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NYSDEC REGION 5  
ENVIRONMENTAL QUALITY

Site No. ~~546031(OU-4)~~ <sup>558041</sup> RD/H

**Site Management Plan**

**Irving Tissue, Inc.**

1 Eddy Street

Fort Edward, NY

VERTEX Project No. 15243

**VERTEX**

**Prepared By:**

VERTEX Environmental Services, Inc.

400 Libbey Parkway

Weymouth, MA 02189

**July 29, 2010**

**Prepared For:**

New York State Department of Environmental Conservation

Division of Environmental Remediation

1115 Route 86

Ray Brook, NY 12977

**On Behalf Of:**

Irving Tissue, Inc.

1 Eddy Street

Fort Edward, NY

# **VERTEX**

**Environmental Services, Inc.**

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July 29, 2010

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
1115 Route 86  
Ray Brook, NY 12977  
Attn.: Mr. Russell Huyck

**RE:** Site No. ~~546031 (OU-4)~~ 558041 (RDH)  
Site Management Plan  
**Irving Tissue, Inc.**  
1 Eddy Street  
Fort Edward, NY  
VERTEX Project No. 15243

Dear Mr. Huyck:

On behalf of Irving Tissue, Inc. (Irving), Vertex Environmental Services, Inc. (VERTEX) is pleased to submit this Site Management Plan (SMP) which was prepared for a portion of the above referenced property identified as the forebay (aka Blocks 4, 5, and a westerly contiguous portion of land currently owned by National Grid) (the Site) which occupies an area of 43,808 square-feet. FIGURE 1 depicts the Site location and FIGURE 2 depicts the boundary of the referenced forebay.

558041

The SMP has been developed in accordance with the provisions contained in New York State Department of Environmental Conservation (NYSDEC) ("Department") Order On Consent and Administrative Settlement Index # A5-0638-06-10 Site #~~546031~~ ("OU-4") ("Order"). Section 5 of the Order states that the goal of the Order is to facilitate the implementation of a Department approved Site Management Plan during construction activities at the Site. The SMP will be utilized for the proposed construction which includes an industrial building, a warehouse, associated loading docks and a utility duct, and any future development at the Site.

The purpose of this SMP is to facilitate the on-site management and off-site disposal of excess soil that could be generated during construction activities at the Site. Soil at the Site has been

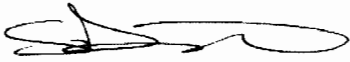
affected by polychlorinated biphenyls (PCBs) and metals at concentrations that require regulated off-site disposal in accordance with relevant NYSDEC and US Environmental Protection Agency (EPA) regulations.

In addition, the proposed SMP contains provisions for the management of excess groundwater affected by PCBs and pentachlorophenol (PCP) that could potentially be generated during construction activities at the Site.

Please do not hesitate to contact us should you have any questions or require additional information.

Sincerely,

**Vertex Environmental Services, Inc.**



Sean E. Dinneen  
Project Manager



Jessica Fox, PE  
Sr. Project Manager



Benjamin B. Strong  
Vice President

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## 1.0 Purpose

The purpose of this Site Management Plan (SMP) is to facilitate the on-site management and off-site disposal of excess soil that could be generated during construction activities at the Site (referenced as the forebay). The Site constitutes a portion of an industrial property that is owned and operated by Irving Tissue, Inc. (Irving) located at 1 Eddy Street in Fort Edward, New York. Refer to **FIGURE 1** for the general Site Locus.

The soil at the Site has been impacted by PCBs and metals at concentrations that require regulated off-site disposal in accordance with relevant NYSDEC and EPA regulations.

The SMP has been prepared in accordance with the NYSDEC Order on Consent and Administrative Settlement ("Order") Index #A5-0638-06-10, Site #<sup>5580-11</sup>546031 ("OU-4") and pursuant to the provisions contained in 6 NYCRR 375 and NYSDEC Technical Guidance for Site Investigation and Remediation DER-10, dated May 2010.

In addition, contained herein are provisions for the management of excess groundwater impacted with PCBs and PCP that could be generated during the proposed and future construction activities.

Finally, the proposed SMP contains provisions for environmental monitoring, health and safety requirements, and erosion control.

## 2.0 Summary of the Site History

The following is a summary of the Site history and usage. Details regarding the Site history and usage are contained in a Record Search Report prepared by VERTEX pursuant to the provisions contained in "Exhibit B" of the above referenced NYSDEC Order. The Record Search Report is contained in **APPENDIX A**. Please refer to Exhibit B of the NYSDEC Order for completed documentation of applicable historic reports and information.

As shown on the enclosed **FIGURE 2**, the Site consists of the western portion of the Irving property that is currently paved with asphalt and is used for truck access and trailer parking.

The Site is located within a former Hudson River forebay that diverted water from the Hudson River through an excavated channel into a power generating facility. A depiction of the former Hudson River forebay is contained in the above referenced Record Search Report (**APPENDIX A**). The former forebay was created by a dam that extended across the Hudson River and diverted water into a turbine house for the purposes of power generation. As such, sediments from the Hudson River were deposited in the forebay and turbine area of the Site. In 1973, while the Site was owned and operated by Scott Paper, power generation ceased, the dam was demolished and the Hudson River reverted to its natural course. Subsequently, the area of the forebay was filled and the current Site configuration was achieved. Based on readily available historic information, and on the results of investigatory work performed at the Site to-date, the fill that was utilized at the former forebay area appears to contain significant amounts of rubble that was generated during the demolition of the former dam as well as pulp and wood that resulted from the long utilization of the Site for the manufacturing of paper products by International Paper (1898-1944), Marinette Paper (1944-1961), and Scott Paper (1961-February 1996). Subsequent to the use of the dam and turbine, and the filling of the forebay, owners included Kimberly Clark (February 1996-August 1996) and the current owner/operator, Irving Tissue (August 1996-present).

