LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUNDWATER AND ENVIRONMENTAL ENGINEERING SERVICES

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May 13, 2011

Mr. Hassan Hussein
New York State Department of
Environmental Conservation
Division of Environmental Remediation
1 Hunter's Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

RE: RCRA Closure Work Plan
Fyn Paint & Lacquer Co., Inc.

Brooklyn, New York EPA ID #NYD001270867

Dear Mr. Hussein:

Attached are two (2) bound copies of the LBG Engineering Services, P.C. (LBGES) report titled: "RCRA Closure Work Plan, Fyn Paint & Lacquer Co., Inc., 230 Kent Avenue, Brooklyn, New York, EPA ID #NYD001270867" for your files.

If you have any questions please do not hesitate to contact Dan Buzea or me at (914) 694-5711.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.

Sean Groszkowski

Associate

SG:dmd Attachment

cc:

Juzer Rasani

Ken Roberts

William Feinstein

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RCRA CLOSURE WORK PLAN FYN PAINT & LACQUER CO., INC. 230 KENT AVENUE BROOKLYN, NEW YORK EPA ID #NYD001270867

RCRA CLOSURE WORK PLAN

Prepared For

Fyn Paint & Lacquer Co., Inc.

September 2010 Revised May 2011

LBG ENGINEERING SERVICES, P.C. Professional Environmental & Civil Engineers 110 Corporate Park Drive, Suite 112 White Plains, NY 10604 (914) 694-5711

TABLE OF CONTENTS

		<u>Page</u>
1.0	EACI	LITY INFORMATION1
1.0	1.1	Background and History
	1.1	State Regulations
	1.3	•
	1.3	Surrounding Land Use
	1.4	Potential Exposure Pathways
2.0	DESC	CRIPTION OF UNITS SUBJECT TO CLOSURE4
	2.1	Mezzanine Level
	2.2	Walkway to Mezzanine5
	2.3	Former Solvent Distillation Area
	2.4	Determination of Historic Quantities of Hazardous Waste
3.0	CLOS	SURE WORK PLAN7
	3.1	Chemical Characterization of Regulated Units7
		3.1.1 Identification of Constituents of Concern
		3.1.2 Appendix 23 Sampling
	3.2	Hazardous Waste Removal
	3.3	Equipment Recycling
	3.4	Plywood Flooring Removal
	3.5	Identification of Contamination Associated with the Storage Areas
		3.5.1 Floor Contamination
		3.5.2 First Floor Concrete Surface Contamination
		3.5.3 Subsurface Contamination
	3.6	Methods for Sampling and Analysis
		3.6.1 Wood Floor Sampling
		3.6.2 Surface Concrete Sampling
		3.6.3 Subsurface Soil Sampling
	3.7	Wash Waters and Decontamination Wastewaters Sampling
	3.8	Waste Concrete, Concrete Dust/Blasting Media and Wood Dust Sampling 19
	3.9	Field Quality Assurance/Quality Control Program
	3.10	Personal Protection
	3.11	Floor Decontamination
4.0	CERT	TIFICATION OF CLOSURE
5.0	SCHE	EDULE FOR CLOSURE
6.0	CLOS	SURE COST ESTIMATE
7.0	CLEA	AN CLOSURE FAILURE

LIST OF TABLE (at end of report)

Soil Quality Summary - Volatile Organic Compounds Detected in UST Excavation Bottom Samples
Groundwater Quality Summary - EPA Method 8260 Modified to Include MTBE
Preliminary List of Constituents of Concern
Soil Quality Summary - Volatile Organic Compounds Detected in SSDS Trench and Pipe Trench Bottom Samples

LIST OF FIGURES (at end of report)

Figure

- 1 Site Map
- 2 Site Plan

LIST OF APPENDIX (at end of report)

Appendix

- I Quality Assurance Project Plan (QAPP)
- II Cost Estimate

RCRA CLOSURE WORK PLAN FYN PAINT & LACQUER CO., INC. 230 KENT AVENUE BROOKLYN, NEW YORK EPA ID #NYD001270867

1.0 FACILITY INFORMATION

1.1 Background and History

The Fyn Paint & Lacquer Co., Inc. (Fyn Paint) facility is located at 230 Kent Avenue in Williamsburg, Brooklyn, Kings County, New York (the "Site"). The Site consists of a partial two-story industrial/warehouse building situated on the block bounded by Kent Avenue to the east, Metropolitan Avenue to the north, North First Street to the south and River Street to the west. The Site is currently an active paint and lacquer manufacturing facility, as has been the case since at least 1951. The Site is an active Resource Conservation and Recovery Act (RCRA) facility, and a large quantity generator of hazardous waste (EPA ID #NYD001270867). A site map is presented as figure 1.

The vicinity of the property consists of industrial, commercial and residential properties. The footprint of the building is approximately 5,862 ft² (square feet) with a mezzanine floor approximately 2,800 ft².

The ground floor of the building is a slab on grade construction with a thickness of approximately 4 inches.

1.2 State Regulations

In accordance with the regulations contained in State of New York 6 NYCRR Section 373-3.7, all owners and operators of hazardous waste facilities must close their facilities in a manner that:

- minimizes the need for further maintenance;
- controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface water or to the atmosphere; and,

• complies with the closure requirements of Subpart 373-3.7 including, but not limited to, the requirements of subdivisions 373-3.10(h), 373-3.11(f), 373-3.12(g), 373-3.14(d), 373-3.15(e), 373-3.16(e), 373-3.17(e) and 373-3.30(c).

LBG Engineering Services, P.C. (LBGES) has outlined under this plan, the procedure for determining constituents-of-concern (COCs), characterizing the extent of contamination, if any, and closing the areas subject to New York State (NYS) hazardous waste regulations at Fyn Paint. It is Fyn Paint's intent to close the regulated units due to the sale of the property.

1.3 Surrounding Land Use

The Site is located in an industrial/commercial area with some residential properties (currently expanding residential development). The property adjacent to the north of the Site is the Con Edison building and parking lot located at 214 Kent Avenue which was formerly a part of the North First Street Terminal (NFST). The surrounding properties in the area consist of mixed use residential/commercial/industrial buildings. To the north of Metropolitan Avenue are several commercial buildings. To the south of the Site (south of North First Street) is a commercial building (currently under construction) as well as several residential and commercial buildings to the southeast. To the east of the Site (east of Kent Avenue) is a newly constructed residential building. To the west of the Site (west of River Street) are Con Edison properties containing above ground storage tanks associated with the former NFST. Also across River Street to the southwest of the Site there is a New York State Power Authority (NYSPA) sub-station. Additionally, the East River is located approximately 300 feet west of the Site. There were no schools, day care facilities or hospitals observed in the immediate vicinity of the Site.

1.4 Geology

Based on the remedial investigation activities performed at the Site, the geologic conditions have been comprehensively characterized. The ground surface at the Site consists of concrete and asphalt pavement. The shallow sediments beneath the Site consist of medium and

coarse grained brown sand with some silt and a trace of gravel. In general, the subsurface beneath the area consists of interbedded layers of sand, gravel, clay and silt to approximately 65 feet below ground surface. Bedrock beneath the Site was not encountered but it is expected to be below 75 feet. The regional groundwater flow direction beneath the property is toward the west. The depth to groundwater is approximately 12 ft bg (feet below grade) to 15 ft bg. Based on the results of investigations performed at the Site (and groundwater contour maps generated from this data), the hydraulic gradient at the Site is approximately 0.025 foot per foot to the west (toward the East River) and the regional hydraulic gradient surrounding the Site is approximately 0.01 foot per foot to the west. Although the wells adjacent to the East River show tidal influence, the wells at the Site and in the immediate vicinity of the Site show no significant tidal influence.

Based on data collected during groundwater pumping test, the hydraulic conductivity in the subsurface at the Site is 2.7 feet per day. The groundwater velocity (beneath the Site) using an effective porosity of 25% and a hydraulic gradient of 0.025 is approximately 0.27 foot per day.

1.5 Potential Exposure Pathways

The contamination beneath the Site is the result of historical activities on the Site and/or surrounding properties. The workplace activities at the Site include the manufacture, formulation, and/or commercial use of the contaminants. Site workers are involved in directly handling many of the contaminants. As such, a direct exposure pathway exists for Site workers via ingestion, inhalation and/or dermal contact. Additionally, a possible exposure route is through soil vapor intrusion. The possible contamination exposure route at the surrounding properties may be only if a contaminant is finding its way into food, water or air supplies. The physical location of the contamination is in the subsurface. The surrounding area is completely paved and covered with buildings. As such, the potential for humans being directly exposed through ingestion and/or dermal contact is minimal.

2.0 DESCRIPTION OF UNITS SUBJECT TO CLOSURE

2.1 Mezzanine Level

The mezzanine level was historically the primary area where virgin products were stored and mixed to manufacture paint and lacquer coatings. Equipment in the mezzanine level includes mixers and virgin product storage tanks. The mezzanine was also the primary area for storage of hazardous wastes generated during manufacturing of the coatings. Hazardous wastes were stored in various sized containers including 55-gallon drums and 5-gallon pails.

The mezzanine level is located on the western portion of the building (see figure 2). The rectangular mezzanine floor is approximately 54 feet wide by 52 feet long. The mezzanine floor consists of plywood flooring approximately 3/8 to 3/4-inch thick on top of wood planks supported by wood joints and steel beams.

Secondary containment units around the virgin product storage tanks and equipment are not present. Spilling of raw material and wastes is evident by the visual observations of paint on the equipment and layers of paint on the floor measuring up to 4 inches thick.

An inventory of the description, number and size of containers containing hazardous waste in the mezzanine level is as follows:

- approximately eighty three (83) 55-gallon drums of waste (resins, pigments, paint additives, paints);
- eight (8) 150-gallon steel mixing buckets and one 100-gallon steel mixing bucket;
- approximately two hundred fifty (250) 5-gallon pails of waste (resins, pigments, paint additives, paints); and,
- miscellaneous bags of paint/resin additives.

Due to the extent of the hazardous waste storage operation at the mezzanine, the entire mezzanine is considered as a hazardous waste storage area subject to the closure requirements of 6 NYCRR Section 373-3.7.

