

9.0 SUMMARY AND CONCLUSIONS

This CSR for the proposed VDP was prepared in accordance with the requirements of the *Canadian Environmental Assessment Act* (CEAA). The responsible authorities (RAs), in consultation with federal authorities and other parties, developed guidelines for conduct of the comprehensive study and preparation of the draft comprehensive study report by the Proponent.

The RAs considered information contained in the Proponent's Comprehensive Study Environmental Assessment (CSEA) and supplemental information submissions; comments from federal and provincial governments, First Nations, Aboriginal organizations, non-government organizations and the public; recommendations from meetings, workshops and technical sessions, and correspondence received on the public registry. This information was adequate for the RAs to reach conclusions as to whether the project was likely to cause significant adverse environmental effects.

9.1 Overview

De Beers Canada Inc. (De Beers), owned by De Beers Canada Holdings Inc., proposes to mine a diamond-bearing kimberlite resource (the Victor kimberlite) within the James Bay Lowlands of Ontario. Mining facilities would be situated immediately adjacent to the deposit. The Proponent proposes to commence construction of the mine in the winter of 2006, with mine operations beginning in the last quarter of 2008. Total reserves of 28 Mt of kimberlite ore will be mined from an open pit at an average annual rate of approximately 2.5 Mt over nearly 13 years. Mine closure will be conducted over a period of 6 years with site monitoring up to 10 years after the end of mining.

The Proponent initiated consultation with the AttFN in 1999 in regards to its advanced exploration program, and consultation on the project moving forward as a mine was initiated in 2001. Pre-consultation was also carried out with the communities of Kashechewan, Fort Albany, Moosonee and Moose Factory starting in 2003. Pre-consultations were also conducted with the federal government agencies.

De Beers submitted its initial project proposal to the government in May 2002, and updated proposals in March and May of 2003. The federal government determined that Natural Resources Canada, Fisheries and Oceans Canada Transport Canada and Human Resources and Skills Development Canada were RAs. Health Canada, Environment Canada and Indian and Northern Affairs Canada were expert federal authorities.

NRCan announced in a September 19, 2003 letter to the Proponent that it had assumed the role of lead RA, and that the project would be assessed as a Comprehensive Study. The Proponent submitted its final project description in November 2003. A public registry was established by NRCan in Ottawa, and satellite public registries were established in Attawapiskat, Moose Factory and Timmins. The RAs undertook development of project-specific environmental assessment guidelines in consultation with expert departments, provincial agencies, Aboriginal groups, and the public. Draft guidelines were issued on December 12, 2003 and were made

available for comment during a 9-week public review period ending on February 3, 2004. The final guidelines were issued on February 26, 2004.

The Proponent completed an environmental assessment and submitted it to the RAs in March 2004. The submission consisted of a Comprehensive Study Environmental Assessment (CSEA) document and 12 technical supporting documents. Technical reports included an environmental baseline study, air quality assessment, noise assessment, a river dispersion model, fuel spill models for the Attawapiskat River and James Bay, an economic impact study, geotechnical investigations, a processed kimberlite containment facility design report, a groundwater dewatering report, geochemistry study, and traditional ecological knowledge report. The CSEA summarized investigations undertaken since 2001 and, in some cases, since 1999, and documented pre-consultation with the Attawapiskat First Nation and government agencies. Baseline conditions were documented and analyses were conducted on the effects of the proposed project on the natural environment.

As a result of public consultation feedback and concerns over a fuel pipeline and tanker shipment of fuel in James Bay, as part of the project, the Proponent re-evaluated various project alternatives and, in August 2004, submitted supplementary information in the report entitled, *Re-evaluation of Site Access and Power Supply Alternatives*. This report detailed changes in project design, most notably the use of a transmission line to provide grid power in lieu of on-site diesel-fired power generation. The project change resulted in a significant reduction of planned fuel movement in James Bay.

As part of the public participation plan, information sessions, meetings and consultations with communities were conducted by De Beers and by the federal and provincial governments. The federal agencies undertook a technical review of the Proponent's CSEA. The review involved federal and provincial expertise, information provided by Aboriginal communities and their technical experts, and comments from the general public.

