

**In the matter of the  
ENVIRONMENTAL ASSESSMENT ACT  
S.B.C. 2002, c. 43  
(Act)**

and

**in the matter of an  
APPLICATION  
for an  
Environmental Assessment Certificate  
(Application)**

by

**Highland Valley Copper  
(Proponent)**

for the

**Highland Valley Centre for Sustainable Waste Management Project  
(Project)**

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***Recommendations of the Executive Director***

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In accordance with the provisions of section 17(2)(b) of the *Environmental Assessment Act*, the Executive Director of the Environmental Assessment Office makes the recommendations contained in this submission, for the reasons indicated, in connection with the application by Highland Valley Copper for an Environmental Assessment Certificate for the Highland Valley Centre for Sustainable Waste Management.

## **A. ISSUE**

Decision by Ministers on the application for an Environmental Assessment (EA) Certificate by Highland Valley Copper (Proponent) in connection with its proposal for the Highland Valley Centre for Sustainable Waste Management Project (Project).

## **B. BACKGROUND**

### **B.1. Proponent and Project Description**

#### **B.1.1. Proponent**

The Proponent of this Project is Highland Valley Copper, a partnership between Teck Cominco and certain of its wholly-owned subsidiaries (95%) and Highmont Mining Company (5%). Teck Cominco has a 50% interest in Highmont Mining Company for an effective 97.5% interest in Highland Valley Copper.

The Project is designed to meet the long-term waste management needs from the Greater Vancouver Regional District and/or communities in southern British Columbia, following the anticipated closure of the Cache Creek landfill in 2010, and the closure of municipal landfills in other jurisdictions. With an ultimate capacity of 55 million tonnes, the landfill would receive up to 600,000 tonnes of municipal solid waste per year from communities throughout southern British Columbia.

#### **B.1.2. Project description**

The Project includes a 140-hectare landfill located 19 kilometres west of Logan Lake. Co-located on the current site of the Highland Valley Copper Mine, the Project site was selected by the Proponent for three main reasons:

- the existing brownfield site minimizes the need to disturb additional land;
- the precipitation rate and geological factors are well-suited to the project design; and
- large quantities of overburden and rock resources are available on-site to meet the needs of construction, operations and closure.

The Project includes the following components to ensure high levels of environmental protection: a triple liner system, leachate treatment plant and recirculation system, landfill gas collection and landfill gas to energy conversion system, and stormwater control systems. Other key features of the Project and assessment review were: cover material borrow areas, progressive closure systems, landfill equipment, access road, weigh scale, aeration lagoon, holding pond, administration building, maintenance shop, equipment wash areas, parking area for transfer trailers, perimeter and litter control fencing, a thaw shed for de-icing frozen transfer load and recycling and composting facilities.

The Project is designed as a bioreactor landfill, intended to minimize the landfill footprint, reduce greenhouse gases, and harness the renewable energy produced by waste decomposition through a landfill gas collection system. Gases will be captured and converted to produce electrical power (anticipated at approximately 17-19 megawatts annually) or pipeline-quality methane gas. The resulting electrical power and/or methane gas can be used onsite or sold to energy companies such as BC Hydro and Terasen Gas. Other project design components aimed at greenhouse gas reduction include the application of biocover to reduce fugitive

methane emissions and the employment of forestry trucks on backhaul routes returning from the Lower Mainland to the Interior for waste haul to the project site.

When the Greater Vancouver Regional District (GVRD) announced its decision not to pursue options for a replacement landfill in British Columbia's interior in January 2008, the Proponent confirmed its continued commitment to the Project via a letter to the Environmental Assessment Office (EAO). At the request of the EAO, the Proponent submitted a supplemental report in April 2008 to identify and assess the changes in project design and plan as well as any potential impacts from alternate waste sources should municipal solid waste from GVRD not be available. Accordingly, the Environmental Assessment Report prepared by the EAO includes an analysis of the potential effects and impacts of two scenarios:

- one that includes GVRD municipal solid waste (Scenario 1); and
- one that includes regional municipal waste sources only (Scenario 2).

The Project has a capital cost of approximately \$112 million. Pending finalization of the waste sources which affects the anticipated annual tonnage, the Proponent expects the Project to create between 25 direct full-time jobs under Scenario 2 and 38 direct full-time jobs under Scenario 1. Indirect employment created as a result of the project is estimated between 12 jobs (at 250,000 tonnes per year) and 34 jobs (at 600,000 tonnes per year). The long-term plan to increase annual tonnage to 600,000 tonnes will increase the number of full-time jobs over time. The jobs at the Project site are required to operate the landfill and landfill gas facilities. Approximately 35 jobs will be created for six months during construction for each of the five landfill cells, and approximately five jobs will be created for two weeks for the installation of each of the 12 landfill gas engines.

