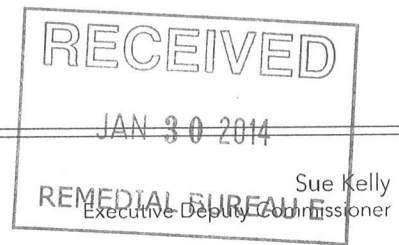


Nirav R. Shah, M.D., M.P.H.
Commissioner

NEW YORK
state department of
HEALTH



January 27, 2014

William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, BURE
625 Broadway
Albany, NY 12233-7017

Re: Site 401031, 120 New Scotland Avenue, Albany

Dear Mr. Welling,

Attached you will find the 2013 Periodic Review Report and Certification Form for the Wadsworth Center's inactive hazardous waste site at 120 New Scotland Avenue.

If you have any questions or require further information, please contact me.

Sincerely,

A handwritten signature in blue ink that reads "Laurie Duncan".

Laurie Duncan, Associate Project Coordinator
Deputy Director of Safety

Attachments

Periodic Review Report For NYS DOH Wadsworth Center (Site No. 401031) Albany, New York

Prepared for

New York State Department of Environmental Conservation 625 Broadway Albany, New York
12233



Prepared by

Laurie Duncan, Deputy Director of Safety
Associate Project Coordinator

CONTENTS

| | <u>Page</u> |
|--|-------------|
| LIST OF FIGURES AND TABLES..... | 2 |
| 1. EXECUTIVE SUMMARY | 3 |
| 2. SITE OVERVIEW | 3 |
| 3. REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS | 4 |
| 3.1 Institutional Controls/Engineering Controls Certification..... | 4 |
| 3.1.1 Institutional Controls, Requirements, and Compliance..... | 4 |
| 3.2 Monitoring Plan Compliance Report..... | 5 |
| 3.2.1 Groundwater Sampling..... | 5 |
| 4. CONCLUSIONS..... | 5 |

LIST OF FIGURES & TABLES

| <u>Figure #</u> | <u>Title</u> |
|-----------------|--|
| 1 | Site location map. |
| 1a | Site and Site Boundaries |
| 2 | Site map with well monitoring locations. |
| 3 | Interpreted groundwater contour map (September 2011 sampling). |
| 4 | Interpreted groundwater contour map (January 2013 sampling). |
| 5 | Survey with Deed Restrictions |

| <u>Table #</u> | <u>Title</u> |
|----------------|--|
| 1 | Summary of Detected VOC's |
| 2 | Summary of Ground Water Elevation and DTW Data |

1. EXECUTIVE SUMMARY

This Periodic Review Report (PRR) has been prepared to document the ongoing performance, effectiveness, and protectiveness of the selected remedy at the NYS DOH Wadsworth Center site as required by 6 New York Code of Rules and Regulations Part 375. The Wadsworth Center site (New York State Department of Environmental Conservation [NYSDEC] Site No. 401031) is located in the city of Albany, at the rear of property at 120 New Scotland Avenue (Figures 1 and 1a).

The overall purpose of this report is to demonstrate that the remedy selected in the Record of Decision (ROD) issued in March 1992 is protecting groundwater and showing current contamination concentrations in ground water are not migrating, and therefore not impacting human health or the environment. Originally the groundwater monitoring program at the Wadsworth Center site consisted of collecting groundwater samples and recording ground water elevations from three monitoring wells every fifth quarter. The site map with well locations is illustrated in Figure 2. The interpreted ground water map from the September 2011 sampling is illustrated in Figure 3. The corresponding map for the December 2012 scheduled sampling (conducted January 2013) is illustrated in Figure 4.

However, since original wells to the West of the site were apparently destroyed during construction of CMS, a TUO was signed with the property owner, and a replacement well was installed to evaluate ground water contaminants in that direction. Subsequently, well 8S to the south of the site was paved over in 2011 and the Wadsworth Center obtained a TUO with that property owner and was able to complete well replacement, near its original location, in January of 2013.

2. SITE OVERVIEW

After the Wadsworth Center reported past practices of ground disposal of chemical waste at 120 New Scotland Avenue, the location was listed as an inactive waste burial site. The firm of Environmental Resources Management was contracted to perform Remedial Investigation activities (performed in 1990 and 1991), develop the remedial plan, and perform required monitoring and testing. They have subsequently been involved in all aspects of the program management for this inactive waste site.

In 1992 the ROD was issued and the Remedial Plan developed. In August of 1993 the Order on Consent was issued. The Remedial Plan included installation of a geomembrane cap with vents and a ground water pump and treat system, and deed restrictions to eliminate disturbance of the cap area. The area covered by the cap would include a section of property owned by the Christian Brothers Academy (CBA). That piece of property was eventually purchased by DOH to maintain institutional control over the cap area.

