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Office of
Emergency and
Remedial Response

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September 1984

EPA

Superfund Record of Decision:

Spence Farm Site, NJ

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

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4. TITLE AND SUBTITLE SUPERFUND RECORD OF DECISION: Spence Farm Site, NJ		5. REPORT DATE 09/30/84
		6. PERFORMING ORGANIZATION CODE
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		14. SPONSORING AGENCY CODE 800/00

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The Spence Farm is located approximately 1.5 miles northeast of the Town of New Egypt in Plumsted Township, Ocean County, New Jersey. The total area investigated is approximately 83 acres, of which 30 acres are stream valleys and swamp lands. Waste disposal occurred at scattered locations throughout a 20 acre low-lying wooded area adjacent to two adjoining tributaries to Crosswicks Creek. Dumping of hazardous waste in drums, bulk and free-flowing liquid form occurred during 1961 to 1967. Contaminant found at the site included organic and inorganic compounds. The organic compounds found onsite are specialty and research chemicals and are not priority pollutants.

The cost-effective remedial alternative selected for this site includes: removal and off-site disposal of all drums and lab packs to a RCRA facility; excavation and off-site disposal of visibly contaminated soil to a RCRA facility; sediment control during excavation and sampling efforts, and monitoring of on-site wells, annually, for a five year period. Capital cost for the selected alternative is estimated to be $845,500 and the five-year O&M ground water monitoring costs are estimated to be $95,300.

Key Words: Direct Contact, Excavation, Ground Water Contamination, NDD, ROD

17. KEY WORDS AND DOCUMENT ANALYSIS

17a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Record of Decision: Site Name: Spence Farm Site, NJ Contaminated media: gw, Soil Key Contaminants: solvents, mercury, zinc, arsenic, chromium		

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ROD ISSUES ABSTRACT

Site: Spence Farm, New Jersey

Region: II

AA, OSWER
Briefing: September 27, 1984

SITE DESCRIPTION

The Spence Farm is located approximately 1.5 miles northeast of the Town of New Egypt in Plumsted Township, Ocean County, New Jersey. The total area investigated is approximately 83 acres, of which 30 acres are stream valleys and swamp lands. Waste disposal occurred at scattered locations throughout a 20 acre low-lying wooded area adjacent to two adjoining tributaries to Crosswicks Creek. Dumping of hazardous wastes in drums, bulk and free-flowing liquid form occurred during 1961 to 1967. Contaminants found at the site included organic and inorganic compounds. The organic compounds found onsite are specialty and research chemicals and are not priority pollutants.

SELECTED ALTERNATIVE

The cost-effective remedial alternative selected for this site includes: removal and off-site disposal of all drums and lab packs to a RCRA facility; excavation and off-site disposal of visibly contaminated soil to a RCRA facility; sediment control during excavation and sampling efforts, and monitoring of on-site wells, annually, for a five year period. Capital cost for the selected alternative is estimated to be $845,500 and the five-year O&M ground water monitoring costs are estimated to be $95,300.

ISSUES AND RESOLUTIONS

1. This ROD authorizes the Phase I remedy of limited excavation to eliminate the threat of direct contact from the site. The extent of contamination and the potential for ground water contamination will be determined during the Phase I remedial action. A supplemental ROD for site closure and additional remedial actions, if necessary, will be initiated upon the completion of Phase I.

KEY WORDS

- Direct Contact
- Excavation
- Ground Water Contamination

ISSUES AND RESOLUTIONS	KEY WORDS
2. A decision was made to approve a ROD for this site instead of an NDD because there were no substantive areas for negotiation and the cost of the remedy is relatively low.	. NDD . ROD

Record of Decision
Remedial Alternative Selection

Site

Spence Farm, Plumsted, New Jersey

Documents Reviewed

I am basing my decision primarily on the following documents describing the analysis of cost-effectiveness of remedial alternatives for the Spence Farm site.

- Immediate Removal of Contained Material Spence Farm, Elson T. Killam Associates, Inc., May 1984.

- Spence Farm Remedial Investigation Report and Feasibility Study (RI/FS), Elson T. Killam Associates, Inc., August 1984.

  Staff summaries and recommendations.

  Responsiveness Summary dated September 1984.

Description of Selected Remedy

- Removal and off-site disposal of all drums and lab packs at a RCRA 264 facility
- Excavation and off-site disposal visibly of contaminated soil at a RCRA 264 facility
- Sediment control during excavation and sampling efforts.
- Monitor on site wells, annually, for a five year period

Declarations

Consistent with the Comprehensive Environmental Response nsation and Liability Act of 1980 (CERCLA), and the National ngency Plan (40 CFR Part 300), I have determined that the al of containerized waste and contaminated soil to a secure hazardous waste facility visibly to be the selected remedial alternative for the Spence Farm site. It has been determined that the implementation of this alternative will provide adequate protection of public health, welfare and the environment. The State of New Jersey has been consulted and agrees with the proposed remedy.

I have also determined that the action being taken is appropriate when balanced against the availability of Trust Fund monies for use at other sites. In addition, the removal of contaminated materials to a secure hazardous waste facility is more cost-effective than other remedial action alternatives, and is necessary to protect public health, welfare, and the environment.

The State and EPA will include additional samplir o determine the potential contact of contamination with ound water. A supplemental Record of Decision will be prepared for approval of the future remedial actions.

9/30/84
Date

Lee M. Thomas
Assistant Administrator
Office of Solid Waste and Emergency Response

Summary of Remedial Alternative Selection

Spence Farm Site
Plumsted, New Jersey

Site Location and Description

The Spence Farm site is located approximately 1.5 miles northeast of the Town of New Egypt in Plumsted Township, Ocean County, New Jersey. The site is approximately 700 feet north of New Egypt-Lakewood Road (County Route 528) and 4,000 feet east of Moorehouse Road and occupies portions of Lots 10, 14 and 15, Block 74 in Plumsted Township. Waste disposal occurred at scattered locations in a 20 acre low-lying wooded area adjacent to two adjoining tributaries to Crosswicks Creek. A vicinity map and site location map are presented in Figures 1 and 2.

The area consists of gently rolling farmlands which range in elevation from 125 to 150 feet above mean sea level. The [illegible] are cut by forested and heavily overgrown stream valleys form a dendritic pattern The total area investigated is imately 83 acres of which approximately 30 acres are stream s and swamp lands.

The drainage area for the stream system crossing the site is approximately 0.48 square miles and is situated within the Delaware River Basin. Downstream from the site the stream joins another small stream which flows west into Crosswicks Creek in New Egypt.

The Spence Farm site is located in the Atlantic Coastal Plain which covers portions of eastern and central New Jersey. This unconsolidated geological formation overlies bedrock comprised of early Paleozoic to Precambrian metamorphic geniss and schist. The unconsolidated beds generally strike northeast-southwest, although shallower units strike in a more easterly direction. [illegible]its dip and thicken toward the southeast at dip angles [illegible]g from about 10 feet per mile at the top to approximately [illegible] feet per mile at the bottom of the unconsolidated sequence. Many of the units vary in composition from where they outcrop to downdip locations.

The Spence Farm site is in the outcrop area of the Kirkwood Formation, one of the major aquifers in the Coastal Plain sequence. Two lithologic members make up the Kirkwood; an upper unit consisting of light gray to yellow-brown, fine quartz sand and a lower unit consisting of dark brown, fine to very fine sand and silt containing some glauconite. Muscovite, ilmentite and lignite are common minerals to both members. The Kirkwood Formation, which ranges in thickness from 40 to 100 feet in the outcrop area, has an average dip of 22 feet per mile in the southeastern direction and strikes N 60°E. Downdip, this formation thickens to over 500 feet at the coast. The Kirkwood aquifers are the

most heavily developed of the Coastal Plain aquifers in Ocean County.

A gradual formational contact exists between the finer sands of the Kirkwood Formation and the coarser sands of the underlying Manasquan Formation, the target depth for termination of monitor wells in the remedial investigation. Even though both formations have geologic similarities, noticeable differences, such as the larger grain size, increased glauconite content and the fossiliferous and calcareous nature of the sediments, distinquishes the Manasquan from the Kirkwood. Additionally, the Manasquan is generally considered an aquitard even though in localized areas the upper unit of the Manasquan may be more permeable than the Kirkwood.

Beneath the Manasquan Formation are the Vincentown Formation, Hornerstown Sand, Red Bank Sand, Navashink Formation and Mt. Laurel-Wenonah Formation. The Vincentown and Mt. Laurel-Wenonah Formations are considered major aquifers.

Site History

Spence Farm was historically an agricultural/woodland site. From approximately 1961 to 1967, portions of the site were used for the dumping of hazardous wastes in drums, bulk and free-flowing liquid form. In 1980 the New Jersey Department of Environmental Protection, with assistance from Ocean County Officials, identified Spence Farm as a hazardous waste site. Currently, the majority of the Spence Farm site is used for agricultural purposes while some steeper sloped, less accessible areas remain woodland.

Previous site studies included soil borings, monitor-well installations, and soil, ground water, surface water and air monitoring. Soil borings consisted of drilling 11 wells to depths of 2.5 to 37 feet. Monitor wells were then installed at these sites between June 5, 1980 and September 8, 1980 and were constructed with 2-inch diameter PVC casing and screen.

A single sample of waste found at the Spence Farm site was taken on April 17, 1980 by the NJDEP. The analysis of this sample indicated the presence of 2,4 dichlorophenol.

A limited amount of ground water, surface water and air samples were collected at the Spence Farm site in 1980. The analytical data generated from these samples was used to expand the data base for the site.

A Remedial Action Master Plan (RAMP) was completed for the Spence Farm site in March 1982. Subsequently, the NJDEP filed a Cooperative Agreement application with the USEPA to cover the costs to complete a detailed RI/FS for the site. In 1982, $288,000 of Federal funds were approved for the Spence Farm RI/FS.

Upon approval of Federal monies the State of New Jersey proceeded to procure a consultant to undertake the work necessary to complete the RI/FS. Elson T. Killam Associates was selected as the State's consultant. Work on the RI/FS was initiated in November 1983. A draft RI/FS report was completed in August

C... :t Site Status

The investigation program undertaken as part of the remedial investigation phase included the following activities:

1. An electromagnetic induction terrain conductivity survey of the site
2. An emanation flux detection survey
3. Construction and sampling of 16 monitoring wells
4. Excavation of 15 test pits and collection of 9 soil and 6 waste samples
5. Collection of 1 sediment and 3 surface water samples
6. Collection of 6 potable well samples

he results of these remedial investigative activities te that:

astes were disposed of at the site by surface dumping rather than by burial;

- Most waste containers were opened intentionally or have rusted and the contents dispersed;

- Principal contamination is found in waste containers and soils, with limited contamination of ground water and surface water;

- Most organic pollutants found were not priority pollutants (only minor concentrations of priority pollutants were found); and

eview of available data on toxicity for these non-priority rganic pollutants indicates that the compounds with the reatest potential for adverse health and environmental effects were found in soil rather than in water.

