

NEW YORK STATE DEPARTMENT OF

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ENVIRONMENTAL CONSERVATION

DIVISION OF HAZARDOUS WASTE REMEDIATION

RECORD OF DECISION FOR INTERIM REMEDIAL MEASURES

OLD BATH LANDFILL SITE

SITE NO. 8-51-014

STEUBEN COUNTY

TECHNOLOGY SEUTION COPY

MARCH 1994

DECLARATION STATEMENT - RECORD OF DECISION FOR INTERIM REMEDIAL MEASURES

"Old Bath Landfill" Inactive Hazardous Waste Site Steuben County, New York Site No. 8-51-014

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Old Bath Landfill inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Old Bath Landfill Inactive Hazardous Waste Site and upon public input to the Proposed Accelerated Remedial Action Plan (PARAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the Interim Remedial Measures (IRM) selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the remedial activities to date performed on the Old Bath Landfill and the criteria identified for evaluation of alternatives the NYSDEC has selected the implementation of an IRM as a substantial portion of the remedy. The components of the IRM are as follows:

- \equiv Excavation of contaminated sediment from the storm water holding basin.
- Development and construction of a cover system (cap) to reduce the infiltration of precipitation, reduce leachate generation, and control landfill gas emmissions.
- Installation of a leachate collection system.

- Design and construction of a leachate pretreatment facility and pipeline to convey the treated leachate to the Village of Bath sanitary sewer.
- Long term maintenance of the cap.
- **Continuous** operation and maintenance of the leachate pretreatment plant and pipeline.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the IRM selected for this site as being protective of human health.

Declaration

The selected IRM remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28, 1994

Date

N His Seba

Ann Hill DeBarbieri Deputy Commissioner

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RECORD OF DECISION FOR INTERIM REMEDIAL MEASURES

"Old Bath Landfill Site" Town of Bath, Steuben County, New York Site No. 8-51-014 March 1994

SECTION 1: SITE DESCRIPTION

The Old Bath Landfill is located in the Town of Bath in Steuben County on Turnpike Road and is adjacent to the currently operating Steuben County landfill. The site is approximately 28 acres in size and located on the 145 acre parcel of land owned by Steuben County approximately three miles southwest of the Village of Bath. Figures 1 and 2 show the site location.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

The Old Bath Landfill was operated from 1978 until 1988. Municipal wastes from Steuben County as well as some industrial wastes were disposed of at the site during its operating history. These wastes included paint sludges and various solvents such as methyl ethyl ketone.

2.2: <u>Remedial History</u>

Previous investigations and quarterly monitoring results have determined that the overburden and bedrock water-bearing zones are contaminated with volatile organic compounds as well as some metals at concentrations exceeding New York State Class "GA" Ground Water Quality Standards. In February 1991, the County entered into a Consent Order (Index #B8-293-89-08) with the Department that required an RI/FS, the completion of an Interim Remedial Measure (IRM) consisting of capping and leachate collection, and implementation of any additional final remedial actions that may be found to be necessary once the IRM is completed.

The County has signed a State Assistance Contract with New York State which provides for State Funding of 75% of all eligible costs of the remedial program under the 1986 Environmental Quality Bond Act (EQBA) Title 3 program.

SECTION 3: <u>CURRENT STATUS</u>

Steuben County, in cooperation with the NYSDEC, initiated a RI/FS in 1991 to identify the extent of the contamination at the site. A draft RI report was submitted to the NYSDEC in September 1993. Additional field work is required for the RI and is currently underway.

3.1: <u>Summary of the Investigations and Information Gathered to Date</u>

Initial results of the RI, as well as results of the IRM Field Sampling Plan indicate significant organic and metals concentrations in the landfill leachate. Calculations based on these investigations indicate that approximately 10 million gallons of leachate are contained within the landfill mound. Investigations of the landfill did not reveal any discrete concentrations of drums or industrial wastes that could reasonably be the subject of a removal action.

