AMENDMENT TO THE RECORD OF DECISION

Unisys Corporation
Operable Unit Number 01: On-Site Remedial Program
State Superfund Project
Lake Success, Nassau County
Site No. 130045
January 2015



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT – AMENDED RECORD OF DECISION

Unisys Corporation
Operable Unit No. 1: On-site Remedial Program
Lake Success, Nassau County
Site No. 130045
January 2015

Statement of Purpose and Basis

The Amended Record of Decision (AROD) presents the selected remedy for the Unisys site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the site and the public's input on the Proposed Amendment to the ROD presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the AROD.

Description of Selected Remedy

The elements of the amended remedy are as follows:

- 1. Modification to the original pumping rate of 1,800 gpm identified in the Original ROD based on the design evaluation. The current system was designed to operate at 730 gpm.
- 2. An active sub-slab depressurization system (SSDS) was installed at two buildings and a passive SSDS is in place for another building as a result of the October 2006 Vapor Intrusion Legacy effort.
- 3. Environmental Easement. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
 - a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - b) allows the use and development of the controlled property for commercial use with the exception of the area of existing soccer fields for which the use is restricted residential (which allows for active recreation), as defined by Part 375- 1.8(g), although land use is subject to local zoning laws;

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- c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- d) prohibits agriculture or vegetable gardens on the controlled property; and
- e) requires compliance with the Department approved Site Management Plan.
- 4. Site Management Plan. A site management plan is required, which includes the following:
 a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the institutional and/or engineering controls for all operable units of the site remain in place and effective.

Institutional Controls: Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: Active sub-slab depressurization systems (SSDS) were installed at two buildings and a passive SSDS has been installed at another building on the site.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b) a Monitoring Plan to assess the performance and effectiveness of all operable units of the remedy. The plan includes, but may not be limited to:
- monitoring of the groundwater to assess the performance and effectiveness of the remedy;
- monitoring of the groundwater at irrigation wells that are or that become impacted by site-related groundwater contamination; and
- a schedule of monitoring and frequency of submittals to the Department.
- c) an Operation and Maintenance(O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- maintaining site access controls and Department notification;

- providing the Department access to the site and O&M records; and
- d) periodic certification the remedial party or site owner must provide, on such periodic basis as established by the Department, certification of:
- institutional and/or engineering controls in accordance with Part 375-1.8(h)(3);
- compliance with the Public Water Supply Protection and Mitigation Program; and
- compliance with the Department approved Site Management Plan.

New York State Department of Health Acceptance

The NYSDOH concurs that the amendment to the remedy for this site is protective of human health.

Declaration

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

January 9, 2015	puschel
Date	Robert W. Schick, P.E., Director
	Division of Environmental Remediation

ROD Amendment January 2015

AMENDED RECORD OF DECISION

Unisys Corporation Operable Unit No. 1: On-site Remedial Program Lake Success, Nassau County Site No. 130045 January 2015

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has amended the Record of Decision (ROD) for Operable Unit No. 1 at the above referenced site. The disposal of hazardous wastes at this site, as more fully described in the original ROD document, has caused the contamination of various environmental media. This proposed amendment identifies new information which has led to this proposed modification to the remedy identified in the March 1997 ROD.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Great Neck Public Library Attn: Ms. Laura Weir 159 Bayview Avenue Great Neck, NY 11023 Phone: 516-466-8055

Hillside Public Library Attn: Ms. Charlene Noll 155 Lakeville Road New Hyde Park, NY 11040

Phone: 516-355-7850

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location: The former Unisys Site is located in the Village of Lake Success and the Town of North Hempstead, Nassau County. The site is bounded by Marcus Avenue to the north, Union Turnpike to the south, Lakeville Road to the west and the Triad Office Park to the east.

