



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

FILE COPY

MAY 23 2013

CERTIFIED MAIL
(Return Receipt Requested)

Kelly L. Payne, P.G.
Manager - Environment
Kennecott Utah Copper
4700 Daybreak Parkway
South Jordan, Utah 84095

Dear Mr. Payne:

Subject: Notice of Violation and Compliance Order, Docket No. UGW13-02

An unauthorized discharge of tailings slurry occurred from the Kennecott Utah Copper (KUC) tailings pipeline on February 4, 2013. Based on information provided by KUC in the required release notification the unauthorized release is in violation of *Utah Code Ann. §19-5-107*.

Please give the enclosed Notice of Violation and Compliance Order (NOV/CO) your immediate attention. A written response is required within 30 calendar days after receipt of this NOV/CO. **This order is fully enforceable unless appealed in writing within 30 days, as described in the "Notice" section of this NOV/CO. Any response or written answer to this NOV/CO should be addressed to Walter L. Baker, P.E., Director, Utah Division of Water Quality, P.O. Box 144870, Salt Lake City, UT 84114-4870.**

If you have any questions, please contact Dan Hall at (801) 536-4356. A phone call to DWQ or a site visit does not alter the requirement to provide a timely written response if you wish to contest this NOV/CO.

Sincerely,

UTAH DIVISION OF WATER QUALITY

Walter L. Baker, P.E.
Director



Enclosure: Notice of Violation and Compliance Order, Docket No. UGW13-02
cc: Salt Lake Valley Health Department
DWQ-2013-003761.doc

UTAH DIVISION OF WATER QUALITY

IN THE MATTER OF	:	DOCKET NUMBER UGW13-02
KENNECOTT UTAH	:	NOTICE OF VIOLATION
COPPER	:	AND COMPLIANCE ORDER

A. STATUTORY AUTHORITY

This **NOTICE OF VIOLATION and COMPLIANCE ORDER (NOV/CO)** is issued to Kennecott Utah Copper (hereafter **KUC**), by the UTAH DIVISION OF WATER QUALITY (**DWQ**) under the Utah Water Quality Act, Utah Code Ann. §§ 19-5-101 to 19-5-123 (the **ACT**), including sections 19-5-106, 19-5-111 and 19-5-115. This **NOV/CO** is also issued in accordance with the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-101 to 63G-4-601. The Director of the DWQ has authority to issue such **NOTICES AND ORDERS** in accordance with §19-5-106(2)(d) of the Utah Code.

B. APPLICABLE STATUTORY AND REGULATORY PROVISIONS

1. *UCA § 19-5-102(21)(a)* defines waters of the state as “all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state”.
2. *UCA § 19-5-107(1)(a)* states: “Except as provided in this chapter or rules made under it, it is unlawful for any person to discharge a pollutant into waters of the state or to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water, or to place or cause to be placed any waste in a location where there is probable cause to believe it will cause pollution.”
3. *UCA § 19-5-107(3)(a)* states: “It is unlawful for any person, without first securing a permit from the executive secretary as authorized by the board, to: make any discharge not authorized under an existing valid discharge permit”.
4. *UAC R.317-1-2.1* states: “No person shall discharge wastewater or deposit wastes or other substances in violation of the requirements of these regulations.”

C. FACTS

1. **KUC** operates a copper ore mine and concentrating facility (Copperton Concentrator) north of the town of Copperton in southwest Salt Lake County. The Concentrator uses a grinding and flotation process to concentrate copper ore. Waste material from this process, known as tailings, is conveyed in slurry form via a pipeline from the Concentrator north to **KUC** operations near the Great Salt Lake where the tailings are deposited in the north end tailings impoundment.
2. **KUC** has a Utah Ground Water Discharge Permit (No. UGW350017) for the Copperton Concentrator, which was renewed by the Utah Division of Water Quality (DWQ) on February 26, 2009.
3. **KUC** also operates under Utah Pollutant Discharge Elimination System (UPDES) Permit (No. UT000051) effective on February 1, 2007 and is currently administratively extended as provided in Utah Administrative Code, Section R317-8-3.1.
4. Part II.I.1 of Ground Water Discharge Permit UGW350017 requires **KUC** to verbally report any noncompliance, or spills subject to the provisions of UCA 19-5-114, which may endanger public health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. In addition, Part II.I.2 of Permit UGW350017 requires **KUC** to provide a written notification to the Executive Secretary within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain: a) a description of the noncompliance and its cause; b) the period of noncompliance, including exact dates and times; c) the estimated time noncompliance is expected to continue if it has not been corrected; and, d) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
5. A previous Notice of Violation and Order was issued against **KUC** on October 12, 2011, Docket No. UGW11-09 in connection with three pipeline spills in July, August and September of 2011. Related thereto, **KUC** signed and settled the Final Stipulation and Consent Order on January 29, 2013. The Consent Order required **KUC** to modify the Copperton Permit, Appendix A, with the submitted BMP plan from the Notice of Violation and Consent Order.
6. The modified Appendix A of **KUC** Permit UGW350017 included requirements with regard to:
 - **Spill Detection:** “Spills as a result of pipeline releases will be identified by one or more of the following measures: 1. Visual observation by roving operators or area personnel. The frequency of visual inspections as outlined in 2.2 may influence the detection time;” and

