



Environment

Prepared for:
PPG Industries, Inc.
Allison Park, PA

Prepared by:
AECOM
Piscataway, NJ
January 2012

Preliminary Assessment Report
Hudson County Chromate Site 203
346 Claremont Avenue
Jersey City, Hudson County, New Jersey





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1.0 Introduction

This Preliminary Assessment (“PA”) Report has been prepared by AECOM on behalf of PPG Industries, Inc. (“PPG”) with regard to Hudson County Chromate (“HCC”) Site 203 (“Site”). The preparation of this PA was requested by the New Jersey Department of Environmental Protection (“NJDEP”) to assess the potential for Areas of Concern (“AOCs”) at Site 203 *specifically related to Chromate Chemical Processing Waste (“CCPW”) and/or the presence of CCPW-impacted material.*

AECOM’s visual inspection of exterior areas of Site 203 was conducted on May 25, 2011. Visual inspection of interior areas was subsequently conducted on December 6, 2011. Photographs of Site conditions at the time of the inspections are provided in **Appendix A**.

According to NJDEP, Site 203 includes the entirety of Jersey City Tax Block 1781, Lot A.1, and is approximately 1.16 acres in size (**Figure 1** – Tax Map). According to the Jersey City Tax Assessor, the street address for the Site is 346 Claremont Avenue, Jersey City, New Jersey.

Known aliases for the Site include:

- 346 Claremont Associates Limited Partnership;
- Corona Corp;
- Corona Lighting Corporation;
- Lightolier Corporation;
- Lightolier, Inc.;
- NJ Transit Parcel No. 76;
- Jersey City Board of Education; and
- NJDEP Orphan Site #2.

The Site previously received a Negative Declaration from the NJDEP (ECRA Case #84322) on October 21, 1988 related to Sale of the Property and Cessation of Operations of the Lightolier Corporation (aka Corona Lighting Corporation).

The NJ Transit Right-of-Way portion of the Site also received NJDEP approval of an electronic Remedial Action Report (“e-RAR”), dated May 2, 2005, for soil remedial actions conducted by BEM Systems, Inc. (“BEM”) on behalf of New Jersey Transit.

In summary, based on the findings as presented in this PA Report, AOCs related to the presence of CCPW or CCPW-impacted materials have not been identified, and no further action (“NFA”) is proposed with regard to further CCPW investigation by PPG at the Site.

1.1 Resources Utilized

During the conduct of this PA, a number of sources of historical information were evaluated. A listing of the resources used to compile the site history is provided below:

Name of Resource	Date of document reviewed	Appendix #
<i>Sanborn Maps</i>	<i>Various</i>	<i>Appendix B1</i>
<i>Historic Topographic Maps</i>	<i>Various</i>	<i>Appendix B2</i>
<i>Historic Aerial Photographs</i>	<i>Various</i>	<i>Appendix B3</i>
<i>EDR Chain of Title Report</i>	<i>June 3, 2011</i>	<i>Appendix B4</i>
<i>EDR Radius Map Report with GeoCheck</i>	<i>November 23, 2009</i>	<i>Appendix B5</i>
<i>EDR City Directory Abstract</i>	<i>November 23, 2009</i>	<i>Appendix B6</i>
<i>Draft Property Acquisition Environmental Cost Estimating (PAECE) Report – Claremont Assoc. NJT Waterfront Hudson-Bergen Light Rail Transit System (NJ91CJ0035), prepared by BEM Systems, Inc.</i>	<i>September 30, 1996</i>	<i>Appendix C</i>
<i>Analytical Sampling Results Summary – Hudson Bergen Light Rail Transit System, Minimum Operational System-1, Parcel No. 76, Claremont Associates, Site Location Map, prepared by BEM Systems, Inc., Florham Park, NJ</i>	<i>June 2010</i>	<i>Appendix D</i>
<i>New Jersey Transit Hudson-Bergen Light Rail System – Remedial Investigation/Remedial Alternatives analysis, Group 3 West Side Industrial Track, Volumes I and II, prepared by BEM Systems, Inc., Florham Park, NJ</i>	<i>December 29, 1995</i>	<i>Not Included</i>
<i>NJDEP Data Miner Results</i>	<i>June 15, 2011</i>	<i>Appendix E</i>
<i>USEPA ECHO Database Summary Results</i>	<i>June 15, 2011</i>	<i>Appendix F</i>
<i>Environmental Priorities Initiative (EPI) Preliminary Assessment Report for Corona Lighting Corp prepared by USEPA, March 13, 1992</i>	<i>March 13, 1992</i>	<i>Appendix G</i>
<i>NJDEP Division of Hazardous Waste Management “Negative Declaration” for Lightolier, Inc. dated October 21, 1988 for Sale of Property, Cessation of Operations.</i>	<i>October 21, 1988</i>	<i>Appendix H</i>
<i>City of Jersey City Building Department Records</i>	<i>Various</i>	<i>Not Included</i>
<i>Memorandum to Michael McCabe regarding PPG Industries, Inc. – Hudson County Chromate Sites 202,203 and 204, prepared by AECOM dated January 24, 2011</i>	<i>January 24, 2011</i>	<i>Appendix I</i>

