

RESTORATION AND RECOVERY OF THE BEDFORD LANDFILLS

Site History:

Landfill operations began at the Bedford I landfill site in 1970. Landfilling started as a trench fill operation with waste placed in clay pits excavated for the manufacturer of bricks at the Claycraft brick yard adjacent to the clay pits. The original waste disposal area covered about 45 acres. In 1974, waste filling began in the Bedford II landfill, located south of the Bedford I facility. The Bedford II facility covered 23 acres and operated until 1984.

In 1983, as the Bedford II facility was nearing completion, a Permit-to-Install (PTI) application was submitted for Bedford I by the landfill owner/operator, Bedford-Ecol Inc., for a 15-acre expansion. The expansion was intended to provide up to 1,100,000 cyd of air space and extend the site life by 4.5 years. In addition to the air space increase, the PTI application incorporated surface water management controls. A PTI for the expansion and improvements was issued in January 1984. It was noted by the Ohio EPA at the time of PTI approval that the Bedford I landfill site was well-suited hydrogeologically for a landfill.

Two years later, in 1986 the Bedford I filed another PTI application to expand the site, providing an additional two years of site life and 1,500,000 cyd of air space. In order to achieve the expansion, the owner, Bedford-Ecol, agreed to provide a landfill gas collection and flaring system as well as improvements to the leachate management system. Though an expansion permit was issued in 1987, there was considerable public opposition to the proposed expansion.

Much of the public opposition was prompted by historic operations of the landfill. Industrial liquids and sludges and other waste materials not qualifying as solid waste and potentially hazardous were known to have been disposed at the landfill. Public complaints were made regarding the odor and blowing. By October, 1995 the Bedford I landfill was no longer accepting solid waste.

When new solid waste regulations came into effect in the mid-1990s, Bedford-Ecol declared the original 45 acres as closed and in final cover, based on the old rules. Similarly, the Bedford II site was declared closed and in final cover by the old regulations. Landfill gas collected by the active gas collection system are being sold to Lucent as an energy source rather than flaring gas at the landfill.

The 1987 15-acre expansion area of Bedford I has never been officially closed; therefore, any closure design for this area must be consistent with the current regulations. Discussions with the OEPA have indicated that the Bedford II site (under different ownership than the Bedford I site) has a number of questions regarding the adequacy of the existing final cover system and that the OEPA revisit this issue if given the opportunity.

Recent Project Events:

The City of Gahanna has recognized for a number of years that as host and former contributor to the Bedford Landfills that it is in the City's interest to be assured that the landfills are properly closed and contained and not creating a threat to public health or the environment. Furthermore, the City would like to see a post-closure development of the landfills that would afford an economic and/or social benefit to the City of Gahanna. The underlying requirement for

any strategy to accomplish closure and post-closure development of the landfills is that the City will not assume real or potential liability for any future contaminant releases from the landfills. The selected strategy to accomplish closure and post-closure development may or may not involve City acquisition of the landfill **BUT WILL NOT INCLUDE THE ASSUMPTION OF LIABILITY BY THE CITY.**

In the interest of proceeding with the project the City solicited proposals from a number of engineering firms during the summer of 2001. The result of this effort was the selection of the M-E project team. The selection was based on the technical capability of the project team and the comprehensive project approach as outlined in their project proposal. The M-E project team includes all the technical disciplines necessary for the completion of all tasks required to bring this project to fruition.

Project Strategy:

The M-E project team will complete the project in three phases. Phase 1, Project Planning, will be completed in two subphases 1a and 1b. Phase 1a will include three tasks, 1a(i)-1a(iii). The work activities association with each task is presented below.

Task 1a)i- Project Funding: The task will include immediate efforts to identify and apply for public funding. Particular attention will be devoted to grant money available through the recently passed Clean Ohio Program. The intent will be to establish a strategy that provides for the timely issuance of project funding for each Phase of the project.

Task 1a)ii-Existing Site Conditions: This will represent the initial efforts in establishing the base line environmental conditions at the landfills. Data will be collected that characterize the conditions of ground and surface water quality, air quality, and landfill site features. Included this effort will be the creation of topographic mapping as a basis for site engineering, planning, and report preparation.

Task 1a)iii-Public Coordination: This task will involve the development and implementation of the initial elements of a public relations plan for the proposed project. This program will be intended to achieve public edification and positive perception of the intended project.

Phase 1b will include the completion of project planning. The primary tasks of this phase will be; 1) the completion of the baseline assessment, 2) development of the closure/post-closure strategy, 3) the creation of legal documents to enable project completion and 4) continuation of the public funding and public relations programs.

Phase 2, Project Design, will involve the completion of engineering calculations and design drawings to enable construction of the closure and post-closure improvements. Also included during this phase will be the completion, submission, and subsequent issuance of all environmental permits required for project implementation.

Finally, Phase 3, Construction Services, will include the provision of engineering services that will include; 1) the preparation of bid documents, 2) assistance to the City in the administration of the bidding and contractor selection process, and 3) monitoring of project construction including preparation of construction certification documents.

Project Costs and Schedule:

Preliminary estimates of project costs are summarized below. It should be noted that the final project costs will be affected by the circumstances of project development that cannot be foreseen at this time. The projected estimate is based on the project experience of our project team.

Phase 1a:	\$30,000
1b:	\$120,000
Phase 2:	\$400,000
Phase 3:	<u>\$200,000</u>
Subtotal :	\$750,000
Const.Est :	<u>\$4,000,000</u>
Project Est	
Say :	\$5,000,000

*The above figures do not reflect the receipt of grant funds by the City of Gahanna.

Completion of the project is projected to take 2.5-3.0 years. The projected schedule is attached.