

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of the General Counsel

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September 16, 2016

**SENT VIA FIRST CLASS MAIL AND
ELECTRONIC MAIL**

Ms. Mary P. Morningstar, Esq.
Lockheed Martin Corp.
6801 Rockledge Drive
Bethesda, MD 20817
Mary.p.morningstar.lmco.com

**RE: Order on Consent and Administrative Settlement
Index No. CO 1-20160426-40
Lockheed Martin Corporation
Site Name: Unisys Corporation
Site No.: 130045**

Dear Ms. Morningstar:

Enclosed to complete your files is the fully executed Order on Consent and Administrative Settlement referencing Lockheed Martin Corporation and the Unisys Corporation site located at 1111 Marcus Avenue, Lake Success, New York.

If you have any further questions or concerns relating to this matter, please contact our office at 518-402-9510.

Respectfully,



Maria Mastroianni
Legal Assistant
Remediation Bureau
Office of General Counsel

Enclosure



Department of
Environmental
Conservation

cc: Ms. Virginia C. Robbins, Esq.
Bond, Schoeneck & King, PLLC
One Lincoln Center
Syracuse, NY 13202
vrobbins@bsk.com

ec: D. Tuohy, Esq., NYSDEC
R. Rusinko, Esq., NYSDEC
P. Foster, Esq., NYSDEC
A. Shah, P.E., NYSDEC

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Remedial Program for an
Inactive Hazardous Waste Disposal
Site under Article 27, Titles 9 and 13, and,
Article 71 of the Environmental Conservation Law,
and New York State's Claim for Damages for the
Injury of New York's Natural Resources under Articles 3
and 71 of the Environmental Conservation Law and
Section 107 of the Comprehensive Environmental
Response, Compensation and Liability Act
by

Lockheed Martin Corporation,
Respondent.

**ORDER
ON
CONSENT
and
ADMINISTRATIVE
SETTLEMENT**

Index # CO 1-20160426-40

Site # 130045

Operable Unit 1
RCRA Requirements
Operable Unit 2
Natural Resource Damages

WHEREAS,

1. A. The New York State Department of Environmental Conservation ("Department") is responsible for inactive hazardous waste disposal site remedial programs pursuant to Article 27, Title 13 of the Environmental Conservation Law ("ECL") and Part 375 of Title 6 of the Official Compilation of Codes, Rules and Regulations ("6 NYCRR") and may issue orders consistent with the authority granted to the Commissioner by such statute.

B. The Commissioner of the Department is the trustee of the natural resources of the State of New York pursuant to: Subpart G of the National Contingency Plan, 40 CFR §300.605; Section 107(f)(2) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §9607(f)(2); Article 12 of the New York Navigation Law ("NL") (e.g., NL §170); the Oil Pollution Act of 1990, 33 U.S.C. §2706(b) and the Federal Water Pollution Prevention And Control Act, 33 U.S.C. §1321(f)(5).

C. The Department is responsible for carrying out the policy of the State of New York to conserve, improve and protect its natural resources and environment and control water, land and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.

D. The Department is also responsible for the Resource Conservation and Recovery Act Program ("RCRA" a/k/a the "Industrial Hazardous Waste Management

Program") pursuant to Article 27, Title 9 of the ECL and 6 NYCRR Parts 370 – 374 and 376.

E. This Order on Consent and Administrative Settlement ("Order") is issued pursuant to the Department's authority under, *inter alia*, ECL Article 27, Titles 9 and 13, ECL Article 71-2727 and ECL 3-0301.

2. Lockheed Martin Corporation ("Respondent") is a business corporation organized and existing under the laws of the State of Maryland and authorized to do business in the State of New York. Respondent is the successor in interest to the former owners and operators of the facility on the Unisys Corporation Site, 90 acres in size, located at 1111 Marcus Avenue, Village of Lake Success, Town of North Hempstead, Nassau County, New York (hereinafter the "Site" or the "Unisys Site"). (The former owners and operators of the Site include Sperry Gyroscope Company, which merged with Burroughs to form Unisys Corporation, Loral Corporation, and Lockheed Martin Tactical Systems, Inc., a formerly owned subsidiary of Lockheed Martin Corporation.) A map depicting the general boundaries of the Site and the tax parcels is attached hereto as Exhibit "A."

3. The Site is listed as a class 2 site with a site number of 130045 in the *Registry of Inactive Hazardous Waste Disposal Sites in New York State*. Because of technical considerations, the Department divided the Site into Operable Unit 1 ("OU1") for on-Site and Operable Unit 2 ("OU2") for off-Site groundwater.

4. The Department issued the Record of Decision for the Site's OU1 on March 31, 1997 ("OU1 ROD"). Respondent entered into Order on Consent, Index # W1-0787-96-12, effective October 29, 1997, for the Development and Implementation of a Remedial Program set forth in the OU1 ROD (the "March 1997 Order"). The Department issued an Amended ROD for OU1 on January 9, 2015 and made a minor change on August 4, 2015 ("OU1 AROD"). The OU1 AROD is attached hereto as Exhibit "C."

5. The Department issued the Record of Decision for the Site's OU2: Off-Site groundwater on December 23, 2014 ("OU2 ROD"). The OU2 ROD is attached hereto as Exhibit "D."

6. Respondent, pursuant to 6 NYCRR § 372.2(a)(8)(iii), as a result of the activities of Respondent's predecessors who were large quantity generators and who Respondent maintains accumulated liquid hazardous waste on site for 90 days or less over a sole source aquifer, is obligated under 6 NYCRR § 373-1.1(d)(1)(iv)(d) to comply with the closure plan requirements of § 373-3.7(a)-(f) (the "373 Requirements") applicable to the Site's 90-day hazardous waste management units ("HWMUs"). In addition, Respondent maintains it has cooperated with the Department to address/remediate, in a manner consistent with ECL Article 27, Title 13, impacts at areas of concern ("AOCs") that were not 90-day HWMUs at the Site.

7. The Department has issued the RCRA Large Quantity Generator Closure Document, dated August 4, 2016, for the Unisys Site's 90-day HWMUs and AOCs (the "Closure Document"). The Closure Document is attached hereto as Exhibit "E".

8. Respondent has satisfactorily completed the requirements of the March 1997 OU1 ROD as then issued, prior to amendments and or/modifications, under the March 1997 Order. Respondent has also satisfactorily completed the work required pursuant to the Remedial Investigation and Feasibility Study ("RI/FS") Order on Consent issued to Respondent in 1991 for the Site.

9. Respondent consents to the issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release or disposal of hazardous waste, hazardous substances or petroleum at or from the Site; and/or (iii) an acknowledgment that a release or threatened release of hazardous waste, hazardous substances or petroleum at or from the Site constitutes a significant threat to the public health or environment.

10. Solely with regard to the matters set forth below, Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order in accordance with its terms, and agrees not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, **IT IS ORDERED THAT:**

I. Operable Unit 1

A. The Subparagraph XII. K.1. of the March 1997 Order states in part: "The terms of this Order constitute the complete and entire Order concerning the implementation of the ROD for OU-1." This sentence of Subparagraph XII. K.1 of the March 1997 Order is hereby amended to read as follows: "The terms of this Order constitute the complete and entire Order concerning the implementation of the ROD for OU-1, provided however, that the ROD for OU-1 is not amended or modified. If the ROD for OU-1 is amended or modified, the implementation of such amendment will be addressed under a separate order."

B. This Order, inter alia, covers the implementation of the requirements of the OU1 AROD for the Site and the further upgrades to the OU1 groundwater remediation system required under the OU2 ROD.

C. 1. Respondent shall, within 30 days of the effective date of this Order, submit for the Department's review and approval a design plan for the modification of the existing OU1 pump and treat system to increase the pumping rate to 850 gallons per minute and the upgrade of the air emission control system to accommodate the increased groundwater extraction (the "Pump and Treat Design Modification Plan"). This submittal of the Pump and Treat Design Modification Plan shall include a thirty percent (30%) design for the required modifications and a schedule for design finalization.

2. Respondent shall implement the Department-approved Pump and Treat Design Modification Plan.

3. The as-built drawings of the pump and treat system modification shall be included in the final engineering report for the Site.

D. 1. Respondent shall continue to operate the active and passive sub-slab depressurization systems ("SSDSs") which were installed on the Site as a result of the October 2006 Vapor Intrusion Legacy effort.

2. a. Respondent shall submit for the Department's review and approval, within 60 days of the Department's request or as initiated by Respondent at any time, a design plan to expand/upgrade such SSDSs as subsequent data indicate is warranted (the "SSDSs Expansion/Upgrade Design Work Plan").

b. Respondent shall implement any SSDSs Expansion/Upgrade Design Work Plan(s) in accordance the Department-approved work plan. Respondent shall submit as built drawings to the Department.

E. Respondent shall, within 60 days of the effective date of this Order, make a submission to the Department for an environmental easement, which submission will contain an environmental easement checklist and all required supporting documents and certifications (the "Environmental Easement Package").

F. 1. Respondent shall, within 60 days of the effective date of this Order, submit to the Department a Site Management Plan ("SMP") which, as required by the OU1 AROD, includes an Institutional and Engineering Control Plan, a Monitoring Plan, an Operation and Maintenance Plan, and a periodic certification.

2. Respondent shall revise the SMP, as required by the Department.

II. Operable Unit 2

A. This Order, inter alia, covers the implementation of the Remedial Program set forth in the Site's OU2 ROD.

B. Respondent shall, within 90 days of the effective date of this Order, submit for the Department's review and approval a Remedial Design/Remedial Action ("RD/RA") Work Plan for the implementation of the OU2 ROD which, *inter alia*, included continued operation of the OU2 IRM groundwater extraction and treatment system, and development and implementation of the Public Water Supply Protection and Mitigation Program.

C. Respondent shall include in the SMP the additional site management plan requirements contained in the OU2 ROD, including but not limited to, on demand treatment at the irrigation well owned by the Village of Lake Success and the certification of compliance with the Public Water Supply Protection and Mitigation Program.

III. 90-day Hazardous Waste Management Units and Areas of Concern

A. This Order, *inter alia*, incorporates the 373 Requirements for the 90-day "HWMUs" for the facility which operated on the Site and the actions which the Department requires pursuant to ECL Article 27, Title 13 as necessary to address/remediate impacts at the AOCs as set forth in the Closure Document. Compliance with the Closure Document is required by this Order.

B. The Closure Document lists the previously identified HWMUs and AOCs on the Site. Each of the previously identified HWMUs and AOCs must be indicated on the "Location Map for Areas of Concern and Hazardous Waste Management Units" and included in the Site Management Plan ("SMP") which is enforceable under the Environmental Easement.

C. Each of the HWMUs and AOCs are categorized in the Closure Document based on an evaluation of the investigation and remediation activities completed to date on the Site into one of the four following categories:

- | | |
|--------------|--|
| Category I | Closure/remedial standards have been met, no further action is required provided that the Site use remains commercial use as defined at 6 NYCRR 375-1.8(g)(2)(iii). Any intrusive work on the site will follow the soil management provisions in the SMP; |
| Category II | Closure/remedial standards will be met through the use of engineering and institutional controls. Any intrusive work on the site will follow the soil management provisions in the SMP; |
| Category III | Closure/remedial standards will be met by implementing the Department-approved remedial actions, provided that the Site use remains commercial use as defined at 6 NYCRR 375-1.8(g)(2)(iii). Any intrusive work on the site will follow the soil management provisions in the SMP; and |

Category IV Tanks which stored petroleum fuels or dielectric fluids and which were reported to have been removed or closed in place due to their inaccessibility. Should any contamination be identified which is associated with these AOCs in the future, appropriate actions pursuant to the site management plan will be required.

D. 1. Respondent shall submit for the Department's review and approval work plan(s) for the remediation of each AOC which is in Category III as defined in Subparagraph III. C above.

2. Respondent shall implement the Department-approved remediation work plan(s) and provide a certification for each AOC addressed that the remediation was completed in accordance with the approved work plan.

E. For the HWMUs where closure standards and AOCs where remedial standards can be met by the existing structure(s) remaining in place as an engineering control, the SMP for the site shall include a monitoring and maintenance plan for the engineering control, and a soil/vapor management plan to be implemented in the event that the slab of the existing structure(s) is breached. In the event the existing structures in whole or in part are demolished and/or the slab of the structure(s) is removed, Respondent shall submit a closure plan for the HWMU(s) and a remediation work plan for the AOC(s) that is uncovered by such demolition or removal and Respondent shall implement such approved closure plan or remediation work plan.

F. The final engineering report for the Site shall also include the requirements of the Closure Document and Paragraph III of this Order.

IV. Restoration Planning Funding and Natural Resource Damages

A. Respondent has agreed to the amount of TWO MILLION EIGHT HUNDRED THOUSAND DOLLARS (\$2,800,000.00) to settle the State's claim for natural resource damages ("NRD") related to the Site.

B. Within 60 days after the effective date of this Order, Respondent shall:

1. Submit a draft restoration project plan ("RPP") for each project identified on Exhibit "F." The estimated value of each project is listed on Exhibit "F."

2. Pay the sum of NINE HUNDRED THOUSAND DOLLARS (\$900,000.00) to the Department's NRD fund.

C. Upon approval by the Department of each RPP, as set forth below (see Paragraph E), Respondent shall proceed to implement the project as set forth on the schedule in the RPP. Respondent shall pay the approved amount for each project to the project sponsor as set forth in the approved RPP. If the final cost of one or more of the RPP projects on Exhibit F is more than the approved amount, and the final cost of one or

more other RPP projects is less than the approved amount, and provided the scope of work of such RPP projects is unchanged from that approved by the Department, Respondent may move funds from one project to another without Respondent being required to seek the Department's prior approval. The Department agrees not to seek any assessment or oversight costs from Respondent or project sponsors with respect to these restoration projects.

D. 1. Payments to the Department as described in Subparagraphs IV.B, C and E shall be by check, money order or electronic funds transfer, payable to "NYSDEC-Natural Resource Damages Fund." Payment, if mailed, should be sent to Sharon Brooks, Office of General Counsel, 625 Broadway – 14th Floor, Albany, N.Y. 12233-1500.

2. Payment of the sum set forth in Subparagraph IV.B.2 shall be in full and complete satisfaction of any assessment and restoration oversight costs incurred by the Department with respect to the approved RPPs.

3. The Department agrees to allocate the NINE HUNDRED THOUSAND DOLLARS (\$900,000.00) received pursuant to Subparagraph IV.B.2 to a study to be conducted by the USGS of groundwater on Long Island, and shall preference the use of any funds received pursuant to Subparagraphs IV.E.2 through E.4 for projects dealing with groundwater management in Nassau County and the acquisition of real property or property interests (e.g., easements) on Long Island suitable to provide groundwater recharge or for other natural resource damage restoration or replacement. The Commissioner shall retain the ultimate authority and discretion to determine the use of funds received for natural resource damages and assessment and oversight costs in accordance with applicable law.

4. The Department shall provide an opportunity for interested municipalities and the public to propose natural resource damage restoration or replacement projects to be funded from the funds received by the Department pursuant to Subparagraphs IV.E.2 through E.4. The Department shall publish a notice soliciting project ideas within 60 days after receipt of funds pursuant to Subparagraphs IV.E.2 through E.4. The Commissioner shall retain ultimate authority to accept or reject some or all of the project ideas received in his sole discretion.

E. 1. Each draft RPP shall present the scope of the work for compensating the asserted natural resource service losses from the historical release(s) of hazardous waste and/or hazardous substances at or from the Site.

2. The Department will review each draft RPP submitted for projects identified on Exhibit F. If the Department does not approve the draft RPP, the Department will provide comments to the Respondent. Respondent shall revise the draft RPP to address the Department's comments or, consistent with the Department's comments, submit a replacement draft RPP. This revision and/or replacement process for any draft RPP may be repeated two additional times in the Respondent's attempt to secure the approval of the Department for the draft RPP. If the Department does not approve a

revised or replacement draft RPP, Respondent shall pay the sum set aside for that RPP to the Department within 30 days of the Department's notice of disapproval.

3. If the Department approves a draft RPP, it shall be published in the Environmental Notice Bulletin, and will be subject to a 30 day public review and comment period. After public review and comment, the Department will review comments and may provide additional comments to the Respondent on the draft RPP or issue a final RPP. If the Department provides comments to Respondent following the public review and comment period, Respondent shall revise the draft RPP to address the Department's comments or, consistent with the Department's comments, submit a replacement draft RPP. This revision and/or replacement process for any draft RPP may be repeated two additional times in the Respondent's attempt to secure the approval of the Department for the draft RPP. If the Department does not approve a revised or replacement RPP and issues a final RPP, Respondent shall pay the sum set aside for that RPP to the Department within 30 days of the Department's notice of disapproval.

4. Respondent will submit an annual report to the Department describing the status of all approved projects for which Respondent has submitted an RPP, including work completed to date and anticipated project completion dates with the first annual report due 12 months from the Department's issuance of the first final RPP with subsequent annual reports due each 12 months from that date. Each annual report shall detail the progress made on implementation of all approved RPPs and describe the anticipated actions in the following year. If the Department determines that substantial progress is not being made on the RPP schedule, it may terminate the RPP within 30 days of the annual report. Upon termination of an RPP, Respondent shall pay the remainder of the sum set aside for that RPP to the Department within 30 days of the Department's notice of termination.

5. Within sixty (60) days after Respondent concludes that implementation of the final RPP has been completed, Respondent shall submit a final report for the Department's review and approval. The Department shall not unreasonably withhold its approval of the final report.

F. Obtaining access to real property owned by a third party that may be required to perform the work identified in an RPP shall be the responsibility of the Department or of the sponsor of the project described in the RPP. Respondent shall have no obligation to obtain access from any third party for the implementation of the RPP.