- **Spill Reporting:** “These regulations require KUC to report a spill the “may cause pollution to groundwater” to the Division of Water Quality within 24 hours of the spill and submit a written notification within five days.”
6. On February 5, 2013, Leland Roberts of **KUC** verbally notified both the UPDES and Ground Water sections of DWQ that a tailings slurry release had occurred on February 4, 2013.
 7. On February 8, 2013, pursuant to Part II.I.3 of UPDES Permit UT000051 and UGW 350017, Appendix A, **KUC** hand delivered a written notification of the tailings release to DWQ, which was addressed to Ms. Kim Shelley and Dan Hall of DWQ. According to the notification, the release occurred from a vent stack (335) located approximately 1 mile east-southeast of pump station 3B and was discovered by a KUC Tailings and Water Services rover at approximately 9:30 pm on February 4, 2013. KUC personnel made an initial assessment of the spill and collected a sample at approximately 10:40 pm on February 4, 2013. KUC personnel followed up on the morning of February 5 to continue the investigation.
 8. In accordance with Section 2.2 of the KUC Process Material Pipeline Spill Prevention, Minimization and Response Plan, KUC visually inspected the pipeline two times on February 4 at 10:30 am and 9:30 pm (when the spill was discovered). At the time of the discovery of the spill, tailings were no longer being released from the vent stack. KUC does not have process monitoring instrumentation at this location. The exact duration of the spill is therefore unknown, but occurred within the above described timeframe.
 9. KUC calculates that approximately 696,000 gallons of slurry were released containing approximately 4,000 tons of tailings solids. Calculations for the release were based on a GPS mapping of the area covered by the tailings slurry and the estimated depth of the deposited solids at a number of points; water volume was calculated based upon an assumed percent solid fraction of the released slurry.
 10. From the release point, tailings flowed north along the pipeline road approximately 2,733 feet. Tailings breached a road berm and flowed east down an unused road, then into an unnamed dry wash where it pooled in a depression near a culvert on the east side of the pipeline road. Additionally, tailings flowed between the east and west pipelines north approximately 1,228 feet where it flowed into a culvert which discharged into a basin. Tailings then flowed from the basin into the same unnamed dry wash and through a 48-inch culvert east under the pipeline road, across a KUC access road. Tailings continued to flow east approximately 1,030 feet where it left KUC property and flowed onto Alliant Tech Systems (ATK) property; approximately 150 feet from highway U-111.

D. FINDINGS

1. An unauthorized discharge of tailings slurry occurred from the **KUC** tailings pipeline on February 4, 2013.
2. Based on **KUC** notification report:
 - a) The spill was discharged from vent stack (335) located approximately 1 mile east-southeast of pump station 3B.
 - b) The spill had associated liquid discharges in addition to the solid tailings fraction.
 - c) **KUC** does not indicate that any of the liquid from the release was recovered. However, **KUC** initiated a removal of solids from both **KUC** and **ATK** property where large deposits occurred.
3. Based on **KUC** analytical results of water and tailings solids samples, a Reportable Quantity (CERCLA 103) of lead was exceeded in the unauthorized discharge.
4. Analytical testing of the water fraction by **KUC** indicated a total dissolved solids concentration of 6,790 mg/L, which exceeds class one and two ground water standards under R317-6-3.
5. The unauthorized discharge is located in the primary recharge area of the Salt Lake Valley principal aquifer. The principal aquifer is a drinking water source for the Salt Lake Valley and is unconfined at this location.

