Groundwater & Environmental Services, Inc.

EASTERN NEW YORK OFFICE

June 2, 2014

David J. Chiusano
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, Section A
625 Broadway, 12th Floor
Albany, New York 12233-7017

Re: Periodic Review Report Addendum
Former Fumex Sanitation Site
131 Herrick Road,
Garden City Park, Nassau County, New York
NYSDEC Site #130041

Dear Mr. Chiusano:

Please see the attached electronic copy of the April 30, 2014 *Periodic Review Report Addendum*. I've also attached the original hard copy of the Engineering Controls – Standby Consultant/Contractor Certification Form. Should you have any questions or require further information regarding the information provided herein, please feel free to contact me at (800) 360-9405, extension 4326.

Sincerely,
GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Sarken E. Dressler
Project Manager

Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form

Site Details **Box 1**

Site No. **130041**

Site Name Fumex Sanitation, Inc.

Site Address: 131 Herricks Road Zip Code: 11040
City/Town: Garden City Park
County: Nassau
Site Acreage: 0.2

Reporting Period: March 23, 2013 to March 23, 2014

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☑	☐
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? (*) SEE PERIODIC REVIEW REPORT, DATED MAY 2014	☑	☐
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development? (*) REFURBISHED BY WINSUPPLY, INC (TENANT) BETWEEN NOVEMBER 2013 and FEBRUARY 2014	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor

7/10/2014
Date

SITE NO. 130041 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
331.74-005-80	Frontseat LLC	Ground Water Use Restriction Landuse Restriction Building Use Restriction Site Management Plan Soil Management Plan Monitoring Plan O&M Plan IC/EC Plan

ROD calls for a cover system consisting of clean soil covered by asphalt. A environmental notice is in place to maintain the impermeable cap and restrict soil excavation beneath the cap without prior approval from NYSDEC.EN was recorded with the Nassau County Clerk's Office on 4/24/12 in Misc. Lien Documents - document #142701.EN was rescinded by the the Nassau County Clerk's Office on 7/16/12 (transaction No.257739). The easement was recorded with the Nassau County Clerk's Office on 7/15/13 @ 2:47 in book 12966 page 52 (transaction No.250375).

Box 4

Description of Engineering Controls

Parcel	Engineering Control
331.74-005-80	Fencing/Access Control Cover System

The following engineering control systems are in place at the Site and are as follows and discussed below:

1. Soil and Asphalt Cover System:Exposure to remaining contamination in soil/fill at the Site is prevented by a soil and asphalt cover system placed over the Site. This cover system is comprised of 11 to 20 inches of clean soil under asphalt pavement.

2.Epoxy Resin Coating:Exposure to remaining contamination in the concrete inside the on?site building is prevented by an epoxy coating applied over the cement floor. Or industrial matting installed inside the on-site building to prevent contact with the cement floor. GB

3.Bridging Encapsulant:Exposure to remaining asbestos containing mastic material on the walls of the on-site building is prevented by an encapsulant applied on top of the mastic material. A sheetrock wall was constructed over the encapsulated mastic to prevent disturbance.

4. Fencing: Security for the Site is provided by fencing that encloses the parking lot. The 21.5 foot wide section of concrete wall on the southern border of the property demolished during remedial construction activities was replaced with a 12 foot chain link fence. The remainder of the southern border is protected with 6 foot chain link fence. The western side of the parking lot is separated from the bordering residential property with 6 foot chain link fencing. The on-site building encloses the eastern side of the parking lot, and the northern edge has brick and block wall/6-foot high replacement fence with a locking chain link fence swinging gates in the center to provide access.

Box 5

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, including data and material prepared by previous contractors for the current certifying period, if any;

   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 ~~compete~~. 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) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor

Date: 7/10/2014

IC/EC CERTIFICATIONS

Box 6

Qualified Environmental Professional Signature

I certify that all information in Boxes 2 through 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 Genevieve F. Bock at Groundwater & Environmental Services, Inc
print name

89 Cabot Court, Suite A

Hauppauge, New York 11788,
(print business address)

am certifying as a Qualified Environmental Professional.

Signature of Qualified Environmental Professional

Stamp (Required for PE)

Date 4/10/2014

FORMER FUMEX SANITATION SITE

Garden City Park, Nassau County, New York

NYSDEC Site #130041

Periodic Review Report Addendum

Prepared for:

David J. Chiusano
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, Section A
625 Broadway, 12th Floor
Albany, New York 12233-7017

Prepared by:

Groundwater & Environmental Services, Inc.
89 Cabot Court, Suite A
Hauppauge, New York 11788
Phone (800) 360-9405
Fax (631) 582-4410

Periodic Review Report Addendum Certification

Reporting Period: March 2013 to March 2014

NYSDEC Site: #130041
Project Name: Former Fumex Sanitation Site
Site Address: 131 Herricks Road, Garden City Park
Nassau County, New York 11040

I, Genevieve F. Bock, P.E., hereby certify on behalf of Groundwater & Environmental Services, Inc. (GES), this *Period Review Report Addendum* and all the information presented under this cover is accurate and prepared under the direction of, and reviewed by, me, including all data and material prepared by previous contractors for the current certifying period.

NYS Professional Engineer #090811 | 5/30/2014 (Date) | Signature

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

PERIODIC REVIEW REPORT ADDENDUM

Former Fumex Sanitation Site
131 Herricks Road
Garden City Park, Nassau County, New York 11040
NYSDEC Site #130041

Prepared for:

David J. Chiusano
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, Section A
625 Broadway, 12th Floor
Albany, New York 12233-7017

May 2014

Prepared by:

Sarken E. Dressler
Project Manager

Reviewed by:

Genevieve F. Bock, P.E.
Project Engineer

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EXECUTIVE SUMMARY

The Site is located at 131 Herricks Road, Garden City Park, Nassau County, New York (herein referenced as the "Site"). The Site operated as a commercial termite extermination business from 1952 to 1992. Investigations confirmed that pesticides contaminated soil and groundwater beneath the Site and surrounding properties as a result of historical operations. The Site was listed as an inactive hazardous waste facility and is being managed by the New York State Department of Environmental Conservation (NYSDEC) under Site #130041. A *Site Management Plan* (herein referenced as the *"SMP"*), dated June 6, 2012, was prepared for the Site following completion of remedial activities and implementation of engineering and institutional controls (ECs/ICs) in 2011 to mitigate exposure to residual impacts at the Site and to monitoring groundwater quality for up to 10 years.

In May 2013, the first *Periodic Review Report* (2013 *PRR*) was submitted summarizing all Site management activities conducted during the monitoring period between March 2012 and March 2013. Increasing trends for pesticides were observed in on-Site, upgradient, and downgradient monitoring wells based on the February 2013 sampling data. Therefore, the 2013 *PRR* recommended completing two (2) additional rounds of groundwater sampling prior to evaluating concentration trends to determine if corrective actions are necessary.

The proposed additional rounds of groundwater sampling were completed at the Site in July 2013 and February 2014. Based on the most recent groundwater sampling results, select pesticide compounds were observed to be above the groundwater quality standards (GWQS) and increasing as compared to the July 2011 results. However, decreasing concentrations of select pesticides were also observed throughout the monitoring well network, pesticides have not been detected at the farthest hydraulically downgradient monitoring wells, and pesticides were not detected in any public supply/monitoring wells based on available public water quality reports for the area. Therefore, dissolved-phase pesticides are being effectively controlled and monitored within the Site monitoring well network and Site remedial objectives are being achieved.