Site Features: The site is approximately 94 acres in size. The former Unisys property is fully developed, with the bulk of the property comprised of the main manufacturing building, various smaller support buildings (e.g., foundry and boiler building), three recharge basins and parking lots. The smaller buildings are located south of the main building. The site was redeveloped by the current owner for commercial use. Presently, the buildings house a number of tenants. The current site owner has deeded 3.5 acres in the southeast corner of the property to the Town of North Hempstead for their use as soccer fields.

Current Zoning/Use(s): The site straddles the border of the Village of Lake Success and the Town of North Hempstead. The portion of the property in the Village of Lake Success is zoned Economic Development A (commercial). The portion of the property in the Town of North Hempstead, including the soccer fields, is zoned Industrial A. The off-site area (OU2) is mixed residential/commercial/industrial.

Past Use of the Site: The former Unisys facility was an active manufacturing facility from its start-up in 1941 until approximately 1995, when most manufacturing activities ceased, although some assembly, integration, prototype development/testing, and/or engineering and administrative activities continued at the facility through early 1999. The facility has been served by a sanitary sewer system since it was constructed in 1941. The on-site storm water collection system which received runoff from the parking lot, roofs and surrounding roads is connected to the three recharge basins located in the southwest corner of the property. Groundwater had been used for non-contact cooling purposes since the facility was constructed. The non-contact cooling water system consisted of three extraction wells and four diffusion wells which were located to the north and south of the main manufacturing building, respectively. The groundwater is no longer used for cooling purposes. In the past, the facility manufactured a wide range of defense related products. Past manufacturing processes included casting, etching, degreasing, plating, machining and assembly. Chemicals used during manufacturing at the facility included halogenated solvents, cutting oils, paints and fuel oils and plating compounds. The facility had five drywells located off the southeastern corner of the main building. These

drywells were used to dispose of water containing solvents and oils from approximately 1941 to 1978.

Operable Units: The site is divided into two Operable Units. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable Unit 1 (OU1) consists of the 94 acre site property. A Record of Decision (ROD) was issued for OU1 in March 1997.

Operable Unit 2 (OU2) is defined as the off-site area beyond the 94 acre property where contaminants in groundwater have migrated from the site (OU1). Eleven active public supply wells are located within OU2; nine drawing from the Magothy aquifer, and two drawing from the Lloyd aquifer. Four inactive public supply wells (Magothy) are located within OU2, as are six active irrigation wells.

Geology/Hydrogeology: The site and surrounding area is underlain by unconsolidated surficial deposits with an estimated 700 foot thickness, and Precambrian bedrock below. The unconsolidated deposits are comprised of the following formations from the ground surface downward: Upper Glacial deposits (150 ft); Magothy formation (250 ft); Raritan Upper Clay unit (200 ft); Raritan Lloyd Sand unit (190 ft) and bedrock.

The groundwater flow in the area has been divided into four zones: the Upper Glacial aquifer and the upper, middle, and basal portions of the Magothy aquifer. The depth to groundwater is approximately 100 feet below ground surface (bgs). Generally, the groundwater flow direction is north/northwest. However, pumping by several public supply/irrigation wells in the area affects the groundwater flow direction.

Operable Unit (OU) Number 1 is the subject of this document.

A Record of Decision for OU2 has been issued.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, the 1997 ROD determined the site could be developed for commercial use, which also would allow industrial use. The area of the site currently used for soccer fields will be designated for restricted residential, which will also allow for active recreational use.

SECTION 5: ENFORCEMENT STATUS

The NYSDEC and the Lockheed Martin Corporation entered into a Consent Order (W1-0787-

96-12) on October 29, 1997. The order obligates the responsible party to develop and implement a remedial program in accordance with the Record of Decision for OU1.

SECTION 6: REMEDIAL ACTION OBJECTIVES

The goals selected for this Operable Unit are:

- Reduce, control or eliminate to the extent practicable the contamination present within the soils on the site.
- Provide for attainment of Standards, Criteria and Guidance (SCGs) for groundwater quality to the extent practicable.
- Mitigate the impacts of contaminated groundwater to the environment.
- Prevent to the extent possible, migration of contaminants from the sediments to the surface water and groundwater.

