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California Regional Water Quality Control Board San Diego Region

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May 17, 2011

In reply refer to:
T10000002362:kdorsey

MV Universal LLC
Mr. John Saunders, Manager
4040 MacArthur Blvd, suite 300
Newport Beach, CA 92660
CERTIFIED MAIL:

Unisys Corporation
Mr. J. Edward Coleman, CEO
801 Lakeview Drive
Blue Bell, PA 19422
CERTIFIED MAIL:

Dear Messrs. Saunders and Coleman:

**SUBJECT: CLEANUP AND ABATEMENT ORDER NO. R9-2011-0029 FOR THE
FORMER UNISYS FACILITY, 25725 JERONIMO ROAD, MISSION
VIEJO, ORANGE COUNTY, CALIFORNIA**

Enclosed is Cleanup and Abatement Order No. R9-2011-0029 (the CAO), issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to MV Universal LLC (Universal) and the Unisys Corporation (Unisys). The CAO directs Universal and Unisys to cleanup and abate the effects of pollution and nuisance created by an unauthorized discharge of waste constituents from the former Unisys Facility to waters of the State.

The CAO has been issued pursuant to the San Diego Water Board's authority under California Water Code sections 13304 and 13267. The first report required by the CAO is due on **July 1, 2011**. Corrective action measures and additional reports are required according to the schedule provided in the CAO.

Please review the requirements contained within the CAO and keep in mind that failure to meet the requirements of the CAO may subject MV Universal and/or Unisys to further enforcement action by the San Diego Water Board, including administrative civil liability pursuant to Water Code section 13268 of up to \$1,000 per day, and section 13350 of up to \$5,000 per day.

California Environmental Protection Agency

May 17, 2011

In the subject line of any response, please include the requested "in reply refer to" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Ms. Kelly Dorsey at (858) 467-2980 or via email at kdorsey@waterboards.ca.gov.

Sincerely,



DAVID W. GIBSON
Executive Officer

DWG:jc:jro:kkd

Enclosure: Cleanup and Abatement Order No. R9-2011-0029

cc w/encl: Mr. Martin Morgenstern, Morgenstern Property Company, LLC, via e-mail
martin@m2pc.net

Mr. Mr. David T. Noble, Unisys Corporation, 801 Lakeview Drive, Suite 100, Blue Bell, PA
19422

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

CLEANUP AND ABATEMENT ORDER NO. R9-2011-0029

AN ORDER DIRECTING MV UNIVERSAL LLC AND UNISYS CORPORATION TO CLEANUP AND
ABATE THE EFFECTS OF POLLUTION, AND SUBMIT TECHNICAL REPORTS
PERTAINING TO CORRECTIVE ACTIONS AT THE

**FORMER UNISYS FACILITY,
25725 JERONIMO ROAD,
MISSION VIEJO, CALIFORNIA**

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) finds:

1. **Legal and Regulatory Authority:** This Order conforms to and implements policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including but not limited to (1) sections 13267 and 13304; (2) applicable State and federal regulations; (3) all applicable provisions of Statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Water Board) and the *Water Quality Control Plan, San Diego Basin* (Basin Plan) adopted by the San Diego Water Board including beneficial uses, water quality objectives, and implementation plans; (4) State Water Board policies and regulations, including State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, Resolution No. 88-63, *Sources of Drinking Water*, and Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under California Water Code Section 13304*; applicable sections of California Code of Regulations (CCR) Title 23, and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
2. **Unauthorized Discharge of Waste:** Trichloroethylene (TCE), Dichloroethene (DCE), Dichloroethane (DCA), Benzene, Arsenic, Cadmium, and Selenium were discovered above Maximum Contaminant Levels¹ (MCLs) in groundwater during an investigation, conducted during 2010, at the Former Unisys Facility located at 25725 Jeronimo Road in the city of Mission Viejo.² The investigation was

¹ MCLs, maximum contaminant levels, are public health-protective drinking water standards to be met by public water systems. MCLs take into account not only chemicals' health risks but also factors such as their detectability and treatability, as well as the costs of treatment. Primary MCLs can be found in Title 22 CCR sections 64431 - 64444. Secondary MCLs address the taste, odor, or appearance of drinking water, and are found in 22 CCR section 64449.