G. 1. Specifically with respect to NRD, conditioned upon the satisfactory performance by Respondent of all its obligations under Paragraph IV of this Order, and in consideration of the payments that will be made under Subparagraphs IV.B and C and may be made under Subparagraph IV.E, and work that will be performed by Respondent pursuant to Subparagraph IV.C, and subject only to Subparagraph IV.E of this Order, the Commissioner, as the designated Trustee for New York State's natural resources, releases Respondent and its successors and assigns (including successors in title) from all claims against Respondent with regard to the Site for the "NRD Matters Addressed" by this Order. The NRD Matters Addressed by this Order are: (1) all past, present and

future New York State claims or causes of action under any federal or State law for natural resource damages arising from or relating to the release, threatened release or disposal of hazardous wastes and/or hazardous substances at or from the Site as identified in the Remedial Investigation/Feasibility Study Report(s), RCRA Facility Investigation Reports and RCRA Closure Plan Reports for the Site and/or the OU1 ROD, as amended, and/or the OU2 ROD and (2) all past, present and future New York State claims and causes of action under any federal or State law for natural resource damage assessment costs and restoration oversight costs arising from or related to the Site. The NRD Matters Addressed by this Order do not include any remedial work, response cost payments, or other similar requirements contained in existing Orders on Consent, this Order (excluding Paragraph IV), or future Orders on Consent between Respondent and the Department.

2. Subject to Subparagraph IV.G.1 above, the Department releases and covenants not to sue or take any civil, judicial or administrative action, whether at law or in equity, or otherwise, under any federal or State law or pursue any claim, action, suit, or proceeding against Respondent or its successors and assigns (including successors in title) for only those NRD Matters Addressed by this Order. These covenants not to sue extend only to the Respondent and its successors and assigns (including successors in title) and do not extend to any other person.

V. Financial Assurance

As the Site is a class "2" inactive hazardous waste disposal site, 6 NYCRR 375-1.11(c) allows for the Department to require financial assurance for the further delineation and remediation of AOCs in Category II of Subparagraph III.C should the structure(s) and/or the slab of the structure(s) which are providing the engineering control be removed. The Department hereby acknowledges that if financial assurance were ever required, it would accept a letter of credit from Respondent, provided the letter of credit is materially the same as the letter of credit form in 6 NYCRR 373-2.8.

VI. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by electronic transmission including email or facsimile, by private courier service, or hand delivered as follows:

1. Communication from Respondent, except that regarding Natural Resources Damages under Paragraph IV, shall be sent to:

Ajay Shah, P.E.
Regional Engineer, Region 1
New York State Department of Environmental Conservation
50 Circle Road, SUNY@ Stony Brook
Stony Brook, New York 11790
ajay.shah@dec.ny.gov

Note: one hard copy (one unbound) of work plans are required, as well
as one electronic copy.
with copies to:

Rosalie K. Rusinko, Esq.
Office of General Counsel
New York State Department of Environmental Conservation
100 Hillside Avenue, Suite 1W
White Plains, New York 10603-2860
rosalie.rusinko@dec.ny.gov
Note: work plans in electronic copy only

Renata Ockerby
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, NY 12237
renata.ockerby@health.ny.gov

Krista Anders (electronic copy only)
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, NY 12237
krista.anders@health.ny.gov

2. Communication from Respondent regarding Restoration Planning
Funding and Natural Resource Damages under Paragraph IV shall be sent to:

Patrick Foster, Esq.
Office of General Counsel
New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, NY 12233-1500
patrick.foster@dec.ny.gov

3. Communication to be made from the Department to Respondent
shall be sent to:

Mary P. Morningstar
Associate General Counsel, Environmental Law
Lockheed Martin Corporation
6801 Rockledge Drive
Bethesda, MD 20817
mary.p.morningstar@lmco.com

with copy to:

Virginia C. Robbins
Bond, Schoeneck & King, PLLC
One Lincoln Center
Syracuse, New York 13202
vrobbs@bsk.com

B. The Department and Respondent reserve the right to designate additional or different addressees for communication upon written notice to the other.

C. Each party shall notify the other within ninety (90) days after any change in the addresses in this Paragraph VI.

VII. Dispute Resolution

In the event disputes arise under this Order, Respondent may, within thirty (30) Days after Respondent knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR 375-1.5(b)(2). Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to any remedy selected by the Department or any element of such remedy, nor to impair any right of Respondent to seek judicial review of the Department's selection of any remedy.

VIII. Termination of Order

This Order will terminate upon the Department's written determination that Respondent has completed all phases of the remedial and closure program (including Site Management), in which event the termination shall be effective on the Fifth Day after the date of the Department's approval of the final report relating to the final phase of the remedial and closure program.

IX. Miscellaneous

A. Appendix A – "Standard Clauses for All New York State State-Superfund Orders" is attached to and hereby made part of this Order as if set forth fully herein.

B. In the event of a conflict between the terms of this Order (including any and all attachments thereto and amendments thereof) and the terms of Appendix A, the terms of this Order shall control.

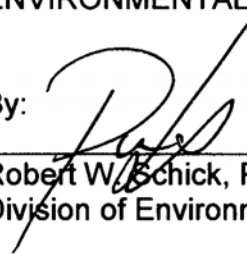
C. Exhibit "B" is not applicable to this Order.

D. The effective date of this Order is the 10th Day after the date the Commissioner or the Commissioner's designee signs this Order.

DATED: Albany, New York
September 15, 2016

BASIL SEGGOS
COMMISSIONER
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

By:


Robert W. Schick, P.E., Director
Division of Environmental Remediation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order without further notice, waive their right to a hearing herein, and agree to be bound by the terms, conditions and provisions contained in this Order.

Lockheed Martin Corporation

By: (Signature): Carol B. Cala

Print Name: Carol B. Cala

Title: Vice President, Energy, Environment
Safety + Health

Date: September 7, 2016

State of Maryland)
~~New York~~) s.s.:
County of Montgomery)

On this 7th day of SEPTEMBER, 2016, before me, the undersigned, personally appeared

CAROL B. CALA, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Jeri Raimondi
Notary Public

EXHIBIT "A"

EXHIBIT "B"

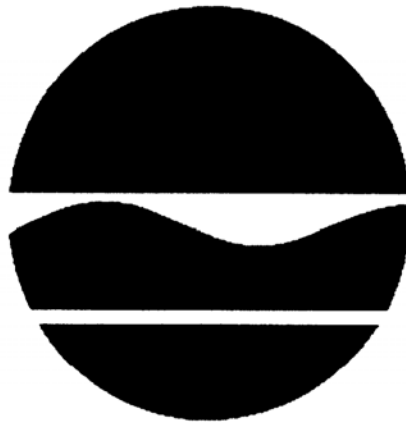
RECORDS SEARCH REPORT

1. Detail all environmental data and information within Respondent's or Respondent's agents' or consultants' possession or control regarding environmental conditions at or emanating from the Site.
2. A comprehensive list of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and of areas immediately surrounding the Site which are or might be affected by contamination at the Site, including all available topographic and property surveys, engineering studies, and aerial photographs.
3. A concise summary of information held by Respondent and Respondent's attorneys and consultants with respect to:
 - (i) a history and description of the Site, including the nature of operations;
 - (ii) the types, quantities, physical state, locations, methods, and dates of disposal or release of hazardous waste at or emanating from the Site;
 - (iii) a description of current Site security (i.e. fencing, posting, etc.); and
 - (iv) the names and addresses of all persons responsible for disposal of hazardous waste, including the dates of such disposal and any proof linking each such person responsible with the hazardous wastes identified.

EXHIBIT "C"

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;

- 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

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

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 heightened 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.

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

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 aquifer. 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**

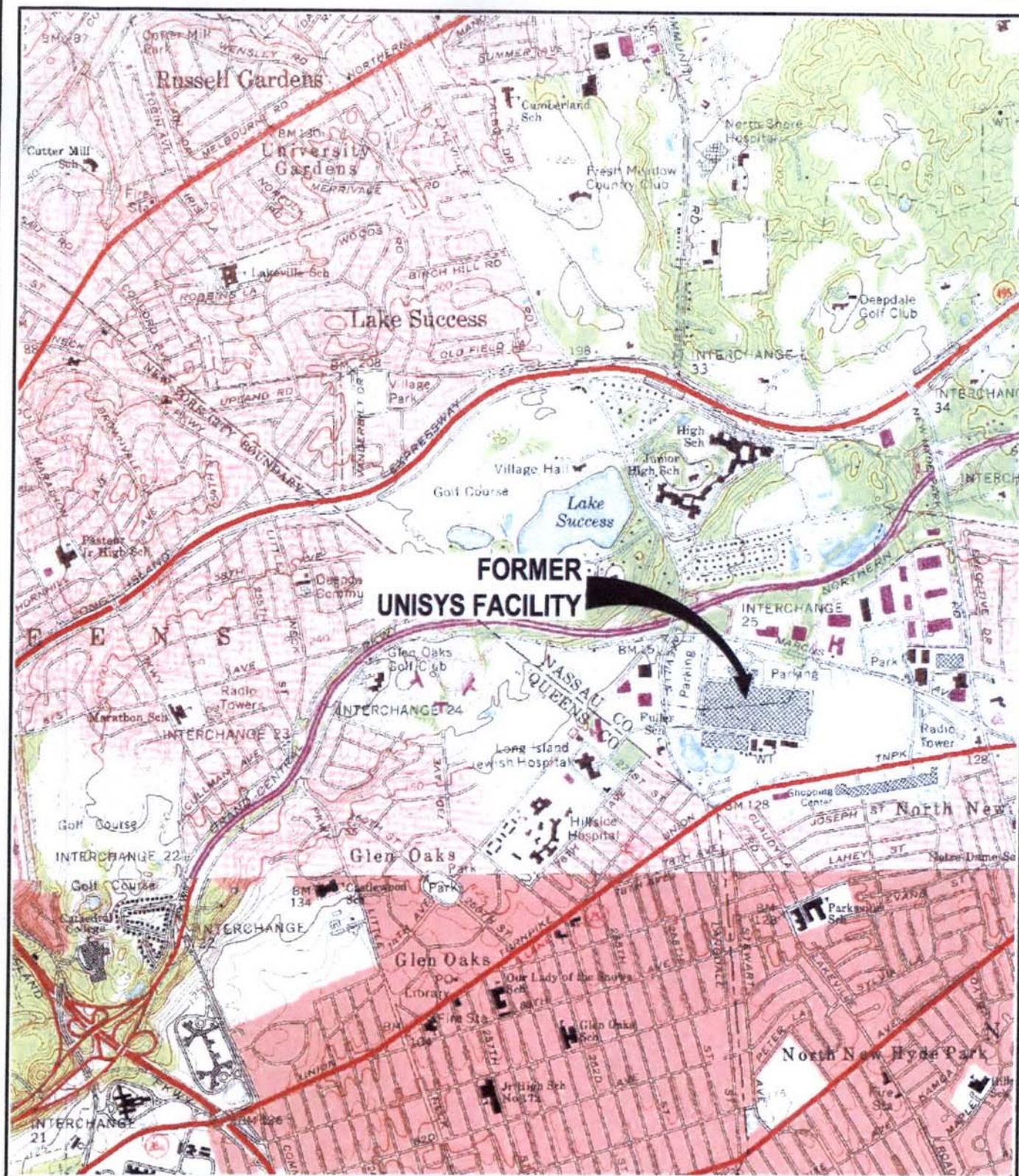
1. Proposed Remedial Action Plan for the Unisys Corporation site, Operable Unit No. 1, dated June 2014, prepared by the Department.
2. Order on Consent, Index No. W-1-0527-91-02, between the Department and Unisys Defense System, Inc., executed on December 13, 1991. On July 11, 1995 Loral Corporation 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:

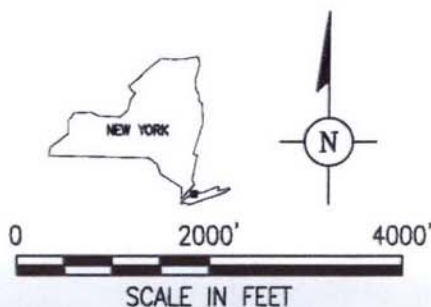
4. Volume I and II Remedial Investigation Report, Operable Unit No. 2 for the Unisys Site, Great Neck, New York, Site No. 130045 - May 2012, Updated: August 17, 2012, prepared by ARCADIS.
5. Feasibility Study, Operable Unit No.2, Former Unisys Facility, Great Neck, New York, Site No. 130045 - May 2012,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



MAP SOURCE: USGS 7.5 MINUTE QUADRANGLE 1979 LYMBROOK AND SEA CLIFF, NEW YORK



LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY, GREAT NECK, NEW YORK
OPERABLE UNIT 1

SITE LOCATION MAP

Record of Decision

FIGURE

1

EXHIBIT "D"

RECORD OF DECISION

Unisys Corporation
Operable Unit Number 02: Offsite Groundwater
State Superfund Project
Lake Success, Nassau County
Site No. 130045
December 2014



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

DECLARATION STATEMENT - RECORD OF DECISION

Unisys Corporation
Operable Unit Number: 02
State Superfund Project
Lake Success, Nassau County
Site No. 130045
December 2014

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Offsite Groundwater of the Unisys Corporation site, a Class 2 inactive hazardous waste disposal site. The 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 Operable Unit Number: 02 of the Unisys Corporation site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 2. The continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system located at the Great Neck School property.
- 3. Upgrade of the current 730 gpm OU1 groundwater remediation system by 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. This upgrade is needed to improve groundwater capture from the basal Magothy aquifer to ensure complete capture. Treatment will be provided by the existing OU1 system. Treated water will be discharged in the same location.
- 4. Public Water Supply Protection and Mitigation Program.

A program that promotes the distribution of potable water of the highest quality will be developed and implemented, until such time as groundwater standards are achieved in all areas impacted by the Unisys Groundwater Plume. The program will be consistent with the requirements of Subpart 5-1 of the State Sanitary Code and will include, but may not be limited to, the following:

- an installation, operation and maintenance plan for public water supply wellhead treatment systems (including continued operation of all existing systems or installation of additional treatment systems or upgrades to existing systems) on wells affected by site-related contamination, now or in the future, to assure for as long as the wells are used as public water supply sources that drinking water standards are achieved and that the finished water is of no lesser quality as currently distributed due to actions taken as part of this remedy;
- a monitoring plan that will include, but may not be limited to, groundwater monitoring at sentinel wells installed upgradient of water supply wells that could potentially be affected by the continued migration of the groundwater contamination;
- periodic updates on the groundwater model simulation results to track contaminant migration; and
- a response plan that will be implemented if site-related contaminant concentration(s) in the sentinel well(s) approach or exceed site-specific action levels and will include, but may not be limited to, notifying the Department, NYSDOH, County Health Department and the potentially impacted water district and evaluating the rate of movement of site-related contaminants toward the public supply well(s) and the need for wellhead treatment. If treatment is needed, an appropriate system will be designed, installed and maintained at the wellhead.

5. Site Management Plan. A site management plan is required, which includes the following:

- a. a Monitoring Plan to assess the performance and effectiveness 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.

b. 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
- an O&M Plan for the on demand treatment system at irrigation well (N-8038) owned by Village of Lake success. This irrigation well is used when needed to supply additional water for golf course irrigation.

c. 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);
- certification of compliance with the Public Water Supply Protection and Mitigation Program; and
- certification of compliance with the Department approved Site Management Plan.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that 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.

December 23, 2014

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

Unisys Corporation
Lake Success, Nassau County
Site No. 130045
December 2014

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 selected a remedy for the above referenced site. The disposal of hazardous wastes at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of hazardous wastes at this site, as more fully described in this document, has contaminated various environmental media. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Record of Decision (ROD) identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for selecting the remedy.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

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.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

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 area. 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 of the property in the southeast corner 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 was 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 feet); Raritan Lloyd Sand unit (190 feet) 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 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 02 is the subject of this document.

A Record of Decision was issued previously for OU 01.

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. Since the remedy for this operable unit addresses off-site groundwater, site land use is not a consideration in remedy selection. The local zoning and current use of the site and its surroundings are described in Section 3.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Unisys Defense Systems, Inc.

Lockheed Martin Corporation

Loral Corporation

The facility was originally designed and built by the United States Government and was operated under a contract with Sperry Gyroscope Company (Sperry) from 1941 to 1951. In 1951, the property was sold to Sperry, which merged with Burroughs in 1986 to form the Unisys Corporation. In 1995, Loral Corporation (Loral) obtained the property from Unisys Corporation. In 1996, the property was purchased by Lockheed Martin Corporation (LMC). In 2000, LMC sold the property to i.park, Lake Success, LLP (i.park). The current owner of the property is Marcus Avenue Unit and 1111 Marcus Avenue Unit 2 Owner, LLC.

The NYSDEC and the Unisys Defense System, Inc. entered into a Consent Order (W-1-0527-91-02) on December 13, 1991. The Order obligates the responsible party to implement a remedial program, consisting of a Remedial Investigation (RI), Feasibility Study (FS) and Interim Remedial Measure (IRM). 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.

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.

After the remedy is selected for OU2, the Department will again approach the PRPs to implement the selected remedy. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- air
- groundwater
- surface water
- drinking water
- soil
- sediment
- soil vapor
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

TRICHLOROETHENE (TCE)	1,1,2-TRICHLORO-1,2,2-
TETRACHLOROETHYLENE (PCE)	TRIFLUOROETHANE (Freon 113)
	CIS-1,2-DICHLOROETHANE

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- drinking water

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) have been completed at this site based on conditions observed during the RI.

OU1 IRM - Groundwater

Two IRMs, dealing with OU1 soils and groundwater, were implemented prior to issuance of the OU1 ROD. The groundwater IRM consisted of the installation of a 1,100 gallon per minute (gpm) groundwater pump and treat system. The groundwater IRM began operation in April 1993 and was initially equipped with an activated carbon treatment system. The control system was upgraded to an air stripper as part of the OU 1 Record of Decision and began operating in August 2002.

OU1 IRM - SOIL

An IRM was undertaken to address soil contamination in 1994. The soil IRM consisted of a soil vapor extraction (SVE) and catalytic incineration system which was installed in the vicinity of the VOC impacted drywell area located off the southeastern corner of the main building. The SVE system uses a blower attached to several soil vapor extraction wells to draw air through soils. This flow of air allows VOCs to evaporate from the soils and into the air spaces between soil particles. Contaminants are then drawn toward the wells and into the treatment system where the vapors are treated prior to discharge to the atmosphere.