The Project will also support over 80 full-time jobs associated with waste haul transportation (at 600,000 tonnes per year). These jobs currently exist through the trucking of wood chips from the interior of the province to the coast. By taking advantage of this existing trucking capacity to haul waste back to Highland Valley (instead of returning to the Interior empty), approximately \$7 million per year in cost-shared benefits with the forestry industry will be realized. Under Scenario 2, the diminished backhaul opportunities to the lower mainland would likely reduce the cost-shared benefits by approximately \$4 million per year.

The projected Project lifespan is anticipated to be approximately 90 years, if the 600,000 annual tonnage threshold is met. This timeline may be extended if the annual tonnage is less than the maximum in the short term, due to either a reduction in waste sources or the implementation of aggressive organic waste diversion programs by municipalities.

Economic benefits are also expected to accrue to local government through host fee revenues and to First Nations through negotiated benefit agreements. These benefits are based on annual waste tonnage, and will rise over time as the waste tonnage increases. At 250,000 tonnes per year, the local government revenue is estimated to be in the range of \$300,000 per year, rising to an estimated \$1.0 million per year when the landfill is operating at full capacity. Over the 90-year lifespan of the Project, the Proponent estimates that the project will inject up to \$100 million in tax benefits to the Thompson Nicola Regional District and \$50 million in toll revenues from the Coquihalla highway to the provincial government if the waste sources include GVRD. At this stage in project development, all figures are estimates only.

The Proponent has requested concurrent permitting for the following:

- Ministry of Transport: Highways Act (Sec. 52) – permit required for access for a controlled access highway.

The Proponent will also be seeking permitting, if the EA Certificate is issued, for the following:

- Ministry of Energy, Mines and Petroleum Resources: Mines Act - Amendment to M-11 Reclamation Permit; and
- Ministry of Environment - Operational Certificate.

Pending approval of the Application for an Environmental Assessment Certificate, and granting of all required permits and approvals, the planned start-up date is December 2009.

## **B.2. British Columbia Environmental Assessment Process**

### **B.2.1 Pre-Application**

The Proponent contacted EAO on June 2, 2005 to voluntarily request that the Project be designated as reviewable under the Act. This is referred to as a proponent “Opt-In” request. An “opt-in” process was required as the Project met only one of the two criteria needed to qualify as a reviewable project (design capacity) but did not meet the criterion related to regional solid waste management planning, pursuant to the *British Columbia Environmental Assessment Act* Reviewable Projects Regulation for solid waste management projects. The “opt-in” request was granted and the project description and the proposed scope of studies for the environmental assessment were submitted to the EAO on July 4, 2005.

EAO issued a Section 10 order on August 2, 2005, stating the Project was reviewable under the Act and would require an environmental assessment certificate. The Proponent submitted a draft Terms of Reference to EAO in February 2006, which was reviewed by the Advisory Working Group and First Nations.

The section 11 Order for the Project, issued March 13, 2006, outlined the scope of the assessment and the procedures and methods for the review. A 30-day public comment period on the draft Terms of Reference was held in March-April 2006, with open houses held in Ashcroft, Logan Lake and Lower Nicola in early April 2006. One hundred and sixty comments were received during the comment period. The Terms of Reference were approved by EAO on May 22, 2007.

The section 11 Order included a clause that stated that EAO would recommend to Ministers that the review be suspended under section 30 of the Act if the Greater Vancouver Regional District (GVRD) Solid Waste Management Plan amendment process was not substantially completed at the time of referral.

### B.2.2. Application Review

The Proponent submitted the Application on July 27, 2007, which was evaluated by an Advisory Working Group, led by EAO, and comprised of representatives from:

Agricultural Land Commission	Ashcroft Indian Band (NNTC)
Ministry of Community Services	Coldwater Indian Band (NTA)
Ministry of Economic Development	Cook's Ferry Indian Band (NTA)
Ministry of Energy, Mines and Petroleum Resources	Lower Nicola Indian Band
Ministry of Environment	Shackan Indian Band (NTA)
Ministry of Forests and Range	Siska Indian Band (NTA)
Ministry of Transportation	Skeetchestn Indian Band (SNTC)
Ministry of Tourism, Sport and the Arts	Thompson-Nicola Regional District
Interior Health Authority	District of Logan Lake
Integrated Land Management Branch, Ministry of Agriculture and Lands	Mining Association of BC, Environment, Health and Safety Division

The Application was accepted for review on August 24, 2007, in compliance with the requirement in section 2 of the Prescribed Time Limits Regulation which requires that a decision be made within 30 days whether to accept an application as submitted.

The formal assessment of the Application commenced on September 5, 2007. A public comment period on the Application was held from September 19 to November 8, 2007. Open houses were held in October 2, 2007, in Ashcroft, October 3, 2007, in Logan Lake, and October 4, 2007, in Merritt.

