



ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS, 2ND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER (502) 564-6716

Application For A
Special Waste Landfill Permit
Form DEP 7094A (5/92)

GENERAL INFORMATION

- 1. USE OF THIS APPLICATION** - This form is to be used to apply for a new special waste landfill permit or for a modification of an existing special waste landfill permit. Please type or print legibly in permanent ink.
- 2. PREPARATION ASSISTANCE** – Questions regarding this form may be directed in writing to the Division of Waste Management, Solid Waste Branch at the address listed above, or by calling (502) 564-6716.
- 3. SUBMISSION** – Submit the original and three (3) copies of the completed form to the Division of Waste Management at the address listed above. The document must be free of errors. Also, submit the following plans:
- 4. LAWS AND REGULATIONS** - Applicants are expected to understand and comply with all laws and regulations applicable to special waste facilities.

**ADMINISTRATIVE INSTRUCTIONS
FOR THE ENGINEERING DRAWINGS**

1. The cover sheet shall bear the professional engineers seal, original signature, and date.
2. The Division requires that the maximum plan sheet not exceed 24" x 36".
3. Each plan sheet should have a title block in the lower right corner. The title block should contain: sheet title, facility title, applicant name, address, and the engineering firm's name and address.
4. Each plan sheet should have a latest revision date block showing all revision dates.
5. Each sheet shall have the appropriate scale to show all required detail.
6. The plan cover sheet shall include an index of plans, the facility name, county, and application number. Show each drawing title on the index of plans. The cabinet recommends the use of the page number system suggested in this application.
7. Each set of plans shall include a legend of all drafting symbols used.
8. All lettering and drafting details shall be legible on reduced scale plans.
9. Each plan sheet shall contain a common stationed straight baseline or offset baseline and a north arrow.
10. Match lines should refer to the appropriate sheet numbers containing the other corresponding match line.
11. The plan sheets should clearly show the 1000 by 1000 foot grids referenced to an established site specific bench mark.
12. Show survey grid locations and reference major plan sheets on all cross-sections.

APPLICATION FOR A SPECIAL WASTE LANDFILL PERMIT

SECTION	DESCRIPTION
A.	General Information
B.	Ownership and Past Performance Information
C.	Operational and Permit Information
D.	Siting Information
E.	Design Plans
F.	Narrative
G.	Liner Design
H.	Geologic and Hydrogeologic Information
I.	Soils Information
J.	Construction Quality Control Plan
K.	Recordkeeping and Reporting
L.	Surface Water, Groundwater, and Corrective Action
M.	Closure, Closure Care and Performance Bond
N.	Permit Preparation Information
O.	Public Notices
P.	Certification

APPLICATION FOR A SPECIAL WASTE LANDFILL PERMIT

A. GENERAL INFORMATION

APPLICATION NO. _____ (LEAVE BLANK ON FIRST SUBMISSION)

FEE SUBMITTED \$ _____ COUNTY _____ DATE _____

Method of Payment: _____ Check _____ Certified Check _____ Money Order No. _____

1. Applicant _____

Address _____

City _____ State _____ Zip Code _____

Phone No. (_____) _____

2. Name of Facility _____

Address _____

City _____ State _____ Zip Code _____

Phone No. (_____) _____

3. Operator of Facility (If different from applicant)

Address _____

City _____ State _____ Zip Code _____

Phone No. (_____) _____

4. Name of Property Owner (s) _____

Address _____

City _____ State _____ Zip Code _____

Phone No. (_____) _____

List information concerning additional property owners in **Attachment 1**.

5. List information concerning owners of mineral rights in **Attachment 2**. Include name of property owner, address, city, state, zip code, and phone number.

6. If an existing special waste landfill, designate the type of modification application:

_____ Vertical Expansion

_____ Horizontal Expansion

_____ Closure

_____ Groundwater Monitoring

_____ Other. Describe _____

7. Provide, as **Attachment 3**, a list of all adjacent property owners. Include name, address, city, state, zip code, and phone number.