Sampling has also shown that sediment from an on site runoff control basin contains several semi-volatile organics and metals (in low concentrations). The basin has accumulated silt for several years, and is in need of excavation if it is to continue to serve for storm water control.

The following reports related to the IRM have been prepared:

- o IRM Conceptual Design February 1994: Contains description of previous IRM related investigations and details concerning the capping system, leachate collection system, leachate treatment plant, and pipeline discharge.
- Treatability Study and Design Report Supplement December 1993: Contains revised alternatives for leachate treatment, as well as the current proposal for leachate pretreatment and pipeline discharge.
- Treatability Study and Design Report February 1993, Vols 1,2,3: Compares leachate treatment alternatives based on the results of the pilot treatability study performed during 1992.

The following reports related to the RI/FS have been prepared:

- Draft RI Report September 1993: Contains results of the remedial investigations performed to date.
- Preliminary Site Characterization Report: Contains results of initial remedial investigation activities and recommendations for alterations to the RI work plan based on initial results.

3.2 <u>Summary of Human and Environmental Exposure Pathways</u>

A baseline health risk assessment is being performed as a part of the ongoing Remedial Investigation. This risk assessment will include an exposure pathway analysis to identify media of concern and assess the potential for human exposure based on these pathways. Quantification of the risk from each potential pathway will be finalized during the RI/FS process.

A Fish and Wildlife Impact Analysis will also be completed as part of the Remedial Investigation. This analysis will identify potential ecological receptors near the site and their potential for exposure to contamination from the site.

SECTION 4: ENFORCEMENT STATUS

The NYSDEC and Steuben County entered into a Consent Order on February 19, 1991. The Order obligates the County to implement a full remedial program at the landfill and allows reimbursement to the County of up to 75 percent of the eligible costs of the remediation.

Orders on Consent

<u>Date</u> 2/19/91

<u>Index</u> B8-293-89-08 Subject Remedial Program

The Consent Order required the completion of an RI/FS as well as an IRM (cap and leachate collection) and any necessary Remedial design and construction following the completion of the IRM which are identified as necessary from the RI/FS findings.

SECTION 5: SUMMARY OF THE ACCELERATED REMEDIATION GOALS

Goals for this action have been established through the remedy selection process outlined in regulation 6NYCRR Part 375-1.10. The primary goals of this action are to minimize leachate production, control leachate that is produced, control gas from the landfill, and to reduce the potential for human contact with wastes and contaminated soils.

At a minimum this action will mitigate significant threats to the public health and to the environment by:

Reducing leachate generation and controlling leachate already within the landfill mass;

- Eliminating or reducing the threat to surface waters by eliminating any future contaminated surface run-off from landfill and removing sediments from the holding basin;
- Eliminating or reducing the potential for direct human or animal contact with the contaminated soils on site;
- Mitigating, to the extent practicable, migration of contaminants from the landfill to groundwater; and
- Controlling gas generated from the landfill.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The accelerated remedial action focuses on reduction and control of leachate and elimination of contact with contaminated soils. This streamlines the approach and reduces the evaluation of remedies to: 1) no action or 2) sediment excavation, capping, and leachate collection and management.

A detailed evaluation of final remedial alternatives and selection of the preferred alternative, if any, will be completed as part of the RI/FS process. Final remedial alternatives, if found necessary, would focus upon possible groundwater contamination and possible off site impacts from contaminated surface water, soils and sediments. The results will be presented in a PRAP once the RI/FS is completed. At that time, public review and comment will be solicited.

6.1: Description of Alternatives

The following alternatives are evaluated herein:

I. No Action

Present Worth:	\$225,000	
Capital Costs:	\$ 0	
Annual O&M (20 years):	\$ 20,000	
Time to Implement:	0 months	

The no action alternative is evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. This is an unacceptable alternative, as the site would remain in its present condition. Human health and the environment would not be adequately protected.