During the many years of the hydroelectric power generation, sediments that were carried by the river were deposited across the forebay area. Readily available information indicates that river sediments that were deposited across the forebay area have been impacted by PCBs that emanated from industrial sources located along the Hudson River upstream from the Site. Thus the Site is considered a historic filling, as defined in 6 NYCRR Part 375-1.2(x).

### **3.0 On-Site Material Management**

It is anticipated that limited amounts of excess soil will be generated during the installation of buildings foundations and during other related construction activities. In addition, it is anticipated that relatively small amounts of groundwater will require management under this

SMP. Finally, due to the presence of rubble in the soil across the Site, it is anticipated that rubble may have to be removed from some locations for construction purposes.

The following is a description of the proposed materials management.

### **3.1 On-Site Soil Management**

None of the excess soil generated during the proposed construction will be re-used on-site. The excess soil which may include drill cuttings from the pre-drilling operations, utility trench excavations, and other construction-related activities will be containerized pursuant to the requirements contained in 40 CFR 761.61(B) in appropriate roll-off containers (or equivalent) that meet the US Department of Transportation (DOT) Hazardous Material Regulations (HMR) contained in 49 CFR 171-180. The containers will be lined with 6-mil polyethylene sheeting and covered appropriately.

### **3.2 On-Site Groundwater Management**

Limited amounts of excess groundwater are anticipated to accumulate as a result of the proposed construction activities. The excess groundwater generated from construction activities will be captured and stored on-site in appropriate tanks/containers as described in 40 CFR 761.61(b)(1).

### **3.3 On-Site Solid Waste Management**

Rubble, generally consisting of concrete, steel, asphalt and brick will be temporarily stockpiled on-site. Soil that may be excavated together with the rubble will be segregated and stored together with other excess soil in roll-off containers. None of the rubble materials will be re-used on-site. Occasionally, wood rubble could be generated. Representative samples of wood rubble will be obtained and tested for waste profiling, as necessary.

## **4.0 Off-Site Disposal**

### **4.1 Soil**

All of the excess soil generated during the construction-related activities subject to this SMP will be disposed of at a NYSDEC regulated off-site facility as Toxic Substance Control Act (TSCA) waste under 40 CFR 760.61. In-situ soil characterization data as obtained from previous assessments and summarized in the Record Search Report (**APPENDIX A**) will be utilized for waste profiling, as necessary, and provided to the disposal facility. Additional sampling and chemical analysis may be required to facilitate off-site disposal. Any additional sampling and testing will be conducted in accordance with relevant NYSDEC regulations and the receiving facility's requirements.

### **4.2 Groundwater**

Excess groundwater generated during construction activities at the Site will be disposed of at a NYSDEC regulated off-site facility in accordance with the provisions contained in 40 CFR 761.61.

Groundwater characterization data as obtained from previous assessments and summarized in the above referenced Record Search Report (**APPENDIX A**) will be utilized for waste profiling, as necessary. If additional sampling/analysis is required, it would be conducted in accordance with NYSDEC regulations and the receiving facility's requirements.

### **4.3 Rubble and Solid Waste**

Rubble and solid waste generated during the construction-related activities subject to this SMP will be disposed of at a NYSDEC regulated off-site facility as Toxic Substance Control Act (TSCA) waste under 40 CFR 760.61. Sampling and chemical analysis may



be required to facilitate off-site disposal. Any sampling and testing will be conducted in accordance with relevant NYSDEC regulations and the receiving facility's requirements.

#### **4.4 Documentation**

All off-site disposal activities will be documented and off-site shipments of any of the above materials will be accompanied by appropriate manifests in accordance with NYSDEC regulations (6 NYCRR Parts 364 and 372).

#### **5.0 Clean Fill and Capping**

Clean fill soil brought on-Site will be comprised of soil or other unregulated material as set forth in Part 360 and will not exceed the applicable soil cleanup objectives for the use of the site, as set forth in Tables 375-6.8(a) or (b) as outlined in Part 375-6.7(d) and DER-10 Section 5.4.

Pursuant to the provisions contained in DER-10 Section 4.1(f) a soil cover is considered as part of the site remedy. The provisions contained in DER-10 Section 4.1(f)(2)(ii) indicate that the soil cover will include a minimum of one foot (12-inches) of compacted soil that meets the criteria contained in 375-6.8(a) or (b), 375-6.7(d) and DER-10 (5.4) or a minimum of 6-inches of asphalt pavement or concrete. Capping within proposed building footprint areas will include at least 6-inches of concrete. Capping in areas of proposed pavement will include either: (1) a minimum of 6 inches of pavement or (2) if asphalt pavement is less than 6-inches in thickness, 12-inches of clean fill must be placed beneath the asphalt. Potential landscaped areas will include at least 12-inches of compacted clean fill overlain by loam or topsoil, as appropriate. Utility corridors will be boxed out with clean fill, as described above, and capped with at least 12-inches of compacted soil or concrete/asphalt, as appropriate, based on the above.

Any excavation of impacted soil situated beneath the above referenced capping materials will be performed in accordance with the provisions contained in this Soil Management Plan.

## **6.0 Stockpiling, Erosion Control and Environmental Monitoring**

As noted above, the proposed SMP contains provisions for containerizing the excess soil and groundwater as it is generated during construction activities. Thus no stockpiling of soil is anticipated. However, if temporary stockpiling of soil becomes necessary, the stockpile will be placed on a 6-mil polyethylene substrate, covered with polyethylene and surrounded by hay bales or a silt fence to mitigate potential migration of silt affected by PCBs and metals.

In addition, if necessary, erosion control measures will be implemented at the locations that will require pre-drilling for the pile installation, or at other locations at the Site where excavation activities are anticipated.