The pump and treat system operated under the Operations and Maintenance Plan for roughly 7 years. Water analysis reports indicated that the system was not effectively removing contaminants as intended, so a request was made to DEC to allow DOH to remove the system. Approval for removal was granted in 2000, completed in 2001, and the decommissioning report approved in Spring 2002.

Secondary to the pump and treat system was fencing and access control. While the pump and treat system was operational, the plan was followed as required and fencing and access controls were maintained. When the pump and treat system was removed, the fencing and access controls were also eventually removed. As part of the pump and treat system removal plan, the original Order on Consent was modified to include a provision for monitoring ground water, whereby certain shallow wells would be sampled every fifth quarter to evaluate water levels and determine if contaminants were migrating from the original site. Three wells had been monitored according to plan. Those Groundwater Reports are on file for Dec. '03, March '05, September '06, Dec. '07, March '09, June 2010, and September 2011. As mentioned above, a fourth well was added to the matrix, and the original well (8S) that was covered over has since been replaced and sampled. All four wells were monitored during the postponed December 2012 sampling event that actually took place in January 2013 (report on file).

Vapor intrusion was evaluated in 2009, through a combination of soil vapor point tests (Geoprobe), internal building air samples, and analysis of building construction, ventilation, and space uses. Sample results showed no abnormal levels that may be attributable to the inactive burial site, and the subsequent NFA memo from DEC was issued.

3. REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

3.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS CERTIFICATION

Engineering Controls (EC) were approved for removal and are no longer applicable to the site, with the exception of the cover system, which is still in place.

Institutional Controls (IC) could not originally be certified as land use restrictions could not be verified as being listed on deed documents. In 2012 the Wadsworth Center had a survey completed to reduce the area of the site to be considered as the "controlled area" to 0.5 acres (indicated in Figure 2), where land use and deed restrictions would apply. Due to additional information that was discovered, the survey was revised in April of 2013, with deed restrictions, and subsequently filed with the Albany County Clerk's Office.

3.1.1 Institutional Controls/Engineering Controls - Requirements and Compliance

The ICs/ECs applied at the site are in place as documented on the survey included as Figure 5. Land use restriction on deed documents have been recorded, along with the Declaration of Covenants and Restrictions document.

An area of chain link fence was erected as a security barrier over a portion of the cap area, but the depth of footings was kept shallow so as not to impact the function/integrity of the site cap. Any future such activity will be subject to the Site Management Plan.

Although small concentrations of the compound methyl tert-butyl ether have appeared in one of the monitoring wells for several sampling cycles, and three additional compounds were detected during the most recent sampling of the replacement well, there is currently no indication of potential impact on public health or the environment.

3.2 MONITORING PLAN COMPLIANCE

The Wadsworth Center has submitted a draft Site Management Plan to DEC for comment. This process will also help determine the frequency of PRR submissions required in the future.

As set forth in the modified Order on Consent, fifth quarter well monitoring has proceeded according to schedule. However, since well 8S to the South of the site was covered over, the Wadsworth Center secured an access agreement with the property owner to allow replacement of the monitoring well and subsequent access for continued monitoring. Monitoring well locations are detailed in Figure 2.

3.2.1 Groundwater Sampling

Groundwater samples have routinely been collected by ERM and analyzed by a NYSDOH approved environmental testing laboratory. Samples were analyzed for VOCs by USEPA Method 8260B, in accordance with the NYSDEC Analytical Services Protocol.

During two previous sampling events, one monitoring well (MW-8S) showed a concentration of methyl tert-butyl ether at 13 ug/L, which is above the NYSDEC Ambient Water Quality Standard (AWQS) of 10 µg/L. The most recent sampling in January 2013 showed this well to have an MTBE concentration of 5.52 µg/L (below DEC Standards). However, during that sampling event the presence of three additional compounds was detected in well 8S. Likewise, small amounts of ethyl ether were detected in well 9S to the north. Available historical data of detectable VOC's from ERM reports are summarized in Table 1. Ground water elevations and depth to water measurements for all sampling events are summarized in Table 2.

We are making an effort to determine possible sources for the compounds and whether the chemicals are originating from the site. The next round of ground water sampling will be conducted in March 2014, and the report may provide additional information and verification of results.

4. CONCLUSIONS

Concentrations of methyl tert-butyl ether (MTBE) in MW-8S have increased somewhat since first appearing in the December 2007 sampling. This compound also appeared in well 11S during the December 2007 sampling event, but had not been detected in that well since. The actual source of this compound is not definite, but since it has also been a fuel additive, one

possibility is that the MTBE may be from vehicle fuel infiltrating from the parking lot near where the well is located. Although well 8S is apparently down gradient, if the waste site were the source of the contaminant, it would be reasonable to expect the appearance of MTBE in well 11S in subsequent samplings. It would also be reasonable to expect the appearance of other contaminants, originally found in the "site", in one of the down gradient wells.