A more detailed discussion of the remedial investigative results is noted below:

Ground Water Sampling and Results

All sixteen newly constructed monitor wells were sampled as part of the investigative program. All organic compounds detected were generally in the concentration range of from 10 to 50 ppb. Two volatile organic compounds were detected, neither of which

are priority pollutants. No acid-extractable organic[illegible] re found in any of the samples. Of the base extractable [illegible] anics detected, only two are priority pollutants; di-n-octyl [illegible]thalate being detected at MW-1S, 1D (Dup) and MW-8 and bis (2-[illegible]hylhexyl) phthalate being detected at MW-3S, MW-4D, and MW-6S. As a result of the random dumping at this site the organic compounds identified in the ground water samples are almost entirely different from those compounds found in the test pit, split-spoon and stream-sediment samples.

There was also a significant change in the concentrations of inorganic priority pollutant compounds. Though present in almost all ground water samples, very low concentrations of mercury (approximately 0.0004 mg/l) and zinc (approximately 0.10 mg/l) were the only inorganic compounds found aside from three exceptions. Phenols were detected at MW-5, arsenic at MW-8 and chromium at MW-9. These occurrences of contamination at MW-5, the site upgradient well, and MW-8, which was located in an area thought to be uncontaminated, were not anticipated and appear to be the results of high background levels.

The six potable water samples that were collected from the potable wells at the six private homes within one-half mile radius were found to be free of organic contamination. The only compounds detected were mercury and zinc in concentrations approximately equal to those in the ground water and surface water samples. Of the two, mercury was found in all potable samples.

Surface Water Sampling and Results

The flows of streams on the Spence Farm site are partially maintained by the discharge of ground water near and at the stream channels. As such, surface water throughout the site is the recipient of water first entering the cycle as recharge. Thus, the three surface water samples are important for defining the water quality at the end-point of its underground migration and also at the point where the surface water eventually leaves the study area.

The results of the chemical analyses i[illegible]ate that the surface contamination water at all three [illegible]tions sampled is virtually free of priority pollutants. Each sample contained mercury and zinc at concentrations well below drinking water standards. The sample from the stream at the site boundary, SW-2, had the lowest levels of both elements. The same sample contained no detectable organic compounds even though the sample of the tributary to the main stream, SW-1, contained up to 25 ppm of 1-chlorodecane and the sample at the main stream at the site boundary, SW-3, contained 10 ppm methylbenzene; both base-extractable organics. Methylbenzene was the only compound of the four found in the surface water which has not been identified in any of the soil and water samples.

Test Pit Soil Sampling and Results

The soil samples obtained in the test pits contained the highest concentrations of contaminants found on the Spence Farm site. These samples are considered to be adjacent to the source as they were collected at depths not exceeding 5 feet below grade. In a majority of the test pits, contamination by individual organic compounds ranged from a low of 11 ug/kg (ppb) to a high of 22,000 ug/kg and generally averaged about 1500 ug/kg. Similarly, individual inorganic compounds ranged from 0.01 ug/g to 220 ug/g with an average of about 10 ug/g. Two observations stand out from the test pit results. First is the near absence of volatile organics. Methylene chloride, which was found only at Test Pit 9, was the only volatile organic compound detected that is on the list of priority pollutants. Methyl-oxirane was found at Test Pits 4, 7, and 11 and alkylethylester carbonic acid was found at Test Pits 7 and 9. These two compounds were identified through a library search of 40 non-priority pollutant peaks shown by the mass spectrometer analysis and were the only volatile organics detected.

The second observation is the general absence of organic ity pollutants in the test pit soil samples, apart from the ide exception noted earlier. Of the priority pollutant ic contaminants, methylene chloride was the only compound detected. In addition, 60 organic compounds were detected either through acid or base extraction techniques and identified through a library search. The concentrations of compounds identified in this manner are only estimated.

The results of a soil sample from Test Pit 2A, located near the main disposal area, was an exception to the other soil sample results. Twenty-one volatile organics, seven from the priority pollutant list and fourteen from the library search, were detected in this sample in individual concentrations ranging from 15 ug/kg to 2800 ug/kg and averaging about 500 ug/kg. Acid and base ctable organics were found in concentrations ranging from 0 ug/kg to 1,300,000 ug/kg. All 20 acid and base extractable unds were identified through the library search and only 3 were found at other test pit locations. Inorganic compounds were detected at Test Pit 2A in concentrations from 0.31 ug/g to 350 ug/g.

In summary, Test Pit 2A turned up the most heavily contaminated soil. There is a general absence of priority pollutants and volatile organics in the test pit soil samples. Those organics which have been detected and identified with the library search are rarely found at more than one test-pit location.

Split Spoon Soil Sampling and Results

After the test pit samples, the split-spoon samples contained the largest concentrations of contamination. The soil zone sampled by split-spoon is considered the next step removed from the initial contaminant sources. Shortly after the start of dumping at Spence Farm, the saturated soils likely retained or adsorbed a portion of the contaminants being carried by the ground water. However, the ground water now has significantly lower contaminant concentrations than the soils. Therefore, these soils may be acting as secondary sources of contamination if the ground water is able to leach compounds from the soil matrix.

The split-spoon samples were similar to the test pit samples in that of the thirty seven organic compounds identified, only three were priority pollutants. Methylene chloride, the only volatile organic priority pollutant, was detected in all split-spoon samples. The other two priority pollutants, found only at Site MW-1, were base extractable organics. Although five additional volatile organic compounds were identified with the library search, there was a general absence of these compounds compared to the relatively large number of acid and base extractable compounds found. Also, the highest levels of contamination were found at MW-1 near the main waste disposal area. In general, individual organic compounds were detected in concentrations ranging from 6 ug/kg to 12,000 ug/kg. Inorganic compounds included on the priority pollutant list were found at all locations. The concentrations of inorganic compounds ranged from 0.01 ug/g to 32 ug/g.

The most notable difference between the split-spoon samples and the test pit samples is that, with the exception of a dozen or so compounds, entirely different organics have been detected in the two sample types. Also worth noting is the unexpected presence of contamination in a deep sample from MW-8, which was drilled across the stream from the known disposal areas and in a location thought to be uncontaminated.

Stream Sediment Sampling and Results

One stream-sediment sample was obtained where the main stream flows out of the study area. The chemical analysis showed this sample to be very similar to the split-spoon samples. Namely, methylene chloride was the only priority pollutant and only volatile organic compound detected in the sample. Also, the types and distribution of acid and base extractable organic compounds and inorganic compounds were about the same.

Discussion of Remedial Investigation Results

The main factor governing the quality of soil and water at the site is that there is no major accumulation of wastes acting as a single source of contamination. Thus, there is no discrete contam-

inant plume to locate and quantify in terms of contaminant concentrations and rate of migration. The situation at Spence Farm is one of random dumping over the entire wooded area of the site. Table 1 includes a summary of waste materials identified on-site during remedial investigative activities.

Of the many compounds which have been identified, few are found in more than one sample of a particular sample type while fewer still are in different types of samples. Though it is expected that some degree of breakdown has occurred in the organic compounds, this phenomenon does not entirely explain why certain compounds are found in the shallow soils of the test pits, different compounds in the split-spoon samples and still different compounds in the ground water.

Although volatile organics are the most mobile organic compounds in ground water, they were not found in significant quantity at this site. This implies that either these compounds were not disposed of or that the dumping practices terminated some time ago and most of the volatiles have had time to dissipate.

onversely, almost all of the numerous organic compounds ed at the site were identified through the acid or base- action process. The fact that these processes are required to remove the compounds from the soil matrix indicates that, under neutral conditions, moving ground-water will leach out only minor amounts of these tightly held compounds. The stability of these organic compounds in the soils is borne out by the relatively large number and concentration of compounds detected in the soil samples while the ground water sample contained only a few organics in low concentrations.

Of the organic compounds found on-site, few are priority pollutants. This means that most of the compounds used in this evaluation were identified through a library search of 40 non-priority pollutants peaks shown by the mass spectrometer analysis estimated the associated concentrations.

organic compounds were the only contaminants that were to the various types of samples. This indicates a general in inorganic compounds as water moves further from the source compounds. Anomalous inorganic compounds were found in three ground water samples. These elements might be expected in on-site or downgradient samples considering the concentrations found in the soils on-site. However, on-site sources at Spence Farm cannot be the source of mercury and zinc in the upgradient monitor well, the upstream surface-water sample and potable water samples. Furthermore, these concentrations are within the background levels for this area, which tend to be unusually high.

In summary, although there are locations where relatively high concentrations of contamination have been found in the soils, only a few compounds having low concentrations have been detected in the ground water. It is in this mobile medium that contamination is of greatest concern. Although a large portion of the ground water discharges into the surface streams, some leaves the study area as underflow and a portion probably moves downward as leakage to the Vincentown Formation.

Table 1 includes a summary of waste materials identified on-site during remedial investigative activities. Table 2 includes the results of all analytical sampling data obtained during remedial investigative activities.

The current condition of scattered drums, lab packs and surface waste material pose a serious threat to the public and the environment. The priority pollutant contamination contained in these items provides a potential for harm for those who come in direct contact with these materials. Detrimental impacts to the local environment may also result from the release of contaminants from those containers currently intact. The migration of contaminants into local ground water and surface water could seriously harm these resources. Therefore, in order to prevent the threat posed by the on-site waste material it is recommended that these materials be removed to a secure hazardous waste treatment facility.

The focus of soil removal is on those species which are priority pollutants or which are listed in Subpart D, Section 3001 of the Resource Conservation and Recovery Act (RCRA). Potential criteria for removal include:

- An order of magnitude above detection limit for individual species using EPA Methods 624 and 625 (detected limit approximately 10 ppb)
- A level of 500 ppb in soil of any single volatile species, based on ten times the NJDEP water quality criteria
- A level of 1 ppm in soil of total priority pollutants and RCRA Section 3001 pollutants

Initial estimates of the extent of soil removal under each criterion can be based on results of remedial investigaion soil analyses. The most stringent criterion (ten times detection limit or approximately 100 ppb for individual pollutants) would require excavation and reburial of material at depths ranging from 26 feet (Well No. 9) to 42 feet (Well No. 8). It is estimated that the resulting volume of excavation would be approximately 373,000 cubic yards, with 58,000 cubic yards for disposal.

For the second approach, based on 500 ppb of any pollutant (ten times the NJDEP criteria), the levels of excavation would be similar, that is, 373,000 CY excavated and 58,000 removed for disposal.

For the third possible crierion, i.e., 1 mg/kg of total RCRA Section 3001 pollutants, the extent of removal would be much reduced based on data resulting from the remedial investigation. Only the monitoring Well No. 1 soil sample (1' depth) showed total RCRA pollutants in excess of this criterion. Therefore, approximately 1,000 cubic yards would require removal under this criterion.

