



ENCLOSURE

Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

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Mr. John Kieling, Acting Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Subject: Transmittal of the Waste Isolation Pilot Plant Annual Waste Minimization Report

Dear Mr. Kieling:

This letter provides the submittal of the Waste Isolation Pilot Plant Annual Waste Minimization Report. This report is required by and has been prepared in accordance with the WIPP Hazardous Waste Facility Permit Part 2, Permit Condition 2.4.

We certify under penalty of law that this document and all enclosures were prepared under our direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Please feel free to contact Ms. Susan McCauslin at (575) 234-7349, if you have any questions regarding this report.

Sincerely,

Edward Ziemianski, Interim Manager
Carlsbad Field Office

M. F. Sharif, General Manager
Washington TRU Solutions LLC

Enclosure

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WIPP FACILITY WASTE MINIMIZATION REPORT

A waste minimization program is in place at the WIPP facility to minimize the volume and toxicity of hazardous and mixed wastes generated. The purpose of this report is to comply with the WIPP Hazardous Waste Facility Permit (Permit) Part 2, Section 2.4 which states:

The Permittees shall implement and maintain a waste minimization program to reduce the volume and toxicity of hazardous and mixed wastes generated at the facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.73(b)(9)). The waste minimization program shall include proposed, practicable methods of treatment and storage currently available to the Permittees to minimize the present and future threat to human health and the environment. The waste minimization program shall include the following items:

1. *Written policies or statements that outline goals, objectives, and methods for source reduction and recycling of hazardous and mixed waste at the facility;*
2. *Employee training or incentive programs designed to identify and implement source reduction and recycling opportunities for all hazardous and mixed wastes;*
3. *Source reduction or recycling measures implemented in the last five years or planned for the next federal fiscal year;*
4. *Estimated dollar amounts of capital expenditures and operating costs devoted to source reduction and recycling of hazardous and mixed waste;*
5. *Factors which have prevented implementation of source reduction or recycling;*
6. *Summary of additional waste minimization efforts that could be implemented at the facility that analyzes the potential for reducing the quantity and toxicity of each waste stream through production process changes, production reformulations, recycling, and all other appropriate means including an assessment of the technical feasibility, cost, and potential waste reduction for each option;*
7. *Flow charts and/or tables summarizing all hazardous and mixed waste streams produced by the facility by quantity, type, building or area, and program; and*
8. *Demonstration of the need to use those processes which produce a particular hazardous or mixed waste due to a lack of alternative processes, available technology, or available alternative processes that would produce less volume or less toxic waste.*

WIPP FACILITY WASTE MINIMIZATION REPORT

The Permittees shall submit to the Secretary a report regarding progress made in the waste minimization program in the previous year. The report shall address items 1 – 8 above, shall show changes from the previous report, and shall be submitted annually by December 1 for the year ending the previous September 30th.

PROGRESS

This is the first report prepared under Permit Section 2.4. It describes the program required under items 1-8. Reports in subsequent years will show changes from the previous report.

1. *Written policies or statements that outline goals, objectives, and methods for source reduction and recycling of hazardous and mixed waste at the facility.*

The WIPP Environmental Policy (DOE/WIPP 04-3310) is a written policy that provides a strong commitment to pollution prevention and its continual improvement. In the policy, the Permittees commit to “...continually plan, perform, assess, and improve the environmental performance of the WIPP.” This policy was updated in March 2011 to include sustainability enhanced through the WIPP Environmental Management System.

In addition, the Permittees have implemented the WIPP Pollution Prevention (P2) Program Plan, WP 02-EC.11, which identifies and outlines the core components of the program. These components include annual P2 goals, defined responsibilities, communication, and awareness activities, performing assessments to identify waste minimization or reduction opportunities, a recycling program, training, sustainable procurement, and reporting.