The treatment system is catalytic incineration (oxidation) which is a process in which the vapors are passed over a catalyst at an elevated temperature and the contaminants are converted to carbon dioxide, water, and inorganic acids. The SVE system began operating in January 1994. The system was subsequently upgraded, as required by the OU1 ROD, and the upgraded system went into operation in the summer of 2001. The system continues to operate.

OU2 IRM - Lloyd Public Supply Well

The Public Supply Well - Lloyd Well No. N-1802 was located adjacent to the site, on the corner of Lakeville Road and Union Turnpike. The well was installed in 1941. This well was owned and operated by Manhasset-Lakeville Water District (MLWD). The well screen was reported to be set at a depth of 641 to 691 feet in the Lloyd formation. The Lloyd formation is separated from the overlying Magothy formation by approximately 150 feet of impermeable clay (Raritan Clay). Routine testing of this well detected the presence of VOCs in the pretreated water and therefore a treatment system was installed to remove VOCs. NYSDEC requested that the well be investigated as part of the RI. Investigation of the well was conducted between April and June 1993. The contamination was attributed to a hole in the well casing. The casing was repaired as an IRM, and the well was put back in service in July 1996. Since repairing the well, the concentrations of VOCs had slowly decreased to non -detect in the pretreated water. The water is routinely monitored by the water supplier to ensure that it meets NYSDOH public drinking water supply standards.

OU2 IRM - The Great Neck School District Property

During the RI, an area of the groundwater plume was identified below the Great Neck School District property. To address this identified "hot spot", an off-site groundwater IRM was implemented to enhance contaminant mass reduction, to minimize the off-site migration of impacted groundwater toward downgradient public supply wells and other receptors, and minimize further contaminant migration into the North Hills Special Groundwater Protection Area. This IRM consists of a groundwater recovery well screened at various depths in the Magothy aquifer beneath the Great Neck School District property. The system includes two air strippers, an emission control system (located on property leased from the Manhasset-Lakeville Water District) and three injection/diffusion wells located on New York State-owned recharge basin property located east and adjacent to Great Neck School District property. The OU2 groundwater IRM system has been running at 500 gpm since 2006.

6.3: 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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 02.

Operable Unit 2 (OU2):

Nature and Extent of Impacted Groundwater:

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 comesles with the Unisys site groundwater plume.

The groundwater plume in the Upper Glacial aquifer, as defined by the 5 part per billion (ppb) contour, extends off site approximately 1,400 feet north of Marcus Avenue and approximately 2,500 feet west of Lakeville Road with the highest levels of total volatile organic compounds (TVOCs) 260 ppb 400 feet northwest of the intersection of Marcus Avenue and Lakeville Road. The TVOC groundwater plume in the Magothy aquifer extends off site approximately 6,000 feet north of Marcus Avenue and approximately 4,800 feet west of Lakeville Road with the peak off-site TVOC concentration at 910 ppb. The Water Authority of Great Neck North supply wells N12999, N 13821 and N13000 are actively pumping water for public supply purposes from the Magothy aquifer. The impact that these public supply wells have on the plume is seen as the 5 ppb TVOC contour is deflected toward the pumping wells. Throughout the study area, the Lloyd aquifer is isolated and hydraulically separate from the overlying Magothy aquifer, and has not been affected by the VOC plume.

The Manhasset Lakeville Water District (MLWD) public supply well N-5099, when operating, pumps water for public supply purposes from the Magothy aquifer. Site related VOCs continue to be detected at low levels in this well. Based on groundwater modeling, the maximum TVOC concentration is expected to reach approximately 160 ppb after 19 years. This well is not in service at this time.

The OU1 groundwater remedial system is effectively containing on-site VOCs in the Upper Magothy aquifer. This proposed remedy will upgrade the OU1 system to ensure containment in the Basal Magothy.

Surface Water/Sediments in Lake Success and Lake Surprise:

No site-related constituents were detected in the water or sediment in Lake Success or the irrigation pond (Lake Surprise). The groundwater plume, is below the bottom of both Lake Success and Lake Surprise, has not affected either lake, and is not expected to affect these lakes in the future.

Nature and Extent of Impacted Soil Vapor:

An off-site soil vapor intrusion (SVI) evaluation was completed in 2009. The soil vapor intrusion samples were collected from a total of eight off-site properties. TCE and PCE were detected in a limited number of sub-slab soil gas and indoor air samples. However, TCE and PCE were detected below the NYSDOH air guideline of 5 micrograms per cubic meter (ug/m3) and 30

ug/m3, respectively. Based on the NYSDOH guidance, no further action is needed as the data indicate that concentrations in sub-slab soil gas and indoor air are below levels of potential concern.

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.

6.4: 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 (OU-1/OU-2). Potential exposure to contaminated groundwater via irrigation well usage to air (via volatilization) was evaluated and no impacts were identified (OU-2). It is not likely that people will come into direct contact with soil contaminants because the majority of the site (OU-1) is covered with buildings and pavement and contaminated soils have been removed from the drywells. Contaminated sediments found in three recharge basins (OU-1) 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 (OU-1). 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 (OU-1). Environmental sampling indicates the indoor air quality of off-site structures is not impacted by site-related contamination (OU-2).

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the feasibility study (FS) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Continue Operation of existing OU2 Groundwater IRM, Upgrade OU1 groundwater treatment system and Public Water Supply Protection and Mitigation plan.

The estimated present worth cost to implement the remedy is \$32,000,000. The cost to construct the remedy is estimated to be \$8,600,000 and the estimated average annual cost is \$1,400,000.

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design,

implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;

Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;

- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. The continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system located at the Great Neck School property.

3. Upgrade of the current 730 gpm OU1 groundwater remediation system by 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. This upgrade is needed to improve groundwater capture from the basal Magothy aquifer to ensure complete capture. Treatment will be provided by the existing OU1 system. Treated water will be discharged in the same location.

4. Public Water Supply Protection and Mitigation Program.

A program that promotes the distribution of potable water of the highest quality will be developed and implemented, until such time as groundwater standards are achieved in all areas impacted by the Unisys Groundwater Plume. The program will be consistent with the requirements of Subpart 5-1 of the State Sanitary Code and will include, but may not be limited to, the following:

- an installation, operation and maintenance plan for public water supply wellhead treatment systems (including continued operation of all existing systems or installation of additional treatment systems or upgrades to existing systems) on wells affected by site-related contamination, now or in the future, to assure for as long as the wells are used as public water supply sources that drinking water standards are achieved and that the finished water is of no lesser quality as currently distributed due to actions taken as part of this remedy;
- a monitoring plan that will include, but may not be limited to, groundwater monitoring at sentinel wells installed upgradient of water supply wells that could potentially be affected by the continued migration of the groundwater contamination;
- periodic updates on the groundwater model simulation results to track contaminant migration; and
- a response plan that will be implemented if site-related contaminant concentration(s) in the sentinel well(s) approach or exceed site-specific action levels and will include, but may not be limited to, notifying the Department, NYSDOH, County Health Department and the potentially impacted water district and evaluating the rate of movement of site-related

contaminants toward the public supply well(s) and the need for wellhead treatment. If treatment is needed, an appropriate system will be designed, installed and maintained at the wellhead.

5. Site Management Plan. A site management plan is required, which includes the following:

- a. a Monitoring Plan to assess the performance and effectiveness 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.
- b. 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
 - an O&M Plan for the on demand treatment system at irrigation well (N-8038) owned by Village of Lake success. This irrigation well is used when needed to supply additional water for golf course irrigation.
- c. 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);
 - certification of compliance with the Public Water Supply Protection and Mitigation Program; and
 - certification of compliance with the Department approved Site Management Plan.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide).

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater and soil vapors.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas identified at the site include drywells located off the southeastern corner of the main building. These drywells were used to dispose of waste water containing solvents and oils. Soil vapors have been detected under the main building and have been mitigated. Investigations of additional potential source areas under the main building slab are being conducted which may support the need for further remediation pursuant to the ongoing RCRA Closure of the site.

The waste/source areas located off the southeastern corner of the main building were addressed by an IRM and the ongoing OUI remedy. A soil vapor extraction system was installed in 1994 as an IRM and the OUI remedy included the removal of approximately 800 tons of contaminated soil from the drywells in 1998.

Groundwater

A complete round of groundwater sampling data was collected from June 2009 through January 2010 and periodic groundwater sampling of selected outpost monitoring wells continued during 2011 and 2012.

Figure 2 provides the location of wells located within a 2.5 mile radius of the former Unisys site. Groundwater samples were collected from off-site monitoring wells, irrigation wells, and public supply wells. Groundwater flow is generally to the northwest, except in local areas affected by current pumping. Figure 3 provides approximate maximum extent and concentration distribution of total volatile organic compounds (VOCs) in groundwater regardless of the aquifer horizon.

As noted on Figure 3, VOCs [cis 1,2 dichloroethene (cis, DCE), trichloroethene (TCE), tetrachloroethene (PCE) and Freon 113] have been detected in on-site and off-site groundwater. The VOC distribution and peak concentrations in the Upper Glacial and Magothy aquifers zones are summarized below:

Upper Glacial Aquifer

The VOC groundwater plume in the Upper Glacial aquifer, as defined by the 5 ppb contour on Figure 3, extends off-site approximately 1,400 feet north of Marcus Avenue and approximately 2,500 feet west of Lakeville Road. The groundwater flow is to the northwest. The peak VOC concentration of 260 ppb was detected in a monitoring well 18GL located approximately 400 feet northwest of the intersection of Marcus Avenue and Lakeville Road. In monitoring well 18GL, three out of four contaminants of concern (COCs) exceeded the Department's Ambient Water Quality Standards and Guidance values (Standards, Criteria and Guidance-SCGs) of 5 ppb. No site-related VOCs were detected in monitoring well 16GL located approximately 2,000 feet north of the intersection between Marcus Avenue and Lakeville Road on the Great Neck North School property.

The groundwater plume, which is below the bottom of both Lake Success and Lake Surprise, has not affected either lake, and is not expected to impact these lakes in the future because the groundwater is below the bottom of the lakes.

Upper Magothy Aquifer

The total VOC groundwater plume in the upper Magothy aquifer, as defined by the 5 ppb contour on Figure 3, extends off-site approximately 6,200 feet north of Marcus Avenue and approximately 4,800 feet west of Lakeville Road. The groundwater flow is to the northwest. At least one COC was detected at concentrations above the SCGs in 16 out of 22 wells. The peak VOC concentration of 580 ppb was found in a monitoring well 16ML located approximately 2,000 feet north of intersection between Marcus Avenue and Lakeville Road on the Great Neck North School property. A VOC concentration of 270 ppb was found in a monitoring well ERM-04 located approximately 500 feet west of Lakeville Road. A total VOC concentration of 130 ppb was found in an irrigation well N13266 located approximately 2,000 feet west of Lakeville Road on North Shore Golf Course (high rise residential buildings on the property). A total VOC concentration of 140 ppb was found in monitoring well 45MU located approximately 3,500 feet west of Lakeville Road and 3,000 feet north of Marcus Avenue on the Village of Lake Success property. A total VOC concentration of 4.9 ppb was found in monitoring well 15GL located approximately 250 feet south of Union Turnpike.

Middle Magothy Aquifer

The total VOC plume, as defined by the 5 ppb contour on Figure 3, extends off-site approximately 6,000 feet north of Marcus Avenue and approximately 4,800 feet west of Lakeville Road. At least one COC was detected at concentrations above the SCGs in 12 out of 19 wells. The peak VOC concentration of 910 ppb was found in monitoring well 38MI located approximately 1,200 feet north of Marcus Avenue and 50 feet west of Lakeville Road.

A total VOC concentration of 230 ppb was found in monitoring well 43MI, located approximately 4,500 feet north of Marcus Avenue and 600 feet east of Community Drive Road on the Deepdale Golf Course property. Monitoring well 43MI is an outpost monitoring well for three public supply wells located northeast. The total VOC concentration in monitoring well 31MI, located approximately 5,000 feet north of Marcus Avenue and 500 feet east of Community Drive, was 360 ppb in 2009 and 430 ppb in 2012. Monitoring well 31MI is an outpost monitoring well for three public supply wells located to the northeast.

The total VOC concentration in monitoring well 46MI was 110 ppb in 2009 and 370 ppb in 2012. This well is located approximately 4,500 feet north of Marcus Avenue and 800 feet west of Community Drive. The total VOC concentration found in monitoring well 50MI was 330 ppb. This well is located southeast on an adjacent property. The VOC concentration found in monitoring well 44MI, located approximately 500 feet west of Lakeville Road, was 860 ppb. The total VOC concentration found in outpost monitoring well 51MI, for the public supply well N-5099, was non-detect in 2010 and 4.7 ppb in 2012. This well is

located approximately 6,500 feet north of Marcus Avenue and 800 feet west of Community Drive on the Fresh Meadow Golf Course property.

The groundwater flow is to the northwest, except in local areas affected by current pumping. The Water Authority of Great Neck North supply wells N12999 and N13000 are actively pumping water for public supply purposes. The effect the pumping of these public supply wells have on the plume is seen as the 5 ppb VOC contour is deflected toward these pumping wells.

Basal Magothy Aquifer

The VOC plume, as defined by the 5 ppb contour on Figure 3, extends off-site approximately 4,800 feet north of Marcus Avenue and approximately 6,000 feet west of Lakeville Road. The groundwater plume is migrating to the north-northwest. At least one COC was detected at concentrations above the SCGs in 8 out of 16 monitoring wells. The peak VOC concentration of 590 ppb was found in monitoring well 37ML located approximately 500 feet north of Marcus Avenue, and 300 feet west of Lakeville Road. A total VOC concentration of 15 ppb was found in monitoring well 15ML, located approximately 250 feet south of Union Turnpike.

Lloyd Aquifer

The groundwater sampling results from the former Lloyd Public Supply Well N1802, Public Supply Well N12802, and Monitoring Well N12450 indicate that the site-related groundwater plume present in the overlying Upper Glacial and Magothy aquifers is not present in the Lloyd aquifer. Public supply Well N1802 was located on the southwest side of the site. In 1996, the work performed to repair a hole in the casing of well N1802 had successfully eliminated the source of VOCs from the overlying aquifers. In 2011, a replacement Lloyd aquifer well (N13749) was installed approximately 25 feet from the former N1802 location. This well currently does not show any impacts from site-related COCs.

Development of a Computer Groundwater Model

A groundwater flow and solute transport model was developed for the site. The model was constructed in order to simulate groundwater flow throughout the entire thickness of the Upper Glacial and Magothy aquifers. A groundwater model documentation report is included in the OU2 Remedial Investigation Report and OU2 Feasibility Study Report, dated May 2012.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Cis-1,2 Dichloroethene	ND to 630	5	74 of 143
Tetrachloroethene (PCE)	ND to 95	5	46 of 143
Trichloroethene (TCE)	ND to 190	5	69 of 143
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND to 29	5	31 of 143

a - ppb: parts per billion, which is equivalent to micrograms per liter, µg/L, in water.

b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

ND: Non-detect

Based on the findings of the RI, the past disposal of hazardous waste has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: cis-1,2 dichloroethene (cis-1,2 DCE), trichloroethene (TCE), tetrachloroethene (PCE) and Freon 113.

Surface Water

No site-related surface water contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for surface water.

Sediment

No site-related sediment contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for sediment.

Soil Vapor

Off-site soil vapor intrusion (SVI) evaluations were conducted at eight properties in 2009. PCE was detected in the indoor air samples at concentrations ranging from non-detect to 1.7 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and TCE was detected at concentrations ranging from non-detect to 0.14 $\mu\text{g}/\text{m}^3$. The levels of PCE and TCE detected in the indoor air are well below the New York State Department of Health's (NYSDOH) air guideline values of 30 $\mu\text{g}/\text{m}^3$ for PCE and 5 $\mu\text{g}/\text{m}^3$ for TCE, and do not represent a health concern. PCE was detected in sub-slab soil gas samples ranging from 0.7 $\mu\text{g}/\text{m}^3$ to 33 $\mu\text{g}/\text{m}^3$ and TCE was detected at concentrations ranging from 0.34 $\mu\text{g}/\text{m}^3$ to 23 $\mu\text{g}/\text{m}^3$. Based on an evaluation of the indoor air and sub-slab soil gas concentrations, soil vapor intrusion is not affecting the indoor air quality of the off-site structures. No further actions are warranted.

Exhibit B

Description of Remedial Alternatives

With the exception of Alternative No. 1, No Action, each of the alternatives includes the following common remedial element:

- **Public Water Supply Protection and Mitigation Program** - A program that promotes the distribution of potable water of the highest quality will be developed and implemented, until such time as groundwater standards are achieved in all areas impacted by the Unisys Groundwater Plume. The program will be consistent with the requirements of Subpart 5-1 of the State Sanitary Code and will include, but may not be limited to, the following:
 - an installation, operation and maintenance plan for public water supply wellhead treatment systems (including continued operation of all existing systems or installation of additional treatment systems or upgrades to existing systems) on wells affected by site-related contamination, now or in the future, to assure for as long as the wells are used as public water supply sources that drinking water standards are achieved and that the finished water is of no lesser quality as currently distributed due to actions taken as part of this remedy;
 - a monitoring plan that will include, but may not be limited to, groundwater monitoring at sentinel wells installed upgradient of water supply wells that could potentially be affected by the continued migration of the groundwater contamination;
 - periodic updates on the groundwater model simulation results to track contaminant migration; and
 - a response plan that will be implemented if site-related contaminant concentration(s) in the sentinel well(s) approach or exceed site-specific action levels and will include, but may not be limited to, notifying the Department, NYSDOH, County Health Department and the potentially impacted water district and evaluating the rate of movement of site-related contaminants toward the public supply well(s) and the need for wellhead treatment. If treatment is needed, an appropriate system will be designed, installed and maintained at the wellhead.

