Superfund Program Fact Sheet

Proposed Plan

Army Creek Landfill Site

New Castle County, Delaware March 1990

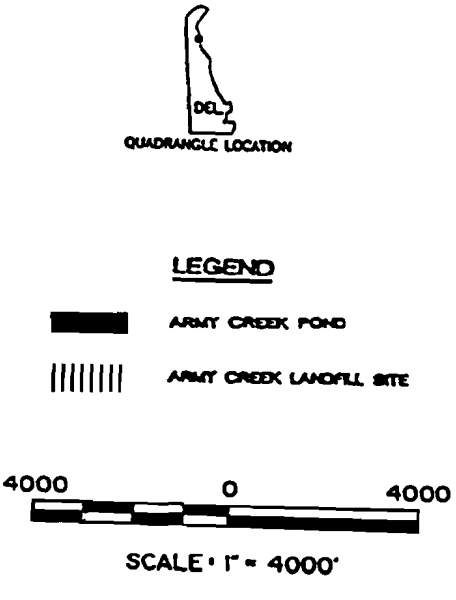
INTRODUCTION

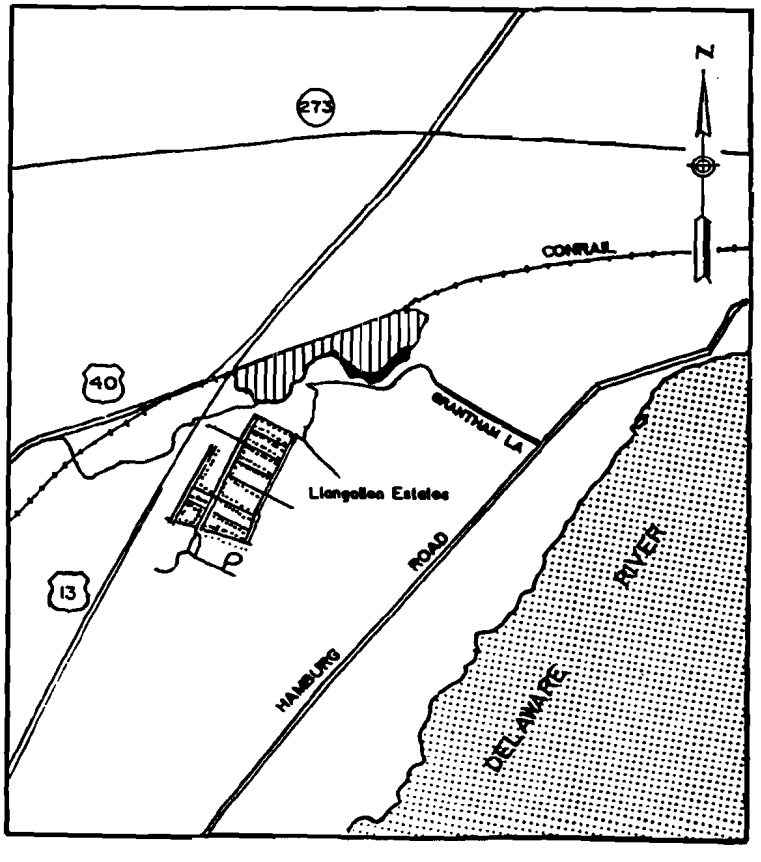
This Proposed Plan identifies the preferred option for treating the extracted water from the groundwater recovery well network prior to discharge to Army Pond at the Army Creek Landfill site. In addition, the plan includes summaries of other alternatives analyzed for this site. This document is issued by the U.S. Environmental Protection Agency (EPA), the lead agency for site activities, and the Delaware Department of Natural Resources and Environmental Control (DNREC), the support agency for this response action. EPA, in consultation with DNREC, will select a final remedy for the site only after the public comment period has ended and the information submitted during the comment period has been reviewed and considered.

EPA is issuing this Proposed Plan as part of its public participation responsibilities under section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This document summarizes information that can be found in greater detail in the Remedial Investigation and Feasibility Study (RI/FS) report and other documents contained in the administrative record file for this site. EPA and the State encourage the public to review these other documents in order to gain a more comprehensive understanding of the site and Superfund activities that have been conducted there.

