



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Reply To
Attn Of: OWW-130

OCT 13 2010

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Rick Baker
Senior Vice President
Kinross DeLamar Mining Company
670 Sierra Rose Drive
Reno, NV 89511

RE: Coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Groundwater Remediation Discharge Facilities in Idaho
Kinross DeLamar Mining Company, DeLamar Mine
Permit No. ID-G91-0007

Dear Mr. Baker:

With this letter, the U.S. Environmental Protection Agency (EPA) authorizes the Kinross DeLamar Mining Company (KDMC) to discharge from a treatment system at its DeLamar Mine to Outfall 001 into Louse Creek under the National Pollutant Discharge Elimination System (NPDES) General Permit for Groundwater Remediation Discharge Facilities in Idaho (ID-G91-0000). The permit number assigned to the facility is ID-G91-0007. Please use this number in all future correspondence and reports.

Enclosed are the effluent limitations and monitoring requirements for your facility (Enclosure 1). All conditions in the permit, including the enclosed effluent limitations and monitoring requirements, are effective immediately upon receipt of this letter. Additionally, in accordance with Part II.F of the general permit, Discharge Monitoring Reports (DMRs) must be submitted monthly, and postmarked by the 15th of the following month. The general permit is enclosed for your reference (Enclosure 2).

EPA received KDMC's NPDES permit application on May 7, 2010 for its discharges of groundwater seepage collected in a containment pond. The application provided a description of the treatment system, which consists of a groundwater seepage collection system into a pipeline. The pipeline will be routed into a treatment building where liquid sodium hydroxide (or a similar compound) will be metered into the pipe, followed by an in-line static mixer. Flocculent may be added, followed by a second in-line static mixer, and then the effluent will be allowed to be settled in a containment pond. After settling, effluent will be routed into a flow-controlled discharge pipeline system (approximately 2,500 feet) and discharged to Louse Creek through an in-stream multi-port diffuser.

In its application materials, KDMC specifically requested that effluent limits for cadmium, copper, mercury, and zinc be based on CORMIX modeling for a dilution factor range of 5 to 10. The general permit does not allow for the use of model-derived limits, but instead, provides tables of effluent limits that were calculated based on meeting state water quality criteria for a range of dilution factors. Therefore, EPA is not authorizing the CORMIX-derived limits. Instead, the limits will be based upon the 5 to 10 dilution factor range set forth in Part I.J.9 of the general permit. The limits for cadmium, copper, lead, nickel, silver, and zinc are based upon the hardness of the receiving water and effluent at the mixed dilution factor. The general permit assumes a hardness value of 100 mg/l, however, the general permit allows for the use of a site-specific hardness value. EPA used a site-specific hardness value of 54 mg/l to calculate these limits. This hardness represents the 5th percentile hardness of Louse Creek after being mixed with the effluent at a dilution factor of 5. Table 1 in Enclosure 1 sets forth the effluent limits applicable to KDMC.

In addition, KDMC requested authorization from the Idaho Department of Environmental Quality (IDEQ) for a mixing zone based upon the 5 to 10 dilution factor range. IDEQ issued an individual Clean Water Act (CWA) § 401 water quality certification on September 15, 2010. The CWA §401 certification authorizes a mixing zone based upon a 5:1 dilution factor using 25% of the critical flow volumes in Louse Creek for the following constituents: cadmium, copper, lead, mercury, nickel, selenium, silver, and zinc. CORMIX modeling indicates that the largest chronic mixing zone is expected to be less than 10 feet in length and occupy less than 15% of the stream width. The CWA §401 certification also includes additional monitoring requirements to assure compliance with state water quality standards. Enclosure 1 includes the conditions set forth in the CWA §401 certification. The CWA §401 certification is enclosed with this authorization letter (Enclosure 3).

Facilities discharging under the authority of the NPDES general permit must keep a copy of the permit and this coverage letter at the facility where the discharge occur, or retain a copy of the permit at the nearest administrative or field office managing the operation.

Please contact Hanh Shaw of my staff at (206) 553-0171 or via email at shaw.hanh@epa.gov if you have any questions regarding this authorization letter or the general permit.