The Proponent requested suspension of the 180-day timeline to submit an addendum to the Application that corrected an error in the estimation of the potential leakage rate through the landfill's triple liner system during and immediately following the operational phase of the Project. The Application review was suspended for 142 days (from December 7, 2007, to April 28, 2008) to provide an opportunity for the Advisory Working Group member agencies and First Nations to review the addendum materials and provide comments.

Following the Greater Vancouver Regional District's January 2008 announcement that it was no longer pursuing an interior landfill option, The Proponent submitted a Supplemental Report in April 2008, describing a viable alternative waste scenario, for review by the EAO and the Advisory Working Group. The report identified and assessed the changes in project design and plan as well as any potential impacts from alternate waste sources should municipal solid waste from GVRD not be available.

The application review was completed on July 23, 2008, which was within the 180-day time limit mandated under section 3 of the Prescribed Time Limits Regulation. The complete, final report of the assessment (the 'Assessment Report') is found in Binder 2 which accompanies this binder.

Ministers have until September 6, 2008, to make a decision on the Application, unless an extension is ordered in accordance with section 24(4) of the Act or a suspension is ordered under section 30 of the Act.

### **B.3. Federal Environmental Assessment Process**

The Project did not require an assessment under the *Canadian Environmental Assessment Act* on the basis that the project description did not trigger a screening by any of the federal agencies.

## **C. DISCUSSION**

### **C.1. Potentially Significant Adverse Effects, Mitigation Measures and Proponent Commitments**

The nature and scale of the Project means that there are important implications for the region and the province in terms of environmental, economic, social, heritage, and health considerations. Because of the Project's location, there are also potential effects on asserted Aboriginal rights and title. As a result, the assessment process examined a broad range of considerations, including:

- impacts on groundwater quality, particularly the drinking water supplies for residents in the District of Logan Lake;
- potential contamination of the aquatic environment and surficial hydrology, specifically the watercourses in the drainage areas of the site;
- impacts on air quality related to landfill site operations and transportation;
- impacts on the vegetation, terrestrial environment and wildlife habitat;
- impacts on key socio-economic and socio-community indicators, particularly for the communities of Logan Lake, Ashcroft and Lower Nicola;
- impacts on archaeological resources; and
- impacts on asserted Aboriginal rights and title.

The EAO, with the assistance of the Advisory Working Group, undertook an independent, comprehensive analysis of the information contained in the Application and related materials, including:

- the Proponent's Application and supporting baseline studies, supplemental reports and appendices;
- the Proponent's public and First Nations consultation program;
- government agency, First Nation and public comments on the Project, and the Proponent's responses to these comments;
- issues raised by First Nations regarding potential impacts of the Project on asserted Aboriginal rights and title, and the Proponent's responses to these issues; and
- commitments and mitigation measures to be undertaken by the Proponent during the construction and operation of the Project.

Issues and concerns raised during the assessment by the public, First Nations, local governments, and provincial and federal agencies were all considered. As a result of consultation and other facets of the assessment process, a number of potentially significant adverse effects were identified. These effects are identified below, along with a description of the corresponding mitigation measures and proposed commitments which would be undertaken by the Proponent.

For each effect, the analysis in the Report includes an examination of:

- whether the effect would be adverse and whether it would be significant;
- where the effect would be significant, whether the mitigation measure would be adequate to resolve the effect;
- where the measure would not fully resolve the effect, whether the residual effect would be significant; and
- where the residual effect would be significant, whether the residual effect could be justifiable.

Table 1 below summarizes the potential significant adverse effects of the Project, the mitigation measures undertaken or committed to by the Proponent, and EAO’s assessment of the significant residual effects, if any. In determining significance, EAO, in conjunction with the Advisory Working Group, considered four criteria: magnitude, geographic extent, duration and frequency, and reversibility.

**Table 1. Summary of potential effects, mitigation and significant residual effects**

<b>Potentially Significant Adverse Effect</b>	<b>Mitigation Measure / Other Commitment (commitment number)</b>	<b>Reasons Residual Effect not Significant – OR – Reasons Significant Residual Effect Justifiable</b>	<b>Section in Assessment Report</b>
Groundwater (aquifer) contamination	Installation of triple liner system (8) with extensive, instrumented monitoring system (10). Installation of leachate management system for collection, treatment, re-circulation and monitoring (8). Groundwater level and quality monitoring for leachate migration at groundwater divide (11). Performance of hydraulic conductivity testing on soils to update modeling predictions of leachate leakage (12). Reinforcement of the base landfill liner with additional overburden soils or geotextile placed beneath the clay liner (62). Extensive groundwater and leachate monitoring program during operations and post-closure (minimum 25 years) (70). Provision of funding to Logan Lake to review water monitoring results annually (51).	No residual effects.	Section 9.1.1