II. Sediment Excavation, Capping and Leachate Collection via Subsurface Drains with On-Site Leachate Pretreatment and Pipeline Discharge

Present Worth:	\$ 27,500,000		
Capital Cost:	\$ 14,100,000*		
Ave. Annual O&M (20 years):	\$ 672,000		
Time to Implement:	24-34 months		

* This cost represents the entire capital costs of the sediment excavation, landfill cap, leachate collection system, leachate pretreatment plant, and pipeline. The leachate pretreatment plant and pipeline will be apportioned at 75% of the capital costs for those two tasks, which is the portion of the pretreatment plant and pipeline necessary for treatment of Old Bath landfill leachate.

The accelerated remedial action consists of excavation of the holding basin sediment; development of a cover system to reduce the amount of leachate produced; installation of a gas venting system; installation of a leachate collection system; construction of an on site leachate pretreatment facility; and construction of a pipeline to convey the treated leachate to the Village of Bath sanitary sewer system. Sediment excavated from the runoff control basin would be placed under the cover system. Monitoring to determine effectiveness of these actions would also be implemented. Long term operation and maintenance will be required and will be performed by the County.

6.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are described below and defined in the State regulation that directs the remediation of inactive hazardous waste sites. For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion.

The first two evaluation criteria are termed threshold criteria and must be satisfied for an alternative to be considered for selection.

1. <u>Compliance with New York State Standards, Criteria, and Guidance (SCGs)</u>. Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

Implementation of the accelerated remedial action will result in compliance with all SCGs except those for groundwater. The issue of groundwater impacts and control has not been fully identified at this time and will be addressed upon completion of the RI/FS. As such,

groundwater SCGs are not applied to the accelerated program. The accelerated program will not impact the ability to implement future groundwater controls if they are necessary.

The accelerated remedial program will eliminate migration of contaminated runoff and leachate to adjacent property and surface water. This will also prevent future contamination of off site surface soils by leachate flows. Landfill gas will be vented, and if necessary, collected and treated to comply with SCGs for air.

The "No Action" alternative does not conform to any SCGs.

2. <u>Protection of Human Health and the Environment</u>. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

The accelerated remedial action will eliminate exposure to leachate and contaminated landfill surface runoff, on-site contaminated surface soils, landfill gases, and contaminated dust at the site. Protection of human health and the environment with regard to groundwater will be addressed upon completion of the RI/FS.

The "No Action" Alternative provides inadequate protection of human health or the environment.

The next five "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. <u>Short-term Effectiveness</u>. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared with the other alternatives.

The potential short-term adverse impacts of the proposed action on the community, workers and environment include 1) exposure to site contaminants which volatilize (vaporize) during excavations and other activities which disturb the fill, 2) dermal contact with waste, leachate, and contaminated soils, 3) incidental ingestion of contaminants by site workers, and 4) inhalation of contaminated dust during various construction activities.

Of these potential impacts from the proposed program, exposure of workers to contaminants and dusts during construction will be the most significant. These impacts will be minimized by the implementation of an appropriate health and safety program during construction activities. Measures will also be taken to minimize community exposure to volatilized contaminants and to control fugitive dust. Short-term effectiveness of the proposed action is high since implementation would immediately reduce leachate production and control leachate that is produced. The duration of construction is expected to be approximately 18 months.

The "No Action" Alternative provides no short-term effectiveness.

4. <u>Long-term Effectiveness and Permanence</u>. This criterion evaluates the long-term effectiveness of alternatives after implementation of the response actions. If wastes or treated residuals remain on site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the controls intended to limit the risk, and 3) the reliability of these controls.

The proposed remedy will address the long term problems associated with leachate migration. Covering the landfill will greatly reduce long term production of leachate. Leachate collection and treatment will minimize risks from long term exposure of humans and the environment to leachate and contaminated site soils. These systems combined will also reduce future groundwater contamination caused by migrating leachate. Any unacceptable risks posed by existing contaminated groundwater will be addressed upon completion of the RI/FS.

The "No Action" Alternative provides no long-term effectiveness or permanence.