6.1: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

The groundwater contamination originates from the former plant site (OU1) and extends over one mile into the off-site area. Groundwater migration from OU1 has resulted in a significant off-site groundwater plume. The groundwater flow direction is to the northwest. The primary site-related contaminants of concern (COCs) for the groundwater include: 1,2 DCE, TCE, PCE, and Freon 113. The groundwater plume originating from the nearby 400 Lakeville Road site (Site No. 130176), known to contain Freon 22, also extends off that site and comingles with the Unisys site groundwater plume.

The OU1 groundwater remedial system is effectively containing on-site VOCs in the Upper Magothy aquifer and is to be upgraded to ensure containment in the Basal Magothy, by the OU2 remedy. Soil Vapor Intrusion on-site is being addressed with a mitigation system.

Resources impacted/threatened: The Long Island Sole Source Aquifer has been impacted with site-related contamination resulting in impacts to nearby Public Supply Wells and Golf Course Irrigation Wells. Several of these wells have treatment systems in place so the water supplied meets acceptable drinking water quality.

6.2: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People are not drinking the contaminated groundwater because public water suppliers have taken appropriate actions (such as treating the groundwater to remove contaminants prior to

distribution or removing wells from service) to ensure that the public water supply continues to meet drinking water standards (OU1/OU2). Potential exposure to contaminated groundwater via irrigation well usage to air (via volatilization) was evaluated and no impacts were identified (OU2). It is not likely that people will come into direct contact with soil contaminants because the majority of the site (OU1) is covered with buildings and pavement and contaminated soils have been removed from the drywells. Contaminated sediments found in three recharge basins (OU1) are covered with standing water and a fence surrounds the basins preventing unauthorized access. Signs are posted around the recharge basin area, indicating that trespassing, swimming and fishing are prohibited (OU1). Volatile organic compounds in contaminated groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn, may move into overlying buildings and affect indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential for soil vapor intrusion to impact indoor air has been addressed in current on-site structures by the continued operations of sub-slab depressurization systems (active and passive) and a soil vapor extraction system. Based on environmental sampling, the potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in any future on-site building development and occupancy (OU1). Environmental sampling indicates the indoor air quality of off-site structures is not impacted by site-related contamination (OU2).

SECTION 7: AMENDEMENT TO THE MARCH 1997 ROD

7.1: Elements of the Original OU1 Remedy to be Changed

The March 1997 ROD stated, relative to the continued operation, maintenance and monitoring of the selected remedy:

- Based on groundwater model, it is estimated that a total of five extraction wells will be operated across the site extracting approximately 1,800 gallons per minute (gpm).
- Pumping and water quality data will be monitored to determine the effects of the selected extraction system at all depths including the Magothy aquifer. After the selected remedy becomes operational it will be evaluated to determine if additional remedial alternatives for the lower Magothy aquifer need to be implemented. This alternative will be evaluated as part of the OU2 RI/FS;
- Over time, the selected remedial alternative would be evaluated by sampling both on-site
 and off-site monitoring wells to determine its ability to provide hydraulic control, to meet
 discharge standards and to reduce on-site groundwater concentrations to the remedial
 action objectives;
- A deed restriction will be imposed on the portions of the site where the recharge basins are located to limit access to the basins and restrict future use of the site; and
- A Declaration of Covenants and Restrictions will be filed with the Nassau County Clerk
 to prohibit modifications to the site without Department approval to prevent potential
 future development on the basin property.

This amendment deletes these elements of the March 1997 ROD and replaces them with comparable, updated requirements as detailed below.

