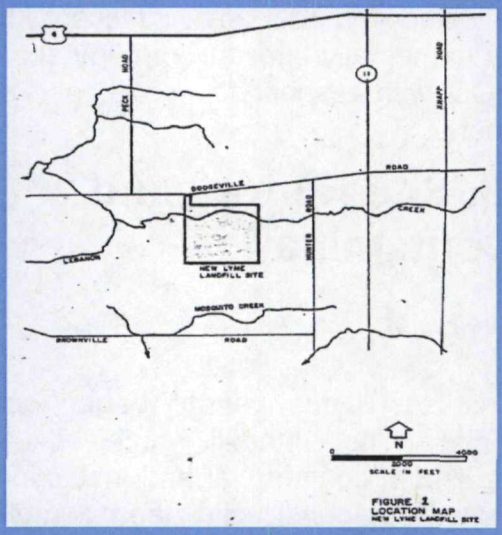
EPA
United States
Environmental Protection
Agency

Explanation of Significant Differences New Lyme Landfill Superfund Site

Site Name:	**New Lyme Landfill Superfund Site**
CERCLA ID #:	**OHD980794614**
Site Location:	**New Lyme (Ashtabula County)**
Lead Agency:	**U.S. EPA, Region 5**
Support Agency:	**Ohio EPA**



New Lyme Landfill
New Lyme, Ohio

I. Introduction

This decision document presents an Explanation of Significant Differences (ESD) for the New Lyme Landfill Superfund Site (Site), located in New Lyme, Ohio. The Record of Decision (ROD) addressed by this ESD was signed in September 1985, and amended by a ROD Amendment, signed in November 1999.

This ESD is issued in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. Section 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Section 300.435(c)(2)(i). The Director of the Superfund Division has been delegated the authority to sign this ESD.

This ESD will become part of the Administrative Record for the New Lyme Landfill Superfund Site (NCP 300.825(a)(2)), which has been developed in accordance with Section 113 (k) of CERCLA, 42 U.S.C. Section 9613 (k).

The Administrative Record (AR) is available for review at the Henderson Memorial Public Library, 54 East Jefferson Street, Jefferson, Ohio, and at U.S. EPA Region 5, 7th Floor, Records Center, 77 W. Jackson Blvd, Chicago, IL 60604 Monday - Friday, 8:00 a.m. to 4:00 p.m.; Phone (312) 886-0900.

II. Statement of Purpose

Since the ROD (as amended) finalization date, issues concerning institutional controls have been identified at the Site.

The purpose of this ESD is to document a final decision to select an institutional control in the

form of an environmental covenant as part of the soil and groundwater remedy for the Site.

U.S. EPA prepares an ESD when the Agency determines that changes to the original selected remedy are significant, but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost.

III. Site History and Contamination

Site History

The New Lyme Landfill began operations in 1969. The landfill received household, industrial, commercial and institutional wastes, as well as construction and demolition debris between 1969 and 1978. Initially managed by two area farmers, the landfill was licensed by the State of Ohio in 1971 and operations were taken over by a licensed landfill operator. Waste records indicated that wastes at the New Lyme Site included coal tar and coal tar distillates, asbestos, resins and resin tar, paint and paint sludge, miscellaneous oils, lacquer thinner, peroxide, various corrosive liquids, acetone, xylene, toluene, kerosene, naphtha, benzene, linseed oil, mineral oil, fuel oil, miscellaneous chlorinated solvents, 2,4-dichlorophenoxy-acetic acid, laboratory chemicals, and waste waters.

In August 1978, the landfill was closed by the Ashtabula County Health Department, because of numerous violations of the license, the Ohio Revised Code, and the Ohio Administrative Code. Violations included open dumping, improper spreading and compacting of waste; no state approval for disposal of certain industrial wastes; and reported excavation of trenches into the shale bedrock.

After receiving notice from Ohio of the numerous violations, the U.S. EPA conducted a Site inspection. U.S. EPA evaluated the Site to determine eligibility for the National Priorities List (NPL). The Site was proposed for the National Priorities List on December 31, 1982.

A remedial investigation was conducted by U.S. EPA from August 1983 to August 1984. Remedial investigation activities included the collection and analyses of samples of surface and subsurface soil, Lebanon Creek, sediment and water, ground water, and leachate seeps. The ROD for the Site was signed in September 1985 (and was amended by the ROD Amendment, signed in November 1999). The remedial investigation and remedial action work was funded by the U.S. EPA until 1997, when the potentially responsible parties (PRPs) began to manage the Site.

Through a consent decree, the PRPs assumed operation and maintenance responsibilities for the Site. The consent decree was lodged on August 16, 2000, and entered on November 9, 2000.