<i>NJDEP Correspondence to NJ Transit dated May 2, 2005 regarding NJDEP electronic Remedial Action Report (e-RAR) Approval for Hudson Bergen Light Rail Transit System – MOS1</i>	<i>May 2, 2005</i>	<i>Appendix I</i>
<i>NJDEP Preliminary Assessment Form and Certifications</i>		<i>Appendix J</i>
<i>Hudson-Bergen Light Rail Transit System Minimal Operational System – 1 Project, electronic Remedial Action report (e-RAR), Volume I, prepared for NJDEP/NJ Transit by BEM Systems, Inc.¹</i>	<i>October 2004</i>	<i>Appendix K</i>

¹ Note that PPG/AECOM has been unable to obtain a complete copy of the e-RAR from either BEM Systems or NJ Transit; only excerpted portions of the report have been provided to PPG/AECOM for review

2.0 Site Setting and Historical Information

2.1 Site Setting

Site 203 is situated in a mixed use area of Jersey City that includes industrial, commercial and residential properties. Site 203 is bound to the west by West Side Avenue, beyond which is an asphalt paved parking lot for the New Jersey Transit (“NJT”) West Side Avenue Park and Ride; to the south by County Road 608 (Claremont Avenue), beyond which are residences; to the east by Halstead Street, beyond which is paved parking; and to the north by the NJT Hudson-Bergen Light Rail Transit System (“Light Rail”) tracks, beyond which are commercial and industrial properties (see **Figure 2** – Site Location Map).

The Site is improved with four buildings, referred to as Buildings A (3-story), B (3-story), C (5-story) and D (8-story) (see **Figure 3** – Site Plan). The buildings are currently occupied by the Jersey City Board of Education and utilized primarily as offices for Board of Education employees. A portion of the NJT West Side Avenue Station, which is comprised of concrete sidewalk and landscaped areas, is located along the north side of the property between the Site Buildings B, C and D and the existing light rail tracks.

Based on the results of previous environmental investigations² on and near the Site, geology consists of disturbed and undisrupted soils and fill material overlying bedrock. Fill materials have been characterized as composed of chiefly sand, gravel and silt with varying amounts of cinders, coals, ash, concrete, brick fragments, wood, railroad ballast, plastic and assorted debris.

Depth to groundwater reportedly ranges from 7 to 14 feet below ground surface (“bgs”). Groundwater flow patterns in the vicinity of the Site have likely been impacted by significant disruption and disturbance to the sub surface related to development activity, but in general groundwater flow is expected to mirror local topography, which slopes gently to the west towards the Hackensack River.

According to the USGS Topographic Map of the area (Jersey City, 2011), and verified by field observations, there are no significant water bodies located within ½-mile of the Site. Based on a review of NJDEP geographic information system (“GIS”) information obtained through I-Map NJ on May 27, 2011, no public or community groundwater wells were identified within 1,000-feet of the property. Groundwater at the Site is classified by NJDEP as Class IIA. The Hackensack River is located approximately 1-mile to the west of Site 203. The latitude/longitude coordinates for the center of the Site are 40.7139436, -74.0873374.

2.2 Site History

In accordance with N.J.A.C. 7:26E-3.1(c)1i, a narrative description of the past industrial/ commercial operation(s) conducted on site by each owner and operator is provided below.

² New Jersey Transit Hudson-Bergen Light Rail System – Remedial Investigation/Remedial Alternatives analysis, Group 3 West Side Industrial Track, Volumes I and II, prepared by BEM Systems, Inc., Florham Park, NJ

2.2.1 Summary of Ownership and Operations

According to information in the BEM Systems Property Acquisition Environmental Cost Estimating ("PAECE") Report, the Site was unimproved land owned by the Estate of Abram Vreeland prior to 1873.

Based on BEM's review of Hopkins Atlas Maps of Hudson County, in 1908 the property was occupied by the Greek American Confectionary Company, with part of the property utilized as a coal yard. The 1919 Hopkins Atlas Map indicates the coal yard continued to operate at the Site, until sometime prior to 1928 when the Hopkins Atlas Maps indicate the property was operated by Corona Lighting Corporation (aka Lightolier Company). According to the EDR Chain of Title, Corona Lighting Corporation (Lightolier Incorporated) operated at the Site until 1986 after which they relocated their operations to Edison, NJ, and the property was transferred to 346 Claremont Associates Limited Partnership.

The following table presents AECOM's understanding of the ownership and operational history of the Site.

Name of Property Owner	From	To
<i>Central Railroad of New Jersey</i>	<i>Prior to 1940</i>	<i>1951</i>
<i>Corona Corporation</i>	<i>1951</i>	<i>1955</i>
<i>Lightolier Incorporated</i>	<i>1955</i>	<i>1986</i>
<i>346 Claremont Avenue Associates, Ltd Partnership</i>	<i>1986</i>	<i>1997</i>
<i>State Operated School District of New Jersey</i>	<i>2/28/1997</i>	<i>Present</i>
<i>NJ Transit Corporation (easement along north side of property only)</i>	<i>10/27/1997</i>	<i>Present</i>
Name of Operator	From	To
<i>Undeveloped</i>	<i>Prior to 1873</i>	
<i>Newark & New York Railroad (north side of property)</i>	<i>Prior to 1891</i>	<i>~1900</i>
<i>Central Railroad of New Jersey (north side of property)</i>	<i>~1900</i>	<i>1986</i>
<i>Canning's Coal Yard</i>	<i>~1896</i>	<i>1928</i>
<i>Greek American Confectionary Company</i>	<i>1908</i>	<i>1911</i>
<i>Novelty Candy Company</i>	<i>1911</i>	<i>1923</i>
<i>Lightolier Company (Corona Lighting Corporation)</i>	<i>1928</i>	<i>1995</i>

<i>Jersey City Board of Education</i>	<i>1997</i>	<i>Present</i>
<i>Various Tenants (See Appendix B6- City Directory Abstract)</i>	<i>1953</i>	<i>Present</i>

2.2.2 Sanborn Map Review

AECOM requested a Certified Sanborn Map Report for the Site, which was provided by Environmental Data Resources, Inc. (“EDR”). Maps were provided for various years from 1896 through 2006. Copies of the Sanborn Maps are provided in **Appendix B1**. A summary of information obtained from AECOM’s review of the maps is provided below.