In addition to the sampling activities, semi-annual Site inspections were completed in accordance with the *SMP*. In June 2013, Frontseat, LLC (the Owner) entered into an Environmental Easement agreement. In November 2013, the Owner leased the Site to Winsupply, Inc. (the Tenant). During this reporting period, the Site was refurbished into a commercial warehouse which stores and sells fire sprinkler components. Current operations at the Site include use of a small forklift and truck deliveries and pickups. Due to these operations, select areas of the epoxy resin coating (intended to limit contact with pesticide-impacted concrete in the building) and the asphalt cover in the parking lot (intended to limit contact with pesticide-impacted soil and minimize infiltration of water) have been damaged. However, most of the epoxy resin coating and asphalt cover are in good condition.

Industrial floor matting was proposed to be installed in the warehouse where the forklift is operated to protect the epoxy resin coating from further damage and to limit contact with the exposed areas. Asphalt sealant was proposed to address the topical cracks observed on the asphalt cover. A summary of the proposed corrective measures was provided to the NYSDEC in February 2014 and it is anticipated that this work will be completed in June or July 2014.

On the northern portion of the Site, a small trench was excavated to repair a water line without notification by the Owner or Tenant to the NYSDEC. The excavated area was not repaved with asphalt; therefore, a corrective action plan (CAP) will be submitted under a separate cover in June 2014. Repairs are anticipated to be completed soon thereafter to ensure compliance with the *SMP*. Upon completion of industrial floor matt installation and asphalt cover repairs, a summary report will be submitted to the NYSDEC within 45 days.

1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES), on behalf of the New York State Department of Environmental Conservation (NYSDEC), has prepared this *Periodic Review Report Addendum* (*PRR Addendum*) for the former Fumex Sanitation located at 131 Herricks Road, Garden City Park (a hamlet in the Town of North Hempstead), Nassau County, New York (herein referenced as the "Site"). The Site currently owned by Frontseat, LLC (the Owner) and is being leased to Winsupply, Inc. (the Tenant), for use as a commercial warehouse which stores and sells fire sprinkler components.

The Site operated as a commercial termite extermination business from 1952 to 1992. Historic Site investigation activities confirmed that soil and groundwater beneath the Site and surrounding properties were impacted by pesticides. The Site was listed as an inactive hazardous waste facility in March of 1990 and is being managed by the NYSDEC under Site #130041. The NYSDEC directed remedial activities to address source areas of contamination to the extent practical and engineering and institutional controls (ECs/ICs) were implemented to reduce or eliminate potential exposure to residual contamination at the Site.

A *Site Management Plan* (*SMP*) dated June 6, 2012, was prepared following completion of the remedial activities and implementation of ECs/ICs between 2010 and 2011. The *SMP* requires compliance with Site-specific ECs/ICs and Site management activities in order to protect public health and the environment from exposure to residual contamination at the Site. The first *Period Review Report* (2013 *PRR*) was prepared for the Site in April 2013 and concluded that increasing trends of select pesticides were observed at on-Site, hydraulically upgradient (north to northeast), and hydraulically downgradient (south to southwest) monitoring wells and that some compounds were orders of magnitude above the applicable groundwater quality standards. However, since only one (1) sampling event was available and the *SMP* specifies reporting every 3 years, the 2013 *PRR*recommended that a PRR Addendum be submitted following two (2) additional rounds of groundwater sampling.

This *PRR Addendum* has been prepared following completion of the additional sampling activities in July 2013 and February 2014. Additionally, this report summarizes all other Site management activities conducted during the monitoring period from March 2013 to March 2014 in accordance with the *SMP*. The primary objectives of this report are as follows:

- To provide a compliance report for the groundwater monitoring activities completed in accordance with the *SMP* which details the sampling program requirements, summarizes the field work completed, and provides analytical results for comparison to baseline sampling data;

- To provide a compliance report for the ECs/ICs implemented at the Site which describes each EC/IC, its objective, how it is evaluated, the current status, and future management activities;

- To provide an evaluation of remedy performance, effectiveness, and protectiveness to determine if remedial actions at the Site are achieving the established goals of the *SMP* based on the additional information; and,

- To provide conclusions and recommendations for future Site management activities based on historical information and an evaluation of Site information collected during the reporting period.

2.0 SITE OVERVIEW

2.1 Site Location

The Site is located at 131 Herricks Road, Garden City Park, Nassau County, New York. A Site Location Map is provided as **Figure 1**. The Site is bounded by Bedford Avenue to the north, a commercial property to the south, Herricks Road to the east, and a residential property to the west. Pertinent Site features and surrounding properties are depicted on **Figure 2**.

2.2 Site Background

The Site operated as a commercial termite extermination business from 1952 to 1992. Site investigations between 1986 and 1999 confirmed that pesticides had contaminated soil and groundwater beneath the Site and the surrounding properties. As a result of the contamination, the Site was listed by the NYSDEC under the Registry of Inactive Hazardous Waste Disposal Sites (referenced as NYSDEC Site #130041).

In January of 2000, a Feasibility Study (FS) was completed which identified Remedial Action Objectives (RAOs) for the Site. In March 2001, a Record of Decision (ROD) detailing RAOs was executed for the Site which required the following remedial activities:

- Excavation and proper disposal of the top 18 inches of soil from the entire parking lot in the rear of the Site;
- Excavation and proper disposal of the contaminated surface soils at the adjacent residential property;
- Installation and long term maintenance of an impermeable cap over the parking lot at the rear of the Site;
- Removal of an on-Site drywell and replacement with a catch basin connected to the local storm sewer;
- Implementation of a deed restriction (i.e., Environmental Notice) to maintain the impermeable cap and restrict any soil excavation beneath the impermeable cap;
- Power washing (with detergent) of the concrete floor in the former garage area with collection and proper disposal of all wash water; and,
- Implementation of a groundwater monitoring program to assess the performance of the remedies.

Following remedial design investigations conducted between 2006 and 2007, an *Explanation of Significant Differences* (*ESD*) letter was issued by the NYSDEC in April 2007. The *ESD* substituted an asphalt cover for the impermeable cap based on results from the remedial design investigations that indicated pesticides were not migrating off-Site.

Remedial activities and implementation of ECs/ICs at the Site were initiated in August 2010 and completed in late 2011. A summary of the major remedial actions performed at the Site is provided below:

- Excavation and off-Site disposal of approximately 730 tons of contaminated soil from the parking lot. The excavation work also included the removal of an on-Site drywell and underground storage tank (UST) that were located in the parking lot;

- Installation of a stormwater management system that connects to the Nassau County stormwater system;

- Installation of an asphalt cap over the parking lot;

- Replacement of monitoring wells MW-10 and MW-11 with MW-10R and MW-11R and completion of a round of groundwater sampling for the entire monitoring well network;

- Abatement of asbestos containing material (ACM) floor tile and encapsulation of ACM wall mastic inside the on-Site building;

- Power washing (with detergent) of the building concrete floor and the encapsulation of the floor surface with an epoxy resin coating;

- Excavation and off-Site disposal of approximately 33 tons of contaminated soil from the residential property to the west of the Site to meet the soil cleanup objectives (SCOs) for residential use; and,

- Installation of a fence on the southern and western portion of the Site property boundary to ensure Site security.

Following completion of the remedial activities and implementation of ECs/ICs, a *Final Engineering Report* (*FER*), dated June 6, 2012, was prepared by Camp, Dresser and McKee (CDM) detailing all remedial activities conducted at the Site. Along with the *FER*, the *SMP* was submitted to the NYSDEC which detailed all future Site management activities to be conducted to ensure that public health and the environment are not adversely affected by the residual contamination present at the Site.