Alternatives Evaluation

After assessing the priority pollutant and non-priority pollutant data generated during the remedial investigation activities, it can be seen that no surface water or ground water quality criteria are violated as a result of waste disposal at the Spence site. The control objectives are first to limit or [illegible]liminate pollutant migration from soil erosion and surface [illegible] and second, to limit or eliminate direct contact. Because [illegible]xotic nature of the non-priority organic contaminants a [illegible] control objective could not be developed.

[illegible]he initial screening of alternatives can be done based on cost, effectiveness and acceptable engineering practice. The most significant pathways with the potential for adverse impacts on public health and the environment are first, to limit or eliminate pollutant migration and second, to eliminate direct contact. The candidate remedial actions identified in the National Contingency Plan are presented in Table 2.

The screening of remedial alternatives developed in response to the results of the field investigation indicates that remedial action will be necessary to mitigate the threat to public health, welfare or the environment. Source control actions which would les[illegible] the migration of stream sediment and measures to eliminate d[illegible]ontact will be required. For this reason the "No Action" a[illegible]ive was not considered in the detailed evaluation of alternatives.

SEE INSERT A.

The following remedial action alternatives were developed for a more detailed analysis of el8ectiveness and cost.

INSERT AT A.

The alternative of closing the site in accordance w[illegible] RCRA, without the removal of any waste off-site for dis[illegible]al, was eliminated during the initial screening of alternatives. This alternative did not significantly lessen the migration [illegible] contamination through ground water already in contact with so[illegible]e materials. In addition, the scattered disposal of drum[illegible] and lab packs would require the extensive capping of the site. However, the discrete removal of the drums, lab packs, and visibly contaminated soils would be significantly lower in cost, as well as more environmentally secure, and will facilitate capping the remaining contaminated soils.

INITIALS

Alternative 1 - Waste and soil removal, dam and pond for sediment control, fencing and direct access control and ground water monitoring.

Alternative 2 - Waste and soil removal, berms along stream for sediment control, fencing and ground water monitoring.

Alternative 3 - Waste and soil removal, berms along stream and site perimeter, fencing and ground water monitoring.

Alternative 4 - Waste and soil removal, site regrading and surface restoration, berm along site perimeter, and ground water monitoring.

Alternative 5 - Removal of both waste and contaminated soil, and site restoration.

Alternative 6 - Construction of on-site landfill to RCRA and NJDEP landfill specifications, site restoration and, ground water monitoring.

The cost-effective alternative is defined as the lowest alternative that is technologically feasible and reliable which effectively mitigates damage to and provides adequate protection of public health, welfare and the environment.

The following evaluation of the six remedial action alternatives will consider their present worth cost as well as their effectiveness in controlling direct contact and sediment migration.

Alternative #1: This alternative would include removal of contaminated waste and soil from the site and the construction of a permanent dam across the stream below the perimeter of the site approximately 560 feet downstream of the confluence of the two streams flowing through the site, as shown in Figure 3.

The total drainage area of these streams is approximately [illegible] acres. Designing the basin to contain a 100 year storm event would require the construction of a dam 150 feet wide and approximately 10 feet high. The pond created during a 100 year storm event would have a volume of approximately 685,000 ft^3 and depth of approximately 5 feet at the dam. The basin will have an emergency overflow riser pipe and will be dewatered by the use of subsurface drains.

The effects of this dam will only be realized during storm events when a pond will be created as a result of the excess inflow entering the basin. The area behind the dam will be relatively calm where the sediment transported by the stream will settle out. After the storm event occurs, the level behind the dam will slowly drain. Preliminary calculations indicate a volume of approximately 61,000 ft^3 of soil will accumulate annually. Therefore, the periodic excavation of this sediment will be required.

The sediment yield of 61,000 ft^3 will not all be delivered to the dam. For sandy soils, approximately 18 percent of the sediment yield will occur at the dam, with the remainder being deposited upstream of the pond area. Therefore, the annual sediment yield will be approximately 11,000 ft^3, or 400 CY. Removal of sediments is recommended every 15 years.

Alternative #2: This alternative includes the removal of contaminated waste and soil from the site as well as the construction of berms along the banks of the streams flowing through the site. These berms would prevent the surface runoff passing through the site from carrying contaminated soil into the stream. The upgradient of the berm will be graded so that the surface runoff will be directed towards a sediment basin where the contaminated soil will settle out.

Approximately 3,600 linear feet of berms would be required to isolate the stream as it flows through the site as shown in Figure 4. The total drainage area tributary to and including the site is approximately 120 acres. The berm on the south bank would have tributary to it a drainage area of approximately 25 acres while the berm on the north bank would have approximately 95 tributary acres. Designing the respective basins (north and south) to withhold a 100 year storm event would require basins with volumes of approximately 220,000 ft^3 and 46,000 ft^3 respectively. Each basin would be designed with an emergency overflow riser pipe and will be dewatered by the use of subsurface drains.

The effects of the berm will be to prevent the contaminated soil from entering the stream and leaving the site. Preliminary calculations indicate that the basins on the north side of the stream will remove annually approximately 3,600 ft^3 of soil. The south side basin will annually remove approximately an additional 1,080 ft^3 of soil. Periodic excavation of this sediment every 15 years is recommended.

Alternative #3:

This alternative is similar to alternative 2 with the addition of a second system of berms around the perimeter of the site as indicated in Figure 5.

The addition of the perimeter would prevent upland runoff from flowing over the site, by directing it to a point further downstream. This alternative would require approximately 6800 linear feet of smaller berms to isolate the site. This is in addition to the approximately 3,600 linear feet of the berms required to isolate the stream as it flows through the site. Therefore, the total drainage area tributary to the site would be greatly reduced. The north side berm would have a drainage area of approximately twenty seven acres. The south side would have a drainage area of approximately nine acres. The respective basins required to withhold a 100 year storm event would have volumes of approximately 53,000 ft^3 and 21,000 ft^3. Each basin would be designed with an emergency

overflow riser and will be dewatered by the use of subsurface drains. With the construction of a perimeter berm, there is a [illegible]tion in size required for the sedimentation basins. S[illegible]rly, the amount of sediment removed prior to entering the stream is also reduced. Preliminary calculations indicate that the basin on the north side of the stream will remove annually approximately 33 ft^3 of soil. The south side basin will remove approximately 15 ft^3 of soil annually. With this small quantity, removal of sediment should not be required over the thirty year planning period.

Alternative #4: This alternative would include removal of contaminated waste and soil from the site and the construction of a temporary dam for sediment control during construction, regrading of areas of high slope and covering with native (uncontaminated) material, construction of a site perimeter berm for runoff control and site restoration.

The greatest source of runoff contaminated soil is the embankment area marking the transition from upland to wetland areas. The slope of this embankment area ranges from approximately [illegible] 1 to approximately 3 to 1. To regrade the slope to 4 to [illegible]over with one foot of uncontaminated material will require [illegible]mately 6 cubic yards of excavation per linear foot of [illegible]. In addition, the slope will require clearing and grubbing (approximately 12.8 acres) before regrading and will reqiure surface restoration after regrading for the area shown in Figure 6. To further minimize erosion, the site perimeter berm (6800 L.F.) described in Alternative 3 will be incorporated. The final stage of construction will be the removal of the temporary sediment control dam.

Alternative #5:

This alternative would involve the removal of contaminated waste and soil (which exceeds 10 times detection limit or approximately 100 ppb for an individual pollutant) from the site. The contaminated soil subject to migration and exceeding the more stringent removal criteria includes both surface soil and contaminated subgrade soils. The removal of these soils for off-site disposal would entail temporary dam construction, well pointing and excavation of approximately 373,000 cubic yards of materials, of which approximately 58,000 cubic yards would require off-site disposal. This would be followed by replacement, regrading and surface restoration of uncontaminated soils, and by removal of the temporary dam and well point system.

Alternative #6:

[illegible]is alternative includes the construction of an on-site [illegible]lity controlled landfill to contain waste materials, [illegible]minated soils and sediments. This landfill would be placed in an upland area near the contaminated area to remove contaminated material from the floodplain. In addition, to RCRA criteria

NJDEP landfill criteria for new construction were use n development of the design. These additional criteria nclude double, rather than single, lining and specifications ror surface cover and drainage layers.

The RCRA landfill configuration is shown in Figure 7, with the disturbed area and tentative landfill locations shown in Figure 8. The landfill design includes site regrading, a double bottom layer for leachate control, surface sealing using a clay cap and new monitoring wells.

Excavation and removal of contaminated surface and subsurface soils will require excavating approximately 373,000 CY of soil, of which 58,000 CY would be placed in the landfill. This excavation will require well pointing to lower the ground water sufficiently for removal of contaminated materials at an average depth of 15 feet below grade. For sediment control the temporary dam would also be required for this option.

Community Relations

A public meeting was held by the NJDEP on February 7, 1984, to discuss the initiation of a Remedial Investigation/Feasibility Study (RI/FS) for the Spence Farm site. Notification of the meeting was accomplished through press releases sent to all newspapers listed in the Farm Community Relations Plan and mailings to all parties listed in the "Contacts" section of the plan. An information package, includin[illegible]enda, fact sheet, overview of the Community Relations Pro[illegible] Superfund sites, and the steps involved in a major hazardous waste site cleanup, was given to all attendees at the beginning of the meeting. The meeting was attended by approximately 30 people in addition to local Township officials and NJDEP representatives. After the initial presentation by the contractor, Elson T. Killam, the meeting was opened for public discussion. There were four questions asked by citizens with regard to testing of the ground water. The state officials responded to these inquiries.

A second public meeting was held by NJDEP on August 16, 1984, to discuss the results of the RI/FS. An information package including the agenda and fact sheet were provided to to the approximately 30 people who attended. The contractor outlined the objectives, scope of work, results and conclusions of the RI/FS. Six alternatives were discussed. The contractor's recommended alternative included; removal of drums, lab packs and contaminated soil, site regrading and surface restoration and berming the perimeter of the site. Numerous questions were raised by the public regarding the proposed remedial alternative. The NJDEP officials were able to respond adequately to all concerns raised by the public.

The Remedial Investigation/Feasibility Study was available for public review and comment, beginning on August 17, at three locations: the Ocean County Library in Toms River, the Plumsted Township Municipal Building, and the NJDEP's Hazardous Site Mitigation Administration in Trenton. There were two letters received prior to the conclusion of the twenty-one day comment period.

One letter was received from Mr. Brandenburg of B&D Realty in Lakewood. Mr. Brandenburg stated that Alternative 5 (complete removal) is his choice for remedial action. With respect to Alternative 5, it is NJDEP's opinion that both the recommended alternative and Alternative 5 provide the same degree of protection to the public health and environment in that they equally eliminate the chances of exposure to substances found at the site. Since the recommended alternative is less costly than Alternative 5, it is currently the alternative that is being recommended by the State.

