



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

October 9, 2007
REGISTERED MAIL

Mr. Glenn King
Crown Resources Corporation/Kinross Gold U.S.A. Inc.
636 Fish Hatchery Road
Republic, Washington 99166

RE: Water Quality Certification Order No. 5158 for Ecology Public Notice for Buckhorn Mountain Project, for the construction of an underground gold mine, the construction and reconstruction of an ore haul route, the installation of utilities, the installation of groundwater monitoring wells, the installation of a water pipeline, the creation of an infiltration gallery and two water augmentation sites, and the installation of fencing.

Dear Mr. King:

On July 5, 2007, Crown Resources, Buckhorn Mountain Project, submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Clean Water Act Section 401 Water Quality Certification. A public notice for a proposed water quality certification from Ecology was distributed by Ecology for the above-referenced project pursuant to the provisions WAC 173-225-030 on August 23, 2007.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.



October 9, 2007

If you have any questions, please contact Gary Graff at (509) 454-4260. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Jeff Lewis

Central Regional Office

Shorelands and Environmental Assistance Program

JL:GG:jt071005

Enclosure

cc: Jay Manning – Ecology, Director
Polly Zehm – Ecology, Deputy Director
Gordon White – Ecology, SEA Program Manager
Joan Marchioro - Assistant Attorney General
Derek Sandison – Ecology, Central Regional Director
Brenden McFarland – Ecology, Metals Mining and Milling Coordinator
Loree' Randall – Ecology, 401 Policy Technical Lead
Dave Every - URS Corporation, Principal Ecologist

ec: Gary Graff – Ecology, Central Regional Federal Permit Coordinator

IN THE MATTER OF GRANTING A)	ORDER # 5158
WATER QUALITY)	Forest Service Reference No. P07-01 April
CERTIFICATION TO)	2007
Crown Resources Corporation/Kinross)	Construction of an underground gold mine, the
Gold U.S.A. Inc. in accordance with 33)	construction and reconstruction of an ore haul
U.S.C. 1341 (FWPCA § 401), RCW)	route, the installation of utilities, the installation
90.48.120, RCW 90.48.260 and WAC)	of groundwater monitoring wells, the installation
173-201A)	of a water pipeline, the creation of an infiltration
		gallery and two water augmentation sites, and the
		installation of fencing located on Buckhorn
		Mountain, Okanogan County, Washington.

TO: Mr. Glenn King
 Crown Resources Corporation/Kinross Gold U.S.A. Inc.
 636 Fish Hatchery Road
 Republic, Washington 99166

On July 5, 2007, Crown Resources, Buckhorn Mountain Project, submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Clean Water Act Section 401 Water Quality Certification. A public notice for a proposed water quality certification from Ecology was distributed by Ecology for the above-referenced project pursuant to the provisions WAC 173-225-030 on August 23, 2007.

The proposed project entails the construction of an underground gold mine, the construction and reconstruction of an ore haul route, the installation of utilities, the installation of groundwater monitoring wells, the installation of a water pipeline, the creation of an infiltration gallery and two water augmentation sites, and the installation of fencing. The project location is in Okanogan County, Washington, Sections 23-26 and 36, Township 40 North, Range 30 East; Sections 7-9, 16-19, 21, 25-28 and 31-32, Township 40 North, Range 31 East; Sections 1, 2, and 11, Township 39 North, Range 30 East; and Sections 2-5, Township 39 North, Range 31 East of the Willamette Meridian, Water Resource Inventory Area (WRIA) Okanogan 49.

AUTHORITIES

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §§ 1311, 1312, 1313, 1316, and 1317 (FWPCA §§ 301, 303, 306 and 307);
2. Conformance with the state water quality standards contained in ch. 173-201A WAC and authorized by 33 U.S.C. § 1313 and by ch. 90.48 RCW, and with other applicable state laws;

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.
4. Pursuant to the requirements of the state Metals Mining and Milling Operations Act (chapter 78.56 RCW), as related to the Environmental Protection Performance Sureties (EPPS).
5. As part of the application procedure for this Federal Clean Water Act Section 401 water quality certification, the applicant has completed a Tier II review. Whenever a water quality constituent is of a higher quality than a criterion designated for that water under Chapter 173-201A WAC, new or expanded actions within designated permit categories that are expected to cause a measurable change in the quality of the water may not be allowed unless Ecology determines that the lowering of water quality is necessary and in the overriding public interest. Ecology has reviewed the submitted Tier II analysis and has determined that the lowering of water quality is necessary and in the overriding public interest.