2.2 Walkway to Mezzanine

A wooden walkway approximately 14 feet wide by 54 feet long is located on the northern side of the building. The walkway connects the mezzanine level with the stairs located on the east side of the building. The flooring of the walkway is consistent with that of the mezzanine level. Small waste containers of various sizes containing process chemicals are currently stored on the flooring in the walkway. The containers are not in cabinets or on shelves.

An inventory of the description, number and size of waste containers in the walkway to the mezzanine level is as follows:

- thirteen (13) 55-gallon drums of waste (resins, pigments, paint additives, paints);
- one (1) 550-gallon steel AST empty;
- twenty five (25) 5-gallon pails of waste (resins, pigments, paint additives, paints); and,
- approximately 200-300 miscellaneous sample containers (resins, pigments, paint additives, paints).

2.3 Former Solvent Distillation Area

A spent solvent distillation unit is located on the ground floor in the northeast corner of the building beneath the mezzanine walkway. The area is approximately 14 feet by 14 feet and is located on the poured concrete slab of the ground floor. The spent solvents are captured in 55-gallon steel drums located adjacent to the distillation unit. The area contains the distillation still and three 55-gallon steel drums containing waste still bottoms. Based on the stains observed on the concrete slab in this area evidence of releases from the distillation unit are present.

The waste still bottoms will be managed and disposed of as listed hazardous waste (F003, F005), and additional testing will be performed to meet requirements of the disposal facility. Once all free flowing liquids and still bottoms are cleaned from the distillation unit, it will be recycled with the other mixing equipment and virgin product storage tanks located in the mezzanine level.

Following the removal of the solvent distillation unit, a soil sample will be collected from beneath the concrete slab to characterize the subsurface soil quality. It should be noted that the former solvent distillation area is located in the area designated as the source zone of subsurface contamination which is the focus of ongoing remedial efforts under the Voluntary Cleanup Program (VCP). Additionally, it is located above where the historical underground storage tank (UST) feed lines were located. The historical USTs and volatile organic compound (VOC) contaminated soil have been removed as a Remedial Action under the VCP. The subsurface contamination in the former UST excavation consists of almost exclusively: acetone, toluene, ethylbenzene and xylene. Endpoint confirmation soil samples collected from the extent of the UST excavation are presented on table 1. Additionally, December 2010 groundwater quality from MW-28 (installed within the completed and backfilled UST excavation) has only four VOCs (acetone, toluene, ethylbenzene and xylene) detected above groundwater quality standards per 6 NYCRR Part 703.5 and the New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Groundwater Quality Standards (GWQS). A summary table presenting the Fourth Quarter 2010 (December) groundwater quality for MW-28 and the other groundwater monitoring wells included in the Site Groundwater Monitoring Program is presented on table 2.

Any residual subsurface contamination beneath the solvent distillation unit would be addressed by the future onsite remedial system which will be installed to perform in-situ subsurface soil and groundwater remediation. Subsequently, following the removal of the solvent distillation unit and associated waste, Fyn Paint will request the closure of this RCRA unit. Further discussion with the NYSDEC will be required to determine the approach to address residual contamination in this area.

2.4 Determination of Historic Quantities of Hazardous Waste

The maximum inventory of hazardous waste ever generated over the active life of the facility was developed by reviewing hazardous waste manifests and the approximate volume of hazardous waste currently stored onsite. No records of the volume of hazardous waste historically generated at the Site were available for review. However; based on conversations with

the owner and the onsite chemist, approximately 20,000 gallons of hazardous waste has been generated during the life of the facility.

3.0 CLOSURE WORK PLAN

The closure work plan describes the steps that will be taken to determine the extent of contamination, if any, associated with the areas subject to NYS hazardous waste regulations to be closed at the facility. The objectives of the closure plan are to:

- 1. determine the nature of the wastes, i.e., COCs, associated with the area subject to NYS hazardous waste regulations (see Section 3.1);
- 2. consolidate and dispose of residual hazardous waste in the unit subject to NYS hazardous waste regulations (see Section 3.2);
- 3. recycle mixing equipment and virgin product storage tanks at the facility (see Section 3.3);
- 4. remove plywood flooring in the unit subject to NYS hazardous waste regulations (see Section 3.4);
- 5. identify contamination associated with the unit subject to NYS hazardous waste regulations (see Section 3.5); and,
- 6. determine appropriate methods for sampling and analysis to document closure of the unit subject to NYS hazardous waste regulations (see Section 3.6).

The remaining Sections (3.7 through 3.11) describe the procedures for characterization of wastes generated during the closure activities, quality assurance/quality control (QA/QC) sampling, etc. which are to be followed during implementation of the closure work plan.

Photographs will be taken during the closure process to document the work conducted onsite.

3.1 Chemical Characterization of Regulated Units

Chemical characterization of the areas subject to NYS hazardous waste regulations consists of identifying the COCs and conducting sampling per 6 NYCRR Section 372.2(a)(2), if necessary. Each of these tasks is described below.

3.1.1 Identification of Constituents of Concern

A preliminary list of COCs for the area subject to NYS hazardous waste regulations operated by Fyn Paint, presented in table 3, was compiled from the following sources:

- comparison of the materials used onsite with hazardous constituents listed in 6 NYCRR Section 371 Appendix 23 and 6 NYCRR Section 373-2 Appendix 33;
- review of present and historical manufacturing records, e.g., process formulations, virgin product purchasing records;
- review of hazardous waste manifests from disposal of wastes from the facility;
 and,
- review of past environmental reports.

Identification of any additional COCs for the area subject to NYS hazardous waste regulations, which were not identified using the sources listed above, will be identified via an Appendix 23 sampling procedure (see Section 3.1.2). If any additional constituents are identified in the Appendix 23 sampling analysis, then these constituents will be added to the COC list (i.e., table 3).

The possibility of other sources (non-RCRA regulated) of soil and groundwater contamination does exist at this site.

3.1.2 Appendix 23 Sampling

Appendix 23 sampling of the area subject to NYS hazardous waste regulations will be conducted to identify any additional COCs not already listed in table 3. Samples collected from the floor will be submitted to a laboratory certified under NYS Department of Health's Environmental Laboratory Approval Program (ELAP) for solid and hazardous waste analysis for analysis of the 6 NYCRR Section 371 Appendix 23 constituents. One composite sample from the un-impacted mezzanine area (above the office away from the production area) will be collected for analysis of metal, semivolatile and volatile Appendix 23 constituents to establish the site specific cleanup criteria for the wood floor of the mezzanine in the production area and in the walkway area. Five composite samples from the impacted mezzanine area, one composite sample from the walkway and one sample from the solvent distillation unit area will be

collected for analysis of metal and semivolatile Appendix 23 constituents, while two selected discrete samples will be collected for analysis of volatile constituents. A description of the sampling procedures is provided below:

- Step 1: A composite sample of the wood floor from the un-impacted area of the mezzanine floor (above office) will be collected. This composite sample will be representative of pre-release conditions for the production area. The results of the laboratory analysis will determent the site specific clean-up criteria for the wood floor of the mezzanine in the production area and in the walkway area.
- Step 2: The impacted area of the mezzanine floor (production area) is a quadrangle covering approximately 2,800 ft². This area will be divided into a grid with each grid equal to approximately 100 ft². The mezzanine level will be divided into a grid consisting of twenty-five (25) subsections, each measuring approximately 10 feet by 10 feet. The walkway from the stairs to the mezzanine level, a rectangle covering approximately 672 ft² will be divided into 5 subsections, each measuring approximately 14 feet by 8.5 feet. The solvent distillation area, a square covering approximately 100 ft² will be divided into 2 subsections, each measuring approximately 5 feet by 10 feet.
- Step 3: Fifteen (15) sampling sites for the impacted mezzanine floor (production area), two (2) from mezzanine walkway and two (2) from the former spent solvent distillation area at random.
- Step 4: From the center of each selected subsection in area, a hammer and wood chisel or an electric drill will be used to collect a sample of dried paint from the flooring.
- Step 5: Select and sample at least five (5) additional sampling subsections based upon judgmental sampling criteria (i.e., paint residue, staining). Additional samples may be collected if severe staining or degraded flooring is encountered.

Step 6: Place the sample collected from each subsection in the mezzanine area into two 8 ounce jars: one jar is filled to the top and sealed for analysis of volatiles (if that grid square is selected; see Step 7 below), and one jar is half-filled for headspace analysis. Repeat for the samples collected

Step 7: The hand chisel or drill bit used for sample collection will be decontaminated between sampling points, as outlined in Section 3.6.1.

from the solvent distillation area and the walkway in separate jars.

Step 8: To determine the sampling site for volatile constituents (via EPA Method 8260) a portable photoionization detector (PID) with a 10.8 eV bulb will be utilized. Headspace analysis of the half-full jars collected from the sample points will be analyzed and the two (2) samples exhibiting the highest headspace contamination will be selected. The matching full jars will be submitted to the laboratory, while the contents of the remaining full jars will be returned to their respective sample locations for appropriate disposal measures. In the event that no VOCs are measured with the PID, the samples with the heaviest staining/paint thickness will be submitted for laboratory analysis.

Step 9: The contents of the half-full jars containing samples collected from the impacted mezzanine area will be thoroughly composited (mixed) and placed into five 8 ounce jars (full jar). The contents of the half-full jars containing samples from the walkway will be thoroughly composited (mixed) and place into one 8 ounce jar (full jar). The contents of the half-full jars containing samples from the distillation area will be thoroughly composited (mixed) and place into one 8 ounce jar (full jar). The resultant seven (five from the mezzanine, one from the distillation area and one from the walkway) composite samples will be submitted for analysis of metals, inorganics and semivolatile constituents listed in Appendix 23. Any excess material will be returned to the respective sample locations.

3.2 Hazardous Waste Removal

All drums, containers and residual wastes will be consolidated and removed from the building. The residual wastes will be containerized in lab packs and 55-gallon drums. Discrete samples for waste characterization will be collected at the rate of one sample for every drum unless the drums have identical waste materials, as determined by the onsite chemist who was responsible for the manufacturing activities when Fyn Paint was active. Small containers containing similar materials will be placed in lab packs and characterized for disposal by collecting one sample per lab pack. Each collected sample will be submitted to a laboratory certified under NYS Department of Health's ELAP for solid and hazardous waste analysis for analysis of the RCRA TCLP contaminants, TCL volatile organics via EPA Method 8260, TCL semivolatile organics via EPA Method 8270, and ignitability. If liquid waste is encountered, the waste should also be tested for the characteristic of corrosivity.