The 1896 Sanborn Map indicates the Site was used as a coal yard. An elevated coal trestle is depicted running east to west across most of the Site, which spurs from the Newark & New York Railroad line adjacent and north of the Site. The presence of five small structures along West Side and Claremont Avenues is depicted. The nature of their use is not indicated.

The 1911 Sanborn Map indicates the western two-thirds of the Site was utilized as a coal yard (Canning’s Coal Yards). The elevated coal trestle is depicted. Several store fronts are depicted along West Side Avenue. A Passenger Station is depicted at the north side of the Site along the rail line. The map indicates the eastern one-third of the property was occupied by a number of buildings comprising a candy making facility (Novelty Candy Company). An independent electric plant (“IEP”), a cooking room, warehousing and an ice plant are depicted, associated with the candy company operations.

The 1951 Sanborn Map indicates the entire western area of the Site is developed with an 8-story brick building, constructed by 1920, utilized by various occupants. The former candy company buildings at the east side of the Site are depicted as having various occupants. One of these buildings is depicted as connected to a Loft building across Halstead Street via a sky bridge. The Passenger Station is depicted at the north side of the Site along the Newark & New York Rail line.

The 1979 Sanborn Map depicts the Site similar to the 1951 map, except that the Passenger Rail Station at the north side of the Site has been removed, and the sky bridge and Loft building across Halstead Street have been demolished. The Site buildings are indicated as having various occupants.

The 1989, 1990, 1993, 1994, 1995, 1999, 2001, 2002, 2003, 2004, 2005 and 2006 Sanborn Maps depict the Site as unchanged from the 1979 map.

2.2.3 Historical Topographic Map Review

AECOM requested a Historic Topographic Map Report for the Site, which was provided by EDR. Maps were provided for various years from 1891, 1900, 1905, 1947, 1955, 1967 and 1981. Copies of the Topographic Maps are provided in **Appendix B2**. A summary of information obtained from AECOM’s review of the maps is provided below.

The 1891 Topographic map depicts the area of Jersey City near the Site as sparsely developed. The Newark & New York Railroad line is visible adjacent and north of the Site.

The 1900 and 1905 Topographic maps depict the Site and surrounding area similarly to the 1891 map, except that the railroad line adjacent and north of the Site is labeled Central Railroad of New Jersey.

The 1947 Topographic map depicts the area of Jersey City near the Site as more developed. The Site is depicted with the building footprints as they exist today. Westside Avenue Station is depicted across the railroad tracks to the north. The rail line is labeled Central Railroad of New Jersey.

The 1955, 1967 and 1981 Topographic maps depict the Site similarly to the 1947 map.

2.2.4 Aerial Photograph Review

AECOM requested an Aerial Photo Decade Package for the Site, which was provided by EDR (**Appendix B3**). AECOM also reviewed available stereo pair aerial photographs at the NJDEP Bureau of Tidelands Management in Trenton, NJ.

Aerial coverage provided for the Site by EDR included the years 1943, 1953, 1966, 1976, 1985 and 2006. Aerial photographs reviewed at NJDEP included the years 1940, 1951, 1953, 1961, 1974, 1978, 1995 and 2002.

In summary, a review of aerial photographs indicates that the property has been completely developed since (at least) 1940. The Site is visible in all aerial photos improved with multi-story structures, which occupy most of the Site footprint. The railroad tracks located along the north side of the property are visible in all aerial photographs, and based on the review of stereo pair aerial photos, the elevation of the tracks, which is significantly higher than the surrounding area, has not changed since 1940. In summary, based on a review of all available historic reference materials, the northern side of the property has been developed and utilized as railroad line since at least the late 1800's.

2.2.5 City Directory Abstract Review

Based on a review of the City Directory Abstract (**Appendix B6**), tenants occupying the Site since 1992 have included the Jersey City Board of Education, PRC Enterprises, Sundance Studios, Inc., Tasty Bite, Three Hour Cleaners, Tri Hard Studio, Three Star Distributor, Pennoni Associates, First Forms, Inc., Corporate Printing and the Jersey City Schools Superintendent. PPG Industries has never occupied or operated at the Site.

2.2.6 Current Operations

Based on the results of a Title and Deed search, the 1.10 acre property is currently owned by the State Operated School District of New Jersey, which conveyed two small easement parcels (0.289 acres and 0.113 acres, respectively) to New Jersey Transit Corporation on October 24, 1997.

The Site buildings are currently occupied by Jersey City Board of Education personnel and utilized predominantly for administrative space, including meeting and conference rooms, offices, lavatories, and storage areas. NJT easement parcels located at the north side of the property are developed with landscaped and paved areas, which are associated with NJT operation of the West Side Avenue Light Rail Station and Light Rail system.