7.2: New Information Forming the Basis for the Remedy Change

In 2003 Article 27 Title 13 of the Environmental Conservation Law (ECL) was amended to require the placement of an Environmental Easement on all class 2 inactive hazardous waste disposal sites that rely on institutional controls as part of the remedy selected for the site. Further, the promulgation of the 6 NYCCR Part 375 regulations necessitated by the change in ECL, redefined operation, maintenance and monitoring activities as Site Management and set forth requirements for a Site Management Plan as the mechanism for assuring the institutional and engineering controls for a site were in place and effective to support the restrictions on the site imposed by the Environmental Easement. These new requirements are effective for all RODs issued after the ECL changes in 2003. Since a ROD is expected for OU2 of this site which will require continued site management, the OU1 ROD needs to be amended to comport with these changes.

During design of the OU1 remedy, groundwater modeling identified a concern over the 5 extraction wells operating at 1,800 gpm and discharging the treated water on-site causing migration of the plume. The evaluation completed at that time and incorporated into the approved remedial design called for lowering the extraction rate to 730 gpm from on-site wells, with the discharge of the treated groundwater located northeast of the site in an area beyond the plume.

In addition, in accordance with the original ROD (first bullet above), the basal (lower) Magothy aquifer was evaluated to determine if additional remedial alternatives for the lower Magothy aquifer need to be implemented. This evaluation determined that an upgrade of the current 730 gpm OU1 groundwater remediation system was needed to improve groundwater capture from the basal (lower) Magothy aquifer to ensure complete capture. Therefore, as stated above, the OU2 proposed remedy will include the installation of a new 120 gpm extraction well to collect and treat an additional volume of groundwater bringing the total system up to 850 gpm. Thus this requirement of the OU1 ROD has been satisfied.

Due to heighten concerns over vapor intrusion at sites where remedies had been selected prior to 2003, the site was evaluated as part of the State's October 2006 Vapor Intrusion Legacy effort. This effort identified a vapor intrusion potential for the former manufacturing facility and has resulted in the installation of an active sub-slab depressurization system (SSDS) in two buildings, and a passive SSDS has been installed at one building. The presence of soil gas at the site also requires an environmental easement on the entire property to cover remaining open areas, if redeveloped, in addition to current buildings. This addition to the OU1 ROD is documented by this amendment.

7.3: Summary of Changes to the Original OU1 Remedy

- 1. Modification to the original pumping rate of 1,800 gpm identified in the Original ROD based on the design evaluation. The current system was designed to operate at 730 gpm.
- 2. An active sub-slab depressurization system (SSDS) was installed at two buildings and a passive SSDS is in place for another building as a result of the October 2006 Vapor Intrusion Legacy effort.
- 3. Environmental Easement. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
 - requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - allows the use and development of the controlled property for commercial use with the exception of the area of existing soccer fields for which the use is restricted residential (which allows for active recreation), as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
 - restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
 - prohibits agriculture or vegetable gardens on the controlled property; and
 - requires compliance with the Department approved Site Management Plan.
- 4. Site Management Plan. A site management plan is required, which includes the following:
 - a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the institutional and/or engineering controls for all operable units of the site remain in place and effective.

Institutional Controls: Environmental Easement discussed in Paragraph 2 above.

Engineering Controls: Active sub-slab depressurization systems (SSDS) were installed at two buildings and a passive SSDS has been installed at another building on the site.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;

- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b) a Monitoring Plan to assess the performance and effectiveness of all operable units of the remedy. The plan includes, but may not be limited to:
 - monitoring of the groundwater to assess the performance and effectiveness of the remedy;
 - monitoring of the groundwater at irrigation wells that are or that become impacted by site-related groundwater contamination; and
 - a schedule of monitoring and frequency of submittals to the Department.
- c) an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
 - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
 - maintaining site access controls and Department notification;
 - providing the Department access to the site and O&M records; and
- d) periodic certification the remedial party or site owner must provide, on such periodic basis as established by the Department, certification of:
 - institutional and/or engineering controls in accordance with Part 375-1.8(h)(3);
 - compliance with the Public Water Supply Protection and Mitigation Program; and
 - compliance with the Department approved Site Management Plan.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Unisys Corporation Site
Operable Unit No. 01: On-Site Remedial Program
State Superfund Project
Lake Success, Nassau County, New York
Site No. 130045

The Proposed Amendment to the Record of Decision (PAROD) for the Unisys Corporation site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on June 13, 2014. The PAROD outlined the remedial measure proposed for the contaminated groundwater at the Unisys Corporation site.