Sincerely,



Michael J. Lidgard, Manager
NPDES Permits Unit

Enclosures: (1) Effluent limitations and monitoring requirements
(2) NPDES General Permit for Groundwater Remediation Discharge Facilities in Idaho (ID-G91-0000)
(3) IDEQ CWA Section 401 water quality certification

cc: Craig Shepard, Boise Regional Office
Johnna Sandow, IDEQ State Office
Steve Smith, Site Manager

ENCLOSURE 1

KINROSS DELAMAR MINING COMPANY, DELAMAR MINE EFFLUENT LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

A. Effluent Limitations (Permit Part II.A)

1. During the effective period of this general permit, the permittee is authorized to discharge subject to the restrictions set forth herein. This general permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application and/or Notice of Intent (NOI), or any pollutants that are not ordinarily present in such waste streams.
2. The permittee must not discharge hazardous materials in concentrations that pose a threat to public health or impair the beneficial uses of the receiving water.
3. The permittee must not discharge chemicals or toxic pollutants in concentrations that impair the beneficial uses of the receiving water.
4. The permittee must not discharge deleterious materials in concentrations that impair the beneficial uses of the receiving water.
5. The permittee must not discharge floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair the beneficial uses of the receiving water.
6. The permittee must not discharge excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing beneficial uses of the receiving water.
7. The effluent pH range must be between 6.5 and 9.0 standard units.
8. Non-designated surface waters are protected for cold water biota where discharges must not exceed 19°C.
9. Discharges must comply with the effluent limitations and monitoring requirements in Table 1.
10. Dilution of effluent as a form of treatment, or as a means of complying with concentration-based effluent limitations is prohibited.

Table 1. Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limit Maximum Daily Limit		Monitoring Frequency	Sample Type
	5 to 10 Dilution Factor Range (Within Mixing Zone)	End-of-Pipe Limits (No Mixing Zone)		
Arsenic ¹	--	10 µg/L	Weekly ²	grab
Cadmium ^{1,3}	3.6 µg/L	--	Weekly ²	grab
Total Chromium ^{1,4,5}	--	11 µg/L	Weekly ²	grab
Copper ^{1,3}	36 µg/L	--	Weekly ²	grab
Iron ¹	--	1,000 µg/L	Weekly ²	grab
Lead ^{1,3}	7 µg/L	--	Weekly ²	grab
Mercury ⁶	0.06 µg/L	--	Weekly ²	grab
Nickel ^{1,3}	158 µg/L	--	Weekly ²	grab
Selenium ¹	25 µg/L	--	Weekly ²	grab
Silver ^{1,3}	7.2 µg/L	--	Weekly ²	grab
Zinc ^{1,3}	362 µg/L	--	Weekly ²	grab
Flow	--	Report (gallons per day)	Continuous	recording
Temperature	--	19°C	Weekly ²	grab
pH	--	6.5 – 9.0 s.u. (at all times)	Weekly ²	grab

¹ Limits expressed as total recoverable.

² Weekly sampling is required as long as the facility is discharging.

³ The effluent limits for these metals are calculated based on a site-specific hardness of 54 mg/L.

⁴ Chromium limit (for total chromium) set to the non-hardness based value for Cr(VI).

⁵ If the total chromium result is greater than the effluent limit for Chromium VI, then the permittee shall monitor for Chromium III and Chromium VI. The end-of-pipe effluent limit for Chromium III is 52 µg/L (based on 54 mg/L hardness).

⁶ Total mercury compliance limit is 0.2 µg/L.

B. Instream Monitoring⁷ (CWA §401 certification)

The permittee must collect quarterly instream water samples from two locations in Louse Creek and analyze the samples for arsenic, cadmium, total chromium⁵, copper, iron, lead, mercury, nickel, selenium, silver, and zinc. One sample location must represent background conditions and must be located upstream of the discharge. The second sample location must represent fully

⁷ Instream sampling is for dissolved arsenic, cadmium, total chromium, copper, iron, lead, nickel, silver, and zinc. Mercury must be measured as total. Selenium is total recoverable.

mixed conditions of the receiving stream and the effluent. The samples shall be collected during times that are safe for sampling and representative of critical stream flows during that quarter.

The permittee must also monitor the daily flows in Louse Creek. This information, coupled with the effluent flow monitoring results, must be used to ensure that a dilution factor of 5 (based upon 25% of Louse Creek flow) is achieved.

The permittee shall submit the instream water quality and Louse Creek flow monitoring results in accordance with the Discharge Monitoring Reports (DMRs) requirements pursuant to Part II.F of the general permit. The instream monitoring must occur for the duration of the permit and the results shall be summarized in an annual monitoring report, which is to be submitted to EPA and IDEQ by January 31st of the following year.

C. Quality Assurance Requirements (Permit Part II.I)

The permittee must develop a Quality Assurance Plan (QAP) for all monitoring required by this permit. The QAP must be completed and implemented within 90 days of the authorization to discharge under this general permit. Upon completion of the QAP, copies must be sent to EPA and IDEQ.

D. Operation and Maintenance Plan (Permit Part II.J)

The permittee must develop and implement an Operations and Maintenance (O&M) Plan within 90 days of the authorization to discharge under this general permit. Upon completion of the O&M Plan, copies must be sent to EPA and IDEQ.