5. <u>Reduction of Toxicity. Mobility or Volume</u>. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

The proposed action will reduce the overall mobility of contaminants significantly. The volume and toxicity of leachate produced from landfill wastes will be reduced by removal and treatment of leachate from the landfill mound. However, the total volume of landfill waste will not be measurably reduced.

The "No Action" Alternative would not reduce the mobility of the contaminants nor the volume or toxicity of the wastes.

6. <u>Implementability</u>. The technical and administrative feasibility of implementing each alternative is evaluated. Technically, this includes the difficulties associated with construction, reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining special permits, access for construction, etc..

The proposed action employs technologies which have been selected at many inactive hazardous waste sites. These technologies are proven reliable and are relatively easy to implement. Equipment, materials and contractors are readily available for this work.

The "No Action" alternative is easily implemented but the technology employed is not capable of resolving identified problems.

7. <u>Cost</u>. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision.

The estimated present worth cost of the proposed action is \$27,500,000 (Construction costs, \$14,100,000; Average Annual O&M costs, \$672,000 over 20 years). Construction costs for the landfill cap assume either placement of new material or reworking of the existing cover material to meet 6NYCRR Part 360 requirements. Operation and maintenance costs include those for continued operation of the leachate pretreatment plant and are average annual costs for a 20 year period. These costs are greater for the first few years of operation, until leachate flows decrease. In addition, the operational costs for the pretreatment plant and pipeline include costs for treatment of other County landfill leachates. As stated in Section 6.1, the portion of the pretreatment plant and pipeline necessary for treatment of Old Bath leachate has been determined to be 75% of those costs.

The estimated present worth cost of "No Action" is \$225,000 (Construction costs, \$0; Annual O&M costs, \$20,000 over 20 years).

The information needed for evaluating the "modifying criterion" of Community Acceptance will be obtained by the NYSDEC during the public comment period for the proposed remedy.

8. <u>Community Acceptance</u> - Concerns of the community regarding the Proposed Accelerated Remedial Action Plan were evaluated. No opposition to the Proposed Accelerated Remedial Action Plan has been expressed. A Responsiveness Summary (Appendix B) has been prepared which describes public comments received and the NYSDEC responses.

SECTION 7: <u>SUMMARY OF THE SELECTED REMEDY</u>

Based upon results of investigations conducted at the Old Bath Landfill site and the evaluation presented in Section 6, the NYSDEC has selected an accelerated remedial program, Alternative II, to be implemented.

This selection is based upon the review of the site data and evaluation of the alternatives and its ability to meet the above discussed criteria.

The program will include removal of sediments from an on-site drainage basin, design and construction of a landfill cover system, installation of a leachate collection system and construction of a leachate pretreatment facility with a pipeline discharge to the Village of Bath wastewater treatment plant. Additional actions to address groundwater contamination, if necessary, will be addressed upon completion of the RI/FS. The estimated present worth cost of the proposed action is \$27,500,000.

SECTION 8: <u>HIGHLIGHTS OF COMMUNITY PARTICIPATION</u>

Document repositories were established at the following locations for public review of project related material:

Davenport Public Library Cameron Circle Bath, N.Y. 14810 Steuben County Department of Public Works 3 East Pulteney Square Bath, N.Y. 14180

NYSDEC Region 8 Headquarters Ms. Mary Jane Peachey Div. of Hazardous Waste Remediation Avon, New York 14414 (716) 226-2466 **By Appointment Only** NYSDEC Mr. Jeffrey A. Konsella - Project Manager Div. of Hazardous Waste Remediation 50 Wolf Road Albany, N.Y. 12233-7010 (518) 457-5636 Hours Mon - Fri 8:30 am - 4:45 pm

The following citizen participation activities were conducted:

- Public meeting January 22, 1992: Presented the initial IRM Concept Design, as well as the RI/FS process.
- Fact sheet February 8, 1994: Presented the revised IRM Concept Design, and announced the availability of the PARAP and the public comment period.
- Public meeting February 15, 1994: Presented the revised IRM Concept Design, presented results of the RI, and presented the PARAP for public comment.
- Public comment period held from February 11, 1994 March 14, 1994 to solicit public comment on the Proposed Accelerated Remedial Action Plan.

