LONG ISLAND RAIL ROAD MORRIS PARK YARD

RCRA INVESTIGATION WORKPLAN FOR FORMER PAINT STRIPPING BUILDING

USEPA ID No. NYD980641625 NYSDEC ID No. 241130

MARCH 2013

LONG ISLAND RAIL ROAD MORRIS PARK YARD RCRA INVESTIGATION EPA ID No. NYD980641625, UIS No. 241130 WORK PLAN

This document presents a work plan to determine the presence of metals contamination beneath a concrete slab in the former location of the paint stripping building, at the Long Island Rail Road's (LIRR's) Morris Park Yard. The following sections provide background information regarding the site, a summary of the tasks associated with the investigation, as well as a tentative schedule.

1.0 GENERAL

1.1 Site Background

The LIRR's Morris Park Yard is located on the north side of Atlantic Avenue in Richmond Hill Queens, NY. A Site Location/Topographic Map is provided as Figure 1 of Attachment 1. The site is owned and operated by the LIRR and has been in use dating as far back as the mid-1800s. In 1990, multiple RCRA violations were discovered at the Morris Park Yard. One of these violations involved metals contamination that was identified on the concrete floor of the former paint stripping building. At that time, in consultation with NYSDEC, the LIRR performed investigation and remediation work to rectify the various violations, including the washing and scarification of the impacted concrete floor of the former paint stripping building. To date, all RCRA violations that were identified at the site have been addressed to the satisfaction of the NYSDEC except for potentially contaminated soil underlying the concrete floor of the Former Paint Stripping Building. As noted in the NYSDEC's letter, dated March 30, 2001:

"... scarification of the concrete floor meets the Department's requirements for decontamination and no further corrective action is required for the inside of the SWMU. However, elevated levels of hazardous constituents, some contributed by listed hazardous waste, in the soil underlying the Paint Stripping building will need to be addressed when the soil becomes accessible".

The Former Paint Stripping Building was demolished in the early 2000s, in anticipation of building a new locomotive repair shop. However, due to lack of funds the new repair shop was never built. It was always the LIRR's understanding and intentions that when the new repair shop was to be constructed, the LIRR would remove the remaining concrete slab beneath the former Paint Stripping Building and any contaminated soil underlying the slab. This corrective action work was to be part of the new repair shop's budget. The LIRR still intends to remove the slab and is in the process of determining a strategy and budget for performing the work.

In September 2012, correspondence (attached) from NYSDEC inquired as to what the LIRR planned to do to properly terminate the on-going RCRA issue for the former Paint

Stripping Building. In a telephone conversation with the NYSDEC on October 4, 2012, the LIRR requested that any post-closure groundwater monitoring requirements be waived, provided the LIRR could determine that it was not warranted for the site. Towards that end, in a letter dated October 16, 2012 to the NYSDEC, the LIRR offered to collect groundwater samples from existing wells at the site to determine whether or not metals contamination existed. The NYSDEC responded with an October 19, 2012 letter (attached), indicating specific recommendations. These recommendations included the addition of unfiltered and filtered target analyte list (TAL) metals analysis from existing site wells, and soil sampling from beneath the concrete slab of the Former Paint Stripping Building for TAL metals.

As requested, the LIRR collected and analyzed the additional groundwater samples on December 12, 2012 as part of its quarterly groundwater monitoring requirement for another program at the Morris Park Yard. The results of this sampling effort were emailed to the NYSDEC on December 20, 2012. The LIRR will continue to monitor the groundwater for unfiltered and filtered TAL metals during future quarterly groundwater sampling events until the NYSDEC determines that enough data have been collected to make a decision regarding further sampling and analysis.

2.0 SCOPE OF WORK

In accordance with an additional requirement specified in the NYSDEC letter, dated October 19, 2012, the LIRR plans to collect and analyze soil samples from beneath the concrete slab, in the location of the Former Paint Stripping Building.