A second letter was received from Mr. Edward C. Laird, Esq., attorney for Morton-Thiokol. This letter included comments concerning the technical feasibility and detailed implementation of the various facets of the recommended alternative. The comments, that are directly related to the first phase of the recommended remedial alternative, have been considered in this Record of Decision Document and the NJDEP's response is included in the responsiveness summary.

Consistency With Other Environmental Laws

The final recommended remedial alternative for Spence Farm will require the removal of the hazardous waste and visibly contaminated soil. These materials will be manifested for transport from the site to a secure facility in accordance with RCRA requirements. The benefits of reducing direct contact of the residual contaminants and the migration of these contaminants to the stream far outweigh the minimal impacts on the floodplain. NJDEP Bureau of Floodplain Management will require the incorporation of specific environmental specifications into the cleanup plan to minimize the impacts on the floodplain. The cleanup contractor will be required to obtain a Stream Encroachment Permit from the NJDEP prior to the initiation of any work in the floodplain area. A floodplain management assessment is included as Attachment 1.

Enforcement

The State of New Jersey and EPA have identified Morton-Thiokol, Inc., and Dayton Hopkins (landowner) as a potentially responsible party. Notice letters were sent by the State to the PRP's on March 18, 1982. This resulted in a meeting with Thiokol on July 7, 1982, to discuss its role in undertaking the site clean up.

Further correspondence resulted in Thiokol submitting two proposals for conducting a modified RI/FS. These proposals were rejected by EPA on January 16, 1983. A second Notice Letter was sent to Thiokol on March 18, 1983 indicating the State would be responsible to perform the RI/FS.

The State of New Jersey and EPA Region II have designated this site as a State enforcement lead. Currently, the State of New Jersey is negotiating an Administrative Consent Order with Morton-Thiokol, Inc. for the clean up of this site. The recommended remedial actions included in this Record of Decision will be incorporated by the State into the Administrative Consent Order. There will be a negotiation period of no greater than 60 days following the signing of this ROD. If New Jersey is unsuccessful in these negotiations EPA will likely issue a §106 Order for the selected remedy and later pursue a Cost Recovery Action against Morton-Thiokol.

Recommended Alternative

According to 40CFR Part 300.68 (j), cost-effectiveness is described as the lowest cost alternative that is technically feasible and reliable and which effectively mitigates and minimizes damages to and provides adequate protection of public health, welfare and the enviornment. A cost comparison of remedial alternatives is presented in Table 3. The evaluation of the six remedial alternatives leads to the conclusion that Alternative #4 is the most cost-effective.

Of the remaining alternatives, the initial three were all found to have slightly lower present worth cost. However operation and maintenance costs were significantly greater for all three alternatives. In addition, the permanent loss of forest (approximately 15 acres) and wetland (approximately 0.5 acres) areas are common to all these alternatives. Furthermore, contamination would remain on site in the surface water sediment, for the initial three alternatives.

Alternatives 5 and 6 would result in the permanent loss of forest and wetland areas. These two alternatives were also far more costly than the recommended alternative.

The components of Alternative #4 are technically feasible and reliable and when combined, provide adequate protection of public health, welfare and the environment. The removal of containerized wastes and visibly contaminated soils to a secure hazardous waste management facility is a reliable remedial measure. The regrading of the site in conjunction with placing clean fill will effectively control direct contact with residual contaminants. The construction of a temporary dam during excavation activities will eliminate the off-site migration of contaminants. The monitoring of existing on-site wells for a period of five years

after the completion of the remedial action will evaluate for the possible migration of contaminants from the site, thereby, ensuring the effectiveness of the remedial action.

The Agency and the State of New Jersey have decided to proceed with the recommended alternative as a multiphase remedial action. Phase I will consist of: The excavation of surface waste material and visibly contaminated soil; the transportation and off-site disposal of the excavated materials; the monitoring of ground water for a five-year period: and the further sampling and analysis of soils and stream sediments. The additional sampling will be conducted to establish the design criteria for the next phase of the remedial action. Sediment control measures will be taken during excavation and sampling efforts. Based on the results of the sampling and analysis effort, Phase II will consist of site regrading and closure, ground water monitoring and if necessary, additional excavation of contaminated soils and/or sediments and the off-site disposal of this material.

The following listed figures respresent a cost estimate for oposed actions. Cost sharing for project implementation Federal and 10% State on capital costs and the first year monitoring costs. The remaining four years of monitoring will be borne by the State of New Jersey.

Cost Summary for Recommended Remedial Alternative #4

Remedial Measure Component	Capital Cost	Present Worth of O&M	Total Cost Present Worth
Waste Removal & Disposal	$ 493,500	--	$ 493,500
Ground water Monitoring	--	95,300	95,300
Sampling and Analysis	350,000	--	350,000
TOTAL COST	$ 843,500	$ 95,300	$ 938,800

Operation and Maintenance

Upon completion of all remedial actions, monitor: of the site will be necessary to evaluate the migration of any contaminants into the local ground water.

Future Actions

Schedule	Date
- Final Record of Decision	September 1984
- Continue negotiations with Morton-Thiokol	October-November 1984
- Amend Cooperative Agreement (if necessary)	December 1984
- Initiate Design (if necessary)	February 1985
- Complete Design (if necessary)	August 1985

SPENCE FARM - Vicinity Map

FIGURE 1

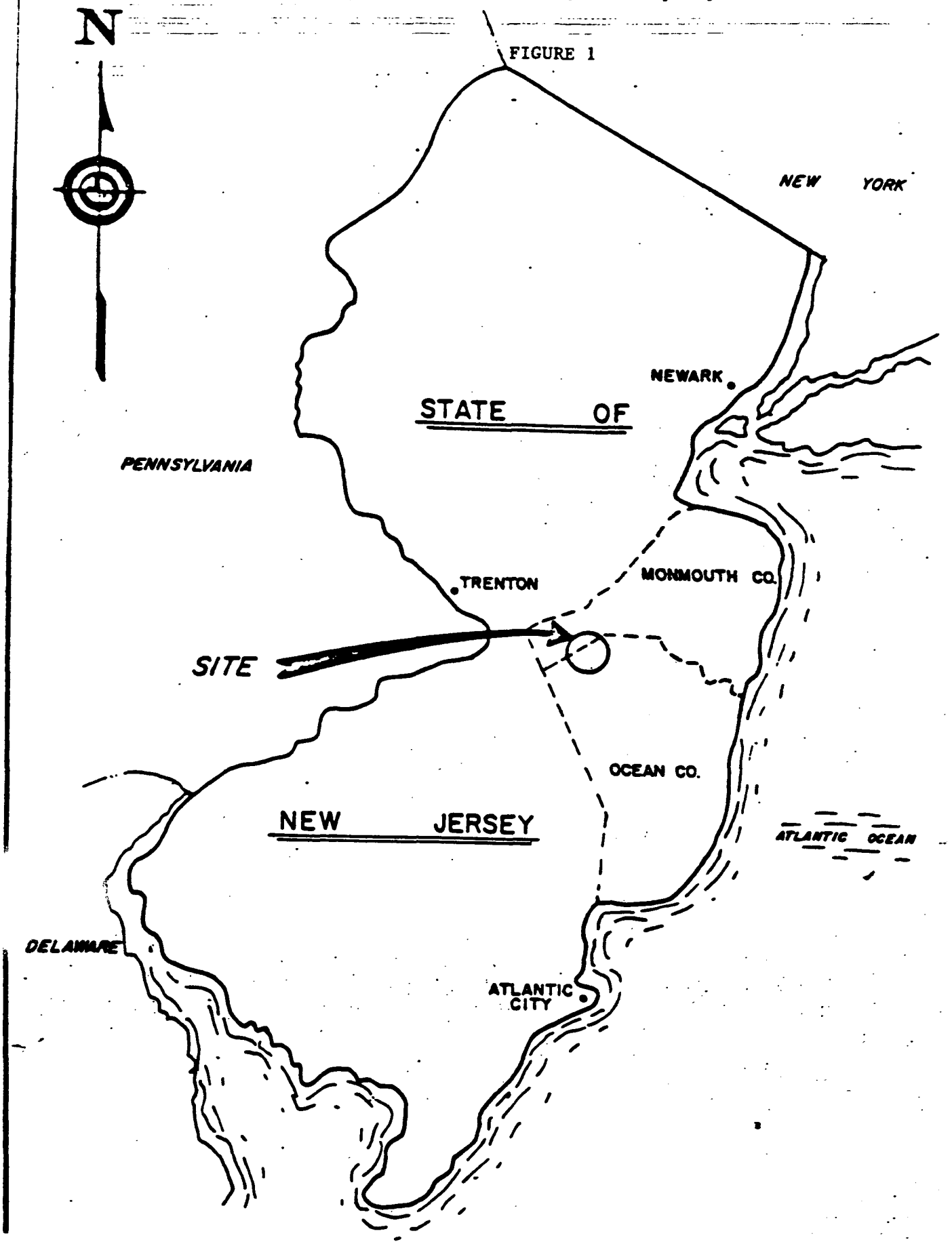
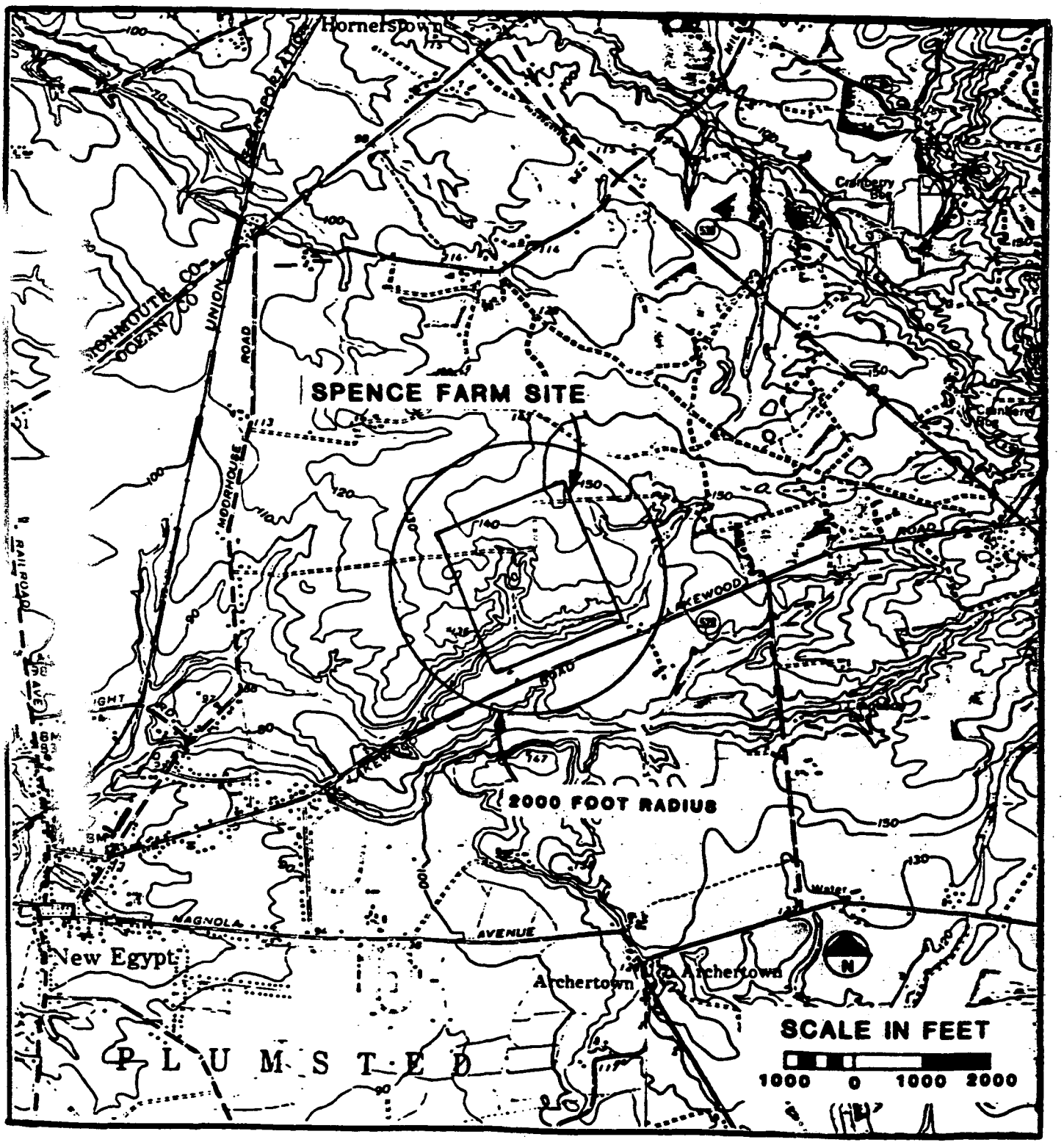