2.2.7 Present and Past Production Processes

Based on the findings of this PA, no historical operations are known to have occurred at the Site that would be associated with the use or placement of CCPW, or CCPW-impacted material at the property, and no documentation regarding the placement of CCPW or CCPW-impacted material at the Site was found.

No current industrial operations or production processes were observed at the time of site inspection.

Corona Lighting Corporation (Lightolier) operated at the Site from the late 1920's through the mid-1980's, and reportedly manufactured residential electric lighting fixtures and electric lamp bulb parts. Fixtures were manufactured via the shaping of sheet metal which was finished in a fabrication shop. Copper and zinc electroplating operations were also reportedly conducted.

From the early 1900's through the late 1920's the Site was operated primarily as a candy manufacturing business. No detailed information regarding production processes were available for review during the conduct of this PA. Sanborn maps indicate the presence of large boilers inside the facility, possibly coal fired, that were used to generate electricity for the plant.

From the late 1800's through early 1900's the Site was operated primarily as a coal storage yard. Based on the configuration of the facility as depicted on the Sanborn maps, it appears that coal was transported to the Site primarily via rail car, which entered the Site via a rail spur from the main line. It should be noted that coal, and in particular coal combustion byproducts (coal ash) generally contain rather high concentrations of polycyclic aromatic hydrocarbons ("PAHs") and trace metals including lead, arsenic, thallium, zinc, beryllium and chromium.

2.3 Raw Materials, Products, Formulations, Hazardous Substances and Wastes

Based on AECOM's review of prior environmental reports, and the results of an Environmental Database Search (**Appendix B5**), Corona Lighting Corporation was a generator of hazardous wastes, which included chlorinated solvents and sludges resulting from degreasing operations, waste paints, phenols and methyl ethyl ketone ("MEK"). According to USEPA documents reviewed (**Appendix G**), approximately 6,000 pounds of hazardous waste was generated annually and stored in 55-gallon drums on-site.

With the exception of hazardous waste information for Corona Lighting Corporation, no specific information with regard to historic manufacturing processes, or types of raw materials utilized for past operations was available for review in the historic records reviewed for the Site.

In general, based upon the industry types known to have operated on site, hazardous substances utilized for site operations likely included a variety of petroleum products (gasoline, diesel fuel, heating oil, lubricants and hydraulic fluids), paints, coal and coal combustion by-products, solvents and degreasers, plating chemicals, processed metals, and hazardous waste generated as spent raw materials.

2.4 Wastewater Discharges

According to USEPA inspection reports, all contact and non-contact cooling wastewater discharges for Corona Lighting Corp. went directly to the publicly owned treatment works ("POTW"). According to

the inspection reports, there were no reported violations or indications that permit limitations were exceeded when Corona operated their facility.

No information regarding wastewater discharges for previous industrial operations were found during the conduct of this PA.

Currently, sanitary waste is discharged to the Jersey City Municipal Utilities Authority.

2.5 Storm Water Discharges

Precipitation that falls on the impervious surfaces (concrete, asphalt) generally runoff toward the municipal storm water collection system drains located along West Side Avenue. At the time of the site inspection, there was no visual indication (staining, odors) that hazardous substances are migrating from the Site to the storm water collection system.

2.6 Previous Environmental Investigations and Remedial Activities

The Site has been subject to New Jersey's Environmental Clean-up Responsibility Act ("ECRA") and Industrial Site Recovery Act ("ISRA") due to prior operations. The following is a summary of the environmental activities conducted related to each ECRA or ISRA Case.

NJDEP ECRA Case #84322

According to BEM's 1996 PAECE Report, a review of NJDEP files indicated that a Site Investigation ("SI") and Remedial Investigation ("RI") were conducted on the Corona Lighting Corp. site under the direction of the NJDEP's Bureau of Environmental Evaluation, Cleanup and Responsibility Assessment ("BEECRA"), which assigned Case #84322 to the Site. These investigations were conducted due to the report of a failed tightness test performed on a 15,000-gallon fuel oil underground storage tank ("UST"), which was located on the east side of the main building, west of Halstead Street. The UST was located within an underground tank vault.

According to BEM's review of NJDEP files, three soil borings during the SI, and nine soil borings during the RI, were installed surrounding the underground tank vault. Three soil samples were collected from each boring for laboratory analysis. Analytical results indicated subsurface soils were impacted with petroleum hydrocarbons above the former NJDEP cleanup criteria of 100 milligrams per kilogram ("mg/kg"), and approximately 100 cubic yards of soil was excavated and disposed off site as part of a Remedial Action.

NJDEP issued a "Negative Declaration" to Corona Lighting Corp. on October 21, 1988 closing out the UST case.