The current proposed construction includes the installation of piles, potential pile caps and associated grade beams, as well as the construction of loading docks and a utility duct. As such, significant soil excavation and/or stockpiling are not currently expected. Therefore, continuous air quality/particulate monitoring does not appear warranted at this time. However, construction activities such as the stockpiling of soil, asphalt stripping by where subsurface is exposed potentially generating dust, or large utility excavation/trenching, will require air quality/particulate monitoring. Limited construction activities by where dust generation does not appear significant, such as roof drain, light pole, and fence post installation, etc, are not expected to be monitored.

If necessary and as described above, air quality at the Site and at the perimeter of the Site will be monitored in accordance with a Community Air Monitoring Plan (CAMP) that has been prepared for the Site. The CAMP is contained in **APPENDIX B**. The results of the investigatory work performed at the Site to-date (refer to **APPENDIX A**) indicate that volatile organic compounds (VOCs) were not detected at significant concentrations in the tested soil and groundwater samples obtained from the Site. Thus VOCs are not considered contaminants of concern at the Site and are not addressed in the CAMP. However, the CAMP contains provisions for the monitoring of particulate matter within the Site and along the Site perimeter.

Since neither PCBs nor the identified metals readily volatilize in ambient air, the monitoring of the dust concentrations in the ambient air is considered sufficient.

As indicated in the CAMP, real-time monitoring for particulates (visual and measured concentrations) at the perimeter of the Site and at each designated work area when certain activities are in progress will be performed. Particulate concentrations in the ambient air will be monitored and the results will be compared with Target Air Quality Level established for the Site in the CAMP (refer to **APPENDIX B**). In addition, the CAMP establishes an action level that if exceeded, triggers the implementation of dust mitigating measures. Finally, the CAMP established procedures for record keeping will be implemented.

In accordance with the provisions contained in NYSDEC Technical Guidance for Site Investigation and Remediation DER-10, a Community and Environmental Response Plan (CERP) is required for certain sites where the remedial action requires controls, monitoring or work practices to address the potential for short-term impacts to the surrounding community or environmental resources. Since the proposed SMP activities are not considered a remedial action and excavation into subsurface soils affected by PCBs and metals will be limited in nature and relatively minor, the preparation of a CERP is not considered a requirement for the Site.

## **7.0 Health & Safety Plan**

A Health and Safety Plan (HASP) will be prepared by a Certified Industrial Hygienist (CIH) retained by the Construction Manager or by the Contractor for use by all personnel involved in the construction activities and by occasional visitors. The HASP will address health and safety requirements including, but not limited to, the implementation of personal protective measures and usage of personal protective equipment. The HASP will be kept on-site at the construction office and the Contractor or the Construction Manager will appoint a health and safety officer, as required by relevant Occupational Safety and Health Administration (OSHA) regulations, to oversee the implementation of the HASP.

In addition, the HASP will establish Site controls such as access limitations (fence and gates), decontamination of construction equipment, washing of trucks before leaving the Site and sweeping of nearby streets in order to minimize potential spreading of soil that may be affected by PCBs and metals. However, these actions will only be implemented as deemed necessary based on particular construction activities such as asphalt stripping or any other activity by where trucks become in contact with exposed soil and leave the site.

### **8.0 Confirmation Sampling**

As noted above, the proposed activities under this SMP are not considered remedial actions and removal of soil affected by PCBs or metals will be limited to those locations where the installation of the piles will require pre-drilling in order to advance the proposed piles through subsurface obstructions or where minor quantities of soil may be expected to be removed in association with future projects. Therefore, confirmation sampling, as described in the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, is not considered to be required.

### **9.0 Restoration**

As noted in Section 8 above, the proposed SMP does not include remedial activities that would require the installation or dismantling of remedial structures. However, existing groundwater monitoring wells situated within the Site boundaries will be decommissioned in accordance with the current NYSDEC Commissioner's Policy on Groundwater Monitoring Well Decommissioning.

### **10.0 Schedule**

It is anticipated that the proposed SMP will be implemented during the upcoming construction of the proposed industrial buildings commencing in the summer of 2010 and is considered to be in effect for all future related construction activities within the forebay area.

## **11.0 Public Notice**

Within thirty (30) days after the effective date of the Order, public notice will be filed with the local municipality and within sixty (60) days of such filing, a copy will be provided to NYSDEC.

## **12.0 Progress Reports and Citizen Participation Plan**

Progress reports will be prepared and submitted to NYSDEC by the 10<sup>th</sup> day of each month commencing with the month subsequent to the approval of the first work plan in accordance with Section III within the Order. Such reports will include information pertaining to, actions taken pursuant to the Order, approved modifications, sampling and testing results, percentage complete, delays, etc., as applicable.

Since the proposed SMP activities are not considered a remedial action and excavation into subsurface soils affected by PCBs and metals will be limited in nature and relatively minor, a Citizen Participation Plan is not considered a requirement for the Site.

## **13.0 Closure Report and Institutional Control**

Subsequent to the completion of the activities subject to this SMP, a Closure Report will be prepared in accordance with the provisions contained in NYSDEC DER-10-6(6.5). The Closure Report will summarize the activities described in this SMP and will contain records of on-site management and off-site disposal of soil and/or groundwater affected by PCBs, PCP, and/or metals. The Closure report will be submitted to the NYSDEC as required.

Future limited construction activities, such as roof drain, light pole, and fence post installation, etc, will be documented and kept on file at Irving Tissue for future reference. As such, limited maintenance construction activities will not warrant additional NYSDEC/Closure Report Submittals.