The scope of work for this project is broken down into the following three subtasks:

- Field investigation implementation (Sample Collection);
- Laboratory Analysis; and
- Summary Report Preparation

The following subsections present a work plan for collecting soil samples beneath the former paint stripping building's concrete floor.

2.1 Field Investigation Implementation

Upon approval of this work plan, the LIRR and our Contractor will proceed with the field investigation activities. The field investigation will consist of the collection of 8 soil samples from beneath the concrete slab of the LIRR's Former Paint Stripping Building. The area of the concrete slab measures 69 feet by 100 feet. The sample locations have been chosen on a grid pattern, across the area of concern. The actual points however, will be biased towards areas of the concrete slab that appear to be cracked or somehow compromised. A Sample Location Map is provided as Figure 2 of Attachment 1.

A Site-Specific Health and Safety plan (HASP) has been developed by the LIRR for use during the investigation. The HASP is provided as Attachment 2 of this document.

Prior to the start of the field investigation activities, the LIRR will provide advanced notice to the NYSDEC of the scheduled start date. This way, the field work can be witnessed by the NYSDEC's representative. The soil samples will be collected in accordance with the procedures described in the NYSDEC's DER-10, Section 3.5. Specifically we will use the following procedure to collect the samples:

- The Contractor will use an electric core drill to remove overlying concrete. It is anticipated that the concrete is approximately 8-10" in thickness. Particulate monitoring will not be conducted during the core drilling activities. However, if necessary, the Contractor will use a water spray to suppress any fugitive dust particles generated during drilling activities.
- The Contractor will then use a hand auger to collect a surface soil sample from 0 to 6" below the bottom of the concrete. Visual observations of the soil characteristics will be documented. In the event that a sample is collected from an area where there is cracked or compromised concrete, an additional sample will be collected from between 1 and 2 feet below the bottom of the concrete.
- If soil beneath the concrete is visually impacted, additional soil samples will be collected from depths below 2 feet below the bottom of the concrete. Specifically, samples of the visually impacted material will be collected, in addition to visually clean soil located beneath the impacted layer.
- It is anticipated that a minimum of 8 samples will be collected. The locations of these samples are depicted on Figure 2 (Attachment 1).
- Each soil sample will be collected from the auger while wearing dedicated nitrile gloves and will be placed directly into 8 oz. glass jars.
- The hand auger will be thoroughly decontaminated using an alconox solution before it is utilized at each sampling location.
- The locations of all samples will be photo-documented.
- All samples will be kept in an iced cooler until they are picked up by the laboratory representative at the end of the day.
- Wastes generated through the course of this work will be drummed and labeled by the Contractor and staged on-site for proper disposal by the LIRR, in accordance with applicable sections of DER-10, Section 3.3(e).

2.2 Subtask 2 – Laboratory Analysis

As mentioned above, the soil samples will be picked up by the LIRR's contracted laboratory at the end of the work day. All 8 samples will be analyzed for target analyte list (TAL) metals using method EPA ILMO 5.3. The LIRR will use Analytical Chemists Laboratory (New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified). In addition, the Laboratory will report Category B Laboratory data deliverables, as required by NYSDEC DER -10, Section 2.

In the LIRR's letter report, analytical data obtained from the sampling event will be accompanied by a data usability summary report.

2.3 Subtask 3 – Report Preparation

At the conclusion of the field investigation, the LIRR will prepare a letter report detailing the findings of the investigation. The report will contain a written summary of the results of the field work and soil sampling analysis. The report shall include all laboratory data, documented soil characteristics, and site map showing soil sample locations.

The report shall also include specific recommendations with respect to the need for any additional delineation sampling, if deemed necessary. If significant delineation is not warranted, the LIRR will provide a brief summary of potential remedial actions to be considered to clean up impacted soil to achieve closure of the area of concern.

The report will be submitted to the NYSDEC in Electronic Data Deliverables format, within thirty (30) working days after the conclusion of the field investigation activities.