If any of the TCLP constituents are detected at levels which exceed the characteristic hazardous waste levels in 6 NYCRR Section 371, then the waste material will be disposed of as a characteristic hazardous waste. If the waste material is found to be corrosive and/or reactive as per criteria in 6 NYCRR Section 371, it must be managed as hazardous waste. For any unknown waste material, if any VOC or semivolatile organic compound (SVOC) constituent is detected at any concentration, the waste material must be managed as listed hazardous waste.

3.3 Equipment Recycling

Onsite, there are several steel items which were previously utilized in the production process. These items include: virgin product storage tanks; steel mixing tubs; steel industrial mixers; and, a steel solvent distillation unit. These items will be inspected to ensure that they contain no free flowing liquids. If free flowing liquids are present on/in any of the items to be recycled, they will be cleaned adequately prior to being transported offsite for recycling. Of note, the facility manager suspects that one of the mixers may have free flowing liquid in a 1-gallon reservoir tank. This reservoir will be drained and cleaned prior to taking the mixer offsite for recycling. Subsequently, Fyn Paint intends to recycle the contaminated equipment through an approved scrap metal dealer pursuant to the scrap metal exemption of 6 NYCRR Section 371.1(g)(1)(iii)(b). Fyn Paint and the receiving facility must separately file a "c7" no-

tification with the NYSDEC prior to the shipment of waste pursuant to 6 NYCRR Section 371.1(c)(7).

3.4 Plywood Flooring Removal

The mezzanine floor consists of a layer of plywood approximately 3/8 to 3/4 inch thick, underlain by wooden planks, joists and steel beams. The upper layer of plywood will be removed and placed in 20 cubic yard roll-off containers. Discrete samples for waste characterization will be collected at the rate of one sample per every 10 cubic yard of waste material. Each collected sample will be submitted to a laboratory certified under NYS Department of Health's ELAP for solid and hazardous waste analysis for analysis of the RCRA TCLP contaminants, TCL volatile organics via EPA Method 8260, TCL semivolatile organics via EPA Method 8270, and ignitability.

If any of the TCLP constituents are detected at levels which exceed the characteristic hazardous waste levels in 6 NYCRR Section 371, then the waste material will be disposed of as a characteristic hazardous waste. If the waste material is found to be corrosive and/or reactive as per criteria in 6 NYCRR Section 371, it must be managed as hazardous waste. For any unknown waste material, if any VOC or SVOC constituent is detected at any concentration, the waste material must be managed as listed hazardous waste.

3.5 Identification of Contamination Associated with the Storage Areas

3.5.1 Floor Contamination

The proposed plan to address the first layer of flooring (plywood) is to remove the flooring and dispose of it as hazardous waste. To determine if the flooring surfaces beneath the plywood layer has been affected by the operation of the areas subject to NYS hazardous waste regulations, the following procedure will be followed:

Step 1: Examine the wood flooring to locate an area that has not been impacted by operations or contamination. A composite sample of the wood floor from the un-impacted area of the mezzanine floor (above office) will be collected. This composite sample will be representative of pre-release conditions for the production area. The results of the laboratory analysis

will determent the site specific clean-up criteria for the wood floor of the mezzanine in the production area and in the walkway area.

- Step 2: Place a tarp or polyethylene plastic on the ground floor beneath the mezzanine level and walkway.
- Step 3: Remove any hazardous constituents which may have contaminated the floor surfaces; scrape, sand and/or plane the surface to remove visual contamination.
- Step 4: The spent abrasive and resultant wood dust/chips generated in Step 3 will be collected using a vacuum system and placed in 55-gallon drums or into roll-offs. The containerized material will be sampled and analyzed as described in Section 3.8.
- Step 5: A total of twenty five (25) samples will be collected from the floor surface using the sampling procedures described under Section 3.6.1. The sample locations will be determined by dividing the storage area into 25 subsections (each approximately 100 ft² in area). Samples will be collected from the center of each subsection. An additional five (5) samples will be collected in the areas of suspected highest concentration (e.g., staining). Each sample will be analyzed for the COCs by both mass and TCLP.
- Step 6: If COCs are detected above their background concentrations in any of the floor samples, Fyn Paint will either repeat decontamination (i.e., sand, scrape and/or plane) of the affected area to determine if the closure criteria can be met, encapsulate or remove the required section(s) of the floor and dispose of it at a permitted facility.

The floor will be defined as being "clean" when the concentration of each COC within each sample is at or below the background concentrations.

3.5.2 First Floor Concrete Surface Contamination

Prior to the sampling of the concrete floor, the first floor will be swept clean, and all material will be stored in 55-gallon drums. The containerized material will be sampled and analyzed as described in Section 3.8.

Following the cleaning and exposing of the concrete slab, concrete chip samples will be collected to determine if the concrete surfaces have been affected by the operation of the areas subject the NYS hazardous waste regulations according to the following procedure:

- Step 1: A total of ten (10) concrete chip samples will be collected from the concrete surface using the sampling procedures described under Section 3.6.2. Eight of the ten sampling locations will be determined by dividing the storage area into eight subsections, and collecting samples from each subsection. Two additional samples will be collected from the areas of suspected highest concentration (e.g., stained concrete). Each sample will be analyzed for the COCs by both mass and TCLP.
- Step 2: If COCs are detected in any of the concrete samples, Fyn Paint will decontaminate (i.e., power wash or abrasive blast) the affected area, encapsulate the floor with an epoxy floor coating or remove the required section(s) of the concrete and dispose of it at a permitted facility. If the floor is to be decontaminated, samples of the rinsate used to decontaminate the floor will be collected and analyzed for COCs. Decontamination will be repeated until laboratory results for the rinsate samples do not exceed the groundwater standards in 6 NYCRR Section 703.
- Step 3: The concrete dust generated in Step 2, if abrasive blasting is necessary, will be collected using a vacuum system and placed in 55-gallon drums or into roll-offs. The containerized material will be sampled and analyzed as described in Section 3.8.
- Step 4: The decontamination wash water generated in Step 2 will be collected using a vacuum system and placed in 55-gallon drums or into roll-offs. The containerized material will be sampled and analyzed as described in Section 3.7.

The concrete floor will be defined as being "clean" when the concentration of each COC within each rinsate sample is at or below the groundwater standards. Of note, if the first floor concrete is encapsulated with an epoxy coating, the encapsulation will be subject to annual certification (under the Site Management Plan) to ensure its function has not been compromised.

3.5.3 Subsurface Contamination

As part of the onsite remedial activities associated with the VCP cleanup, ten (10) soil samples (TB-1 to TB-10) were collected from beneath the concrete slab in the area beneath the mezzanine and one (1) soil sample (PTB-1) was collected from beneath the concrete slab in the area beneath the mezzanine walkway. These soil samples were collected following the excavation of a pipe trench which was created to facilitate the installation of a sub-slab depressurization system (SSDS). Of note, all of the soil samples were analyzed for VOCs as per the NYSDEC approved Remedial Action Work Plan. The results of the laboratory analytical testing, all soil samples had VOC concentrations which were below the established 6 NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives for Protection of Public Health (Commercial), which is applicable to the Site. A summary table presenting the laboratory analytical results is included as table 4. As such, no subsurface soil sampling will be performed in the area beneath the mezzanine or the mezzanine walkway.

If it has been determined that the concrete in the former solvent distillation area has been contaminated (based on sampling results), the concrete slab on grade will be decontaminated (i.e., power wash or abrasive blast), and a soil sample will be collected from beneath the concrete slab to characterize the soil quality.

3.6 Methods for Sampling and Analysis

The procedures described in this section will be used to sample and analyze the various media:

- Wood Floor Sampling (Section 3.6.1);
- Surface Concrete Sampling (Section 3.6.2); and,
- Subsurface Soil Sampling (Section 3.6.3).

3.6.1 Wood Floor Sampling

To determine if the wood flooring beneath the plywood layer in the mezzanine level has been contaminated, the procedures described below will be followed:

- Step 1: Using a wood chisel or hole saw to generate sufficient material for sampling.
- Step 2: Collect sufficient samples from each sampling location.
- Step 3: To prevent cross contamination between sampling points, the sampling equipment will be decontaminated before and after each sample as follows:
 - wash with a suitable laboratory soap (alconox);
 - rinse with tap water;
 - rinse with deionized water;
 - rinse with 1:4 solution of nitric acid:deionized water;
 - rinse with deionized water;
 - rinse with hexane; and,
 - air dry.
- Step 4: Store samples in plastic or glass jars with Teflon seals and place on ice for storage prior to delivery to the laboratory.

Field and trip blanks for QA/QC purposes will be collected according to the procedures described in the Quality Assurance Project Plan (QAPP) per Section 3.9 of this plan.

3.6.2 Surface Concrete Sampling

To determine if the concrete surfaces have been affected by operation of the storage areas and/or the solvent distillation unit, first floor surface concrete samples will be collected in the following manner:

- Step 1: Collect sufficient concrete chip sample from the center of each sampling section using a hammer and chisel, or an electric hammer drill and masonry chisel.
- Step 2: To prevent cross contamination between sampling points, sampling equipment will be decontaminated before and after each sample as follows:

- wash with a suitable laboratory soap (alconox);
- rinse with tap water;
- rinse with deionized water:
- rinse with 1:4 solution of nitric acid:deionized water;
- rinse with deionized water;
- rinse with hexane; and,
- air dry.
- Step 3: Store concrete chip samples in glass or plastic jars with Teflon seals and place on ice for storage prior to delivery to the laboratory.

Field and trip blanks for QA/QC purposes will be collected according to the procedures described in the QAPP per Section 3.9 of this plan.