Small amounts of ethyl ether were detected in well 9S, and that same compound, as well as three additional compounds were, detected in replacement well 8S. The source of these compounds in these wells has yet to be verified. Well 9S is generally up gradient from the site, and 8S is down gradient. One potential source of the chemicals in 8S was postulated, but the unlikely hood of it being the source has dismissed it for now. Again, if the site were the source of the chemicals, it would reasonable to expect their appearance in other wells, particularly the other down gradient well (11S).

Continued monitoring of the current wells will help evaluate the source and detail if there is actual movement from the cap site.

The Wadsworth Center is again in the process of securing an access agreement with the property owner to the South of the site to allow access for continued monitoring. This process is expected to be finalized before the end February, and before the next round of sampling slated for March of 2013.

Part of an annual review process, included in the draft SMP, will be a reiteration to staff that official site restrictions are in place to ensure no projects/activities are undertaken within the site boundary without proper review and approval by the site coordinator and the DEC.

The modified Order on Consent references evaluation of technologies for the remediation of soils, and submittal of a Remedial Action Report every five years. To my knowledge, a formal evaluation has not been conducted concerning soil remediation technologies, and nothing of that nature has been brought to our attention by our consultant. The Wadsworth Center will review documentation periodically to determine if any new technologies may be available for effective site remediation.