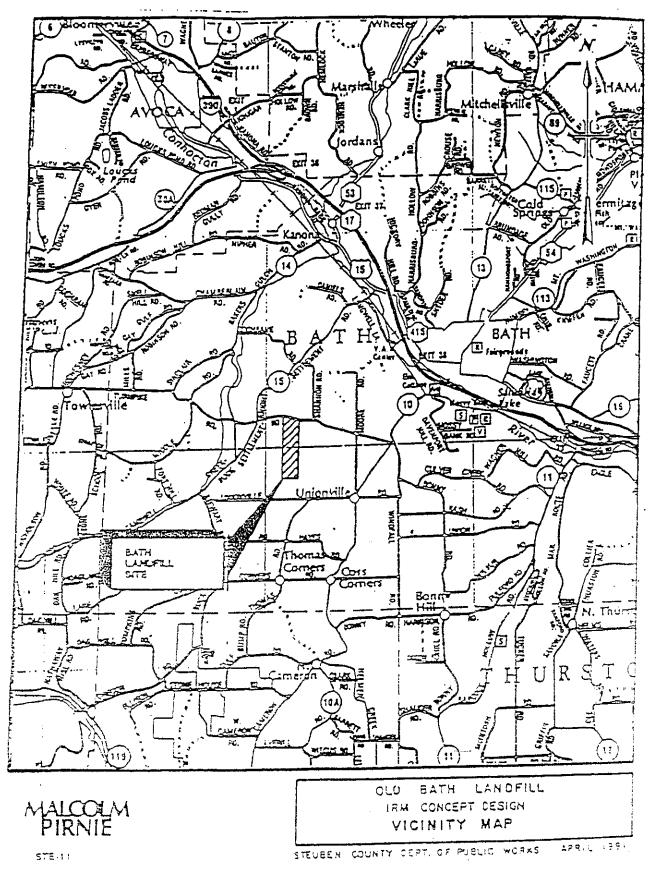


Figure 1. Site location.

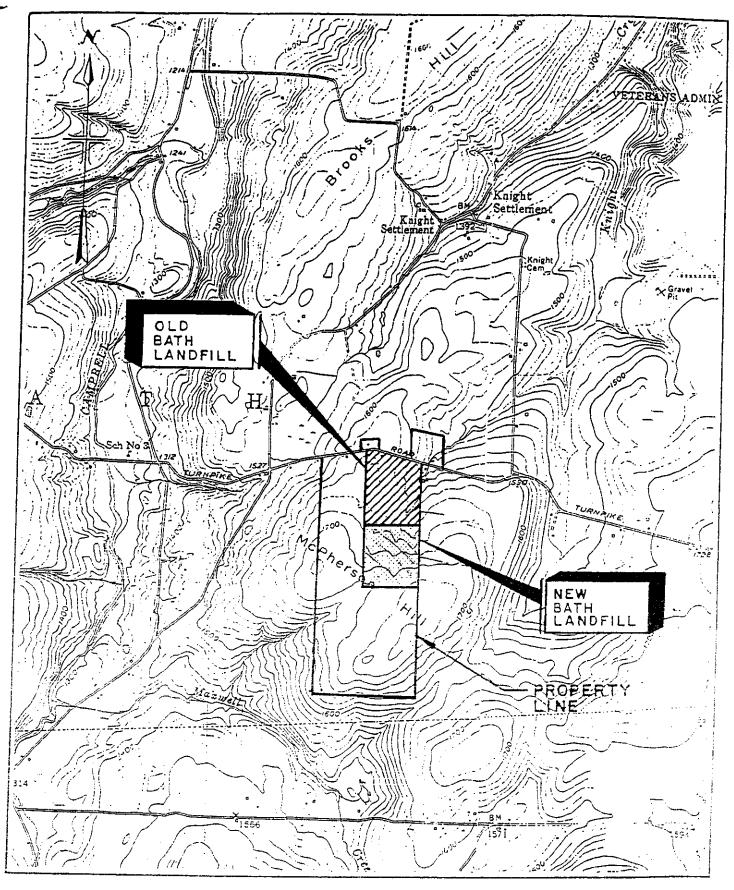


Figure 2 Site Location Detail

OLD BATH LANDFILL RI/FS SITE LOCATION MAP

OLD BATH LANDFILL RESPONSIVENESS SUMMARY

Questions raised during the public meeting of February 15, 1994;