3.6.3 Subsurface Soil Sampling

To determine if the soil located beneath the concrete in the former solvent distillation area has been affected by historical operations, the following procedures will be followed:

- Step 1: The concrete floor will be inspected for cracks, gaps or other surface damage or features which may have allowed migration of wastes to the subsurface soil. The location of each crack, gap or other surface damage will be noted on a scale drawing.
- Step 2: Two soil samples will be collected from directly beneath the former location of the distillation unit using the two designated sections as per Step 1 of the Appendix 23 sampling plan (Section 3.1.2). A 4-inch diameter concrete core drill will be used to reach the subsurface.
- Step 3: Following removal of the concrete core and any process stone, a soil auger or trowel will be used to core/sample down a depth of six inches from each sampling area (soil horizon). A sufficient soil sample will be collected from each sampling location.
- Step 4: To prevent cross contamination between sampling points, sampling equipment will be decontaminated before and after each sample as follows:

- wash with a suitable laboratory soap (alconox);
- rinse with tap water;
- rinse with deionized water;
- rinse with 1:4 solution of nitric acid:deionized water:
- rinse with deionized water;
- rinse with hexane; and,
- air dry.
- Step 5: Store soil samples in laboratory prepared glass jars and place on ice for storage prior to delivery to the laboratory.
- Step 6: Soil samples collected under Step 3 will be submitted to a State-certified laboratory for analysis of COCs listed under table 3. Each soil sample will be analyzed by both mass and TCLP analysis. Of note, due to the proximity to the known source area, vertical contamination delineation will not be completed.
- Step 7: Upon completion of the soil sampling, the concrete hole will be filled with clean soil and capped with concrete. The concrete cores, if possible, will be reused to cap the holes.

If it is determined based on the laboratory analytical results that the soil is contaminated, a remedial approach will be established in conjunction with the NYSDEC.

3.7 Wash Waters and Decontamination Wastewaters Sampling

All of the wash waters and the decontamination wastewaters generated during the closure proceedings will be collected and stored in 55-gallon drums and/or a vacuum truck. Wastewater samples will be collected from the drums and/or vacuum truck and analyzed for the TCLP contaminants, TCL VOCs, TCL SVOCs, and pH. If free standing solvent or paint is observed in the wash water, samples should be analyzed for ignitability. If the sample results exceed the criteria in 6 NYCRR Section 371, the wash water must be managed as a characteristic hazardous waste. If any VOCs or SVOCs are detected at any level in the wash water, the water must be managed as a listed hazardous waste.

3.8 Waste Concrete, Concrete Dust/Blasting Media and Wood Dust Sampling

Waste generated during sampling and decontamination activities will be collected and stored in 55-gallon drums or roll-offs. One representative sample will be collected for waste characterization for every drum unless the drums contain the same materials, then one representative composite sample will be collected per every 5 drums. If waste is collected in rolloff containers samples will be collected at the rate of one representative composite sample per every 10 cubic yards of waste material. Each collected sample will be submitted to a laboratory certified under NYS Department of Health's ELAP for solid and hazardous waste analysis for analysis of the RCRA TCLP contaminants, TCL volatile organics via EPA Method 8260, TCL semivolatile organics via EPA Method 8270, and ignitability. If a material is found to contain free liquid, it must be analyzed for pH also. If any of the TCLP constituents are detected at levels which exceed the characteristic hazardous waste levels in 6 NYCRR Section 371, then the waste material will be disposed of as a characteristic hazardous waste. If the waste material is found to be corrosive and/or reactive as per criteria in 6 NYCRR Section 371, it must be managed as hazardous waste. For any unknown waste material, if any VOC or SVOC constituent is detected at any concentration, the waste material must be managed as listed hazardous waste.

3.9 Field Quality Assurance/Quality Control Program

All sampling and analytical testing must be performed pursuant to the site-specific QAPP to demonstrate that closure and decontamination procedures were effective. A copy of the site-specific QAPP is included in Appendix I.

NYSDEC ASP Category B data deliverables will be provided in PDF format for all laboratory analyses.

Following completion of the sampling and analysis and upon receipt of the Category B data deliverables, Data Usability Summary Reports (DUSRs) will be prepared by an independent party. All DUSRs will be completed in accordance with the guidelines as presented in Appendix 2B of DER-10. Results of the DUSRs will be included with the Closure Report.

3.10 Personal Protection

All personnel involved in the inspection, sampling, decontamination, and removal activities will have been trained with respect to the applicable provisions of the Occupational Health and Safety Act. To ensure the safety of the site workers, appropriate personal protection equipment will be utilized as required for the site activity in progress.

3.11 Floor Decontamination

To carry out the closure activities outlined in this closure plan the following equipment may be utilized:

- shovels;
- steam jenny;
- 55-gallon drums;
- squeegees;
- concrete core drill;
- wood drill bit;
- hammer and chisel (masonry and wood);
- air purification respirators (if necessary);
- jackhammer;
- excavator (if necessary); and,
- roll-off (if necessary).

Prior to placing this equipment back into service, the procedure outlined below will be followed to remove any residue.

- Step 1: All decontamination procedures will be performed in an area located away from any floor drains, floor trenches, catch basins, etc. To prevent any runoff from these areas, a 4-6 mil piece of plastic will be elevated 6-8 inches using sandbags or bags of absorbent material stationed around the decontamination area.
- Step 2: Equipment will be first cleaned using brushes and brooms to remove any visible residue.
- Step 3: All residue (solid) collected from this operation will be placed in appropriate DOT containers for offsite disposal at a permitted hazardous waste facility.

Step 4: To remove any residue remaining on the equipment, the following washing procedure will be followed:

- A. Equipment such as shovels, chisels and drill bits will be washed and rinsed over an open 55-gallon drum. Laboratory soap, containing the active ingredient trisodium phosphate will be used in the washing operation.
- B. The wash and rinse waters will be collected in the 55-gallon drum for offsite disposal at a licensed facility (see Section 3.8 for sampling procedure).
- C. Any spillage from this operation will be absorbed with an absorbent (e.g., speedi-dry or sand) and shoveled in a 55-gallon drum for offsite disposal at a licensed facility.

Step 5: All disposable safety equipment such as coveralls, gloves, etc., will be collected in an appropriate DOT container and disposed of offsite at a permitted hazardous waste facility. The waste safety equipment will be segregated based on the activities performed and waste removed, and will then be disposed of as similar waste.

Sampling and analysis of equipment after decontamination is not considered necessary. Rather, a visual examination verifying removal of all stains should be sufficient to ensure that all contaminants are removed. Photographs of the cleaned equipment will be taken and provided in the closure certification report to document that the decontamination process was completed.

All decontamination work will be performed using qualified personnel. Qualified personnel will be required to be trained regarding the hazards of the substances which they may be exposed to and in the proper use of personal protective equipment prior to the start of decontaminating activities.

4.0 CERTIFICATION OF CLOSURE

In accordance with 6 NYCRR Section 373-3.7(f)(1), within 60 days of completion of final or partial closure of any hazardous waste management units, Fyn Paint & Lacquer Company, Inc. will submit to NYSDEC by registered mail, a certification that the hazardous waste storage areas are closed in accordance with the specification of the approved Closure Plan. The certification will be signed by a Professional Engineer registered in the State of New York. Documentation supporting the certification will be provided in a Certification Report submitted with the certification. The report will include the following:

- text describing closure activities;
- tables and figures summarizing the sampling and analytical data; and,
- appendices containing, at a minimum:
 - o meeting notes from the onsite pre-closure meeting;
 - o daily reports;
 - o photographs and logbook;
 - o laboratory analytical results including QA/QC documentation including an electronic copy of the deliverables in PDF format; and,
 - o documenting of all stages of waste generation, handling and disposal (e.g., waste manifests and land disposal restriction forms).

5.0 SCHEDULE FOR CLOSURE

A schedule of closure activities is included below. It subdivides work elements and provides estimated dates for performance of work and deliverables.

FYN Paint will implement the closure plan activities following NYSDEC approval of this plan. The schedule will follow the general outline below:

	TASK	TASK COMPLETED
•	Remove residual waste and drums (Section 3.2)	Ongoing
•	Develop COC list (Section 3.1)	20 days after approval of closure work plan
•	Recycle equipment and virgin product storage tanks (Section 3.3)	30 days after COC list is developed
•	Remove plywood flooring (Section 3.4)	10 days after equipment and virgin product storage tanks are removed
•	Identify contamination in area subject to NYS hazardous waste regulations (Section 3.5)	30 days after removal of plywood flooring (contingent on laboratory results)
•	Prepare Closure Certification Report (Section 4.0)	45 days after decontamination of area subject to NYS hazardous waste regulations

6.0 CLOSURE COST ESTIMATE

A cost estimate to complete the Closure Plan is provided in Appendix II. The estimate is based on third-party costs including experience completing similar work at other properties and contractor estimates. Unallocated Administrative and Contingency Costs are included at 15% and 20% of allocated costs, respectively.

7.0 CLEAN CLOSURE FAILURE

If clean closure of any of the units subject to NYS hazardous waste regulations cannot be achieved, Fyn Paint & Lacquer Company, Inc. will contact the NYSDEC to discuss methods to achieve closure.

dmd

TABLES

FYN PAINT AND LACQUER CO., INC. KENT AVENUE **BROOKLYN, NEW YORK VCP INDEX NO. W2-0873-00-10**

Soil Quality Summary - Volatile Organic Compounds Detected in UST Excavation Bottom Samples