2.3 Nature and Extent of Residual Contamination

The extent of soil and groundwater impacts detected at the Site prior to remediation is detailed in previous Site investigation reports submitted to the NSYDEC. A brief summary of the post-remedial contamination present on-Site is detailed below:

- Soil Impacts:
    - Per the ROD, the most significant contaminants at the Site were pesticides (chlordane, heptachlor, dieldrin, and heptachlor epoxide). Following soil excavation, alpha-chlordane and dieldrin were detected above the commercial SCOs at select sampling locations. The maximum concentration of remaining pesticides was alpha-chlordane at 520,000 micrograms per kilogram (µg/kg) detected at soil endpoint SW-2 located in the northeastern corner of the parking lot. The commercial use SCO for alpha-chlordane is 24,000 µg/kg. Volatile organic compounds (VOCs), semi-VOCs (SVOCs), and metals contamination were also contaminants that were investigated. Per the January 2000 *Final Feasibility Study Report (2000 FSR),* trace detections of VOCs (2-botanone and tetrachloroethene) and SVOCs were present beneath the Site, but all VOCs and SVOCs were below respective SCOs. The

SVOCs were detected in the upper 1 foot of the parking lot were attributed to the former petroleum-based asphalt used at the Site. Most of the asphalt parking lot was excavated to 1.5-feet; therefore, SVOCs are not likely present beneath the Site. All 23 target analyte list (TAL) metals were also below respective NYSDEC SCOs per the 2000 *FSR*.

- Pesticide impacts beneath the building slab were never investigated and remain unknown.
- The residential property to the west of the Site, located at 280 Bedford Avenue, Garden City Park, New York, was determined to be impacted with pesticides. However, these impacts were determined to be successfully remediated and suitable for unrestricted use following soil excavation activities and results of the soil endpoint sampling.

- Building Concrete Surface: Following power washing of the surface floor, concrete chips were collected and submitted for analysis. The results revealed elevated levels of chlordane contamination ranging from 8.9 parts per million (ppm) to 17 ppm.
- Interior Building Wall: Sections of the building wall on the northern and eastern sides have an ACM coating.
- Groundwater Contamination: Upon completion of the remedial activities and implementation of engineering controls, groundwater sampling was conducted in July 2011 to establish baseline concentrations of contaminants for comparison to future sampling events. A summary of baseline sampling is provided below:
  - July 2011 Baseline Sampling Event: A total of 14 monitoring wells were sampled in July 2011. Results of the baseline sampling event indicated that select pesticides, SVOCs, VOCs, and metals concentrations were present above the June 1998 *Technical and Operational Guidance Series (TOGS) [1.1.1] Ambient Water Quality Standards Guidance Values and Groundwater Effluent Limitations* (hereinafter referenced as GWQS) in the Site well network. Pesticides were the predominant contaminants detected above the GWQS in all on-Site monitoring wells (MW-1 through MW-6), upgradient monitoring wells MW-9S and MW-9D, and downgradient monitoring wells MW-7D, MW-10R, and MW-11R.

2.4 Sensitive Receptors

Based on the residual nature of contamination, the only sensitive receptors of concern are those that may use the local groundwater for potable purposes. However, per the *Final Phase II Remedial Investigation Report* (*Phase II RIR*), there are no public or private wells within a 1,000-foot radius of the Site. The closest groundwater supply well (Well #9) is located approximately 1,300 feet to the west (hydraulically cross-gradient) which is only operated during emergency situations.

2.5 Site Closure Criteria

Per the *SMP*, remedial processes are considered to be complete when effectiveness monitoring indicates that the remedy has achieved the RAOs which are defined in the ROD. The framework for determining when Site closure for groundwater monitoring is provided in Section 6.4 of NYSDEC *DER-10 Technical Guidance for Site Investigation and Remediation*, dated May 2010.

The *SMP* requires that the following ECs shall be maintained in perpetuity: soil and asphalt cover system, epoxy resin coating, and Site security fencing.

3.0 GROUNDWATER MONITORING PLAN COMPLIANCE REPORT

A Groundwater Monitoring Plan (GMP) is a component of the *SMP* for the Site. As stipulated in the *SMP,* the purpose of this groundwater monitoring program is to monitor the effectiveness of the remedial actions and to demonstrate that groundwater at the Site has not been negatively impacted as a result of remedial construction activities.

The purpose of this section is to provide a compliance report for the groundwater monitoring activities completed in accordance with the *SMP*. The compliance report briefly details the sampling program requirements, summarizes the field work completed during the reporting period, and provides analytical results for comparison to the July 2011 baseline sampling event.

3.1 Groundwater Monitoring Plan

The monitoring program requires sampling the existing well network (14 monitoring wells) on a semi-annual basis for a period of 10 years or as determined by NYSDEC. Below is summary of the sampling plan per the GMP.

Well ID	Physical Location	Screen Zone* (depth in feet below TOC or fbgs)	Laboratory Analysis**
MW-1	On-Site, in the parking lot	Shallow (51.71 ft. below TOC)	-Target Compound List (TCL) Organochlorine Pesticides via NYSDEC ASP Method USEPA SOW ILMO4.2 -TCL VOCs via NYSDEC ASP Method UESPA SOW OLMO4.2 -TCL SVOCs via NYSDEC ASP Method UESPA SOW OLMO4.2 -Cyanide via NYSDEC Analytical Service Protocol (ASP) Method 335.2 -Target Analyte List (TAL) Metals via NYSDEC ASP Method USEPA SOW ILMO4.0
MW-2		Shallow (49.91 ft. below TOC)	
MW-3		Shallow (53.46 ft. below TOC)	
MW-4		Shallow (50.33 ft. below TOC)	
MW-5		Shallow (52.60 ft. below TOC)	
MW-6		*Deep (110-120 fbgs)	
MW-7S	Off-Site, Downgradient, on Broadway	*Shallow (40-50 fbgs)	
MW-7D		*Deep (110-120 fbgs)	
MW-8S	The furthest off-Site, downgradient wells, on Thorens Ave	*Shallow (50-60 fbgs)	
MW-8D		*Deep (115-125 fbgs)	
W-9S	The furthest off-Site, upgradient wells, on Madison Ave	*Shallow (40-50 fbgs)	
W-9D		*Deep (105-115 fbgs)	
MW-10R	Off-Site, immediately downgradient, on Park Ave	*Shallow (39.5 to 49.5 fbgs)	
MW-11R		*Shallow (39.5 to 49.5 fbgs)	

Note: *If a range is provided, it is based on available boring logs. All other values indicate depth to bottom of the well from the most recent sampling event conducted in July of 2013. fbgs = feet below grade surface. TOC = top of casing. **Samples are analyzed by a NYSDEC contracted laboratory and in accordance with the contracted analytical methods and quality control requirements (see **Section 3.5** of this report for an explanation).

3.2 Data Usability Summary Report

In accordance with the GMP, a data usability summary report (DUSR) was prepared by Validata of WNY, LLC in general compliance with NYSDEC Analytical Services Protocols (ASP) and Environmental Protection Agency (EPA) National Functional Guidelines. Among many other quality checks performed, the DUSR evaluated data completeness, chain-of-custody, holding times, laboratory qualifiers, and control samples for each analysis performed. In general, the DUSR concluded that the data are acceptable for use. Copies of these reports are provided in **Appendix A**.