- Q: Does DEC take care of only the dumps that have been open since the 1980's?
- A: The Division of Hazardous Waste Remediation within the DEC deals with the remediation of hazardous waste sites in New York which are listed on the <u>Registry of Inactive Hazardous Waste</u> <u>Sites</u>. When identifying and listing a hazardous waste site there are no time restrictions placed on when the site may have been opened, operated, or closed. A site is placed on the Registry as a hazardous waste site based on the presence of hazardous wastes. The Division of Solid Waste within the DEC deals with municipal and privately owned landfills that are not classified as hazardous waste sites.
- Q: How is the construction and additional traffic going to affect the residents who live near the landfill?
- A: The most observable effect on residents will be construction of the pipeline in the road right-ofway. There will be an increase in truck traffic for a period of time, and there will be some unavoidable inconveniences similar to any road construction project. The contractor who is selected to do the construction will be required to control any impacts to the extent practicable. When the pipeline installation is complete, the road will be restored to its previous condition or better. The contractor will be required to maintain traffic while the work is being performed. The intent is to stay in the road right-of-way, and it is not expected that there will be any major effects to landowners' properties.
- Q: Will there be more odors from the site once the pretreatment plant is up and running?
- A: Odors associated with operation of the leachate pretreatment facility are possible and will be considered in design. There is an odor associated with the leachate. All leachate treatment processes are enclosed, but there will be vents to release gases. These gases will be treated if necessary, prior to release. There are technologies available to help with odor control, and they could be applied to control odors from tank vents.
- Q: Was the Town of Bath Landfill (located off Moore road) put on the Registry of Inactive Hazardous Waste Sites?
- A: The Town of Bath Landfill has not been classified as an inactive hazardous waste site, nor has it been placed on the Registry.
- Q: How come DEC hasn't checked the Town of Bath Landfill (located off Moore Road)?
- A: The Bureau of Hazardous Site Control sampled soil and surface water at the Town landfill off Moore Road on February 28, 1992. The samples taken from the Town landfill showed very little

contamination (either organic or inorganic). The Old Bath Landfill and the Town Landfill are two distinct landfills at different locations. They were operated during different time periods and by different operators. The Old Bath Landfill is on the Registry, while the Town Landfill is not. A landfill which is not on the Registry is under the jurisdiction of the Division of Solid Waste.

- NOTE: While numerous questions were raised and responded to at the public meeting concerning the Town of Bath landfill (or Town dump), as they do not concern the Old Bath Landfill in question here, they are not included in this responsiveness summary. The concerns raised have been forwarded to the Region 8 Division of Solid Waste. If there are further questions they should be addressed to Daniel David, Region 8 Solid Waste Engineer, 6274 East Avon-Lima Road, Avon, NY 14414. However, it should be noted that while the Division of Solid Waste does have jurisdiction over non-hazardous waste landfills, there would have to be violations of State environmental criteria before any further activity would likely be taken.
- Q: What is the estimated cost of this project?
- A: The estimated total cost of the pretreatment plant and pipeline is \$8.6 million. The leachate collection system and the final cover system is estimated at \$5.5 million. The NYSDEC will be reimbursing the County up to 75% of the eligible costs for leachate collection and capping, and up to 56% (the portion dedicated to Old Bath) of the eligible costs for the leachate pretreatment plant and pipeline (i.e. 56% of \$8.6 million).
- Q: What about the additional costs and charges by the Village of Bath for accepting pre-treated leachate in the Village's wastewater system?
- A: The Village of Bath POTW has been consulted about charges for acceptance of the treated leachate. An estimate of those costs were included in the economic analysis and comparison of treatment alternatives over a 20 year period. Steuben County is currently negotiating a fee schedule for the rates for receiving treated leachate effluent.
- Q: How will the new cover affect the leachate?
- A: The existing cover isn't uniform. The present cover has a lot stones and lacks adequate slopes on the top of the landfill to shed water. The placement of a new cover, or a reworking of portions of the existing cover will lessen infiltration, thereby lessening leachate generation rates.
- Q: What type of material will be used for the cover?
- A: It is anticipated that a low permeability soil (clay) soil cover will be placed for the cap, however the use of low permeability membranes may be considered.
- Q: Were would the cover material come from?