VOCs by EPA Method 8260 Samples Collected - February 18, March 10, 16, 2010

Compound			6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives					
Compound	В-1	B-2	В-3	B-4	B-5	Reporting Limit	Protection of Public Health (Commercial)	Protection of Groundwater
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	10.0	NE	NE
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	10.0	500,000	680
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	10.0	NE	NE
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	ND	ND	ND	ND	10.0	NE	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	10.0	NE	NE
1,1-Dichloroethane	ND	ND	ND	ND	ND	10.0	240,000	270
1,1-Dichloroethylene	ND	ND	ND	ND	ND	10.0	500,000	330
1,1-Dichloropropylene	ND	ND	ND	ND	ND	10.0	NE	NE
1,2,3-Trichlorobenzene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	NE NE	NE NE
1,2,3-Trichloropropane			ND ND	ND ND	ND ND	10.0	NE NE	NE NE
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	190.000	3,600
1,2-Dibromo-3-chloropropane	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	NE	NE
1,2-Dibromoethane	ND	ND ND	ND ND	ND ND	ND ND	10.0	NE NE	NE NE
1,2-Dioromoeniane	ND	ND	ND ND	ND ND	ND ND	10.0	500.000	1,100
1,2-Dichloroethane	ND	ND	ND ND	ND ND	ND	10.0	30,000	20
1,2-Dichloropropane	ND	ND	ND	ND	ND	10.0	NE	NE
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	10.0	190,000	8,400
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10.0	280,000	2,400
1,3-Dichloropropane	ND	ND	ND	ND	ND	10.0	NE	NE
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10.0	130,000	1,800
2,2-Dichloropropane	ND	ND	ND	ND	ND	10.0	NE	NE
2-Chlorotoluene	ND	ND	ND	ND	ND	10.0	NE	NE
Acetone	330,000	210,000	130,000	750,000	1,500,000	10.0	500,000	500
2-Butanone	ND	ND	ND	ND	6,300	10.0	NE	NE
4-Chlorotoluene	ND	ND	ND	ND	ND	10.0	NE	NE
Benzene	ND	ND	ND	ND	ND	10.0	44,000	60
Bromobenzene	ND	ND	ND	ND	ND	10.0	NE	NE
Bromochloromethane	ND	ND	ND	ND	ND	10.0	NE	NE
Bromodichloromethane	ND	ND	ND	ND	ND	10.0	NE	NE
Bromoform	ND	ND	ND	ND	ND	10.0	NE	NE
Bromomethane	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	NE 22,000	NE 760
Carbon tetrachloride Chlorobenzene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	500,000	1,100
Chloroethane	ND	ND	ND ND	ND ND	ND	10.0		NE
Chloroform	ND	ND	ND	ND	ND	10.0	350,000	370
Chloromethane	ND	ND	ND	ND	ND	10.0	NE	NE NE
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	10.0	500,000	250
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	10.0	NE	NE
Dibromochloromethane	ND	ND	ND	ND	ND	10.0	NE	NE
Dibromomethane	ND	ND	ND	ND	ND	10.0	NE	NE
Dichlorodifluoromethane	ND	ND	ND	ND	ND	10.0	NE	NE
Ethyl Benzene	88,000	42,000	94,000	320,000	2,600	10.0	390,000	1,000
Hexachlorobutadiene	ND	ND	ND	ND	ND	10.0	NE	NE
Isopropylbenzene	ND	ND	ND	3,500	ND	10.0	NE	NE
Methyl tert-butyl ether (MTBE)	ND	ND	ND	ND	ND	10.0	500,000	930
Methylene chloride	ND	ND	ND	ND	ND	20.1	500,000	50
Naphthalene	ND	ND	ND	ND	ND	10.0	500,000	12,000
n-Butylbenzene	ND	ND	ND	ND	ND	10.0	NE	NE
n-Propylbenzene	ND	ND	ND	ND	ND	10.0	500,000	3,900
o-Xylene	110,000	61,000	160,000	450,000	5,700	10.0	500,000	1,600
p- & m- Xylenes	360,000 ND	190,000	480,000	1,400,000	13,000 ND	20.1	NE	NE
p-Isopropyltoluene sec-Butylbenzene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0 10.0	NE 500,000	NE 11,000
Styrene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	NE	NE
styrene tert-Butylbenzene	ND ND	ND ND	ND ND	ND ND	ND ND	10.0	500,000	5,900
Tetrachloroethylene	ND ND	ND	ND ND	ND ND	ND	10.0	150,000	1,300
Toluene	1,500,000	270,000	70,000	270,000	5,900	10.0	500,000	700
trans-1,2-Dichloroethylene	ND	ND	ND	ND	ND	10.0	500,000	190
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	10.0	NE	NE NE
Trichloroethylene	ND	ND	ND	ND	ND	10.0	200,000	470
Trichlorofluoromethane	ND	ND	ND	ND	ND	10.0	NE	NE
<u>-</u>	ND	ND	ND	ND	ND	10.0	13,000	20

ug/kg - micrograms per kilogram

B - Compound present in method blank

J - Indicates an estimated value

New York State Codes, Rules and Regulations, Chapter VI, Part 375: Environmental Remediation Programs, Subpart 375-6: Remedial Program Soil Cleanup Objectives, Dec. 14, 2006

NE - Soil Cleanup Objective Not Established

ND - Not Detected

NS - Not Specified

TABLE 2

FYN PAINT & LACQUER COMPANY, INC. 230 KENT AVENUE

WILLIAMSBURG, BROOKLYN, NEW YORK

Groundwater Quality Summary - EPA Method 8260 Modified to Include MTBE¹⁾ Collected December 9, 10 & 13, 2010

Concentration (ug/l) ²⁾																	1																
Well Identification	Acetone	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene	2-Butanone	Carbon Tetrachloride	Chloroform	Chlorobenzene	cis-1,2-Dichloroethene	trans-1, 2-Dichloroethene	1,2 Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloropropane	1,2-Dichlorobenzene	Diethyl Ether	Isopropylbenzene	n-propylbenzene	4-Methyl-2-Pentanone	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Tetrachloroethene	Trichloroethene	1,1,1-Trichloroethane	Trichlorofluoromethane	Methyl tert-butyl ether	Methylene Chloride	Vinyl Chloride	Tetrahydrofuran	Dichlorodifluoromethane
MW-1	Not Sampled - To Be Sampled Annually Concurrent with the Con Edison MOSF Sampling as per NYSDEC Not Sampled - To Be Sampled Annually Concurrent with the Con Edison MOSF Sampling as per NYSDEC																																
MW-2											No	Sampled	- To Be S	ampled A	nnually C	Concurren	t with the	Con Edis	on MOSI	Samplin	g as per N	YSDEC											
MW-3	Not Sampled - To Be Sampled Annually Concurrent with the Con Edison MOSF Sampling as per NYSDEC																																
MW-4	ND 3)	ND	ND	2.7	5.5	ND	ND	ND	ND	2.9	10.0	7.2	ND	ND	4	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND
MW-5	Not Sampled - To Be Sampled Annually Concurrent with the Con Edison MOSF Sampling as per NYSDEC																																
MW-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND
MW-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	18	2.2	ND	ND	ND	ND	ND	5.4
MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-9A				•										N	lot Sampl	ed - Produ	uct Detect	ed In The	Well		•				•	•							
MW-10	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND
MW-11	ND	ND	ND	ND	23.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12	ND	ND	720	6,500	22,650	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-13				•	•	•]	Not Samp	led - Wel	covered	by scaffo	lding	•	•				•	•	•	•	•				
MW-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND
MW-15				_										N	lot Sampl	ed - Produ	uct Detect	ed In The	Well		_											,	
MW-16	18,000	ND	33,000	5,000	30,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-20	ND	ND	ND	11	37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-21	51,000	110	290,000	4,400	29,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-22														N	lot Sampl	ed - Produ	uct Detect	ed In The	Well		_											,	
MW-23	ND	ND	1,600	2,600	14,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-24	ND	ND	6,500	420	1,770	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-25				•										N	lot Sampl	ed - Produ	uct Detect	ed In The	Well		•				•	•							
MW-26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND
MW-27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-28	13,000	ND	9,900	380	1,280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-1				•											Not	Sampled	- Decomn	nissioned			•				•	•							
GP-2															Not	Sampled -	- Decomn	nissioned															
EW-1	3,400	ND	75,000	4,200	20,800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EW-2	ND	ND	13,000	9,100	48,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CE-4											No	Sampled	- To Be S	ampled A	nnually C	Concurren	t with the	Con Edis	on MOSI	Samplin	g as per N	YSDEC											
ASW-1															Not	Sampled	- Air Spa	rge Well															
Trip Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC 4) TOGS GWQS 5)	5	0.7	5	5	5	10	5	5	7	5	5	5	0.6	5	5	1	3	NA	5	5	NA	0.04	5	5	5	5	5	5	10	5	2	50	5

- Methyl tert-butyl ether
 Micrograms per liter
 Not detected

- 4) New York State Department of Environmental Conservation5) Technical & Operational Guidance Series Ground Water Quality Standards

Notes: Samples analyzed by EPA Method 8260

TABLE 3

FYN PAINT & LACQUER CO., INC. 230 KENT AVENUE BROOKLYN, KINGS COUNTY, NEW YORK

RCRA CLOSURE WORK PLAN

Preliminary List of Constituents of Concern

RCRA Metals

Volatile Organic Compounds

Semi-Volatile Organic Compounds

Specific constituents of concern will be determined during implementation of closure work plan through laboratory analysis of samples analyzed for parameters listed in 40 CFR 264 Appendix 23.

FYN PAINT AND LACQUER CO., INC. KENT AVENUE BROOKLYN, NEW YORK VCP INDEX NO. W2-0873-00-10

Soil Quality Summary - Volatile Organic Compounds Detected in SSDS Trench and Pipe Trench Bottom Samples