3.3 Groundwater Monitoring Results

In July 2013 and February 2014 GES conducted groundwater sampling activities in general accordance with the GMP. The location of the monitoring wells are depicted on the Site Vicinity Map provided as **Figure 3**. All pertinent supporting field work documentation including equipment calibration logs, low-flow sampling tracking logs, and synoptic water level measurements logs for the July 2013 and February 2014 sampling events are provided as **Appendix B** and **C**, respectively. Pertinent information and results of the field work are provided below.

- Prior to collecting field bioparameters, each monitoring well was gauged using an oil-water interface probe. Groundwater was approximately 59.17 feet above mean sea level (AMSL) in July 2013 and 55.18 feet AMSL in February 2014. A summary of the groundwater gauging data is provided in **Table 1**. Based on the February 2014 groundwater gauging data, groundwater flow is to the southwest of the Site under a hydraulic gradient of approximately 0.003 feet per foot. A Groundwater Monitoring Map depicting groundwater flow direction is provided as **Figure 4**.
- In accordance with the GMP, low-flow sampling was performed and stabilization readings were achieved for all of the parameters at all monitoring wells for both sampling events. Turbidity values were below 50 NTUs at all wells for both sampling events with exception to MW-7S and MW-5 during the July 2013 sampling event. Field filtering was completed utilizing a 0.45 micron filter prior to collecting samples for metals analysis at MW-7S and MW-5 for the July 2013 sampling event. A summary of the final stabilization readings for both sampling events are provided in **Table 2**.
- Decontamination procedures were completed as detailed in the GMP, excluding the use of nitric acid as approved by the NYSDEC. Approximately 40 gallons (20 gallons per event) of decontamination and purge water was generated during the sampling activities. The investigation-derived waste (IDW) is being containerized in a 55-gallon drum at the Site and will be disposed of at an approved facility once the drum is full.

Per the *SMP*, post-remediation groundwater sampling data should be compared to the baseline sampling event conducted in July 2011 to monitor the effectiveness of the remedies and demonstrate that groundwater at the Site has not been negatively impacted as a result of remedial construction activities. A summary of the most recent groundwater analytical data is provided in **Table 1**. Laboratory analytical results for pesticides, SVOCs, VOCs and metals for the July 2013 and February 2014 groundwater sampling event are provided in **Appendix D**. Results have also been summarized in the Groundwater Monitoring Map provided as **Figure 4**.

A summary of dissolved-phase groundwater trends (evaluated based on percent reduction) for pesticides, SVOCs, VOCs, and metals are provided in **Table 3** through **Table 6**, respectively. A summary of groundwater trends for pesticides, SVOCs, VOCs, and metals based on the most recent groundwater

sampling data (February 2014) as compared to the baseline sampling event (July 2011) is provided in the tables below. Only monitoring wells exhibiting concentrations above GWQS and increasing trends are discussed in the tables.

FEBRUARY 2014 GROUNDWATER RESULTS – PESTICIDES			
Location	**Well ID**	**Detected Compound Exceeds GWQS And Increasing**	**Current Maximum Concentration**
On-Site Wells	MW-1 through MW-5	- heptachlor epoxide, chlordane, dieldrin, and 4,4'-DDT	Chlordane at 6.8 µg/L (GWQS = 0.05 µg/L)
Downgradient Wells	MW-11R	-Dieldrin	Dieldrin at 0.89 µg/L (GWQS = 0.001 µg/L)
Upgradient Wells	MW-9S and MW-9D	-Dieldrin	Dieldrin at 0.49 µg/L (GWQS = 0.001 µg/L)

Note: Results based on the February 2014 sampling event (see **Table 3**). A Pesticides Percent Reduction map is provided as **Figure 5**.

FEBRUARY 2014 GROUNDWATER RESULTS – SVOCs			
Location	**Well ID**	**Detected Compound Exceeds GWQS And Increasing**	**Current Maximum Concentration**
On-Site Wells	None	None	Non-detect
Downgradient Wells	None	None	Non-detect
Upgradient Wells	None	None	Non-detect

Note: Results based on the February 2014 sampling event (see **Table 4**).

FEBRUARY 2014 GROUNDWATER RESULTS – VOCs			
Location	**Well ID**	**Detected Compound Exceeds GWQS And Increasing**	**Current Maximum Concentration**
On-Site Wells	None	None	Non-detect
Downgradient Wells	None	None	Non-detect
Upgradient Wells	MW-9D	Tetrachloroethene	Tetrachloroethene at 74 µg/L (GWQS = 5 µg/L)

Note: Results based on the February 2014 sampling event (see **Table 5**).

FEBRUARY 2014 GROUNDWATER RESULTS – METALS			
Location	**Well ID**	**Detected Compound Exceeds GWQS And Increasing**	**Current Maximum Concentration**
On-Site Wells	MW-6	Sodium	Sodium at 54,800 µg/L (GWQS = 20,000 µg/L)
Downgradient Wells	MW-7D, MW-8S	Sodium	Sodium at 90,100 µg/L (GWQS = 20,000 µg/L)
Upgradient Wells	MW-9S, MW-9D	Sodium	Sodium at 33,600 µg/L (GWQS = 20,000 µg/L)

Note: Results based on the February 2014 sampling event (see **Table 6**).

Based on the groundwater analytical results from the most recent sampling event conducted in February 2014, select pesticides (heptachlor epoxide, chlordane, dieldrin, and 4,4'-DDT), VOCs (tetrachloroethene at MW-9D), and metals remain above the GWQS and exhibit increasing dissolved-phase concentration trends in on-Site, upgradient, and downgradient monitoring wells when compared to the July 2011 baseline sampling event. Alternately, decreasing dissolved-phase concentration trends of select pesticide, VOC, and metals compounds were also observed based on the February 2014 sampling event. Although increasing dissolved-phase pesticide impacts above GWQSs were observed both on-Site and in the immediately downgradient monitoring well MW-11R, pesticides were not detected at the farthest hydraulically downgradient monitoring wells, MW-8S and MW-8D.

3.4 Comparison of Groundwater Results to Remedial Objectives

As discussed in the *SMP*, prior to completion of remedial activities on-Site, investigations and fate and transport modeling determined that pesticides were not migrating off-Site. Soil excavation was conducted in the parking lot to remove the source of impacts to the extent practical. The excavation was then backfilled with clean fill and the surface of the parking lot was paved with asphalt to minimize soil flushing (i.e., groundwater infiltration). To evaluate the effectiveness of the remedial activities, the *SMP* requires groundwater monitoring activities to be conducted over a 10 year period to compare these results to the baseline sampling event conducted in July 2011.

Based on the groundwater analytical results from the most recent sampling event conducted in February 2014, select pesticides remain above the GWQS in on-Site, upgradient, and downgradient monitoring wells. Dissolved-phase pesticide concentration trends (above the GWQS) were also observed to be increasing at select on-Site, upgradient, and downgradient monitoring wells. However, other pesticide compounds were observed to be decreasing at the same wells.

Although these results indicate that the dissolved-phase pesticide plume has moved off-Site, since July 2011 pesticides, SVOCs, and VOCs have not been detected above the GWQS at the farthest hydraulically downgradient monitoring wells, MW-8S and MW-8D. A review of the Garden City Park Water District water quality reports for 2011, 2012, and 2013 reveal no detections of pesticides in groundwater supply or monitoring wells for the area (refer to **Appendix E**). Therefore, although the existing dissolved-phase does appear to be migrating in the hydraulically downgradient direction, regional groundwater has not been negatively impacted (i.e., pesticide impacts have not migrated to the downgradient boundary of Site groundwater monitoring or to off-Site potable wells) following remedial

activities and contaminants are being effectively controlled through natural attenuation. As such, the remedial objectives are being achieved at the present time.

