

US EPA ARCHIVE DOCUMENT

217/524-3300

OWNER/OPERATOR  
Clinton Landfill, Inc.  
Attn: Mr. Ron L. Edwards  
P. O. Box 9071  
Peoria, Illinois 61612-9071

Re: 0390055036-- DeWitt County  
Clinton Landfill 3  
Log No. 2008-054  
Permit File

Dear Mr. Edwards:

This will acknowledge receipt of your permit application that includes a proposal to redesign the approximately 22.5 acres in the southwest corner of the above referenced landfill. The referenced permit application is dated February 1, 2008 and was received by the Illinois EPA on February 5, 2008.

Your permit application is denied.

You have failed to provide proof that granting this permit would not result in violations of the Illinois Environmental Protection Act (Act). Section 39(a) of the Act [415 ILCS 5/39(a)] requires the Illinois EPA to provide the applicant with specific reasons for the denial of permit. The following reasons are given:

1. The revised closure plan provided does not mention the Rail-Off Loading Facility or the Waste Processing Facility to manage excessively dusty wastes. Construction of the Rail-Off Loading Facility was approved in Modification No. 2, while construction of the Waste Processing Facility was approved in Modification No. 3.
2. Section 812.108.1 (Page 3) of the application states that Asbestos Containing Waste Materials (ACWM) will be accepted at the Municipal Solid Waste (MSW) unit. Condition No. II.9 of Modification No. 1 states that ACWM shall not be accepted until a revised operating plan including appropriate NESHAPS requirements have been submitted to and approved by the Illinois EPA. The revised operating plan provided in this application only applies to the Chemical Waste Unit. No change is proposed to the MSW operating plan.
3. As per the application the redesigned components comply with the requirements of 35 Ill. Adm. Code Part 724. The following issues regarding compliance with the requirements of 35 Ill. Adm. Code Part 724 were noted:

- a. Pursuant to 35 Ill. Adm. Code 724.401(c)(3)(A) the leak detection system must be constructed with a slope of one percent or more. From the information provided in the application it is not possible to ascertain the slope of the redundant leachate layer.
  - b. Pursuant to 35 Ill. Adm. Code 724.401(c)(5), the operator of a leak detection system that is not located completely above the seasonal high water table shall demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater. The application does not discuss compliance with 35 Ill. Adm. Code 724.401(c)(5).
4. The material properties for chemical wastes (Appendix A.2 – Table 1) are based on testing wastes from a single source. The application does not demonstrate that these properties accurately represent the types of wastes that will be received at Chemical Waste Unit (CWU).
5. Drawing D-17 shows interim conditions of the landfill. As per this drawing and the Stormwater Management Plan provided in Attachment 4 a separation berm between the CWU and MSW units will have a ditch to collect runoff from the areas sloping towards the separation berm. Water entering the ditch will be pumped into the perimeter ditches. The application shall include additional details about conveying of surface water from the separation berm to Sedimentation basin B.
6. As per the Design Report provided in Attachment 2 excavation face with circular failure (long and short term; static and seismic conditions) was modeled. However, the stability runs for this scenario were not included in the Appendix A.2.
7. Pursuant to 35 Ill. Adm. Code 812.302 an application for landfill that accepts chemical wastes shall include results of a waste analysis showing that the wastes to be accepted at the facility meet the definition of chemical wastes. The analysis shall show that all wastes entering the unit will be compatible and will not react to form a hazardous substance or gaseous product. This information required by 35 Ill. Adm. Code 812.302 was not provided in the application.
8. Pursuant to 35 Ill. Adm. Code 811.304(f) the potential for an earthquake or blast induced liquefaction, and its effect on the stability and integrity of the unit shall be considered and taken into account in the design. The potential for landslides or earthquake induced liquefaction outside the unit shall be considered if such events could affect the unit. The stability analyses provided in the application does not address the requirements of 35 Ill. Adm. Code 811.304(f).
9. Pursuant to 35 Ill. Adm. Code 811.306(b) the liner and leachate collection system side slopes shall have a minimum factor of safety of 1.3 for static and 1.0 for seismic conditions at all times. The stability analyses provided in the application do not address the requirements of 35 Ill. Adm. Code 811.306(b).

10. Pursuant to 35 Ill. Adm. Code 811.308(g) the leachate collection system shall be equipped with a sufficient number of manholes and cleanout risers to allow cleaning and maintenance of all pipes throughout the design period. The details of the leachate collection system provided in Drawing Nos. D-8 and D-9 do not include details of the leachate cleanouts and leachate level monitoring locations.
11. Pursuant to 35 Ill. Adm. Code 811.309(b) the leachate management system shall consist of any combination of multiple treatment and storage structures, to allow management and disposal of leachate during routine maintenance and repairs. The application does not address the requirements specified in 35 Ill. Adm. Code 811.309(b).
12. Pursuant to 35 Ill. Adm. Code 811.309(e)(2) the operator is responsible for securing permission from offsite treatment works for authority to discharge to the treatment works. Application Log No. 2005-070 included information complying with the requirements of 35 Ill. Adm. Code 811.309(e). However, this application has to demonstrate that the information provided in Log No. 2005-070 remains valid for the CWU. Additionally, the application has to demonstrate that the unit cost of treating leachate from the CWU is the same as that for the MSW Unit.
13. Interface requirements for geomembrane and geocomposite drainage layers have changed. The application has to demonstrate that the stability analysis for the interim conditions for the municipal solid waste unit provided in Log No. 2005-070 remain valid.
14. The presence of the geosynthetic clay liner in the bottom liner of the CWU was not accounted for in the stability analysis. No interface requirements have been specified in the Technical Specifications for the geosynthetic clay liner.
15. The Operating Plan proposes to solidify liquid PCB wastes. The use of cements, bentonite or 'other products' as reagents is proposed. The application has to include a complete list of reagents that will be used as reagents to solidify PCB liquids.

Notes:

- a. Page 13 of the Operating Plan states that 'PCBs and PCB items will be placed in a manner that will prevent damage to containers or articles'. Please provide a clarification as to what containers and articles are being referred to.
- b. As per the application sidewall liner is to be cover with 18-inches of soil or select waste. Please provide a clarification about what select waste means.

Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may

be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Should you wish to reapply or have any questions regarding this application, please contact Imran Syed at 217/782-7813.

Sincerely,

Stephen F. Nightingale, P.E.  
Manager, Permit Section  
Bureau of Land

SFN:IMS

cc: George L. Armstrong, P.E., PDC Technical Services, Inc.