² Phase II Site Assessment Report, Former Unisys Property, 25725 Jeronimo Rd, Mission Viejo, CA , January 2011.

conducted by Batchelor Environmental Services, Inc., on behalf of MV Universal LLC, to determine the extent of the pollution found in previous soil investigations, and if that pollution had impacted groundwater. The report concluded that TCE, DCE (both cis-1,2-DCE and 1,1-DCE), DCA (1,2 DCA), and benzene, detected in the groundwater above MCLs originated from past operations at the Former Unisys Facility. The TCE, DCE, DCA, and benzene are synthetic chemicals, are not naturally occurring, and are wastes, as defined in Water Code section 13050, subdivision (d).³

The groundwater investigation results⁴ revealed concentrations of TCE and other wastes in groundwater at concentrations greater than the MCLs tabulated below:

Constituent	Maximum Contaminant Levels⁵ (micrograms per liter or ug/L)	Maximum Measured Groundwater Concentration (ug/L)
Benzene	1	3
TCE	5	290
1,1-DCE	6	874
cis 1,2-DCE	6	9.8
1,1-DCA	5	40
1,2-DCA	0.5	3.1
Cadmium	5	5.13
Selenium	50	96.5

The building (the facility) was formerly occupied by the Unisys Corporation, which conducted operations that included storage, conveyance and generation of wastes. The types of waste constituents found in the soil and groundwater are associated with the types of wastes stored, conveyed, and generated at the facility. Thus, the wastes found in soil and groundwater most likely were discharged from the facility. The discharge of waste from the facility has caused the concentrations of waste constituents in the groundwater to exceed applicable water quality objectives and has therefore created a condition of pollution, as defined in Water Code section 13050(I), in waters of the State. The adverse changes in groundwater quality caused by the waste discharges are a contributing cause of interference with the municipal and domestic supply

³ "Waste" is very broadly defined in Water Code section 13050(d) and includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

⁴ Phase II Site Assessment Report, Former Unisys Property, 25725 Jeronimo Rd, Mission Viejo, CA, January 2011, and Supplemental Baseline Soil, Groundwater, Indoor Air Investigation Report, 25725 Jeronimo Rd, Mission Viejo, CA, December 2010.

⁵ Maximum contaminant levels from California Department of Public Health, <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx>

(MUN)⁶ designated beneficial use and are potentially injurious to the public health. The water quality condition caused by the discharge of waste constitutes a nuisance condition because it potentially interferes with and complicates the use of groundwater for drinking water purposes and can be considered an obstruction to the free use of property as provided in Water Code section 13050(m).

3. **Persons Responsible for the Discharge of Wastes:** The building (the facility), located at 25725 Jeronimo Road, Mission Viejo, CA, was formerly occupied by the Unisys Corporation, which conducted operations that included storage, conveyance and generation of wastes. MV Universal LLC owns the property on which the facility resides. MV Universal LLC notified the San Diego Water Board that evidence of a release was found at the facility during an environmental investigation conducted in 2009.

Unisys Corporation is subject to this Order because they operated the facility and discharged or deposited waste where it discharged into waters of the State and created or threatens to create a condition of pollution or nuisance.

MV Universal LLC is subject to this Order because they own the property, have knowledge of the discharge, and the ability to control it.