3.5 Groundwater Monitoring Deficiencies

Below is a brief summary of sampling activities which did not fully comply with the GMP for this reporting period:

- The use of nitric acid as part of the decontamination procedures described in section 3.7 of the GMP was not conducted as approved by the NYSDEC; and,
- The analytical methods specified in the GMP were not utilized as these listed methods did not match the NYSDEC laboratory contract requirements.

3.6 Groundwater Monitoring Conclusions

GES conducted groundwater sampling activities in July 2013 and February 2014 in general accordance with the *SMP*. No significant issues were encountered during the sampling events which would significantly affect the results. Additionally, third-party data usability and validation analysis indicates the data are reliable.

Pesticides are the primary contaminant of concern and based on the February 2014 sampling event select compounds remain above the GWQS and were observed to be higher in concentration than the baseline sampling event (July 2011) at select on-Site, hydraulically upgradient, and downgradient monitoring wells closest to the Site. However, decreasing concentrations of other pesticide compounds were also observed at on-Site, hydraulically downgradient, and upgradient monitoring wells. Although increasing pesticide concentrations were observed in some Site monitoring wells, no pesticide compounds have been detected at the furthest hydraulically downgradient monitoring wells (MW-8S and MW-8D) and pesticides have not been detected in any public supply/monitoring wells based on the water quality reports for the Garden City Park area. Therefore, dissolved-phase pesticides appear to be effectively controlled within the Site groundwater monitoring network and remedial objectives are being achieved at the present time.

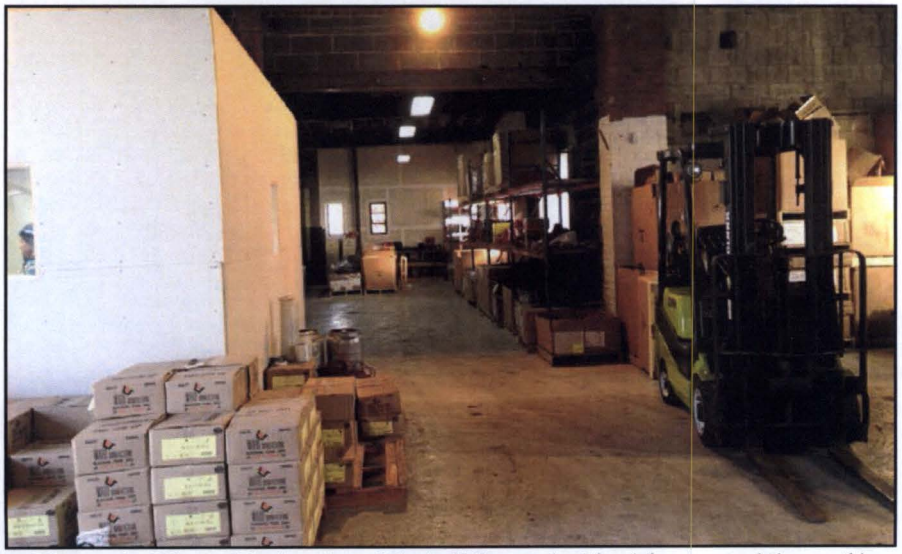
SVOCs, VOCs, and metals were also analyzed as required by the *SMP*. All SVOCs are below the GWQS and are lower in concentration when compared to the baseline sampling event conducted in July 2011. Tetrachloroethene (detected at 74 µg/L) was the only VOC compound detected above the GWQS (5 µg/L) during the February 2014 sampling event and it was only detected at the hydraulically upgradient monitoring well, MW-9D. Concentrations of tetrachloroethene are also increasing at monitoring well MW-9D compared to the July 2011 baseline sampling data. Therefore, because monitoring well MW-9D is located hydraulically upgradient of the Site, increasing VOC concentrations at this well are not likely related to Site conditions. All other VOCs compounds are currently below the GWQS. Sodium was the only metal detected above applicable GWQSs with increasing concentrations in the Site monitoring well network (detected at on-Site monitoring well MW-6, downgradient monitoring well MW-7D, and upgradient monitoring wells MW-9S and MW-9D). Although dissolved-phase sodium concentrations remain above GWQSs throughout the monitoring well network, current sodium concentrations throughout the monitoring well network (maximum of 90,100 µg/L at MW-7D) are below the maximum dissolved-phase sodium concentrations detected during the baseline sampling event in 2011 (118,000 µg/L and 123,000 µg/L at monitoring wells MW-10R and MW-11R, respectively). Therefore, the remaining dissolved-phase sodium concentrations are likely associated with naturally occuring sodium concentrations in the area and the observed concentration increases are not related to historic Site activities.

Based on the analysis of dissolved-phase SVOCs, VOCs, and metals remaining in the Site monitoring well network as discussed above, remaining dissolved-phase SVOCs, VOCs, and metals are not increasing due to remedial activities conducted at the Site and do not pose a threat to human health or the environment. Therefore, GES suggests that analysis of SVOCs, VOCs, and metals are removed from the GMP for the Site. Future groundwater sampling events would analyze and evaluate remaining TCL pesticide compounds only.

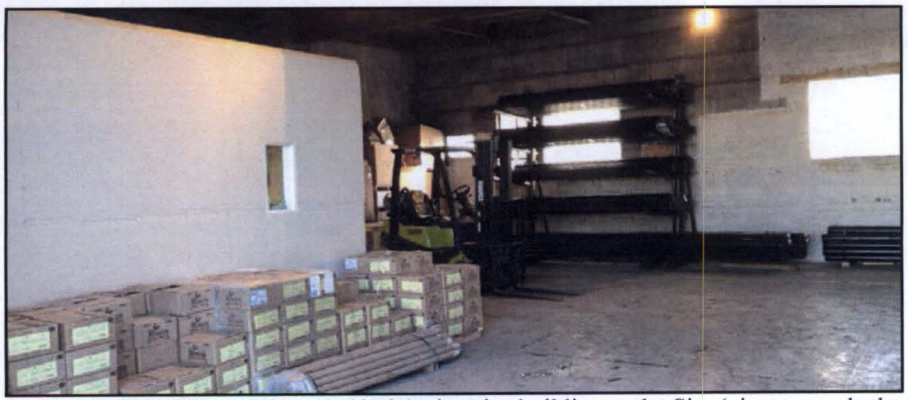
4.0 ECs/ICs PLAN COMPLIANCE REPORT

The *SMP* was prepared following the completion of remedial activities and implementation of ECs/ICs at the Site in 2011. The *SMP* establishes Site management activities to be conducted thereafter in order to protect public health and the environment from residual contamination at the Site via continued implementation of the ECs/ICs.

As detailed in the 2013 *PRR*, the Site was purchased by Frontseat, LLC (the Owner) in February 2013 and remained undeveloped through July 2013. Sometime between July 2013 and November 2013, the Owner leased the Site to Winsupply, Inc. (the Tenant). The NYSDEC was notified on November 11, 2013 of a potential new tenant. Between November 2013 and February 2014, the Site building was refurbished into a commercial warehouse which stores and sells fire sprinkler components. Specifically, a reception office was built on the southwestern portion of the building and the rooms that were located on the northwestern portion of the building were converted to office space. A forklift operates at the Site to transport heavy equipment and materials from the parking lot to the interior of the warehouse and heavy duty commercial vehicles were also observed picking up and dropping off materials during the February 2014 Site inspection. **Pictures 1** and **2** provided below depict the general use and condition of the Site building.



