

Environmental Assessment Approval

Approval Date: February 1, 2008

Touquoy Gold Project

DDV Gold Ltd., Proponent
Halifax Regional Municipality, Nova Scotia

The Touquoy Gold Project (the "Undertaking"), proposed by DDV Gold Ltd. (the "Proponent"), in Halifax Regional Municipality, Nova Scotia is approved pursuant to Section 18(a) of the *Environmental Assessment Regulations*. This Approval is subject to the following conditions and obtaining all other necessary approvals, permits or authorizations required by municipal, provincial and federal acts, regulations, by-laws, guidelines, policies or standards before commencing work on the Undertaking. It is the responsibility of the Proponent to ensure that all such approvals, permits or authorizations are obtained before commencing work on the Undertaking.

This Environmental Assessment Approval is based upon the review of the conceptual design, environmental baseline information, impact predictions, and mitigation presented in the Registration Information.

Terms and Conditions for Environmental Assessment Approval

1.0 General Approval

- 1.1 The Environmental Assessment Approval for the project is limited to the project as described in the registration document. Any proposal by the Proponent for expansion, modification or relocation of any aspect of the project from that proposed in the registration document must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.
- 1.2 The Proponent must, within two years of the date of issuance of this approval, commence work on the undertaking unless granted a written extension by the Minister.
- 1.3 The Proponent must not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of an approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 1.4 The Proponent must implement all mitigation and commitments in the Registration Document, unless approved otherwise by Nova Scotia Environment & Labour (NSEL).

2.0 Protection of Lands

- 2.1 Within four years of the date of this Approval, the Proponent shall develop and implement a plan for procuring conservation land with valued protected areas attributes in the vicinity of the Undertaking for statutory protection by the province. The plan shall be developed in consultation with NSEL, NSDNR, the Community Liaison Committee, and any other parties identified by NSEL. The plan must be approved by the Minister prior to implementation.

3.0 Surface Water Resources

- 3.1 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval:
- a) A soil erosion and sedimentation management plan for construction and operation;
 - b) detailed engineering design drawings and specifications for process wastewater management including cyanide destruction process, smelter system, dams, spillways, discharge structures, sludge disposal cells, wastewater effluent treatment, polishing pond, tailings deposition scheme and run-off controls. The capacity of all wastewater management infrastructure must be approved by NSEL;
 - c) plans for the maintenance, monitoring and record keeping of all wastewater management systems at all times, until these structures have been fully decommissioned to the satisfaction of NSEL;
 - d) detailed engineering design drawings, specifications, maintenance and monitoring plans for the wetland treatment system, and
 - e) a contingency plan to address malfunctions, risk of failure, and failure of wastewater management system components.
- 3.2 The Proponent shall, no later than the commencement of project construction, and until one year following commencement of mine operation, take weekly samples of surface waters in locations which are to be used for water quality monitoring purposes pursuant to the Federal *Metal Mining Effluent Regulations*. The Proponent shall submit to NSEL and to Environment Canada the results of analysis of all samples for all parameters required to be measured pursuant to section 7 of the Federal *Metal Mining Effluent Regulations*. Protocols and reporting requirements shall be as specified in the Federal *Metal Mining Effluent Regulations*, part 8.
- 3.3 The Proponent, as part of the application for Part V Approval under the

Environment Act, shall provide for review and approval a project Surface Water Monitoring Program. Sampling locations, frequency, methodology and parameters must be developed in consultation with, and approved by NSEL.

- 3.4 The Proponent shall conduct any additional effluent or surface water monitoring or studies requested by NSEL before, during or following operations.
- 3.5 The Proponent shall provide to NSEL, copies of all information submitted to Environment Canada pursuant to the Federal *Metal Mining Effluent Regulations*.
- 3.6 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval a Copper Sulphate Management Plan.
- 3.7 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide a Surface Water Protection Bond the value of which shall be determined by NSEL, or, proof of environmental impairment liability insurance to compensate for or repair adverse effects resulting from failure of the tailings management facility.

4.0 Groundwater Resources

- 4.1 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval a groundwater contingency plan outlining actions to be taken if impacts to groundwater quality or quantity are detected.
- 4.2 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval a groundwater monitoring program to:
 - a) determine ground water / surface water interaction between the open pit and Moose River.
 - b) monitor groundwater quality at the site, including but not limited to, the perimeter of the tailings management facility
- 4.3 All ground water monitoring plan details including, but not limited to, sampling protocols, locations of monitoring wells, parameters sampled for, the frequency and duration of sampling, and format of reporting must be approved by NSEL.
- 4.4 The Proponent, as part of the application for Part V Approval under the

Environment Act, shall provide for review and approval a pre-blast survey and a well monitoring and contingency plan for any water wells which will remain in use within 800 m of the open pit during project development and operation.