MV Universal LLC and Unisys Corporation, hereinafter the Dischargers, by failing to control the discharge, have caused or permitted waste to be discharged in such a manner that it has created a condition of pollution or nuisance. The term "discharge" includes active, initial release, and passive migration of waste.⁷

4. **Water Quality Standards:** The property is located within both the Aliso Hydrologic Subarea (HSA No. 901.13) and the Oso Hydrologic Subarea (HSA No. 901.21), of the San Juan Hydrologic Unit (Basin No. 901.00). The Basin Plan designates the following beneficial uses of groundwater in the Aliso and Oso Hydrologic Subareas:

- a. Municipal and domestic supply
- b. Agricultural supply
- c. Industrial supply (Oso HSA only)

⁶ See Basin Plan, page 2-3. The Basin Plan defines MUN as "uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply."

⁷ *In the Matter of Zoecon Corporation*, Order No. 86-2 (State Water Board, 1986) (the discharge of waste includes the passive migration of waste.) This Order found that the owner of a contaminated site causes or permits a discharge even if the owner did not own the property at the time of the initial release.

The Basin Plan contains numeric water quality objectives⁸ for chemical constituents to protect groundwaters designated for municipal and domestic supply. The numeric objectives are derived from primary MCLs established by the California Department of Public Health in Title 22 of the CCR.⁹ Groundwater concentrations of TCE, 1,1-DCE, cis-1,2-DCE, 1,1-DCA, 1,2-DCA, Cadmium, and Selenium are not in conformance with the water quality objectives required to support Municipal and Domestic uses of the groundwater, creating a condition of pollution and nuisance in waters of the State.

The Basin Plan designates the following beneficial uses of surface water in the Aliso and Oso Hydrologic Subareas:

- a. Agricultural supply
- b. Industrial supply (Oso HSA only)
- c. Contact water recreation (Aliso HSA is potential contact recreation)
- d. Non-contact water recreation
- e. Warm freshwater habitat
- f. Cold water habitat (Oso HSA only)
- g. Wildlife habitat

Impacts to surface water are unlikely because of the distance of between the waste in groundwater and the nearest surface water bodies, specifically Oso Creek and Aliso Creek. Nonetheless, the ongoing investigation should address this uncertainty.

5. **Basis for Cleanup and Abatement Order:** Water Code section 13304 contains the authority for the San Diego Water Board to require cleanup and abatement of pollution caused by discharges of wastes. Water Code section 13304 requires a person to clean up waste or abate the effects of the waste discharge if so ordered by a regional water board in the event there has been a discharge in violation of waste discharge requirements, or if a person has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the State and creates or threatens to create a condition of pollution or nuisance. Therefore, based on the previous findings, the San Diego

⁸ "Water quality objectives" are defined in Water Code section 13050(h) as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area."

⁹ Basin Plan, footnote 2, supra. Page 3-24 and Table 3-5 at page 3-25. The Basin Plan provides that "Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in CCR Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5.)"

Water Board is authorized to order the Dischargers to cleanup and abate the effects of the waste discharge.

6. **Basis for Requiring Technical and Monitoring Reports:** Water Code section 13267 provides that the San Diego Water Board may require dischargers, past dischargers, or suspected dischargers to furnish those technical or monitoring reports as the San Diego Water Board may specify, provided that the burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring the reports, the San Diego Water Board must provide the person with a written explanation with regard to the need for the reports, and identify the evidence that supports requiring that person to provide the reports.
7. **Need for and Benefit of Technical and Monitoring Reports:** Technical reports and Monitoring reports are needed to provide information to the San Diego Water Board regarding (a) the nature and extent of the waste discharge, (b) the nature and extent of pollution conditions in State waters created by the discharge, (c) the threat to public health posed by the discharge, and (d) identification of appropriate site-specific cleanup and abatement measures. The reports will enable the San Diego Water Board to determine the vertical and lateral extent of the discharge, ascertain if the condition of pollution poses a threat to human health in the vicinity of the Site,¹⁰ and provide technical information to determine what cleanup and abatement measures are necessary to bring the Site into compliance with applicable water quality objectives. Based on the nature and possible consequences of the discharge from the facility, the Dischargers' burden of providing the required reports, including the costs, bears a reasonable relationship to the need for the reports, and the benefits to be obtained from the reports.
8. **Cleanup Levels:** State Water Board Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under California Water Code Section 13304*, sets forth the policies and procedures to be used during an investigation or cleanup of a discharge of waste and requires that cleanup levels be consistent with State Water Board Resolution No. 68-16, the *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. Resolution No. 92-49 applies to the cleanup and abatement of the effects of waste discharges at the Site.