Picture 1 - View of the interior of the building at the Site (view toward the north)



Picture 2 – View of the southern-half of the interior building at the Site (view towards the northeast)

4.1 EC Compliance Report

The purpose of this section is to: (a) describe each EC, its objective and how performance of the control is evaluated; (b) summarize the status of each EC; (c) describe the corrective measures taken to address any deficiencies, if applicable; and, (d) provide recommendations for future management activities per the *SMP*.

Per the *SMP*, routine Site inspections shall be completed on a semi-annual basis. The Site-Wide Inspection Forms for the July 2013 and February 2014 inspections and associated photographs depicting Site conditions are provided as **Appendix F**. Tables summarizing the status of Site ECs based on the most recent Site inspection (February 2014) are included below.

Engineering Control (EC)	SUMMARY OF EC
Asphalt cover system.	**Objective:** An asphalt cover is in place on the western portion of the Site (parking lot) to eliminate exposure (via direct contact pathways) to remaining contamination beneath the Site. The asphalt cover also serves to minimize groundwater infiltration in the source area to limit soil flushing which could result in the leaching and migration of the residual contaminants of concern (primarily pesticides). **Monitoring Requirements:** This control is required to be visually inspected and maintained on a semi-annual basis. Inspections will note any cracks, depressions, and other irregularities that affect the asphalt surface. Maintenance will be performed to keep the asphalt surface intact. **Performance Evaluation Criteria:** If the asphalt cover is in good physical condition without large cracks or depressions, then the EC is meeting its objective. **Status:** A few areas of the asphalt cover were observed to be cracked along the surface based on the February 2014 inspection (see **Appendix F** for details and photographs). These cracks are topical and likely a result of the commercial vehicles picking up and dropping of materials at the Site. A supplemental Site inspection was completed in March 2014 to inspect areas of the asphalt previously covered by snow and a small portion of the asphalt cover (approximately 3 foot wide by 5 feet long) was removed and left unpaved. Based on conversations with the Tenant, the asphalt was removed as part of soil excavation activities completed to repair a water line (see the last photograph in **Appendix F**). No notification of this work was provided to the NYSDEC by the Owner/Tenant. Due to the presence of large cracks and removed asphalt, the asphalt cover is not currently meeting the EC objective and corrective measures are required. **Corrective Actions/:** The NYSDEC was notified in February 2014 of the topical asphalt cracks and it was recommended that an asphalt sealant be used as a corrective measure (see **Appendix G**). With regards to small excavated area on the northern portion of the Site, the NYSDEC contacted the Owner and requested compliance with the *SMP* in March 2014. A detailed corrective action plan to address the damaged asphalt cover will be submitted under a separate cover in June 2014 for review and approval by the NYSDEC. **Future Management Activities:** Semi-annual inspections of the EC should continue as required by the *SMP*.

Engineering Control (EC)	SUMMARY OF EC
Stormwater trench drain to the north of the parking lot.	**Objective:** To drain stormwater away from the Site where residual contamination beneath the parking lot exists. Similar to the asphalt cover, the purpose of the storm water trench drain is to eliminate infiltration of water beneath the Site to control groundwater contamination. **Monitoring Requirements:** This control is required to be visually inspected and maintained on a semi-annual basis. **Performance Evaluation Criteria:** If the drain is in good physical condition, clear of obstructions and water in the drain flows away from the parking lot without pooling, then the EC is meeting its objective. **Status:** During the Site inspections, the stormwater trench drain was clear of obstructions and no pooling of water was observed (See **Appendix F**). Therefore, the EC objective is being met and no corrective measures are necessary. **Future Management Activities:** Semi-annual inspections and maintenance of the EC should continue as required by the *SMP*.
Epoxy resin coating on the surface of the building floor.	**Objective:** To eliminate exposure via direct contact to remaining pesticide contamination on the concrete floor of the building. **Monitoring Requirements:** Semi-annual inspections should be conducted and note any irregularities that affect the integrity of the coating. Maintenance should be performed to keep the coating intact. **Performance Evaluation Criteria:** Contact with the surface floor is eliminated by an epoxy resin coating. If no significant irregularities are observed during inspections, the objective of the EC is being met. **Status:** In February 2014, several irregularities with the epoxy resin coating were observed and attributed to forklift operations by the Tenant. Specifically, the epoxy coating on the surface of the warehouse has been cracked or chipped through the first coat (gray color) and/or second coat (tan/brown in color) in select areas. However, most of the epoxy resin coating is in good shape. Currently, the EC objective is not being met and corrective measures are required. Documentation of the irregularities s provided in **Appendix F**. **Corrective Measures:** Use of industrial matting where forklift operations occur was proposed as a corrective measure in February 2014 (see **Appendix G**). The corrective measures were approved by the NYSDEC in March 2014 are anticipated to be implemented in June/July 2014. **Future Management Activities:** Semi-annual inspections and maintenance of the EC should continue as required by the *SMP*. Additionally, upon completion of the implementation of corrective measures, the existing *SMP* will be updated to ensure that the modified EC remains intact. A copy of the update *SMP* will be provided to the current or future Site owner(s) and tenant(s).

Engineering Control (EC)	SUMMARY OF EC
Bridging encapsulant and overlying sheetrock wall on the northern and northeastern walls of the building interior.	**Objective:** To eliminate exposure to remaining ACM on the interior walls of the on-Site building. The sheetrock wall was constructed over the ACM mastic to prevent removal and direct contact with the ACM. **Monitoring Requirements:** The bridging encapsulant and overlying sheetrock wall is a permanent control and the quality and integrity of this system should be inspected semi-annually for the lifetime of the wall. **Performance Evaluation Criteria:** Contact with the ACM is eliminated by an encapsulant and overlying sheetrock wall. If the sheetrock wall remains intact, the objective of the EC is being met. **Status:** The sheetrock wall overlying the encapsulant was observed intact during the Site inspections (see **Appendix F**). The EC objective is being met and no corrective measures are necessary. **Future Management Activities:** Semi-annual inspections of the EC should continue as required by the *SMP*.
Fencing around the perimeter of the Site.	**Objective:** Site security and access control is provided by fencing that encloses the parking lot. The objective of the fence is to prevent the public from entering the property and disturbing the ECs. **Monitoring Requirements:** The integrity of the fence and gate should be inspected semi-annually. Inspections will note any deficiencies, and maintenance should be performed to correct them. **Performance Evaluation Criteria:** If the fence remains intact and prevents the public from entering the property, then the objective of this EC is being met. **Status:** The fencing around the perimeter of the parking lot remains intact. Furthermore, the Site is now utilized as a warehouse and is more secure. Therefore, the public is less likely to access the building (see **Appendix F**). The EC objective is being met and no corrective measures are necessary. **Future Management Activities:** Semi-annual inspections of the EC should continue as required by the *SMP*.

4.2 EC Conclusions

During this reporting period, the Site was purchased by Frontseat, LLC and leased to Winsupply, Inc. Between November 2014 and February 2014, the Site building was refurbished into a commercial warehouse that stores and sells fire sprinkler components. Due to operations at the Site, the epoxy resin coating on the interior floor of the building and the asphalt cover were adversely affected in select areas and requires corrective measures. The asphalt cover was damaged when a small area was excavated to repair a water line and was subsequently left unpaved by the Tenant. However, all other ECs are currently in good condition and meeting their objectives.

A corrective action plan was submitted to the NYSDEC in February 2014 to address the deficiencies observed with the epoxy resin and the surface of the asphalt cover. A corrective action plan will be

submitted under a separate cover to restore the excavated area of the asphalt cover to remain in compliance the *SMP*.