FIGURE 1

ARMY CREEK LANDFILL SITE LOCATION





The administrative record file, which contains the information upon which the selection of the response action will be based, is available at the following locations:

Delaware DNREC
715 Grantham Lane
New Castle, DE 19720
(302) 323-4540

and

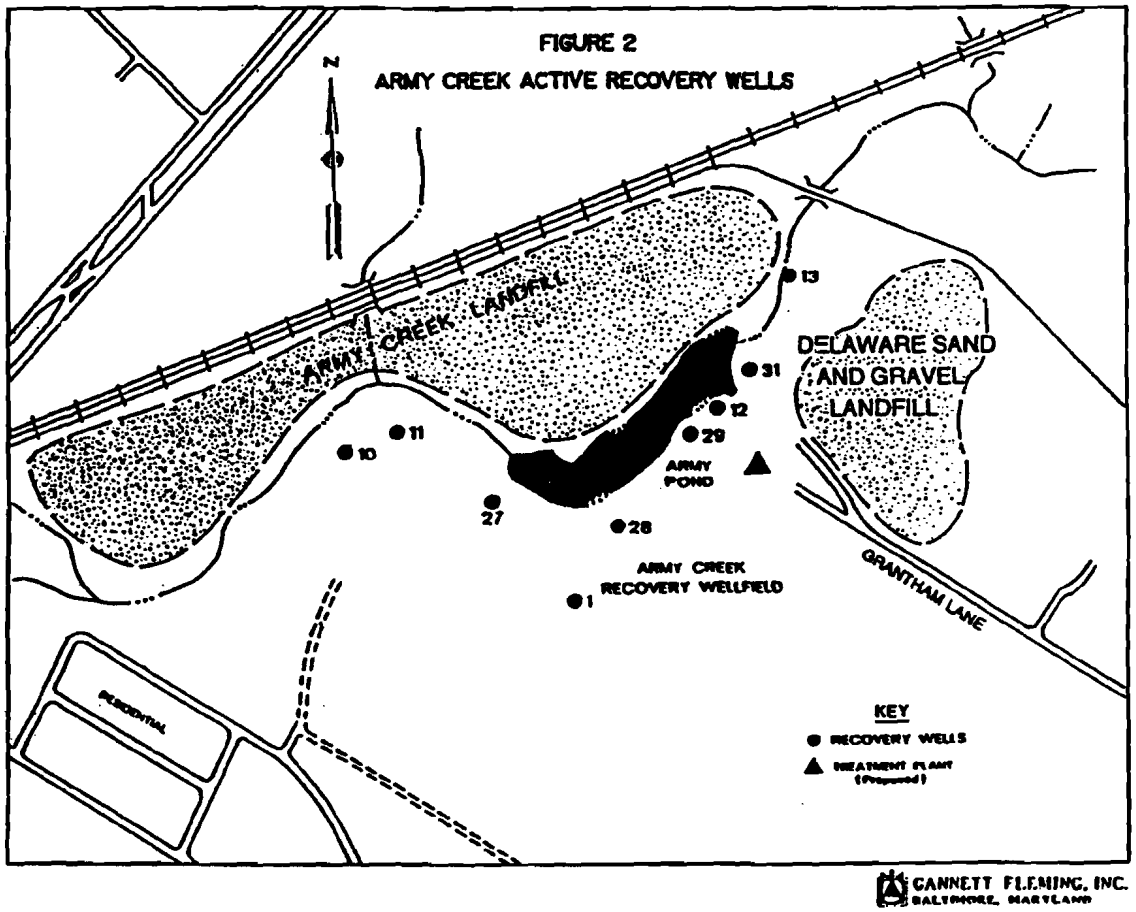
U.S. EPA Docket Room
Ms. Margaret Leva
Region III
841 Chestnut Building, 6th Floor
Philadelphia, PA 19107
(215) 597-3037

EPA encourages comments on all alternatives and on the information that supports the alternatives. Public comments can influence EPA's choice; as a result, the final remedial action plan , as presented in the Record of Decision (ROD), may be different from the preferred alternative. A glossary of terms that may be unfamiliar to the general public is provided in the pullout pages of this Proposed Plan. The terms are in bold print in the text to highlight their availability in the glossary.

