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State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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August 4, 1999

Paula H. Doughty, Manager
Environmental Compliance
Kennecott Utah Copper Corporation
8315 West 3595 South
P. O. Box 6001
Magna, Utah 84044-6001

RECEIVED
AUG - 9 1999
DIV. OF OIL, GAS & MINING

Dear Ms. Doughty:

Subject: Use and Stockpiling of Class B Biosolids for Land Reclamation

This letter is to summarize the meeting with Rich Bordan and Bill Adams of Kennecott Copper Corporation (KCC) and Mark Schmitz and Fred Pehrson of the Division of Water Quality (DWQ) July 28,1999.

KCC and the DWQ recognize that the beneficial use of biosolids for land reclamation at KCC is a win-win situation for the environment and the water reclamation facilities that are supplying the biosolids. However, the DWQ is concerned about the potential impacts to ground water from long term stockpiling of biosolids. During the meeting it was agreed that the following best management practices (BMP's) need to be implemented to minimize risks to ground water quality from the leachate of the biosolids and to avoid the need for separate ground water permits.

1. Biosolids will only be stockpiled in those areas covered by a valid ground water permit that has been issued by the DWQ.

2. All reasonable efforts will be made to minimize the length of time biosolids are stockpiled. Biosolids stockpiled for land application of the overburden areas during the winter shall be incorporated into the soil and seeded with a cover crop the following spring or as soon as the snowmelt and weather permits.

3. Biosolids stockpiled during the spring/summer shall be incorporated into the soil and seeded with a cover crop as often as practicable in conjunction with the reclamation plan. We understand this will be done at a frequency of no longer than every ninety days, and before onset of winter.

As long as the above BMP's are met the request in your letter dated March 2, 1999 to stockpile and apply biosolids that exceed the annual agronomic application rate of Class B biosolids is hereby granted by the Executive Secretary of the Utah Water Quality Board for a one-time application. This authority is granted under *40 CFR 503.14(d)*. The biosolids application will be limited to sections 17, 18, 19, 20, 21, 29, 30, 31 and 32 Township 3 South, Range 2 West and Sections 11, 13, 14, 22, 23, 24, 25, 26, 27, 34, 35 and 36 of Township

3 South, Range 3 West, Salt Lake County, Utah and Tailings Pond Impoundment Site of approximately 7,000 acres located in Sections 7, 8, 17, 18, 19 and 20, Township 1 South, Range 2 West, and Sections 11, 12, 13, 14, 23, and 24, Township 1 South, Range 3 West.

As you may recall it had been agreed that the intended application rates are 15 to 30 dry tons per acre (dt/ac) or less, but approval is granted for up to 35 dt/ac in case of minor variations in application rate. The range of 15 - 30 dt/ac is based on preliminary results from earlier test plots that used a wider range of application rates.

We also understand that you agree with our position that large-scale application rates should not be above the rate at which no further improvement in reclamation is achieved by adding more.

The biosolids will be supplied by the Central Valley Water Reclamation Facility, South Valley Water Reclamation Facility, Salt Lake City Corporation Water Reclamation Facility and Magna City Water Reclamation Facility. All requirements of *40 CFR 503,* including the permit requirements of the biosolids generators must be met, including at least Class B pathogen treatment and corresponding management practices.

This approval does not release Kennecott from compliance with other State rules and programs or local authority. Kennecott must notify the DWQ if the application rates are significantly different from those proposed, or if the 35 tons/acre is exceeded. If you or any one else have any questions please contact Mark Schmitz at the DWQ or call 538-6097.

We appreciate the willingness of KCC to work with the DWQ and abide by these BMP's for the benefit of the environment and all parties concerned.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E.
Executive Secretary

DAO:MS:st

cc: Bob Brobst, EPA Region VIII
Lynn Kunzler, DOGM
Reed Fisher, Central Valley WRF
John Hays, South Valley WRF
Jon Adams, Salt Lake City Corp. WRF
Dan Stewart, Magna WRF
Terry Sadler, Salt Lake City/County Health Dept.

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