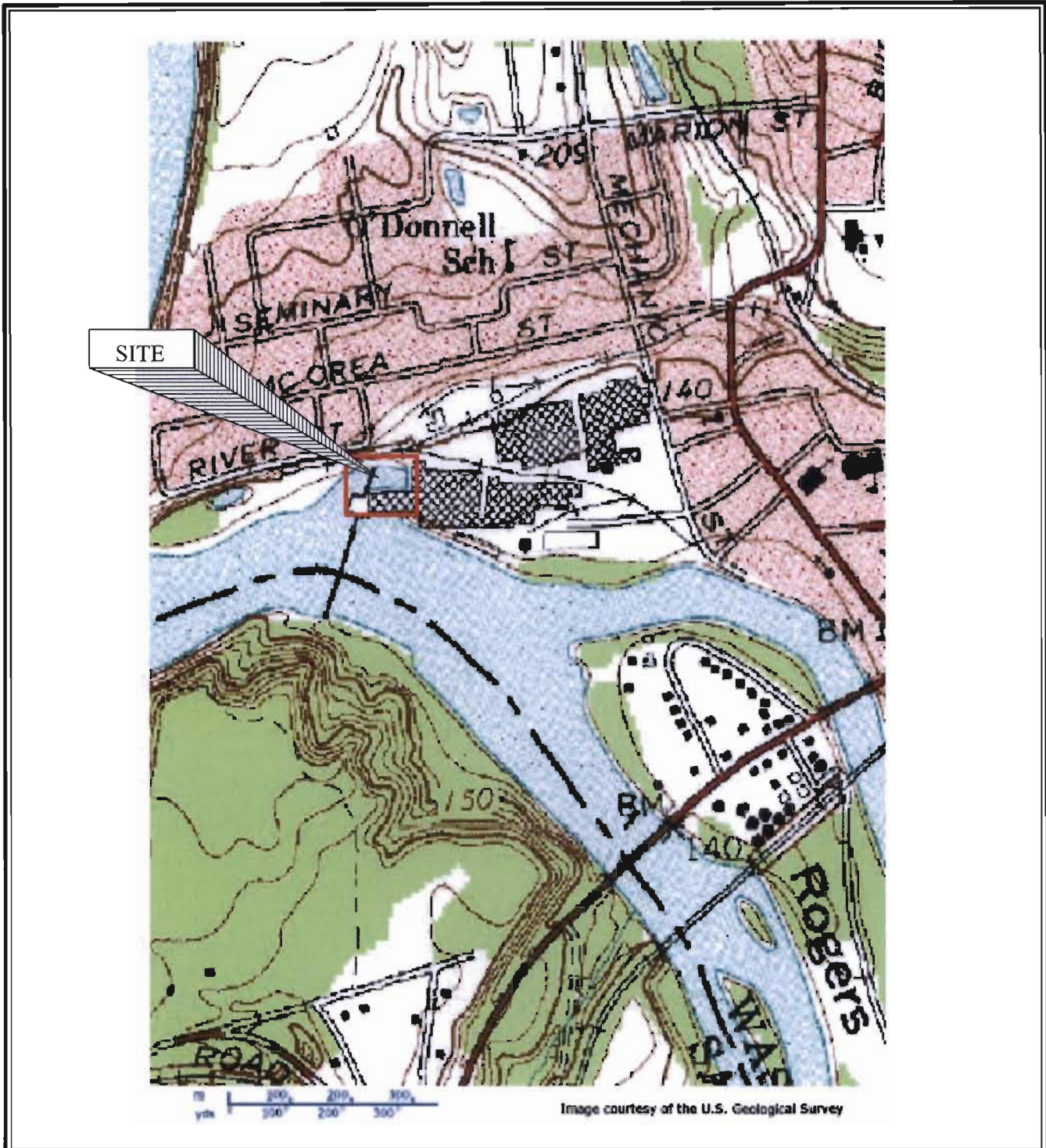
Although activities under the proposed SMP are not considered a remedial action, an Institutional Control (IC) (prepared in accordance with NYSDEC DER-10 5.6) will be implemented to restrict activities at the Site and to ensure that potential future uses of the Site, other than the current industrial usage, would not result in a significant risk of harm to human health. Permitted activities will be limited to current industrial usage of the Site. Restricted activities will include uses such as residential, commercial usage other than the current industrial usage, growing of fruit and vegetable for human consumption or the use of the Site for a child daycare facility or a playground. The deed restriction will be prepared and filed in accordance with NYSDEC DER-10-5.6 (c). The deed restriction will include the Order on Consent, this SMP, and any required property transfer notifications and requirement as described in the Property Transfer section below.

A copy of the deed restrictions, as filed with the appropriate Registry of Deeds, will be provided to NYSDEC and a public notification thereof will be made in accordance with the provisions contained in NYSDEC DER-10.

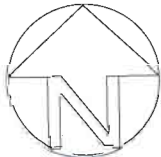
#### **14.0 Property Transfer**

In the event of property transfer, NYSDEC will be notified that the prospective purchaser has been provided a copy of the Order which includes the SMP described herein as to continue compliance with the Order and applicable SMP. In addition, notice will be submitted to NYSDEC which will include the name of the new owner and the new owner's contact information, including a contact representative and the contact information for such representative all in accordance with Subpart 375-1.11(d).