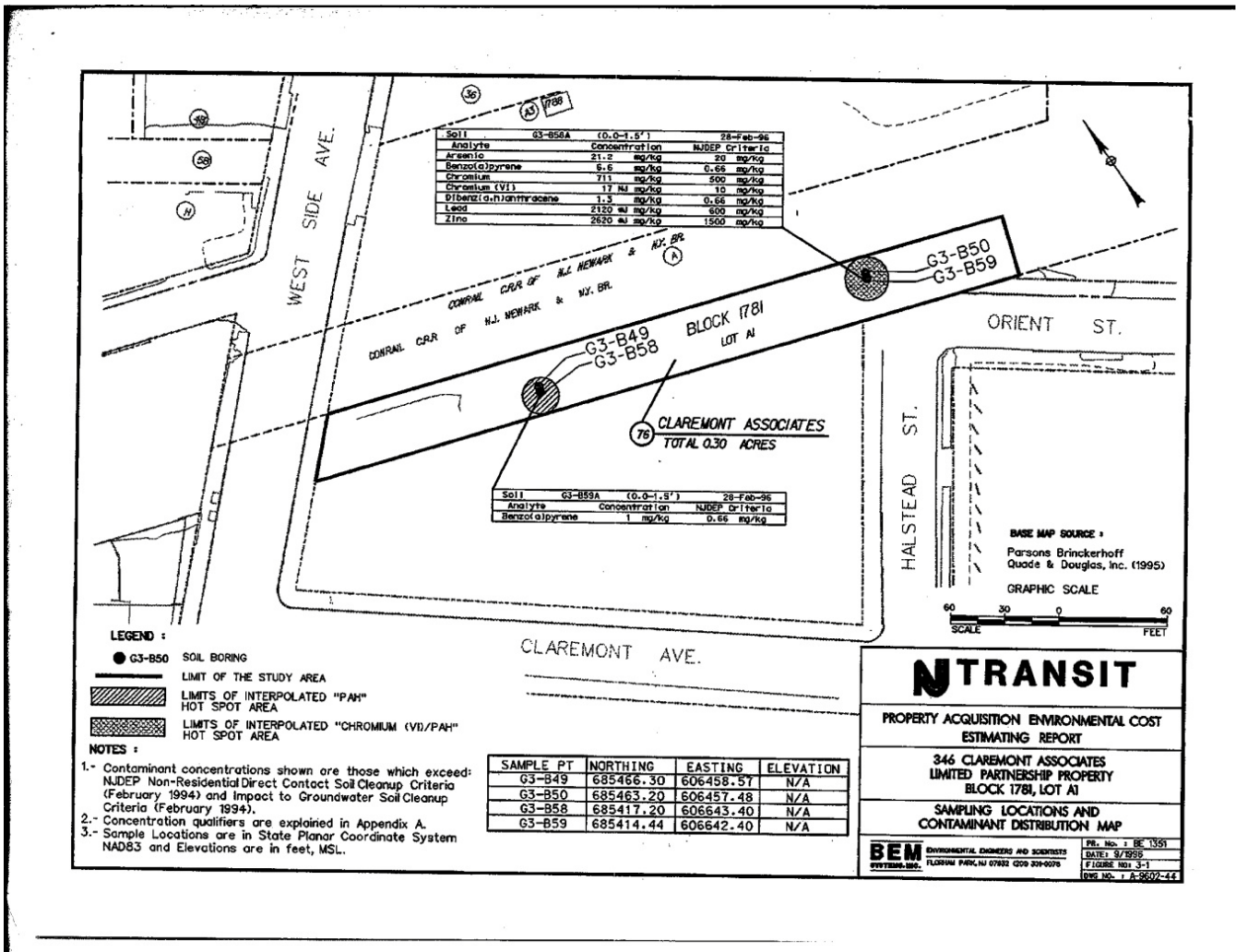
BEM Soil Sampling – Claremont Associates Property (February 1996)

According to BEM's PAECE Report, the Site was listed as a known area of environmental concern and had been used for commercial manufacturing land use throughout its history. The PAECE Report focused on the 0.30 acre portion of the Site, referred to at the time as the Claremont Associates Property, located along the northern property boundary, between the site buildings and the railroad line. This are of the Site, which BEM also referred to as the "study area," was to be acquired by NJ Transit for use as part of the Light Rail construction.

A total of two soil borings and two hand-augers were installed and sampled to assess the nature and extent of contamination within the study area. A total of six soil samples was collected from the study area and analyzed for Target Compound List ("TCL") Base Neutral and Acid Extractable Compounds ("BNA+20"), Cyanide, Total Petroleum Hydrocarbons ("TPHC"), Hexavalent Chromium, Target Analyte List ("TAL") Metals (including total chromium), TCL Pesticides, Polychlorinated biphenyls ("PCB") and Herbicides, and TCL Volatile Organic Compounds ("VOC+10").

Soil boring samples were collected at the depth intervals of 2.0'-3.5' and 4.0'-4.5' bgs. Hand auger samples were collected from 0.0'-1.5' bgs.

The analytical results (excluding metals) were compared to the NJDEP's cleanup criteria in effect at that time, which included either the Non-Residential Direct Contact Soil Cleanup Criteria ("NRDCSCC") for the 0.0-1.5' samples, or Impact to Groundwater Soil Cleanup Criteria ("IGWSCC") for deeper samples. Metals results were only compared to NRDCSCC since no IGWSCC was established for metals at that time. The Sampling Locations and Contaminant Distribution Map included in the PAECE Report are depicted below:



Analytical data resulted in BEM's PAECE Report designating two "Hot Spot" areas to be further investigated, as depicted above. Both areas were located along the railroad right-of-way to be acquired by NJ Transit for Light Rail construction. The eastern most hot spot area was established due to the presence of a number metals and SVOC in shallow soils (0.0-1.5') that exceeded NJDEP Soil Cleanup Criteria ("SCC") in effect at the time. The western most "hot spot" area was established due to the presence of SVOC in shallow soils (0.0-1.5').

Table 1 below provides a summary of the February 28, 1996 analytical results compared to NJDEP SCC in effect at that time, as well as current NJDEP Soil Remediation Standards for each respective compound.