- A: If the required low permeability soil is not available from the County parcel around the landfill, the contractor who performs the construction will be responsible for finding a suitable source and obtaining the proper permits.
- Q: Will there be additional remedial measures necessary beyond the proposed cap, leachate collection system, leachate pretreatment plant, and pipeline?
- A: The Accelerated Remedial Action Plan will comprise the majority of the final remedy. The Feasibility Study will focus on impacts to groundwater from the site, and any off-site impacts. If appropriate, further remedial measures will be undertaken to address any site impacts not addressed in the IRM Concept Design.
- Q: Will the pipeline be designed to handle extra capacity, so that there could be more tie-ins along the route? Is the design of the pipeline inducing growth?
- A: The pipeline is sized to handle peak treated leachate flows from the plant which are expected during the first two years of operation. The issue of tie-in to the pipeline has been discussed with the County, and it has been decided that the Pipeline will be a dedicated line to convey treated leachate only. Therefore the pipeline will not induce localized growth along the route that would otherwise not occur.
- Q: Will the leachate flows diminish over time?
- A: After the leachate within the landfill is removed, and the landfill is capped, leachate generation and collected leachate amounts from Old Bath will be diminished considerably.
- Q: How does that impact the remaining years of treatment plant operation?
- A: The leachate pretreatment plant has been sized to treat the initial short-term, high rate of leachate flow from the Old Bath landfill. There will be extra capacity in the pretreatment plant when the majority of leachate within Old Bath has been treated. However, leachates from the New Bath landfill, and Lindley North and South will continue to be treated at the plant. In addition, leachate collection tanks at Lindley South are presently inadequate to handle the current flow. When remediation of Lindley landfill South commences, more leachate will be collected and additional quantities of leachate will require treatment.
- Q: When the landfill is capped with highly compact low permeable soil, the water will flow laterally over the landfill, creating more surface water runoff. How will that affect the surrounding area, including homeowners?
- A: Design of the landfill cap will include all necessary surface water runoff controls. It is currently envisioned that runoff will be handled by way of the on site drainage basin, which will in turn flow into the tributary to Knights Creek. Drainage of surface water after capping is not expected to pose any impacts to homeowners or to off-site drainage ways.
- Q: Will an Environmental Impact Statement be performed for the pretreatment plant and pipeline?