**FIGURES**



USGS Topographic Map, 1966  
 Ft. Edward, NY Quadrangle



**SITE LOCUS MAP**

Irving Tissue  
 1 Eddy Street  
 Ft. Edward, NY

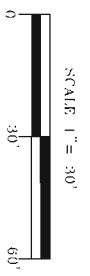
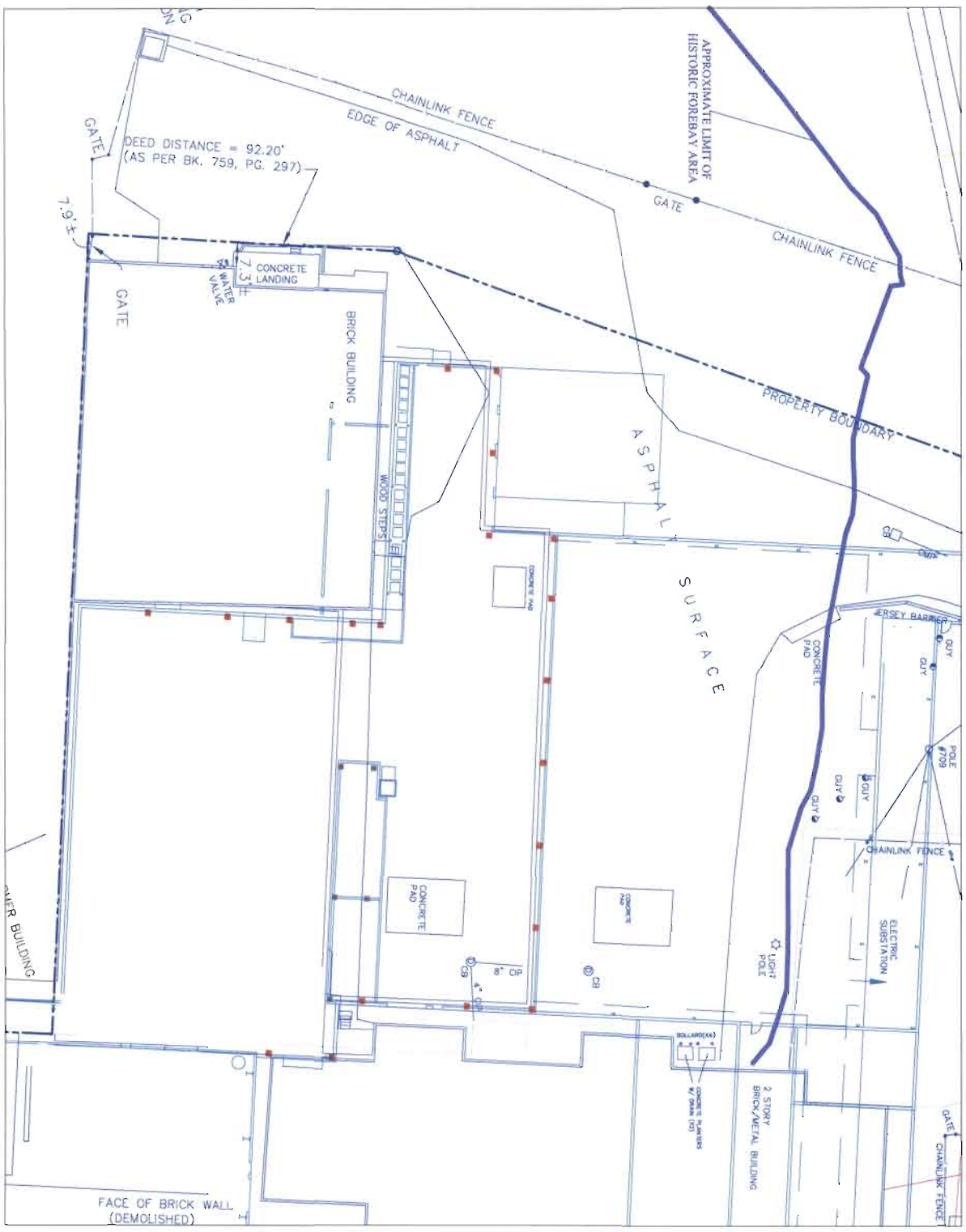
Scale: As Shown

July 2010

Project No. 15243

**VERTEX**  
 Environmental Services, Inc.  
 FIGURE NO. 1





**VERTEX**  
 Environmental Services, Inc.  
 VERTEX@vertextg.com

**Project:** IRVING TISSUE  
 1 EDDY STREET  
 FORT EDWARD, NEW YORK

**Drawing Title:** SITE SCHEMATIC

**Date:** July 2010

**Job Number:** 15243

**Figure No.:** 2

**APPENDIX A**  
**RECORD SEARCH REPORT**

**Site No. 546031 (OU-4)**  
**Exhibit B** – Records Search Report  
Index # A5-0638-06-10  
**Irving Tissue, Inc.**  
1 Eddy Street  
Fort Edward, NY  
VERTEX Project No. 15243

**VERTEX**

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**Prepared By:**

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400 Libbey Parkway  
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**July 29, 2010**

**Prepared For:**

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
1115 Route 86  
Ray Brook, NY 12977

**On Behalf Of:**

Irving Tissue, Inc.  
1 Eddy Street  
Fort Edward, NY

## INTRODUCTION

This Exhibit B – Records Search Report has been developed in accordance with the provisions contained in New York State Department of Environmental Conservation (NYSDEC) (“Department”) Order On Consent and Administrative Settlement Index # A5-0638-06-10 Site #546031 (“OU-4”) (“Order”). Exhibit B – Records Search Report included within contains details regarding available relevant environmental data/reports/information for the Site, a comprehensive list of relevant reports including titles, authors, dates, and subject matter, and a concise summary of the described relevant information.

## SUMMARY

The Site constitutes a portion of an industrial property that is owned and operated by Irving Tissue, Inc. (Irving) located at 1 Eddy Street in Fort Edward, New York. The Site occupies an area of approximately 43,808 square-feet. The Site is located within a former Hudson River forebay that diverted water from the Hudson River through an excavated channel into a power generating facility. The former forebay was created by a dam that extended across the Hudson River and diverted water into a turbine house for the purposes of power generation. As such, sediments from the Hudson River were deposited in the forebay and turbine area of the Site. In 1973, while the Site was owned and operated by Scott Paper, power generation ceased, the dam was demolished and the Hudson River reverted to its natural course. Subsequently, the area of the forebay was filled and the current Site configuration was achieved. Based on readily available historic information, and on the results of investigatory work performed at the Site to-date, the fill that was utilized at the former forebay area appears to contain significant amounts of rubble that was generated during the demolition of the former dam as well as pulp and wood that resulted from the long utilization of the Site for the manufacturing of paper products by International Paper (1898-1944), Marinette Paper (1944-1961), and Scott Paper (1961-February 1996). Subsequent to the use of the dam and turbine, and the filling of the forebay, owners included Kimberly Clark (February 1996-August 1996) and the current owner/operator, Irving Tissue (August 1996-present).