9.2 Environmental Effects

The Comprehensive Study included consideration of the potential effects of:

- The project on environmental components (air quality, geological systems, surface water systems, groundwater systems, the terrestrial environment, heritage resources, and bio-physical socio-economic conditions);
- Environmental changes on human health, physical and cultural heritage, current use of lands and resources for traditional purposes by Aboriginal persons and significant structures, sites or things;
- Cumulative environmental effects;
- Project alternatives;

- The project on the sustainable use of renewable resources;
- The environment on the project; and,
- Possible malfunctions or accidents.

Throughout the Proponent's pre-submission consultation and the environmental assessment process, the following potential effects of the project were consistently raised by various parties as areas of concern:

- Potential to dewater local creeks and smaller rivers due to bedrock groundwater dewatering;
- Potential to dewater a large area of muskeg around the site (and loss of habitat), due to bedrock groundwater dewatering;
- Degradation of the environment, including water quality in rivers, fish habitat, and wildlife habitat;
- Loss of potential land for traditional land use, and provision of compensation;
- Limitations to employment and training opportunities; and,
- Loss or reduction in social well-being.

The concerns raised during the Comprehensive Study were addressed by De Beers to the general satisfaction of the RAs. In some cases, such as hydrogeological issues, discussions between experts and additional information were required to satisfy the RAs. There was consensus of support from the federal authorities, provincial agencies and Aboriginal organizations for the RAs' conclusions that, with the implementation of appropriate mitigation measures, the project is not likely to cause significant adverse environmental effects.

9.3 Mitigation

Mitigation includes measures taken into account by the Proponent in the design of the project as described in the CSEA and supplementary materials, and the implementation of a site-specific environmental management system (EMS) and related procedures, as well as those identified through the technical sessions. The RAs considered that the mitigation measures proposed by De Beers to address potential environmental effects are appropriate. Mechanisms are required to ensure the co-operative development and implementation of mitigation measures and management strategies. These mechanisms include environmental management and socio-economic monitoring agreements, regulatory instruments with terms and conditions, and De Beers' EMS.

9.4 Outstanding Issues

The Attawapiskat First Nation has indicated that the socio-economic and traditional knowledge data collection has been insufficient for their requirements and that additional data collection and monitoring should be provided.

Mushkegowuk Council (MC) has indicated that the socio-economic effects assessment completed for the coastal Cree communities excluding Attawapiskat is not adequate. MC has proposed a detailed socio-economic monitoring framework.

Additional data on TEK and traditional land uses were provided by the Proponent; however, much of the socio-economic information requests from Attawapiskat and the MC have no bio-physical links to the project, and therefore lie outside of the scope of the Comprehensive Study.

9.5 Follow-up

Follow-up programs are required to ensure monitoring compliance and to determine the effectiveness of measures taken to mitigate adverse environmental effects of the project. A follow-up program as outlined in chapter 8 of the CSR is required to address specific issues.

Where a regulatory instrument is required for the project to proceed, related follow-up requirements may be specified as terms and conditions by the regulatory agency. If approved, the project would require:

- *Fisheries Act* authorizations;
- *A Navigable Waters Protection Act* permit;
- An *Explosives Act* storage and factory license;
- Approval under the Class EA for Minor Transmission Facilities (*Ontario Environmental Assessment Act*);
- Leave to Construct under Section 92 of the *Ontario Energy Board Act*;
- Closure Plan approval under the *Ontario Mining Act*;
- Quarry permits under the *Ontario Aggregate Resources Act*;
- Provincial work permits, and tenure for Crown Land under the *Public Lands Act*;
- Location approval under the *Lakes and Rivers Improvement Act*;
- Permits to take water under the *Ontario Water Resources Act*;

- Certificates of Approval for air, water, and waste management under the Ontario *Environmental Protection Act*; and,
- Other such permits, licences, authorizations and approvals as might be required.

The design and implementation of follow-up measures specified in this CSR that are not attached to a regulatory instrument will be assured through agreements as discussed in Chapter 8.

The environmental and socio-economic agreement for the VDP will be a key tool for ensuring that commitments and mitigation measures that lie outside the scope of regulatory instruments are appropriately implemented. This agreement will be finalized pursuant to the completion of the CSR.

9.6 RA Conclusions

The RAs have determined that there are no likely significant adverse environmental effects resulting from the project after mitigation is applied. In addition, there are no significant adverse cumulative effects predicted. The Proponent will be required to conduct monitoring and follow-up as per the commitments in this CSR, under permitting and as part of the follow-up program.