VOCs by EPA Method 8260 Samples Collected - April 7 and May 3, 2010

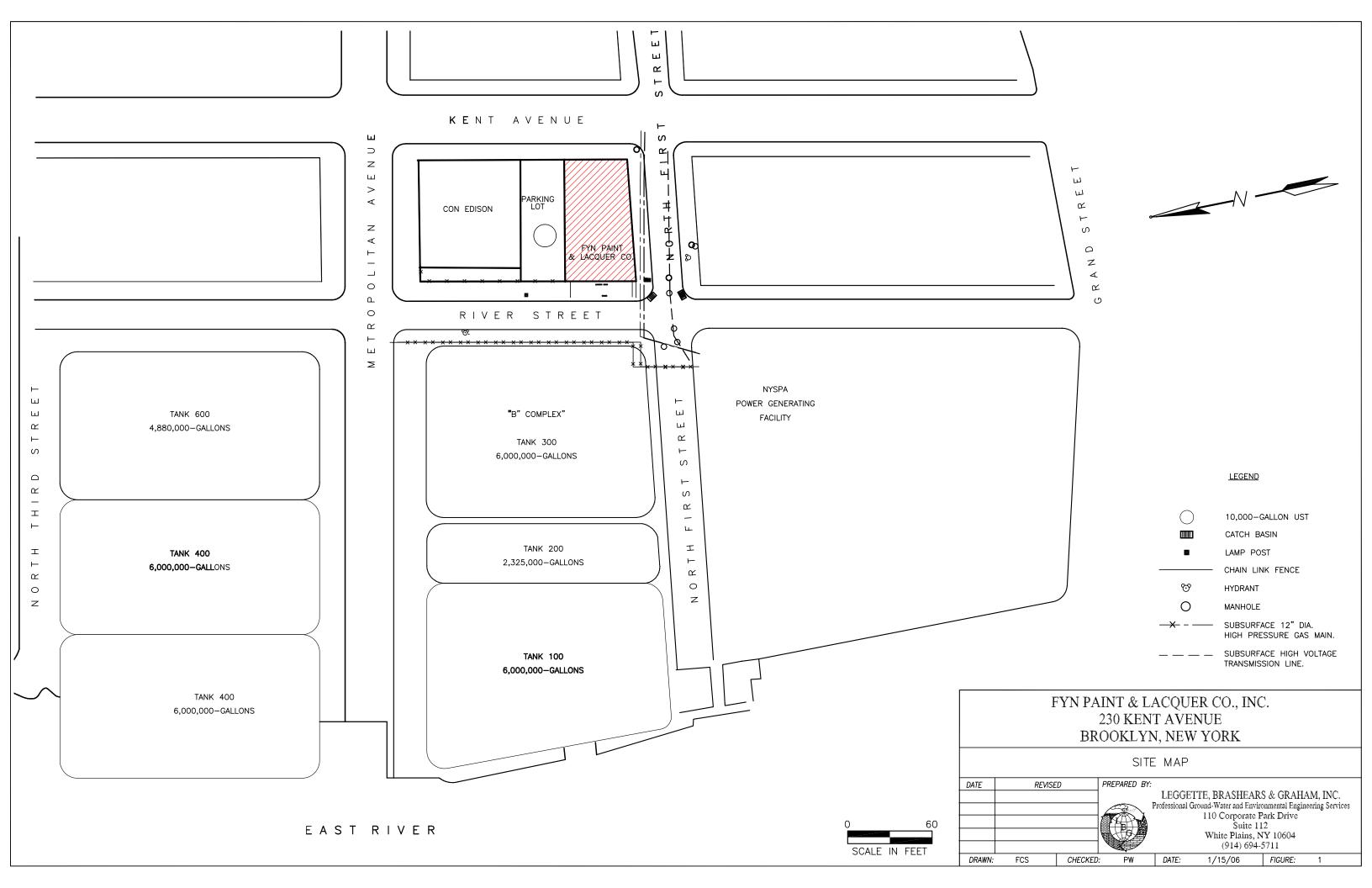
							Concentration	(ug/kg)						6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives			
Compound	TB-1	TB-2	TB-3	TB-4	TB-5	TB-6	TB-7	TB-8	TB-9	TB-10	PTB-1	Reporting Limit	Reporting Flag	Protection of Public Health (Commercial)	Protection of Groundwater		
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,1,1-Trichloroethane	ND	ND	42	44	79	ND	ND	ND	ND	ND	ND	10.0		500,000	680		
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		240,000	270		
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	330		
1,1-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE NE	NE		
1,2,3-Trichloropropane	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	10.0		NE NE	NE NE		
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	ND ND	ND 31	ND 34	ND 120	ND 60	ND 260	53	ND 100	ND 190	ND 26	ND ND	10.0		NE 190,000	NE 3,600		
1,2-Dibromo-3-chloropropane	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	10.0		NE	3,000 NE		
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE NE	NE NE		
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	1,100		
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		30,000	20		
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,3,5-Trimethylbenzene	ND	ND	ND	83	43	100	30	58	110	ND	ND	10.0		190,000	8.400		
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		280,000	2,400		
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		130,000	1,800		
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
2-Butanone	ND	ND	610	ND	ND	700	ND	ND	ND	ND	ND						
Acetone	310	1,300	4,400	900	3,600	780	300	580	310	ND	330,000						
Benzene	ND	ND	ND	32	ND	ND	ND	ND	ND	ND	ND	10.0		44,000	60		
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		22,000	760		
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	1,100		
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		350,000	370		
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE 250		
cis-1,2-Dichloroethylene cis-1,3-Dichloropropylene	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	10.0		500,000 NE	NE		
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE NE	NE NE		
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE NE	NE NE		
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE.		
Ethyl Benzene	ND	350	400	220	310	210	68	230	110	320	95,000	10.0		390,000	1.000		
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	29	ND	25	ND	10.0		NE	NE		
Methyl tert-butyl ether (MTBE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	930		
Methylene chloride	ND	ND	180	ND	470	ND	63	62	79	ND	ND	20.1		500,000	50		
Naphthalene	ND	ND	ND	60	ND	890	270	190	170	ND	ND	10.0		500,000	12,000		
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
n-Propylbenzene	ND	ND	ND	32	ND	42	ND	ND	ND	ND	ND	10.0		500,000	3,900		
o-Xylene	52	1,700	3,200	260	990	340	150	730	300	2,000	110,000	10.0		500,000	1,600		
p- & m- Xylenes	120	3,500	1,100	1,100	2,400	1,200	420	1,400	1,200	3,000	380,000	20.1			1		
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	11,000		
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		NE	NE		
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000	5,900		
Tetrachloroethene	ND	65	190	700	2,700	74	79	170	110	ND	ND	10.0		150,000	1,300		
Toluene	45	1,600	11,000	810	4,400	3,600	180	270	560	1,300	140,000	10.0		500,000	700		
trans-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0		500,000 NE	190		
trans-1,3-Dichloropropylene	ND ND	ND	ND	ND	ND	ND ND	ND	ND	ND ND	ND	ND	10.0 10.0			NE 470		
Trichloroethene Trichlorofluoromethane	ND 170	ND ND	26 ND	ND ND	280 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	10.0		200,000 NE	470 NE		
Trichlorofluoromethane Vinyl Chloride	170 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	10.0		NE 13.000	NE 20		
vinyi Cinoride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	IND	10.0		12,000	120		

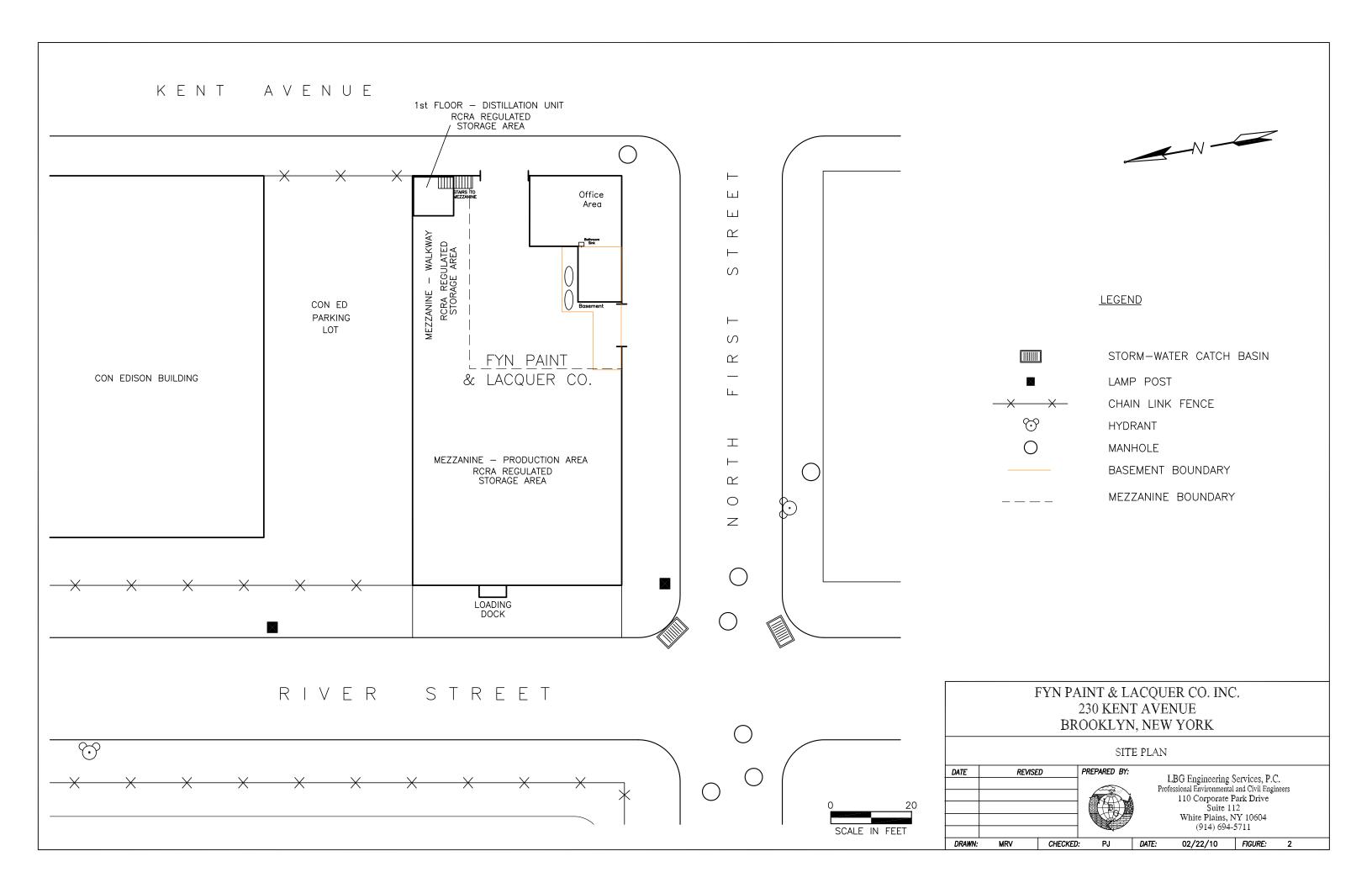
ug/kg - micrograms per kilogram
B - Compound present in method blank
J - Indicates an estimated value
New York State Codes, Rules and Regulations, Chapter VI, Part 375: Environmental Remediation Programs,
Subpart 375-6: Remedial Program Soil Cleanup Objectives, Dec. 14, 2006

NE - Soil Cleanup Objective Not Established

ND - Not Detected NS - Not Specified

FIGURES





APPENDIX I

Quality Assurance Project Plan (QAPP)

QUALITY ASSURANCE PROJECT PLAN FYN PAINT AND LACQUER CO., INC. 230 KENT AVENUE WILLIAMSBURG, KINGS COUNTY, NEW YORK

NYSDEC SITE ID #V00380-2

Prepared For

Fyn Paint & Lacquer Co., Inc.

June 2008 Revised: May 2011

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QUALITY ASSURANCE PROJECT PLAN FYN PAINT AND LACQUER CO., INC. 230 KENT AVENUE WILLIAMSBURG, KINGS COUNTY, NEW YORK

NYSDEC SITE ID #V00380-2

QUALITY ASSURANCE PROJECT PLAN

In the event of any additional soil, ground-water and soil gas/indoor air sampling, latex gloves will be worn and changed between sampling locations. All of the samples will be preserved for holding time (if necessary) and properly labeled in the field. This includes the following:

- name of collector;
- date and time of collection;
- place of collection; and,
- sample identification and/or number.