SITE BACKGROUND

The Army Creek Landfill (also known as Llangollen Landfill, see Figure 1) is a 60-acre abandoned sand and gravel quarry that was operated by New Castle County (County), from 1960 through 1968, for disposal of municipal and industrial waste. Approximately 1.9 million cubic yards of refuse were landfilled at Army Creek. The site is adjacent to another National Priorities List (NPL) site, Delaware Sand and Gravel Landfill, an industrial waste disposal site closed by the DNREC in 1976 (see Figure 2).

Groundwater contamination was discovered in a residential well downgradient from the Army Creek site in 1972. In response, the County conducted a series of groundwater investigations designed to characterize and define the extent of contamination and to evaluate control alternatives. To minimize the immediate threat, the County installed a series of groundwater recovery wells downgradient of the landfill (see figure 2) to prevent the **contaminant plume** from reaching public supply wells belonging to the Artesian Water Company which serves approximately 5,000 residential customers. The pumping of the recovery wells has created a **groundwater divide** between the Army Creek Landfill and the Artesian Well Company's Llangollen Wellfield, effectively capturing the



groundwater-borne organic and inorganic contaminants from both Army Creek and Delaware Sand and Gravel Landfills. The recovery wells currently discharge, untreated, to the Army Creek and Army Pond.

The Army Creek site was proposed for inclusion on the NPL in October of 1981, and was promulgated in September of 1983. EPA reviewed all past studies conducted by the County and determined that, taken together, these previous studies constituted a Remedial Investigation (RI). In 1984, EPA entered into a Consent Agreement and Order with the County allowing the County to perform a Feasibility Study (FS) based on the RI. The County completed the FS in July 1986.

The Army Creek Record of Decision (ROD) for the first operable unit, issued on September 30, 1986, selected a remedial alternative for source controls but deferred selection of appropriate remedial measures for sediments in Army Pond and a treatment alternative for the groundwater recovery well discharges to a second operable unit decision document. The first operable unit ROD selected a two-phased approach:

Phase I

1. installation of a multi-layer landfill cap
2. continued operation of the downgradient recovery well network
3. evaluation of the remedial action for five years after the cap is installed to assess the effectiveness of the system during operation

Phase II

1. based on the five year evaluation, a determination will be made on whether to install upgradient controls
2. continue evaluation of the effectiveness of the system
3. operation and maintenance

The extensive studies that have been conducted at the site have identified contamination in both the groundwater and surface water. The remedial action strategy selected in the first operable unit, described above, addresses the groundwater contamination and the landfill leachate currently seeping into the surface water (Army Creek/Pond).

SCOPE OR ROLE OF OPERABLE UNIT

This is the second and final planned operable unit for the site. The first operable unit provided for the installation of a hydraulic barrier (cap) over the landfill to prevent vertical infiltration through the wastes and for the continued operation of the downgradient recovery well network to prevent the migration of contaminated groundwater to public supply wells. This second operable unit addresses the need to treat the recovery well discharges, which, as determined in the Remedial Investigation, do not present a threat to human health but are potentially harmful to the environment. Sediment sampling revealed contaminant levels which were within a range expected to be found in a wetland environment and therefore not a environmental concern.

The contaminated media to be addressed in the second operable unit is the surface water of Army Creek/Pond in general and the recovery well discharge in particular.