FIGURE 2

SPENCE FARM

NEW EGYPT, NEW JERSEY

REGIONAL SITE LOCATION MAP



LEGGETTE, BRASHEARS & GRAHAM, INC.

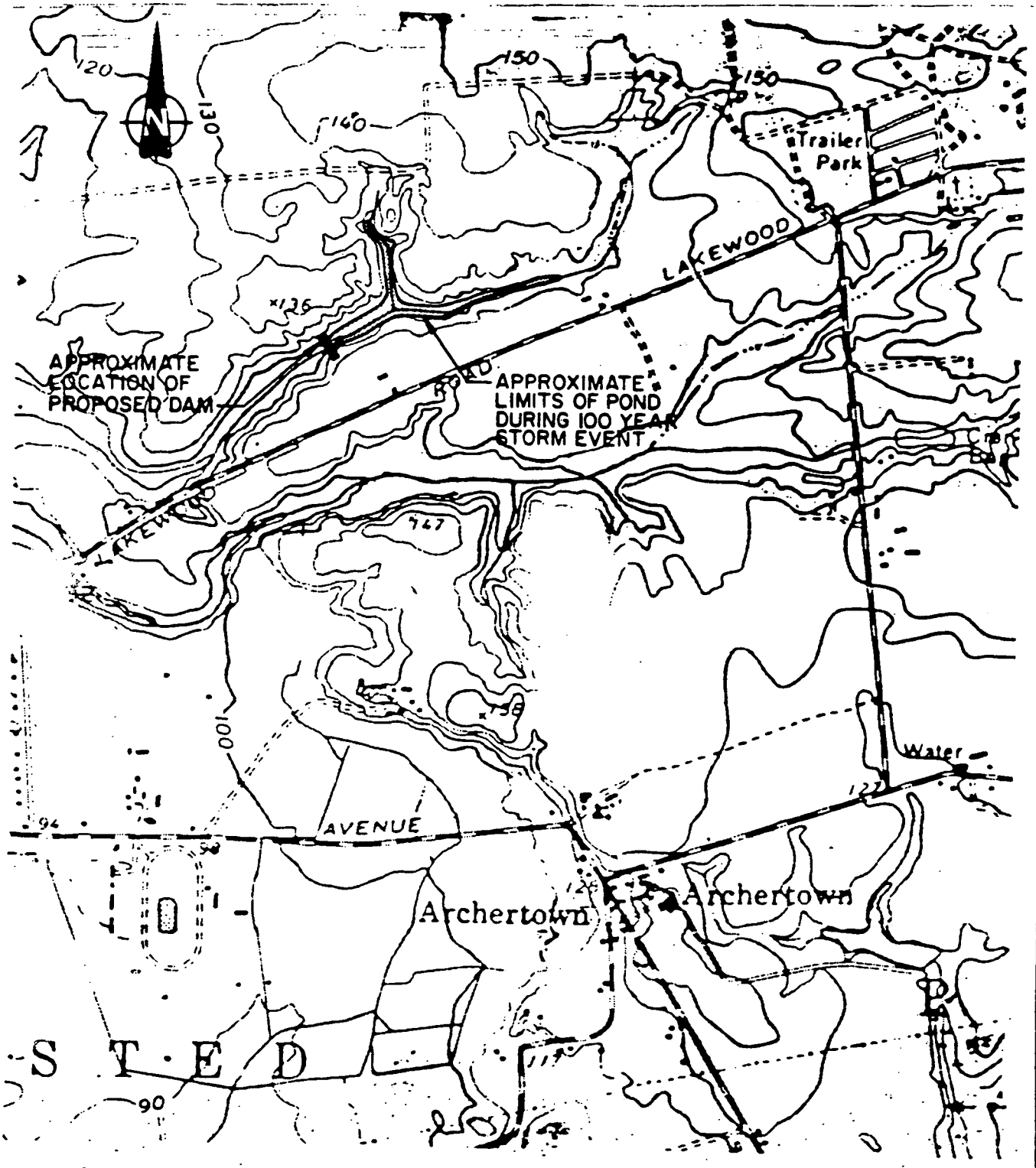


FIGURE 3 - ILLUSTRATION OF ALTERNATIVE #1

SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY

DAMMING WITH STREAM PONDING

SCALE: 1" = 1,200'±
SOURCE: U.S.G.S. TOPO MAPS

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
27 Bleeker Street Millburn New Jersey 07041

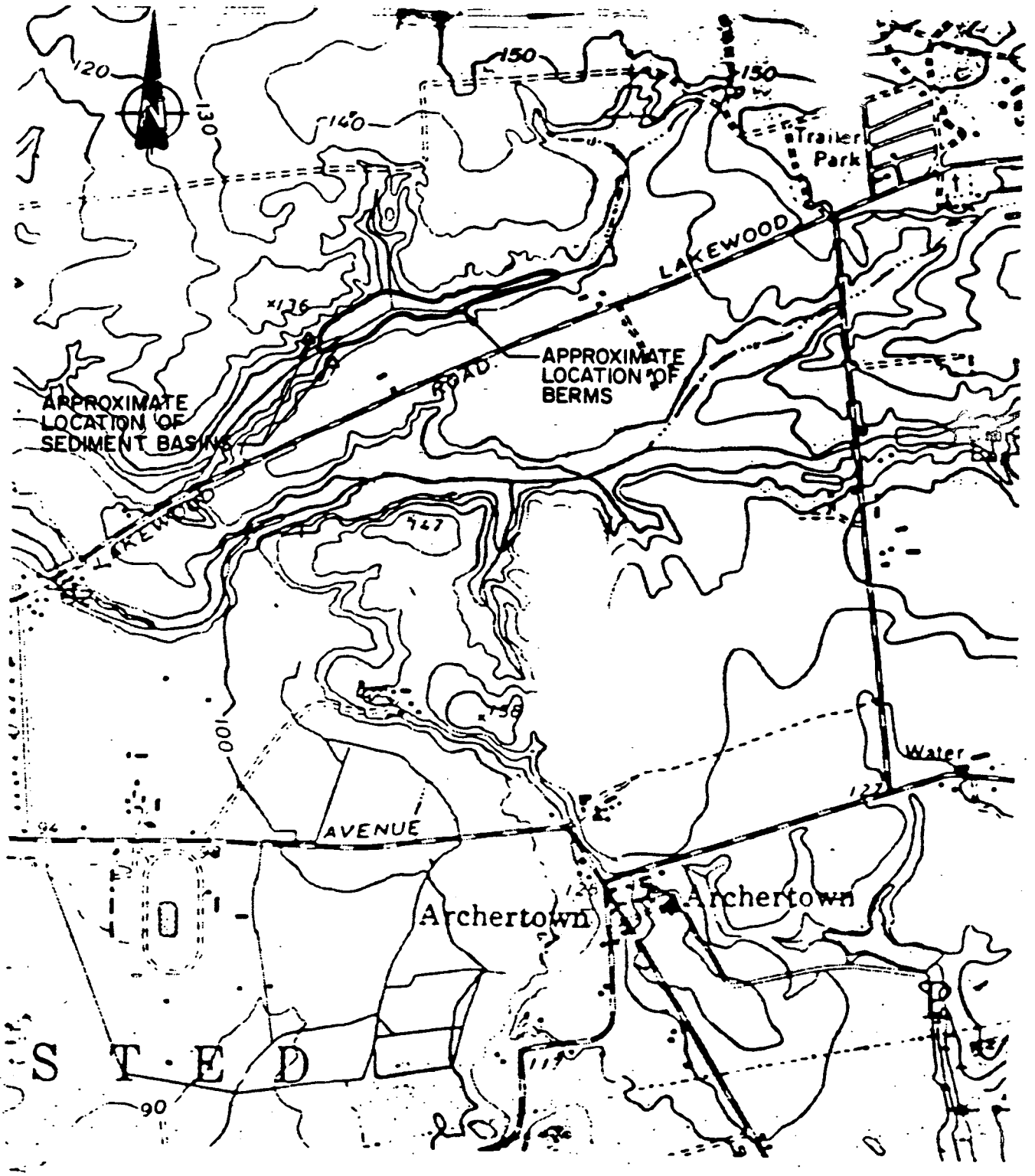


FIGURE 4 - Illustration of Alternative #2

SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY

BERMS ALONG STREAM

SCALE: 1" = 1,200'±
SOURCE: U.S.G.S. TOPO MAPS

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
27 Sleeper Street Millburn New Jersey 07041