2.4 Project Personnel

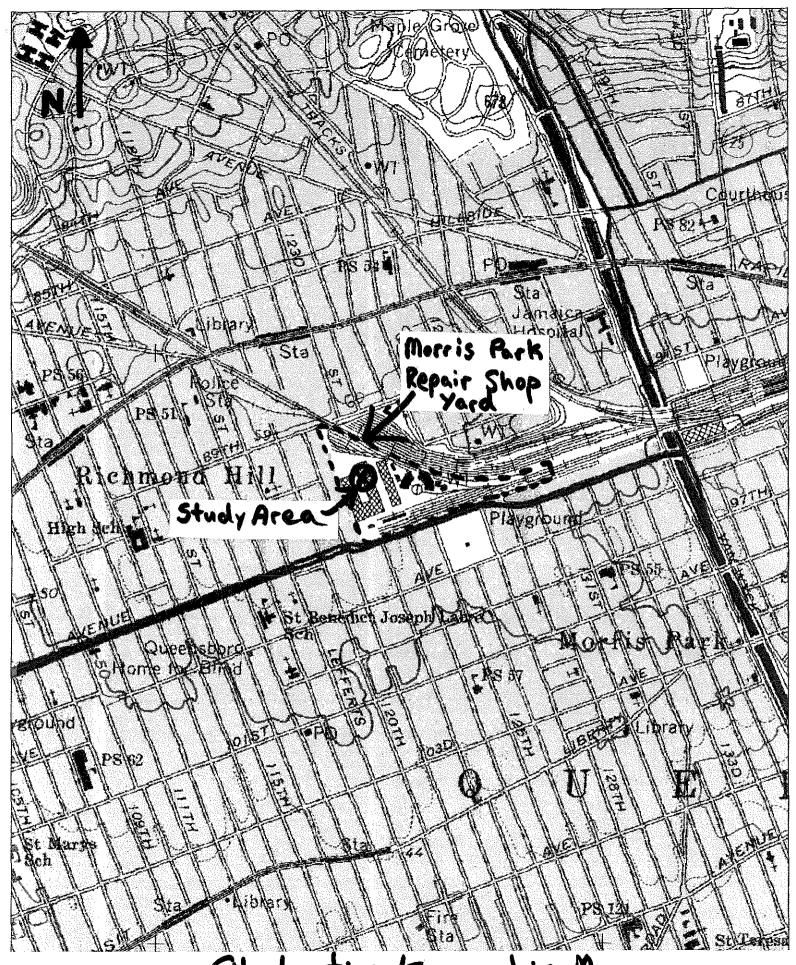
The following presents a list of project personnel, including pertinent contact information:

Name	<u>Position</u>	Company	Office/Cell Phone Number
Gloria Russo	Project Manager	LIRR	(347)494-6034/(516)369-4889
Albert Albano	Env. Field Engr.		(347)494-6020/(516)523-0894
Matt Shieferstein	Contractor Mngr.		d (631)586-4900/(516)702-0025

2.5 Schedule

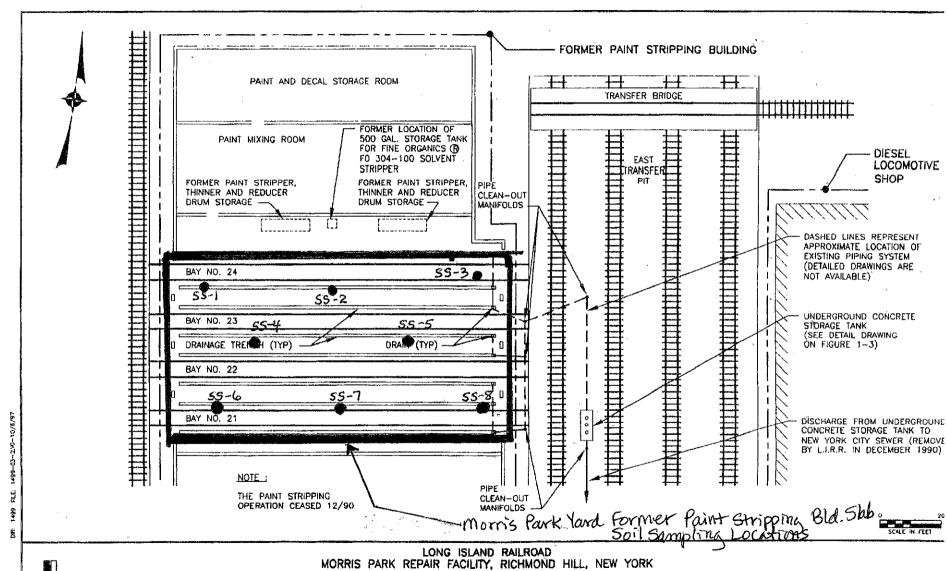
Upon approval of this work plan, the LIRR will complete the field work portion of work within thirty (30) working days. The NYSDEC project manager will be notified at least 7 business days prior to initiation of any investigation activities. As mentioned above, the report will be completed within thirty (30) working days of completing the field work. In summary, the report will be submitted within sixty (60) working days of approval of this work plan.