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment. This baseline scenario does not include continued operation of the current OU2 groundwater IRM system. However, the OU1 soil and groundwater remedial systems will continue to operate as required by OU1 ROD and the order on consent to meet the remedial goals selected for the site.

The OU1 groundwater remediation system is located in the northeast corner of the site and includes a groundwater treatment plant and three remedial groundwater extraction wells. Treated water is conveyed

to three off-site diffusion (recharge) wells located northeast of the site, on property owned by the New York State Office of Parks and Historic Preservation. This system is currently operating at a flow rate of 730 gpm.

Assuming that the existing OU2 IRM is turned off and no further off-site remediation is undertaken, a review of the groundwater modeling results predicts that the leading edge of the site related VOC plume will be approximately 2.5 miles downgradient of the site in approximately 30 years.

Present Worth: \$00
Capital Cost: \$00
Annual Costs: \$00

Alternative 2: Continue Operation of existing OU2 Groundwater IRM, Upgrade OU1 groundwater treatment system and Public Water Supply Protection and Mitigation Plan

This Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2, and includes Site Management and Institutional Controls and Engineering Controls to confirm the effectiveness of the IRM. This alternative maintains engineering controls which were part of the IRM and includes institutional controls, in the form of an environmental easement and site management plan, necessary to protect public health and the environment from contamination remaining at the site after the IRMs. This alternative would include:

- a. the continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system at the Great Neck School;
- b. installation of a new 120 gpm extraction well and increasing capacity of the current OU1 groundwater remediation system from 730 gpm to 850 gpm; and
- c. upgrade the existing groundwater and air emission control systems to accommodate the increased groundwater extraction in OU1.

This alternative would remediate 59% volume of impacted groundwater.

Present Worth: \$32,000,000
Capital Cost: \$8,600,000
Annual Costs: \$1,400,000

Alternative 3: Removing COCs with one Additional Treatment System and Public Water Supply Protection and Mitigation Plan

This alternative would include:

- a. the continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system at the Great Neck School;
- b. installation of a new 120 gpm extraction well and upgrade of the current OU1 groundwater remediation system to treat additional treatment volume;

- c. installation of another 500 gpm groundwater extraction and treatment system at the Village of Lake Success Golf Course (VLSGC) property and the diffusion of treated water on VLSGC property;
- d. the treatment system should be designed to remove VOCs from all of the extracted groundwater to meet the State Pollutant Discharge Elimination System (SPDES) Permit discharge limitations; and
- e. the installation of air emission controls, if required, to comply with the NYSDEC air regulations.

This alternative would remediate 68% volume of impacted groundwater.

Present Worth: \$55,000,000
Capital Cost: \$20,000,000
Annual Costs: \$2,500,000

Alternative 4: Removing COCs with two additional Treatment Systems and Public Water Supply Protection and Mitigation Plan

This alternative would include:

- a. continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system at the Great Neck School;
- b. installation of a new 120 gpm extraction well and upgrade of the current OU1 groundwater remediation system to treat additional treatment volume;
- c. installation of another 500 gpm groundwater extraction and treatment system at the Village of Lake Success Golf Course (VLSGC) property and the diffusion of treated water on VLSGC property;
- d. installation of a 1,100 gpm groundwater extraction and treatment system at the North Shore Long Island Jewish Hospital (NSLIJH) property and the diffusion of treated water along the southeast portion of the NSLIJH property or the Deepdale golf course property;
- e. the treatment system should be designed to remove VOCs from all of the extracted groundwater to meet the State Pollutant Discharge Elimination System (SPDES) Permit discharge limitations; and
- f. the installation of air emission controls, if required, to comply with the NYSDEC air regulations.

This alternative would remediate 76% volume of impacted groundwater.

Present Worth: \$80,000,000

Capital Cost:..... \$31,000,000
Annual Costs:..... \$4,000,000

Alternative 5: Restoration to Pre-Disposal Conditions and Public Water Supply Protection and Mitigation Plan

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A. This alternative will include:

- a. Continued operation of the existing 500 gpm OU2 IRM groundwater extraction and treatment system at the Great Neck School;
- b. installation of a new 120 gpm extraction well and upgrade of the current OU1 groundwater remediation system to treat additional treatment volume;
- c. extraction of groundwater at a rate of 1,300 gpm from northwest of the Long Island Expressway (LIE), 1,000 gpm from the Fresh Meadow Country Club (FMCC), and 1000 gpm from North Shore Long Island Jewish Hospital (NSLIJH). The combined 3,300 gpm of extracted groundwater will be treated by two separate treatment plants at VLSCG and NSLIJH. The treated water will be diffused back into the aquifer by the diffusion wells;
- d. the treatment system should be designed to remove VOCs from all of the extracted groundwater to meet the State Pollutant Discharge Elimination System (SPDES) Permit discharge limitations; and
- e. the installation of air emission controls, if required, to comply with the NYSDEC air regulations.

This alternative would remediate 95% volume of impacted groundwater.

Present Worth:..... \$97,000,000
Capital Cost:..... \$34,000,000
Annual Costs:..... \$5,500,000

Exhibit C**Remedial Alternative Costs**

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Alternative 2	8,600,000	1,400,000	32,000,000
Alternative 3	20,000,000	2,500,000	55,000,000
Alternative 4	31,000,000	4,000,000	80,000,000
Alternative 5	34,000,000	5,500,000	97,000,000

Remedial Alternative costs are adapted from the 2012 FS Report.

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department has selected Alternative 2, which removes COCs and reduces impacts to public supply wells by treatment of off-site groundwater at three separate locations as the remedy for this site. Alternative 2 with a provision for the public water supply protection program would achieve the remediation goals for the site by preventing exposure to public health and the environment to site-related contamination, minimize potential impacts to the public water supply wells, reduce impacts to North Hills Special Groundwater Protection Area and treat elevated concentration of groundwater contamination off-site. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figure 4.

Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

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

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

The proposed remedy, Alternative 2, would satisfy this criterion by continuing treatment of groundwater contamination at the existing OU1 and OU2 (IRM) groundwater treatment systems, upgrade the OU1 groundwater treatment system and implement a wellhead treatment plan for all public supply wells currently impacted, or threatened, by the Unisys site plume. The area is currently served by one public water supply with existing wellhead treatment.

Alternative 1 (No Action) is not protective of public health or the environment since it would discontinue the existing OU2 IRM groundwater treatment system thus decreasing, rather than achieving, protection of public health and the environment. Hence, Alternative 1 will not be evaluated further.

Alternative 5, by restoring the groundwater aquifer to pre-disposal/pre-release conditions meets the threshold criteria. Alternative 4 would control spread of higher concentrations of groundwater contamination in the area near the two new pump and treat locations. Alternatives 3, 4 and 5 would provide varying degrees of additional environmental protection as compared to Alternative 2 since these three alternatives would allow less migration of higher concentration groundwater within the plume, however they are not more protective of public health since Alternatives 2, 3, 4 and 5 would all require wellhead treatments at impacted public supply wells.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria.

In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternatives 2, 3, 4 and 5 would meet SCGs for groundwater to varying degrees. The additional pumping and treating (P&T) of Alternatives 3,4 and will provide SCG compliance in somewhat reduced time periods than Alternative 2 since they allow less migration of higher concentration groundwater.

Alternative 2 will meet groundwater standards eventually, but a wider area will be affected before this occurs. However, under for all alternatives, wellhead treatment will be required at the currently impacted well and threatened well for at least 20 years.

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

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation.

Alternatives 3, 4 and 5 would reduce the contaminant mass to varying degrees before reaching public supply wells and thus providing marginally better long-term effectiveness and permanence for environmental protection than Alternative 2. However, all alternatives would provide similar protection for public health. Alternative 2 would reduce less contaminant mass than other Alternatives 3, 4 and 5 before reaching public supply wells but provide similar protection for public health.

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

Alternatives 2, 3, 4 and 5 all address the off-site contaminated groundwater to varying degrees and thus each result in reduction of the toxicity and mobility or volume of the contaminants in the off-site groundwater. Alternative 3, 4 and 5 would further reduce toxicity and mobility or volume at P&T locations. Alternatives 3 and 4 would not completely contain the groundwater plume, which will continue to spread in those areas outside the capture zone of the pump and treat systems, but to a lesser extent than Alternative 2. Alternative 5 best satisfies this criteria, by providing the most containment. Alternative 2 will reduce the toxicity and mobility or volume at public supply well locations, but plume will spread in those areas outside capture zone of public supply well locations.

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

Alternative 2 poses minimal disruption to the community as the treatment systems are largely already installed and additional wells will not be required. Alternatives 3 through 5 will result in increased short-term impacts to the community due to the degree of difficulty of constructing the ever larger off-site groundwater pump and treatment systems. These systems would include a larger number of groundwater extraction wells, pipelines, treatment system(s) and points of discharge at several locations in the plume. There are potential risks to the community, workers, and environment that would result from the carrying out of these tasks under Alternatives 3, 4

and 5 to varying degrees associated with the significant construction related noise, dust, traffic and road closures within highly developed residential/commercial areas. These impacts would be controlled with the appropriate health and safety measures and proper engineering controls. Alternative 3 has the highest potential short-term impacts and would take the longest to implement followed by Alternatives 4 and 5.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

There is a significantly greater degree of difficulty for the implementation of Alternatives 3, 4 and 5 as gaining access to multiple off-site properties (including park land) would be required for the construction of the wells, treatment systems and pipelines associated with these alternatives. This will require negotiation with several parties. All of this would be occurring within highly developed residential/commercial areas. Alternative 4 would have a somewhat lesser degree of difficulty relative to implementation, than Alternative 5. Alternative 3 would have a lesser degree of difficulty than Alternatives 4 and 5. The OU2 groundwater IRM is already implemented and operational. No impediments exist to implement Alternative 2. It could begin as soon as the ROD is issued.

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

The estimated total present worth for the four alternatives under consideration ranged from \$32 to \$97M. From the least expensive to the most expensive they are Alternative 2, Alternative 3, Alternative 4 and Alternative 5. While Alternatives 3 through 5 would result in some increase in environmental protection; and reduction in toxicity, mobility and volume by limiting expansion of the plume, they would all result in comparable degrees of protection of public health as all would have relied on wellhead protection. Long-term effectiveness also would be marginally more effective under Alternatives 5, 4 and 3, respectively than Alternative 2, though all would require wellhead protection for at least 20 years. Short-term impacts would be insignificant for Alternative 2, as would issues that could affect the implementability of this alternative, since it could proceed as soon as the ROD is issued. However, for Alternatives 3 through 5, significant nuisance short-term impacts to the community resulting from construction related noise, dust, traffic and road closures are likely. Issues relative to the implementability of Alternatives 3 through 5 would be significant, and experience with other such large projects indicate these issues (notably access) could result in months to years of delay in the implementation of these alternatives. Finally, given the incremental benefit to environmental protection, with comparable public health protection afforded by Alternatives 3 through 5, Alternative 2, at a cost of \$32M, is viewed as the most cost effective alternative.

8. Land Use.

Alternative 2 does not require any change in land use or commitment of new land areas to construct the remedy. Alternatives 3, 4 and 5 should not result in any new restriction on current land use. However,

there will be a commitment of land area for treatment facilities and wells, as well as the rights of way for the pipelines.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 2 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**Unisys Corporation Site
Operable Unit No. 02, Off-site Groundwater
State Superfund Project
Lake Success, Nassau County, New York
Site No. 130045**

The Proposed Remedial Action Plan (PRAP) 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 PRAP outlined the remedial measure proposed for the contaminated groundwater at the Unisys site.

The release of the PRAP 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 and feasibility study (RI/FS) for the Unisys 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 PRAP 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:

I. Questions relating to off-site groundwater contamination/plume and groundwater modeling

COMMENT 1: At what depth is the groundwater contamination located?

RESPONSE 1: The depth to groundwater is approximately 100 feet below ground surface (bgs). The groundwater contamination is located at the water table (100 feet bgs) on-site. In the off-site plume area, the contaminant plume extends as deep as 450 feet bgs, however in this area, a layer of clean groundwater (not impacted by site contamination) also lies over the contaminant plume. The presence of the clean groundwater in the off-site plume area means soil vapor in areas over the plume has not been impacted.

COMMENT 2: How much time will the sentinel wells give to the supply wells to put on treatment if needed? Are there sentinel wells that will tell us that contamination may be reaching a public supply well?

RESPONSE 2: Sentinel wells are typically installed upgradient of public water supply wells at a distance, based on groundwater modeling, to provide at least two years of time before the plume

potentially could impact the public supply wells. All sentinel wells for the public supply wells will be monitored periodically at a frequency based on the updated groundwater model results.

COMMENT 3: When was the plume map developed for the off-site area?

RESPONSE 3: The groundwater plume maps were developed in 2000 based on the results of groundwater modeling at that time and have been periodically updated as remedial investigation continued and more data was available. The plume maps currently in use were last updated during the development of the 2012 Feasibility Study.

COMMENT 4: Does your modeling go back in time as well? How accurate is the model?

RESPONSE 4: Groundwater modeling is not used to predict what levels may have been present in an area at a specific time in the past, groundwater modeling is the tool that we use to predict contaminant migration. For this site, modeling has been conducted a number of times using available groundwater data. Initially, modelling was undertaken for the 1997 OU1 Feasibility Study, which was used to determine the best location and pumping rates for the OU1 groundwater extraction system. The use of modeling continued through the OU2 Remedial Investigation and Feasibility Study process, to predict what the future groundwater contamination levels would be under the different alternatives. The latest groundwater modeling results are included in the 2012 Remedial Investigation Report (RI) and 2012 Feasibility Study (FS) Report.

COMMENT 5: You talked about north of the site, what is happening south of this site?

RESPONSE 5: Based on the current and historic data, the groundwater plume that previously (pre-remediation) extended south of the site has been steadily moving northward due to the operation of the OU1 groundwater pump and treat system. The movement of this plume from south of the site to the north was expedited by recharge of treated water northeast of the site instead of on-site recharge as part of the operation of the interim remedial measure. Recent data indicates that there is no longer groundwater contamination associated with the site to the south.

COMMENT 6: At what point does the plume reach the bay and at what depth in Alternative 2? What about the other Alternatives?

RESPONSE 6: It does not appear there will be a measurable impact to the Bay under any alternative. The groundwater contamination is too deep and the shallow groundwater discharging to the Bay is not contaminated by this site.

COMMENT 7: Did the Department require modeling of the plume in connection with the off-site IRM in 2006? If so, where can I find that information/modeling? I am looking for records which reflect the historic accuracy of previous modeling that projects the direction/behavior of this plume.

RESPONSE 7: See Response 4. All site reports are available in the document repositories (i.e., Great Neck Public Library, Hillside Public Library).

COMMENT 8: Your note indicates that the CDM Smith document that you sent has modeling for all the alternatives. Unfortunately, that is not the case - it contains modeling for just 3 of the 19 scenarios. Moreover, this document was clearly crafted by the RP's consultant to justify selection of 2b. Where can I find modeling that reflects how the plume will behave over the next 5-30 years for each of the alternatives/scenarios under consideration?

RESPONSE 8: The 19 different scenarios are differing variations of the approaches that became alternative in the PRAP. The modelling that was provided is representative of all of them.

COMMENT 9: Where can I find modeling that reflects the depth of the contaminants over time for each of the Alternatives, and especially for Alternative 2?

RESPONSE 9: See Response 4.

COMMENT 10: How often are the Manhasset-Lakeville Water District (MLWD) monitoring wells monitored?

RESPONSE 10: It is assumed that the question relates to monitoring of the Manhasset-Lakeville Water District public supply wells, since DEC is not aware that they have any monitoring wells. Monitoring of public water supplies is required by both the State and Nassau County Health Departments. The frequency is dependent on several parameters. For example, continuous monitoring is required for chlorine residual and daily monitoring is performed for microbial contamination. Testing for other parameters in the raw water is typically required on a quarterly basis. If the need for treatment of chemical contamination is identified, monitoring of the finished water is required monthly. Please contact the water district for a full list of parameters monitored and the frequency.

COMMENT 11: The OU-2 remedy presumes that the plume continues to move in the current direction. You did not address the issue of Queens pumping water from this area. What happens if the plume changes direction with the opening of the New York City wells? Would the taxpayers of NYC have to pay for the remediation of their wells, if the plume is pulled into their system? Will Lockheed Martin pay for remedies based on the plume direction changing, or would the city be responsible because they caused the plume direction to change?

RESPONSE 11: The Department, through its Region 2 office, will work with New York City to address the issue of proposed pumping in Queens County through the SEQR process. The potential for this pumping to impact groundwater direction and any resulting contamination of the source water for the Queens wells will be evaluated as part of that process. The Public Water Supply Protection and Mitigation Program would apply if contamination attributable to this site impacts a well(s) in the City. The OU 2 ROD does not limit New York City's rights, should the contamination impact any public supply wells in New York City.

II. Questions relating to public health:

(a) Off-site air sampling; off-site soil vapor intrusion evaluations:

COMMENT 12: Has the air quality been sampled at 450 Lakeville Road or at the North Shore Towers parking garage?

RESPONSE 12: Air sampling has not been conducted at 450 Lakeville Road or in the underground parking garage located at North Shore Towers. Sampling was however conducted at the North Shore Towers Golf Course and the air intakes for the parking garage. Based on the review of this data, no levels of site related contaminants were identified above typical background levels at the intakes and as a result there was no need to sample air inside of the garage. The off-site groundwater contamination is well below the surface of the groundwater and a layer of clean groundwater overlies the contaminated groundwater, precluding any concern for vapor intrusion due to groundwater. There is no site-related contaminated soil off-site which would be the only other contributor to vapor intrusion. Also see Response 1.

COMMENT 13: Will additional soil vapor intrusion evaluations be conducted off-site?

RESPONSE 13: Based on the results of the off-site soil vapor intrusion evaluations and the presence of a layer of clean groundwater over the contamination in the plume area, the State has determined that additional off-site evaluations are not necessary. Also see Responses 1 and 12.

