Attachment 27 to

GNRO-2012/00039

ER Reference - GGNS 2007b (2006 WMP Report)
Grand Gulf Nuclear Station 2006 Waste Minimization Certified Report

Entergy

Entergy
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Richard Scarbrough
Chemistry Superintendent
Grand Gulf Nuclear Station

July 31, 2007

Mr. Khairy Abu-Salah
Department of Environmental Quality
Pollution Prevention Waste Division
Post Office Box 10385
Jackson, MS 39289-0385

SUBJECT: Grand Gulf Nuclear Station
2006 Waste Minimization Certified Report

GEXO-2007/00043

Dear Mr. Abu-Salah·

We have attached Grand Gulf Nuclear Station's Waste Minimization Certified Report for 2006, as required by the Mississippi Comprehensive Multimedia Waste Minimization Act of 1990.

If you have questions or require additional information, please contact Rusty Shaw at 601/437-7312.

Sincerely,

Richard Scarbrough
Superintendent, Chemistry
Grand Gulf Nuclear Station

RDS/JML/dh
attachment: 2006 Waste Minimization Certified Report

cc. Mr. J A Reed w/o
Mr. R. N. Buckley (M-ECH-595) w/a
File (CENTRAL) [10]
File (CHEM) w/a

GGNS-WMP-2006 - 1

GRAND GULF NUCLEAR STATION

2006 WASTE MINIMIZATION CERTIFIED REPORT

I certify this report was prepared under my direction in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is to the best of my knowledge and belief, true accurate and complete.

W Brian
Signature

July 31, 2007
Date

William R. Brian
Printed Name

Vice President, GGNS Operations
Title

- **Types and Quantities of Waste Generated:**

  See Table 1 in this attachment.

- **Types and Quantities of Waste Minimized:**

  Recyclable waste stream quantities for 2006 totaled 35,217 pounds and included batteries, fluorescent lamps (intact), scrap metals, used oil, used oil filters, used oil/water and used cooking oil.

  Hazardous waste stream quantities for 2006 (3,450 pounds) was 36% below the 2005 waste generation (5,388 pounds) due to less generation of expired shelf life warehouse stock and 92% below the 1991 baseline generation (43,794 pounds)

  Nonhazardous waste stream quantities for 2006 (14,914 pounds), excluding recyclable waste streams, was 66% below the 2005 generation (43,555 pounds) due to no generation of wastewater and wastewater sludge from equipment cleaning activities.

- **Summary Explaining Waste Generation, Goals and Impediments:**

  1. Recycled Wastes

  A. Generation:

  Batteries, fluorescent lamps (intact), scrap metals, used oil, used oil filters, used oil/water and used cooking oil.

  B. Goals:

  Goal is to increase recycling activities where source reduction opportunities are not feasible or possible. GGNS recycled less material in 2006 due to a reduction in scrap metal and electronics shipped for recycle

  C. Impediments:

  Lack of cost-effective recycling options and the absence of an established method for tracking unmanifested wastes inhibit the effectiveness of capturing site waste minimization efforts

2. Hazardous Wastes

A. Generation:

Cleaning solutions from plant maintenance activities are shipped off-site for disposal. Currently, no waste minimization opportunities for this waste stream have been identified.

Off-Specification and expired chemicals are shipped off-site for disposal. Although this generation resulted from discarding out-dated and unusable products and is considered intermittent, tighter purchasing and inventory controls are in place in an effort to minimize this waste stream.

Paint waste from painting activities are shipped off-site for disposal. Currently, no waste minimization opportunities for this waste stream have been identified.

Aerosols from plant maintenance activities are shipped off-site for disposal. Currently, no waste minimization opportunities for this waste stream have been identified

Lead paint contaminated debris was shipped off-site in 2006. This is an infrequently generated waste; therefore, no minimization efforts are planned for this waste stream.