8. Provide, as **Attachment 4**, a copy of the deed or option to the property and a copy of the lease showing a five (5) year right of re-entry following cabinet approved closure of the facility.

9. Provide, as **Attachment 5**, a description of the facility's impact on transportation routes, prime agricultural lands, water resources, historic properties, and endangered or threatened species.

10. List, in **Attachment 6**, any variances applied for. Include a cite for each regulation for which the applicant proposes to vary

11. Provide, as **Attachment 7**, a notarized statement from applicable jurisdictions that the proposed facility complies with all local planning and zoning laws.

12. Provide, as **Attachment 8**, a description of assistance provided by the local fire district.

B. OWNERSHIP AND PAST PERFORMANCE INFORMATION

1. Indicate by checking the appropriate blank, the legal organizational structure of the applicant.

_____ Proprietorship

_____ Partnership _____ General _____ Limited

_____ Corporation

_____ Joint venture

_____ Governmental agency. Type _____ (City, County, State, Federal)

_____ Other. Describe: _____

2. If the owner is a corporation, is it registered with the Kentucky Secretary of State?

_____ Yes _____ No

3. For the applicant and each person meeting the definition of key personnel, provide a Past Performance Information form as required by KRS 224.40-330(1) and (3). The Cabinet has developed form DEP 7094J for submittal of this information. Complete this form and include it as part of this application as **Attachment 9**.

NOTE: DEP Form No. 7094J may be obtained by contacting the Division of Waste Management at the address specified on the "General Instructions" page of this application.

C. OPERATIONAL AND PERMIT INFORMATION

1. Complete the waste information below and in **Attachment 10**.

Estimated Average Daily Fill Rate	_____Tons/Day	_____Cu.Yds./Day
Estimated Maximum Daily Fill Rate	_____Tons/Day	_____Cu.Yds./Day
Estimated Disposal Rate	_____Tons/Year	_____Cu.Yds./Yr.
Site Life	_____Years	
Total Site Volume	_____Cubic Yards	
Number of acres to be filled:	_____Acres	
Number of acres to be permitted:	_____Acres	

2. For industrial facilities, complete the following:

(a) List the major U.S. Department of Commerce Standard Industrial Codes.

(SIC)_____

(b) Provide, as **Attachment 11**, the description of the raw materials used for production and the generation process for each waste.

(c) Describe the physical; chemical; and, if applicable, biological characteristics of the waste. Also, provide a TCLP analysis of the wastes. Label as **Attachment 12**.

3. Provide, as **Attachment 13**, a list of all equipment that is to be used at the facility.

D. SITING INFORMATION

1. Provide directions to the site using roads or highways from a commonly known landmark_____

2. Center of Landfill Location:
Latitude_____ Longitude_____

Nearest Community:

Nearest Public Road Intersection:

3. Provide an original current USGS 7.5 minute topographic map, as **Attachment 14**, showing the existing or proposed waste boundaries and property boundaries. Show the locations of the following features located within a one mile radius of the waste boundaries:

- a. all surface water intake and discharge structures
- b. all waste management, storage, processing, or disposal facilities
- c. all injection wells
- d. all wells, springs, ephemeral, intermittent, and perennial streams, other surface water bodies, and drinking water wells
- e. airports
- f. fault areas
- g. sinks or sinkholes

4. (a) Show the following on a site map of a scale 1" = 400' for existing or proposed facilities and label as **Attachment 15**. (Check blanks, if applicable):
- _____ Property lines
 - _____ Adjacent property owners
 - _____ Permit area
 - _____ Fill area
 - _____ Surrounding residences (within 1500' of the waste boundary)
 - _____ 100 year floodplain
 - _____ Mine works
 - _____ Un-Plugged wells
 - _____ Gas, sewer and water lines
 - _____ Cultural or historic resources listed, or eligible for listing on the Natural Register of Historic Places
 - _____ Known archaeological sites
 - _____ Critical habitats of federally protected threatened and endangered species
 - _____ Wetlands
- (b) Provide, as **Attachment 16, 17, and 18**, the published information to confirm the presence or absence of archaeological sites, critical habitats and wetlands, respectively.
5. Include a general county highway map published by the Kentucky Transportation Cabinet showing the location of the site label as **Attachment 19**.