RISK ASSESSMENT

To determine whether there is an actual exposure or a potential for exposure at this site, the most likely pathways of contaminant release and transport, and the human and environmental activities patterns in the area were considered. A complete exposure pathway has three components:

1. a source of chemicals that can be released into the environment
2. a route of contamination transported through soil, sediment, air or water
3. an exposure or contact point for humans or the environment

Potential sources of contamination are summarized as follows:

1. recovery well water discharge
2. creek and pond surface water
3. creek and pond sediments
4. air in the area of the creek and pond

Potentially exposed human and environmental receptors (plants and animals) are as follows:

1. persons trespassing on the site
2. persons residing or working downwind (to the north) of the site

3. aquatic life in the creek and pond
4. plants and animals living on the site or seasonally using the site

Identified potential human exposure routes included:

1. inadvertent ingestion of groundwater recovery well discharges (e.g., being splashed in the face), surface water (e.g., falling into the pond), and fish consumption
2. inhalation of volatile organic compounds from groundwater recovery well discharges and surface water (e.g., while fishing on or near the pond)
3. dermal absorption of contaminants from inadvertent exposure to recovered groundwater or surface water (e.g., falling into the pond)

Remedial action is generally warranted at a site when the calculated carcinogenic risk level exceed 10^{-6}, meaning that one additional person out of 1,000,000 is at risk of developing cancer. The summary of total potential carcinogenic risks (Table 1) shows that none of the exposure scenarios at this site present an unacceptable risk to human health.

The potential for health effects resulting from exposure to noncarcinogenic compounds is estimated by comparing an estimated daily dose to an acceptable level. If the ratio exceeds 1.0, there is a potential health risk associated with exposure to that particular chemical. The ratios can be added for exposures to multiple contaminants. The sum, known as a Hazard Index, is not a mathematical prediction of the severity of toxic effects, but rather a numerical indicator of the transition from acceptable to unacceptable levels. Table 2 presents a summary of the total potential Hazard Indices for the exposure scenarios described in the Remedial Investigation. Since none of the total Hazard Indices exceeds 1.0, there is no cause of concern for noncarcinogenic risk to human health at the Army Creek site.

ENVIRONMENTAL EXPOSURE

EPA conducted a survey of the aquatic life present in Army Pond which identified a very low number of species in the pond. In addition, 95 percent of those species found in the pond were pollution tolerant organisms, indicating poor water quality. Ambient Water Quality Criteria (AWQC) have been developed by EPA and DNREC and are of primary utility in assessing acute and chronic toxicity effects in aquatic organisms.

TABLE 1

SUMMARY OF TOTAL CARCINOGENIC RISKS

Media	Scenario	Age Group Exposed	
		Children 6-11 yrs	Adults 70-yr life span
Groundwater Recovery Well Discharges	Inadvertent ingestion	1.2x10E-8	5.3x10E-9
	Inhalation of organics leaving groundwater	7.2x10E-7	3.1x10E-7
	Dermal absorption	9.7x10E-7	9.2x10E-7
Sediment *	Inadvertent ingestion	4.1x10E-9	1.7x10E-9
Surface Water	Inadvertent ingestion	6.5x10E-9	2.9x10E-9
	Inhalation of organics leaving surface water	1.8x10E-7	7.6x10E-8
	Dermal absorption	6.0x10E-8	5.7x10E-7

* Sediment and surface water risks were calculated using the highest pollutant concentrations detected during sampling.

GLOSSARY

Administrative Record: An official compilation of documents, data, reports, and other information that is considered important to the status of and decisions made relative to a Superfund Site. The record is placed in the **information repository** to allow public access to the material.

Ambient Water Quality Criteria (AWQC): Based on scientific study, EPA and DNREC have established maximum contaminant levels allowable for ponds, streams, rivers, etc., that are protective of aquatic life. Standards developed for freshwater bodies are applicable at the Army Creek Site.

Applicable or Relevant and Appropriate Requirements (ARARs): The Federal and State requirements that a selected remedy must attain. These requirements may vary among sites and alternatives.

Cap: A layer of clay and/or synthetic materials placed over contaminated areas to reduce or eliminate the amount of precipitation that seeps through contaminated materials. By reducing the contamination that seeps through materials, the cap reduces the movement of contaminants from the site. Capping also prevents direct human contact with the contamination.