Resolution No. 92-49 requires that discharges of waste be cleaned up to background levels, or if that is not reasonable, to alternative levels that are the most stringent levels that are economically and technologically feasible in

¹⁰ The "Site" refers to the footprint of the entire extent of pollution in groundwater and waste impacts to soil.

accordance with Title 23, CCR section 2550.4. Any alternative cleanup level greater than background must (1) be consistent with the maximum benefit for the people of the State; (2) not unreasonably affect present and anticipated beneficial use of waters of the State; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

9. **California Environmental Quality Act Compliance:** The issuance of this Order is an enforcement action taken by a regulatory agency and is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to section 15321(a) (2), Chapter 3, Title 14 of the CCR. Further, the San Diego Water Board finds with certainty that there is no possibility that the proposed remedial action, as documented in the Remedial Action Plan, will have a significant effect on the environment and is not subject to CEQA, pursuant to section 15061(b)(c), Chapter 3, Title 14 of the CCR.
10. **Qualified Professionals: The Dischargers' reliance** on qualified professionals promotes proper planning, implementation, and long-term cost-effectiveness of investigation and cleanup and abatement activities. Professionals should be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals.
11. **Cost Recovery:** Pursuant to Water Code section 13304, and consistent with other statutory and regulatory requirements, including but not limited to Water Code section 13365, the San Diego Water Board is entitled to, and will seek reimbursement for all reasonable costs actually incurred by the San Diego Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action required by this Order.

IT IS HEREBY ORDERED that, pursuant to sections 13267 and 13304 of the Water Code, the Dischargers must comply with the following Directives:

- A. **CLEANUP AND ABATE DISCHARGES:** The Dischargers shall forthwith take all corrective actions necessary to cleanup and abate the effects of the discharge.
- B. **INTERIM REMEDIAL ACTION:** The Dischargers shall implement interim remedial actions, as necessary, to abate or correct the actual or potential effects of the discharge. Interim remedial actions can occur concurrently with any phase of the site investigation or remedial action. Before taking interim remedial action, the

Dischargers shall notify the San Diego Water Board of the proposed action and shall comply with any additional requirements that the San Diego Water Board sets.

C. **SITE CONCEPTUAL MODEL:** The Dischargers shall submit a Site Conceptual Model (SCM) that provides a written or pictorial representation of the release scenario and the likely distribution of waste at the property, off-property, as well as potential pathways and receptors. The SCM must identify and describe the types of wastes present including their distribution in space and time, and how the wastes are changing in space and time. In addition the SCM must identify the potential, current, and future receptors in the area; link potential sources to potential receptors through transport of wastes in the air, soil, and water; and identify the fate and transport characteristics of the site. It should describe or show the physical characteristics and properties of the subsurface and identify the environmental issues that need to be investigated (and those issues that do not need to be addressed). The SCM must include data interpretations, a discussion of the level of uncertainty of conclusions, outline data gaps remaining in the conceptual model, and make recommendations for the next phase of cleanup. Updates to the SCM, as a result of further investigation or remediation, must be submitted to the San Diego Water Board. The updated SCM may be included as an appendix to regular groundwater monitoring reports (see Directive E Groundwater Monitoring Reports below).