E. Agency Contacts

The monthly Discharge Monitoring Reports (DMRs), annual monitoring reports, QAP, and O&M must be sent to the following agency contacts:

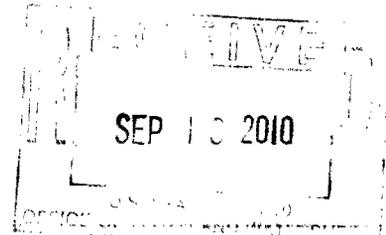
U.S. EPA Region 10
1200 Sixth Avenue, Suite 900
Attn: PCS Data Entry Team, OCE-133
Seattle, Washington 98101

Idaho Department of Environmental Quality
Regional Office
1445 North Orchard
Boise, Idaho 83706



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550



C.L. "Butch" Otter, Governor
Toni Hardesty, Director

September 15, 2010

Mr. Michael J. Lidgard, Manager
NPDES Permit Unit
US EPA, Region 10
1200 Sixth Avenue
Seattle, WA 98101

RE: Final 401 Water Quality Certification for the Kinross DeLamar Mine Groundwater
Remediation NPDES Permit No. ID-G91-0007

Dear Mr. Lidgard:

The public comment period (August 16 through September 7, 2010) for the draft certification of the mixing zones for the Kinross DeLamar Groundwater Remediation Facility has been completed and no comments were received. Enclosed with this letter is the State of Idaho's final 401 water quality certification.

If you have any questions or need further information please contact Craig Shepard or me at 373-0550.

Sincerely,

A handwritten signature in cursive script that reads "Pete Wagner". The signature is written in black ink and is positioned above the printed name.

Pete Wagner
Regional Administrator
DEQ Boise Regional Office

Enclosure

cc: Hanh Shaw, EPA R10
Doug Conde, Deputy Attorney General
Craig Shepard, DEQ Boise Regional Office
Barry Burnell, DEQ Water Quality Division Administrator
Johnna Sandow, DEQ State Office



Idaho Department of Environmental Quality FINAL §401 Water Quality Certification

September 15, 2010

NPDES Permit Number: ID-G91-0007
Groundwater Remediation Discharge Facilities in Idaho
Kinross DeLamar Mining Company, DeLamar Mine

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC Section 1341 (a)(1), and Idaho Code §§ 39-101 et.seq., and 39-3601 et.seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

The General NPDES Permit for Groundwater Remediation Facilities in Idaho allows mixing zones if a facility includes in its Notice of Intent a request that DEQ consider a mixing zone and such a mixing zone is subsequently authorized by DEQ. Kinross DeLamar Mining Company (DeLamar) included a request for a mixing zone in its NOI. This certification is in response to the request for a mixing zone.

Based upon DEQ's review of the information contained in the NOI and the above-referenced permit, DEQ authorizes the mixing zones as set forth below and certifies that, if DeLamar complies with the terms and conditions imposed by the permit along with the conditions set forth below, then there is a reasonable assurance that the authorized mixing zones comply with the applicable requirements of the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) and other appropriate water quality requirements of State law.

MIXING ZONES

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone based upon a 5.1 dilution factor using 25% of the critical flow volumes of Louse Creek for the following constituents: cadmium, copper, lead, mercury, nickel, selenium, silver, and zinc. Based on the results of CORMIX modeling, the largest chronic mixing zone is expected to be less than 10 feet in length and occupy less than 15 percent of the stream width.

DeLamar must collect instream water samples from two locations in Louse Creek. One sample location must represent background conditions and must be located upstream of the discharge. The second sample location must represent fully mixed conditions of the receiving stream and the effluent. The surface water samples shall be collected quarterly during times that are safe for sampling and representative of critical stream flows during that quarter. The samples shall be analyzed for arsenic, cadmium, total chromium¹, copper, iron, lead, mercury, nickel, selenium, silver, and zinc.

¹ If the total chromium result is greater than the criterion for Chromium VI, then DeLamar shall monitor for Chromium III and Chromium VI.

DeLamar must also continue to monitor the daily flows in Louse Creek. This information, coupled with the effluent flow monitoring results must be used to ensure that a dilution factor of 5 (based upon 25% of Louse Creek flow) is achieved.

The in-stream water quality and flow monitoring must occur for the duration of the permit. Results shall be summarized in an annual monitoring report, which is to be submitted to the DEQ Boise Regional Office by January 31 of the following year.

RIGHT TO APPEAL FINAL CERTIFICATION

The final DEQ authorization of mixing zones for DeLamar may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5), and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of the final certification.

Questions regarding the actions taken in this certification should be directed to Craig Shepard, DEQ at (208) 373-0550.


Pete Wagner
Administrator, DEQ Boise Regional Office