During the many years of the hydroelectric power generation, sediments that were carried by the river were deposited across the forebay area. Readily available information indicates that river sediments that were deposited across the forebay area have been impacted by polychlorinated biphenyls (PCBs) that likely emanated from industrial sources located along the Hudson River upstream from the Site. Thus the Site is considered a historic filling, as defined in 6 NYCRR Part 375-1.2(x).

The following summarizes the environmental data and information contained within Exhibit B – Records Search Report. Please refer to the identified reports for more specific details including text, schematics and summary tables.

1) *Confirmatory Soil Sampling\_ENSR International\_9-13-2002* for Irving Tissue, Inc.

ENSR performed a subsurface investigation in two (2) locations at the Irving facility to identify the potential presence of PCBs within the footprint of two (2) proposed building expansions (one being the relevant forebay area expansion). Six (6) of the eighteen (18) soil borings were advanced in the area of the forebay. Soil samples were collected at three (3) distinct depth intervals including 0-6” below grade surface (bgs), 5-5.5’ bgs, and 10-10.5’ bgs. Laboratory results identified PCBs at concentrations above 1mg/kg within the surficial soil. PCBs were not identified at concentrations above 10 mg/kg within the deeper intervals. ENSR recommended that if excavations deeper than 10-feet bgs are proposed, then a targeted boring plan should be undertaken to determine potential PCB content at depth.

2) *Limited Subsurface Investigation\_O’Brien & Gere (OBG)\_5-20-2009* for Irving Tissue, Inc.

On April 14, 2009 and April 15, 2009, OBG advanced ten soil borings (SB-1 through SB-10), and installed two overburden temporary groundwater monitoring wells (at SB-03 and SB-09) with a tractor-mounted Geoprobe drill rig at the overall facility. Soil samples collected in five soil borings (SB-02, SB-03, SB-05, SB-09 and SB-10) were found to contain PCBs at concentrations ranging from 2.419 to 20.316 mg/kg. Two of these borings (SB-09 and SB-10) were located on the southern edge of Block 4 in the forebay, where PCBs were detected in this general area during the previous ENSR investigation. PCBs were detected in monitoring well TMW-2/SB-09 at a total concentration of 3.709 ug/l.

3) *Human Health Risks Associated with Future Construction Activities in Block 4 Memorandum\_OBG\_10-23-2009* for Irving Tissue, Inc.

OBG contracted Paradigm Environmental Services, Inc. of Rochester, New York to perform an exposure assessment based on the soil analytical analysis for PCBs that were collected by ENSR, during a subsurface investigation conducted in the Block 4 area in August of 2002. The highest total PCB level detected in the soil samples collected by ENSR was 4.31 mg/kg. This PCB level

was used to calculate a potential worker exposure, should the soil be disturbed and become airborne. Paradigm addressed incidental ingestion, dust inhalation, and soil vapor as summarized below.

According to Paradigm, PCBs is not expected to be a concern once the new building is constructed because direct contact with subsurface soils will be eliminated since these soils will essentially be capped with an impermeable barrier (i.e., the new building and surrounding pavement) and clean topsoil.

4) *Block 4 Limited Subsurface Investigation\_OBG\_12-18-2009* for Irving Tissue, Inc.

In an attempt to delineate previously identified PCB impacts, OBG performed an additional subsurface investigation at the site. On November 19th and 20th, 2009, OBG advanced seven soil borings (SB-11 through SB-14 and SB-16 through SB-18) with a track-mounted Geoprobe 6610DT drill rig. Due to difficult drilling conditions and the inability for the Geoprobe to reach bedrock at all boring locations, OBG returned to the Site with a hollow stem auger rotary drill rig on December 1st through December 10th, 2009 and installed thirteen additional soil borings (SB-15 and SB-19 through SB-30) and re-drilled five borings (SB-15 through SB-18 and ENSR B-18) to bedrock. Two temporary monitoring wells were also installed (TMW-28 and TWM-29) at two of the soil borings (SB-28 and SB-29, respectively). PCBs were detected in soil at six (6) borings installed during the investigation (SB-16, SB-18, SB-25, SB-26, SB-30 and ENSR B-18) at concentrations above 50 mg/kg. OBG concluded that soils that contain PCBs at these concentrations would be considered a Hazardous Waste under the New York State Hazardous Waste Regulations (6 NYCRR 371.4(e)) and also trigger reporting and remedial action under the Federal Toxic Substance Control Act (TSCA) Regulations (40 CFR 761) governed by USEPA. PCBs were also detected in three monitoring wells, TMW-28 (28.503 ug/l), TMW-29 (3.4 ug/l) and TMW-2 (3.709 ug/l) at concentrations above the TOGS 1.1.1 standard and guidance value (0.09 ug/l) and the USEPA groundwater cleanup concentration for discharge to navigable waters (3 ug/l). The detected concentrations however, at all three wells, were below the USEPA groundwater cleanup concentration for non contact use in a closed system where there are no releases (200 ug/l).

5) *PCB Schematics\_OBG\_12-2009*

OBG prepared three (3) PCB schematics depicting potential/assumed locations of PCB impacted soil.

6) *Sanborn Maps, Topographic Maps, and Aerial Photographs\_Environmental Data Resources\_12-2009*

VERTEX obtained historic information for the development of a conceptual Site model and design of a subsurface investigation to further identify potential PCB concerns.

#### 7) *Pre-Characterization Investigation*\_VERTEX\_3/4-2010

In March and April of 2010, VERTEX performed two (2) subsurface investigations at the Site. Twenty-four soil borings were advanced utilizing hollow stem auger drilling techniques. Six (6) of these soil borings were converted to permanent monitoring wells. VERTEX collected and analyzed soil samples from continuous intervals to the extent feasible and performed two (2) rounds of groundwater sampling via USEPA low flow sampling techniques.