COMMENT 14: How can I get my home sampled?

RESPONSE 14: Additional sampling related to this site is not planned. See Response 13.

COMMENT 15: Homes that have soil vapor issues were not discussed as part of the presentation.

RESPONSE 15: A vapor intrusion issue has not been observed off-site, see Response 12.

COMMENT 16: At what depth does vapor become a concern for the contaminants present in OU-2?

RESPONSE 16 See Responses 12 and 13.

COMMENT 17: I'm concerned about the use of groundwater for the golf course and the impacts that breathing this water may have for residents of North Shore Towers.

RESPONSE 17: An ambient air study was conducted at the North Shore Towers Golf Course, during which air samples were collected during golf course irrigation activities. Based on the review of this data, no levels of site related contaminants were identified above typical background levels. See Response 12 relative to the Tower structure.

COMMENT 18: At no time can I recall was any notification given to the residents and workers (over 3000) about the vapors of the irrigation of the golf course.

RESPONSE 18: This information was provided to the North Shore Towers and Country Club on November 11, 2009, to be shared with members and tenants. Also see Responses 12 and 17.

(b) Impacts to Public Water Supply:

COMMENT 19: How long have the public supply wells in the area been affected by this plume?

RESPONSE 19: Groundwater contamination was detected in a public supply well in 1977. As noted in the 1997 OU1 Record of Decision (ROD), the Manhasset-Lakeville Water District was treating the water before distribution from two former public supply wells located at Tanners Road and a former public supply well located near the corner of Lakeville Road and Union Turnpike. These public supply wells were located within a half mile radius of the Unisys site.

COMMENT 20: When did the DEC know that the public supply wells would be impacted?

RESPONSE 20: In early 2000, the Water Authority of Great Neck North (WAGNN) and the Department became aware that the two new public supply wells installed by WAGNN would be contaminated by the groundwater plume in the near future, based on groundwater modeling results. At that time, the Department directed Lockheed Martin to install a groundwater collection and treatment well, as an IRM, at the Great Neck Public School Property (OU2 IRM) to address an off-site hot spot (area of highest groundwater contamination). The primary objective of the IRM was to effectively capture this portion of the plume.

COMMENT 21: There are quite a few drinking water wells impacted in Alternative 2. Did the Department expect all these drinking water wells to be impacted by the plume going back to 2006?

RESPONSE 21: The Department was aware of the contamination, or potential for contamination, of wells in the area prior to 2006 and had already directed Lockheed Martin to install an IRM to minimize the impact, see Response 20.

COMMENT 22: How effective is the treatment of water at the wellhead?

RESPONSE 22: The treatment of water at the wellhead is very effective and ensures that potable (drinking) water meets the requirements regarding maximum contaminant levels (MCLs) for the volatile organic compounds (VOCs) of concern prior to distribution. The design goal for VOCs is non-detect. Similar treatment systems are in use throughout the State and nation to treat contaminated water supplies.

COMMENT 23: Are SVOCs (semi-volatile organic compounds) being sampled for in the drinking water?

RESPONSE 23: Yes.

COMMENT 24: You have focused on three compounds, but there are a lot of compounds in this group. What about the other 34 contaminants from the Unisys site? How do we know if these contaminants were removed if the water district is not testing for them? Will treatment remove things that you don't know about, like insecticides, herbicides, all things that are used on the golf course?

RESPONSE 24: While the presentation focused on the four primary site contaminants of concern, the investigation included the entire contaminant list and the proposed remedy will address all of the contaminants identified. The local water suppliers are subject to state and local health department requirements and sample for a wide variety of compounds including those in the Principal Organics List

and for Unspecified Organic Compounds. Treatment is required for any compounds detected above the maximum contaminant levels. Districts also must comply with the USEPA's Unregulated Contaminant Monitoring Rule.

COMMENT 25: Does the ROD require that the public supply wells provide clean water to drink?

RESPONSE 25: The State Sanitary Code (Sub-Part 5-1) contains the requirements for potable drinking water which includes the provision of clean water to drink. The ROD is consistent with these requirements.

COMMENT 26: I have been told by very responsible people, that there are houses in the area which in fact do have vapors emanating from their basements, and the fact that this has not been disclosed here tonight is disturbing. I have also been told that there was absolutely to be no boring in any of the foundations on the properties on the site, based upon the fact that it might allow vapors to be released, and have an effect on whatever is going on under ground.

RESPONSE 26: See Response 12 relative to off-site properties. The on-site building has a vapor mitigation system installed and operating. While there is no prohibition on boring into the foundation, the site is subject to a site management plan (SMP) that specifies procedures that must be followed if the building foundation (or the rest of the site) is disturbed.

COMMENT 27: Regardless of the Alternative selected, transparency is going to be critical to ensuring the ongoing safety and protection of public health. What are the testing protocols and frequency of testing? Will testing be conducted at least once a month? Will the (monthly) reports reflect both raw water analysis and post-treatment analysis? Will testing results be posted on an accessible website and in a manner that is readily understandable by the general public? When will the results of the testing be made public? Will it be within 30 days of the tests?

RESPONSE 27: The specifics of the Public Water Supply Protection and Mitigation Plan, which address the above referenced questions, will be incorporated in the approved Remedial Action Work Plan and subsequent Site Management Plan. These documents will be available in the document repositories. Results from the routine testing of the public water supply wells should be available from the water suppliers.

COMMENT 28: How do you choose between air stripper and carbon when you are picking a treatment option for a public supply well?

RESPONSE 28: The determination of whether an air stripper or granulated activated carbon filtration will be used for control of contaminants in water is based on an engineering and economic analysis, which takes into consideration the specific contaminants in the raw water, their concentration, and the volume of water to be treated. Both technologies can be equally effective for most contaminants. In general, carbon is used when relatively low levels of contamination and lower volumes of water are to be treated, while air strippers are used for higher levels of contamination and water volume. In some cases, both are needed. In this case, the water supplier must submit a proposed design to the Nassau County Department of Health for review and approval, prior to construction.

COMMENT 29: How much time does the ROD require Lockheed Martin to provide filtering equipment for public supply wells?

RESPONSE 29: The ROD does not specify a time frame for Lockheed Martin to provide the necessary treatment. The ROD does however require the Public Water Supply Protection and Mitigation Program be implemented until such time as the water supply meets applicable drinking water standards without treatment or water supplies are no longer threatened by the plume. The Department will be contacting Lockheed Martin to sign an Order on Consent to implement the remedy. The Order on Consent will require them to implement the remedy in a timely manner.

(c) Cancer inquiries; health impact studies:

COMMENT 30: A North Shore Tower resident requests a cancer study be conducted.

RESPONSE 30: A formal request for a Cancer Study at North Shore Towers should be directed to Aura Weinstein, Director, Cancer Surveillance Program; Center for Community Health, New York State Department of Health. (518) 473-7817. Also, detailed information regarding types of cancers and the number of cancer cases can be accessed via the Environmental Facilities and Cancer Map (found on the NYSDOH Web Site). Additional cancer data for New York State can be found on Health Data NY (<https://health.data.ny.gov>) and <http://www.health.gov/statistics/cancer/registry/zipcode/index.htm>.

COMMENT 31: Has there been correlation between the NYSDOH and the EPA on impacts of contaminants in drinking water and cancer in the Great Neck Area?

RESPONSE 31: Correlation studies between drinking water contaminants and cancer in the Great Neck area have not been conducted, also see Response 30. The NYSDOH did however performed a cancer incidence study (August 2006) among current and former students at Great Neck South High School. This study can be accessed via the following web address:
https://apps.health.ny.gov/statistics/environmental/public_health_tracking/tracking

COMMENT 32: Has there been a health impact study for the North Shore Towers zip code (11005)?

RESPONSE 32: A health study for the North Shore Towers zip code has not been conducted. Also see Response 30

III. Questions relating to proposed remedial actions

COMMENT 33: Why wasn't alternative 5 selected since it is the best? It seems this remedy is a sell out for the least expensive remediation? It has come to my attention that in deciding which of the five alternatives to choose from in attempting to remedy the toxic state of the water table at and around Marcus Ave. and Lakeville Rd., choice number 2 was chosen. I question this choice as it seems less effective and therefore less desirable than choice 5, although this is the most costly. Why are we not choosing what is most effective? Why must the citizens who live in that area pay for the sins of the Sperry Corp by having compromised water?

RESPONSE 33: Alternatives 2, 3, 4 and 5 are each equally protective of public health, since wellhead treatment will be required under each of these alternatives. Alternative 5 would provide some additional environmental protection since this alternative would treat some of the more highly concentrated groundwater within the plume, limiting further migration of this area. The implementation of Alternatives 3, 4 or 5 would be significantly more difficult to implement than Alternative 2 due to the difficulty in finding a location for, and constructing the wells, treatment systems and pipelines associated with these alternatives, within this highly developed residential/commercial area. Further, since multiple private properties (as well as parkland) would need to agree to access, implementation of Alternative 5 may not be possible. Alternative 2 is readily implementable. Alternatives 3, 4 or 5 also have significant short-term impacts associated with the construction of significant infrastructure in this highly developed area, while Alternative 2 has minimal short-term impacts. Alternative 2 was selected because it satisfies the threshold criteria stated in 6 NYCRR Part 375-1.8(f) and provides the best balance of the balancing criterion, as discussed briefly above and in detail in Exhibit D of the ROD.

COMMENT 34: Is this proposed remedy setting a precedent for future remedies? Why wouldn't someone (DEC) go the greatest extent possible to remediate this site

RESPONSE 34: Each remedy is proposed and selected only after consideration of the same remedy selection criteria discussed in Response 33. If another site with similar circumstances were evaluated, the selected remedy would likely be the same. If another site existed where a more aggressive remedy was implementable and would make a significant difference in the protectiveness of the remedy (e.g., prevent the need for wellhead treatment) it is possible that the more aggressive remedy would be selected.

COMMENT 35: At the hearing, every speaker from the general public voiced concern about how such a situation could have been allowed to contaminate the ground, air and water table from 1941-1999, and asked why nothing was done to clean it up, other than minimal treatment, for seventeen years. If the state has been doing a wonderful job, why is the plume gaining on my home, and why has the problem not been corrected after seventeen years?

RESPONSE 35: The Department has been working with the responsible parties (first Unisys and now Lockheed Martin) on this site for a long time and significant progress has been made. The source areas that were the cause of the contamination have been addressed. Exposures to vapor intrusion within the existing building have been addressed, and studies have shown that there are no vapor concerns off-site. The migration of contaminated groundwater from the site has been controlled and measures have been installed to address the off-site groundwater. This action is the final phase of the work associated with the off-site impacts to the public water supplies, both now and going forward.

COMMENT 36: Why do the experts and my local politicians all seem determined to pursue remedy #2? I realize that you may never be able to restore the environment in question to its pre-polluted state, but don't you think you should give it your best shot, and try? Please explain to me why solution #2 is better than solution #5.

RESPONSE 36: See Response 33 for the Department's basis for selecting Alternative 2.

COMMENT 37: Have any properties been looked at for installing any of the other alternatives?

RESPONSE 37: Yes.

COMMENT 38: Is DEC satisfied that this proposed remedy is the best remedy for this site?

RESPONSE 38: Yes. See Response 33.

COMMENT 39: Who is currently paying for the well head treatment? How long have the public supply wells in the area been effected by this plume?

RESPONSE 39: Lockheed Martin Corporation is funding the wellhead treatments at public supply wells contaminated by the site-related groundwater plume. Also see Response 19.

COMMENT 40: Environmental groups are concerned that this is setting a precedent for future remediation efforts? It seems like it is in the interest of the responsible party to delay a cleanup because it will be less expensive to treat the plume than to clean up the entire plume?

RESPONSE 40: See Response 34.

COMMENT 41: Do all the alternatives result in contamination of Public Water Supply Well N-05099? What about Well N-04388 and Well N-12796? It is hard to imagine that impacts to all three of these wells cannot be avoided under any scenario (especially Wells N-04388 and N-12796). Did any of these 16 scenarios specifically evaluate protection of these drinking water wells? If so, which alternative/scenario? If such an analysis was not conducted, why not?

RESPONSE 41: Public Water Supply Well N-05099 is already impacted so none of the alternatives will prevent the contamination of that well. Public Supply Wells N-04388 and Well N-12796 are located well to the north of the current plume and are currently not impacted by the groundwater contamination from the former Unisys site. However, these wells have already been impacted by another groundwater plume, and are equipped with wellhead treatment.

COMMENT 42: Are there other wells that are not currently impacted by the plume that will be impacted beyond these three wells if Alternative 2 is implemented?

RESPONSE 42: See Response 41.

COMMENT 43: What would be the incremental cost to Alternative 2 if additional remedial measures were added at the leading edge of the plume for the purpose of protecting one or more of these drinking water wells?

RESPONSE 43: The incremental cost between Alternative 2 and Alternative 5 is \$65,000,000. Any additional measures at the leading edge would be at a significant cost likely comparable to the incremental cost between Alternatives 2 and 5. Also see Response 41.

COMMENT 44: What percentage of the contamination will be removed by the end of the remediation?

RESPONSE 44: It is estimated that Alternative 2 will remediate about 60% of the groundwater contamination.

COMMENT 45: Why is the O&M of the golf course irrigation well (N-8038) included in the ROD?

RESPONSE 45: Irrigation well N-8038 (owned by the Village of Lake Success) is impacted by groundwater contamination related to the former Unisys site. While this well is not often used, the selected alternative requires that a treatment system be maintained and operated when it is used, to prevent possible contamination of Lake Surprise which is also a source of water used for golf course irrigation.

COMMENT 46: What is the difference between Alternative 2 and Alternative 2b? How does 2b differ from 2a and 2c?

RESPONSE 46: Alternative 2 (as proposed in the OU2 PRAP and selected by this ROD) and Alternative 2b (in the FS report) are similar except that Alternative 2 includes the Public Water Supply Protection and Mitigation Plan. Alternatives 2a and 2c were developed and evaluated by Lockheed Martin as part of the 19 alternatives contained in the 2012 FS report, but were not included in the OU2 PRAP. Please refer to 2012 FS report which is available in the document repositories.

COMMENT 47: Can I get a copy of the agreement between the Responsible Party and the water authorities?

RESPONSE 47: A copy of the agreement is available in the public document repositories.

COMMENT 48: While I understand that the Department is not a party to the Agreement between the RP and the water authorities, can you clarify the purpose of the Agreement and whether an agreement between an RP and water authority is typical of other Superfund sites across the state? Or, is this an aberration found only on Long Island and/or only in Nassau?

RESPONSE 48: The Department is not party to any of these agreements and cannot comment as to the purpose or whether others exist.

COMMENT 49: What guidance does the DEC offer to water authorities to manage their role and/or their negotiation with RPs?

RESPONSE 49: DEC has no role in the matter.

COMMENT 50: This Agreement appears to eviscerate the public participation process – as it was executed in May 2013, more than a year before the PRAP. It clearly is intended to bind the water authorities to Alternative 2 before the PRAP and before weighing public comments. Does the existence of this executed agreement contravene the intent of the Law's provisions on public participation?

- The Agreement becomes null and void if the Department chooses an alternative other than 2b.
- What are the implications of such nullification on the remediation? Would it delay progress? Would it impact the payment responsibilities? Would the DEC compel the RP to carry out the short term

remedial measures if the agreement needs to be amended so that there is no further delay in implementing the remediation?

RESPONSE 50: See Responses 48 and 49.

COMMENT 51: Is staffing and funding a problem at DEC? Is that why it took so long to get a remedy proposed?

RESPONSE 51: Staffing and funding at the Department have not impacted the schedule for this site. This is a very complicated site where significant progress has already been made. Also see Response 35.

COMMENT 52: Has the RP or PRP been cooperating?

RESPONSE 52: Yes.

COMMENT 53: Has the local repository been updated and does it now contain all the relevant documents?

RESPONSE 53: Yes.

A letter dated July 14, 2014 was received from resident Jody Kass, which included the following comment:

COMMENT 54: The remedy proposed by NYSDEC for this site, Alternative 2 - which involves filtering the water at the wellhead instead of conventional treatment to address the plume before it impacts drinking water wells - could have health and environmental impacts and could also set a dangerous precedent. According to the PRAP, the DEC may modify the proposed remedy or select another alternative based on new information or public comments. With that in mind, it is respectfully requested that additional remedial measures be added to Alternative #2 at the leading edge of the plume for the purpose of protecting one or more of the vulnerable drinking water wells.

It is outrageous that it has taken 17 years for the PRAP and in that time, the toxic plume has continued to spread over a mile - to the point where residents are now being told that it is too late to protect most of the drinking water wells. Besides setting a dangerous precedent for other Long Island cleanups that are supposed to protect our drinking water from contamination, this relatively low cost remedy at \$32m, (compared to Remedial Alternative 5 at \$97m) rewards the Responsible Party for the 17 year delay.

According to the PRAP, Alternative 2 would result in the contamination of at least three drinking water wells that are not currently impacted by the plume. These include Public Water Supply Wells N-05099, N-04388 and N-12796. The NYS Superfund law requires the balancing of various selection criteria, including cost-effectiveness in selecting the remedy. To this end, it appears that the decision by DEC to select Alternative 2 was at least partly due to the cost increase from Alternative 2 (\$32m) to Alternative 3 (at \$55m), and the relatively low increase in the remediated volume of impacted groundwater (from 59% for Alternative 2 to 68% for Alternative 3). However, it is clear that in areas of NYS where the sole source aquifer and drinking water wells are in jeopardy, that the weight of the state's balancing criteria needs to shift so that more weight is given to protectiveness. Of course it is cheaper to use a water authority's infrastructure to filter the contaminated water after it reaches the wellhead than it is to install

expensive remedial apparatus to clean the plume before it reaches the wellhead. But allowing that to happen is clearly not in accordance with either the letter or intent of the Superfund Law. With the spreading of toxic plumes across Long Island, this "business as usual" attitude toward wellhead contamination is unacceptable.