Site Contamination

Analytical results from sampling at the Site showed contaminants in the groundwater, soil, surface water, and sediments. Contaminants found in the groundwater included 1, 2-dichloro-ethane, ethyl benzene, methylene chloride, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. Contaminants found in the soil included toluene, xylene, fluorotrichloro-methane, tetra-chloroethene, carbon disulfide, phthalates, styrene, PAHs, and PCBs. Surface water contaminants included trichloroethene, tetrachloroethene, and acetone. Methylene chloride, toluene, 2-butanone, and 2-hexanone were identified in sediments. All of the contaminants identified are hazardous substances as defined in Section 104(14) of CERCLA, 42, U.S.C. Section 9601(14), and 40 C.F.R. Section 302.4. Approximately 5,500 cubic yards of domestic wastes, 8,000 cubic yards of

commercial wastes, and 14,000 cubic yards of industrial wastes per month were disposed of at the landfill.

IV. Selected Remedy

A ROD was signed on September 27, 1985. An Amended ROD was issued on November 16, 1999. These documents are identified in the Superfund Document Management System as record numbers 138627 and 270768. The documents can be obtained at the U.S. EPA Region 5 Records Center, 7th Floor, 77 West Jackson Boulevard, Chicago, Illinois, or at www.epa.gov/region5/cleanup/newlyme, under Technical Documents.

The 1985 remedy included the extraction and on-Site treatment of Site groundwater, the installation of a multi layer cap, fence, and monitoring wells. The Amended ROD included the shutdown of the groundwater extraction system, the implementation of an amended long-term groundwater monitoring program with a generic contingency plan to ensure that contaminants would not migrate off-Site, and the continued operation and maintenance of the installed cap and fence. The generic contingency plan described the levels of the analytical results which will trigger implementation of a contingency plan. These triggers included all MCLs and a 1×10^{-5} cumulative risk level for a contaminant with no MCL. The amended remedy provides that if these triggers were met or exceeded, then that well would be re-sampled and analyzed for the specific contaminant. If the analysis indicates a repeated exceedance, then the contingency plan will be implemented. The contingency plan will be approved by U.S. EPA and Ohio EPA, and will include details on methods to define, among other things, the rate, concentration, and extent of the release.

V. Description of Significant Differences and Basis for the ESD

Institutional controls in the form of an environmental covenant are needed at the Site to protect the remedial action components, and to eliminate potential exposure to hazardous substances, thus protecting human health and the environment, because the remedial action results in hazardous substances, pollutants, or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure to the groundwater. The remedial action provided in the ROD does not include institutional controls for groundwater. As a result, an explanation of significant differences is needed to select an institutional control in the form of an environmental covenant as part of the ground-water remedy for the Site to ensure the protection of human health and the environment. The covenant will also include necessary restrictions on the landfill property to ensure no action is taken that would negatively impact the remedy. Restrictions will be placed on the landfill property which would prohibit the use of the contaminated groundwater for drinking or irrigation purposes. Additional restrictions will be placed on the soil and the landfill cap which will prohibit residential or recreational use and prohibit interference with the remedy. The area(s) of the landfill and associated groundwater locations to be addressed by the environmental covenant are generally depicted on the attached map.

In addition, an IC Implementation and Assurance Plan will be designed and implemented to ensure long-term stewardship of ICs. The IC Implementation and Assurance Plan will include, among other things, a detailed analysis of the precise boundaries (along with a legal description) of the area(s) that the environmental covenant will address.

VI. Support Agency Comments

U.S. EPA consulted with the Ohio EPA and provided it the opportunity to comment on this ESD in accordance with the NCP Section 300.435 (c)(2) and Section 300.435 (c)(2)(i) and CERCLA Section 121(f). The Ohio EPA staff issued an informal concurrence with this ESD on April 25, 2013. The Ohio EPA will issue a formal concurrence in July 2013.

VII. Statutory Determinations

EPA has determined that these significant changes comply with the statutory requirements of CERCLA Section 121, 42 U.S.C. Section 9621, are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, are cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Because the remedy results in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review is conducted no less often than each five years after the initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

VIII. Public Participation

The public participation requirements set out in the NCP Section 300.435(c)(2) will be met by publishing this ESD, making it available to thepublic in the Administrative Record, and publishing a notice summarizing the ESD in a major local newspaper. This ESD is supported by documents in the administrative record, including the documents listed in the attached Administrative Record Index Update #4.

IX. Authorizing Signature

I have determined the remedy for the Site, as modified by this ESD, is protective of human health and the environment, and will remain so provided the actions presented in this ESD are implemented as described above.

This ESD documents the significant changes related to the remedy at the Site. U.S. EPA selected these changes with the concurrence of Ohio EPA.

U.S. Environmental Protection Agency

By: _____
for Richard C. Karl
Director
Superfund Division

Date: 6/27/13

U.S. Environmental Protection Agency
Remedial Action

Administrative Record
For
New Lyme Landfill
Ashtabula County, Ohio

Update 4
May 21, 2013
SEMS ID: 902685

NO.	SEMS ID	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	288673	3/4/08	U.S. EPA	File	Third Five Year Review Report for the New Lyme Landfill Site (Signed) - 2008	148
2	449689	3/1/13	U.S. EPA	File	Fourth Five Year Review Report for the New Lyme Landfill Site (Signed) - 2013	390
3	902695	8/29/08	The New Lyme Group	Hill, L., U.S. EPA	Letter re: The New Lyme Group's Responses to the Third Five Year ROD Review Report	17

FIGURE 1. NEW LYME LANDFILL SITE