WATER QUALITY CERTIFICATION CONDITIONS

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260, ch. 173-200 WAC and ch. 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (ch. 173-201A WAC), ground water standards (ch. 173-200 WAC) or sediment quality standards (ch. 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

A. General Conditions

1. For purposes of this Order, the term "Applicant" shall mean Crown Resources Corporation/Kinross Gold U.S.A. Inc., and its agents, assignees, and contractors.
2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Central Regional Office, Attn: Federal Permit Coordinator, SEA Program, 15 West Yakima Avenue, Suite 200, Yakima, Washington 98902. Any submittals shall reference Order No. 5158, and Forest Service Reference No. P07-01 April 2007.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on July 5, 2007. The JARPA captures the construction and operation described in:
 - a. Buckhorn Mt. Project Final Supplemental Environmental Impact Statement Volume I – FSEIS, September 15, 2006.

- b. Buckhorn Mt. Project Final Supplemental Environmental Impact Statement Addendum, September, 19, 2007.
 - c. Buckhorn Mt. Project Habitat Mitigation Plan Buckhorn Mountain Project: Golder Associates, July 20, 2006.
 - d. Buckhorn Mt. Project Ecological and Aquatic Resources Monitoring Plan, Golder Associates, August 29, 2006.
 - e. Buckhorn Mt. Project Adaptive Management Plan, Golder Associates, June 25, 2007.
 - f. Buckhorn Mt. Project Hydrologic Monitoring Plan, Golder Associates, July 30, 2007.
 - g. Buckhorn Mt. Project Aquatic Resources Mitigation Plan, Golder Associates, July 31, 2007.
4. Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
 5. Within thirty (30) days of receipt of an updated JARPA, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
 6. This Order does not exempt, and is provisional upon compliance with other statutes and codes administered by federal, state, and local agencies.
 7. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
 8. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
 9. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
 10. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins at the project.

11. The applicant shall pay all necessary fees for monitoring costs as required by the Metals Mining and Milling Operations Act (chapter 78.56 RCW).
12. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.
13. Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars (\$10,000) per violation for each day of continuing noncompliance.

B. No Further Impairment of Existing Water Quality

1. Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (ch. 173-201A WAC) or sediment quality standards (ch. 173-204 WAC). Water quality criteria contained in WAC 173-201A-200 shall apply to this project, unless otherwise authorized by Ecology.
2. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-200(1)(e)(i). Furthermore, nothing in this certification shall absolve the Applicants from liability for contamination and any subsequent cleanup of surface waters or sediments occurring as a result of project construction or operations.
3. Identified waterways of Nicholson Creek, Gold Bowl Creek, North Fork Nicholson Creek, Nicholson Creek, Marias Creek and Toroda Creek have not been identified on the current 303(d) list as exceeding state water quality standards for any parameter.

C. Timing

1. Ecology Order No. 5158 is valid until all compliance requirements in this document have been met.
2. In-water work shall be subject to the timing limitations imposed by the most current agreement issued by the Washington Department of Fish and Wildlife (WDFW) for this project.
3. The Applicant must implement the fish and wildlife mitigation measures in the Agreement for Mitigation Between the State of Washington Department of Fish and Wildlife and Crown Resources Corporation, and all documents referenced therein. The mitigation measures must be implemented in accordance with the schedules found in the agreement and the referenced documents. The mitigation measures may be modified subsequent to the effective date of this permit, provided that the modifications are contained in a mitigation plan approved by the Washington Department of Fish and Wildlife.

D. Notification Conditions

1. The Applicant shall provide written notification (Fax, e-mail, or United States mail) to Ecology's Central Regional Office Federal Permit Coordinator in writing at least three (3) days prior to the start of construction at the project site.
2. The Applicant shall provide written notification to Ecology's Central Regional Office Federal Permit Coordinator in writing within fourteen (14) days after completion of construction.
3. The Applicant shall provide written notification to Ecology's Central Regional Office Federal Permit Coordinator in writing at least thirty (30) days prior to scheduled completion of reclamation activities on the project site.

NOTE: All notifications shall include the Applicant's name, project name, Order No. 5158, Forest Service Reference No. P07-01 April 2007, project location, on-site contact, and contact's phone number.