Figure 1

SITE LOCATION MAP

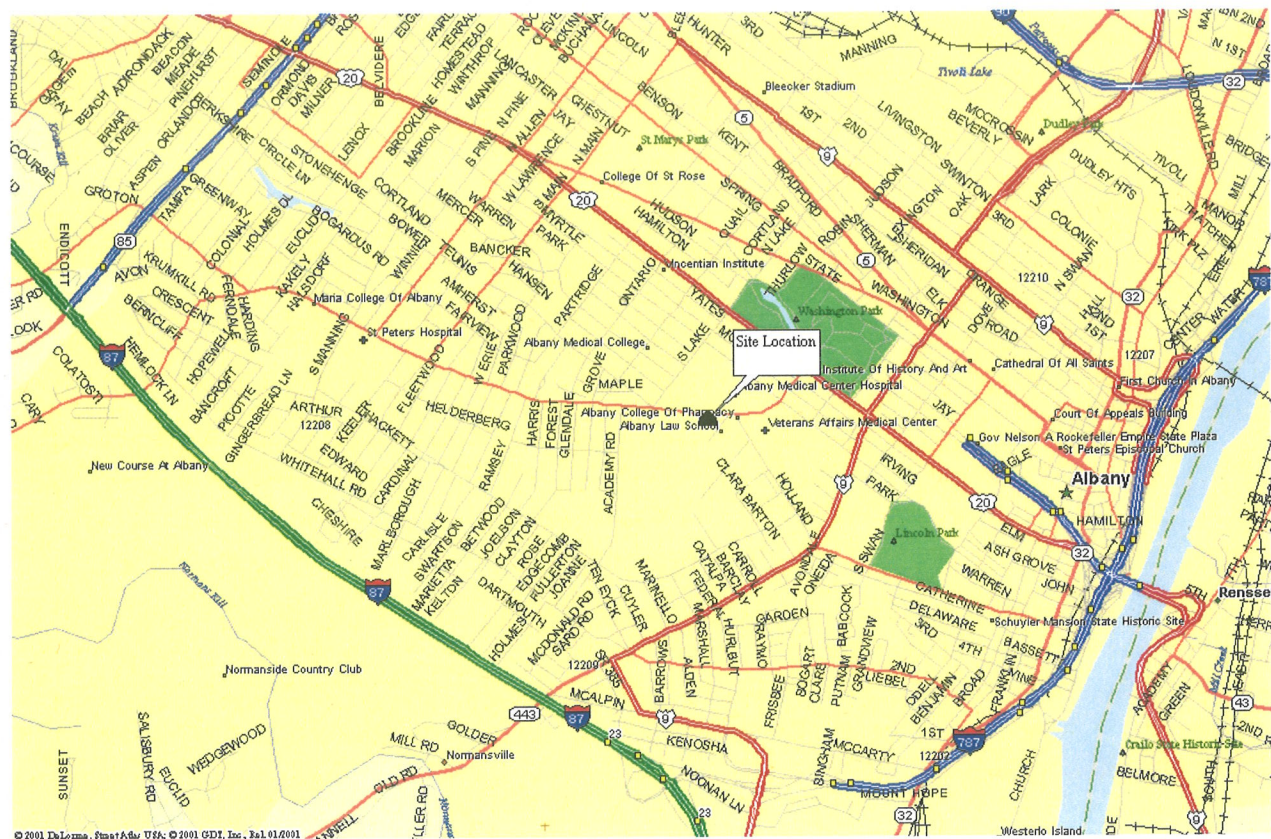
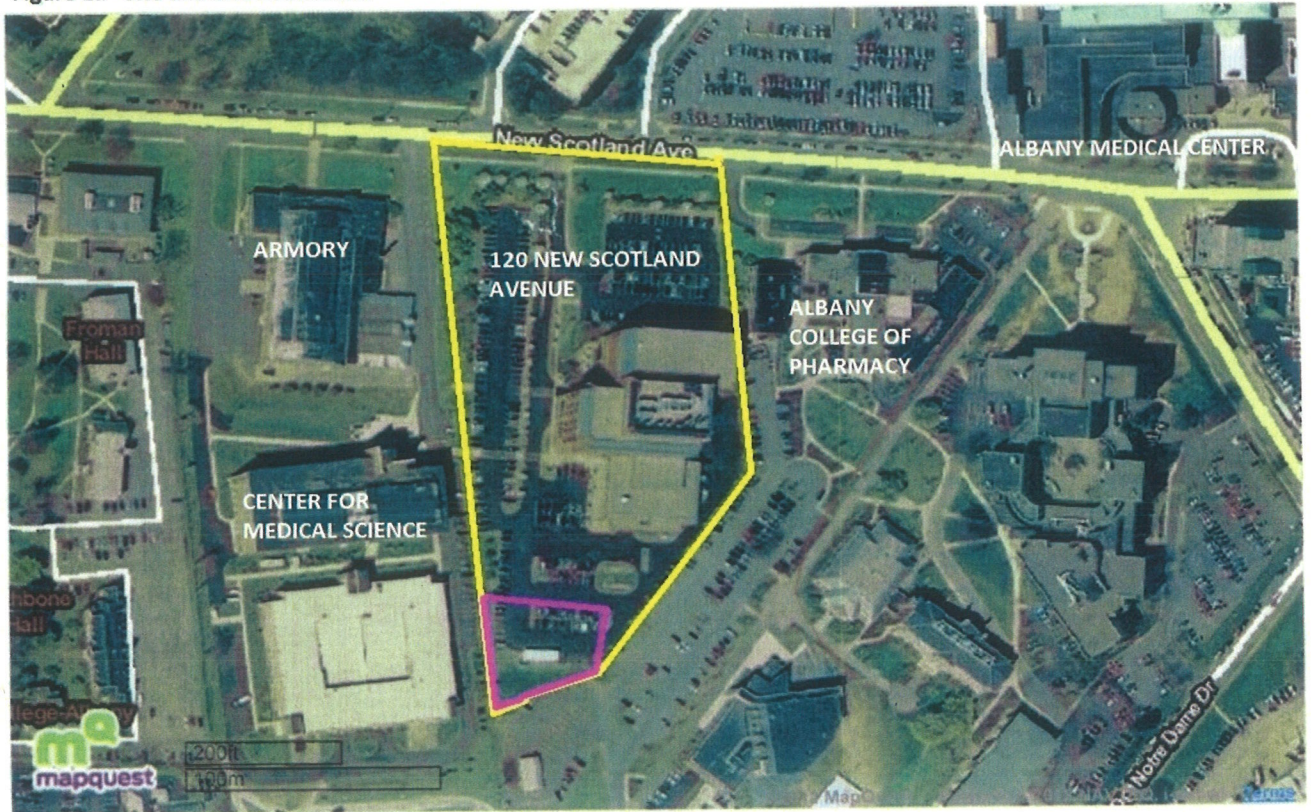


Figure 1a - Site and Site Boundaries



— Approximate Controlled Area Boundary

— Approximate Property Boundary

Figure 2 - Site Map with Well Locations






-  Approximate Cap Boundary
-  Monitoring Well Locations (12S, 8S, 9S, 11S)
-  Proposed Area Subject to SMP

Figure 3 - Groundwater Contour Map (9/11)