The release of the PAROD was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on June 26, 2014, which included a presentation of the remedial investigation feasibility study (RI/FS) for the Unisys Corporation site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PAROD ended on July 14, 2014.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: How was 120 gallons per minute (gpm) chosen as the required increase for pumping for the new well for OU-1?

RESPONSE 1: Hydrogeologic and engineering evaluations determined that the existing system was not completely capturing the plume in the basal (lower) Magothy aquifer and that a new 120 gpm extraction well would provide the complete capture.

COMMENT 2: Why is the fence still around the contaminated recharge basins? Why haven't these basins been remediated?

RESPONSE 2: The remedy for the on-site recharge basins selected in 1997 OU1 ROD was an institutional control. This remedy was implemented by the erection of a security fence and posting of signs around the entire recharge basin area to prevent unauthorized access. Deed restrictions were also placed on the area of the site where the three recharge basins were located to limit the use and future development of the property. The selected remedy for OU 2 will require an environmental

easement be placed on the entire site, including this area which will further assure this remedy remains protective of public health and environment.

COMMENT 3: Who is the new owner of the site?

RESPONSE 3: Marcus Avenue Unit One Nominee LLC and 1111 Marcus Ave Unit 2 Owner, LLC are identified as the current owners of the site.

COMMENT 4: What assurance do we have that Lockheed Martin will continue to pay for this remedy? Will they put the required environmental easements on the property? What happens if Lockheed Martin goes bankrupt?

RESPONSE 4: The NYSDEC and the Lockheed Martin Corporation entered into an Order on Consent in 1997 for the implementation of the 19xx OU-1 ROD (the 1997 Order). The 1997 Order will cover the implementation of the OU-1 Amended ROD. Lockheed Martin submitted comments supporting the proposed amended OU-1. The Department anticipates that the current owners of the site will place the Environmental Easement required by the OU1 Amended ROD on the property which will ensure compliance with the site management plan.

COMMENT 5: What happens if there is a natural disaster? Will the remediation systems keep working?

RESPONSE 5: The remedial system may be shut down during a natural disaster. However, such a shutdown is expected to be of relatively short duration and as such is not expected to have a significant impact on the overall performance delivered by these systems.

COMMENT 6: What was the extent of the indoor air sampling and was the sampling the same in both the east and west sides of the building?

RESPONSE 6: Indoor air samples were collected from sampling locations inside the former Unisys facility, LA Fitness, powerhouse and garage buildings. Sampling was conducted in accordance with NYSDOH guidance.

COMMENT 7: Is the SSDS operating in the entire building?

RESPONSE 7: An active SSDS system is operating inside the former main manufacturing building and the garage building. A passive system is operating at the LA Fitness building.

COMMENT 8: How is the effluent air from an air stripper treated? What concentration in water causes an effluent problem in the air?

RESPONSE 8: Effluent air from the air strippers is treated with series of emission control units which include vapor phase granular activated carbon and potassium permanganate-impregnated zeolite. The system is capable of treating levels of contamination that are significantly above what is expected based on many years of groundwater monitoring.

COMMENT 9: Are you now testing for Freon in the ground water?

RESPONSE 9: Yes. Testing of Freon in the groundwater has been underway for several years.

COMMENT 10: You mention that you put in a wonderful generator on the subslab depressurization system, which is wonderful, so we're breathing clean air. Are there generators for the water treatment extraction pumps, because we were out last year 3-1/2 weeks no power? What was the effect? Were those pumps running and extraction cleaning the water?

RESPONSE 10: While a backup generator exists for the subslab system, there is not a backup generator for the groundwater extraction/containment system. Also see Response 5.

COMMENT 11: Why is the O&M of the golf course irrigation well included in the ROD amendment?