Chain-of-Custody Record will be completely filled out for every shipment and every sample to trace sample possession including:

- sample number and/or identification;
- signature of sample collector;
- date and time of sample collection;
- place of sample collection;
- sample type (water, soil, etc.);
- sample preservatives;
- sample container;
- requested analysis;
- signature of person involved with sample possession;
- inclusive dates of sample possession; and,
- pertinent comments and/or notes.

The laboratory portion of the Chain-of-Custody Form will be completed by the designated analytical laboratory person and contain the following information:

- inclusive dates of sample possession;
- pertinent comments and/or notes;
- name of person receiving the sample;
- laboratory sample number;
- date of sample receipt;
- analysis requested; and,
- sample condition and temperature.

Detailed field records for all site activities will be kept by the personnel performing or supervising the work. Recordkeeping will be completed in a field notebook and/or preprinted data sheets used by LBG. The field notebook and/or preprinted data sheets will be used to record pertinent observations (odors, visual observation, matters of interest, weather), all field measurements (water levels, pH, specific conductance) and any irregularities or deviations from the prescribed sampling procedures. All entries into the field book and/or preprinted data sheets will be with waterproof ink pen, initialed by the person completing the measurements/observations, and the pages of the field book numbered.

During sample collection, extreme care will be taken in order to ensure that high quality data are obtained. The sampling team will avoid fueling vehicles, using permanent marking pens or any other materials containing volatile organic compounds (VOCs) which can cause sample interference in the field.

Analytical data control checks will be established by utilizing trip blanks and field blanks. Trip blanks will be prepared in the laboratory using organic free water. Trip blanks will accompany a batch of samples from the start of sampling to delivery of samples to the laboratory for analysis, remaining unopened. The purpose of the trip blank is to measure possible cross contamination of samples during the shipping and handling stages. The Field Blank is prepared in the field by passing the analyte-free water from the full bottle to the empty Field Blank container. The purpose of the Field Blank is to demonstrate ambient field

conditions and/or equipment conditions that may potentially affect the quality of the samples. One field blank and one trip blank will be collected per twenty sampling locations for VOCs in ground water.

All samples will be collected utilizing laboratory supplied sampling containers. Water samples collected for VOC analysis will be collected in 40 ml vials prepared with hydrochloric acid preservative. Water samples collected for total metals analysis will be collected in 500 ml plastic containers prepared with nitric acid preservative. All soil and water samples collected will be stored in an appropriate shipping container such as a cooler and temperature will be maintained with ice. The sample storage will ensure that the samples remain at a temperature between 2C° and 6C° until their delivery to the laboratory for analysis. The sample storage container will be secured to ensure that the samples are not been disturbed during transport. Analytical methods and holding times are outlined below:

SUMMARY OF SAMPLE HANDLING AND PRESERVATION

Sample Collection Area	Media	Analytical Method	Holding Time	Preservation
Mezzanine Soil Borings, Grab samples Hand auger samples	Dried Paint Wood Concrete chips Soil	EPA Method 8260 EPA Method 8270 EPA Method 6010	< 2 Weeks	ICE
Rinsate Sampling Monitor Wells Geoprobe Soil Borings	Rinsate Groundwater Decon Water	EPA Method 8260 EPA Method 8270 EPA Method 6010	< 2 Weeks	HCl Acid (for VOCs) Nitric Acid (for Metals) ICE
Sub-Slab Soil Vapor Points Soil Vapor Points Ambient Air	Air	EPA Method TO-15 Propane/Helium (tracer)	N/A As soon as possible	Avoid extreme heat

All samples will be submitted and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Laboratory analysis of soil and ground-water samples will consist of Category A (as defined in the ASP) or Category Spills laboratory data deliverables for all sampling performed at the Site

with the exception of confirmatory (post remediation) samples and final delineation samples. For all confirmatory (post remediation) samples and final delineation samples, Category B laboratory data deliverables as defined in the analytical services protocol (ASP) will be submitted. In addition, for samples analyzed according to Category B laboratory data deliverables, a Data Usability Summary Report (DUSR) will be prepared by a party independent from the laboratory performing the analysis, when required by the NYSDEC.

For all soil gas and indoor air quality sampling, Category B laboratory data deliverables as defined in the analytical services protocol (ASP) will be submitted.

In accordance with the DER-10 guidance document, analytical results without all quality control documentation and raw data may be provided for all intermediate sampling events and for all long-term ground-water monitoring samples where the Site has Department of Environmental Remediation oversight, provided the following information is submitted:

- a cover page, including facility name and address, laboratory name and address, laboratory certification number, if applicable, date of analytical report preparation and signature of laboratory director;
- a listing of all field sample identification numbers and corresponding laboratory sample identification numbers;
- a listing of all analytical methods used, including matrix cleanup method;
- the method detection limit and practical quantitation level for each analyte for each sample analysis;
- all sample results including date of analysis;
- all method blank results; and
- all chain-of-custody documentation.

SOIL SAMPLING PROCEDURES

Soil samples may be collected in association with activities at the Site. Soil samples may be collected several ways: grab sample, hand auger, geoprobe macrocore and split-spoon sampling.

Grab Sampling

Grab samples are collected from exposed surficial soil and from stockpiled soil. Collection of a grab sample will be performed with the field personnel using latex or nitrile sampling gloves. The soil sample(s) will be placed into laboratory prepared sampling containers and stored on ice. The sample will then be shipped to the laboratory under chain-of-custody procedures.

Hand Auger Sampling

Pending access to the subsurface, the hand auger would be advanced from grade to the designated termination depth. Samples will be removed from the hand auger and placed on polyethylene liner for observation. During advancement of the hand auger, the samples obtained will be screened in the field for VOCs using a photoionization detector (PID). The soil samples will be handled by field personnel using new latex or nitrile sampling gloves for each sampling interval. Pending review of all samples collected, the previously collected soil samples will be stored in plastic Ziploc bags to prevent off-gassing of VOCs. The soil sample(s) selected for analysis will be placed into laboratory prepared sampling containers and stored on ice. The sample will then be shipped to the laboratory under chain-of-custody procedures.

Following completion of each individual boring, the hand auger sampling point and extension rods will be decontaminated using alconox and water.

Geoprobe Macrocore Sampling

Soil samples may be collected from the Site using a Geoprobe drill rig. This rig uses direct push technology to recover 4-foot or 5-foot long macrocore samples. The samples are collected in dedicated polyethylene liners. The liners are then cut open to expose the soil cross-section. The soil is then characterized on a geologic log. The soil samples will be handled by field personnel using new latex or nitrile sampling gloves for each sampling interval. Pending review of all samples collected, the previously collected soil samples will be

stored in plastic Ziploc bags to prevent off-gassing of VOCs. The soil sample(s) selected for analysis will be placed into laboratory prepared sampling containers and stored on ice. The sample will then be shipped to the laboratory under chain-of-custody procedures.

Following completion of each macrocore sample, the macrocore will be decontaminated using alconox and water and a new dedicated polyethylene sleeve will be used.

Split-Spoon Sampling

Soil samples may be collected from the Site using a stainless steel split-spoon sampler in association with a hollow-stem auger and/or mud-rotary drill rig. This technique involves sending a 2-foot sampling device to the termination depth of a drill boring and hammering the sampler through the soil. The samples are collected within the split-spoon sampler and prevented from falling out of the sampler with a plastic basket at the bottom. After the split-spoon sampler is advanced two feet, it is removed from the boring. The split-spoon sampler is then taken apart exposing the soil sample. The soil is then characterized on a geologic log. The soil samples will be handled by field personnel using new latex or nitrile sampling gloves for each sampling interval. Pending review of all samples collected, the previously collected soil samples will be stored in plastic Ziploc bags to prevent off-gassing of VOCs. The soil sample(s) selected for analysis will be placed into laboratory prepared sampling containers and stored on ice. The sample will then be shipped to the laboratory under chain-of-custody procedures.

Following completion of each split-spoon sample, the split-spoon sampler will be decontaminated using alconox and water.

CONCRETE SAMPLING PROCEDURES

When collecting concrete rinsate samples from the selected areas, the following procedure should be used to collect surface water samples:

- Record the sample location on a site map and in the field logbook.
- Don a clean pair of latex/nitrile gloves.

- Collect the concrete rinsate sample(s) by pouring the laboratory supplied reagent free water across the concrete pad and collecting the "run-off" at the low end of the selected bay. A temporary berm will be constructed to allow the water to pool after contact with the pad.
- The samples will be collected directly into the laboratory supplied containers.

 Containers with preservatives will be filled by first filling an unpreserved container and then transferring the liquid to the preserved containers.
- Label, store and document the sample according to the QAPP and RCRA Closure Work Plan.
- Identify and document the location for future reference.

GROUND-WATER SAMPLING PROCEDURES

In the interest of generating additional ground-water parameter information, a low-flow sample technique will be used. Ground water will be sampled from onsite monitor wells using a peristaltic sampling pump. The pump intake will be placed at predetermined positions within each well and, if necessary, lowered as pumping progresses. The pump intake position within each well was determined from geologic logs.

The low flow purge and sample methodology will be utilized for the collection of ground-water samples. Prior to sampling, the depth to water with respect to the top of well casing and total depth of each well will be measured with an electric tape and/or weighted steel tape. Both measurements will be recorded in a field logbook. Dedicated polyethylene tubing will be set within each well at the predetermined well screen interval and connected to a variable speed peristaltic pump. The peristaltic pump will be operated at a discharge rate of 100-500 milliliters per minute and will discharge to a Flow-Through Cell. Geochemical parameters of the associated ground water such as pH, conductivity, dissolved oxygen and temperature will be continuously monitored inside the Flow-Through Cell using a Horiba multi-parameter meter. Once all of the above geochemical parameters stabilize, a ground-water sample will be collected from the dedicated polyethylene tubing through an inline

sampling port prior to the Flow-Through Cell. During the sampling, latex gloves will be worn and changed between sampling locations.

All of the samples will be preserved for holding time and properly labeled in the field. A chain-of-custody form will be filled out and the samples will be placed in a cooler with ice. The sample will then be shipped to the laboratory under chain-of-custody procedures.