5.0 Terrestrial and Aquatic Habitat

- 5.1 Prior to construction, the Proponent shall prepare and implement an Environmental Effects Monitoring Program which shall include biological effects monitoring procedures, protocols, parameters, locations and frequencies. The plan shall be developed in consultation with NSEL and NSDNR Wildlife Division with consideration of appropriate baseline data. Based on the results of environmental effects monitoring, the Proponent shall make necessary modifications to mitigation plans and/or mine operations to prevent continued unacceptable environmental effects to the satisfaction of NSEL. Any proposed changes shall be submitted to NSEL and other appropriate departments for review and approval.
- 5.2 The Proponent shall implement a Moose Management Plan for site development, operation and decommissioning. NSDNR Wildlife Division must be consulted on the final details of the plan prior to construction.
- 5.3 The Proponent shall provide the Nova Scotia Museum of Natural History with voucher samples of rare lichen species that would be destroyed as a result of mine development and operations.
- 5.4 Prior to operation, the Proponent shall develop and implement a plan for minimizing interactions between wildlife and project activities. The plan should be developed in consultation with NSDNR Wildlife Division and must be acceptable to NSEL.

6.0 Wetlands

- 6.1 The Proponent, as part of the application required for disrupting a wetland under Part V of the *Environment Act*, shall provide for review and approval a wetland compensation plan to be approved by NSEL and NSDNR. The plan shall be implemented within time frames established by NSEL and NSDNR.
- 6.2 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval a Wetland Protection Plan to be developed in consultation with NSDNR Wildlife Division.

7.0 Pre-existing Site Contamination

- 7.1 Prior to construction, the Proponent shall conduct a full chemical delineation of historic mine tailings that will be removed and contained as a result of project development and operation.
- 7.2 The proponent shall implement the Historic Mine Tailings Management Plan as committed to in the Environmental Assessment Focus Report.
- 7.3 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval detailed engineering design drawings and specifications for historic mine tailing containment cells.

8.0 Air Quality, Dust and Greenhouse Gases

- 8.1 Prior to Application for Part V Approval under the Environment Act, the Proponent shall provide a detailed analysis of predicted mercury air emissions associated with gold processing. The format and content of this analysis shall be developed in consultation with NSEL's Air Quality Branch. Results of the analysis shall be used in the preparation of an air quality management plan and mitigation measures to be submitted as part of the application for Part V Approval under the Environment Act.
- 8.2 The Proponent as part of the application for Part V Approval under the Environment Act, shall provide for review and approval a detailed dust management plan for construction and operation.
- 8.3 The Proponent shall develop and implement a project Greenhouse Gas Management Plan to be developed in consultation with NSEL.

9.0 Operation, Decommissioning and Reclamation

- 9.1 The Proponent as part of the application for Part V Approval under the Environment Act, shall provide detailed mine plans and preliminary reclamation plans.
- 9.2 One year prior to projected decommissioning, the Proponent shall develop a mine reclamation plan in consultation with the CLC, NSDNR and NSEL. The plan shall incorporate landscaping and reforestation that is compatible with the surrounding area and must be approved by NSEL and NSDNR.
- 9.3 The Proponent as part of the application for Part V Approval under the Environment Act, shall provide for review and approval a preliminary Post-Mining Environmental Management Plan which includes monitoring requirements, remediation measures, and response measures that will

occur following the completion of mining and processing on site. The Plan shall be updated and finalized six months prior to projected decommissioning for review and approval by NSEL.

- 9.4 The Proponent shall be responsible for the costs of any third party review of plans, reports, or monitoring results deemed necessary by NSEL over the life of the project.

10.0 Noise

- 10.1 The Proponent shall conduct noise monitoring at the request of NSEL.

11.0 Hazardous Materials Management

- 11.1 The Proponent shall, as part of the application for Part V Approval under the Environment Act, shall submit for review and approval, an Environmental Emergency and Spills Contingency Plan which is consistent with or exceeds the requirements of Nova Scotia's Contingency Planning Guidelines. The contingency plan shall include, but not be limited to, plans for response to releases of sodium cyanide, or hydrogen cyanide gas on the mine site and during transport to the mine site, including measures to address awareness, preparedness and capacity of local emergency response personnel who might act as first responders to releases.

12.0 Public Consultation

- 12.1 The Proponent shall submit to NSEL for review and approval, a plan for the formation and operation of a community liaison committee (CLC) for the project, including a terms of reference. The NSEL Guidelines for the Formation of a Community Liaison Committee shall be used for guidance.
- 12.2 The CLC terms of Reference must describe the CLC's degree of participation in, but not necessarily limited to, the following:
- a) environmental monitoring
 - b) dispute resolution / complaint response procedures
 - c) reclamation planning
 - d) wetlands compensation plans
 - e) mine development and operations
- 12.3 The CLC must be established prior to Part V Approval under the Environment Act.

Original Signed By

Mark Parent
Minister of Environment and Labour

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