RESPONSE 11: It is included in OU2 ROD and has been deleted from the OU1 AROD.

A letter dated June 30, 2014 was received from Mayor Ronald Cooper of the Incorporated Village of Lake Success, which included the following comments:

COMMENT 12: The Village requests that the Soil Management Plan for the site be constructed to remain consistent with the protocols that have been developed in the past between the NYSDEC RCRA program, the NYSDEC superfund program and the EIS developed under the NYS SEQRA program.

For any construction activity performed in an RCRA area (either inside or outside the buildings on-site) that will result in the disturbance of soil, written approval from NYSDEC will be required and shall be provided to the Incorporated Village of Lake Success prior to disturbance/construction in these areas.

Any soil disturbance/construction activity performed outside of the buildings and not in a RCRA area will be subject to the following – the applicant shall screen the soils (PIO, visual and odor) during the work. Excavated soils to be disposed of offsite shall undergo waste characterization sampling as per the disposal facility requirements. Excavated soil to be re-used on-site shall be sampled in accordance with NYSDEC protocols and obtain NYSDEC Region 1 approval prior to re-use. Copies of all NYSDEC approvals and/or manifests shall be provided to the Incorporated Village of Lake Success.

Any sub-slab construction/soil disturbance activity performed inside the buildings and not in a RCRA area will be subject to the following – During and after the SSDS is installed, all slab penetrations will comply with the Arcadis/NYSDEC-approved Sub Slab Depressurization System Construction Site Specific Health and Safety Plan (HASP) Addendum Great Neck, New York, dated August 13, 2010, the October 18, 2010 Arcadis memo (Appendix G of the FEIS) and the additional requirements, as follows: The associated VOC monitoring shall include

trichloroethene (TCE), tetrachloroethene(PCE), vinyl chloride (VC), at a minimum; an action level greater than 10 parts per million (ppm) total VOCs measured with a photoionization detector (PIO) for a sustained period of 2 minutes in the breathing zone, shall trigger the identification of specific target VOC levels (TCE, PCE, VC) using Draeger Tubes; Draeger Tubes shall be collected for TCE, PCE and VC and if the levels exceed 10 ppm for TCE or PCE and 1 ppm for VC for a sustained period of 10 minutes, work will be suspended until the hazard can be assessed, and/or engineering controls employed. NYSDEC and NYSDOH will be sent the monitoring results (copy to the Village Clerk and Mayor of the Incorporated Village of Lake Success and the Supervisor and Commissioner of Planning & Environmental Protection of the Town of North Hempstead) so that the NYSDEC and NYSDOH can make an assessment and take corrective action as necessary.

We request to be part of this process because OU1 and OU2, to a great extent, is in the Village of Lake Success and affects our population directly. Actions on OU1 also directly affect the finding statement of the EIS that the entity owning 1111 Marcus Avenue is presently complying with in connection with a change in use of the building granted by the Village. Therefore, any site modification and monitoring results may affect the EIS finding statement. Please keep us informed so that we can fulfill our obligations as lead agency under SEQRA as part of that process.

RESPONSE 12: A site management plan (SMP) is required by the Amended OU1 ROD. The SMP will include an excavation plan which details the provisions for management of future excavations in areas of remaining contamination. The SMP should include all of the detailed information identified in your comment. All of the information submitted to the Department can be made available to the Village.

A letter dated July 14, 2014 was received from R. Stan Phillips on behalf of the Lockheed Martin Corporation, which included following comments:

COMMENT 13: Lockheed Martin Corporation ("Lockheed Martin") has examined the June 2014 proposed amendment to the March 1997 Record of Decision ("ROD"), relating to the on-site remedial program for Operable Unit ("OU") No. 01 at the Unisys Corporation site (the "Proposed Amendment"), located in Lake Success, Nassau County. Lockheed Martin requests the Department to adopt the Proposed Amendment in its current form as the final ROD amendment.