Regardless of the Alternative selected, transparency is going to be critical to ensuring the ongoing safety and protection of public health. What are the testing protocols and frequency of testing? Will testing be conducted at least once a month? Will the (monthly) reports reflect both raw water analysis and post-treatment analysis? Will testing results be posted on an accessible website and in a manner that is readily understandable by the general public? When will the results of the testing be made public? Will it be within 30 days of the tests?

In conclusion, it is requested that additional remedial measures be added to Alternative #2 at the leading edge of the plume for the purpose of protecting one or more of these vulnerable drinking water wells. Moreover, if these adjustments are not made, it is especially important to clarify in the Responsiveness Summary document what the incremental cost of protecting these wells would have been and the reason.

RESPONSE 54: See Responses 27, 33, 35 and 43. The public supply well N-5099 is already impacted by Unisys site related contamination. Public supply wells N-4038 and N-12796 which are located over two miles in northwest direction are impacted by contamination unrelated to Unisys site and treatment systems are installed on both wells. In the future, these supply wells will be impacted by Unisys related groundwater plume based on groundwater modeling. Lockheed Martin will be responsible to provide treatment for Unisys site related contaminations to these wells upon execution of an appropriate consent order. Alternative 5 can prevent these wells from impact by the Unisys site related contamination at an additional cost of approximately \$65 million. The specifics of the Public Water Supply Protection and Mitigation Plan, which address the above referenced questions, will be incorporated in the Remedial Action Work Plan and subsequent Site Management Plan.

A letter dated July 15, 2014 was received from resident Michael Currie, which included the following comment:

COMMENT 55: 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. 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 to the 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. It is important for the health of Long Island's precious water aquifer that you take another look at the remedial actions being planned for the Unisys site.

RESPONSE 55: The goal of the remedy for Operable Unit 01 was to address the source of the groundwater contamination and to stop contaminants in the groundwater from leaving the site. That remedy has been implemented and has largely been successful. Based on the data, the concentration of total VOCs in shallow groundwater monitoring well 35GL (near the former source area) has significantly decreased. Levels are also decreasing in the nearby well cluster (2GL, 2MU, 2MI, 2ML). Further success will be realized with the implementation of the OU-1 ROD Amendment which requires upgrading the on-site groundwater extraction, increasing the extraction rate.

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

COMMENT 56: Lockheed Martin Corporation (“Lockheed Martin”) has examined the June 2014 proposed remedial action plan (“PRAP”) for Operable Unit (“OU”) No. 02, relating to off-site groundwater at the Unisys Corporation site (the “Proposed ROD”), located in Lake Success, Nassau County. Lockheed Martin requests the Department to adopt the PRAP in its current form as the final OU No. 02 ROD. Lockheed Martin makes this request based on the technical information contained in the PRAP that it has developed with Department oversight over many years during site investigations and the implementation of significant on-site and off-site interim remedial measures. The elements of the on-site and off-site groundwater remedy will assure the protection of human health and the environment. In addition, Lockheed Martin is committed to the implementation of a Public Water Supply Protection and Mitigation Program so that potable water of the highest quality is distributed from public supply wells. Lockheed Martin looks forward to working with Department staff to implement the OU2 ROD.

RESPONSE 56: Comment noted.

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

COMMENT 57: The Mayor supports Alternative 2 and stated that the other alternatives will take significantly more time to effectuate, will pose significant infrastructure issues to the community and will be only marginally more protective. We have waited 17 years to come to this point and I believe it is not in the best interests of the community to wait any longer to put in place the protective measures that need to be made to ensure that the community does not face potential health issues resulting from the plume. The Village of Lake Success is very concerned about the protection of water supply wells that would be affected by the plume. There are no details concerning the execution and monitoring of the provisions of the proposed Record of Decision. Mayor requested that the Record of Decision include a requirement that the Village of Lake Success be informed when all drafts and final reports are prepared in identifying the water supply wells, the sentinel wells, the treatment plant design and the monitoring plan you will be requiring as part of the remedial action and be accorded access to such reports. In addition, we would request that the Record of Decision requires that the Village will receive ground water monitoring reports of the monitoring wells, the supply wells, the extraction and the irrigation wells. The Village requests that the Record of Decision directs the Lockheed Martin Corporation to reimburse the Village for the costs of our consultants in this regard.

RESPONSE 57: The Department appreciates the Village’s support of the proposed remedy. All of the information requested that is provided to the Department can be made available to the Village. The

Department is unable to direct the Responsible Party to reimburse the Village's costs for reviewing these documents as it is not part of the remedy.

Two emails dated June 16, 2014 and July 13, 2104 were received from Barbara Leonardi, resident of North Shore Towers, Floral Park, which included the following comment:

COMMENT 58: As per this email you can see I have had very strong feelings about doing a vapor intrusion evaluation at North Shore Towers. We are the only Golf Course that has residential buildings where the vapors from the irrigation could possibly enter our buildings. We are self contained buildings with a very old ventilation system. Trane had sent out warnings as early as 1986. What that means is that any intake remains in the building for years. I would very much like to ask questions at the Public Meeting Thursday June 26, 2014. I would also like a study done for zip code 11005 as to our rate of cancer. Please put us on the list.

I attended your June 26, 2014 Town Hall Meeting on the Unisys Site #130045 and having read your papers on Soil Vapor Intrusion, What is cancer and Environmental Conservation I am more concern than ever that the wells and buildings at North Shore Towers and the surrounding property need much extensive monitoring. The contents reports I have (1999-2001) and 2004 the levels of Trichloroethylene, Tetrachloroethylene and Toluene and the information how these chemicals can be a traced and found in the body are of great concern to me. At no time can I recall was any notification given to the residents and WORKERS (over 3000) about the vapors of the irrigation of the golf course. Since this has been going on for at least 10 years I again must call on the State Agencies and my local politicians to assure me that Health issues have been fully studied by Lockheed Martin at this site. Since we are west of this site and by what I remember from that meeting this plume is spreading Northwest and cannot be contained. It is moving right under our buildings. Detailed Vapor and Soil testing should be done in and around our buildings. Why is Lockheed Martin not more doing more to install a water filtration system before it reaches the water wells in Fresh Meadows? I have been reading how Exxon is cleaning up the waters south of us. Is anyone studying the path that Plume is traveling on Is there any chance the two can meet under us effecting the waters of Nassau and Queens. We cannot just keep putting a band aid on the treatment of Cancer by allowing LIJ North Shore to just build more buildings to treat the disease an Environmental Impact study is needed for the Lake Success area. Please help address my concerns. More needs to be done about this serious issue. Lockheed Martin as owner of this site has an obligation to do its do diligence in protecting the community.

RESPONSE 58: See Responses 12, 13 and 30. So that you will receive all future project related mailings, a subscription was created for your email address for the Nassau County listserv. You will receive notifications issued by the Department via email.

An email dated July 14, 2014 received from Alan Mindel and Vincent M. Lentini, residents of Lake Success, included the following comment:

COMMENT 59: As a resident of Lake Success, I wanted to indicate my support for the Proposed Remedial Action Plan. While I support the plan, I would like to emphasize the importance of the water testing. While I understand there is robust testing of volatile organic compounds, there are many semi volatile organic compounds that are currently not being tested for. The testing should be expanded to include these semi volatile organic compounds. Furthermore, the sentinel wells should be situated so as to

detect contaminants coming from the north, south, east or west. The direction of the plume is only predictable to a point, and the sentinel wells should be positioned for any eventuality. Please keep me informed of your final findings.

RESPONSE 59: See Responses 23 and 24.

An email dated July 8, 2014 from Patricia Hyland, included the following comment:

COMMENT 60: It has come to my attention that in deciding which of the five alternatives to choose from in attempting to remedy the toxic state of the water table at and around Marcus Ave and Lakeville Rd., choice number 2 was chosen. I question this choice as it seems less effective and therefore less desirable than choice 5, although this is the most costly. Why are we not choosing what is most effective? Why must the citizens who live in that area pay for the sins of the Sperry Corp by having compromised water?

RESPONSE 60: See Response 33.

An email dated July 14, 2014 received from Pauline Schwager, included the following comment:

COMMENT 61: When Northrup Grumman bought the Sperry site, they knew of the contamination situation. That pollution must be totally cleaned up - no halfway measures. The health of the people must come first. It is travesty and tragedy that people have suffered and will suffer from the poisons in their atmosphere, land and water, if total restitution is not made.

RESPONSE 61: See Response 33.

An email dated July 7, 2014 received from Ruth Shalom, a resident of Great Neck, included the following comment:

COMMENT 62: I attended the hearing in Great Neck last week regarding the Unisys Superfund site, and I cannot stop thinking about The Plume because it makes me angry. According to the map, the Plume is under my house. At the hearing, every speaker from the general public voiced concern about how such a situation could have been allowed to contaminate the ground, air and water table from 1941-1999, and asked why nothing was done to clean it up, other than minimal treatment, for seventeen years.

The experts from the NYS Dept. of Environmental Conservation proposed 5 remedies, ranging from doing nothing, to restoration of the site to pre-disposal conditions. The costs range from 00.00 for remedy #1 (doing nothing) to \$34,000,000 and a cost of \$5,500,000 per year for remedy #5. The experts recommend remedy #2 at a cost of \$8,6000,000 and \$1,4000.000 per year. Lockheed Martin, who owns the site now, has to bear the cost. I am sure they would prefer remedy #2 over remedy #5.

Michelle Schimel, our State Assemblywoman, spoke about how upset she was with the situation, and her determination to see that it never happens again. Jack Martins, our State Senator, who has one of the lowest environmental ratings in the state, said that we should stop looking at the past because that will not solve the problem, and concentrate on the future, and he was sure that the experts from the state were doing a wonderful job.

If the state has been doing a wonderful job, why is the Plume gaining on my home, and why has the problem not been corrected after seventeen years?

Why do the experts and my local politicians all seem determined to pursue remedy #2? I realize that you may never be able to restore the environment in question to its pre-polluted state, but don't you think you should give it your best shot, and try? Please explain to me why solution #2 is better than solution #5.

RESPONSE 62: See Responses 33 and 35.

Several emails dated June 23, 2014, July 1, 2014, July 9, 2014 were received from Jody Kass, resident of Great Neck, which included the following comment.

COMMENT 63: Can you let me know whether the June 26th presentation at the public meeting on the Unisys site will address the disturbing issues raised in the attached article (Huntington Buzz – October 23, 2013) including but not limited to how the plume will be contained, whether new extraction wells are part of the remedy, and who has been paying for well head treatment?

- Modeling of the plume that was done in previous years that reflects the expectations of how the plume would move. I am particularly interested in seeing information that clarifies the earliest date by which it became clear that there was nothing that could be done to protect the drinking water wells from the plume.
- Modeling that shows how the plume will change over the next 5, 10, and 20 years for each of the alternatives being considered by the Department.
- The agreement between the Responsible Party and the water authorities.
- Any other information that explains why it has taken 17 years to develop the PRAP for this plume that is now impacting all the drinking water wells. For example, were delays a result of insufficient Superfund dollars, DEC staff cuts, recalcitrant behavior by the RP, or other causes?

Thank you for forwarding the requested agreement and also the CDM Smith/Lockheed Martin October 2013 modeling document. This information addresses some but not all of my questions, and also raises additional issues. As you know, I am concerned that the remedy under consideration for this site - which involves filtering the water at the wellhead instead of conventional treatment to address the plume before it impacts drinking water wells - could have health and environmental impacts and also set a dangerous precedent.

I would greatly appreciate your help in identifying the key documents (or links) that can answer the following questions:

- Did the Department require modeling of the plume in connection with the off-site IRM in 2006? If so, where can I find that information/modeling? I am looking for records which reflect the historic accuracy of previous modeling that projects the direction/behavior of this plume.
- There are quite a few drinking water wells impacted in Alternative 2. Did the Department expect all these drinking water wells to be impacted by the plume going back to 2006?
- Your note indicates that the CDM Smith document that you sent has modeling for all the alternatives. Unfortunately, that is not the case - it contains modeling for just 3 of the 16 scenarios. Moreover, this document was clearly crafted by the RP's consultant to justify selection of 2b. Where can I find modeling

that reflects how the plume will behave over the next 5 – 30 years for each of the alternatives/scenarios under consideration?

- Do all the alternatives result in contamination of Public Water Supply Well N-05099? What about Well N-04388 and Well N-12796? It is hard to imagine that impacts to all three of these wells cannot be avoided under any scenario (especially Wells N-04388 and N-12796). Did any of these 16 scenarios specifically evaluate protection of these drinking water wells? If so, which alternative/scenario? If such an analysis was not conducted, why not?

- Are there other wells that are not currently impacted by the plume that will be impacted beyond these three wells if Alternative 2 is implemented?

- What would be the incremental cost to Alternative 2 if additional remedial measures were added at the leading edge of the plume for the purpose of protecting one or more of these drinking water wells?

- At what point does the plume reach the bay and at what depth in Alternative 2? What about the other Alternatives?

- At what depth does vapor become a concern for the contaminants present in OU2? Where can I find modeling that reflects the depth of the contaminants over time for each of the Alternatives, and especially for Alternative 2?

- While I understand that the Department is not a party to the Agreement between the RP and the water authorities, can you clarify the purpose of the Agreement and whether an agreement between an RP and water authority is typical of other Superfund sites across the state? Or, is this an aberration found only on Long Island and/or only in Nassau? What guidance does the DEC offer to water authorities to manage their role and/or their negotiation with RPs?

- This Agreement appears to eviscerate the public participation process – as it was executed in May 2013, more than a year before the PRAP. It clearly is intended to bind the water authorities to Alternative 2 before the PRAP and before weighing public comments. Does the existence of this executed agreement contravene the intent of the Law's provisions on public participation?

- The Agreement becomes null and void if the Department chooses an alternative other than 2b. What is the difference between Alternative 2 and Alternative 2b? How does 2b differ from 2a and 2c?

- What are the implications of such nullification on the remediation? Would it delay progress? Would it impact the payment responsibilities? Would the DEC compel the RP to carry out the short term remedial measures if the agreement needs to be amended so that there is no further delay in implementing the remediation?

- Has the local repository been updated and does it now contain all the relevant documents?

- Regardless of the Alternative selected, transparency is going to be critical to ensuring the ongoing safety and protection of public health:

- What are the testing protocols?

- What is the frequency of the testing?

- Will testing be conducted at least 1x/month?

- Will the monthly reports reflect both the test results before treatment and also the test result after treatment?

- Will testing info/results be posted on an accessible website and in a manner that is readily understandable by the general public?

- When will the results of the testing be made public? Will it be within 30 days of the tests?

RESPONSE 63: The October 23, 2013 Huntington Buzz article regarding the Unisys plume and the agreement between Lockheed Martin and the Water Districts was published before a remedy was proposed and we are unaware of the remedy that the article contemplates. Despite the articles' statement

about DEC approval of the agreement, we are not a party to the agreement and do not have an approval role. Also, see Responses 3, 4, 6-8, 16, 20, 21, 27, 33-35, 37, 41-43, 46-51 and 53.

APPENDIX B

Administrative Record

Administrative Record

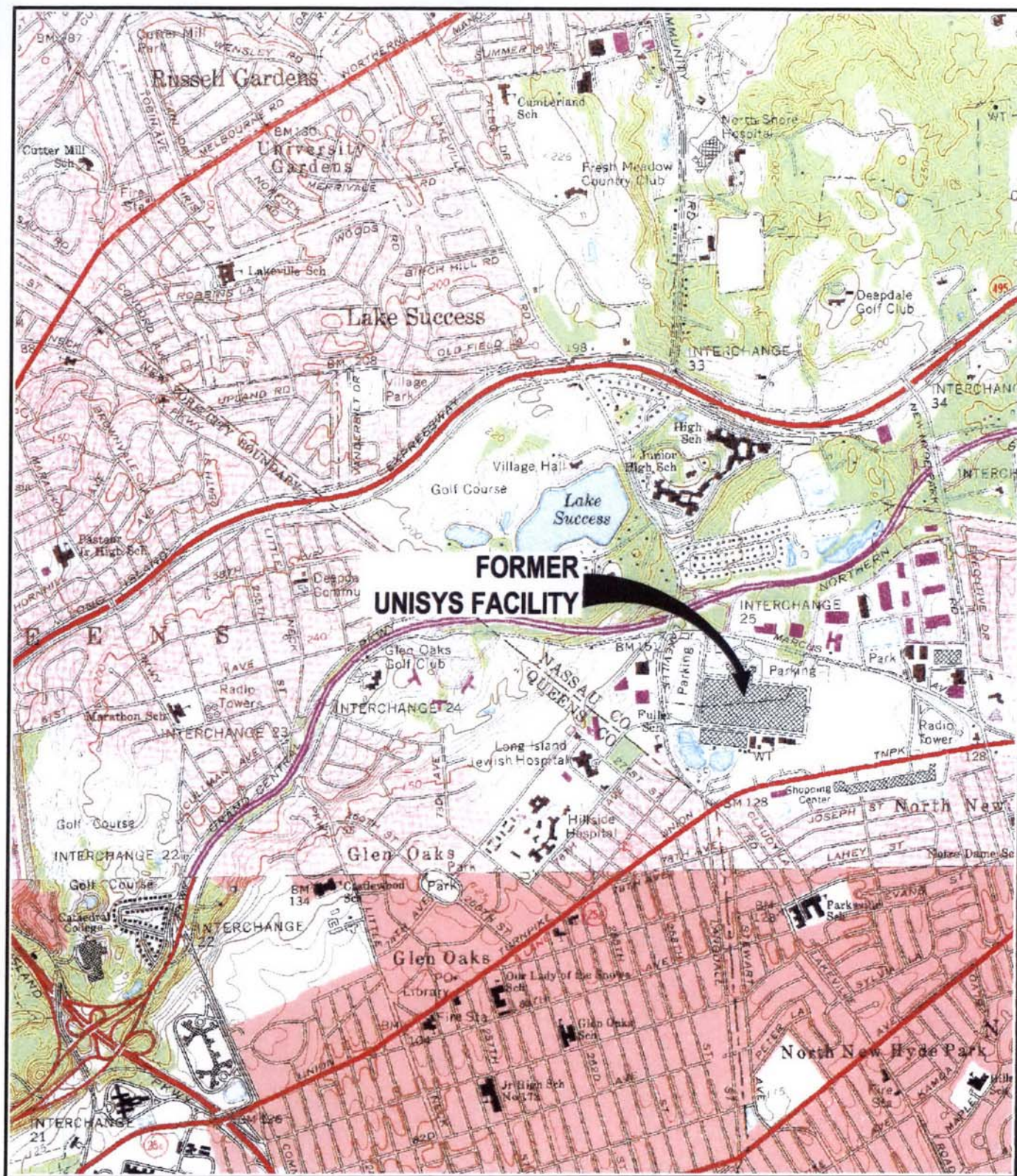
**Unisys Corporation Site
Operable Unit No. 2, Off-site Groundwater
State Superfund Project
Lake Success, Nassau County, New York
Site No. 130045**

1. Proposed Remedial Action Plan for the Unisys site, Operable Unit No. 2, 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.
3. 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.
4. Feasibility Study, Operable Unit No.2, Former Unisys Facility, Great Neck, New York, Site No. 130045 - May 2012, prepared by ARCADIS.
5. Feasibility Study Addendum, Operable Unit No.2 Former Unisys Facility, Great Neck, New York, Site No. 130045 - May 2012, prepared by ARCADIS.
6. OU-2 IRM South System Groundwater Remediation Work Plan, May 2003, prepared by ARCADIS.
7. Supplemental OU-2 Remedial Investigation Work Plan, April 1999, prepared by ARCADIS Geraghty & Miller.
8. OU2 Remedial Investigation/Feasibility Study Work Plan, Lockheed Martin Corporation, Great Neck, New York, NYSDEC Site # 130045, January 1998, prepared by H2M Group.
9. Record of Decision, Lockheed Martin Tactical Defense Systems, Inc., Operable Unit 1 Lake Success & Town of North Hempstead, Nassau County, Site # 1-30-045, March 1997 prepared by the Department.