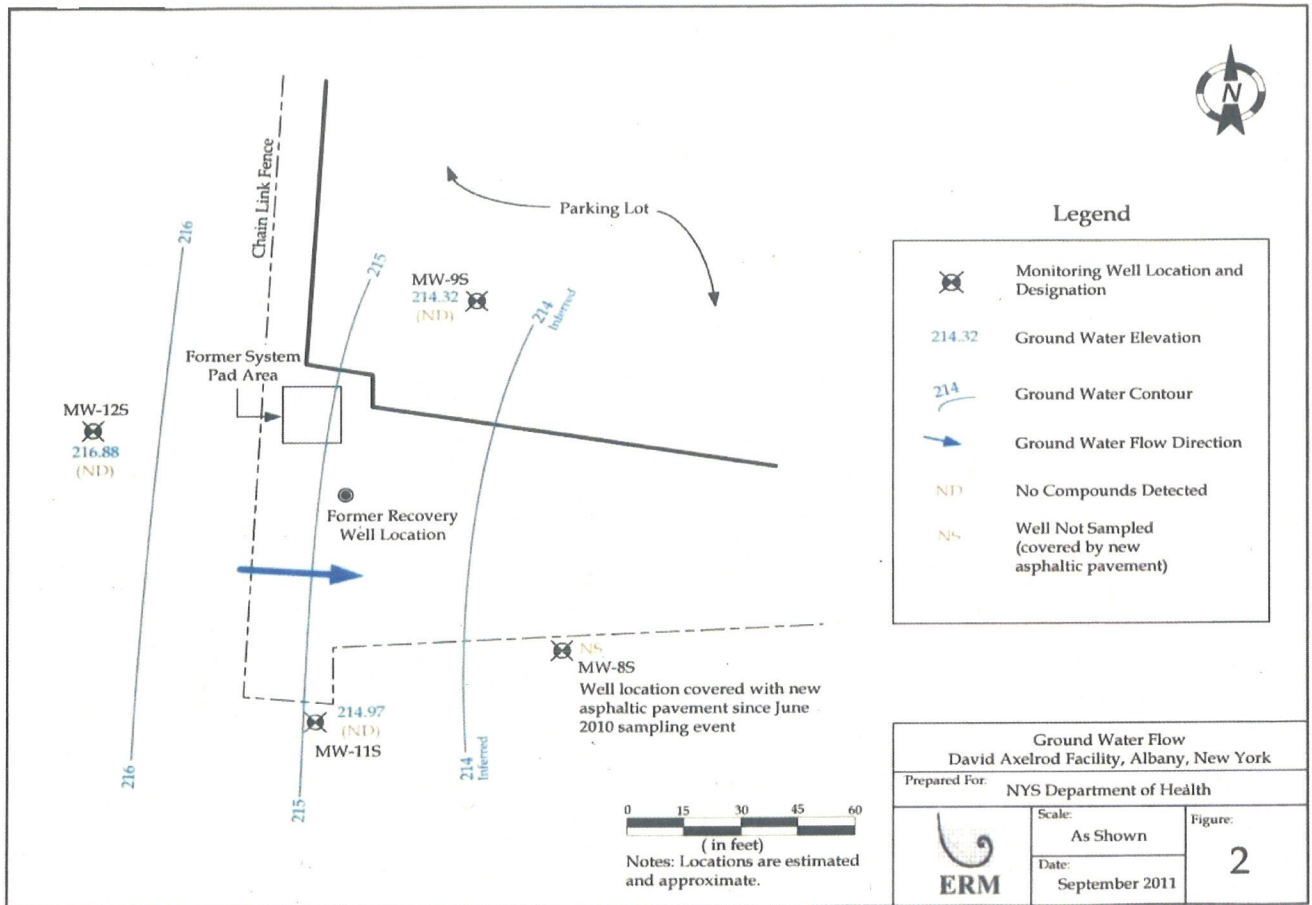
