

# WIPP WASTE MINIMIZATION PROGRAM DESCRIPTION

## November 10, 2010

The waste minimization program is in place at the WIPP to minimize the volume and toxicity of hazardous wastes generated. WIPP's program addresses the WIPP Hazardous Waste Facility Permit's (HWFP) suggested criteria as discussed below.

a. Written Policy

The WIPP environmental policy (DOE/WIPP 04-3310) provides a strong commitment to pollution prevention and its continual improvement.

The WIPP Pollution Prevention Program Plan, WP 02-EC.11, identifies and outlines the core components of the program. These components include the following:

- Annual pollution prevention goals
- Defined responsibilities
- Communication and awareness activities
- Performing assessments for minimizing or reducing wastes
- A recycling program
- Training
- Affirmative procurement
- Reporting

b. Employee Training

Every WIPP employee receives General Employee Training. The training includes content related to waste management, pollution prevention, 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, managers identified in DOE Order 5480.20A receive Manager and Supervisor Training which includes a review of the Pollution Prevention Program.

c. Source Reduction and/or Recycling Measures

The WIPP maintains an active recycling program and strives to continually improve performance in this area. Over the past five years the WIPP recycling program has encompassed the following materials:

- Aluminum
- Antifreeze
- Batteries
- Cardboard
- Circuit Boards
- Electronics
- Fluorescent light bulbs

- High pressure sodium lamps
- Metal (other than aluminum)
- Plastic
- Paper
- Used oils

d. Capital Expenditures and Operating Costs

WIPP's FY2010 budget for promoting and implementing pollution prevention and waste minimization was \$150,000. In FY2011, WIPP plans to fund the P2 Program in the amount of \$150,000.

e. Factors Preventing Implementation

There are no factors that have prevented the implementation of the WIPP program to reduce waste generated as a result of Solid Waste Management Units, environmental monitoring activities, or waste derived from the management of mixed TRU waste. Other waste streams that could generate a hazardous waste are reviewed regularly to ensure minimization of the hazardous constituents.

Waste generated for which prevention or minimization is not within WIPP's control are periodically reviewed for new methods that may help minimize these waste streams. Examples of such wastes are ring water from the waste shaft or waste shaft sump water.

f. Sources of Information

Two libraries are maintained for information at WIPP; one in the Skeen-Whitlock Building and one at the WIPP site. Copies of the most current regulations are maintained within the libraries. In addition, periodical subscriptions are maintained and circulated to WIPP personnel to provide current information on source reduction and recycling. Subscriptions are also maintained for a number of electronic information sites that provide current regulations, guidance, and discussions.

WIPP receives information via the Environmental Protection Agency's Pollution Prevention website, the Department of Energy's Sustainability Assistance Network, the Environmental Management System Assistance Network and Environmental Sustainability Network phone calls, Federal Electronic Challenge phone calls, and the Energy Facilities Contractors Group. In addition, the WIPP has access to the DOE material exchange website to seek possible material reuse opportunities prior to disposal.

g. Investigation of Additional Waste Minimization Efforts

Another core component of the WIPP Pollution Prevention Program Plan is conducting pollution prevention opportunity assessments. Assessments are performed on waste streams to evaluate opportunities for waste minimization, source reduction or recycling. In FY2010, WIPP

performed three Pollution Prevention opportunity assessments. Recommendations resulting from these assessments have been implemented.

h. Waste Generation Matrix

WIPP maintains an active database which records all hazardous waste generated by quantity, type, and building or area.

i. Demonstration

Processes required for the successful operation of the WIPP generate minimal hazardous waste. In accordance with the HWFP, processes that have the potential to generate 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 pollution prevention opportunity assessments.

j. Description

WIPP's waste minimization methodology for waste streams includes:

- Administrative and management controls
- Training
- Substitution of non-hazardous for hazardous material when practicable

Specific to waste generated from unplanned events, training individuals on prevention of incidents and minimization of waste in incident response spill are the methodologies employed.

k. Description of Changes

WIPP's RCRA hazardous waste disposal in FY2010 increased in comparison to FY2009 levels. The increase occurred because WIPP installed a new air filtering system which created a new waste stream of air filter media. There was also some hazardous water generated this year which WIPP has generated periodically in the past. WIPP also had an increase in the amount of New Mexico Special Waste in FY2010 primarily resulting from scheduled maintenance of WIPP's sewage lagoon ponds.