Correspondence received during PRAP Comment Period:

10. A letter dated July 15, 2014 from Michael Currie, resident to NYSDEC.
11. A letter dated July 14, 2014 and several emails from Jody Kass, resident and executive director, New Partners for Community Revitalization to NYSDEC.
12. A letter dated July 14, 2014 from R. Stan Philips, Lockheed Martin Corporation to NYSDEC.

13. A letter dated June 30, 2014 from Ronald S. Cooper, Mayor of Incorporated Village of Lake Success to NYSDEC.
14. Two emails dated June 16, 2014 and July 13, 2104 received from Barbara Leonardi, resident of North Shore Towers, Floral Park.
15. An email dated July 14, 2014 received from Alan Mindel and Vincent M. Lentini, residents of Lake Success to NYSDEC.
16. An email dated July 8, 2014 from Patricia Hyland to NYSDEC.
17. An email dated July 14, 2014 received from Pauline Schwager to NYSDEC.
18. An email dated July 7, 2014 from Ruth Shalom, a resident of Great Neck to NYSDEC.



MAP SOURCE: USGS 7.5 MINUTE QUADRANGLE 1979 LYNBROOK AND SEA CLIFF, NEW YORK

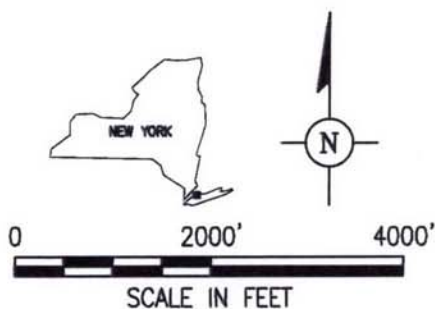
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY, GREAT NECK, NEW YORK
OPERABLE UNIT 2

SITE LOCATION MAP

Record of Decision

FIGURE

1



CESS





LEGEND:



APPROXIMATE MAXIMUM EXTENT AND
CONCENTRATION DISTRIBUTION OF TVOCs
IN GROUNDWATER REGARDLESS OF
AQUIFER HORIZON, EXPRESSED IN
MICROGRAMS PER LITER (>5 MG/L)

NOTE:

TOTAL VOLATILE ORGANIC COMPOUNDS (TVOC)
EQUAL SUM OF ALL VOC CONSTITUENTS
DETECTED AND NOT LIMITED TO THE FOUR SITE-
RELATED CONSTITUENTS OF POTENTIAL
CONCERN, WHICH INCLUDE:
TRICHLOROETHENE, TETRACHLOROETHENE,
CIS-1,2-DICHLOROETHENE, AND FREON-113

LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY, GREAT NECK, NEW YORK
OPERABLE UNIT 2

MAXIMUM EXTENT and DISTRIBUTION OF TVOCs in GROUNDWATER

FIGURE

Record of Decision





EXHIBIT "E"

RCRA LARGE QUANTITY GENERATOR CLOSURE DOCUMENT

**Unisys Corporation Site
Lake Success, Nassau County
Site No. 130045
EPA ID NYD075796037
August 2016**

Statement of Purpose and Basis

This RCRA Large Quantity Generator (LQG) Closure presents the actions approved by the Department of Environmental Conservation (Department) for the above referenced site, pursuant to Article 27, Title 9 of the Environmental Conservation Law (ECL) and 6 NYCRR Parts 370–374 and 376 for closure of LQGs located over sole source aquifers. Closure addresses any contamination associated with the regulated storage areas for hazardous waste or any releases from other areas of the facility that may have occurred while in LQG status. A LQG is a facility that generates 1,000 kilograms or more of non-acute hazardous waste in a month or stores 6,000 or greater kilograms of non-acute hazardous waste at any one time in designated and regulated storage areas. For acute hazardous wastes, an LQG is one that generates 1 kilogram per month or stores 1 or more kilograms of that waste.

Description of the Site

Site Location: The Unisys Corporation 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 90 acres in area. Originally the site was defined as a 94 acre parcel but previous investigations demonstrated that a 4 acre parcel was not contaminated and the parcel was removed from the site definition. This 4 acre parcel was deeded to the Town of North Hempstead for use as athletic 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 site in the Village of Lake Success is zoned for commercial use. The portion of the site in the Town of North Hempstead is zoned for industrial use. The property is fully developed, with the bulk of the area comprised of the historic main manufacturing building, various smaller support buildings, three recharge basins and parking lots. The smaller buildings are located south of the main building. The site was redeveloped by a prior owner for commercial use. Presently, the buildings house a number of tenants.

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. 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 chlorinated 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 was 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 90 acre site property. OU2 is the off-site area beyond the 90 acre property where contaminants in groundwater have migrated from OU1.

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 feet); Raritan Lloyd Sand unit (190 feet) 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. Eleven active public supply wells are located within the plume area, nine drawing from the Magothy aquifer, and two drawing from the Lloyd aquifer. Four inactive public supply wells (Magothy) are located in the area, as are six active irrigation wells.

The Department issued a Record of Decision (ROD) for OU2 on December 23, 2014.

The Department also issued an Amended Record of Decision (ROD) for OU1 on January 9, 2015 which amended the original March 1997 OU1 ROD.

Nature and Extent of Contamination

The RCRA Closure Investigation of this site evaluated a total of 53 areas: 49 Areas of Concern (AOC) and 4 Hazardous Waste Management Units (HWMU). The Site Management Plan (SMP) referenced in the description of the RCRA closure will contain a figure showing the location of all AOCs and HWMUs.

Soil: Subsurface soil at the site has been impacted by various metals, Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs) and low levels of Polychlorinated Biphenyls (PCBs). Metals identified were primarily arsenic, which range from 2.49 to 53.9 mg/kg (vs 16 mg/kg*); chromium, from 29.3 to 1,100 mg/kg (vs 22 mg/kg*); copper, from 50.7 to 5,300 mg/kg (vs 270 mg/kg*); lead, from 67.9 to 6,900 mg/kg (vs 400 mg/kg); silver, from 2.49 to 51 mg/kg (vs 36 mg/kg*); and mercury, from 0.96 to 19.2 mg/kg (vs 0.81 mg/kg*). VOCs identified included methylene chloride to 25 mg/kg (vs 51 mg/kg*); trichloroethylene (TCE) to 19 mg/kg (vs 10 mg/kg*); perchloroethylene (PCE) to 8.9 mg/kg (vs 5.5 mg/kg*); and PAHs ranging from 0.43 to 45 mg/kg (vs 1 mg/kg for individual PAH's*).

*residential soil cleanup objectives

Soil testing in the Lake House area, which is a paved parking area located on the site just south of the recharge basins, identified significant levels of barium (to 1,300 mg/kg), cadmium (to 20.9 mg/kg), nickel (to 567 mg/kg), selenium (to 16 mg/kg) and zinc (to 3,200 mg/kg) in addition to the metals and PAHs noted above.

While significant contamination, including all accessible sources of groundwater contamination identified for closure have been removed, some contamination remains in locations beneath concrete slabs and in other inaccessible areas, which will require a RCRA closure remedial program to address that contamination.

Groundwater: Groundwater contamination was identified during the inactive hazardous waste disposal site investigation which resulted in the Records of Decision referenced above. The groundwater contamination originates from the former plant site (OU1) and extends over one mile off-site (i.e., OU2). Groundwater migration from OU1 has resulted in a significant off-site groundwater plume. The groundwater flow direction is to the northwest. The primary groundwater contaminants include: 1,2 dichloroethylene, TCE, PCE and Freon 113. This contamination is being addressed by the RODs referenced above

Soil Vapor: An off-site soil vapor intrusion (SVI) evaluation was completed in 2009. The soil vapor intrusion samples were collected from a total of eight off-site properties. TCE and PCE were detected in a limited number of sub-slab soil gas and indoor air samples. However, TCE and PCE were detected below the NYSDOH air guideline of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $30 \mu\text{g}/\text{m}^3$, respectively. Based on the NYSDOH guidance, no further action is needed as the data indicate that concentrations in sub-slab soil gas and indoor air are below levels of potential concern.

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.

Description of the RCRA Closure

Forty-nine AOCs and four HWMUs were identified at this facility. These AOCs/HWMUs are divided into four categories. Category I - A total of 23 AOCs were investigation and remediation has been completed. The remaining 30 AOCs/HWMUs are identified by the following categories: Category II - AOC's and HWMU's where closure has been met through the use of Engineering and Institutional Controls; Category III - AOCs where investigation is complete and remediation is required and will be accomplished as identified by this document; and Category IV - AOCs where additional investigation will be required if the area becomes accessible

Based on these categories, the Department has approved the following actions for the RCRA closure of this LQG site. The components of the closure, are as follows:

1. A site cover currently exists and will be maintained to allow for commercial or industrial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site

development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

2. The following 23 AOCs (Category I) require no further action, provided that the site use remains commercial, since the investigation and any required remediation to achieve closure for commercial use has been completed. Any intrusive work on the site will follow the soil management provisions in the Site Management Plan described below:

- Area 1 - THIN FILM LAB
- Area 2 - CHEMISTRY LAB
- Area 5 - MAINTENANCE BUILDING
- Area 6 - COAL SILO/ASH PIT & INCINERATOR
- Area 10 - PUBLISHING PHOTO LAB
- Area 18 - OIL/WATER SEPARATORS (2) IN GARAGE
- Area 19 - USTs IN SE CORNER OF MANUFACTURING BUILDING
- Area 20 - FORMER GASOLINE UST
- Area 23 - DRYWELL LOCATIONS
- Area 25 - CLEAN ROOM SUMPS & TANKS (A8)
- Area 26A - COOLING TOWERS
- Area 26C - COOLING TOWERS
- Area 26D - COOLING TOWERS
- Area 26E - COOLING TOWERS
- Area 27 - SHEET METAL SUMP (C12)
- Area 28 - TEMPERATURE CONTROL ROOM SUMP (2) (B11)
- Area 29 - CLEAN ROOM SUMPS (013)
- Area 30 - SHORT ORDER MACHINE ROOM SUMPS (2) (B11)
- Area 40 - HYDRAULIC LIFT IN GARAGE
- Area FPM-1 - BLUEPRINT AREA EAST OF ADMIN. BLDG.
- Area FPM -8 - FORMER SOIL STORAGE NORTH OF BOILER BLDG.
- Area FPM-20 - WAVE SOLDER AREA IN MANUFACTURING BUILDING (M10)
- Area NYSDEC-5CUSTOMER SERVICE AREA (K12)

3. Based on investigation the closure for the following 13 AOCs and 4 HWMUs (Category II), will be met through an engineering control in the form of the site cover (see Remedial Element 1) and placement of an institutional control in the form of an environmental easement (see Remedial Element 6). Any intrusive work on the site will follow the soil management provisions in the site management plan described below:

- Area 3 - HIGH POWER LAB
- Area 4 - FOUNDRY BASEMENT
- HWMU – Area 7 – PAINT STORAGE ROOM (Q18)
- HWMU – Area 8 - OIL STORAGE/PUMP ROOM (Q19)

- Area 9 - OLD PLATING AREA (Q10)
 - Area 11 - PROCESS PHOTO LAB
 - Area 12 - PLATING/PHOTO LAB (A12)
 - HWMU - Area 13 - HAZ. MATERIALS STORAGE FACILITY (N19)
 - Area 14 - BOILER HOUSE
 - HWMU - Area 17 - RECLAMATION ROOM (Q19)
 - Area 24 - TRANSFORMER SUB-STATION
 - Area 31 - FOUNDRY SUMP
 - Area 32 - A/C CONDENSATE SUMP (02)
 - Area 33 - SUMP (013)
 - Area 34 - HEAT TREAT PIT (G19)
 - Area FPM-3 - BUBBLE IN FLOOR OF MANUFACTURING BLDG.
 - Area FPM-19 - REPORTED CHEMICAL DUMPING NORTH OF FOUNDRY BLDG.
4. Closure will be achieved for the following 7 AOCs (Category III) by implementing the actions identified below, provided that the site use remains commercial. Any intrusive work on the site will follow the soil management provisions in the Site Management Plan described below:
- Area 15 - LIME NEUTRALIZATION PIT (L19 OUTSIDE BUILDING)
 - Removal of ≈ 68 cubic yards (yd^3) of soil
 - Area 16 - FORMER OIL BLADDER AST
 - Removal of $\approx 520 \text{ yd}^3$ of soil
 - Area 21 - Foundry UST
 - Removal of $\approx 2700 \text{ yd}^3$ of soil
 - Area 26B - COOLING TOWERS
 - Removal of $\approx 200 \text{ yd}^3$ of soil
 - Area 35 - LAKEHOUSE AREA including LIME NEUTRALIZATION TANK
 - Removal of $\approx 200 \text{ yd}^3$ of soil
 - Area 37 - FORMER 275 GALLON GASOLINE UST
 - Removal of $\approx 43 \text{ yd}^3$ of soil
 - Area 39 - FORMER ETHYLENE GLYCOL AST
 - Removal of $\approx 89 \text{ yd}^3$ of soil
5. The following 6 AOCs are tanks which stored petroleum fuels or dielectric fluids and which were reported to have been removed or closed in place due to their inaccessibility (Category IV). Should any contamination be identified which is associated with these AOCs in the future, appropriate actions pursuant to the site management plan (see Remedial Element 7) will be required.
- Area 22 - Foundry Dielectric UST
 - Area 36A - Former 100 gallon Gasoline Storage Tank
 - Area 36B - Former 100 gallon Gasoline Storage Tank
 - Area 36C - Former 100 gallon Gasoline Storage Tank
 - Area 36D - Former 100 gallon Gasoline Storage Tank
 - Area 38 - Former 275 gallon Gasoline AST

6. An institutional control in the form of an environmental easement for the controlled property was required by the OU1 ROD amendment, which will:

- require 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);
- allow the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict 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; and
- require compliance with the Department approved Site Management Plan.

7. A Site Management Plan (SMP) was required by the OU1 ROD amendment, which will include 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 following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 6 above.

Engineering Controls: Maintenance of the site cover system discussed in Paragraph 1.

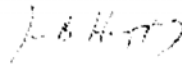
This plan includes, but may not be limited to: an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- a figure identifying all of the AOCs and HWMU's;
- a list of the AOC's that have been determined that no further action is required at this time (Category I); are subject to the site IC/ECs (Category II) or require action pursuant to this plan (Category III);
- a list of the AOCs determined to be inaccessible (Category IV) and provision for further investigation and closure of these AOCs and HWMU's should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department's determination of the need for further action a closure work plan will be developed for the now accessible AOCs. Any necessary closure will be completed prior to, or in association with, redevelopment of the site;

- descriptions of the provisions of the environmental easement including any land use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

Declaration

The closure selected 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 and will allow for the identified use of the site.



Date: August 4, 2016

James B. Harrington, P.E.

Director, Remedial Bureau A
Division of Environmental Remediation

EXHIBIT "F"

Proposed Projects		Costs
Village of Lake Success Restoration Projects		
1. Hydraulic Connection Between Lake Surprise and Lake		\$ 320,000
2. Groundwater Recharge for Village Park		
a. Repair parking lots and roads using porous pavement		\$ 250,000
b. Provide horizontal drain in walking/jogging track		\$ 150,000
c. Playing field drainage improvements		\$ 300,000
3. Weather station		\$ 15,000
4. Tanners Road Drainage Improvement		\$ 75,000
	SUBTOTAL	\$1,110,000
Town of North Hempstead Restoration Project		
1. Whitney Stream Environmental Restoration		\$ 790,000
TOTAL PROJECT PROPOSAL AMOUNT		\$1,900,000

APPENDIX A

STANDARD CLAUSES FOR ALL NEW YORK STATE SUPERFUND ADMINISTRATIVE ORDERS

The parties to the State Superfund Order (hereinafter "Order") agree to be bound by the following clauses which are hereby made a part of the Order. The word "Respondent" herein refers to any party to the Order, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. Citizen Participation Plan

Within twenty (20) days after the effective date of this Order, Respondent shall submit for review and approval a written citizen participation plan prepared in accordance with the requirements of ECL §27-1417 and 6 NYCRR sections 375-1.10 and 375-3.10. Upon approval, the Citizen Participation Plan shall be deemed to be incorporated into and made a part of this Order.

