



Norman H. Bangerter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

September 17, 1992

Mr. Rod Ivy  
Price River Water Improvement District  
265 South Fairgrounds Road  
P.O. Box 903  
Price, Utah 84501

Dear Mr. Ivy:

As you are aware, PacifiCorp is interested in examining the reclamation benefits of the application of dried, digested sewage sludge (sludge) to mined lands, and the Division of Oil, Gas and Mining (Division) supports this evaluation. Upon approval from the Bureau of Water Pollution Control (BWPC), a small amount of sludge will be applied to revegetation test plots at PacifiCorp's Des-Bee-Dove Mine. Additionally, the Division would like to develop a protocol which would, if otherwise acceptable, facilitate regular application of sludge to reclaimed mined lands throughout the state on an as-needed basis.

The mining industry is apprehensive about the use of sludge in reclamation projects because of the liability assumed when accepting potentially hazardous waste. In many circumstances these apprehensions are unfounded. If Public Operated Treatment Works (POTW) operators could prove that their waste is nonhazardous and beneficial to mine land reclamation, then the mining industry may be more inclined to use sludge for reclamation projects. A second benefit would be the removal of sludge from crowded treatment facilities.

Therefore, the Division would like to meet, in the near future, with various state agencies, POTW operators and mining industry representatives to discuss the opportunities for developing a protocol to facilitate regular land application of sludge to lands being reclaimed by mine operators.

To arrive at the goal of procuring sludge for the Des-Bee-Dove Mine revegetation test plots and for determining the quality of the sludge produced at the Price River Water Improvement District (PRWID) water treatment facility, the sludge material must be analyzed, prior to land application, to determine that the sludge is not categorically hazardous waste. The sludge must be characterized by employing a statistically valid, representative sampling program. The sample methods and laboratory analyses must include a Quality Assurance and Quality Control Program for the specific data collection activities. The quality of the analyses must be of sufficient

Page 2  
Mr. Rod Ivy  
September 17, 1992

quality and of known precision and accuracy to satisfy the requirements of 40 CFR 257 et. seq., Section 503 of the Clean Water Act, regulations set forth under R315 of the Utah Administrative Code.

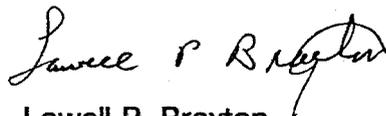
The Environmental Protection Agency has published the following documents to aid the POTW operator in developing a valid sludge sampling and analysis plan: "Process Design Manual -Land Application of Municipal Sludge" (Doc. # EPA-625/1-83-016); POTW Sludge Sampling and Analysis Guidance Document; EPA Test Methods for Evaluating Solid Waste.

The formulation of a sludge sampling and analysis plan could be accomplished in cooperation with other POTW operators. POTW with similar sludge bed drying methods and similar waste streams, could standardize the sampling and analysis plans for the various degrees of sewage treatment. Sample methods, for a particular POTW, may require some minor deviations from the standard methods.

The Division would like to arrange a meeting to discuss the details of arriving at the aforementioned goals. If it is acceptable to you, the Division would like to arrange a meeting to be held at the PRWID facility, with representatives from the BWPC, the Division, PacifiCorp, and PRWID.

Thank you for your time on this matter and feel free to contact Priscilla Burton and/or Henry Sauer of my staff for additional information and meeting schedules.

Sincerely,



Lowell P. Braxton  
Associate Director, Mining

jbe  
cc: Ralph Bohn, Solid Waste Branch Manager, Utah Department of Environmental Quality,  
Division of Solid and Hazardous Waste  
Paul Krauth, Permits Section, Utah Department of Environmental Quality,  
Division of Water Quality  
Don Ostler, Division Director, Utah Department of Environmental Quality,  
Division of Water Quality  
Val Payne, Senior Environmental Engineer, PacifiCorp Electric Operations  
Priscilla Burton, Reclamation Soils Specialist, DOGM  
Pamela Grubaugh-Littig, Permit Supervisor, DOGM  
Daron Haddock, Permit Supervisor, DOGM  
Henry Sauer, Senior Reclamation Soils Specialist, DOGM  
Holland Shepherd, Senior Reclamation Specialist, DOGM

IVYSLUDG.INT