4.3 IC Compliance Report

The purpose of this section is to: (a) describe each IC, its objective and how performance of the IC is evaluated; (b) summarize the status of each IC; (c) describe the corrective measures taken to address any deficiencies; and, (d) provided future management activities per the *SMP*.

Site-Wide Inspection Forms that were completed by or under the direction of a qualified environmental professional (QEP) are provided in **Appendix E** to support the discussion on the status of each IC, where applicable.

Institutional Control (IC)	SUMMARY OF IC
All ECs on the Controlled Property (i.e., the Site) must be inspected at a frequency and in a manner defined in the *SMP*.	**Objective:** To ensure that the ECs are inspected and, if necessary, maintained to eliminate exposure to residual contamination at the Site. **Monitoring Requirements:** Comprehensive Site-wide inspections should be conducted annually, regardless of the frequency of the PRR. Semi-annual inspections are required for ECs. **Performance Evaluation Criteria:** If comprehensive Site-wide inspections are conducted annually and ECs are inspected semi-annually, then the objective of this IC is being met. **Status:** A comprehensive Site-wide inspection was completed by a QEP in July 2013 and on behalf of the QEP in February 2014. Therefore, this IC is in compliance. Refer to **Section 4.1** for further details on the status of each EC. **Future Management Activities:** Semi-annual inspections of the ECs should continue as required by the *SMP*. A comprehensive site-wide inspection should be completed annually per the *SMP*.

Institutional Control (IC)	SUMMARY OF IC
Compliance with the Environmental Notice, executed in March of 2012, and the *SMP* by the Grantor (i.e., property owner) and the Grantor's successors and assigns (i.e., any future tenants/owners).	**Objective:** To ensure that the current or future property owner(s)/tenant(s) are aware of the requirements of the *SMP* and Site restrictions. **Monitoring Requirements:** Annual or semi-annual Site-wide inspections should be conducted to ensure compliance with the Environmental Notice and the *SMP* (or any updated environmental notices/SMPs). **Performance Evaluation Criteria:** If the Environmental Notice and *SMP* is being complied with, then the objective of this IC is being met. **Status:** In June 2013, Frontseat, LLC entered into an Environmental Easement agreement for the subject Site which requires compliance with the *SMP*. A copy of this document is provided in **Appendix H**. In November 2013, the Site was leased to Winsupply, Inc. Soil excavation was completed by the Owner to repair a water line without notification to the NYSDEC which is in direct violation of the requirements set forth in the existing Environmental Easement. **Corrective Measures**: The NYSDEC notified the Site owner and requested compliance with the *SMP* in March 2014. **Future Management Activities:** Annual or semi-annual Site-wide inspections should continue to be performed as required by the *SMP*.
Data and information pertinent to the Site management activities related to the Controlled Property (i.e., the Site) must be reported at the frequency and in manner defined in the *SMP*.	**Objective:** To identify and report any issues with the ECs/ICs at the Site and report any issues within a reasonable timeframe so that corrective actions can be taken to protect the public health. **Performance Evaluation Criteria:** If data and information pertinent to the Site management activities are being reported, then the objective of this IC is being met. **Status:** All deficiencies to the ECs/ICs and changes to Site conditions were communicated to the NYSDEC within the required timeframes as per the *SMP*. **Future Management Activities:** Continue to report all future Site management activities in accordance with the *SMP* or as directed by the NYSDEC.

Institutional Control (IC)	SUMMARY OF IC
Excavation Work Plan, if applicable.	**Objective:** To eliminate the potential exposure to remaining contamination at the Site and to properly manage waste in the event soil excavation is necessary to complete Site redevelopment activities. **Monitoring Requirements:** Any work that will penetrate the soil and asphalt cover system, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan that is attached as an appendix to the *SMP*. **Status:** Disturbances to the soil beneath the Site and asphalt cover were conducted between November 2013 and February 2014 by the current Owner or Tenant to repair a water line without notification the NYSDEC. **Corrective Measures**: The NYSDEC submitted a letter to the Owner and Tenant requesting compliance with the *SMP* for all future ground disturbance work on March 7, 2014 via electronic mail. No other corrective measures are necessary. **Future Management Activities:** Ensure the excavation work plan in the *SMP* is followed if future Site redevelopment activities are necessary by the current or future Site owner(s) or tenant(s).
Groundwater monitoring must be performed as defined in the *SMP*.	**Objective:** To monitor the effectiveness of the remedial activities (soil excavation and installation of an asphalt cover) conducted at the Site and to monitor that groundwater has not been negatively impacted as a result of the remedial activities. **Monitoring Requirements:** Groundwater sampling is required at the existing well network on a semi-annual basis for up to 10 years or as determined by the NYSDEC. **Performance Evaluation Criteria:** If groundwater monitoring is completed per the *SMP* or at the request of the NYSDEC and concentrations are compared to the July 2011 baseline sampling results, then then the objective of this IC is being met. **Status:** Groundwater sampling was completed in July 2013 and February 2014 in accordance with the *SMP* and the results of the groundwater monitoring are detailed in **Section 3**. Therefore, this IC is in compliance. **Future Management Activities:** Conduct semi-annual sampling through 2021 unless otherwise direct by the NYSDEC per the *SMP*.

Institutional Control (IC)	SUMMARY OF IC
Submission of periodic review reports (PRRs) and Electronic Data Deliverable (EDD) to the NYSDEC Electronic Information Management System (EIMS).	**Objective:** To ensure that the Site management activities are being communicated and reported to the NYSDEC. **Monitoring Requirements:** The *SMP* requires that the first PRR is to be submitted 18 months after the completion of the June 2012 *FER*, and every 3 years thereafter (or at the request of the NYSDEC). There is no timeframe for when EDDs are to be submitted in the *SMP*. However, it should be submitted within a reasonable timeframe or at the request of the NYSDEC. **Performance Evaluation Criteria:** If PRRs and EDDs are being submitted in accordance with the *SMP*, then then the objective of this IC is being met. **Status:** The first *PRR* was submitted to the NYSDEC in May 2013. Therefore, the next PRR is due 3 years after unless otherwise requested by the NYSDEC. The NYSDEC requested a PRR report for the reporting period between May 2013 and April 2014. EDDs for the July 2013 and February 2014 groundwater sampling activities completed were submitted in October 2013 and May 2014, respectively, to the NYSDEC. **Future Management Activities:** Submit future PRRs and EDDs at the required interval or at the request of the NYSDEC.

4.4 IC Conclusions

In general, all ICs are in compliance with exception of the Site Owner, Frontseat, LLC, and the Tenant, Winsupply, Inc., failing to comply with one of the requirements of the Environmental Easement and the *SMP*. Specifically, between November 2013 and February 2014, the Tenant conducted soil excavation activities on the northern portion of the Site to repair a water line without notification to the NYSDEC or compliance with the Excavation Work Plan. Therefore, this was in direct violation of the Environmental Easement and requirements of the *SMP*. The NYSDEC notified the property owner of this issues and required compliance in the future.

4.5 ECs/ICs Certification

Based on the details provided in **Section 4.1** through **Section 4.4**, ECs/ICs are generally in compliance with the requirements of the *SMP*. However, corrective measures for the asphalt cover and the epoxy resin coating are necessary to be in full compliance with the *SMP*. Therefore, the ECs could not be certified as in place and functioning as designed. A copy of the ECs/ICs certification form is provided in **Appendix I**.