B. Goals:

Goals are to consistently maintain small quantity generator status as defined by the Environmental Protection Agency and to increase recycling activities where source reduction opportunities are not feasible or possible. GGNS maintained small quantity generator status for all of 2006 and recycled waste material that would have otherwise been hazardous waste if sent for disposal. Therefore, GGNS is having success in meeting this goal.

C Impediments:

Materials that are intermittently generated, lack of suitable alternative products and regulatory driven requirements inhibit waste minimization efforts.

3. Nonhazardous Wastes

A. Generation:

Asbestos material from plant maintenance activities is collected at a designated accumulation area and then landfilled off-site. Currently, no waste minimization opportunities for this waste stream have been identified.

Desiccant is collected at a designated accumulation area and then landfilled off-site. Currently, no waste minimization opportunities for this waste stream have been identified.

Oil contaminated waste from equipment maintenance and plant operational activities are shipped off-site for disposal. Since this is an intermittent waste stream, waste minimization efforts have not been pursued.

Sulfuric acid spill cleanup material was shipped off-site in 2006 This waste stream was due to a warehouse spill. This is an infrequently generated waste; therefore, no minimization efforts are planned for this waste stream.

Off-Specification and expired chemicals are shipped off-site for disposal This generation results from discarding out-dated and unusable products and is considered intermittent. Tighter purchasing and inventory controls are in place in an effort to minimize this waste stream.

PCB lighting ballasts and debris are collected at a designated accumulation area and then shipped off-site for disposal. These ballasts are being replaced with non-PCB ballasts, which has reduced and should eventually eliminate this waste stream.

B. Goals:

Goal is to maintain nonhazardous waste generation at or below previous levels, and to increase recycling activities, where source reduction opportunities are not feasible or possible. Due to no generation of wastewater and wastewater sludge from equipment cleaning activities, the quantities for 2006 were below those in 2005. Progress is being made in minimizing nonhazardous waste based on review of those waste streams that are generated routinely during non-refueling outage years.

C. Impediments:

The occurrence of intermittent waste streams, the absence of an established method for tracking unmanifested wastes, and emergent plant and equipment maintenance projects compete with waste minimization efforts.

TABLE 1

Types and Quantities of Waste Generated

A. Recycled Waste Streams	1991 lbs	2005 lbs	2006 lbs
➢ Batteries from equipment maintenance activities	**No Data**	2,892	3,215
➢ Circuit boards & CRTs from computer maintenance activities and other electronics	0	19,500	0
➢ Ethylene glycol from vehicle maintenance activities	0	0	0
➢ Fluorescent lights from lighting maintenance activities	0	2,117	2,435
➢ Freon from plant equipment maintenance activities	**No Data**	**No Data**	**0**
➢ Grease from equipment maintenance activities	0	0	0
➢ Mercury from damaged thermometers, thermostats, and other mercury-containing equipment	0	1	0
➢ Off-specification chemicals from discarding unusable products	0	0	0
➢ Oil & solvent wastes from cleaning & degreasing activities	1,596	0	0
➢ Oil contaminated wastes from equipment maintenance & plant operational activities	0	405	0
➢ Paint liquids from painting & cleaning activities	6,100	0	0
➢ Scrap metal from plant activities	**No Data**	119,600	1
➢ Used oil drums from plant maintenance activities	**No Data**	2,350	0
➢ Toner cartridges from copier maintenance activities	**No Data**	**No Data**	0
➢ Used oils from vehicle & equipment maintenance activities	23,440	31,418	21,863
➢ Used diesel fuel from equipment maintenance activities	**No Data**	1,650	0
➢ Used oil filters from vehicle & equipment maintenance activities	0	1,080	135
➢ Used cooking oil from ESC cafeteria	**No Data**	4,538	413
➢ Used oil/water from plant equipment maintenance activities	0	7,920	7,155
➢ Used tires from vehicle maintenance activities	0	872	0
TOTAL POUNDS →	**31,136**	**194,343**	**35,217**