SOIL GAS, INDOOR AIR AMBIENT AIR AND SVE SYSTEM SAMPLING PROCEDURES

The purpose of soil gas and indoor air sampling is to determine the following:

- potential for current human exposure;
- potential for future human exposure;
- necessary measures to be implemented for removal of vapors from the subsurface and/or indoor air;
- potential for offsite soil vapor contamination;
- determine any offsite preferential migration pathways;
- characterize the vapors in the vadose zone; and,
- investigate the relationship between contaminated ground water and soil vapor.

Soil Vapor

Soil vapor samples may be collected from both existing soil vapor sampling points and from soil vapor points yet to be installed. If additional soil vapor points are installed at the Site, they will be installed following the construction specifications as described in the New York State Department of Health Center for Environmental Health, Bureau of Environmental Exposure Investigation Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Soil vapor samples may be collected from the soil vapor sampling points using the following procedures.

- a soil vapor sample will be collected from a soil vapor sampling point after one to three volumes of the soil vapor sampling point and the tube are purged using a peristaltic pump;
- the flow rate for purging will not exceed 0.2 liters per minute; and,
- each sample will be collected using a Summa canister fitted with a flow regulator to collect a 1-liter soil vapor sample over a 2 to 8 hour period.

The soil vapor sample will then be sent to the laboratory via overnight courier service under chain-of-custody procedures. The soil vapor samples will be analyzed by EPA Method TO-15.

Indoor Air

In the event that it is deemed necessary, indoor air samples may be collected from within the building. If this sampling is to constitute a soil vapor intrusion investigation, the indoor air samples will be collected concurrent with the soil vapor samples from similar building areas. The indoor air sampling would be used to characterize the indoor air quality and; if sampled concurrently with soil vapor samples, also to evaluate the relationship between the indoor air and the soil vapor concentrations the Site. A 6-liter Summa canister will be placed in the sample location at a slightly elevated height of approximately 3-4 feet above the ground surface. Each Summa canister used for collecting indoor air samples will be fitted with a dedicated regulator calibrated to allow 1 liter of air flow over an 8-hour sampling period. The indoor air sample will then be sent to the laboratory via overnight courier service under chain-of-custody procedures. The indoor air sample will be analyzed by a NYSDOH ELAP certified laboratory by EPA Method TO-15.

Outdoor Ambient Air

Outdoor ambient air samples (if collected) will be collected from predetermined locations at the perimeter of the building onsite. One location will be upwind of the Site and one location will be downwind of the Site. A 6-liter Summa canister will be placed in each sample location at a slightly elevated height. Each Summa canister used for collecting outdoor ambient air samples will be fitted with a dedicated regulator calibrated to allow 1 liter of air flow over an 8-hour sampling period. The outdoor ambient air samples will then be sent to the laboratory via overnight courier service under chain-of-custody procedures. The outdoor

ambient air samples will be analyzed by a NYSDOH ELAP certified laboratory by EPA

Method TO-15.

(Remediation System) Sampling

Soil-Vapor Extraction (SVE) System, Sub-Slab Depressurization System and Ground Water Pump and Treat System sampling protocol for the remediation system will be conducted

as described in the RAWP.

scg

May 2, 2011

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APPENDIX II

Cost Estimate

COST ESTIMATE - RCRA FACILITY CLOSURE ACTIVITIES

SUMMARY

GRAND TOTAL.	\$	375,936
Tax, 8.875 percent	<u>\$</u>	30,645
SUB-TOTAL	\$	345,291
Contingency Costs (20% of		51,895
Unallocated Administrative	Costs (15% of Total)\$	38,931
Total (Tasks 1-10)	\$	259,475
Task 10 – Correspondence with NYSDEC		3,000
Task 9 – RCRA Closure Report		8,000
•		•
Task 8 – Expenses		3,000
Task 7B – Mezzanine Beam Encapsulation		12,020
Task 7 – Floor Reconstruction		10,520
Task 6 – Recycling of Waste Equipment		43,250
Task 5 – Waste Disposal	\$	37,285
Task 4 – Waste Compositing Activities and Floor Demolition	n\$	49,200
Task 3 – Waste Material Characterization Sampling	\$	54,300
Task 2 – Implementation of RCRA Closure Work Plan	\$	21,900
Task 1B - RCRA Closure Work Plan Modifications	\$	8,500
Task 1 – RCRA Closure Work Plan		8,500

NOTES:

- 1. The disposal costs may increase due to disposal of additional waste as hazardous.
- 2. The cost for the wood floor disposal is contingent on the removal of only the plywood and assumes the base wood (joists and planks) can remain in place.
- 3. As per RCRA closure requirements, additional sampling and disposal may be required based on closure sample results.
- 4. If additional closure sampling activities are required, billing will be submitted on a time and materials basis.
- 5. Costs assume direct payment to subcontractor for waste compositing/demolition/disposal/reconstruction services.
- 6. All invoicing subject to LBG standard rates.
- 7. Post-Closure costs are based on only one layer of floor needing to be removed to meet closure compliance requirements.
- 8. An itemized cost estimate with pro-rate information is attached.
- 9. Unallocated Administrative Costs and Contingency Costs were required by NYSDEC

dmd

May 13, 2011

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COST ESTIMATE - RCRA FACILITY CLOSURE ACTIVITIES

Task 1 – RCRA Closure Work Plan	
Prepare Site Specific RCRA Closure Work Plan	\$ 7,000
Communications with NYSDEC	
• Site Visit	:
• Expenses	
Total Task 1 - COMPLETED	\$ 8,500
-Floor 40% -Equipment 20% -Drums/cans/pails 40%	
Task 1B - RCRA Closure Work Plan Modifications	
Report Modifications and NYSDEC Communications	\$ 8,500
Total Task 1B - COMPLETED	\$ 8,500
-Floor 40% -Equipment 20% -Drums/cans/pails 40%	
Task 2 – Implementation of RCRA Closure Work Plan	
Onsite Post Closure Sampling Labor (assumes 2 days)	\$ 3,600
Post Closure Sample Analytical	
Expenses and equipment	
Total Task 2	\$ 21,900
-Floor 40% -Equipment 20% - Drums/cans/pails 40%	
<u>Task 3 – Waste Material Characterization Sampling</u>	
Wood Analytical for Roll-offs	\$ 3,000
Equipment Waste Analytical	
Waste Paints and Lacquers	\$ 10,000
Thick Build-up Paint Analytical	\$ 1,400
Decontamination/Rinsate/Endpoint Samples	
Data Usability Summary Reports (DUSRs)	\$ 4,400
Miscellaneous Analytical	\$ 6,500
• Expenses and equipment	
Sampling, supervision, including Health and Safety	\$ 8,200
Total Task 3	\$ 54,300
-Floor 41% -Equipment 9% - Drums/cans/pails 50%	

COST ESTIMATE - RCRA FACILITY CLOSURE ACTIVITIES (continued)

Task 4 - Waste Compositing Activities and Floor Demolition	
• Equipment (lifts, mini-excavator, bobcat)\$	18,450
• Labor \$	13,600
Personal Protective Equipment\$	1,950
• Supervision \$	15,200
<u></u>	10,200
Total Task 4\$	49,200
-Floor 50% -Equipment 0% - Drums/cans/pails 50%	
Task 5 – Waste Disposal	
• Six (6) 55-gallon drums of solvents\$	1,900
• Three (3) 55-gallon drums of still bottoms\$	1,125
• Eight (8) 55-gallon drums of pumpable paint\$	2,700
• Six (6) 55-gallon drums of solidified paints\$	2,600
• Four (4) 55-gallon drums of lab-packed non-flammable paints\$	1,700
• Four (4) 55-gallon drums of lab-packed flammable paints\$	1,600
• Approximately four (4) pallets of 5 gallon paint and paint pails\$	2,760
Approximately sixty (60) yards of non-hazardous floor boards	_,
(3 roll-offs) \$	10,000
• Transportation costs for three (3) roll-off containers of paint saturated	
floor boards\$	3,400
• Approximately forty (40) reconditioned DOT 55-gallon drums\$	1,200
• Expenses and equipment\$	3,500
• Supervision <u>\$</u>	4,800
Total Task 5\$	37,285
-Floor 47% -Equipment 0% - Drums/cans/pails 53%	
Task 6 – Recycling of Waste Equipment	
• Supervision/Oversight/Expenses\$	10,100
• Equipment (Forklift, air chisel, dump truck)\$	12,750
Subcontractor Labor Subcontractor Labor	20,400
	42.250
Total Task 6\$ Note – There will be some cost recovery based on the amount of steel recycled (estimated to be approximately \$5.00).	43,250 500 to \$1,000)
-Floor 0% -Equipment 100% - Drums/cans/pails 0%	

COST ESTIMATE - RCRA FACILITY CLOSURE ACTIVITIES (continued)

Task 7 – Floor Reconstruction		
Materials	\$	2,500
Permits (if required)		TBD
• Labor		5,500
• Supervision		2,520
Total Task 7	\$	10,520
-Floor 100% -Equipment 0% - Drums/cans/pails 0%		
<u>Task 7B – Alternative Mezzanine Encapsulation</u>		
• Equipment	\$	1,500
Surface Preparation, Encapsulant & Application Labor		8,000
• Supervision		2,520
Total Task 7B	\$	12,020
-Floor 100% -Equipment 0% - Drums/cans/pails 0%		
Task 8 – Expenses		
1 dsk 0 - Expenses		
Travel (mileage and tolls)	\$	1,000
Monitoring Equipment (lump sum)	\$	1,000
• Miscellaneous Supplies (poly, respirators, Tyvek, ear muffs, gloves)	. <u>\$</u>	1,000
Total Task 8	\$	3,000
-Floor 40 % -Equipment 20% - Drums/cans/pails 40 %		
Task 9 – RCRA Closure Report		
Prepare Site Specific RCRA Closure Report	\$	5,000
Communications with NYSDEC		1,800
Complete Necessary Report Revisions		1,200
Total Task 9	\$	8,000
-Floor 50 % -Equipment 20% - Drums/cans/pails 30%		

COST ESTIMATE - RCRA FACILITY CLOSURE ACTIVITIES (continued)

Task 10 - Project Correspondence with NYSDEC

•	Two (2) Meetings with NYSDEC RCRA Division	. \$	1,800 1,000 200
	Total Task 10 -Floor 50 % -Equipment 20% - Drums/cans/pails 30%		3,000