Table 1
Site 203
Summary of Analytical Results
BEM Soil Sampling, February 1996

Soil Analyte	Concentration (mg/kg)		Date of Analysis	NJDEP NRDCSCC (1996)	NJDEP NRDCSRS (2011)
	Boring ID				
	B58A (0.0-1.5')	B59A (0.0-1.5')			
Arsenic	21.2	-	28-Feb-1996	20	19.0
Benzo(a)pyrene	6.6	1.0	28-Feb-1996	0.66	0.2
Chromium (total)	711	-	28-Feb-1996	500	120,000*
Chromium (VI)	17	-	28-Feb-1996	10	20*
Dibenz(a,h)anthracene	1.3	-	28-Feb-1996	0.66	0.2
Lead	2,120	-	28-Feb-1996	600	800
Zinc	2,620	-	28-Feb-1996	1,500	110,000

*most stringent cleanup criteria
mg/kg = milligrams per kilogram

Note that the chromium concentrations detected in the 1996 samples exceeded prior NJDEP criteria, but are below the most stringent current NJDEP Soil Remediation Standards.

NJ Transit Parcel 76 (Claremont Associates)

Based on information provided by the NJDEP and the results of historic record searches, Site 203 was added to the NJDEP's listing of HCC Sites based on the analytical results of prior soil sampling and remediation conducted on a small area of Site 203, referred to as New Jersey Transit Parcel 76, which is located along the northern property boundary and is approximately 0.30 acres in size.

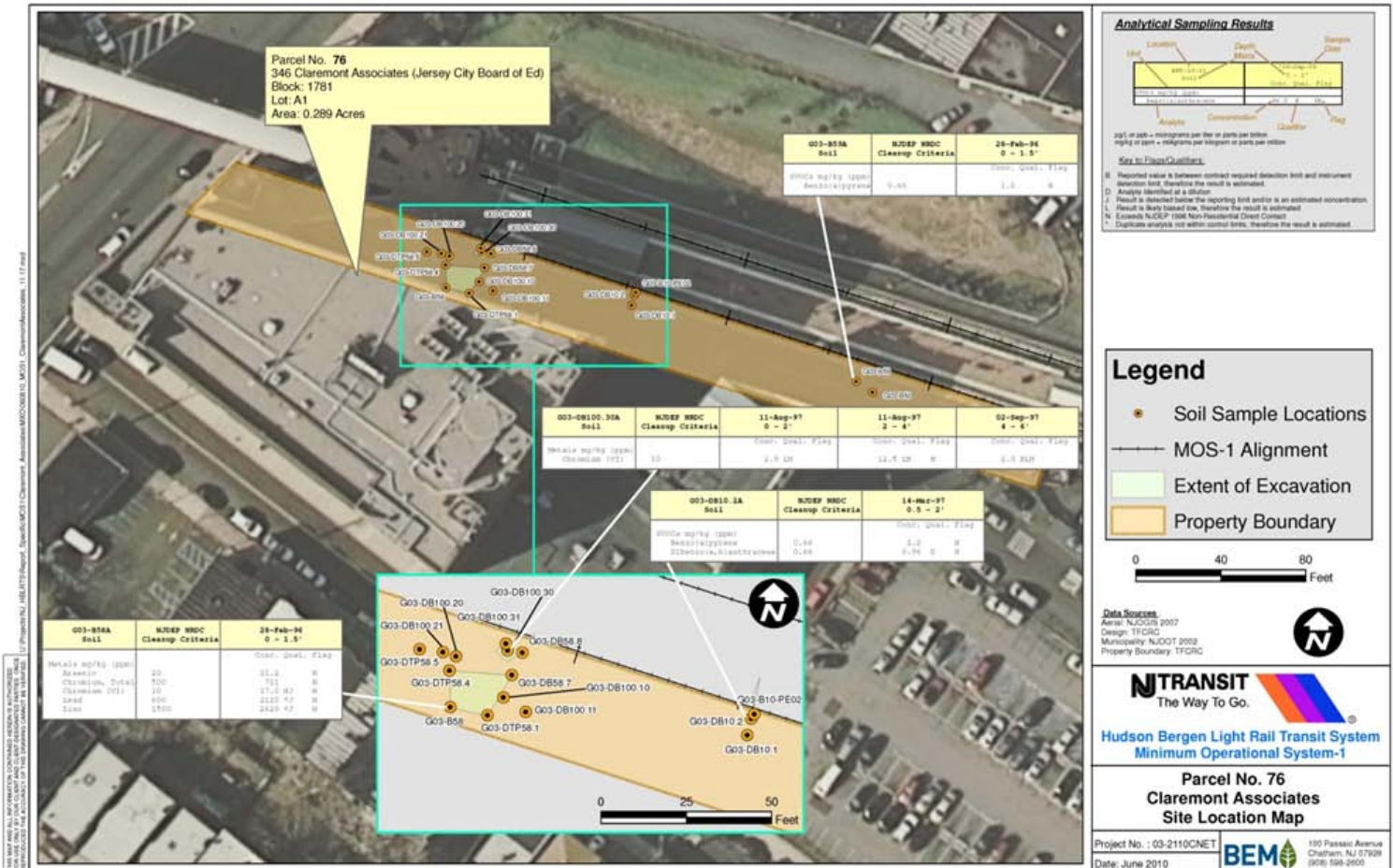
The soil sampling and remediation on Parcel 76 was conducted in 1996 and 1997 by BEM on behalf of NJ Transit – Office of New Rail Construction as part of the assessment of parcels associated with construction of the New Jersey Transit Hudson-Bergen Light Rail Transit System, Minimum Operational System-1 ("MOS").