Lockheed Martin makes this request based on the technical information contained in the Proposed Amendment that it has developed with Department oversight over many years during site investigation and remediation. The elements of the amended remedy relating to the OU No. 01 groundwater remedial system will assure enhanced groundwater capture and control. Regarding soil vapor, Lockheed Martin has constructed a state-of-the-art sub-slab depressurization system to protect building occupants at the site from the potential for soil vapor intrusion and the potential for such intrusion should be considered if new buildings are constructed. The Environmental Easement and the Site Management Plan will set forth requirements for future controls and the operation and maintenance of remedial systems to assure the protection of human health and the environment. Lockheed Martin will work with the Department on designing and including in the Site Management

Plan certain controls, as appropriate, for the closure of areas at the site that either have been the subject of or were proposed to be regulated through activity and use limitations.

Lockheed Martin looks forward to working with Department staff to implement the components of the amended OU No. 01 ROD.

RESPONSE 13: Comment noted.

<u>A letter dated July 15, 2014 was received from resident Michael Currie, which included the following comments:</u>

COMMENT 14: The following recommendation is made as the most efficient and effective means to minimize any further contamination entering the off-site OU 2 and migrating deeper into the aquifer at the on-site OU-1, and to eliminate the contamination at OU1. The most efficient and effective means of eliminating the contamination at OU 1 is to treat the aquifer water/soil at the exact site of the pollution injection.

The NYSDEC has over 20 years of sampling data from the affected aquifer. This allows the DEC to define the level of contamination for all the different contaminants at all the meaningful depths and locations relative to the original injection site and define the changes in the contamination levels in the effected on and off site areas over this time period. This data also allows the DEC to clearly define how remediation actions affected these changes.

So if the goal is to minimize and eventually stop the contaminants from leaving the injection site and polluting the surrounding aquifer, the aquifer water needs to be remediated at the injection site. This new extraction and treatment system at the pollution injection site must have extraction at all the depths required and associated pumping rates for each depth appropriate to the density and concentration of the contamination. The orientation of the well head openings, the pumping rates and the location and design of the reinjection wells will determine how the contaminants are withdrawn from the aquifer. They will also determine the modification of the aquifer flow. Besides removing all the contaminants from the injection site, this can cause a small amount of the contaminants to be pulled back to the injection site and removed. Removing all the contaminants from the injection site is the only way to stop the contaminants from leaving the injection site and polluting the surrounding aguifer. All the other extraction treatment wells except at the pollution injection site as clearly shown in your presentation will alter the natural flow of the water in this aquifer, accelerating the flow in the general direction of these well heads. But that is also accelerating the movement of the contaminants away from the pollution injection site out of OU1 and into OU 2 and thus also helping to expand the size of the off-site aquifer contamination area, OU 2. Each of these extraction / treatment wells can only capture a portion of the contaminants flowing with the natural aquifer passed them. It is a practical impossibility to put a continuous treatment screen across the entire width and depth of the existing plume. So the design of the extraction / treatment wells and their associated reinjection wells that are employed away from the pollution injection site must minimize the acceleration of the aquifer flow away from the injection site while maximizing the removal

and treatment of the water in their immediate vicinity.

In the document titled "Proposed Remediation Action Plan" for site #130045 OU-2 nine items are listed as the basis for the remediation choice. In fact they are good rational for all the remediation choices at the entire site, OU-1 and OU-2.

- 1. Protection of Human Health and Environment
- 2. Compliance with NYS Standards, Criteria, and Guidance (SCGs)
- 3. Long Term Effectiveness and Permanence
- 4. Reduction of Toxicity, Mobility or Volume
- 5. Short Term Impact and Effectiveness
- 6. Implementability
- 7. Cost-Effectiveness
- 8. Land Use
- 9. Community Acceptance

Installing an extraction and treatment system at the pollution injection site satisfies numbers 1, 3, 4, and 5 of these criteria by its definition and associated requirements. Since it will be very similar to the other on-site system, it will satisfy criteria 2 and 6. There is an active Vapor remediation system close contaminant injection site now, to expand that to include this new system satisfies criterion 8. Most importantly any plan that will completely and permanently remove the pollution from the aquifer water will have overwhelming community acceptance, satisfying criterion 9. As far as criterion 7 is concerned, the more rapidly and efficiently the contaminants are removed, the more totally cost effective the plan is.