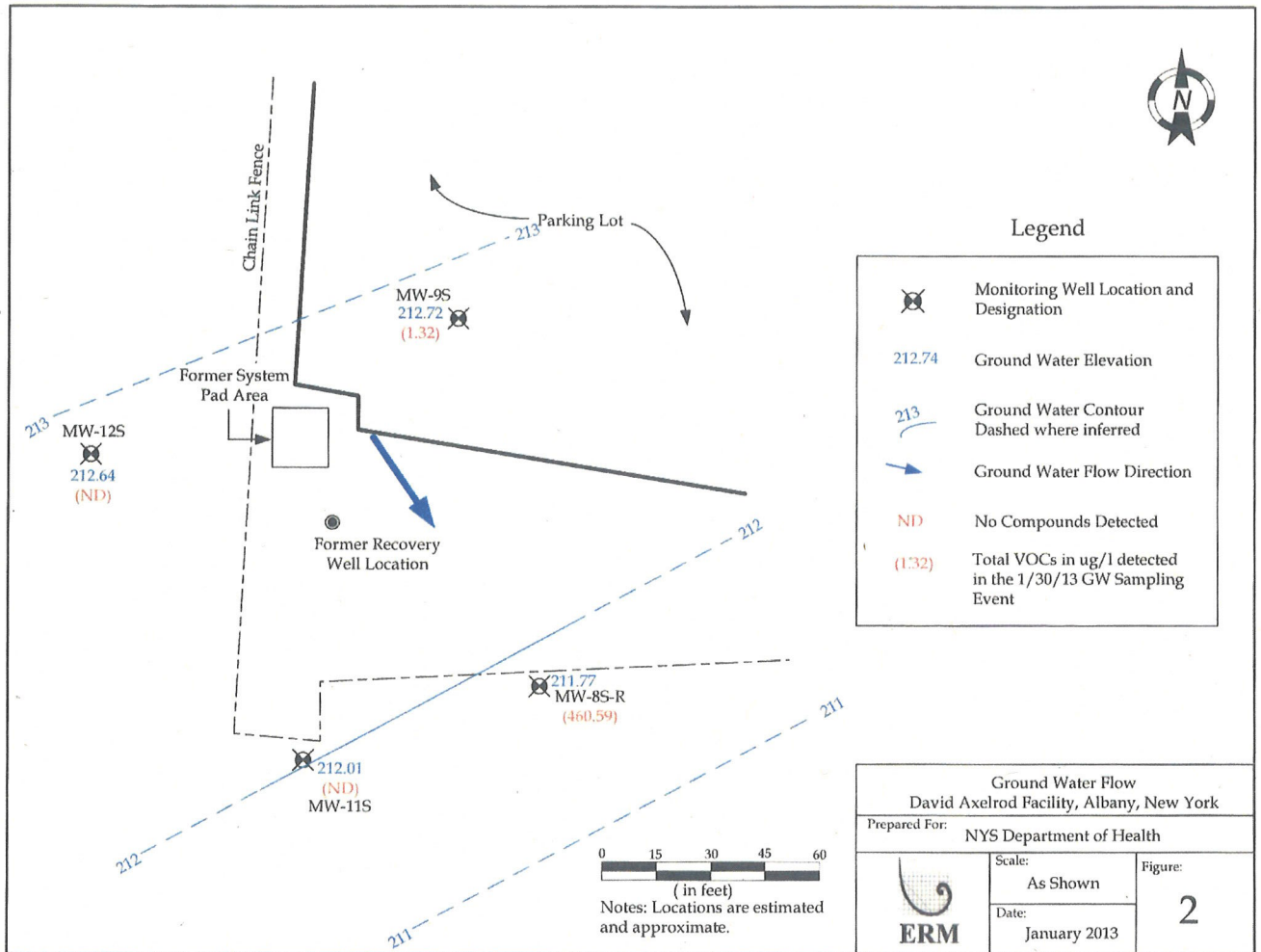


