CERTIFIED MAIL – RETURN RECEIPT REQUESTED

September 8, 2004

R. P. Detwiler, Acting Manager
U.S. Department of Energy
Waste Isolation Pilot Plant
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

RE: Discharge Permit Modification Required, DP-831, Waste Isolation Pilot Plant

Dear Mr. Detwiler:

The Ground Water Quality Bureau of the New Mexico Environment Department (NMED) renewed the Discharge Permit, DP-831, for the U.S. Department of Energy’s Waste Isolation Pilot Plant (WIPP) on April 29, 2003. At the time of the renewal, the permit primarily covered discharges to a domestic waste lagoon system, and miscellaneous industrial and brine discharges to evaporation ponds. On April 25, 2003, WIPP submitted an application to modify DP-831 to construct and incorporate storm water control systems to reduce subsurface seepage from runoff at the plant facility, and particularly from salt tailings stored north of the facility. The storm water control systems include the lining of storm water runoff collection basins, installing a cover on the existing salt tailings and construction of a new salt storage facility. The discharge permit modification was issued on December 22, 2003.

NMED conducted an inspection of the WIPP facility on August 11, 2004, to inspect facility components covered under the discharge permit, and to observe the construction activities on the storm water control systems addressed under the permit modification. NMED raised questions about the ultimate disposition of the salt tailings during the inspection, however WIPP personnel indicated uncertainty about final closure. NMED has conducted a file review and determined that the closure plan included in the discharge permit only addresses the domestic waste lagoons and does not include final closure measures for other evaporation ponds, storm water control systems and the salt tailings.
Upon conducting the file review, NMED has also determined that potential sources of ground water contamination exist on the facility property that were not included in the permit modification of DP-831. Specifically, a salt storage facility located on the east side of the WIPP facility, identified as the SPDV Salt Storage Area, was not addressed for its potential to contaminate ground water. According to a May 1994 document titled *Assessment of Solid Waste Management Units at the Waste Isolation Pilot Plant* (NMED/WIPP 93-001), this storage area contains approximately 155,000 cubic yards of salt covering approximately 7 acres. NMED is concerned that the presence of salt in this storage area has the same potential to contaminate ground water as the salt tailings WIPP is mitigating on the north side of the plant.

NMED requires that all discharge permits for mining facilities include a comprehensive closure plan to ensure the prevention and/or abatement of ground water contamination after the facility is closed. Water Quality Control Commission (WQCC) Regulation 20.6.2.3107.A(11) NMAC authorizes the NMED Secretary to require a closure plan to prevent the exceedence of standards of Section 20.6.2.3103 NMAC or the presence of a toxic pollutant in ground water after cessation of operation, which includes: a description of closure measures, maintenance and monitoring plans, post-closure maintenance and monitoring plans, financial assurance, and other measures necessary to prevent and/or abate such contamination.

NMED also requires that discharge permits address all components at the facility that have the potential to contaminate ground water. WQCC Regulation 20.6.2.3104 NMAC states that no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. Discharges from the SPDV Salt Storage Area must be addressed because it is not covered by DP-831.

NMED has determined that further permitting actions are necessary to address additional potential contamination sources at the WIPP facility and to incorporate all potential sources into a comprehensive closure plan. Pursuant to WQCC Regulation 20.6.2.3104, 20.6.2.3109.E(1) and 20.6.2.3107.A(11) NMAC, and NMSA 1978 § 74-6-5.1(5) of the Water Quality Act, NMED hereby requires WIPP to modify its discharge permit, DP-831 to include all potential contamination sources at the facility and a comprehensive closure plan that addresses all facility components covered under DP-831.

Potential contamination sources to be addressed under this permit modification must include all active and inactive salt storage areas and waste disposal areas located within the WIPP property boundary defined by the Land Withdrawal Act. To the extent practicable, full disclosure of the contents of these facilities must be included. The closure plan must address closure of all evaporation ponds used to dispose of industrial and brine discharges as well as domestic waste discharges. The plan must also address final closure of all active and inactive salt tailings storage areas and waste disposal facilities not presently included in DP-831. An alternatives analysis must be conducted that examines different closure scenarios for all salt tailing storage facilities. Such scenarios must include removal of the salt tailings from the site as well as onsite closure options.
Within 120 days of this letter, WIPP must submit an application for the modification of DP-831. The application may reference current activities and existing documents, plans and specifications that apply towards final closure of facility components covered under DP-831.

Any appeal from this determination must be made to the New Mexico Water Quality Control Commission within 30 days, in accordance with Section 20.6.2.3112.B NMAC.

If you have any questions, please call Clint Marshall, 505-827-0027, or Mary Ann Menetrey, 505-827-2944, of the Mining Environmental Compliance Section.

Sincerely,

George Schuman, Acting Chief
Ground Water Quality Bureau

GS/CLM

xc: Carlos Romero, District Manager, NMED District 4, Roswell
    James Smith, HPM, Carlsbad Field Office