Potentially Significant Adverse Effect	Mitigation Measure / Other Commitment (commitment number)	Reasons Residual Effect not Significant – OR – Reasons Significant Residual Effect Justifiable	Section in Assessment Report
Contamination of surface water and hydrological resources, at site or downstream watercourses	<p>Installation of triple liner system (8).</p> <p>Monitoring and maintenance of sedimentation ponds and ditches (9).</p> <p>Development of a surface water quality and sediment control management plan (54,70).</p> <p>Surface water monitoring program in all creeks and drainage area affected by project (15, 17).</p> <p>Design and implementation of stormwater management program (13,19).</p> <p>Design and implementation of spill management plan (24).</p> <p>Reclamation and restoration of tailings surge pond (18).</p>	No residual effects.	Section 9.1.2
Air quality contamination	<p>Site-specific and ambient monitoring for range of contaminants and dust during pre-construction and operations (3).</p> <p>Installation of landfill gas management system (2).</p> <p>Landfill gas monitoring program during and post-closure for full range of criteria contaminants (5).</p> <p>Monitoring odours at site, according to air quality management plan (52).</p>	No residual effects.	Section 9.1.3
Greenhouse gas emissions	<p>Greenhouse gases are generated by municipal waste, not the Project, however, initiatives to reduce greenhouse gases include:</p> <p>Construction and operation of landfill gas collection and gas-to-energy conversion facilities.</p> <p>Application of biocover to reduce methane emissions.</p> <p>Fugitive gas capture for energy production.</p>	No residual effects.	Section 9.1.3

Potentially Significant Adverse Effect	Mitigation Measure / Other Commitment (commitment number)	Reasons Residual Effect not Significant – OR – Reasons Significant Residual Effect Justifiable	Section in Assessment Report
Wildlife habitat reduction, disruption/ displacement or destruction	<p>Completion of denning habitat study (26).</p> <p>Timing of land clearing to minimize impact on wildlife, bird nesting (34).</p> <p>Installation of protective measures, control measures and good housekeeping to reduce waste-wildlife interactions (27).</p> <p>Monitoring wildlife control systems (28) and traffic-related wildlife casualties (29).</p> <p>Installation of electric fencing (34).</p> <p>Development of wildlife management plan and bear encounter management plan (27,28).</p> <p>Waste rock not to be used as cover material (61).</p> <p>Capping and land reclamation of landfill cells at conclusion of each active phase (55).</p>	No residual effects.	Section 9.1.4
Reduction in vegetation and increase in invasive species	<p>Project situated on disturbed land or pine beetle land.</p> <p>Monitoring of invasive species (30).</p> <p>Reclamation using grasses, legumes and native plants in order to reduce ability of invasive plants to become established (31, 32, 33).</p> <p>Development of a landscape design and restoration plan (35, 37, 38).</p>	No residual effects.	Section 9.1.4
Socio-community: Transportation impacts	<p>Alteration of truck routes to minimize impacts on Logan Lake (44).</p> <p>Design and construction of left-hand turn lanes and traffic calming measures (43, 45).</p> <p>Monitoring and enforcement of speed limits and no engine-brake policy (48, 50).</p> <p>Development of community advisory group to identify and review transportation and safety impacts in Logan Lake (41).</p>	No residual effects.	Section 9.2.1

Potentially Significant Adverse Effect	Mitigation Measure / Other Commitment (commitment number)	Reasons Residual Effect not Significant – OR – Reasons Significant Residual Effect Justifiable	Section in Assessment Report
Other	Establishment of post-closure fund sufficient to carry out all project commitments, including full replacement of cover if required (71).		

In summary, as the result of commitments made by the Proponent to mitigate, compensate or otherwise respond to all potential, significant adverse effects, EAO has concluded that there are no residual or outstanding significant adverse effects related to environmental, economic, social, heritage, and health considerations.

The next section contains a summary of the potential effects on asserted Aboriginal rights and title.

## C.2. First Nations' Interests

### C.2.1. First Nations Setting

The Project is located in an area indicated by a number of First Nations to be within or in proximity to their traditional territory. For the purposes of this review, the First Nations are represented largely according to two ethnographic groups: the Nlaka'pamux Nation and the Secwepemc/Shuswap.

#### *Nlaka'pamux Nation*

- Ashcroft Indian Band (Nlaka'pamux Nation Tribal Council)
- Boothroyd Indian Band (Nlaka'pamux Nation Tribal Council)
- Boston Bar First Nation (Nlaka'pamux Nation Tribal Council)
- Coldwater Indian Band (Nicola Tribal Association)
- Cook's Ferry Indian Band (Nicola Tribal Association)
- Kanaka Bar Indian Band (Nlaka'pamux Nation Tribal Council)
- Lower Nicola Indian Band (unaffiliated)
- Lytton First Nation (Nlaka'pamux Nation Tribal Council)
- Nicomen Indian Band (Nicola Tribal Association)
- Nooaitch Indian Band (Nicola Tribal Association)
- Oregon Jack Creek Indian Band (Nlaka'pamux Nation Tribal Council)
- Shackan Indian Band (Nicola Tribal Association)
- Siska Indian Band (Nicola Tribal Association)
- Skuppah Indian Band (Nlaka'pamux Nation Tribal Council)
- Spuzzum First Nation (Nlaka'pamux Nation Tribal Council)
- Upper Nicola Indian Band (Nicola Tribal Association)