Figure 4 Groundwater Contour Map (01/13)



12

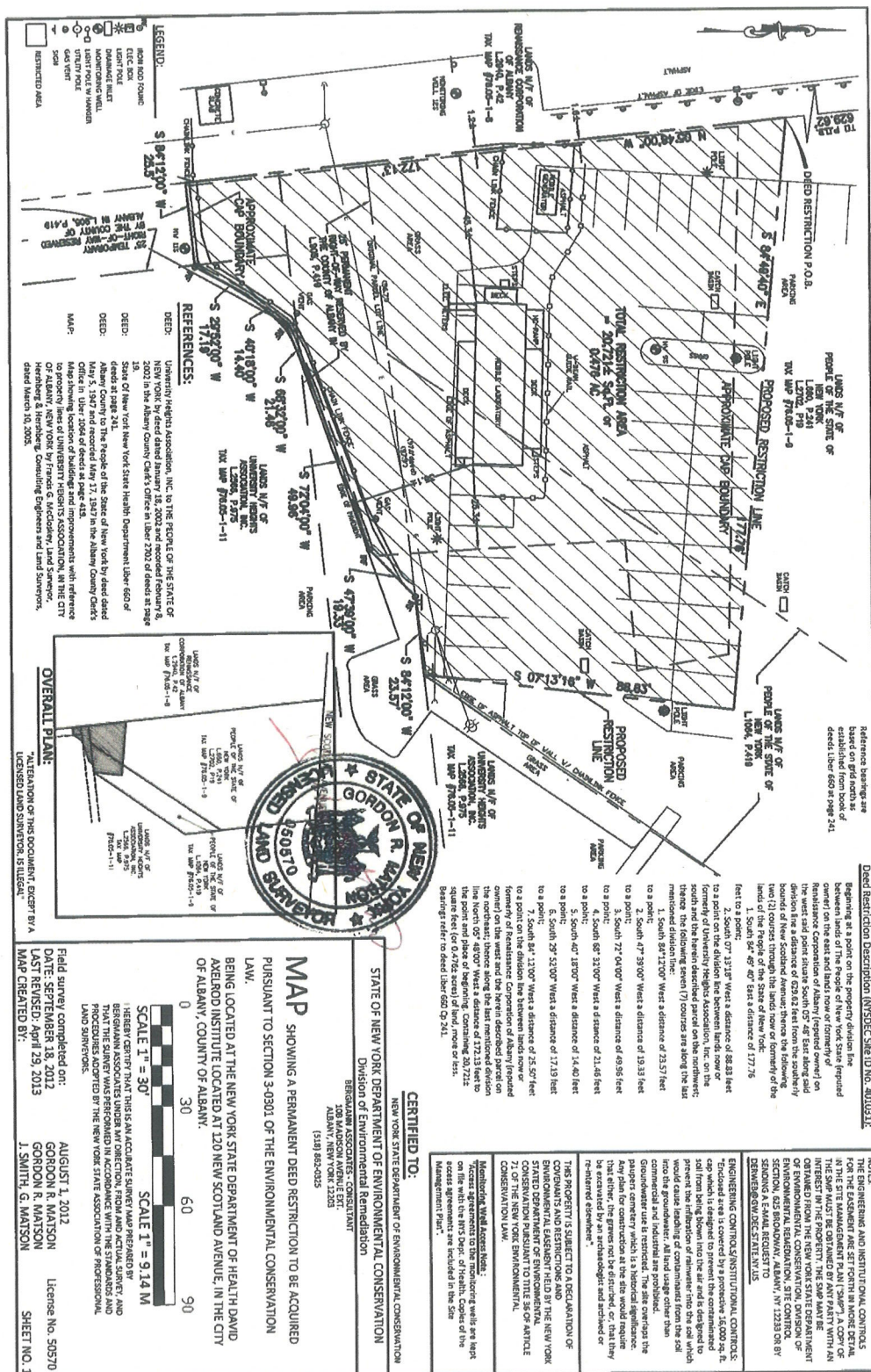


TABLE 1
SUMMARY OF DETECTED VOC's
AXELROD FACILITY
ALBANY, NEW YORK
ERM PROJECT NUMBER 0186101

| Sample Location Date Sampled | NYSDEC Standard | MW-8S 12/22/2003 | MW-9S 12/22/2003 | MW-10S 12/22/2003 | MW-11S 12/22/2003 | MW-8S 3/2/2005 | MW-9S 3/2/2005 | MW-10S 3/2/2005 | MW-11S 3/2/2005 |
|---------------------------------|--------------------|---------------------|---------------------|----------------------|----------------------|-------------------|-------------------|--------------------|--------------------|
| TCL VOCs (ug/L) | | | | | | | | | |
| Methyl tert-butyl ether | 10 | U | U | NS | U | U | U | NS | 2.1 |

| Sample Location Date Sampled | NYSDEC Standard | MW-8S 9/7/2006 | MW-9S 9/7/2006 | MW-10S 9/7/2006 | MW-11S 9/7/2006 | MW-8S 12/4/2007 | MW-9S 12/4/2007 | MW-10S 12/4/2007 | MW-11S 12/4/2007 |
|---------------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| TCL VOCs (ug/L) | | | | | | | | | |
| Methyl tert-butyl ether | 10 | U | U | NS | 19J | 8.24J | U | NS | 6.91J |

| Sample Location Date Sampled | NYSDEC Standard | MW-8S 3/19/2009 | MW-9S 3/19/2009 | MW-10S 3/19/2009 | MW-11S 3/19/2009 | MW-8S 6/8/2010 | MW-9S 6/8/2010 | MW-10S 6/8/2010 | MW-11S 6/8/2010 |
|---------------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|-------------------|-------------------|--------------------|--------------------|
| TCL VOCs (ug/L) | | | | | | | | | |
| Methyl tert-butyl ether | 10 | 13.0 | U | NS | U | 13.0 | U | NS | U |

| Sample Location Date Sampled | NYSDEC Standard | MW-8S 9/8/2011 | MW-9S 9/8/2011 | MW-11S 9/8/2011 | MW-12S 9/8/2011 | MW-8S-R 1/30/2013 | MW-9S 1/30/2013 | MW-11S 1/30/2013 | MW-12S 1/30/2013 |
|---------------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|----------------------|--------------------|---------------------|---------------------|
| TCL VOCs (ug/L) | | | | | | | | | |
| Methyl tert-butyl ether | 10 | NS | U | U | U | 5.52 | U | U | U |
| Ethyl ether | NS | NS | U | U | U | 54.2 | 1.32 | U | U |
| Di-isopropyl ether | NS | NS | U | U | U | 2.87 | U | U | U |
| 1,4 Dioxane | NS | NS | U | U | U | 398.0 | U | U | U |

NOTES:

U = Not Detected above laboratory detection limits.