Site Location /Topographic Map

Figure 1



SITE PLAN - FORMER PAINT STRIPPING AREA

Ovirka and Bartilucci Consulting Engineers

A Division of William F. Cosulich Associates, P.C.

ATTACHMENT 2 – HEALTH AND SAFETY PLAN

SITE-SPECIFIC HEALTH AND SAFETY PLAN

LONG ISLAND RAIL ROAD – MORRIS PARK YARD RCRA SOIL SAMPLING INVESTIGATION EPA ID NO. NYD980641625 and UIS NO. 241130

This Health and Safety Plan (HASP) establishes guidelines and requirements for safety of personnel during the performance of field activities associated with the referenced project. All employees of the Long Island Rail Road (LIRR) and its contractors that are involved in field activities on this project are required to abide by the provisions of this HASP.

PROJECT ORBANIZATION AND CONTACT LIST

 LIRR Project Director:
 Gloria Russo
 1-347-494-6034 (office)

 1-516-369-4889 (cell)

 LIRR Field Engineer:
 Albert Albano
 1-347-494-6020 (office)

 1-516-523-0894 (cell)

 Driller Name:
 Fenley and Nicol, Inc.
 1-631-586-4900 (office)

Driller Name: Fenley and Nicol, Inc. 1-631-586-4900 (office)
Driller Contact: Matthew Shieferstein 1-516-702-0025 (phone)

EMERGENCY INFORMATION

Ambulance	911
Fire Department (general)	1-718-999-2000
Police Department	911
MTA Police	1-718-217-3300
Hospital	1-718-206-6000
Poison Control Center	1-516-542-2323
NYSDEC Spill Hotline (24-hour)	1-800-457-7362
NYSDEC Spill Response	1-516-444-0320

WORK ACTIVITY DESCRIPTION

The site is an active rail yard which is occupied by LIRR. The property is located on the east side of 121st Street between Atlantic Avenue and 89th Avenue in Queens, New York. The LIRR will be collecting soil samples from beneath a 10"-thick concrete pad. The contractor will be using a core drill to remove the overlying concrete, to provide access to the underlying soil. Samples will be collected from the ground using a hand-auger.

HASP-RELATED PROJECT RESPONSIBILITIES

The following provides a description of the role of each person involved in the project:

Gloria Russo (Project Manager)

- To see that the project is performed in a manner consistent with the LIRR's Health and Safety Plan.
- To have a HASP prepared and approved.
- To implement the HASP.
- To monitor compliance with the HASP by LIRR and contractor personnel.

Albert Albano (Environmental Field Engineer)

- To direct health and safety activities on-site.
- To report safety-related incidents or accidents to the Project Manager.
- To ensure that health and safety equipment is properly maintained on-site, as specified in the HASP.
- To monitor compliance with approved HASP.

