



Kentucky Natural Resources and Environmental Protection Cabinet
 Department for Environmental Protection
 Division of Waste Management

SOLID WASTE DISPOSAL FACILITY PERMIT

Permittee: U.S. DEPARTMENT OF ENERGY
 Paducah Gaseous Diffusion Plant
 P.O. Box 1410
 Paducah, Kentucky 42002-1410

Facility: U.S. DEPARTMENT OF ENERGY
 Paducah Gaseous Diffusion Plant
 5600 Hobbs Road
 Paducah, Kentucky 42001

The Division of Waste Management hereby grants the above-named facility a permit to engage in the activity specified below. This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto and is subject to all conditions and operating limitations contained herein. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet and/or other state and local agencies.

—See Pages Two and Three

No deviation from the plans and specifications submitted with your application or the conditions specified herein is allowed, unless authorized in writing from the Division of Waste Management. Violation of the terms and conditions specified herein shall render this permit null and void. All rights of inspection by representatives of the Division of Waste Management are reserved. Conformance with all applicable Waste Management Regulations is the responsibility of the permittee. Receipt of the permit fee and bond amount specified below is hereby acknowledged.

PERMIT TYPE:	Construction/Operation	PERMIT NUMBER:	073-00045
TYPE OF ACTIVITY:	Contained Landfill		
BOND:		COUNTY:	McCracken
INSTRUMENT TYPE:	N/A		
INSTRUMENT NUMBER:	N/A		
AMOUNT:	N/A		
ACRES:			
WASTE DISPOSAL AREA:	22.1		
PERMIT AREA:	59.7		
PERMIT FEE:	N/A		
EFFECTIVE DATE:	November 4, 1996		
EXPIRATION DATE:	November 4, 2006		
PERMIT TERM:	Ten Years		

Issued this 3rd day of October 2003

Anthony B. Hutton
 Anthony B. Hutton/ Acting Director

Robert W. Logan
 Robert W. Logan, Commissioner

SOLID WASTE DISPOSAL FACILITY PERMIT - Continued

General Conditions

- 1) The Permittee shall construct and operate in accordance with plans and narratives approved February 28, 1995 (NW 1, Construction Permit); January 19, 1996 (MOMN1); November 4, 1996 (Construction/Operating Permit); January 3, 1997 (Unnumbered Minor Modification); February 1, 2001 (MOGW1, MOGW2 & MOMN2); January 4, 2002 (MOGW3); October 8, 2002 (Conditional Reopening of the Landfill); and October 3, 2003 (MOMN 3 and parts of MOMJ1).
- 2) The Permittee shall comply with 401 KAR 47:120 Section 1 relating to conditions applicable to all permits.
- 3) The Permittee shall use agricultural methods to prevent tree and woody plant growth, control vegetative growth to prevent weeds, and prevent roots from entering the low permeability layer.
- 4) The Permittee shall inspect and maintain, as required, all site diversion ditches after every storm event greater than 0.5-inch.
- 5) Waste entering the landfill shall be inspected in accordance with 401 KAR 48:090 Section 2. Records of inspections shall be kept in a daily log and shall be made available for review by Cabinet representatives upon request.
- 6) The permittee shall prepare and submit to the Division of Waste Management a complete reevaluation of the seismic hazards to the landfill liner, cap, leachate collection, and surface water collection systems by August 31, 2001. This study shall be coordinated with the Solid Waste Branch geological and engineering staff. The seismic reevaluation study shall completely reevaluate the ground motion potential, the potential for structural offset along local faults, and all other seismic risks associated with the New Madrid Seismic Zone, the Wabash Valley Seismic Zone, and local fault zones.
- 7) The leachate collection system shall include tanks capable of storing at least fifteen (15) days volume of leachate. A quarterly log of the volume, method, and place of disposal of the leachate shall be maintained, and shall be made available for review by Cabinet representatives upon request.
- 8) The permittee shall comply with all requirements of 401 KAR 48:300 and the Surface Water Monitoring Plan. The requirements of 401 KAR 48:300 Section 8, Subsections 9, 11, 13, and 14 shall not apply to statistical exceedences of radionuclides, Uranium, and Technetium-99. However, in the event that a statistically significant increase of these contaminants occurs the permittee shall perform a complete Groundwater Contamination Assessment as required by 401 KAR 48:300 Section 8.

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ISSUE DATE: 10-03-2003

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- 9) At each approved groundwater monitoring location, beginning with the third quarter calendar year 2001, the permittee shall monitor quarterly for the complete list of parameters listed in 401 KAR 48:300 Section 11(3), plus the following: Aluminum, Boron, Bromide, Calcium, Cyanide, Eh, Fluoride, Gross Alpha, Gross Beta, Iodide, Iodine-131, Magnesium, Manganese, Molybdenum, Dissolved Oxygen, Potassium, Radium, Rhodium, Strontium-90, Sulfate, Tantalum, Technetium-99, Tritium, and Uranium (total). Metals samples shall not be filtered.
- 10) At each approved groundwater monitoring location, the permittee shall monitor annually for PCBs.
- 11) The permittee shall test the leachate annually for the parameters listed in conditions 8 and 9 of this permit. The metals samples shall not be filtered.
- 12) Groundwater and surface water samples shall be taken quarterly and the results submitted to the Cabinet according to the following schedule:
- | <u>Sample to be Collected During the:</u> | <u>Results Due to the Division of Waste Management by:</u> |
|---|--|
| First Quarter | May 30 |
| Second Quarter | August 30 |
| Third Quarter | November 30 |
| Fourth Quarter | February 28 |
- 13) (a) No Construction may begin on phases 6 thru 24 of the landfill until the seismic hazard reevaluation and fault study results required by Condition 6 are accepted by the Division.
- 14) (a) Non-hazardous remediation wastes from Sections 1 and 2 of the North South Diversion Ditch (hereafter NSDD) remedial action may be placed in the landfill.
- (b) Of all wastes generated from the CERCLA scrap metal removal action, only non-hazardous scrap metal and wood pallets may be placed in the landfill. The permittee may continue to place scrap metal from non-CERCLA sources in the landfill, provided these wastes are non-hazardous and meet the landfill's present waste acceptance criteria.
- (c) The permittee shall adequately characterize all remediation wastes from these two actions to ensure that only non-hazardous wastes are disposed of in the landfill.