2. *Employee training or incentive programs designed to identify and implement source reduction and recycling opportunities for all hazardous and mixed wastes.*

Every WIPP facility employee receives General Employee Training. The training includes content related to waste management, P2, waste minimization, and emergency response procedures. Employees involved in waste generation or handling activities and emergency response receive additional training to ensure that they are fully qualified to perform the expected tasks. Most of these training programs have elements in which waste minimization, source reduction, and recycling strategies are included. In addition, selected managers receive Manager and Supervisor Training which includes a review of the P2 Program.

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3. *Source reduction or recycling measures implemented in the last five years or planned for the next fiscal year.*

The Permittees maintain an active recycling/reuse program and strives to continually improve performance in this area. Over the past five years the Permittees recycling/reuse program at the WIPP facility has encompassed the following materials:

- Aluminum
- Antifreeze
- Asphalt
- Batteries
- Cardboard
- Circuit Boards
- Electronics
- Fluorescent light bulbs
- High pressure sodium lamps
- Metals
- Mined salt
- Paper
- Plastic
- Used oils
- Storm water

In 2011, 7,935 metric tons of materials were recycled.

4. *Estimated dollar amounts of capital expenditures and operating costs devoted to source reduction and recycling of hazardous and mixed wastes.*

The Permittees' FY2011 budget for promoting and implementing pollution prevention and waste minimization was \$150,000. This money was used for staffing support to maintain and implement the WIPP facility waste minimization program.

5. *Factors which have prevented implementation of source reduction or recycling.*

There are no factors that have prevented the implementation of the WIPP facility waste minimization program to reduce the volume and toxicity of hazardous waste generated from activities or waste derived from the management of TRU mixed waste. Proposed waste streams that could generate hazardous wastes are reviewed regularly to ensure minimization of the hazardous constituents and to incorporate waste reduction, recycling and reuse whenever possible.

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6. *Summary of additional waste minimization efforts that could be implemented at the facility that analyzes the potential for reducing the quantity and toxicity of each waste stream through production process changes, production reformations, recycling, and all other appropriate means including an assessment of the technical feasibility, cost, and potential waste reduction for each option;*

Another core component of the WIPP P2 program is conducting Pollution Prevention Opportunity Assessments (PPOAs). Assessments are performed on selected processes and/or waste streams to evaluate potential for waste minimization, source reduction or recycling. In FY2011, the Permittees performed four PPOAs and implemented P2 opportunities identified in the assessments. The assessments resulted in the following:

- Development and implementation of a “green” purchasing catalog that will allow the Permittees to increase purchase of sustainable office products.
- Establishing a means to reuse the existing salt pile as a supplement for a livestock feed.
- Identification of and contracting with a new, local metal recycling vendor that result in more types of metals being recycled.
- Analysis of Scope 3 Greenhouse Gas (GHG) emissions that produced increased emphasis on carpooling and reducing travel by use of telephone/video conferencing in order to reduce GHG emissions associated with the WIPP mission.

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7. *Flow charts and/or tables summarizing all hazardous and mixed waste streams produced by the facility by quantity, type, building or area, and program.*

There was no mixed-waste generated by the Permittees at the WIPP facility during this reporting period. The following table summarizes hazardous waste generated by the Permittees, at the WIPP facility, from October 1, 2010, to September 30, 2011.

Waste Summary Table

| Type of Waste | Waste Disposition | Metric Tons |
|---------------|----------------------------------|-------------|
| RCRA Waste | Permitted RCRA Disposal Facility | 19 |

8. *Demonstration of the need to use those processes which produce a particular hazardous or mixed waste due to a lack of alternative processes, available technology, or available alternative processes that would produce less volume or less toxic waste.*

Processes required for the successful operation of the WIPP facility generate minimal hazardous/mixed waste as noted in the Table above. In accordance with the Permit, processes that have the potential to generate hazardous/mixed waste are monitored to ensure protection of the environment. They are also evaluated as appropriate to identify any new options/technology for waste minimization or recycling through PPOAs.