already been completed by Coster and Singer.

For final landfill closure and reclamation work, trees would be removed from the one hectare piece of land and soil would be borrowed to cover the active landfill site. The area would then be re-seeded and rehabilitated. The one hectare area is accessible via a gravel road located off of Clearwater Dump Road. The gravel road runs along the entire northern edge of the one hectare piece of land (as shown in Figure 1).

No structures will be built on the land. It will be logged and used as a soil borrow area only. Final landfill closure is planned to be complete by 2012, thus the area would be logged and excavated during 2011.

Section B – Project Description

Investigative work will determine the soil depth and type by digging test pits. The types of strata would then be noted as well as how far down the bedrock is located. Once the material types are classified according to the Unified Soils Classification system, the information would be combined with a topographical model to show volumes and anticipated final grading.

Other factors listed in the "Description of Work" list do not apply to this specific project as the material is not being mined and processed or exported.

I. Present State of Land

Presently the one hectare piece of land is forested Crown land. It has been noted by ILMB that the parcel contains a Woodlot Licence, and is noted as a Trapline and Mineral Reserve area however; it appeared that they would not present a conflict as logging would involve consultation with woodlot owner.

The land is at an elevation of 700 meters with no contour changes on site. According to Agriculture Canada's soil classification system, soil in the area is a humo-ferric podzol. Bedrock in the area is comprised mainly of middle to late Jurassic granodioritic intrusive

rock and Pleistocene basaltic volcanic rock. A discontinuous till with possible rock outcrops describe surficial geology. During excavation of cover soil it has been noted that surficial deposits are primarily sandy gravel with considerable cobbles and boulders that are about 2 to 3 meters deep over weather basalt.

Land adjacent to the one hectare parcel is currently multi-use land for septage pits, a borrow area for landfill cover, stockpiling topsoil plus a recycling and waste drop off area. A gravel road borders the one hectare piece of land as a secondary access road into the landfill site. The gravel road is located off of Clearwater Dump Road and is in good condition.

There are no water courses running through the land and depth to the water table is approximately 13 meters below ground surface in bedrock upgradient of the landfill and 300 meters south of land being applied for.

The land is not part of the ALR but does appear to be part of the Clearwater River Trail Recreation Site.

Section C - Additional Information

I. Environmental ***a. Land Impacts***

Impacts to the land from the project include loss of trees and vegetation in the area and the removal of soil for use as landfill cover and remediation work. The soil borrow area would be seeded with natural vegetation and restored as part of the TNRD's Clearwater landfill post-closure monitoring plan.

b. Atmospheric Impacts

Impacts to the atmosphere would result temporarily from equipment emissions during the logging stage of the project. Excavators would be used for soil removal and would also have emissions impacts on the atmosphere. Fugitive dust control measures would be taken by watering borrow areas and roads. As they will be temporary activities, impacts are negligible. As the landfill area will be restored after closure, planted trees and vegetation will have a positive impact on the atmosphere through converting carbon dioxide to oxygen.

c. Aquatic Impact

There will be no impacts on aquatic systems from this project.

d. Fish and Wildlife Habitat

The project will have no impacts on fish habitat. The area surrounding the Clearwater landfill is heavily utilized prime deer habitat. As the one hectare area will need to be logged, there will be a temporary loss of ungulate habitat until the area can be rehabilitated.

I. Socio-Community
a. Land Use

The area surrounding the Clearwater landfill running along the east side of the Clearwater River is designated as the Clearwater River Trail Recreation Site. Across the Clearwater River from the landfill on the western side is the southern extent of Wells Grey Provincial Park. This is why land located east of the river is designated as a natural area. There are some hiking trails in the area however; they do not intersect with the one hectare parcel being applied for and would not be impacted by the TNRD using the area for landfill closure purposes. Once the landfill is closed and remediated to naturalized conditions it will enhance the area's aesthetics.

b. Socio-community conditions

The project will not have an impact on community services in Clearwater. Waste management is a community service however; with the closure of the landfill, the community will receive an Eco-Depot which offers increased capacity for handling residential and commercial waste while increasing recycling opportunities for residents and businesses.

c. Public Health

The project will not have an impact on public health. As mentioned above the community will be receiving an Eco-Depot which will handle the waste and recycling needs. Closure of the Clearwater landfill will serve long-term public health effects by reducing potential impacts of the landfill on the Clearwater River. Closure will mitigate landfill leachate and gas production thus creating a positive impact on public health in the area.

d. First Nations

The project will not have an impact on First Nations people or land.



TNRD Signature

September 21/2010

Date

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Clerk/Director of Community Services
Thompson-Nicola Regional District