*Secwepemc/Shuswap*

- Skeetchestn Indian Band (Shuswap Nation Tribal Council)

C.2.2. First Nations Consultation Undertaken by EAO and the Proponent

Early in the review (August 2005) EAO issued letters to the First Nations and tribal organizations listed above to advise about the Project and the review process and to invite them to participate in the environmental assessment review.

The EAO and the Proponent offered capacity funding to all First Nations in 2005/06 during pre-Application work and in 2007/08 during the Application review to assist First Nations in their contributions to the environmental assessment review. The Proponent also agreed to provide funding for a Traditional Use/Knowledge Project, and an independent review of the groundwater aspects of the Project to be conducted on behalf of the Cook's Ferry, Coldwater and Siska Indian Bands.

Throughout 2005, 2006 and 2007, all of the First Nations were invited to participate in meetings of the Advisory Working Group and attend site tours. Copies of all pre-Application materials were provided to the First Nations, including the Draft Terms of Reference for review and comment and minutes from the Advisory Working Group meetings.

During the pre-application stage, the Skeetchestn, Oregon Jack Creek, Lower Nicola and Cook's Ferry Indian Bands attended Advisory Working Group meetings chaired by EAO. Following acceptance of the Proponent's Application for review, EAO chaired an Advisory Working Group meeting on October 3, 2007. Representatives from the Shackan and Cook's Ferry Indian Bands attended the meeting.

In addition to the Advisory Working Group meetings, eight meetings were held with representatives of the Nlaka'pamux Nation Tribal Council throughout the environmental assessment review for the Project. The purpose of the meetings was to discuss opportunities for Nlaka'pamux Nation Tribal Council member First Nations to participate in the review process, as well as to listen to their concerns regarding the environmental assessment process and the potential effects from the Project on asserted Aboriginal rights and title.

Throughout the environmental assessment review process, EAO provided First Nations with a copy of all relevant documents for review and comment, including the Proponent's First Nations Consultation Report, comment tracking tables with Proponent responses, minutes from Advisory Working Group meetings, the Supplementary Report to the Application, Application Addendum, independent groundwater study and a draft of the Assessment Report, which included a summary of First Nations interests.

Prior to entering the environmental assessment process, the Proponent began a program of information sharing and consultation with several of the identified First Nations groups (Oregon Jack Creek Indian Band, Cook's Ferry Indian Band and the Nlaka'pamux Nation Tribal Council). The purpose of this early consultation was to provide a broad overview of the Project and to solicit input from the First Nations regarding issues of concern and their desired level of involvement in the review process. The discussions subsequently contributed to the development of Terms of Reference for the Application.

In the spring of 2006, the Proponent wrote to each of the First Nations to clarify the Project scope and to determine their interest in participating in the environmental assessment process, including the Advisory Working Group established by EAO for the review of the Project.

In the fall of 2006, the Proponent wrote to each of the First Nations to notify them of plans to undertake an archaeological overview assessment and requested input regarding the choice of an archaeological consultant. After an additional invitation to First Nations to participate, the archaeological overview assessment was undertaken by the Proponent in May 2007, in cooperation with representatives from the Nicola Tribal Association and the Oregon Jack Creek Indian Band.

In March 2007, the Proponent provided draft copies of the First Nation Considerations Report to the First Nations for review and comment and engaged in discussions with participating First Nations regarding financial assistance to enable them to participate in the review.

All of the First Nations received copies of the Application and a letter from the Proponent requesting their participation in consultation initiatives and the environmental assessment review of the Project.

The following individual meetings were held between the Proponent and various First Nations:

- October 24, 2007 – meeting with and presentation to the Cook's Ferry Indian Band;
- October 2/November 15, 2007 – Project site tours with representatives of the Cook's Ferry, Coldwater and Lower Nicola Indian Bands;
- November 6/December 11, 2007 – meeting with and presentation to the Lower Nicola Indian Band (EAO in attendance);
- February 5, 2008 – meeting with representatives of the Nlaka'pamux Nation Tribal Council, Nicola Tribal Association and Lower Nicola Indian Band to discuss Aboriginal rights and title issues as they relate to the Project;
- March 15, 2008 – participation in the Lower Nicola Indian Band's Economic Opportunity Fair; and
- April 1, 2008 – meeting with the Cook's Ferry Indian Band.

The Proponent participated in, and provided funding for, meetings of the Interior Landfill Taskforce, made up of local communities and First Nations seeking to reach consensus and secure support for a new landfill in British Columbia's interior.