F. Construction Monitoring and Reporting Conditions for In-Water Activities

1. In-water construction during and immediately after project construction, the Applicant or its contractor shall visually monitor for turbidity discharges at the point of compliance established in WAC 173-201A-200(1)(e)(i). If turbidity exceedances are observed, work shall cease immediately and the Applicant or the contractor shall assess the cause of the turbidity problem and take appropriate measures to correct the problem and/or prevent further water quality turbidity exceedances. The Applicant or its contractor shall comply with all permit conditions of: Ecology's General Construction Stormwater Permit: WAR007757 Haul Route, United States Army Corps of Engineers Nationwide Permit 18, reference number 200500982, and EPA Construction General Permit WAR10AQ2F, unless or until superseded by subsequent permit issuances.
2. Work in or near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment, and erosion control, and best management practices suitable to prevent exceedances of state water quality standards (e.g., hay bales, detention areas, silt fences, etc.), shall be in place before starting clearing, filling, and grading work at the impact sites.
3. Prior to clearing and grading in wetlands, the adjacent wetlands shall be protected from construction impacts. Construction fencing or flagging (using brightly colored tape at no less than twenty-five foot (25') intervals) of the existing wetlands and stream channels to be protected shall be completed prior to clearing. All project staff shall be trained to recognize construction fencing or flagging that identifies wetland boundaries. Equipment shall not be moved into or operated in wetlands or stream channels that are not authorized to be filled.
4. During clearing and filling at the various project sites, the Applicant shall take all necessary measures to minimize the alteration or disturbance of existing wetland and upland vegetation.

5. No existing shoreline or streambed material (i.e., logs, rocks, gravel, cobbles, woody debris or other streambed material,) shall be relocated or used as fill or for any other purpose.
6. Dredge spoils will be deposited upland, according to the plans provided to Ecology prior to the start of construction activity. Dredge spoils shall not be allowed to enter the OHWM or the wetted perimeter of waters of the state.
7. Uncured concrete and concrete by-products shall be completely sealed off from the ordinary high water mark (OHWM) and wetted perimeter of waters of the state, totally contained through the use of sealed forms or other leak proof containment systems, and not allowed to contaminate or enter the OHWM or wetted perimeter of waters of the state.
8. All construction debris shall be properly disposed of on land so that it cannot enter a waterway or cause water quality degradation to state waters.
9. Wash water containing oils, grease, or other hazardous materials resulting from wash-down of equipment or working areas shall be contained for proper disposal and shall not be discharged into state waters or storm drains.
10. Any wooden components or other materials composed of pressure treated wood shall be professionally and commercially produced and chemically fixed in accordance with all current best management practices as contained in the Western Wood Preservers Institute's latest edition of Best Management Practices for the Use of Treated Wood in Aquatic Environments.
11. No wood, metal, or concrete preservatives, paints, sealers, glues, epoxies, chemicals, or other substances harmful or toxic to fish or shellfish shall be applied to any structure within or over the OHWM of waters of the state.
12. If for any reason changes to the monitoring requirements are proposed, the Applicant must apply to Ecology and such application shall include the changes requested, justification for changes, and specific locations of change. No change shall be considered authorized until Ecology issues a written decision affirming the proposed change.

G. Construction Monitoring and Reporting Conditions for Upland Activities

The Applicant or its contractor shall comply with all permit conditions of Ecology's General Construction Stormwater Permit: WAR007757 Haul Route and Ecology's General Construction Stormwater Permit: WAR-007755NPDES: Mine Construction, EPA Construction General Permit WAR10AQ2F, unless or until superseded by subsequent permit issuance.

H. Mine Operation

The Applicant and/or its contractor shall comply with all permit conditions of Ecology NPDES Permit: WA-005243-4, Buckhorn Mountain Mine Site.

I. Wetland Mitigation Requirements

1. Provisions and conditions in the above-referenced documents (A.3) are incorporated herein and are specific conditions of Ecology Order No. 5158. Mitigation for impacts to aquatic resources, including wetlands, seeps and springs, stream channels, water quality and quantity, riparian areas, and associated buffers and uplands shall be implemented as described, except as otherwise stated in the Order, or as replaced by later documents as approved by Ecology in writing. In addition to the described mitigation measures the following requirements shall be conditions for the mitigation plan:
 - a. Fertilizers: The use of fertilizers shall be limited to a small amount of slow release fertilizers within planting holes, and only as needed.
 - b. Field Supervision: The wetland mitigation implementation shall be field-supervised by a qualified wetland ecologist to ensure that grading was completed as planned and plants are appropriately placed.
 - c. As-built Report: Submit a final as-built report for the wetland mitigation projects, with drawings, to Ecology (per condition A.1.) within 60 days of completing construction, including planting.

2. Include the following information in the as-built report:
 - a. Final site topography.
 - b. Photographs taken from permanent reference points.
 - c. Installed planting scheme with quantities, densities, sizes and approximate locations.
 - d. Types of habitat features and their locations.
 - e. Important dates including:
 - i. When the development project's construction began.
 - ii. Starting and completion dates of the construction of the compensatory mitigation project including grading and planting of the site.
 - f. Name and contact information for the parties responsible for the mitigation site including the applicant, landowner, and wetland professional on site during construction.
 - g. Description of and reasons for any changes to the plan.
 - h. Description of any problems that occurred during construction.
 - i. List of any follow-up actions needed with a schedule.
 - j. Copy of the deed notification.