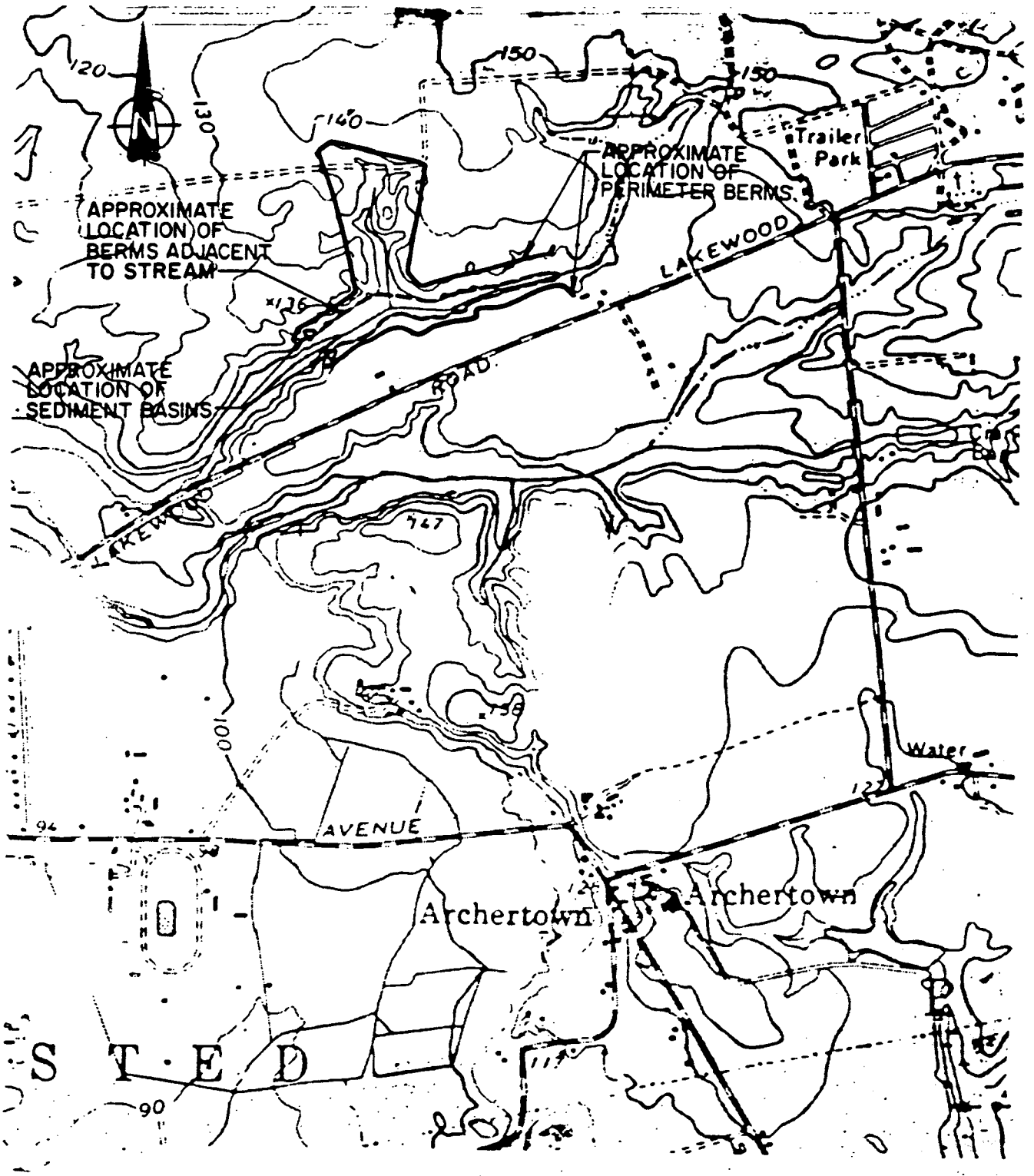


FIGURE 5 - ILLUSTRATION OF ALTERNATIVE #3

SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY

PERIMETER BERMS

SCALE: 1" = 1,200'±
SOURCE: U.S.G.S. TOPO MAPS

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
27 Beekar Street Millburn New Jersey 07041

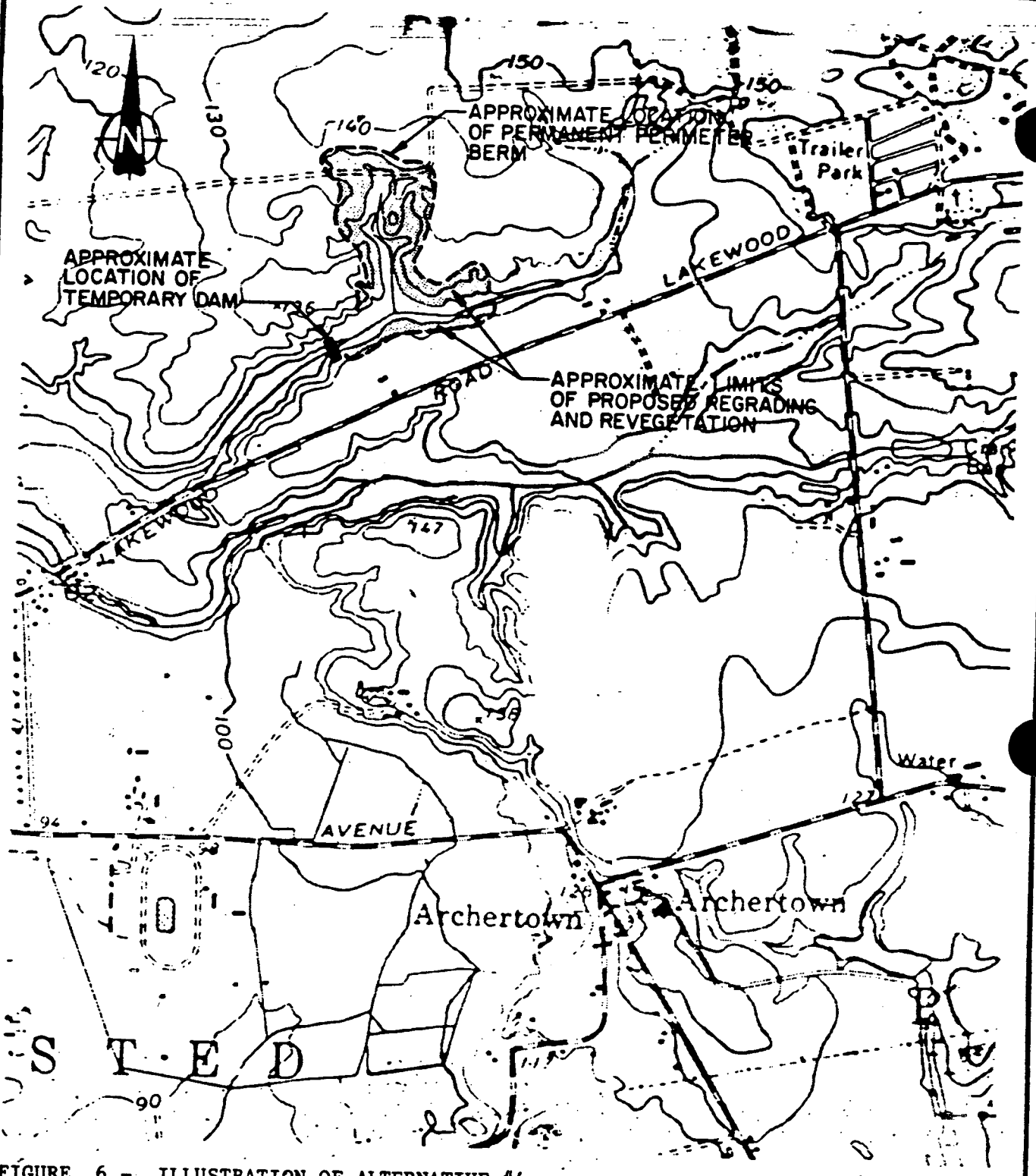


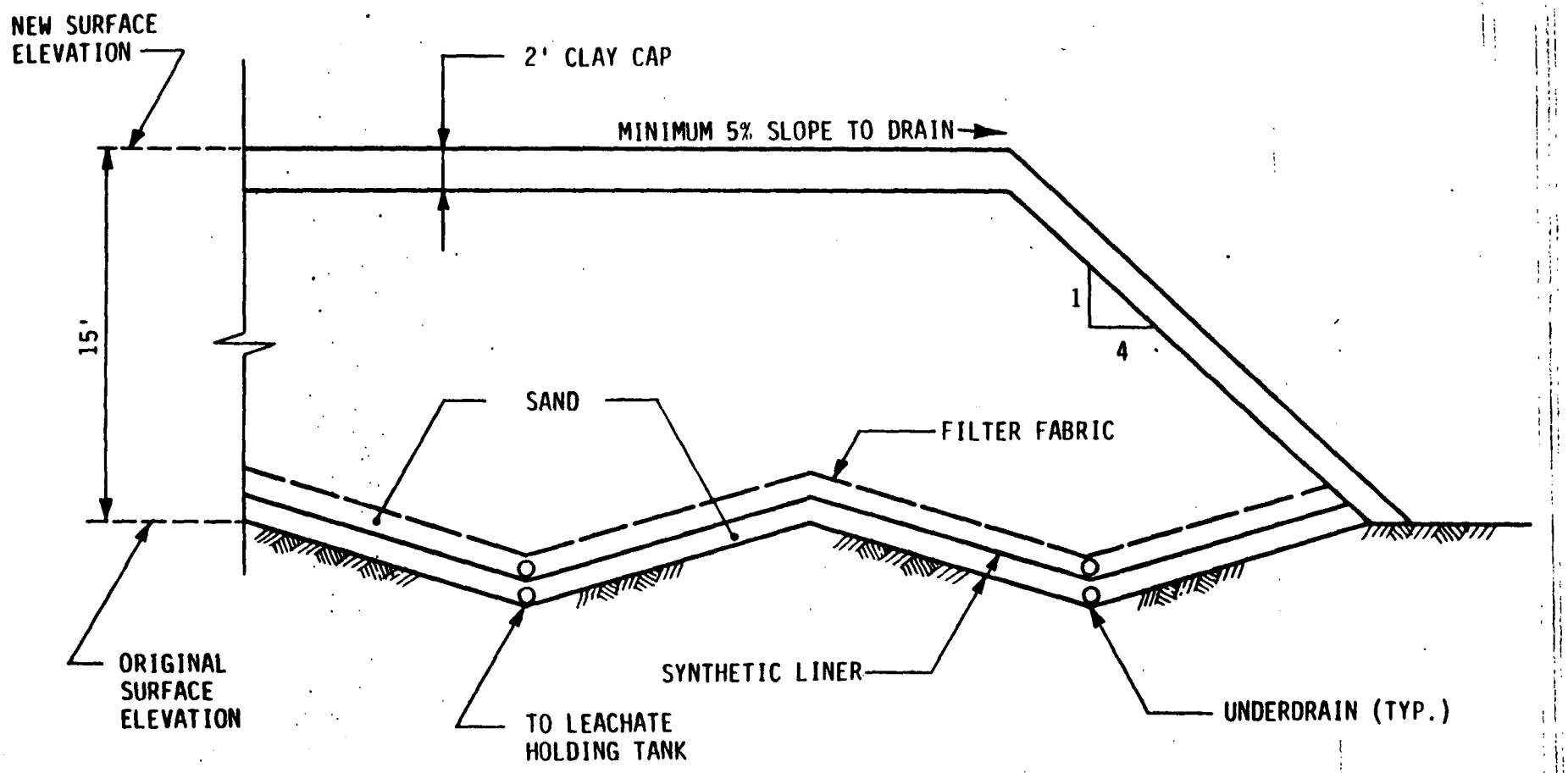
FIGURE 6 - ILLUSTRATION OF ALTERNATIVE #4