D. **REMEDIAL ACTION PLAN**

1. **Remedial Action Plan:** The Dischargers shall prepare a Remedial Action Plan (RAP) that contains the information listed below. The RAP must be received by the San Diego Water Board by 5:00 p.m. on **July 1, 2011**.
 - a. Feasibility Study: The Dischargers shall, using information in the December 2010 Site Assessment Report and any additional data collected, prepare a Feasibility Study (FS). The FS shall evaluate at least two cleanup and abatement alternatives that:
 - i. Result in effective control of the source(s) of soluble and dense non-aqueous phase liquids (DNAPLs), groundwater pollutants, and control of conditions that contribute to the migration of pollutants.
 - ii. Considers the following cleanup and abatement methods or combinations thereof in the development of Site remediation alternatives.
 1. Source removal and/or isolation;
 2. In-place treatment of soil or water;
 3. Excavation or extraction of soil, water, or soil-gas for on-site or off-site treatment; and
 4. Excavation or extraction of soil, water, or soil-gas for appropriate recycling, reuse, or disposal.

- iii. Evaluates remedial alternatives, including the cost and effectiveness of each alternative, for the remediation of the waste constituents to attain a level of soil and groundwater cleanup that result in a range of long-term groundwater concentrations that are between background water quality conditions and alternative cleanup levels derived by applying the conditions set forth in Title 23, section 2550.4. Alternative cleanup levels shall be the lowest levels that are economically and technologically feasible. Alternative cleanup levels greater than background also must (1) be consistent with the maximum benefit for the people of the State; (2) not unreasonably affect present and anticipated beneficial use of waters of the State; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

The FS shall present a recommended alternative for the cleanup or remediation of the waste constituents.

- b. Implementation Activities: A detailed description of all activities planned to implement the recommended alternative for remediation of the waste constituents described in the FS and a schedule for their completion.
 - c. Monitoring Plan: A monitoring plan capable of meeting the requirements in Directive E- Groundwater Monitoring Program.
2. **Remedial Action Plan Implementation**: The Dischargers shall begin implementation of the RAP by 5:00 p.m. **July 30, 2011**, unless otherwise directed in writing by the San Diego Water Board. The Dischargers shall complete the RAP implementation activities according to the schedule required in Directive D.1.b. Before beginning RAP implementation activities, the Dischargers shall:
- a. Notify the San Diego Water Board of its intention to begin cleanup; and
 - b. Comply with any conditions set by the San Diego Water Board, including mitigation of adverse consequences from cleanup activities.
3. **Remedial Action Zone**: The Dischargers shall implement remedial actions that ensure the waste constituents achieve their respective cleanup levels at all monitoring points and throughout the zone affected by the waste constituents, including any portions thereof that extend beyond the facility property boundary.
4. **Monitoring and Evaluation**: The Dischargers shall monitor, evaluate, and report the results of the RAP implementation on a quarterly schedule as follows:

Monitoring Period	Due Date for Report
First Quarter (Jan-Mar)	Due no later than April 30
Second Quarter (Apr-Jun)	Due no later than July 30
Third Quarter (July-Sept)	Due no later than Oct 30
Fourth Quarter (Oct-Dec)	Due no later than January 30

Results from monitoring and evaluation of RAP implementation may be included as an appendix to regular groundwater monitoring reports (see Directive E Groundwater Monitoring Reports below).

5. **Modify or Suspend Cleanup Activities:** The Dischargers shall modify or suspend cleanup activities when directed to do so by the San Diego Water Board.

E. GROUNDWATER MONITORING PROGRAM

The Dischargers shall submit the technical reports required in this Groundwater Monitoring Program (GMP). The purpose of the GMP is to regularly assess progress toward and document achievement of cleanup levels, and to provide data to answer the following questions.

- a. Are interim remedial actions effective?
 - b. Has the lateral and vertical extent of each waste constituent in soil, groundwater, and soil vapor been delineated?
 - c. Is the plume of each waste constituent decreasing in size and/or mass?
 - d. Has the source of each waste constituent been effectively cleaned up?
 - e. Is the selected remedial action alternative effectively removing waste constituents from the soil, groundwater, and soil vapor, and is the alternative capable of achieving the cleanup levels in the RAP?
 - f. Have the beneficial uses of the groundwater been restored, and are human health and the environment protected?
1. **Monitoring:** The Dischargers must measure groundwater elevations quarterly in all monitoring wells. Groundwater samples collected from all current groundwater monitoring wells shall be collected and analyzed on a quarterly basis using U.S. Environmental Protection Agency (USEPA) method 8260b for the full scan of volatile organic compounds and on an annual basis for the CAM-17 Metals using USEPA methods 6010, 6020, and 7470..