II. Initial Submittal

Within thirty (30) days after the effective date of this Order, Respondent shall submit to the Department a Records Search Report prepared in accordance with Exhibit "B" attached to the Order. The Records Search Report can be limited if the Department notifies Respondent that prior submissions satisfy specific items required for the Records Search Report.

III. Development, Performance, and Reporting of Work Plans

A. Work Plan Requirements

All activities at the Site that comprise any element of an Inactive Hazardous Waste Disposal Site Remedial Program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order and all activities shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, as required under CERCLA, 42 U.S.C. § 9600 *et seq.* The Work Plan(s) under this Order shall address both on-Site and off-Site conditions and shall be developed and implemented in accordance with 6 NYCRR § 375-1.6(a), 375-3.6, and 375-6. All Department-approved Work Plans shall be incorporated into and become enforceable parts of this Order. Upon approval of a

Work Plan by the Department, Respondent shall implement such Work Plan in accordance with the schedule contained therein. Nothing in this Subparagraph shall mandate that any particular Work Plan be submitted.

The Work Plans shall be captioned as follows:

1. Site Characterization ("SC") Work Plan: a Work Plan which provides for the identification of the presence of any hazardous waste disposal at the Site;
2. Remedial Investigation/Feasibility Study ("RI/FS") Work Plan: a Work Plan which provides for the investigation of the nature and extent of contamination within the boundaries of the Site and emanating from such Site and a study of remedial alternatives to address such on-site and off-site contamination;
3. Remedial Design/Remedial Action ("RD/RA") Work Plan: a Work Plan which provides for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in the ROD;
4. "IRM Work Plan" if the Work Plan provides for an interim remedial measure;
5. "Site Management Plan" if the Work Plan provides for the identification and implementation of institutional and/or engineering controls as well as any necessary monitoring and/or operation and maintenance of the remedy; or
6. "Supplemental" if additional work plans other than those set forth in II.A.1-5 are required to be prepared and implemented.

B. Submission/Implementation of Work Plans

1. Respondent may opt to propose one or more additional or supplemental Work Plans (including one or more IRM Work Plans) at any time, which the Department shall review for appropriateness and technical sufficiency.
2. Any proposed Work Plan shall be submitted for the Department's review and approval

and shall include, at a minimum, a chronological description of the anticipated activities, a schedule for performance of those activities, and sufficient detail to allow the Department to evaluate that Work Plan.

i. The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph III.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to dispute resolution pursuant to Paragraph XV, modify the Work Plan.

ii. The Department may request, subject to dispute resolution pursuant to Paragraph XV, that Respondent submit additional or supplemental Work Plans for the Site to complete the current remedial phase within thirty (30) Days after the Department's written request.

3. A Site Management Plan, if necessary, shall be submitted in accordance with the schedule set forth in the IRM Work Plan or Remedial Work Plan.

4. During all field activities conducted under a Department-approved Work Plan, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken in accordance with the provisions of 6 NYCRR 375-1.6(a)(3).

5. A Professional Engineer must stamp and sign all Work Plans other than SC or RI/FS Work Plans.

C. Submission of Final Reports and Periodic Reports

1. In accordance with the schedule contained in a Work Plan, Respondent shall submit a final report as provided at 6 NYCRR 375-1.6(b) and a final engineering report as provided at 6 NYCRR 375-1.6(c).

2. Any final report or final engineering report that includes construction activities shall include "as built" drawings showing any changes made to the remedial design or the IRM.

3. In the event that the final engineering report for the Site requires Site management, Respondent shall submit an initial periodic report by

in accordance with the schedule in the Site Management Plan and thereafter in accordance with a schedule determined by the Department. Such periodic report shall be signed by a Professional Engineer or by such other qualified environmental professional as the Department may find acceptable and shall contain a certification as provided at 6 NYCRR 375-1.8(h)(3). Respondent may petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

4. Within sixty (60) days of the Department's approval of a Final Report, Respondent shall submit such additional Work Plans as is required by the Department in its approval letter of such Final Report. Failure to submit any additional Work Plans within such period shall be a violation of this Order.

D. Review of Submittals

1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondent makes pursuant to this Order within sixty (60) Days. The Department's response shall include, in accordance with 6 NYCRR 375-1.6(d), an approval, modification request, or disapproval of the submittal, in whole or in part.

i. Upon the Department's written approval of a Work Plan, such Department-approved Work Plan shall be deemed to be incorporated into and made a part of this Order and shall be implemented in accordance with the schedule contained therein.

ii. If the Department modifies or requests modifications to a submittal, it shall specify the reasons for such modification(s). Within fifteen (15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(3). If Respondent elects to modify or accept the Department's modifications to the submittal, Respondent shall make a revised submittal that incorporates all of the Department's modifications to the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(3). In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in

violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

iii. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within fifteen (15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(4). If Respondent elects to modify the submittal, Respondent shall make a revised submittal that addresses all of the Department's stated reasons for disapproving the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(4). In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

2. Within thirty (30) Days after the Department's approval of a final report, Respondent shall submit such final report, as well as all data gathered and drawings and submittals made pursuant to such Work Plan, in an electronic format acceptable to the Department. If any document cannot be converted into electronic format, Respondent shall submit such document in an alternative format acceptable to the Department.

E. Department's Issuance of a ROD

1. Respondent shall cooperate with the Department and provide reasonable assistance, consistent with the Citizen Participation Plan, in soliciting public comment on the proposed remedial action plan ("PRAP"), if any. After the close of the public comment period, the Department shall select a final remedial alternative for the Site in a ROD. Nothing in this Order shall be construed to abridge any rights of Respondent, as provided by law, to judicially challenge the Department's ROD.

2. Respondent shall have 60 days from the date of the Department's issuance of the ROD to notify the Department in writing whether it will implement the remedial activities required by such ROD. If the Respondent elects not to implement the required remedial activities, then this order shall terminate in accordance with Paragraph XIV.A. Failure to make an election or failure to comply with the election is a violation of this Order.

F. Institutional/Engineering Control Certification

In the event that the remedy for the Site, if any, or any Work Plan for the Site, requires institutional or engineering controls, Respondent shall submit a written certification in accordance with 6 NYCRR 375-1.8(h)(3) and 375-3.8(h)(2).

IV. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4). Nothing herein abridges Respondent's right to contest any allegation that it has failed to comply with this Order.

2. Payment of any penalties shall not in any way alter Respondent's obligations under this Order.

B. 1. Respondent shall not suffer any penalty or be subject to any proceeding or action in the event it cannot comply with any requirement of this Order as a result of any Force Majeure Event as provided at 6 NYCRR 375-1.5(b)(4). Respondent must use best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, the failure of Respondent to make complete and timely application for any required approval or permit, and non-attainment of the goals, standards, and requirements of this Order.

2. Respondent shall notify the Department in writing within five (5) Days of the onset of any Force Majeure Event. Failure to give such notice within such five (5) Day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall be deemed to know of any circumstance which it, any entity controlled by it, or its contractors knew or should have known.

3. Respondent shall have the burden of proving by a preponderance of the evidence that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought is warranted under the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subparagraph IV.B.2 regarding timely notification.

4. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for a period of time equivalent to the time lost because of the Force majeure event, in accordance with 375-1.5(4).

5. If the Department rejects Respondent's assertion that an event provides a defense to non-compliance with this Order pursuant to Subparagraph IV.B, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and Respondent's position prevails.

V. Entry upon Site

A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Site (or areas in the vicinity of the Site which may be under the control of Respondent) by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Site, for inspecting, sampling, copying records related to the contamination at the Site, testing, and any other activities necessary to ensure Respondent's compliance with this Order. Upon request, Respondent shall (i) provide the Department with suitable work space at the Site, including access to a telephone, to the extent available, and (ii) permit the Department full access to all non-privileged records relating to matters addressed by this Order. Raw data is not considered privileged and that portion of any privileged document containing raw data must be provided to the Department. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.

B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such sampling and scientific measurements available to Respondent.

VI. Payment of State Costs

A. Within forty-five (45) days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for State Costs as provided by 6 NYCRR 375-1.5 (b)(3)(i). Failure to timely pay any invoice will be subject to late payment charge and interest at a rate of 9% from the date the payment is due until the date the payment is made.

B. Costs shall be documented as provided by 6 NYCRR 375-1.5(b)(3). The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.

C. Each such payment shall be made payable to the New York State Department of Environmental Conservation and shall be sent to:

Director, Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental
Conservation
625 Broadway
Albany, New York 12233-7012

D. The Department shall provide written notification to the Respondent of any change in the foregoing addresses.

E. If Respondent objects to any invoiced costs under this Order, the provisions of 6 NYCRR 375-1.5 (b)(3)(v) and (vi) shall apply. Objections shall be sent to the Department as provided under subparagraph VI.C above.

F. In the event of non-payment of any invoice within the 45 days provided herein, the Department may seek enforcement of this provision pursuant to Paragraph IV or the Department may commence an enforcement action for non-compliance with ECL '27-1423 and ECL 71-4003.

VII. Release and Covenant Not to Sue

Upon the Department's issuance of a Certificate of Completion as provided at 6 NYCRR 375-1.9 and 375-2.9, Respondent shall obtain the benefits conferred by such provisions, subject to the terms and conditions described therein.

VIII. Reservation of Rights

A. Except as provided at 6 NYCRR 375-1.9 and 375-2.9, nothing contained in this Order shall be

construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.

B. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental assertion of remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, the Trustee of the State's natural resources, and their representatives and employees harmless as provided by 6 NYCRR 375-2.5(a)(3)(i).

X. Public Notice

A. Within thirty (30) Days after the effective date of this Order, Respondent shall provide notice as required by 6 NYCRR 375-1.5(a). Within sixty (60) Days of such filing, Respondent shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondent proposes to transfer by sale or lease the whole or any part of Respondent's interest in the Site, or becomes aware of such transfer, Respondent shall, not fewer than forty-five (45) Days before the date of transfer, or within forty-five (45)

Days after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondent to secure the repayment of money or the performance of a duty or obligation.

XI. Change of Use

Applicant shall notify the Department at least sixty (60) days in advance of any change of use, as defined in 6 NYCRR 375-2.2(a), which is proposed for the Site, in accordance with the provisions of 6 NYCRR 375-1.11(d). In the event the Department determines that the proposed change of use is prohibited, the Department shall notify Applicant of such determination within forty-five (45) days of receipt of such notice.

XII. Environmental Easement

A. If a Record of Decision for the Site relies upon one or more institutional and/or engineering controls, Respondent (or the owner of the Site) shall submit to the Department for approval an Environmental Easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36, and 6 NYCRR 375-1.8(h)(2). Upon acceptance of the Environmental Easement by the State, Respondent shall comply with the requirements of 6 NYCRR 375-1.8(h)(2).

B. If the ROD provides for no action other than implementation of one or more institutional controls, Respondent shall cause an environmental easement to be recorded under the provisions of Subparagraph XII.A.

C. If Respondent does not cause such environmental easement to be recorded in accordance with 6 NYCRR 375-1.8(h)(2), Respondent will not be entitled to the benefits conferred by 6 NYCRR 375-1.9 and 375-2.9 and the Department may file an Environmental Notice on the site.

XIII. Progress Reports

Respondent shall submit a written progress report of its actions under this Order to the parties

identified in Subparagraph IV.A.1 of the Order by the 10th day of each month commencing with the month subsequent to the approval of the first Work Plan and ending with the Termination date as set forth in Paragraph XIV, unless a different frequency is set forth in a Work Plan. Such reports shall, at a minimum, include: all actions relative to the Site during the previous reporting period and those anticipated for the next reporting period; all approved activity modifications (changes of work scope and/or schedule); all results of sampling and tests and all other data received or generated by or on behalf of Respondent in connection with this Site, whether under this Order or otherwise, in the previous reporting period, including quality assurance/quality control information; information regarding percentage of completion; unresolved delays encountered or anticipated that may affect the future schedule and efforts made to mitigate such delays; and information regarding activities undertaken in support of the Citizen Participation Plan during the previous reporting period and those anticipated for the next reporting period.

XIV. Termination of Order

A. This Order will terminate upon the earlier of the following events:

1. Respondent's election in accordance with Paragraph III.E.2 not to implement the remedial activities required pursuant to the ROD. In the event of termination in accordance with this Subparagraph, this Order shall terminate effective the 5th Day after the Department's receipt of the written notification, provided, however, that if there are one or more Work Plan(s) for which a final report has not been approved at the time of Respondent's notification of its election not to implement the remedial activities in accordance with the ROD, Respondent shall complete the activities required by such previously approved Work Plan(s) consistent with the schedules contained therein. Thereafter, this Order shall terminate effective the 5th Day after the Department's approval of the final report for all previously approved Work Plans; or

2. The Department's written determination that Respondent has completed all phases of the Remedial Program (including Site Management), in which event the termination shall be effective on the 5th Day after the date of the Department's letter stating that all phases of the remedial program have been completed.

B. Notwithstanding the foregoing, the provisions contained in Paragraphs VI and IX shall

survive the termination of this Order and any violation of such surviving Paragraphs shall be a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4), subjecting Respondent to penalties as provided under Paragraph IV so long as such obligations accrued on or prior to the Termination Date.

C. If the Order is terminated pursuant to Subparagraph XIV.A.1, neither this Order nor its termination shall affect any liability of Respondent for remediation of the Site and/or for payment of State Costs, including implementation of removal and remedial actions, interest, enforcement, and any and all other response costs as defined under CERCLA, nor shall it affect any defenses to such liability that may be asserted by Respondent. Respondent shall also ensure that it does not leave the Site in a condition, from the perspective of human health and environmental protection, worse than that which existed before any activities under this Order were commenced. Further, the Department's efforts in obtaining and overseeing compliance with this Order shall constitute reasonable efforts under law to obtain a voluntary commitment from Respondent for any further activities to be undertaken as part of a Remedial Program for the Site.

XV. Dispute Resolution

A. In the event disputes arise under this Order, Respondent may, within fifteen (15) Days after Respondent knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR 375-1.5(b)(2).

B. All cost incurred by the Department associated with dispute resolution are State costs subject to reimbursement pursuant to this Order.

C. Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in the ROD or any element of such remedy, nor to impair any right of Respondent to seek judicial review of the Department's selection of any remedy.

XVI. Miscellaneous

A. Respondent agrees to comply with and be bound by the provisions of 6 NYCRR Subparts 375-1 and 375-2; the provisions of such Subparts that are referenced herein are referenced for clarity and convenience only and the failure of this Order to specifically reference any particular regulatory

provision is not intended to imply that such provision is not applicable to activities performed under this Order.

B. The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for any activity conducted pursuant to this Order in accordance with 6 NYCRR 375-1.12(b), (c), and (d).

C. 1. Respondent shall use best efforts to obtain all Site access, permits, easements, approvals, institutional controls, and/or authorizations necessary to perform Respondent's obligations under this Order, including all Department-approved Work Plans and the schedules contained therein. If, despite Respondent's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, Respondent shall promptly notify the Department and include a summary of the steps taken. The Department may, as it deems appropriate and within its authority, assist Respondent in obtaining same.

2. If an interest in property is needed to implement an institutional control required by a Work Plan and such interest cannot be obtained, the Department may require Respondent to modify the Work Plan pursuant to 6 NYCRR 375-1.6(d)(3) to reflect changes necessitated by Respondent's inability to obtain such interest.

D. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.

E. 1. The terms of this Order shall constitute the complete and entire agreement between the Department and Respondent concerning the implementation of the activities required by this Order. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order. In the event of a conflict between the terms of this Order and any Work Plan submitted pursuant to this Order, the terms of this Order shall control over the terms of the Work Plan(s). Respondent consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Order.

2. i. Except as set forth herein, if Respondent desires that any provision of this Order be changed, Respondent shall make timely written application to the Commissioner with copies to the parties listed in Subparagraph IV.A.1.

ii. If Respondent seeks to modify an approved Work Plan, a written request shall be made to the Department's project manager, with copies to the parties listed in Subparagraph IV.A.1.

iii. Requests for a change to a time frame set forth in this Order shall be made in writing to the Department's project attorney and project manager; such requests shall not be unreasonably denied and a written response to such requests shall be sent to Respondent promptly.

F. 1. If there are multiple parties signing this Order, the term "Respondent" shall be read in the plural, the obligations of each such party under this Order are joint and several, and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s) under this Order.

2. If Respondent is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Order are joint and several and the insolvency or failure of any general partner to implement any obligations under this Order shall not affect the obligations of the remaining partner(s) under this Order.

3. Notwithstanding the foregoing Subparagraphs XVI.F.1 and 2, if multiple parties sign this Order as Respondents but not all of the signing parties elect to implement a Work Plan, all Respondents are jointly and severally liable for each and every obligation under this Order through the completion of activities in such Work Plan that all such parties consented to; thereafter, only those Respondents electing to perform additional work shall be jointly and severally liable under this Order for the obligations and activities under such additional Work Plan(s). The parties electing not to implement the additional Work Plan(s) shall have no obligations under this Order relative to the activities set forth in such Work Plan(s). Further, only those Respondents electing to implement such additional Work Plan(s) shall be eligible to receive the release and covenant not to sue referenced in Paragraph VII.

G. Respondent shall be entitled to receive contribution protection and/or to seek contribution to

the extent authorized by ECL 27-1421(6) and 6 NYCRR 375-1.5(b)(5).

H. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27 or in regulations promulgated thereunder shall have the meaning assigned to them under said statute or regulations.

I. Respondent's obligations under this Order represent payment for or reimbursement of response costs, and shall not be deemed to constitute any type of fine or penalty.

J. Respondent and Respondent's successors and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent shall in no way alter Respondent's responsibilities under this Order.

K. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.