Results of soil sample analysis for Parcel 76 indicate two soil samples (the February 28, 1996 sample and a sample collected in August 1997) exceeded the former NJDEP Chromium Soil Cleanup Criteria ("CrSCC") of 10 mg/kg, as summarized in Table 2 below:

**Table 2
Site 203 / Parcel 76
Summary of Analytical Results – Chromium
BEM Soil Sampling, 1996/1997**

Boring ID	Contaminant of Concern	Depth of Contaminant of Concern	Analytical Result (mg/kg)	Date of Analysis	Former CrSCC (mg/kg)	Current CrSCC (mg/kg)
G03-B58A	Hexavalent Chromium (Chrome VI)	0' – 1.5'	17	28-Feb-1996	10	20
G03-DB100.30A	Hexavalent Chromium (Chrome VI)	2' – 4'	12.5	11-Aug-1997	10	20

Analytical results also indicated that elevated levels of lead, zinc, arsenic, benzo(a)pyrene and dibenz(a,h)anthracene were detected above NJDEP NRDCSCC in effect at the time, as presented by BEM in the figure below (also presented in **Appendix D**):



Upon completion of remedial activities, BEM, on behalf of NJ Transit, submitted electronic Remedial Action Reports (“e-RAR”) to NJDEP. NJDEP approved the e-RAR for Parcel 76 on May 2, 2005.

According to information included in the e-RAR (Volume I, page 28) prepared by BEM, the area where these soil samples were collected (defined by BEM as a “hot-spot”) was excavated, and the materials transported off-site for disposal. A total of 20.2 cubic yards of material was reported excavated from the area near borings G03-B58 and G03-DB100. According to BEM, the excavation was conducted on 3/27/1998. According to BEM, post-excavation soil samples were collected from the excavation bottom and sidewalls to ensure that the entire hot-spot was removed. None of the post-excavation samples exceeded the former 10 mg/kg or the current CrSCC of 20 mg/kg. BEM did not report visual evidence of the presence CCPW during soil sampling or remediation activities. Analytical results of post-excavation soil samples are summarized in Table 3 below:

Table 3
Site 203 / Parcel 76
Summary of Post-Excavation Analytical Results
Hexavalent Chromium
BEM Soil Sampling, March 1998

Post-Excavation Sample ID	Contaminant of Concern	Depth of Post-Excavation Sample	Analytical Result (mg/kg)	Date of Analysis	Former CrSCC (mg/kg)	Current CrSCC (mg/kg)
G03-B58-PE01	Hexavalent Chromium (Chrome VI)	1' – 1.5'	0.457	27-Mar-1998	10	20
G03-B58-PE02	Hexavalent Chromium (Chrome VI)	1' – 1.5'	2.7	27-Mar-1998	10	20
G03-B58-PE03	Hexavalent Chromium (Chrome VI)	1' – 1.5'	1.77	27-Mar-1998	10	20
G03-B58-PE04	Hexavalent Chromium (Chrome VI)	1' – 1.5'	2.2	27-Mar-1998	10	20
G03-DB100.30-PE-1	Hexavalent Chromium (Chrome VI)	Not Reported	2.4	27-Mar-1998	10	20

Additional details regarding all boring locations and sampling results cited above are presented in an AECOM Memorandum to Michael McCabe dated January 24, 2011 (**Appendix I**).

2.7 Site Visit and Local Records Search

AECOM's visual inspections of Site 203 were conducted on May 19 and May 25, 2011. A photo log of the exterior areas inspected during the site visits is presented in **Appendix A**.

AECOM also conducted a review of local government agency records after submitting FOIA requests to the various local agencies. AECOM visited the Jersey City Municipal Authority, Tax Assessor, Construction Department, Engineering, Planning, and Health Departments. Records available for review at these agencies are referenced throughout this PA.

2.8 Areas of Concern

The Area of Concern ("AOC") Checklist for all known current and former AOC has been completed, and is included in the completed NJDEP Preliminary Assessment/Site Investigation Form provided in **Appendix J**.

A summary description of current and former AOC is provided below.

2.8.1 Aboveground Storage Tank

During the December 6, 2011 Site Inspection, a 550-gallon aboveground storage tank (AST) was observed in the Generator Room located in the basement of the building. The AST, which was noted to be in good condition, is utilized to supply fuel to an adjacent emergency generator.

The concrete walls near the AST appeared to be stained with a tar or petroleum like substance. The potential source of the substance was not determined during the site inspection.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.2 Paint Storage Room

During the December 6, 2011 Site Inspection, a Paint Storage Room was observed in the center of the building basement. Miscellaneous paints and painting supplies were observed stored in the room. The room was neat and orderly, and no indication of spills or releases of paints was observed.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.3 Sump/Floor Drains

During the December 6, 2011 Site inspection, numerous floor drains and trench drains were observed throughout the basement. According to the JCBOE contact, all drains lead to the municipal sanitary sewer. No odors or visual indication of staining or discharges was observed associated with the drains.