Towards the end of the application review, EAO received a letter from Lower Nicola Indian Band advising that no agreement regarding accommodation had been reached with the Proponent. EAO's response stated that numerous attempts were made by EAO and the Proponent to invite LNIB to participate in the EA review as a means of harmonizing interests and moving further down the path of reconciliation. The Proponent also advised EAO that it is their intent and interest to continue to work with Lower Nicola Indian Band post-certification, if granted. EAO believes that the Proponent and EAO have made significant and on-going efforts to engage LNIB to identify and address any concerns about the proposed Project.

The Proponent has committed to continuing consultation efforts with First Nations throughout the permitting, construction and operational phases.

### C.2.3. Key Issues and Concerns Raised by First Nations

It should be noted that many of the issues and concerns identified by First Nations were also identified by the Advisory Working Group and the public. These issues and concerns include:

- Contamination caused by composting activities;
- Air quality;
- Greenhouse gas emissions;
- Use of sewage sludge as part of the landfill cover;
- Water quality;
- Preference for the development of regional waste-to-energy facilities instead of a landfill;
- Past infringements, including the measurement of impacts on Aboriginal rights and title from mining activities in the Highland Valley area, and the measurement of potential impacts from the Project based on the state of the land prior to the commencement of mining;
- Concerns regarding the current environmental assessment process;
- Wildlife management;
- Safety issues related to increased truck traffic; and
- Accommodation of First Nation interests and compensation for infringements on their traditional territory.

### C.2.4. Aboriginal Rights and Title

With respect to Nlaka'pamux Nation, EAO has concluded that the *prima facie* case in support of the claim to Aboriginal title over the Highland Valley is a weak one such that there is a low probability that the Nlaka'pamux Nation would be able to establish Aboriginal title to the Highland Valley area. It is important to remember that this conclusion is focused on the Highland Valley and is not meant to apply to any other part of Nlaka'pamux Nation traditional territory.

In the context of the EA review, it is EAO's view that the Nlaka'pamux likely have a strong *prima facie* case to support the claim for the Aboriginal right to hunt and trap birds and animals throughout the territory used by these people at the time of contact for food, social, ceremonial, and/or cultural purposes. It is also likely that there would be a claim for the Aboriginal right to gather certain plants, berries, etc. in that territory for similar purposes.

If, however, the claims described above were to be framed to refer specifically to the exercise of Aboriginal rights in the Highland Valley as being integral to the distinctive culture of the Nlaka'pamux Nation, EAO notes that there is at this time no evidence to suggest that hunting (or gathering or any other practice) in the Highland Valley was of such particular importance that it would constitute an integral part of the distinctive culture of the Nlaka'pamux people. It is possible that the valley was an important place to find specific species of animals or types of plant, and that the plants or animals were part of a practice integral to the culture of the Nlaka'pamux Nation. However, EAO is not aware of any assertions or suggestions to this effect.

Similarly, with respect to Secwepemc/Shuswap Nation, EAO has made the assumption that Skeetchestn Indian Band could establish a *prima facie* case in support of a claim for Aboriginal rights to hunt, trap and gather plants in areas within their asserted territory that were available and suitable for such purposes at the time of European contact. However, for the purposes of this environmental assessment review, it is EAO's view that there is no evidence to establish a *prima facie* case in support of a claim by the Skeetchestn Indian Band to Aboriginal title over the Highland Valley.

#### C.2.5. Summary of Mitigation Measures to Address or Accommodate Aboriginal Interests

- The Proponent must notify local communities (District of Logan Lake, Village of Ashcroft and Village of Cache Creek), including First Nations, about Project-related employment opportunities as they arise (commitment #40).
- The Proponent must support the development of an economic development steering committee with community representatives from local First Nations, the District of Logan Lake and the Villages of Ashcroft and Cache Creek. The committee would work with the Proponent on developing a procurement policy for these communities, focusing on local employment and spin-off business opportunities (commitment #42).
- An Environmental Management Plan for Composting Operations must be developed prior to operation of the on-site composting facilities. The plan must incorporate best management practices to minimize and prevent environmental impacts associated with operations (commitment #66);
- Site-specific ambient and meteorological data must be collected for a minimum of one year prior to construction (commitment #3);
- Semi-annual landfill gas monitoring must be conducted prior to construction and operations (commitment #5);
- One round of dustfall samples collected prior to construction and one round of dustfall samples collected following the commencement of operations will be analyzed for polycyclic aromatic hydrocarbons, polychlorinated biphenyls and polybrominated diphenyl ethers to confirm that the Project is not a significant source of these contaminants to the surrounding soils and vegetation (commitment #3);
- An assessment to review biosolids characteristics, environmental impacts from the application of biosolids, as well as biosolids regulations and best management practices was conducted and concluded that if applied in compliance with regulations and best management practices, the use of biosolids in land application and reclamation programs is considered safe and protective of the environment;
- The Proponent has committed to carrying out the seven recommendations included in an independent review of the groundwater aspects ("Kala Report") of the Project;