TABLE 1

Types and Quantities of Waste Generated

B. Hazardous Waste Streams	1991 lbs	2005 lbs	2006 lbs
➢ Fluorescent lights (crushed) from lighting maintenance activities	0	0	0
➢ Intermittent miscellaneous wastes from equipment maintenance and cleanup activities	33,460	0	0
➢ Off-specification & expired chemicals from discarding out-dated & unusable products	6,669	2,097	67
➢ Oil & solvent wastes from cleaning & degreasing activities	1,960	469	0
➢ Oil lab waste from diesel fuel receipt analyses	300	0	0
➢ Paint wastes from painting & cleaning operations	1,220	1,020	1,498
➢ Aerosols from plant maintenance activities	**No Data**	80	60
➢ Sulfuric Acid spill cleanup materials	**No Data**	1,722	0
➢ Photographic waste from microfilming activities	185	0	0
➢ Cleaning solution from plant maintenance activities	**No Data**	**No Data**	1,800
➢ Lead Paint Contaminated Debris	**No Data**	**No Data**	25
TOTAL POUNDS →	**43,794**	**5,388**	**3,450**

TABLE 1

Types and Quantities of Waste Generated

C. Nonhazardous Waste Streams	1991 lbs	2005 lbs	2006 lbs
➢ Asbestos waste from plant maintenance activities	0	0	20
➢ Blasting media from paint surface preparation activities	0	0	0
➢ Construction debris from site & plant activities	0	0	0
➢ Desiccant from plant equipment maintenance activities	**No Data**	90	620
➢ Ethylene glycol from plant equipment & vehicle maintenance activities	8,911	0	0
➢ Garbage from office administrative & plant operational activities	643,500	**No Data**	**No Data**
➢ Grease from equipment maintenance activities	**No Data**	0	0
➢ Intermittent miscellaneous wastes from equipment maintenance, plant operational & cleanup activities	0	0	0
➢ Off-specification & expired chemicals from discarding out-dated & unusable products	**No Data**	1,084	1,914
➢ Oil contaminated wastes from equipment maintenance & plant operational activities	**No Data**	270	11,536
➢ PCB waste from discarding spent capacitors, lighting ballasts, & cleanup debris	0	211	644
➢ Resin from water treatment activities	**No Data**	0	0
➢ Wastewater and wastewater sludges from equipment cleaning activities	0	41,300	0
➢ Toner cartridges from copier maintenance activities	**No Data**	150	0
➢ Sulfuric Acid spill cleanup materials	0	450	180
TOTAL POUNDS →	**652,411**	**43,555**	**14,914**

TABLE 1

Types and Quantities of Waste Generated

C. Nonhazardous Waste Streams	1991 lbs	2005 lbs	2006 lbs
➢ Asbestos waste from plant maintenance activities	0	0	20
➢ Blasting media from paint surface preparation activities	0	0	0
➢ Construction debris from site & plant activities	0	0	0
➢ Desiccant from plant equipment maintenance activities	**No Data**	90	620
➢ Ethylene glycol from plant equipment & vehicle maintenance activities	8,911	0	0
➢ Garbage from office administrative & plant operational activities	643,500	**No Data**	**No Data**
➢ Grease from equipment maintenance activities	**No Data**	0	0
➢ Intermittent miscellaneous wastes from equipment maintenance, plant operational & cleanup activities	0	0	0
➢ Off-specification & expired chemicals from discarding out-dated & unusable products	**No Data**	1,084	1,914
➢ Oil contaminated wastes from equipment maintenance & plant operational activities	**No Data**	270	11,536
➢ PCB waste from discarding spent capacitors, lighting ballasts, & cleanup debris	0	211	644
➢ Resin from water treatment activities	**No Data**	0	0
➢ Wastewater and wastewater sludges from equipment cleaning activities	0	41,300	0
➢ Toner cartridges from copier maintenance activities	**No Data**	150	0
➢ Sulfuric Acid spill cleanup materials	0	450	180
TOTAL POUNDS →	**652,411**	**43,555**	**14,914**