

2. Leachate collection geonet drainage layer;
3. 60-mil high density polyethylene (HDPE) geomembrane top liner;
4. Leakage detection geonet drainage layer;
5. 60-mil HDPE geomembrane bottom liner; and
6. 1.5-foot low permeability (1×10^{-7} , cm/s, demonstrated by construction QA/QC) soil subbase.

Attachment VI in the FPA contains a detailed drawing of the base liner system currently constructed in the subcells in Cell 8. This liner system exceeds the performance requirements of MDE and EPA for MSW landfills, and incorporates two geomembranes providing for leak detection, features typically associated with stricter hazardous waste landfill designs.

E. What Are the Environmental Benefits Expected Through This XL Project?

The expected environmental benefits of this XL project include: (1) Accelerated biodegradation of waste, resulting in increased space for new waste in the Landfill (air space) and therefore longer Landfill life; (2) decreased concentration of most leachate constituents; (3) reduced amount of leachate requiring pretreatment; (4) reduced amount of leachate that the Landfill discharges to the local wastewater treatment plant, with subsequent discharge of effluent to the Patuxent River, and (5) reduced post-closure care, maintenance and risk (since the controlled settlement of the solid waste will occur during Landfill operation, there will be lower potential for leachate migration into the subsurface environment, and more LFG will be produced during operation). Additional information on the potential environmental benefits of bioreactor landfills is discussed in Section III.B. and is available on EPA's Web site at <http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/bioreactors.htm> and at <http://www.epa.gov/ProjectXL/>.

To adequately measure the environmental and other benefits of the proposed bioreactor pilot project, the County will establish a baseline that records the environmental impacts of the Landfill without the proposed bioreactor project. Without the project, Subcell 8.4 would be filled until it reaches its capacity, and then covered. The remainder of the subcells in Cell 8 would also be filled until they reach capacity and Cell 8 will be closed and the County would develop Cell 9.

Without this project, it is assumed, Cell 8 would also continue to generate the same levels of leachate for disposal to the local Publicly Owned Treatment

Works (POTW). Treatment of leachate outside the Landfill necessitates the use of equipment, chemicals and ultimately results in the discharge of effluent to surface water. If all the leachate is managed inside the Landfill there will be no discharge to surface water and it is expected to result in cost savings to the County.

The superior environmental performance for this XL Project would be measured using the baseline against the actual results of the project for the following areas: The amount of landfill settlement, the additional air space created in the Cell 8.4 and the amount and concentration of leachate disposed at the local POTW. Specific monitoring parameters are listed in the proposed rule following this preamble.

F. How Have Various Stakeholders Been Involved in This Project?

The County has a history of involving stakeholders in projects at its solid waste acceptance or disposal facilities. This philosophy has proved to be beneficial to all involved parties. The County has divided the stakeholders into three groups. The groups are identified as primary stakeholders, potential interested parties, and members of the general public.

The primary stakeholders are the regulatory agencies involved with solid waste disposal facilities or other activities at the Landfill. The primary stakeholders include:

- U.S. Environmental Protection Agency (EPA)
- Maryland Department of the Environment, Solid Waste Program
- Anne Arundel County Health Department, Environmental Health Bureau
- Anne Arundel County, Planning and Code Enforcement
- Anne Arundel County, Soil Conservation District

Other potentially interested stakeholders have expressed an interest in the project and have had some involvement in the project. It is not anticipated that all stakeholders would play an active and ongoing role in the project. If they do not actively participate in the project, they will be kept informed of the project's progress at appropriate milestones. Their input will be welcomed in verbal or written form.

In May of 2001, after the FPA was signed, the County sent newsletters to approximately 130 nearby residents and concerned citizens with information on the bioreactor testing under project XL.

During implementation of this XL project, the stakeholder involvement

program agreed to in the FPA would ensure that: (1) Stakeholders are apprised of the status of project implementation; and (2) stakeholders have access to information sufficient to judge the success of this XL project. Anticipated stakeholder involvement during the term of the project may include other general public meetings to present periodic status reports, availability of data and other information generated. Anne Arundel County plans to convene periodic meetings for interested stakeholders to brief them on progress during the duration of the XL project. In addition to the reporting requirements of today's proposed rule, the FPA includes provisions whereby the County will make copies of project reports available to all interested parties.

A public file on this XL project has been maintained at the Web site throughout project development, and the EPA will continue to update it as the project is implemented. Additional information is available at EPA's Web site at URL <http://www.epa.gov/projectxl>.

G. How Long Will This Project Last and When Will It Be Complete?

As with all XL projects testing alternative environmental protection strategies, the term of this XL project is limited. Today's proposed rule would be in effect for seven (7) years. In the event that EPA determines that this project should be terminated before the end of the seven year period and that the site-specific rule should be rescinded, the Agency may withdraw this rule through a subsequent rulemaking. This will allow all interested persons and entities the opportunity to comment on the proposed termination and withdrawal of regulatory authority. In the event of an early termination of the project term, EPA or the State will establish an interim compliance period, not to exceed six months, such that the County will be returned to full compliance with the existing requirements of 40 CFR part 258.

The FPA allows any party to the agreement to withdraw from the agreement at any time before the end of the seven year period. It also sets forth several conditions that could trigger an early termination of the project, as well as procedures to follow in the event that EPA, the State or local agency seeks to terminate the project.

For example, an early conclusion will be warranted if the project's environmental benefits do not meet the Project XL goal for the achievement of superior environmental results. In