- The Proponent has indicated that the Project constitutes only five percent of the Highland Valley Copper mine site and the Project will not significantly affect the reclamation of the remainder of the mine site. The Proponent must also develop the landfill in a series of phases with progressive closure and reclamation occurring at the completion of each phase. Environmental monitoring must be maintained by the Proponent throughout the operations, closure and post-closure periods of the Project (commitment #55,67,70);
- A groundwater monitoring program must be undertaken from wells located upgradient and downgradient of landfill operations and will be included in the Design and Operations Plan. The groundwater monitoring program would generate information of a developing problem situation decades in advance of impacts to groundwater beyond the Highland Valley, providing an opportunity for the Proponent and the landfill operator to develop mitigation measures capable of ensuring that there would be no impacts to the water supply for the community of Logan Lake or other downstream groundwater users (commitment #15);
- The Proponent must develop a Bear Encounter Management Plan as part of the Wildlife Management Plan for the Project (commitment #27);
- The Proponent must ensure that adequate fleet insurance is maintained to address third party liability claims associated with traffic collisions related to the Project (commitment #47);
- The Proponent must ensure that measures are in place to remotely monitor the speed of long-haul waste haulers to and from the site (commitment #50);
- A Spill Management Plan must be developed that incorporates management actions to address spills associated with waste transportation (commitment #24);
- Electric fencing must be constructed around the active phase of the landfill. The fencing requirements must be reviewed as part of the detailed design to ensure that wildlife is prevented from gaining access to any waste (commitment #27);
- Where practicable, land clearing will be done in late fall or early winter. Compliance with the *Wildlife Act* must be maintained at all times (commitment #34);
- Wildlife surveys will be conducted during the development and operation of the Project, in accordance with the Proponent's Wildlife Management Plan (commitment #26,27);
- All traffic incidents involving the haulage fleet will be fully assessed and, if particular problem areas are identified, the Proponent must work with the Ministry of Transportation to determine any practicable solutions (commitment #29); and
- The Proponent must develop an Invasive Species Management and Response Plan (commitment #30).

EAO also considered the following two strategic issues raised by the Nlaka'pamux Nation Tribal Council (NNTC):

1. Alleged past infringements, including the measurement of impacts on Aboriginal rights and title from mining activities in the Highland Valley area and the measurement of potential impacts from the Project based on the state of the land prior to the commencement of mining; and
2. Concerns regarding the current environmental assessment process.

In an attempt to address the concerns raised by the NNTC regarding alleged past infringements, EAO agreed to make note in this report of the disagreement regarding alleged past infringements, including the measurement of impacts on Aboriginal rights and title from mining activities in the Highland Valley area and the measurement of potential impacts from the Project based on the state of the land prior to the commencement of mining. The EAO also invited the NNTC to prepare a separate report for submission to Ministers. Attempts were also made to establish a forum to discuss this issue further; however, EAO and the NNTC were unable to agree on scope and mandate of the proposed forum.

With respect to the concerns raised regarding the current environmental assessment process, EAO advised the NNTC of the following:

- EAO accepts that First Nations have interests in an environmental assessment process that go beyond that of a stakeholder. Specifically, EAO accepts that First Nations have a right to be consulted and accommodated, where appropriate, in respect of asserted Aboriginal rights and title, in accordance with principles established by the Supreme Court of Canada in *Haida v. British Columbia (Minister of Forests)* and related case law;
- EAO was committed to ensuring that the member First Nations of the NNTC had an opportunity to be consulted on a government-to-government basis, outside of the advisory working group process, if warranted. At the same time, EAO believes it is appropriate to use the working group process wherever possible, as experience has shown this to be an effective forum for dealing with First Nation issues in past. For this reason, EAO typically requests First Nations to participate in the working group process, and if there are any issues respecting asserted Aboriginal rights or title that cannot be adequately addressed in that forum (for example, because they require discussion of information First Nations feel should be kept confidential), then they can be addressed in separate government-to-government discussions; and
- The NNTC expressed the view that it is necessary to assess impacts of a project based on the web of relationships throughout the traditional territory, and that in that world view, all issues in life must be considered as part of an interconnected whole. EAO respects this view, and believes it is important to note that the environmental assessment process presents considerable opportunity for more than "site-specific" impacts of a project to be considered. While there are limits on the ability of any process to study and consider the interconnectedness of things, and while there may be different views on the manner and extent to which such matters should be considered in EA, EAO believes that the present environmental assessment process is able to consider such matters, when appropriate.

### C.2.6. Conclusions related to First Nations' Interests

In the EA review of the Project, the EAO has considered the assertion of Aboriginal rights and title by the bands of the Nlaka'pamux Nation and Skeetchestn Indian Band and the information available to support the strength of these assertions.