E. DESIGN PLANS

Submit an original and 3 copies of the plans showing the design of the site. Label as **Attachment 20**.

Number the drawings as follows:

1. A drawing of the entire site on one sheet showing:
 - Current site conditions
 - Site development plan including buffer zones
 - Location of monitoring points for:
 - Surface Water
 - Ground Water
 - Methane; and
 - Baselines

2. Site plans drawn to 1 inch = 100 feet (or Cabinet-approved alternative scale) showing:
 - Development Plan
 - Location of monitoring points
 - Baseline or off-set baseline
 3. Cross-Sections at:
 - 100 Foot intervals
 - Vertical scale of 1 inch = 10 feet
 - Horizontal scale of 1 inch = 100 feet
 4. Drawing of the profile along each baseline.
 5. Proper site development including the sequence of filling (i.e. units, phases, working areas).
 6. Construction details.
 7. Include typical details for the following features of the cell:
 - Lifts
 - Liners (if required)
 - Final Cover
-

F. NARRATIVE

1. (a) Will waste be placed within 250 feet of an intermittent or perennial stream?
Yes _____ No _____
- (b) If yes, enclose the 401 Water quality certification that has been issued pursuant to 401 KAR 5:029 through 5:031. Label as **Attachment 21**.
2. Is the waste disposal area within:
 - (a) The zone of collapse of deep-mine workings or within the critical angle of draw?
Yes _____ No _____
 - (b) 250 feet of a karst Terrain feature? Yes ____ No ____
 - (c) 100 feet of the property line? Yes ____ No ____
 - (d) 250 feet of a residence? Yes ____ No ____
 - (e) 50 feet of a gas, sewer, or water line? Yes ____ No ____
- (f) 250 feet of an unplugged well (other than monitoring)? Yes ____ No ____

3. Is the depth to the seasonal high groundwater table to the bottom of the liner system or the waste for those residual landfills without liners four feet or greater? Yes _____ No _____
4. (a) Does the leachate analysis indicate the presence of any metal in excess of drinking water standards? Yes _____ No _____
(b) If yes, will the depth from the bottom of the waste to the seasonal high groundwater table exceed 5 feet? Yes _____ No _____
5. (a) Is this proposed site located in the 100 year floodplain? Yes _____ No _____
(b) If yes, enclose a report describing how you will meet Section 2 of 401 KAR 30:031 concerning floodplains. Label as **Attachment 22**.
6. Is any proposed waste cell within 200 feet of a fault that has had displacement in holocene time? Yes _____ No _____
7. Enclose as **Attachment 23**, a description of the surface water controls which meet the Environmental Performance Standards.
8. Describe, in **Attachment 24**, the potential for gas emissions and odors based on the waste characteristics and the proposed landfill design. If applicable, describe the proposed explosive gas monitoring program.
9. Describe, in **Attachment 25**, the procedures to control access by the public.
10. Describe, in **Attachment 26**, how the applicant will comply with working face requirements.
11. Complete the information requested below for placement on the landfill sign at the landfill entrance as required by 48:090 Section 14:

Landfill Name _____

Name of Owner _____

Name of Operator _____

Hours to Receive Waste _____ to _____

Days to Receive Waste _____ to _____

Permit Number (To be assigned by Division upon Permit Issuance) _____

Emergency Telephone Number (_____) _____

G. LINER DESIGN

1. If applicable, submit, as **Attachment 27**, the design specifications for the bottom liner.
 2. Enclose the risk analysis study showing how the proposed bottom liner design will meet the environmental performance standards of 401 KAR 30:031, specific attention should be given to Sections 5 and 6 of 401 KAR 45:160 concerning protection of groundwater. Label as **Attachment 28**.
-

H. GEOLOGIC AND HYDROGEOLOGIC INFORMATION

1. Provide, in **Attachment 29**, a description of the type, texture, thickness, and range in thickness of unconsolidated materials within the disposal area.
2. Provide the following information for the regional bedrock geologic structure.