The Dischargers must sample any new groundwater monitoring wells quarterly and analyze groundwater samples for all volatile organic compounds quarterly and metals annually. The Dischargers may provide a written proposal to change the sampling requirements in this Order. The Dischargers shall not implement proposed changes to groundwater monitoring requirements without San Diego Water Board approval.

2. **Groundwater Monitoring Reports:** The Dischargers must submit groundwater monitoring reports quarterly. The quarterly groundwater monitoring reports to the San Diego Water Board shall commence with the third calendar quarter, **due by 5:00 p.m. July 30, 2011**. Subsequent reports must be received by the San Diego Water Board no later than 30 days following the end of the monitoring period according to the following schedule:

Monitoring Period	Report Due Dates
First Quarter (Jan-Mar)	Due no later than 5 p.m., April 30
Second Quarter (Apr-Jun)	Due no later than 5 p.m., July 30
Third Quarter (July-Sept)	Due no later than 5 p.m., Oct 30
Fourth Quarter (Oct-Dec)	Due no later than 5 p.m., January 30

The San Diego Water Board may consider changing the groundwater monitoring requirements based on data submitted, delineation of the groundwater plume, remediation methods, rebound effect, and numerous other conditions that can arise during mitigation and remediation of the groundwater pollution. The Dischargers shall not implement proposed changes to the monitoring frequency without San Diego Water Board approval.

The groundwater monitoring reports must include the following minimum information:

- a. Transmittal Letter with Penalty of Perjury Statement. The transmittal letter must discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter must be signed by the Discharger's principal executive officer or their duly authorized representative, and must include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
- b. Groundwater Elevations. Groundwater elevation data must be presented in tabular format with: depth to groundwater (in feet below ground surface), top of casing elevations, depths to the top of well screens, length of well screens and total depth for each well included in the monitoring program. A

groundwater elevation map must be prepared for each monitored water-bearing zone with the groundwater flow direction and calculated hydrologic gradients(s) clearly indicated in the figures(s). A complete tabulation of historical groundwater elevations must be included in the fourth quarterly report each year.

- c. Reporting Groundwater Results. All monitoring reports must:
- i. Present all groundwater sampling data in tabular format. Isoconcentration map(s) must be prepared for constituents of concern (COCs) for each monitored water-bearing zone, as appropriate. Time versus concentration plots and distance versus concentration plots that also show groundwater elevations must be prepared for all constituents of concern at appropriate wells.
 - ii. Provide a Site plot plan which clearly illustrates the locations of monitoring wells, the former location(s) of industrial processes and equipment, former locations of liquid storage and conveyance systems, and buildings located on the property and immediately adjacent to the property lines of the facility.
 - iii. Provide a Site plot plan with the most recent concentrations of chemicals of concern.
 - iv. Provide a text discussion and technical interpretations of the groundwater data, and describe any significant increases in pollutant concentrations since the last report, any measures proposed to address the increases, any changes to the site conceptual model, and any conclusions and recommendations for future action with each report.
 - v. Describe analytical methods used, detection limits obtained for each reported constituent, and a summary of Quality Assurance/Quality Control (QA/QC) data.
 - vi. Describe sample collection protocol(s), how investigation derived wastes are managed at the facility, and include documentation of proper disposal of contaminated well purge water and/or soil cuttings removed from the facility.
 - vii. List historical groundwater sampling results in tabular form and include them in the fourth quarterly report each year.
- d. Remediation. If applicable, the report must include an estimate of the mass of contaminant(s) removed via soil vapor or groundwater extraction results,

reported in a tabular format, for each extraction well and for the Site as a whole. The report must also include contaminant removal results, from all extraction wells and from other cleanup and abatement systems (e.g. skimmers), expressed in units of chemical mass per day and total mass removed during the reporting period. A tabulation of historical annual contaminant mass removal results must be included in the second semiannual report each year.