5.0 REMEDY PERFORMANCE, EFFECTIVENESS & PROTECTIVENESS EVALUATION

As detailed under **Section 4.0**, ECs/ICs were required to be implemented at the Site to protect human health and the environment. The primary objectives of the ECs/ICs are to prevent direct contact with residual contamination at the Site and to monitor groundwater quality (primarily pesticides) to evaluate the effectiveness of the asphalt cover.

Due to Site operations during the monitoring period, the epoxy resin coating does not appear to be able to withstand general forklift operations in select areas; therefore, an additional protective barrier (e.g., industrial matting) must be used to try and limit further damage. There is likely no risk to exposure via direct contact with the pesticide-impacted concrete surface since approximately 99% of the epoxy remains in good shape (i.e., both layers are intact), activities at the Site do not require extensive contact with the epoxy floor (i.e., most materials are being stored on shelves and not contacting the floor), and it was communicated that personnel should avoid contact with the exposed areas until maintenance and repair activities could be completed.

The excavated area where the water line repair occurred needs to be resealed with asphalt; however, it is unlikely that contact will be made with the residual pesticides as the soil as this area was backfilled. Approximately 99% of the asphalt cover remains intact; therefore, this remedy is still generally effective at limiting direct contact with pesticide impacts in soil and minimizing groundwater infiltration. However, to remain in compliance with the *SMP*, the asphalt cover should be repaired.

As detailed in **Section 2.0**, pesticides are the primary contaminant of concern and based on the monitoring results presented in **Section 3.0**, specific compounds of dissolved-phase pesticides remain above the GWQS and are increasing at select on-Site, hydraulically upgradient, and downgradient monitoring wells. However, select compounds of dissolved-phase pesticides were also observed be decreasing at several on-Site, hydraulically upgradient, and downgradient monitoring wells,pesticides have not reached the furthest hydraulically downgradient monitoring wells, and no pesticides have been detected in the public supply/monitoring wells for the Garden City Park area. Therefore, the remedial actions at the Site are effectively controlling the pesticide plume within the boundaries of the Site groundwater monitoring network.

6.0 CONCLUSIONS AND RECOMMENDATIONS

GES, on behalf of the NYSDEC, submitted the first Periodic Review Report (2013 *PRR*) for the Site in May 2013 for the reporting period between March 2012 and March 2013. Based on observed increasing concentrations of pesticides, the 2013 *PRR* recommended supplemental groundwater sampling activities and preparation of an addendum to the *2013 PRR* summarizing the results of two (2) additional sampling events since reporting is only required every 3 years under the *SMP*. This *PRR Addendum* was prepared to summarize the results of the semi-annual groundwater sampling activities and semi-annual Site inspections for the monitored period between March 2013 and March 2014.

In July 2013 and February 2014, groundwater monitoring was conducted in accordance with the *SMP* and the results were compared to the baseline sampling event conducted in July 2011 to determine if groundwater has been negatively impacted following completion of remediation actions at the Site. The following conclusions were drawn based on the additional sampling events:

- Based on the most recent groundwater sampling results, select pesticide compounds were observed to be above the GWQS and increasing as compared to the July 2011 results. However, decreasing concentrations of other pesticides were also observed throughout the monitoring well network, pesticides have not been detected at the farthest hydraulically downgradient monitoring wells, and pesticides were not detected in any public supply/monitoring wells based on available public water quality reports for the area. Therefore, dissolved-phase pesticides are being effectively controlled and monitored within the Site monitoring well network and Site remedial objectives are being achieved.
- Based on the February 2014 sampling event, SVOCs were all below the GWQS and no compounds are increasing when compared to the baseline sampling event conducted in July 2011.
- Based on the February 2014 sampling event, tetrachloroethene was the only dissolved-phase VOC compound detected above the GWQS and was only found at a hydraulically upgradient monitoring well MW-9D. Therefore, this increase in tetrachloroethene concentration is not related to Site remedial activities. Some increasing dissolved-phase VOCs concentrations were detected at on-Site and hydraulically downgradient monitoring wells when compared to the baseline sampling event; however, all of these VOCs are currently below the GWQS.
- The only metal detected above the GWQS with increasing trends in the monitoring well network is sodium (at on-Site monitoring well MW-6, downgradient monitoring well MW-7D, and upgradient monitoring wells MW-9S and MW-9D). No other metals were detect above the GWQS and increasing in concentration when compared to the baseline sampling event. Based on baseline concentrations at monitoring wells MW-10R and MW-11R, all current dissolved-phase sodium concentrations are below the maximum background levels detected during baseline groundwater sampling. Therefore, the

In addition to the groundwater sampling activities, Site visits were conducted to evaluate the condition of existing ECs. In June 2013, the Site was purchased by Frontseat, LLC; however, the property remained vacant up until November 2013. In November 2013, Frontseat, LLC, leased the property to Winsupply, Inc (the Tenant). Between November 2013 and February 2014, the building was refurbished for use as a commercial warehouse. Based on the most recent inspections, the following was concluded:

- The epoxy resin coating was cracked and chipped in select areas due to forklift operations and requires corrective measures. Corrective measures were proposed in February 2014 and the

NYSDEC has approved funding to proceed with implementation. This work is anticipated to be completed in June or July 2014.

- The asphalt cover was also cracked in select areas; however, these appear to be topical and needs minor maintenance. An application of an asphalt sealant was proposed as a corrective measure in February 2014 and this work is anticipated to be completed in June or July 2014.
- Soil excavation was completed on the northern portion of the Site by the Tenant to repair a water line without notification to the NYSDEC.
- All other ECs (e.g., storm drain, security fence, etc) were in good condition and in compliance with the *SMP*.

All ICs were in compliance with exception to the IC requiring the Site owner/tenant to comply with the requirements of the Environmental Notice and the *SMP*. Specifically, the lack of notification of soil excavation activities to the NYSDEC was in direct violation of the *SMP*. The NYSDEC notified Frontseat, LLC and requested compliance with the Environmental Notice for all future activities.

Based on the information provided in this *PRR Addendum*, GES recommends the following actions:

- Discontinuation of groundwater sampling analysis for SVOCs, VOCs, and metals in all future sampling events.
- Completion of groundwater monitoring activities for pesticides in accordance with the *SMP*. The next round of sampling should be completed in July 2014 unless otherwise directed by the NYSDEC.
- Complete semi-annual Site inspections in accordance with the *SMP*;
- Installation of industrial matting as proposed in March 2014 to cover the epoxy resin coating in order to mitigate further damage by forklift operations or general Site use. Upon completion of this work, the existing *SMP* should be updated to reflect this additional EC which should remain intact and maintained in perpetuity, unless otherwise directed by the NYSDEC.
- Repair of the observed asphalt cracks in the parking lot using an asphalt sealant as proposed in February 2014.

  A corrective action plan should be submitted to the NYSDEC (including a cost analysis) for repair of the damaged asphalt cover in the northern portion of the Site where excavation was conducted to repair a water line. The work will be completed upon approval of the correction action plan and funding. A summary of this work, along with any other corrective measures, will be provided 45 days after completion.

- The *SMP* should be updated following NYSDEC approval of recommendations and the corrective measures summary report to memorialize the change in the GMP (eliminate analysis for SVOCs, VOCs, and metals) and the addition of the industrial matting EC.

The *SMP* requires periodic review reports to be submitted triennially following the submission of the first report in May 2013. Unless otherwise directed, GES will continue to perform semi-annual inspections and groundwater monitoring and submit the next periodic review report three (3) years after submittal of this *PRR Addendum* in May 2017 in accordance with the existing *SMP*.