Comprehensive Environmental Response, Compensation and Liability Act, or Superfund: A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act. The Act created a Trust Fund, known as Superfund, to investigate and cleanup abandoned or uncontrolled hazardous waste sites.

Contaminant Plume: A column of contamination with measurable horizontal and vertical dimensions that is suspended in and moves with groundwater.

Groundwater: Water found beneath the earth's surface that fills pores between soil, sand, and gravel particles to the point of saturation. Groundwater often flows more slowly than surface water. When it occurs in sufficient quantity, ground water can be used as a water supply.

Groundwater Divide: Imaginary boundaries, either natural or man-made that separate the direction of groundwater movement.

Hazard Index: The ratio between the average daily dose of a toxicant received by a human population and the reference dose. The reference dose is an average daily lifetime dose believed to be without adverse effects in human populations.

Information Repository: A location where documents and data related to the Superfund project are placed to allow the public access to the material.

Inorganic Compound: A catch-all term that includes all compounds which do not fall within the definition of organic.

Leachate: A liquid that passed through wastes and contains some components of the wastes.

Monitoring: Ongoing collection of information about the environment that helps gauge the effectiveness of a cleanup action.

National Priorities List: EPA's list of the nation's top priority hazardous waste sites that are eligible to receive federal money for response under superfund.

Operable Unit: A portion of a Superfund site that has been conceptually separated from the rest of the site to allow for easier management.

Organic Compounds: Carbon compounds, such as solvents, oils and pesticides, which generally do not dissolve readily in water. Some organic compounds can cause cancer.

GLOSSARY

Present Worth: A term used to indicate the discounting of sums to be received in the future to their present value equivalent, or the amount which will accumulate to that sum if invested at prevailing interest rates.

Record of Decision (ROD): A legal document that describes the final remedial actions selected for a Superfund site, why the remedial actions were chosen and others not, how much they will cost, and how the public responded.

Recovery Well Network: A series of wells placed in line, close enough to each other so the slow-moving groundwater is captured. This prevents any contamination suspended in the groundwater from moving past these wells.

Remedial Investigation/Feasibility Study (RI/FS): A two-part study of a hazardous waste site that supports the selection of a remedial action for a site. The first part, the RI, identifies the nature and extent of contamination at the site. The second part, the FS, identifies and evaluates alternatives for addressing site contamination.

Source Control: A remedy that addresses contamination problems at their source. At the Army Creek site this refers to the landfill cap.

μg/L: Micrograms per liter, a concentration corresponding to a part per billion.

Volatile Organic Compounds: Organic compounds that vaporize easily.

GLOSSARY FOR ALTERNATIVE EVALUATION CRITERIA

Overall Protection of Human Health and the Environment: Whether the remedy provides adequate protection and describes how risks posed through each pathway are eliminated, reduced or controlled through treatment, engineering controls, or institutional controls.

Compliance with ARARs: Whether or not a remedy will meet all **Applicable or Relevant and Appropriate Requirements (ARARs)** of Federal and State Environmental Statutes and/or provides grounds for invoking a waiver. Whether or not the remedy complies with advisories, criteria and guidance that EPA and DNREC have agreed to follow.

Long-Term Effectiveness and Permanence: The ability of the remedy to maintain reliable protection of human health and the environment over time once the clean-up goals have been met.

Reduction of Toxicity, Mobility or Volume: The anticipated performance of the treatment technologies the remedy may employ.

Short Term Effectiveness: The period of time needed to achieve protection, and any adverse impacts on human health and the environment that may be posed during the construction and implementation, until clean-up goals are achieved.

Implementability: The technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular option.

Cost: The following costs are evaluated: estimated capital, operation and maintenance, and net present worth.

State Acceptance: This indicates whether, based on its review of the FS and the Proposed Plan, the State concurs with, opposes, or has no comment regarding the preferred alternative at the present time.

Community Acceptance: Will be assessed in the **Record of Decision** following a review of the public comments received on the **Administrative Record** and the Proposed Plan.