SCALE: 1" = 1,200'±
SOURCE: U.S.G.S. TOPO MAPS

SPENCE FARM
PLUMSTED TOWNSHIP NEW JERSEY
SITE REGRADING & RESTORATION

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
27 Becker Street Millburn New Jersey 07041

FIGURE 7 - Sk[illegible] RCRA Landfill



NOT TO SCALE

SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY

ON-SITE
SECURE LANDFILL

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
27 Beaker Street Millburn, New Jersey 07041

OGILVIE PRESS

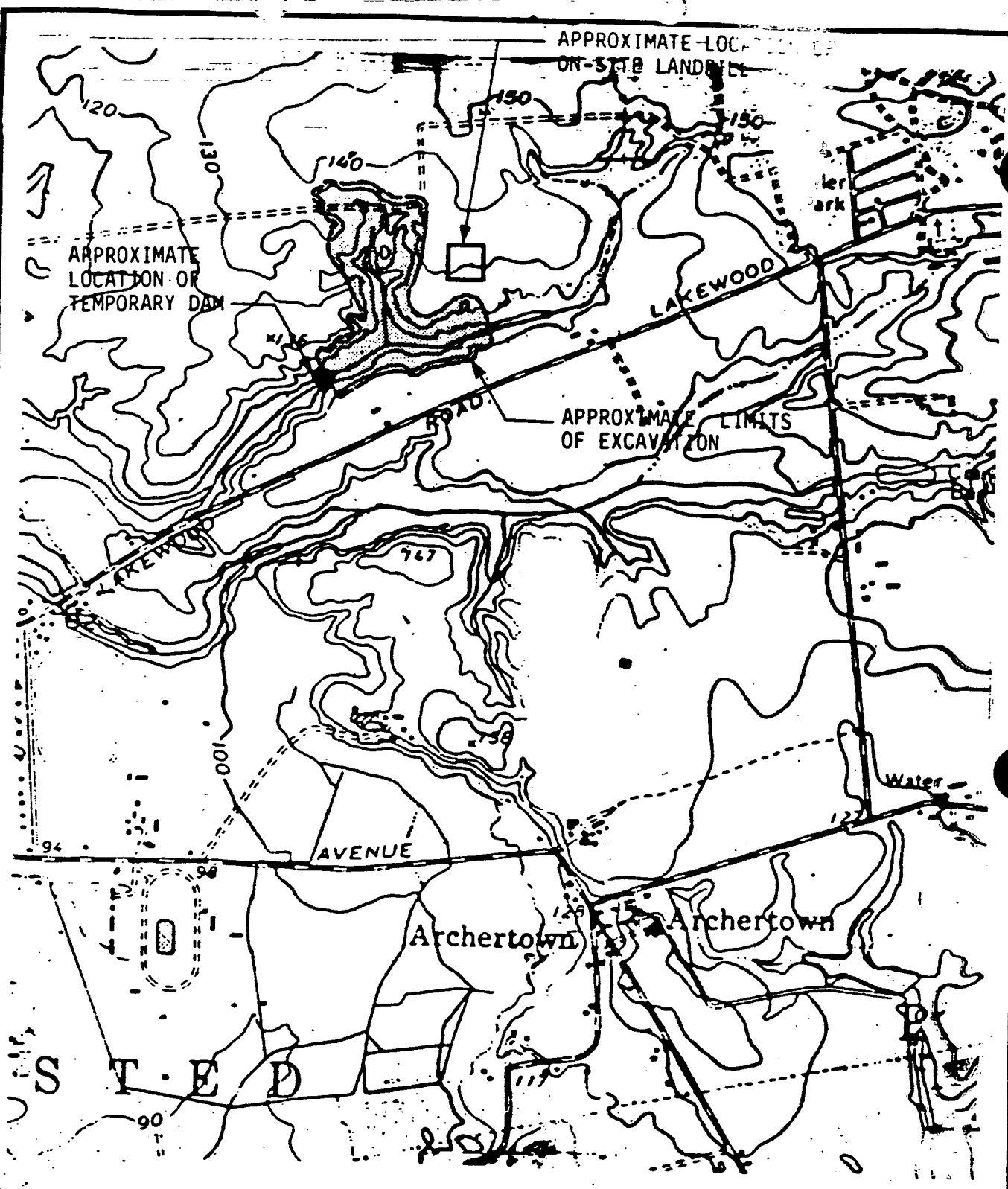


FIGURE 8 - ILLUSTRATION OF ALTERNATIVE #6

SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY

EXCAVATION AND ON-SITE LANDFILL

SCALE: 1" = 1,200 '±
SOURCE: U.S.G.S. TOPO MAPS

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
37 Bleecker Street Millburn, New Jersey 07041

Table 1
Summary of On-Site Waste Materials

Estimate of Drummed Material

Site	#Drums	Drums Intact
TP 1A	10	1
TP 2-2A	200	10
TP 2-B	20	14
TP 8	50	1
TP [illegible]	10	0
TP 10	40	20
Scattered	100	0
	430	46

Laboratory Packs & Small Drums

Site	Number
TP 2-2A	< 1000
	< 1000
	<2000

Other Surface Material

Site	Number
TP 2-2A	30cy
TP 2B	5cy
Total	35cy

Other

One Empty 10,000 gallon tank

TABLE 2

Screening of Alternatives

SPENCE FARM

Remedial Action	Need For Action?	Acceptable Cost?	Acceptable Effectiveness?	Acceptable Engineering Practice?
I. Emissions Control				
A. Air Emissions Control				
1. Pipe Vents	N			
2. Trench Vents	N			
3. Gas Barriers	N			
4. Gas Collection	N			
5. Overpacking	Y	Y	Y	Y
B. Surface Water Controls				
1. Surface Seals	Y	N	Y	Y
2. Diversion/Collection				
a. Dikes & Berns	Y	Y	Y	Y
b. Ditching	Y	Y	Y	Y
c. Chutes	Y	Y	Y	Y
d. Levees	Y	Y	Y	Y
e. Seepage Basins	Y	Y	Y	Y
f. Sediment Basins	Y	Y	Y	Y
g. Terracing	Y	Y	Y	Y
C. Groundwater Controls				
1. Impermeable Barriers	N			
2. Permeable Treatment	N			
3. GW Pumping	N			
4. Leachate Control	N			
D. Contaminated Sewer Lines	N			

TABLE 2

SPENCE FARM

Remedial Action	Need For Action?	Acceptable Cost?	Acceptable Effective-ness?	Acceptable Engineering Practice
II. On Site Treatment				
A. Direct Treatment				
1. Biological	N			
2. Chemical	N			
3. Physical	N			
am. Soil/Sediment				
cineration	Y	N	Y	Y
t Air Oxidation	Y	N	Y	Y
olidification	N			
4. Ecapsulation	Y	Y	Y	Y
5. In-Situ Treatment	N			
III. Other Control Technology				
A. Removal for Off-Site Treatment or Disposal	Y	Y	Y	Y
B. Provision of Alternative Water Supply	N			
C. Relocation	N			
D. Other				
uring Site itoring	Y	Y	Y	Y
oundwater	Y	Y	Y	Y
rface Water	Y	Y	Y	Y
E. Air	N			

TABLE 3

COMPARISON OF ALTERNATIVES

Alternative	Present Worth Costs Capital	O&M	Total	Control Objective - Soils	Effectiveness for Sediment Control	Groundwater Control	Access Control	Adverse Environmental Effects
1. Permanent Dam	$ 747,140	$251,520	$ 998,600	1 ppm	LT 100%	LT 100%	LT 100%	Permanent Loss of Forest & Wetland, Contaminated Sediment On-Site
2. Berm along Stream	$ 863,870	$213,775	$ 1,077,460	1 ppm	LT 100%	LT 100%	LT 100%	Permanent Loss of Forest & Wetland, Contaminated Sediment On-Site
3. Berm along Stream & Perimeter	$ 849,760	$159,960	$ 1,009,660	1 ppm	LT 100%	LT 100%	LT 100%	Permanent Loss of Forest & Wetland, Contaminated Sediment On-Site
4. Regrading & Restoration	$ 1,144,400	$105,430	$ 1,250,830	1 ppm	100%	LT 100%	LT 100%	Temporary Loss of Wetland
5. Complete Removal & Restoration	$27,453,820	-	$27,453,820	100 ppb	100%	100%	100%	Permanent Loss of Forest & Wetland, Groundwater Movement
6. On-Site Landfill	$ 8,882,520	$336,000	$ 9,218,530	100 ppb	100%	100%	100%	Permanent Loss of Forest Wetland, Farm Lands, Groundwater Movement

ATTACHMENT 1

Spence Farm Site
New Jersey

FLOODPLAIN MANAGEMENT ASSESSMENT

I. Purpose

The purpose of this addendum is to·

1. Review Executive Order No. 11988, May 24, 1977, 42 F.R. 26951 entitled Floodplain Management:

2. Review applicable statute referred to in the Executive Order as required:

3. Review the proposed Remedial Alternative as it relates to the floodplain·

4. Summarize the review and describe any technical requirements necessary to comply with (1) and (2) above.

II. Introduction

A Remedial Investigation/Fresibility Study (RI/FS) was prepared by Elson T. Killam Associates, for the New Jersey Department of Environmental Protection (NJDEP), to determine the extent of contamination on-site and to evaluate remedial alternatives. The Spence Farm site is approximately 700 feet North of New Egypt-Lakewood Road and 4,000 feet east of Moorehouse Road in Plumsted Township. Waste disposal occurred at scattered locations in a 30 acre low-lying wooded area adjacent to two adjoining tributaries to Crosswicks Creek.

The random dumping of hazardous wastes via drums and b packs has resulted in numerous areas of contamination. Investigative activities indicated a majority of the drums dumped at the site were intentionally opened or rusted through and their content dispersed. This has resulted in many areas of contaminated surface soils along the stream banks.

