

Chapter 9 – Conclusions and Recommendations



9. Conclusions and Recommendations

The proposed Project is a 42-ha extension of the existing operational Cache Creek Landfill which has been in operation for two decades. The extension is expected to provide an additional 15 million tonnes of capacity over the next 20 to 30 years, meeting foreseeable solid waste disposal needs for the users.

The Project provides the opportunity to extend the lifespan of the existing Cache Creek Landfill industry, using existing infrastructure and a well-established operational approach. Without this proposed extension, it is anticipated that economic stability within the local setting would be adversely affected.

9.1 Biophysical Setting

The proposed Project is perched overlooking a valley centered on and parallel to the Trans -Canada Highway, narrows at the north end and opens up to the south into the Bonaparte River Valley. The climate in the study area is typical of BC's southern interior and is characterized by warm, dry summers and cool winters. Little to no surface water is on the Project site. Groundwater flow patterns suggest that the landfill is located in a groundwater discharge zone where groundwater typically flows eastward towards the base of the valley, where it changes to a southeast direction following the base of the valley. Groundwater flowing through the bedrock discharges into the weathered bedrock and/or soil horizons, where it continues to flow along the bedrock interface. This water will be collected in buried channels and eventually goes to the Thompson River. Soils within the Project area are generally orthic brown chernozems, which are typical of grassland and grassland-forest communities. There are no rare or endangered plants or wildlife found on the Project site, but the area does support typical species found in the grassland sub-steppe region, including culturally important species. The site is situated in proximity to the Village of Cache Creek and the Bonaparte Indian Band. It is also close to the Village of Ashcroft, and the Ashcroft Indian Band.

9.2 Summary of Impacts and Mitigation

Summaries of impacts and mitigation requirements can be found in Tables 7-1 and 7-6 through 7-10. Main Project activities that may have an impact include:

- Soil handling and clearing - This activity will occur throughout the Project, resulting in impacts to soils, atmospheric conditions, and vegetation and dust may have impacts on the local community
- Leachate production during operation of the landfill in the extension area - Leachate is expected to be produced by the landfill extension with the potential to affect soils, vegetation, and aquatic resources
- Physical footprint of the landfill extension and increased human activity - The footprint of the landfill will result in a reduction of vegetation capacity, the possible introduction

of weeds, loss of opportunity for wildlife movement, and potential increased traffic problems for the local population

Impacts after mitigation are expected to be low for all resources on the site. Socioeconomic effects are also expected to be low throughout Project construction and operation, with positive effects as a result of personal and corporate income generation and an increase in government revenue for the area. The Project is also expected to create jobs and keep the populations of Cache Creek and Ashcroft stable.

9.3 Summary of Commitments

A full summary of commitments for the Project can be found in Table 7-10. Key commitments to address potential impacts for the Project include:

- Erosion and sediment control, including proper topsoil management and handling, will reduce impacts to soils, protect atmospheric resources through dust control, and protect aquatic resources through runoff management
- Leachate management will include a double liner and leak detection system to ensure leachate does not enter the watershed
- Timing of construction activities and traffic management outside of peak wildlife periods is expected to reduce impacts to vegetation and wildlife, and improve safety for residents and tourists
- Reclamation plans should include an accelerated re-vegetation program to ensure no loss of vegetation, restore wildlife habitat, and ensure no further soil erosion

Observing these commitments will keep potential impacts to VEC's low.

9.4 Conclusion

Based on (1) the fact that the proposed landfill extension is not in an environmentally sensitive area, (2) the Project is an extension of a current operational landfill, and residual impacts after mitigation are low, it is our view that the Cache Creek Landfill Extension Project provides a low impact alternative to disposing of Metro Vancouver's and other user regional district's solid waste.

The Project is not likely to cause significant adverse environmental, socioeconomic, or other effects taking into account the implementation of appropriate impact management measures as identified in the table of proposed commitments (Table 7-10).

9.5 Recommendations for Further Study

No recommendations for further study appear to be warranted at this time.