- e. **Status Report.** Each quarterly report must describe relevant work completed during the reporting period (e.g. Site investigation, interim remedial measures) and a description of work planned for the following monitoring period.
 - 4. **Record Keeping:** The Dischargers or their agent must retain data generated for the above reports, including laboratory results and QA/QC data, for a minimum of six years after origination and must make them available to the San Diego Water Board upon request.
 - 5. **Groundwater Monitoring Program Revisions:** The Dischargers may request revisions to the GMP, however, the revisions may not be implemented until approved by the San Diego Water Board. Prior to making GMP revisions, the San Diego Water Board will consider the burden, including costs, of the groundwater monitoring reports relative to the benefits to be obtained from these reports.
- F. **PENALTY OF PERJURY STATEMENT:** All reports must be signed by the Discharger's responsible corporate officer or its duly authorized representative, and must include the following statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- G. **DOCUMENT SUBMITTALS:** The Dischargers shall submit both one paper and one electronic, searchable PDF copy of all documents required under this Order to:

Executive Officer

Former Unisys Facility
Cleanup and Abatement Order
No. R9-2011-0029

California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4353
Attn: Supervisor Northern Cleanup Unit

All correspondence and documents submitted to the San Diego Water Board shall include the following Geotracker Site ID in the header or subject line:

T10000002362

H. **ELECTRONIC DATA SUBMITTALS:** The Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 and Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site after July 1, 2005. All information submitted to the San Diego Water Board in compliance with this Order is required to be submitted electronically via the Internet into the Geotracker database <http://geotracker.waterboards.ca.gov/> (Geotracker Site ID. **T10000002362**). The electronic data shall be uploaded on or prior to the regulatory due dates set forth in the Order or addenda thereto. To comply with these requirements, the Dischargers shall upload to the Geotracker database the following minimum information.

1. **Laboratory Analytical Data:** Analytical data (including geochemical data) for all soil, vapor, and water samples in Electronic Data File (EDF) format. Water, soil, and vapor data include analytical results of samples collected from: monitoring wells, boreholes, gas and vapor wells or other collection devices, surface water, groundwater, piezometers, stockpiles, and drinking water wells.
2. **Locational Data:** The latitude and longitude of any permanent monitoring well or soil vapor probe for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
3. **Monitoring Well Elevation Data:** The surveyed elevation relative to a geodetic datum of any permanent monitoring well. Elevation measurements to the top of groundwater well casings for all groundwater monitoring wells.
4. **Depth-to-Water Data:** Monitoring wells need to have the depth-to-water information reported whenever water data is collected, even if water samples are not actually collected during the sampling event.
5. **Monitoring Well Screen Intervals:** The depth to the top of the screened interval and the length of screened interval for any permanent monitoring well.

6. **Site Map:** Site map or maps which display discharge locations,¹¹ streets bordering the facility, and sampling locations for all soil, water, and vapor samples. The site map is a stand-alone document that may be submitted in various electronic formats.¹² A site map must also be uploaded to show the maximum extent of any groundwater pollution. An update to the site map may be uploaded at any time.
7. **Boring logs:** Boring logs (in searchable PDF format) prepared by an appropriately licensed professional.
8. **Electronic Report:** A complete copy (in searchable PDF format) of all workplans, assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.
- I. **VIOLATION REPORTS:** If the Dischargers violate any requirement of this Order, then the Dischargers must notify the San Diego Water Board office by telephone and fax (FAX 858-571-6972) as soon as practicable once the Dischargers have knowledge of the violation. The San Diego Water Board may, depending on violation severity, require the Dischargers to submit a separate technical report on the violation within five working days of telephone notification.
- J. **OTHER REPORTS:** The Dischargers must notify the San Diego Water Board in writing prior to implementing any site activities that have the potential to cause further migration of contaminants or that would provide new opportunities for Site investigation.
- K. **PROVISIONS**
 1. **No Pollution, Contamination or Nuisance:** The storage, handling, treatment, or disposal of soil containing waste or polluted groundwater must not create conditions of nuisance, as defined in Water Code section 13050(m). The Dischargers must properly manage, treat and dispose of wastes and polluted groundwater in accordance with applicable federal, State and local regulations.
 2. **Good Operation and Maintenance:** The Dischargers must maintain in good working order and operate as efficiently as possible any monitoring system, Site or control system installed to achieve compliance with the requirements of this Order.