3. If the mitigation project is not completed within 13 months of the date of this Order, submit a written report on the status of the mitigation construction. Continue to submit status reports every 12 months until the construction (including planting) of the mitigation is complete and the final as-built report is submitted.

4. **Permanent Protection:** The Applicant shall provide documentation showing the means of permanent protection for the mitigation site (such as deed restrictions, conservation easement or similar) to Ecology's 401 Federal Project Manager along with the as-built report.
5. **Performance Standards:** The performance standards for the wetland mitigation shall be as listed in the Mitigation Plan, which details standards for plant survival and plant cover.
6. **Monitoring:** Monitoring to ensure that the project performance standards are met shall be performed as described in the Mitigation Plan. In addition, all mitigation monitoring shall take place over a period of ten (10) years, in years 1, 2, 3, 5, 7 and 10. Two (2) copies of all monitoring reports shall be submitted to Ecology per Condition A2.
7. **Maintenance:** Maintenance of the wetland mitigation sites is necessary to ensure that the required performance standards are met. Maintenance shall be performed as described in the Mitigation Plan.
8. **Year 5 Delineation:** The mitigated wetlands shall be delineated using the 1997 Washington State Wetlands Identification and Delineation Manual (or as updated) during the 5th year monitoring period to determine the actual area of wetlands created, restored, and rehabilitated.
9. **Year 10 Rating:** The 2004 Washington State Wetlands Rating System (or as updated) shall be applied to the mitigation area at the end of the 10-year monitoring period to determine the classification and rating of the created wetlands.
10. **Contingency Measures:** The Applicant is responsible for the success of the mitigation site. Contingency measures of the mitigation plan shall be implemented as soon as monitoring shows that one or more performance standards have not been met.

J. Emergency/Contingency Measures

1. Any work that is out of compliance with the provisions of this Order, or producing conditions that are causing distressed or dying fish, or causing any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters is prohibited. If such work occurs, the Applicant shall immediately take the following actions:
 - a. Cease operations at the location of the violation;
 - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage;
 - c. In the event of finding distressed or dying fish, collect fish specimens and water samples in the affected area within the first hour of the event. These samples shall be held in refrigeration or on ice until the Applicant receives further instructions from Ecology. Ecology may require analyses of these samples before allowing the work to resume;

- d. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible. This work shall take precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials;
 - e. Immediately notify Ecology's Central Regional Spill Response Office at 509-575-2490 of the nature of the problem, any actions taken to correct the problem, and any proposed changes in operations to prevent further problems.
 - f. Immediately notify the National Response Center at 1-800-424-8802 for spills to water.
 - g. Submit a detailed written report to Ecology per condition A2, within five (5) days that describes the nature of the violation, corrective action taken and/or planned steps to be taken to prevent a recurrence, results of any sampling taken and any other pertinent information.
2. If at any time, the Applicant finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the Applicant shall immediately notify Ecology's Central Regional Spill Response Office at 509-575-2490.
 3. Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.
 4. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. No refueling of equipment shall occur over, or within 100 feet of creeks, rivers, lakes, or wetlands.

K. Appeal Process

Any person aggrieved or adversely affected by Order No. 5158 may obtain review thereof by appeal. Pursuant to RCW 43.21.L., a person can appeal this order to the Environmental and Land Use Hearings Board within 21 days of the date of the issuance of this Order. Any such appeal must be sent to the Environmental and Land Use Hearings Board, PO Box 40903, Olympia, WA 98504-0903. Concurrently, a copy of the appeal must be served on the Director of the Department of Ecology, PO Box 47600, Olympia, WA 98504-7600 and served on the other parties identified in RCW 43.21.L.050(2). These procedures are consistent with the provisions of RCW 43.21.L and the rules and regulations adopted thereunder.

To appeal this Order, your notice of appeal must contain a copy of the Ecology Order you are appealing.

Your appeal must be filed with:

Environmental and Land Use Hearings Board
PO Box 40903,
Olympia, WA 98504-0903

Your appeal must also be served on:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, Washington 98504-7608.

In addition, please send a copy of your appeal to:

Federal Permit Appeals Coordinator
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

For additional information. Environmental Hearings Office Website. <http://www.eho.wa.gov>

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Ch. 43.21B RCW.

Dated October 9, 2007 at Yakima, Washington.



Jeff Lewis, Section Manager
Shorelands and Environmental Assistance Program
Department of Ecology
State of Washington