VERTEX collected approximately sixty (60) composite and/or discrete soil samples for varying laboratory analysis including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), 8 RCRA metals, TCLP metals (if necessary), total petroleum hydrocarbons (TPH) – Gasoline and Diesel, PCBs, and general chemistry parameters including reactivity, ignitability, corrosivity, and/or conductance. Laboratory analysis of the soil samples identified PCBs at concentrations ranging from ND to 110 mg/kg. Additional laboratory results are outlined in the summary tables in the attached report.

In March and April of 2010, VERTEX performed two (2) rounds of low flow groundwater sampling at the Site. In March of 2010, VERTEX collected groundwater samples from monitoring wells VMW-1, VMW-2, and VMW-4 for laboratory analysis including VOCs, SVOCs, 13 priority pollutant metals, TPH – Gasoline and Diesel, PCBs, and general chemistry parameters including pH and total suspended solids. Laboratory analysis did not identify PCB concentrations above the laboratory detection limit. However, based on matrix interference, the laboratory method detection limits were above the NYSDEC Ambient Water Quality Standard of 0.09 ug/l. In April of 2010, VERTEX collected groundwater samples from monitoring wells VMW-1, VMW-2, VMW-4, VMW-5, VMW-6, and VMW-7 for laboratory analysis of 13 priority pollutant metals and PCBs. Laboratory analysis of the groundwater samples collected from monitoring wells VMW-1, VMW-4, and VMW-6 identified PCB concentrations of 10.7 ug/l, 2.8 ug/l, and 2.4 ug/l, respectively. PCBs were not identified in the remaining groundwater samples. Additional laboratory results are outlined in the summary tables in the attached report.

#### 8) *Solute Transport Analysis*\_VERTEX\_5-14-2010

VERTEX prepared a solute transport analyses based on modeling parameters and the identification of a modeling concept to estimate the concentration of constituents that would potentially reach the river and the resulting concentrations of the diluted analytes in the river. Two models were used in the analysis. The first model, a two-dimensional solute transport model developed by USEPA titled BIOSCREEN, was used to estimate the retardation factor (attenuation due to adsorption) of the modeled constituents in the aquifer material as groundwater flows toward the river. The second model, a groundwater flow model based on Darcy's Law, was used to calculate the rate of groundwater discharge from the impacted portion of the Site. This discharge rate has been used in conjunction with the Hudson River 7Q10 value calculated from the Fort Edward USGS Gauging Station using the DFLOW 3 computer application. Based on the results of the Solute Transport Analysis performed by VERTEX for PCBs, pentachlorophenol (PCP) and metals and the calculated attenuation of PCBs, PCP and metals detected in the tested groundwater samples, VERTEX concluded that the detected concentrations do not pose a threat of adverse impact to the surface water of the Hudson River.

**The following schematics depict various potential construction plans and layouts at the Site within the forebay area.**

9) *Operating Floor\_198900111D-1001\_Stantec\_12-1-2009*

10) *Pile Foundation\_198900111D-3002\_Stantec\_11-30-2009*

11) *Bale Storage and Next Phase\_Stantec\_6-16-2008*

12) *General Arrangement Layout\_198900111D1089-SK\_Stantec\_3-5-2010*

13) *Electrical Proposed Site and Substation Layout\_Stantec\_12-1-2010*

14) *Site Schematic(Forebay Boundary)\_VERTEX\_7-2010*



## **Exhibit B Documents**

**Site No. 546031 (OU-4)**

**Irving Tissue, Inc.**

1 Eddy Street

Fort Edward, NY

VERTEX Project No. 15243

- 1) *Confirmatory Soil Sampling*\_ENSR International\_9-13-2002 for Irving Tissue, Inc.
- 2) *Limited Subsurface Investigation*\_O'Brien & Gere (OBG)\_5-20-2009 for Irving Tissue, Inc.
- 3) *Human Health Risks Associated with Future Construction Activities in Block 4 Memorandum*\_OBG\_10-23-2009 for Irving Tissue, Inc.
- 4) *Block 4 Limited Subsurface Investigation*\_OBG\_12-18-2009 for Irving Tissue, Inc.
- 5) *PCB Schematics*\_OBG\_12-2009
- 6) *Sanborn Maps, Topographic Maps, and Aerial Photographs*\_Environmental Data Resources\_12-2009
- 7) *Pre-Characterization Investigation*\_VERTEX\_3-2010
- 8) *Solute Transport Analysis*\_VERTEX\_5-14-2010
- 9) *Operating Floor\_198900111D-1001*\_Stantec\_12-1-2009
- 10) *Pile Foundation\_198900111D-3002*\_Stantec\_11-30-2009
- 11) *Bale Storage and Next Phase*\_Stantec\_6-16-2008
- 12) *General Arrangement Layout\_198900111D1089-SK*\_Stantec\_3-5-2010
- 13) *Electrical Proposed Site and Substation Layout*\_Stantec\_12-1-2010
- 14) *Site Schematic (Forebay Boundary)*\_VERTEX\_7-2010

**APPENDIX B**  
**COMMUNITY AIR MONITORING PLAN (CAMP)**

**Site No. 546031(OU-4)**  
**Community Air Monitoring Plan**  
**Irving Tissue, Inc.**  
1 Eddy Street  
Fort Edward, NY  
VERTEX Project No. 15243

**VERTEX**

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**July 29, 2010**

**Prepared For:**

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**On Behalf Of:**

Irving Tissue, Inc.  
1 Eddy Street  
Fort Edward, NY

## 1.0 Purpose and Scope

This Community Air Monitoring Plan (CAMP) has been developed in support of certain Site construction activities as described in the Site Management Plan (SMP) to which this CAMP is appended and made a part thereof. The purpose of this CAMP is to evaluate and document the air quality at the Site and around the Site perimeter during the performance of certain construction activities described in the SMP.