¹¹ Areas related to discharge from former location(s) of: industrial processes and equipment, liquid storage and conveyance systems, and buildings located on the property and immediately adjacent to the property lines of the facility.

¹² Formats include .gif, .jpeg, .jpg, .tiff, .tif, .pdf

3. **Contractor/Consultant Qualifications:** All reports, plans and documents required under this Order shall be prepared under the direction of appropriately qualified professionals. A statement of qualifications and license numbers, if applicable, of the responsible lead professional and all professionals making significant and/or substantive contributions shall be included in the report submitted by the Dischargers. The lead professional performing engineering and geologic evaluations and judgments shall sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted the San Diego Water Board.
4. **Laboratory Qualifications:** All samples must be analyzed by California State-certified laboratories using methods approved by the USEPA for the type of analysis to be performed. All laboratories must maintain QA/QC records for San Diego Water Board review.
5. **Laboratory Analytical Reports:** Any report presenting new analytical data is required to include the complete Laboratory Analytical Report(s). The Laboratory Analytical Report(s) must be signed by the laboratory director and contain:
 - a. A complete sample analytical report,
 - b. A complete laboratory QA/QC report,
 - c. A discussion of the sample and QA/QC data, and
 - d. A transmittal letter indicating whether or not all the analytical work was supervised by the director of the laboratory, and contain the following statement, "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services in accordance with current USEPA procedures."
6. **Reporting of Changed Owner or Operator:** The Dischargers must provide written notification to the San Diego Water Board **within 30 days** of any changes in property occupancy or ownership associated with the property described in this Order.
7. **Regulations:** All corrective actions must be in accordance with the provisions of CCR Title 23, Chapter 15, and the Cleanup and Abatement Policy in the Water Quality Control Plan for the San Diego Basin (9).

L. NOTIFICATIONS

1. **Cost Recovery:** Upon receipt of invoices, and in accordance with instructions therein, the Dischargers must reimburse the San Diego Water Board for all reasonable costs incurred by the San Diego Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.
2. **All Applicable Permits:** This Order does not relieve the Dischargers of the responsibility of obtaining permits or other entitlements to perform necessary corrective action. This includes, but is not limited to, actions that are subject to local, State, and/or federal discretionary review and permitting.
3. **Enforcement Notification:** Failure to comply with requirements of this Order may subject the Dischargers to enforcement action, including but not limited to administrative enforcement orders requiring you to cease and desist from violations, imposition of administrative civil liability, pursuant to Water Code sections 13268 and 13350, in an amount not to exceed \$5,000 for each day in which the violation occurs referral to the State Attorney General for injunctive relief and referral to the District Attorney for criminal prosecution.
4. **Requesting Administrative Review by the State Water Board:** Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with section 13320 of the Water Code and CCR Title 23 section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812) within **30 calendar days** of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.



DAVID W. GIBSON
Executive Officer

17 May 2011
DATE

Former Unisys Facility
Cleanup and Abatement Order
No. R9-2011-0029

Summary of Required Submittals and Their Due Dates

Directive	Document	Due Date
D.1	Remedial Action Plan	July 1, 2011
D.2	Remedial Action Plan Implementation	July 30, 2011
E	Groundwater Monitoring Report	July 30, 2011