Strike and dip of bedrock _____

Attitude of faults _____

Location of faults relative to the site _____

Has fault displacement occurred in holocene times? _____ Yes _____ No

Attitude of folds? _____

Location of fold relative to site _____

Jointing trends _____

3. Provide the following information for the site specific geologic structure.

Strike and dip of bedrock _____

Attitude of faults _____

Location of faults relative to the site _____

Has fault displacement occurred in holocene times? Yes No

Attitude of folding _____

Location of fold relative to site _____

Jointing attitudes _____

Location of faults relative to the site _____

Has fault displacement occurred in holocene times? Yes No

Attitude of folds? _____

Location of fold relative to site _____

Joint attitudes _____

Joint spacing _____

4. Provide, as **Attachment 30**, a description of the influence of fracture zones on the infiltration and movement of water and groundwater.
5. Provide, as **Attachment 31**, a minimum of two (2) geologic cross sections drawn with vertical exaggeration using published data, bedrock outcrops and rock core boring information. This drawing must adequately illustrate the geology of the site and include the season high groundwater table and rock outcrops.
6. List on **Attachment 32**, any extractable coal seams or other minerals of economic value beneath the site.

7. List on Attachment 33, any active or inactive deep mines located within 1,500 feet of the waste boundaries.
8. Provide, as Attachment 34, all rock core log data.
9. Provide, as Attachment 35, a map of geologic features and rock coring locations for the waste disposal site, including the area 1,500 feet beyond the waste boundary. This map is to be of a scale of one (1) inch equals four hundred (400) feet. Include the following information:
 - Geologic units
 - Rock outcrop
 - Surface depressions
 - Sinkholes
 - Springs
 - Injection wells
 - Water withdrawal wells
 - Surface contours
 - Location of rock corings
 - Legend to include symbols
 - Bar scale
 - Date
 - North arrow

10. Provide, as **Attachment 36**, a hydrogeologic characterization of the site. This characterization must include data procedures, calculations, and the following information:

A description of the hydrogeologic characteristics of the:

- Uppermost aquifer
- Geologic units hydraulically connected to the uppermost aquifer

Field Test Data for:

- Hydraulic conductivity
- Storage coefficient
- Transmissivity
- Groundwater hydraulic gradient
- Groundwater hydraulic velocity

Based on:

- Multiple well aquifer tests
- Piezometer test evaluation
- Core evaluation
- Tracer studies (Karst Areas)
- Another cabinet-approved method

Characterization of karst conditions for:

- Diffuse flow conditions
- Discrete flow conditions
- List, on Attachment 37, all springs and upgradient wells

I. SOILS INFORMATION

1. List, on **Attachment 38**, the type, thickness, and range in thickness of unconsolidated materials. The applicant may submit a cross-section in lieu of completing attachment.
2. Show, on **Attachment 39**, a soils inventory consisting of a description of the total volume and source of borrow material available, the total estimated volume and source of required daily cover, interim cover, long-term cover, final cover, and low permeability soils.

Also, show the soils as determined by the approved site investigation: location, depth, thickness, classification of soils for engineering purposes, particle size distribution, atterburg limits, optimum moisture, permeability, and recoverable volume in compacted cubic yards for each soil classification and permeability.
3. Provide, as **Attachment 40**, a soils inventory map at a scale of one (1) inch equals 400 feet, depicting the distribution of the soils that is keyed to a list of the soils by engineering classification. The approximate volume and depth of each type of soil shall be recorded on the map.