TABLE 2

SUMMARY OF TOTAL POTENTIAL HAZARD INDICES FOR NONCARCINOGENIC COMPOUNDS

Media	Scenario	Age Group Exposed	
		Children 6-11 yrs	Adults 70-yr life span
Groundwater Recovery Well Discharges	Inadvertent ingestion	.000015	.0000013
Sediment *	Inadvertent ingestion	.00036	.000031
Surface Water *	Inadvertent ingestion	.0008	.00069
Fish	Ingestion	NC	0.26

* Sediment and surface water risks were calculated using the highest pollutant concentrations detected during sampling.

NC These values could not be calculated due to a lack of sufficient information regarding average fresh fish consumption for children 6-11 years old.

Contaminant-specific maximum levels have been established for the protection of freshwater aquatic life. The following contaminants were found to exceed the AWQC for freshwater aquatic life set by EPA and DNREC in the surface water: cadmium, chromium, iron, mercury, and zinc (Table 3). There are three potential sources of surface water contamination:

1. recovered groundwater discharges to the surface water
2. leachate seeps from the Army Creek Landfill
3. offsite surface runoff

The average value for contaminants identified in the recovered groundwater discharges was computed. The only contaminant found to exceed AWQC in the discharge is iron (Table 3). This indicates that the source of cadmium, chromium, mercury and zinc is either the leachate seeps or runoff from the offsite drainage area.

The installation of the hydraulic barrier (cap) in accordance with the first Record of Decision will reduce the leaching of contaminants from and modify the flow of runoff in the area of the landfill surface (first operable unit) and reducing the iron levels in the recovery well discharge to the pond (subject of second operable unit) is expected to reduce the concentration of contaminants in the surface water to below the AWQC for the protection of the aquatic environment.

Actual or threatened releases of hazardous substances from this site, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to the environment.

SUMMARY OF REMEDIAL ALTERNATIVES

The Remedial Investigation established that neither the surface water nor the recovery well discharges present an unacceptable risk to human health or welfare. Therefore, the remedial objective of operable unit two is to mitigate unacceptable risks to the aquatic environment associated with the elevated levels of iron found in the recovered groundwater discharges.

Four remedial alternatives were identified in the Feasibility Study as possible response actions for providing a level of water quality in the recovery well discharges that is protective of the aquatic environment. The four remedial alternatives considered for the second operable unit are:

TABLE 3

ENVIRONMENTAL CHEMICALS OF CONCERN

Chemical	Range of Environmental Concern	Reason for Concern
From Recovery Well Discharge		
Iron	488-34,300 ug/L	Exceeds federal and state AWQC (chronic) of 1,000 ug/L
From Surface Water		
Cadmium	34-38 ug/L	Exceeds federal and state AWQC of 1.1 ug/L (chronic) and 3.9 ug/L (acute)
Chromium (Total)	57-150 ug/L	Possible exceedance of federal and state AWQC of 11 ug/L (chronic) and 16 ug/L (acute) as chromium (VI)
Iron	980-2,860 ug/L	Exceeds federal and state AWQC (chronic) of 1,000 ug/L
Mercury	ND-0.2 ug/L	Exceeds federal and state AWQC (chronic) of 0.012 ug/L
Zinc	25-640 ug/L	Exceeds federal and state AWQC of 106 ug/L (chronic) and 117 ug/L (acute)

1. No Action
2. Conventional Water Treatment (<5,000 μg/L iron)
3. Modified Conventional Water Treatment ($\leq$1,000 μg/L iron)
4. Enhanced Conventional Water Treatment (<1,000 μg/L iron)

These alternatives were evaluated against the following criteria:

1. **Overall Protection of Human Health and the Environment**
2. **Compliance with All Applicable or Relevant and Appropriate Requirements (ARARs)**
3. **Long-Term Effectiveness and Permanence**
4. **Reduction of Toxicity, Mobility or Volume**
5. **Short Term Effectiveness**
6. **Implementability**
7. **Cost**
8. **State Acceptance**
9. **Community Acceptance**