E. VIOLATIONS

Based on the foregoing **FACTS** and **FINDINGS**, **KUC** is in violation of:

1. UCA 19-5-107(1)(a), for discharging a pollutant into waters of the state or causing pollution which constitutes a menace to public health and welfare, or for placing or causing to be placed wastes in a location where there is probable cause to believe it will cause pollution.
2. UCA 19-5-107(3), for making a discharge not authorized under an existing valid permit.

F. ORDER

In view of the foregoing **FINDINGS**, and pursuant to Utah Code Ann. Section 19-5-106, **KUC** is hereby ordered to:

Provide a detailed, written submission for the spill occurrence of February 4, 2013 within sixty days of receipt of this **ORDER** describing:

- 1) The root cause of the unauthorized discharge;
- 2) Additional calculations of spill volumes based on the time of the last inspection where no spill was detected and when the leak was discovered;
- 3) Corrective actions that have been or will be taken for the unauthorized discharges;
- 4) Steps that will be taken to prevent reoccurrence of the unauthorized discharges;
- 5) All parameters used to make the spill calculation estimates (including the estimate based on GPS mapping) such as, but not limited to estimated tailings flow volume and liquid/solid percentages;
- 6) A detailed map of both tailings pipelines showing the locations of any and all potential discharge points (vents, drop boxes etc.) whether open or capped; and
- 7) A discussion of the age and maintenance of the pipelines including but not limited to life expectancy, potential for replacement and operating capacity of the pipeline as it relates to the timeframe of this spill and potential mine expansion.

G. NOTICE

Compliance with the provisions of this NOV/CO is mandatory. Under DWQ's Penalty Criteria for Civil Settlement Negotiations, Utah Admin. Code § R317-1-8, **KUC's** good faith efforts to comply with this Compliance Order may impact the monetary penalty that would apply in a settlement. Providing false information may subject **KUC** to further civil penalties or criminal fines.

UCA § 19-5-115 provides that a violation of the **ACT** or a related order may be subject to a civil penalty of up to \$10,000 per day of violation. Under certain circumstances of willfulness or gross negligence, violators may be fined up to \$25,000 per day of violation.

H. CONTESTING THIS NOV/CO

This **NOV/CO** is effective immediately and shall become final unless contested in writing within thirty (30) days after the date this **NOV/CO** was signed. See Utah Admin. Code § R317-9- 3(3). Any further administrative proceedings in this case shall be conducted formally under Utah Code Ann. § 63G-4-204 to 601.

To contest this **NOV/CO**, you must respond in writing and must comply with the requirements of the Administrative Rules of the Water Quality Board, found at Utah Admin Code § R317-9 and with the requirements of the Utah Administrative Procedures Act, including Utah Code Ann. § 63G-4-201(3)(a) and (b). Those provisions of the Utah Administrative Procedures Act require, among other things, that you state your factual and legal reasons for disagreeing with the **NOV/CO**, and that you state the action that you would like the agency to take (e.g., withdrawing the **NOV/CO**). A copy of Utah Code Ann. § 63G-4-201(3)(a) and (b) is provided on page 7.

A response contesting this **NOV/CO** must be received by the Director within 30 days of the date this **NOV/CO** was signed. The Director's address is:

(Mailing address)

Walter L. Baker
Utah Division of Water Quality
P.O. Box 144870
Salt Lake City, UT 84114-4870

(Address for hand or overnight delivery)

Walter L. Baker
Multi-Agency State Office Building
195 North 1950 West
Salt Lake City, UT 84114-4870

You will not be allowed to contest this **NOV/CO** in court or in any other forum if you do not first contest the **NOV/CO** as described above.

Signed this 23 day of May, 2013.

UTAH DIVISION OF WATER QUALITY



Walter L. Baker, P.E.
Director

Utah Code Ann. § 63G-4-201(3)(a) and (b):

- (a) Where the law applicable to the agency permits persons other than the agency to initiate adjudicative proceedings, that person's request for agency action shall be in writing and signed by the person invoking the jurisdiction of the agency, or by that person's representative, and shall include:
- (i) the names and addresses of all persons to whom a copy of the request for agency action is being sent;
 - (ii) the agency's file number or other reference number, if known;
 - (iii) the date that the request for agency action was mailed;
 - (iv) a statement of the legal authority and jurisdiction under which agency action is requested;
 - (v) a statement of the relief or action sought from the agency; and
 - (vi) a statement of the facts and reasons forming the basis for relief or agency action.
- (b) The person requesting agency action shall file the request with the agency and shall mail a copy to each person known to have a direct interest in the requested agency action.

Dwq-2013-003758