NYSDEC Standards - NYSDEC Ambient Water Quality Standards - TOCS 1.1.1; - NS = No Standard or Guidance Value Given

TCL VOCs = Target Compound List Volatile Organic Compounds.

ug/L = micrograms per liter.

Bold Text - Above NYSDEC Standard

J = estimated value

- Only those analytes that were detected in at least one sample are presented.

- All samples analyzed for TCL VOCs by EPA Method 8260B.

- MW-10S was not sampled (NS) since the well was destroyed.

- MW-8S was not sampled (NS) since the well was covered with new asphaltic pavement.

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
AXELROD FACILITY
ALBANY, NEW YORK
ERM PROJECT NUMBER 0186101

| Well Location | MW-8S | MW-9S | MW-11S | MW-12S |
|----------------------------|---------|--------|--------|--------|
| Elevation at Top of Casing | 216.42 | 219.64 | 219.39 | 220.94 |
| Total Depth of Well | 17.92 | 19.88 | 16.35 | 19.75 |
| Screen Length | 10 | 15 | 10 | 10 |
| Date | | | | |
| 12/22/2003 | 211.74 | 213.24 | 212.17 | NA |
| 3/2/2005 | 211.40 | 213.00 | 211.54 | NA |
| 9/7/2006 | 211.27 | 212.42 | 211.41 | NA |
| 12/4/2007 | 211.90 | 213.22 | 211.99 | NA |
| 3/19/2009 | 212.36 | 213.63 | 212.31 | NA |
| 6/8/2010 | 211.56 | 212.59 | 211.47 | NA |
| 9/8/2011 | NM | 214.32 | 214.97 | 216.88 |
| 1/30/2013 | 211.77* | 212.74 | 212.01 | 212.64 |

NOTES:

- All measurements reported in feet.

NA - Not Applicable - MW-12S installed 8 April 2011.

NM = Not measured (well was covered with new asphaltic pavement since June 2010 sampling event).

* - Replacement Well MW-8S-R installed 01/26/2013 - Elevation TOC = 216.88

Total Depth of Replacement Well MW-8S-R = 17.42' and screen length is 10.00'

| DIW Data | MW-8S | MW-9S | MW-11S | MW-12S |
|------------|----------|-------|--------|--------|
| | MW-8S-R* | | | |
| Date | | | | |
| 12/22/2003 | 4.68 | 6.40 | 7.22 | NA |
| 3/2/2005 | 5.02 | 6.64 | 7.85 | NA |
| 9/7/2006 | 5.15 | 7.22 | 7.98 | NA |
| 12/4/2007 | 4.52 | 6.42 | 7.4 | NA |
| 3/19/2009 | 4.06 | 6.01 | 7.08 | NA |
| 6/8/2010 | 4.86 | 7.05 | 7.92 | NA |
| 9/8/2011 | NM | 5.32 | 4.42 | 4.06 |
| 1/30/2013 | 5.11* | 6.90 | 7.38 | 8.30 |



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



| Site Details | Box 1 |
|--|--|
| Site No. 401031 | |
| Site Name New Scotland Ave. (Wadsworth Laboratory) | |
| Site Address: 120 NEW SCOTLAND AVE | Zip Code: 12208 |
| City/Town: Albany | |
| County: Albany | |
| Site Acreage: 1.0 0.5 | |
| Reporting Period: January 1, 2012 to December 31, 2013 | |
| | YES NO |
| 1. Is the information above correct? | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet. | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | |
| 5. Is the site currently undergoing development? | <input type="checkbox"/> <input checked="" type="checkbox"/> |

| | Box 2 |
|--|--|
| | YES NO |
| 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed? | <input checked="" type="checkbox"/> <input type="checkbox"/> |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. 401031

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

76.05-1-9

N.Y. STATE LABORATORY

IC/EC Plan
Ground Water Use Restriction
Landuse Restriction
Monitoring Plan
Site Management Plan

Pursuant to a Deed Restriction recorded on 6/6/2013, groundwater and land use restrictions apply.

Box 4

Description of Engineering Controls

Parcel

Engineering Control

76.05-1-9

Cover System

The pump and treat system has been decommissioned. The asphalt cover is a parking lot which must be inspected in accordance with the site management plan. Monitoring of the groundwater is required.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 401031

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I LAURIE DUNCAN at NYS DOH WADSWORTH CENTER
print name print business address P.O. Box 509, Rm B940, ALBANY NY
12201-0509

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Laurie Duncan
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

1/27/14
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I LAURIE DUNCAN at NYS DOH WADSWORTH CENTER
P.O. Box 509, Rm 13940, ALBANY, NY 12201-0509
print name print business address

am certifying as a Qualified Environmental Professional for the OWNER (NYS DOH)
(Owner or Remedial Party)

Laurie Duncan
Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp
(Required for PE)

1/27/14
Date