Except for the "No Action" alternative, all of the alternatives now being considered for the site include the construction and operation of a physical/chemical water treatment plant to remove iron from the recovered groundwater prior to discharge into Army Pond. Sludge generated by the treatment process will be sampled and disposed of appropriately. Each alternative also includes long-term groundwater monitoring in compliance with requirements of RCRA Subpart F, 40 CFR 264.100, and a wetland monitoring and evaluation plan consistent with the Delaware Sand and Gravel Record of Decision. The Army Pond habitat will be managed during groundwater treatment and for a period of five (5) years after cessation of groundwater treatment to ensure the dominance of species beneficial to fish and wildlife, and to control less desirable reed grasses (*Phragmites* spp.). These monitoring activities will be conducted to gauge the effectiveness of the selected remedy.

Alternative #1 - No Action

Capital Cost:	0*
Annual Operation and Maintenance (O&M) Costs:	0*
Present Worth:	0*
Months to implement:	None

*** All cost and implementation times are estimated**

The National Contingency Plan (NCP) requires that EPA consider a "No Action" alternative for each and every site to establish a baseline for comparison to alternatives that do require action. The first operable unit Record of Decision requires that contaminated groundwater be extracted from the aquifer adjacent to the site. Groundwater is currently recovered from the local aquifer by a series of wells which comprise a recovery well network. The calculated average concentration of iron being discharged from the recovery well network to Army Pond is in the range of 6,000 to 12,000 μg/L. This is well above the ambient water quality criteria of 1,000 μg/L considered by EPA and DNREC to be protective of the aquatic environment.

Alternative #2 - Conventional Water Treatment

Capitol Cost:	$1,874,250*
Annual O&M Cost:	260,860*
Present Worth:	3,900,000*
Months to implement:	14*

The recovered groundwater would be passed through a conventional precipitation water treatment plant. This system involves a combination of operations including aeration (cascade aeration), precipitation (pH adjustment and polymer addition), and filtration (sand filtration). Support processes include sludge thickening and dewatering, and offsite sludge disposal.

This plant is anticipated to reduce the iron concentration in the recovered groundwater in the range of 6,000 to 12,000 μg/L to less than 5,000 μg/L, but not to the 1,000 μg/L target level. The treatment plant will reduce the volume of iron in the recovered groundwater discharges by reducing the concentration. The mobility and toxicity to aquatic life associated with iron in the recovered groundwater at the site would be reduced slightly.

Alternative #3 - Modified Conventional Water Treatment

Capital Cost:	$2,710,000*
Annual O&M Costs:	294,000*
Present Worth:	4,900,000*
Months to implement:	14*

In order to ensure achieving the 1,000 μg/L remedial action objective for recovered groundwater discharged to Army Pond, modifications to the Conventional Water Treatment (Alternative 2) can be incorporated. This "modified" conventional treatment plant is Alternative 3. Preliminary engineering evaluations indicate that these modification should satisfy the objectives; however, other modifications to the conventional precipitation water treatment plant might be equally effective.

The recovered groundwater would be passed through a modified conventional precipitation water treatment plant. This system involves a combination of operations including an influent flow equalization chamber, aeration (cascade aeration with a blower), precipitation (pH adjustment and polymer addition), sedimentation (settling and thickening chamber), and granular media filtration. Support processes include sludge thickening and dewatering, and offsite sludge disposal.

By meeting the contaminant-specific ARAR (iron AWQC of 1,000 μg/L), the discharge from the treatment plant would be protective of the aquatic environment. The treatment plant would reduce the volume of iron being discharged into Army Pond and the mobility would also be reduced. The toxicity to aquatic life associated with iron in the recovered groundwater would be eliminated.

Alternative #4 - Enhanced Conventional Water Treatment

Capital Cost:	$3,344,000*
Annual O&M Costs:	351,000*
Present Worth:	6,000,000*
Months to implement:	14*

The "Enhanced" conventional water treatment plant employs even further modification to the conventional precipitation water treatment plant (Alternative 2). Preliminary engineering evaluations indicate that the Enhanced Conventional Water Treatment plant would achieve iron concentrations far below the remedial action objective of 1,000 μg/L required to be protective of the aquatic environment.