DESCRIPTION OF LEVELS OF PROTECTION

The personal protective equipment specified in this HASP will be required for all field personnel. The following requirements will be followed in accordance with OSHA Regulations:

Level D Personal Protective Equipment

- Safety glasses or goggles
- Steel-toed and steel shank work boots
- Nitrile-butadiene rubber outer gloves⁽¹⁾
- Regular Tyvek coveralls⁽¹⁾
- Latex surgical gloves (to be worn underneath outer gloves)⁽¹⁾
- Safety Vest
- (1) Optional, at discretion of D&B SSO.

Modified Level D Personal Protective Equipment

- Hard hat
- Safety glasses or goggles
- Steel-toed and steel shank work boots (if rubber boots not worn)
- Rubber overboots, steel-toed and steel shank rubber boots, or disposable "booties"
- Nitrile-butadiene rubber outer gloves
- Latex surgical gloves (to be work underneath outer gloves)
- Polyethylene coated or Saranex impregnated Tyvek coveralls⁽¹⁾ (taped at cuffs)
- (1) Choice at discretion of LIRR Field Engineer

* It is anticipated that Level D PPE will be sufficient to complete the activities outlined in the work plan.

HOSPITAL INFORMATION

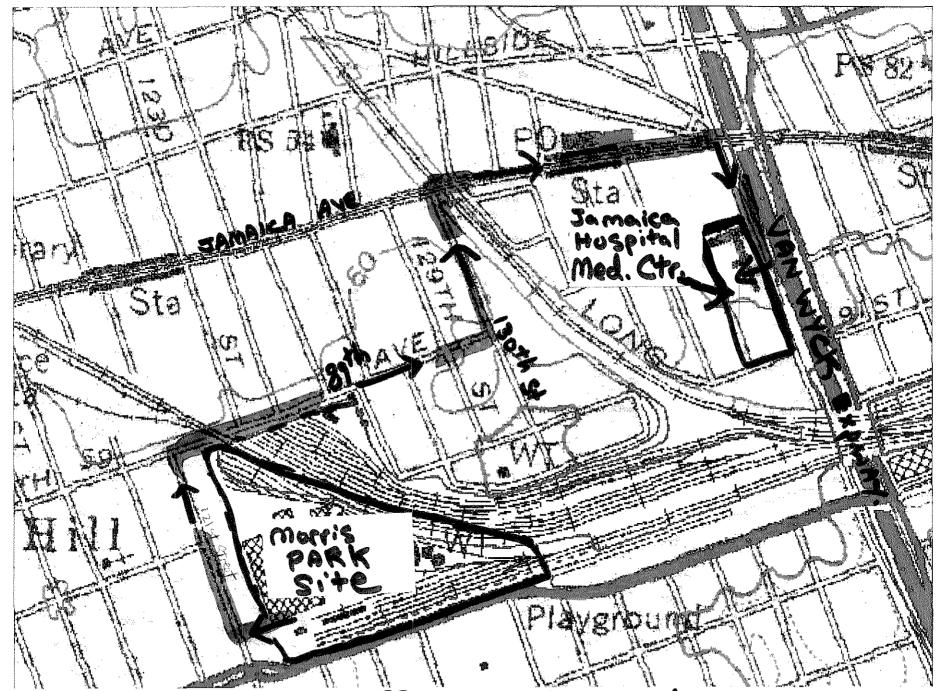
Hospital Name, Address and Phone Number:

Jamaica Hospital Medical Center 8900 Van Wyck Expressway Jamaica, New York 11418 (718) 206-6000

Directions from Site to Hospital

- 1. Exit the site heading north on 121st.
- 2. Take 121st Street approximately 1,000' and turn right onto 89th Avenue.
- 3. Take 89th Avenue approximately 1,500' east and turn left onto 130th Street (heading north).
- 4. Take 130th Street approximately 1,000' and turn right (heading east) onto Jamaica Avenue.
- 5. Take Jamaica Avenue east approximately 1,500' and make a right (heading south) onto the service road of the Van Wyck expressway.
- 6. The entrance to the hospital will be on the right side of the service road, approximately 500' south of Jamaica Avenue.

Note: See Attached Hospital Route Map.



LIRR-Morris Park Yard. HOSPITAL ROUTE MAP