The EAO has also considered the potential for impacts to asserted Aboriginal rights and title from the Project, based on it being implemented as designed and in accordance with all avoidance and mitigation measures and commitments made by the Proponent.

The EAO and the Proponent have been engaged in consultations with the Nlaka'pamux Nation bands and Skeetchestn Indian Band from the early stages of the environmental assessment review of the Project to jointly discuss the potential for impacts and to develop measures to mitigate or otherwise accommodate asserted Aboriginal rights and title. The Nlaka'pamux Nation bands and Skeetchestn Indian Band have had an opportunity to review and comment on the consultation report and to specify the nature and scope of their rights from their point of view.

Having regard to all of the above, EAO concludes that the process of consultation has been carried out in good faith, and that it was appropriate and reasonable in the circumstances. The EAO also concludes that the potential for effects on asserted Aboriginal rights and title has been mitigated or otherwise accommodated to an appropriate level such that they will not significantly impact the Nlaka'pamux Nation bands or Skeetchestn Indian Band from exercising their rights. The EAO believes the EA review process has reasonably balanced potential impacts on asserted Aboriginal rights and title with other societal values.

### C.3. Public Consultation

- The Proponent carried out a program of public consultation during both the pre-Application and Application review stages in local communities that met the requirements of EAO;
- Public open houses on the draft Terms of Reference were held in April 2006 in Ashcroft, Logan Lake and Lower Nicola. The two principal areas of concern were waste transportation impacts and groundwater impacts. One hundred and sixty comments were received from the public on the draft Terms of Reference;
- The proponent sent individual response letters responding to the concerns articulated by the Nicola Watershed Community Round Table, the Lower Nicola Water Works, and the Highland Valley Outdoor Association in June 2006;
- The proponent formed the Logan Lake Transportation Committee to address waste transport-related concerns raised during public meetings. The primary role of this Committee was to provide input to the Proponent regarding transportation options being considered for the Project. Two meetings were held with the Committee prior to submission of the Application. The input received from the Committee was used by the Proponent to develop transportation mitigation options and to select a preferred waste transportation strategy for the Project;
- Public open houses on the Application were held in October 2007 in Ashcroft (14 attendees), Logan Lake (26 attendees), and Merritt (14 attendees). The Application was made available during the event, as well as additional supporting documents such as

maps and visual simulations of the Project. The Proponent and its consultants were present to answer questions from the public, including the conclusions presented in the Application regarding the Project's potential effects;

- The Proponent provided funding to the District of Logan Lake in partnership with the Cook's Ferry Indian Band, Coldwater Indian Band and Siska Indian Band to undertake an independent review of the groundwater analysis presented in the Application for an Environmental Assessment Certificate to address concerns raised repeatedly by the public regarding potential impacts from the Project on the local water supply. The review was conducted by Kala Groundwater Consulting Ltd.;
- Overall public response has been muted. Nine written comments were received from the public during the Application review period, most of which were from residents of the District of Logan Lake; and
- Over the duration of the pre-application and application review stage, the public has become cautiously more supportive of the Project as potential effects and corresponding mitigation measures and Proponent commitments were clarified.

#### **D. CONCLUSIONS**

The Environmental Assessment Office is satisfied that:

- the Assessment process has adequately identified and addressed the potential adverse environmental, economic, social, heritage and health effects of the Project, having regard to the conditions, the mitigation measures, and the compensation provisions set out in the Proponent's Table of Commitments, attached to the draft Environmental Assessment Certificate;
- the public and First Nations consultation, and the distribution of information about the Project have been adequately carried out by the Proponent;
- issues identified by the public, local and provincial government agencies, and First Nations which were within the scope of the environmental assessment, were adequately addressed by the Proponent during the review of the Application;
- potential effects on asserted (and assumed) Aboriginal rights of the Nlaka'pamux Nation and the Skeetchestn Indian Band have been avoided, mitigated or otherwise accommodated to an appropriate level such that they will not significantly impact these First Nations from exercising their rights;
- the Crown has fulfilled its obligations for consultation and accommodation to First Nations relating to the issuance of an EA Certificate for the Project; and
- practical means have been identified to prevent or reduce to an acceptable level any potential significant adverse effects of the Project.

**RECOMMENDATION:**

The Executive Director recommends that an Environmental Assessment Certificate be issued to Highland Valley Copper in connection with its proposal for the Highland Valley Centre for Sustainable Waste Management with the following conditions:

- a. the Proponent's commitment to comply with all design and mitigation commitments set out in the attachments to the proposed EA Certificate; and
- b. the final Proponent's Table of Commitments, dated July 16, 2008, should be given the force of law by being made a condition of the Certificate, if the Project is approved.

Submitted by:

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David A. Riddell  
Project Assessment Director  
Environmental Assessment Office