- A: Since the site remediation is directed by Consent Order, site remedial measures are exempt from State Environmental Quality Review Act requirements (SEQRA). While formal processing under the SEQRA decision making process will not be utilized for the Old Bath Landfill remediation, possible environmental impacts of the pretreatment plant and pipeline were identified during the conceptual design process. Discussions of potential impacts are contained in the <u>Old Bath Landfill IRM Concept Design</u>. All possible impacts will be addressed either during design, or during construction through proper mitigation efforts.
- Q: Why isn't the plant closer to the Village Public Owned Treatment Works (POTW)?
- A: The pretreatment plant is being placed on site at the Old Bath Landfill since leachate from that landfill will comprise the majority of the flow during the first few years. In addition, leachate from the New Bath Landfill can be readily piped into the facility for treatment. Since the majority of the leachate to be treated comes from either Old Bath or New Bath, the plant will be at the main source of leachate, thereby saving costs and reducing risks of trucking this leachate. While leachate from both Lindley Landfills will have to be trucked to the pretreatment plant, their flow contributions are less than those at Bath.
- Q: What is the estimate for the number of gallons of leachate within the Old Bath landfill now? How many gallons of leachate will be treated at the pretreatment plant over the next 20 years?
- A: Present leachate quantity within the Old Bath Landfill is estimated at about 10 million gallons. This is based on the field work that has been done to date including soil borings and piezometers placed in the landfill. It is estimated that the pretreatment facility will treat approximately 200 million gallons of leachate within the next 20 years from the four County landfills - both New Bath and Old Bath landfills and both Lindley landfills.
- Q: Why was the presented pipeline route selected over the other route that went to the Veterans Administration (VA)?
- A: Although the route to the VA location was viable, the proposed pipeline route was selected to take advantage of topography as well as minimize complications with tie-ins to the Village system. In addition, the proposed route will put the tie-in location closer to the Village treatment plant.
- Q: Will there be control over the flow through the pipeline?
- A: Flow in the pipeline will be a function of treatment plant operations. The design calls for an effluent equalization tank which will drain treated leachate into the pipeline, which should result in a relatively consistent flow during specific operating periods. However, the amount of leachate influent into the plant may fluctuate, resulting in a corresponding increase or decrease in treated leachate effluent. There will be physical controls over the pipeline such as valves to control the flow for operation and maintenance purposes. In addition, the facility is being designed so that, if need be, treated leachate can be hauled by truck to the Village POTW. This would allow the pipeline to be completely shut down if necessary.

Old Bath Landfill Administrative Record

<u>RI/FS</u>

м 1.5 - 1.

- Remedial Investigation/Feasibility Study Scoping Document, prepared by Malcolm Pirnie, October 1991
- Remedial Investigation/Feasibility Study Workplan, prepared by Malcolm Pirnie, October 1991
- Preliminary Site Characterization Report Remedial Investigation/Feasibility Study, Vols. I&II, prepared by Malcolm Pirnie, March 1992
- Remedial Investigation Report, prepared by Malcolm Pirnie, September 1993

<u>IRM</u>

- Field Sampling Plan, prepared by Malcolm Pirnie, June 1991
- Interim Remedial Measures Concept Design, prepared by Malcolm Pirnie, October 1991
- Health and Safety Plan for the IRM Design and Construction Activities, prepared by Malcolm Pirnie, December 1991
- Leachate Treatability Study Workplan, prepared by Malcolm Pirnie, May 1992
- Alternative Cover System Evaluation, prepared by Malcolm Pirnie, December 1992
- Treatability Study and Design Report, Vols I-III, prepared by Malcolm Pirnie, February 1993
- Responses to NYSDEC comments on the Treatability Study and Design Report, prepared by Malcolm Pirnie, May 1993
- Treatability Study and Design Report Supplement, prepared by Malcolm Pirnie. December 1993
- Interim Remedial Measures Concept Design (Revised), prepared by Malcolm Pirnie, February 1994

Earlier Reports

Nº S.

- Hydrogeologic Investigation, prepared by H & A of New York, May 1988
- Geotechnical Engineering Report, prepared by H & A of New York, December 1988
- Groundwater Remedial Measures Investigation, prepared by H & A, October 1988
- Contaminated Soil Excavation, prepared by H & A of New York, August 1988
- Closure Post Closure Plan, prepared by Larsen, September 1988

Legal Documents

- Order on Consent, Case # R8-0574-86-07
- Order on Consent, Index # B8-293-89-08
- State Assistance Contract 1986 Environmental Quality Bond Act Title 3 Inactive Hazardous Waste Disposal Site Remediation Program, October 28, 1991

<u>Other</u>

- Steuben County Project Management Plan, December 1991
- Citizen Participation Plan, Appendix E of RI/FS Workplan, prepared by Malcolm Pirnie, October 1991