Why did we put the pumping wells for this site at the NW side of the building when the greatest contamination is on the SE side of the building?

RESPONSE 14: The goal of the remedy for Operable Unit 1 was to address the source of the groundwater contamination resulting in the plume and to stop contaminants in the groundwater from leaving the site, the actions advocated by this comment. This remedy has been implemented and has largely been successful. Based on the data, the total VOCs in shallow groundwater monitoring well 35GL (near the former source area) have significantly decreased, for example levels of total VOCs well 35GL were 8972 ppb in October 2000 and had dropped to 2000 ppb by 2009 Levels also decreased to a similar extent in the nearby well cluster (2GL, 2MU, 2MI, 2ML). With the addition of the deep pumping well identified by this AROD to the three existing pumping wells, the upgraded OU1 system is expected to contain migration of contaminants from on-site (OU1) to the off-site areas (OU2), the action identified as necessary by this comment. The extraction wells are located at the north side of the building situated to intercept the groundwater which flows from the southeast to the northwest. These wells are cited to cut off migration to the plume and will also extract contamination both from beneath the building as well as any contamination that may be southeast of the building. A groundwater extraction system in the source area was not selected because other remedial efforts addressed this contamination. These efforts included an SVE system (installed as an IRM in 1994 and upgraded in 2001) which includes extraction of the perched ground water in the

vadose zone. Groundwater monitoring near the source area shows that levels of contaminants in the groundwater have significantly decreased, indicating that the measures that have already been implemented are successful. Lastly, installation of a groundwater extraction system in the source area could significantly reduce the effectiveness of the OU1 groundwater system that is located in the northern portion of the site. This system has been installed to prevent off-site migration.

The remedy selection criteria identified in the comment are intended to be used to compare different alternatives rather than be used absolutely as this comment does.

APPENDIX B

Administrative Record

Administrative Record

Unisys Corporation Site
Operable Unit No. 1: On-Site Remedial Program
State Superfund Project
Lake Success, Nassau County, New York
Site No. 130045

- 1. Proposed Remedial Action Plan for the Unisys Corporation site, Operable Unit No. 1, dated June 2014, prepared by the Department.
- 2. Order on Consent, Index No. W-1-0527-91-02, between the Department and Unisys Defense System, Inc., executed on December 13, 1991. On July 11, 1995 Loral Corporation agreed to implement the obligations under the Order. Effective July 23, 1996, Lockheed Martin Tactical Systems, Inc. undertook the obligations of the aforementioned Order.
- 3. Order on Consent, Index No. W1-0787--12, between the Department and Lockheed Martin Corporation, executed on October 29, 1997. The Order obligates the responsible party to develop and implement a remedial program in accordance with the Record of Decision for OU1.

Reports:

- 4. Volume I and II Remedial Investigation Report, Operable Unit No. 2 for the Unisys Site, Great Neck, New York, Site No. 130045 May 2012, Updated: August 17, 2012, prepared by ARCADIS.
- 5. Feasibility Study, Operable Unit No.2, Former Unisys Facility, Great Neck, New York, Site No. 130045 May 2012, prepared by ARCADIS.
- 6. Feasibility Study Addendum, Operable Unit No.2 Former Unisys Facility, Great Neck, New York, Site No. 130045 May 2012, prepared by ARCADIS.

Correspondence received during PRAP Comment Period:

- 7. A letter dated June 30, 2014 from Ronald S. Cooper, Mayor of Incorporated Village of Lake Success to NYSDEC.
- 8. A letter dated July 14, 2014 from R. Stan Philips, Lockheed Martin Corporation to NYSDEC.
- 9. A letter dated July 15, 2014 from Michael Currie, resident to NYSDEC.