At all times, the stream flow is below the areas of soil contamination. However, during times of high flow scouring of the stream bank can result in the migration of contaminants into the waterway. Also, precipitation runoff can carry the contaminants from the low-lying areas into the stream. Figure 1 shows the general location of the remedial activity. Currently the slope in this area of the stream ranges from 1.5: 1 to 3: 1.

A Flood Insurance Study for Plumsted Township completed in March 1981, and the Flood Insurance R Maps were published in March 1982. Based on this study appears that the low-lying areas of the Spence Farm site are within the 100 year floodplain. However, it should be noted that the actual location of the 100 year flood was not determined from the flood insurance study.

III. Proposed Site Remedial Action

The selected remedial action for the Spence Farm site includes the removal of drummed material and lab packs and adjacent contaminated soil. After additional samples are taken to determine the extent of soil contamination, clean fill material will be placed in area where removals have occurred. The clean soil will be graded to its original condition prior to the removal action.

IV. Flood Plain Regulatory Requirements

In accordance with Executive Order 11988, Floodplain Management, an applicable executive agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains. In addition, it is necessary to evaluate the potential effects of any action that may be taken in a floodplain and to assure that potential harm is minimized.

The following agencies would be involved in any floodplain management efforts:

- United States Environmental Protection Agency
- U.S. Army Corps of Engineers
- Federal Emergency Management Agency
- New Jersey Department of Environmental Protection

As a responsibility under the cooperative agreement between the USEPA and the NYSDEC the appropriate agencies and concerned groups will be kept abreast of proposed design and construction activities.

The EPA in conjunction with the NJDEP has determined that the proposed activities for the site are the most practical options available in light of current funding limitations and technical constraints. It is not expected that working in the low-lying area will have any major or long-term detrimental impacts on the floodplain, since the majority of the work will be temporary sediment control measures.

Flood Hazard Assessment

Part of the future recommended remedial action for the Spence F[illegible] site includes the removal of contaminated soil along the [illegible] channel and thus involved working in the floodplain. The benefits of reducing direct contact of the residual contaminants and the migration of these contaminants into the stream far outweigh the minimal impacts on the floodplain. The NJDEP Bureau of Floodplain Management will require the incorporation of specific environmental specifications into the cleanup plan to minimize the impacts on the floodplain. In addition, the cleanup contractor will be required to obtain a Stream Encroachment Permit from the NJDEP prior to the initiation of any work in the floodplain area.

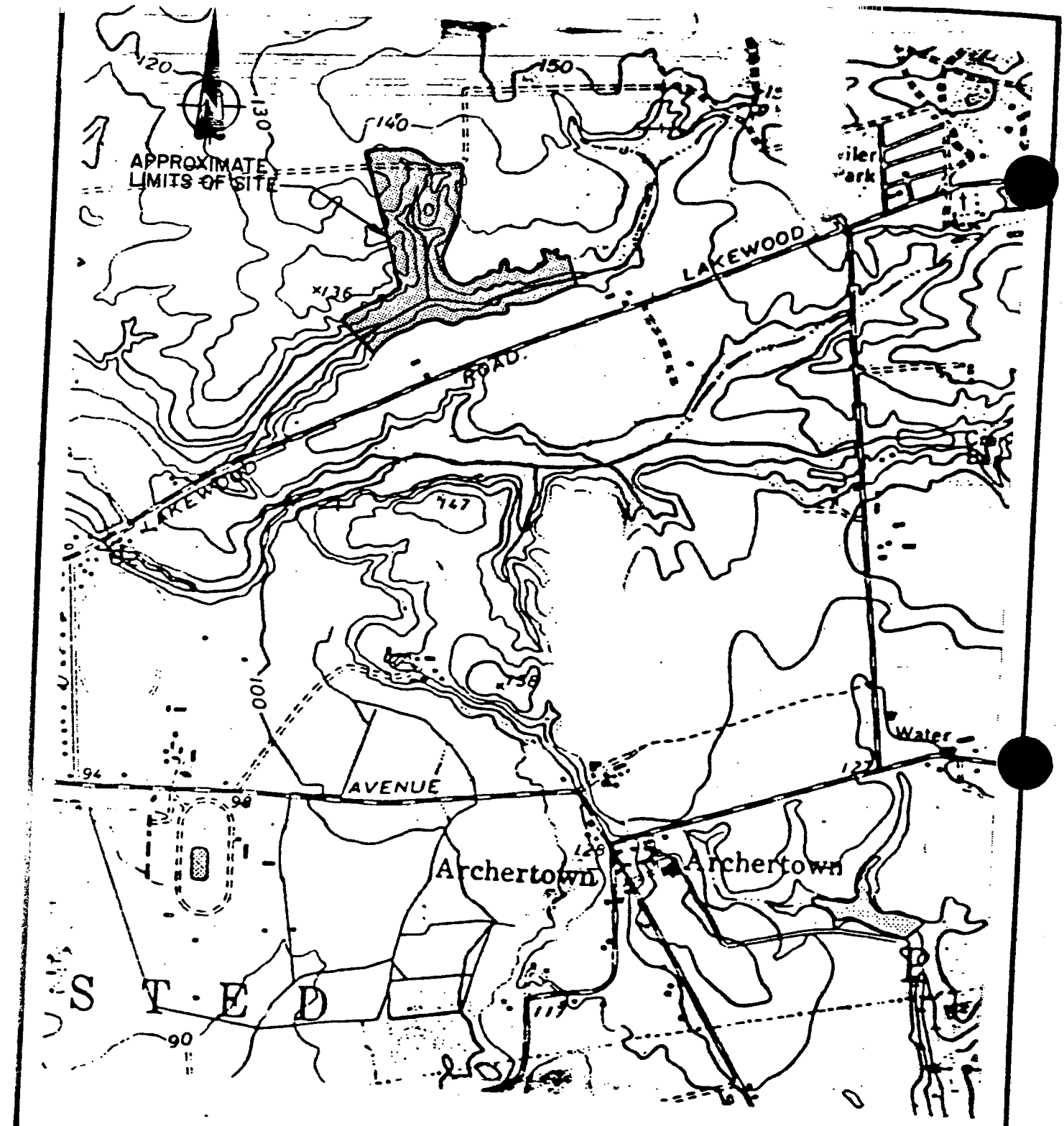


FIGURE 1
SPENCE FARM
PLUMSTED TOWNSHIP, NEW JERSEY
APPROXIMATE SITE LIMITS

SCALE: 1" = 1,200'
SOURCE: U.S.G.S. TOPO MAPS

Elson T. Killam Associates, Inc.
Environmental and Hydraulic E[illegible]ers
27 Bleeker Street Millburn, New Jer[illegible] 7041

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 28 1984

MEMORANDUM

SUBJECT: Authorization to Proceed with Remedial Action for the Spence Farm Site, New Jersey - Record of Decision

FROM: William N. Hedeman, Jr., Director
Office of Emergency and Remedial Response (WH-548)

TO: Lee M. Thomas
Assistant Administrator

The attached Record of Decision (ROD) is presented for your ization of remedial action at the subject site. We are your approval for the excavation and off-site disposal of drums, lab packs, and adjacent soils in accordance with RCRA. We are also recommending the sampling and analysis for possible soil and ground water contamination, in order to determine the extent of contamination and the possible need for further excavation. A supplemental ROD will be developed for site regrading and closure, as well as excavation if additional action is determined to be necessary.

Funding is included in the FY-85 SCAP for the remedial design of the above cited remedial activities.

ent

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Record of Decision for Approval of Remedial Action at the Spence Farm Site, New Jersey

FROM: Francis J. Biros, Director
CERCLA Enforcement Division,
Office of Waste Programs Enforcement (WH-527)

TO: William N. Hedeman, Jr., Director
Office of Emergency and Remedial Response (WH-548E)

The Record of Decision for the Spence Farm Site, New Jersey has been reviewed by my staff.

I Concur X

I Do Not Concur _____

I Concur With the Attached Conditions _____

Date 9-28-84

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE:

SUBJECT: Record of Decision
Spence Farm

FROM Christopher J. Daggett
Regional Administrator

TO: Lee M. Thomas
Assistant Administrator
Office of Solid Waste & Emergency Reponse (WH-562A)

This is to provide you with the draft Record of Decision (ROD) prepared by my staff for the Spence Farm site in the State of New Jersey.

The ROD document reflects Region II's recommendations for remedial action at the Spence Farm site. Our recommendations were developed based on the results of a remedial investigation and feasibility study performed by Elson T. Killam, Associates, Inc. for the New Jersey Department of Environmental Protection (NJDEP).

ecifically, we agree with the recommendations presented by the NJDEP. They recommend the removal of all drums and lab packs and the discolored soil surrounding these surface wastes. These hazardous wastes will be removed to a secure hazardous waste disposal facility. Following this phase of the cleanup, further testing of soil will be performed to determine whether additional soil should be removed. The NJDEP has agreed to monitor the groundwater by sampling the existing on-site wells, annually, for a five year period.

The proposed action, I feel, is consistent with the goals and objectives of the Comprehensive Environmental Response, Compensation and Liability Act and the National Contingency Plan to provide adequate protection of public health and environment. Also, the recommended action has been discussed with the NJDEP, they concur with the proposed remedy.

ou have any questions regarding the attached Record of Decision, not hesitate to contact me.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC - 3 1984

WASTE AND E...

MEMORANDUM

SUBJECT: Authorization to Proceed with Remedial Action for the Spence and Pijak Farm Sites, New Jersey - Records of Decision

FROM: William N. Hedeman, Jr., Director Walter W. Kovalick, Jr. for
Office of Emergency and Remedial Response (WH-548)

TO: Lee M. Thomas
Assistant Administrator

The attached Records of Decision (RODs) were presented for your authorization of remedial action at the subject sites. We submitted these RODs with only verbal concurrence from the Office of General Counsel (OGC) for your approval on September 27, 1984. The RODs were signed three days later pending final OGC review.

The final concurrence from OGC has been recently received, and includes some minor revisions in the wording of the final RODs. These changes are not substantive in nature and only provided minor clarification, with the exception of a one paragraph addition to each ROD.

Your initials on the one paragraph inserts for each ROD will serve as your concurrence to the amended RODs and will allow the release of these documents.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 30 1989

OFFICE OF
GENERAL COUNSEL

MEMORANDUM

TO: Lee M. Thomas
Assistant Administrator
Office of Solid Waste and Emergency
Response

FROM: Lisa K. Friedman
Associate General Counsel
Solid Waste & Emergency
Response Division (LE-132S)

SUBJECT: Records of Decision for Spence
and Pijak Farms

We have reviewed the records of decision for these sites. We have noted a few recommended changes, in addition to changes made by your staff.

I understand that these RODs were previously signed, but that new copies will be produced incorporating our and your staff's changes. We recommend that you re-sign and date the RODs, to avoid any issue of whether you have ratified changes made subsequent to the original signing.

Attachment