This CAMP has been prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent and Administrative Settlement (“Order”) Index #A5-0638-06-10, Site#546031(OU-4) and pursuant to the provisions contained in NYSDEC Technical Guidance for Site Investigation and Remediation DER-10, dated May 2010.

Action levels for on-Site activities and for the perimeter air monitoring will follow, at a minimum, the requirements of the Occupational Safety and Health Administration (OSHA) Standards for nuisance dust.

The scope of this CAMP is limited to the monitoring of particulate matter (dust) in the ambient air at the Site and the Site perimeter and the establishment of action levels for dust. Excluded from this CAMP is monitoring of vapors of volatile organic compounds (VOCs). Based on the results of the investigatory work performed at the Site to-date, VOCs have not been identified in the Site soil or groundwater at concentrations that require the implementation of response actions under relevant NYSDEC regulations. Thus the soil and groundwater at the Site are not considered a source of vapors of VOCs that could significantly affect the ambient air at the Site or the Site perimeter.

## 2.0 Objectives

The objectives of this CAMP are to define the methods that will be used to monitor the levels of airborne particulate matter during certain construction activities defined in the SMP and relate those measurements to action levels established for the Site. The primary goals of the air monitoring described in this CAMP include:

- Determination if concentrations of Site-related particulates in the ambient air are in excess of the air action levels established for the Site;
- Provide information required for the implementation of dust control measures; and
- Document the implementation of dust mitigating measures and evaluate the effectiveness of such measures in controlling dust so that action levels are not exceeded.

Monitoring the air quality will allow for the timely implementation of dust mitigating measures at the Site work areas and will serve as a controlling measurement to ensure that airborne particulates emanating from the Site do not pose a nuisance to the community surrounding the Site.

### **3.0 Air Monitoring**

Air monitoring will be performed during the activities described in the SMP that have the potential to disturb significant amounts of soil at the Site. Air monitoring will be conducted using direct reading instruments to provide real-time air quality data at upwind and downwind locations at the Site. In addition, visual observations will be performed to identify visible dust.

#### **3.1 Prevailing Wind Direction and Weather Conditions**

Wind speed and direction will be measured daily during those construction activities that require air monitoring in order to optimize the locations of the perimeter air monitoring relative to potential off-site migration of dust. Additional wind measurements may be required during noticeable or abrupt changes in wind speed and/or direction.

#### **3.2 Site Air Monitoring and Equipment**

Real-time air monitoring will be performed within the Site boundaries at those locations where significant soil disturbing activities are conducted and potential visible dust conditions may develop. The dust monitoring will be conducted utilizing instruments that are capable of measuring

particulate matter in the size range of 0.1 to 10 micrometers at concentrations ranging from 0.001 and 400 milligrams per cubic meter (mg/m<sup>3</sup>). Instrument measurements will be performed in addition to visual dust observations.

During construction activities that may result in significant disturbance of the Site soil, visual observations and real-time ambient air dust measurements will be recorded by the instrument on a continuous basis. If visible dust conditions are observed and sustained for more than one minute within the Site at any of the locations where significant amounts of soil are disturbed, dust mitigating measures such as water spraying will be implemented. In conjunction with the visual observations, dust measurements will be performed during the soil-disturbing activities and compared with the Site action levels to determine if additional dust mitigating measures are necessary at the Site. Details regarding the Site action levels are presented below.

#### 4.0 Action Levels and Dust Controls

Dust may become airborne during certain construction activities described in the enclosed SMP. The action levels established for the Site are presented below.

<i>Parameter</i>	<i>Monitoring Method/ Frequency</i>	<i>Action Level</i>	<i>Comments</i>
Airborne Dust	Visual/Continuous	Visible Dust > one minute	Implement dust control measures
	Particulate Meter/Continuous	150 ug/m <sup>3</sup> * 35 ug/m <sup>3</sup> **	

Notes:

- 1) \* = 24-hour PM-10 value (NYSDEC DER-10 gCAMP 06/20/2000 and USEPA National Ambient Air Quality Standards) for dust particles of 10 microns or less.
- 2) \*\* = 24-hour PM-2.5 value (NYSDEC DER-10 gCAMP 06/20/2000 and USEPA National Ambient Air Quality Standards) for dust particles of 2.5 microns or less.
- 3) ug/m<sup>3</sup> = concentration of particulate matter in micrograms per cubic meter of air.

Reasonable dust mitigating measures will be implemented at the Site pursuant to the provisions contained in Appendix 1 of the NYSDEC DER-10 during those activities which may generate significant amounts of dust. According to the provisions contained in Appendix 1 of the DER-10 if the downwind PM-10 level exceeds the background level by 100 ug/m<sup>3</sup> for a sustained period of 15 minutes or if visible dust is observed migrating off-Site, dust mitigating measures will be implemented. Work at the Site may continue subsequent to the implementation of dust mitigation measures if the PM-10 action level at the Site perimeter does not exceed the upwind level by 150 ug/m<sup>3</sup>, provided that no visible dust is observed migrating off-site. However, if the downwind PM-10 action level continues to exceed the upwind level by 150 ug/m<sup>3</sup>, dust-generating activities at the Site will cease and additional dust suppression measures will be implemented in order to reduce the dust in the ambient air at the Site to within 150 ug/m<sup>3</sup> of the upwind level.

The PM-2.5 dust levels referenced in the above table are provided as additional action levels should measurable concentrations of PM-2.5 dust are detected. In this case, the above referenced dust mitigating actions would apply.

## **5.0 Record Keeping and Reporting**

As noted above, the air monitoring results will be recorded in appropriate logs. The data contained in the air quality logs will be utilized in preparation of the required monthly monitoring reports. In addition, the logs will contain information regarding exceedances, if any, of the Site action levels and a record will be kept of the implementation of appropriate dust suppression measures.

Records regarding the air quality monitoring at the Site will be provided to NYSDEC along with the monthly reports relevant to the Site Management Plan.