The recovered groundwater would be passed through an Enhanced Conventional precipitation water treatment plant. This system involves a combination of operations including an influent flow equalization chamber, aeration (high velocity-nozzle aerator), precipitation (pH adjustment and polymer addition), sedimentation (settling and thickening chamber), granular media filtration and an catalytic/ion exchange polisher (using "green sand" zeolite). Support processes include sludge thickening and dewatering, and offsite sludge disposal.

By meeting the contaminant-specific ARAR (iron AWQC of 1,000 μg/L), the discharge from the treatment plant would be protective of the aquatic environment. The treatment plant would reduce the volume of iron being discharged into Army Pond and the mobility would also be reduced. The toxicity to aquatic life associated with iron in the recovered groundwater would be eliminated.

*** All cost and implementation times are estimated**

RATIONALE OF EPA'S PREFERENCE FOR ALTERNATIVE #3

The "No Action" alternative will not meet the remedial action objectives for the Army Creek Site. It will not be protective of the environment and will not meet ARARs, and is therefore not considered an acceptable remedial action. Alternative 2, Conventional Water Treatment, will achieve a portion of the remedial action objectives for the site, but will not comply fully with ARARs. Since this alternative will not meet the effluent target of 1,000 $\mu g/L$ for iron, it will not protect the environment by achieving the Ambient Water Quality Criteria in Army Creek. Alternative 2 is therefore not considered an acceptable remedial action.

Alternative 3, Modified Conventional Water Treatment, and Alternative 4, Enhanced Conventional Water Treatment, will both be protective of the environment, and will both meet ARARs. Both alternatives use treatment to reduce the toxicity, mobility, and volume of iron in recovered groundwater, and the two alternatives are equivalent in terms of implementability, overall protection, long-term effectiveness, and short-term effectiveness. The green sand unit incorporated into Alternative 4 will allow that option to achieve remedial action objectives over a wider range of possible site conditions. However, the Army Creek Landfill has been monitored since 1972, giving the Agency a high degree of confidence that the site conditions are known. It is highly unlikely that iron concentrations in the water being extracted by the recovery well network will increase to a level that Alternative 3 could not reduce to 1,000 $\mu g/L$.

The enhanced flexibility offered by Alternative 4 is achieved at a higher cost than Alternative 3. Capital cost is estimated to be about 23 percent greater and annual O&M is estimated to be about 19 percent greater. The present worth value of Alternative 4 is estimated to be about 22 percent greater than the present worth value of Alternative 3.

Balanced against the fact that Alternative 3 is protective of the environment and does meet the remedial objectives, EPA does not believe the more costly treatment plant (Alternative 4) is justified. Therefore, Alternative 3 is EPA's preferred remedial alternative.

COMMUNITY ROLE IN THE SELECTION PROCESS

This Proposed Plan is being distributed to solicit public comment regarding the proposed remedial alternatives to provide treatment to the water being extracted by the recovery well network prior to discharge to the Army Pond. EPA and the State of Delaware rely on public input so that the remedy selected for each Superfund site meets the needs and concerns of the local community. To assure that the community's concerns are being addressed, a public comment period lasting at least 30 days and a public meeting will be held in the community. It is important to note that although EPA has selected a preferred alternative, no final decision has been made. Comments will be summarized and responses provided in the Responsiveness Summary section of the ROD.

PUBLIC COMMENT PERIOD AND PUBLIC MEETING

The public comment period will run from March 18 to April 18, 1990. Written comments, questions, and requests for information can be sent to:

Mr. Eric Newman, 3HW25
Remedial Project Manager
U.S. Environmental Protection Agency
Region III
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-9238

Arrangements have been made for a public meeting to be held on March 26, 1990, at 7:00 p.m. at William Penn High School (cafeteria), 318 Basin Rd., New Castle, DE. Questions regarding the public meeting should be directed to:

Ms. Leanne Nurse, 3PA00
Public Information Officer
U.S. Environmental Protection Agency
Region III
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-9238