J. CONSTRUCTION QUALITY CONTROL PLAN

1. Describe, in **Attachment 41**, the Construction Quality Control (CQC) Plan as required by 45:110 Section 2.

K. RECORDKEEPING AND REPORTING

1. Enclose, as **Attachment 43**, the landfill recordkeeping and reporting system. The applicant may use the record keeping forms provided by the Cabinet or submit a different form for review by the Cabinet.

L. SURFACE WATER, GROUNDWATER, AND CORRECTIVE ACTION

1. Submit, as **Attachment 43**, the Surface Water Monitoring Plan as required by 401 KAR 45:110 and 401 KAR 45:160. At a minimum, the plan must include:
 - a. The proposed locations of the monitoring points shown on the site plans.
 - b. A written description of how the monitoring point locations ensure that sampling will characterize the quality of the water unaffected by the landfill, as well as determining if water leaving the landfill as surface drainage is contaminated with leachate.
 - c. A description of sampling protocol and analytical parameters.
 - d. A monitoring schedule and list of analytical parameters.
 - e. A sample form for reporting results of the analyses to the Division.
 - f. Documentation that the applicant currently holds or has applied for a K.P.D.E.S. permit for all structures to be used to control stormwater run-off and all point source discharges.
 - g. Provide the information requested in **Attachment 43A**, concerning location of the monitoring points.

2. Submit, as **Attachment 44**, a Groundwater Monitoring Plan that meets the requirements of 401 KAR 45:110 and 401 KAR 45:160. At a minimum that plan must provide the following information:
 - a. A list and description of the specific aquifer(s) proposed for monitoring.
 - b. The number, location, and depth of proposed monitoring points. Show the locations of the monitoring points on the site plans.
 - c. Provide a brief discussion of the groundwater quality that currently exists based on the Groundwater Quality Characterization required by 401 KAR 45:160.
 - d. Provide a Groundwater Sampling and Analysis Plan which describes the procedures and techniques designed to accurately measure groundwater quality upgradient and downgradient of the waste disposal area. Include a discussion regarding the chain of custody, as well as field and lab quality assurance and quality control.
 - e. Provide a monitoring schedule and list of analytical parameters in accordance with 401 KAR 45:160 Section 8.
 - f. Provide monitoring well construction specifications which meet the requirements of 401 KAR 45:160 Section 3.

- g. Is the proposed special waste disposal site located in karst terrain ? _____ Yes _____ No

If yes, the groundwater monitoring plan must include dye trace studies to determine the nature and extent of karst drainage beneath the site and proposed monitoring locations.

- h. Provide the information requested in **Attachment 44A**, concerning proposed well locations and depth.

M. CLOSURE, CLOSURE CARE AND PERFORMANCE BOND

- 1. Submit, as **Attachment 45**, the specifications of the closure cap as required by 45:110 Section 5 and 401 KAR 30:031.
- 2. Applicants must enclose the risk analysis study showing how the proposed cap will meet the environmental performance standards of 401 KAR 30:031, especially Sections 4, 5, and 6 concerning surface and groundwater. Address each of the factors listed in 401 KAR 45:110 Section 5. Label as **Attachment 46**.
- 3. Submit, as **Attachment 47**, the closure plan as required.
- 4. Submit, in **Attachment 48**, the post-closure plan as required by 45:110, Section 5.

N. PERMIT PREPARATION INFORMATION

- 1. Engineer _____
Kentucky Registration No. _____
Address _____
City _____ State _____ Zip Code _____
Company Name _____
Phone No. (_____) _____
- 2. Geologist or Geotechnical Engineer _____
Address _____
City _____ State _____ Zip Code _____
Company Name _____
Phone No. (_____) _____

- 3. Indicate the individual(s) authorized to make any necessary corrections to this application and to receive related correspondence from the Division:

Name(s) _____

Address _____

City _____ State _____ Zip Code _____

Phone No. (_____) _____

O. PUBLIC NOTICE

- 1. Public notices are required for a new site or a significant expansion to an existing site in accordance with KRS 224.40-310. Draft notices are found in **Attachments 49 and 50**. Complete the public notice forms; however, only those applicants notified by correspondence from the Cabinet may publish the notices.

P. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted in, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."

Original Signature of Responsible Official

Date

Typed Name of Responsible Official

Title

Name of Applicant, i.e. Corporation or Unit of Government

Subscribed and sworn to before me by _____

Notary Public Signature _____

My Commission Expires _____

ATTACHMENT 10
ANTICIPATED SPECIAL WASTE SOURCES; CHARACTERISTICS, AND AMOUNTS

SOURCE FACILITY NAME AND LOCATION	SPECIAL WASTE DESCRIPTION	ANNUAL QUANTITY RECEIVED (Cu.Yds.)	ANNUAL QUANTITY RECEIVED (Tons)

**ATTACHMENT 43A
SURFACE WATER MONITORING PLAN**

Provide the information requested below:

Monitoring Station I.D.	Location Description	Latitude	Longitude

**ATTACHMENT 44A
GROUNDWATER MONITORING WELL
LOCATION AND DEPTH**

Provide the information requested in the chart below:

MONITORING STATION I.D.	LATITUDE	LONGITUDE	STATION TYPE WELL OR SPRING	AQUIFER	ELEVATION OF SPRING OR TOP OF WELL CASING	DEPTH OF WELL	DEPTH OF WATER

Attachment 49

PUBLIC NOTICE

Pursuant to application number _____

The Energy and Environment Cabinet, Division of Waste Management has received a special waste landfill permit application from:

Name of Applicant _____

Name of Facility _____

Address _____

City _____ State ____ Zip Code _____

This application, if approved, would allow the construction of the landfill to accept the following types of waste and the following activities: _____

The proposed facility may be accessed from _____

by traveling _____

Additional information regarding this application may be obtained from:

Contact Person _____

Address _____

City _____ State ____ Zip Code _____

Phone No. (____) _____ - _____

DEP 7094A (5/92)

The permit application is being processed at the following location:

Division of Waste Management

Solid Waste Branch

200 Fair Oaks

Frankfort, KY 40601

Within thirty (30) days of the publication of this notice, any person who wishes to comment on the application may submit written comments, and, if desired, request from the Cabinet a public meeting.

Please refer to Application No. _____ on all correspondence.

Publication pursuant to KRS 224.40-310.

Attachment 50

PUBLIC NOTICE

Pursuant to application number _____

The Energy and Environment Cabinet, Division of Waste Management has received a special waste landfill permit application from, and has prepared a draft permit for:

Name of Applicant _____

Name of Facility _____

Address _____

City _____ State ____ Zip Code _____

This application, if approved, would allow the construction of the landfill to accept the following types of waste and the following activities: _____

The proposed facility may be accessed from _____
by traveling _____

Additional information regarding this application may be obtained from:

Contact Person _____

Address _____

City _____ State ____ Zip Code _____

Phone No. (____) _____ - _____

DEP 7094A (5/92)

All data submitted by the applicant and other documents concerning this application are available for public inspection during normal business hours at the following location:

Office _____

Address _____

City _____ State ____ Zip Code _____

The permit application is being processed at the following location:

Division of Waste Management

Solid Waste Branch

200 Fair Oaks

Frankfort, KY 40601

A public hearing has been scheduled to receive public comments and will be conducted at the following location and time:

Place _____

Address _____

City _____ State ____ Zip Code _____

From _____ to _____

Any person who wishes to comment on the draft permit decision for this special waste site or facility may file comments with the Cabinet and, if desired, request a public hearing with thirty (30) days of the publication of this notice pursuant to Section 6 of 401 KAR 45:050.

Please refer to Application No. _____ on all correspondence.

Publication pursuant to KRS 224.40-310.