A sump was observed at the eastern end of the basement. Water was observed in the sump, which is reportedly discharged to the sanitary sewer. No odors, staining or other visual evidence of impacts was observed associated with the sump.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.4 Silo/Coal Bin

During the December 6, 2011 Site inspection, an area near in the northeast corner of the basement was observed, that appeared to be a former coal bin or silo, used to unload and store coal from rail cars for use at the facility. Based on the location of the area inside the building it is presumed the coal would have been used to fuel a boiler or other type of heating equipment. No odors or visual indication of discharges was observed associated with the area.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.5 Discharge Area Pursuant to NJAC 7:1E

According to BEM's 1996 PAECE Report, a review of NJDEP files indicated that a SI and RI were conducted on the Corona site under the direction of the NJDEP BEECRA, which assigned Case #84322 to the Site. These investigations were conducted due to the report of a failed tightness test performed on a 15,000-gallon fuel oil UST, which was located on the east side of the main building, west of Halstead Street. The UST was located within an underground tank vault.

According to BEM's review of NJDEP files, three soil borings during the SI, and nine soil borings during the RI, were installed surrounding the underground tank vault. Three soil samples were collected from each boring for laboratory analysis. Analytical results indicated subsurface soils were impacted with petroleum hydrocarbons above the former NJDEP cleanup criteria of 100 mg/kg, and approximately 100 cubic yards of soil was excavated and disposed off site as part of a Remedial Action.

During the December 6, 2011 site inspection, a stick-up casing for a groundwater monitoring well was observed installed in the concrete floor inside the basement of the building, adjacent to the east wall. According to the JCBOE contact, the well was installed as part of the UST investigation. The current status of the well is not known.

According to BEM, NJDEP issued a "Negative Declaration" (**Appendix H**) to Corona on October 21, 1988 closing out the UST case. However, the NJDEP Negative Declaration document does not reference a UST case, but rather the Sale of Property, Cessation of Operations for Lightolier, Inc.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.6 Dumpster

A steel trash dumpster was observed in a small, asphalt paved fenced area, located at the corner of Halstead and Orient. No evidence of disposal of hazardous substances or waste in the dumpster was observed at the time of the site inspection. Minor staining of the asphalt surface near the dumpster was noted.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.7 Hazardous Material Storage or Handling Areas

Corona Lighting Corporation (aka Lightolier, Inc.) operated at the Site from 1926 through 1995. Corona Lighting Corp. was a Large Quantity Generator ("LQG") of hazardous wastes, including 2, 4, 5-trichlorophenol, phenols, trichloroethylene, dichloromethane and MEK. The facility United States Environmental Protection Agency ("USEPA") Generator ID number was NJD001319136. From 1980 through 1983, the facility was designated a Treatment, Storage and Disposal Facility ("TSDF") for hazardous wastes, since it stored wastes beyond 90 days. The status was changed from TSDF to LQG in March 1983.

According to a USEPA facility inspection report dated March 13, 1992 (**Appendix G**), the facility stored hazardous wastes inside the main building, near the corner of Claremont Avenue and West Side Avenue. The condition of the drum storage area at the time of inspection was described by the inspector as good. The inspection did not indicate the occurrence of any major violations at the facility, and USEPA recommended No Further Remedial Action Planned ("NFRAP") status for the facility. NJDEP de-listed the facility EPA ID number on August 31, 1989.

Based upon these findings, and the fact that this AOC is not specifically related CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.8 Loading and Unloading Areas

A loading and unloading area was observed on the east side of the building along Halstead Street. The area consists of an overhead door leading to a concrete paved storage area inside the building. No indication of the presence of hazardous materials or wastes was observed in the loading area at the time of the Site inspection, and no staining or indication of releases was observed on the concrete and asphalt paved areas in that area of the Site.

Based upon these findings, and the fact that this AOC is not specifically related CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.9 Non-Contact Cooling Water

According to USEPA inspection reports, historic contact and non-contact cooling wastewater discharges associated with Corona Lighting Corp. operations went directly to the POTW. There were no reported violations or indications that permit limitations were exceeded when Corona operated their facility.

No information regarding wastewater discharges for previous operations were found during the conduct of this PA.

Currently, sanitary waste is discharged to the Jersey City Municipal Utilities Authority.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.10 Storm Sewer Collection System

Precipitation that falls on the impervious surfaces (concrete, asphalt) generally runoff toward the municipal storm water collection system drains located along West Side Avenue. At the time of the site inspection, there was no visual indication (staining, odors) that hazardous substances are migrating from the Site to the storm water collection catch basins.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.11 Rail Car

In summary, based on a review of all available historic reference materials, the northern side of the property has been developed and utilized as railroad line since at least the late 1800's.

The 1896 Sanborn Map indicates the Site was used as a coal yard. An elevated rail coal trestle is depicted running east to west across most of the Site, which spurs from the Newark & New York Railroad line adjacent and north of the Site.

The railroad tracks located along the north side of the property are visible in all aerial photographs reviewed, and based on the review of stereo pair aerial photos, the elevation of the track grade and ballast, which is significantly higher than the rest of the Site and surrounding area, has not changed since 1940.

Also, remnants of an elevated rail spur (concrete pillars) are visible along the north side of the Site buildings. This area of the Site may have historically been utilized for loading and unloading raw materials or finished product, potentially including coal, coal ash, solvents, various types of metal products, and food products for historic candy making operations (e.g., sugar, flour, etc.).

The presence of environmental contaminants along railroad corridors is well documented, and is typically associated with residual impacts from railroad use and industrial uses along the corridor. Types of contaminants can include: wood treating chemicals including creosote (railroad ties), oil, gasoline, diesel fuel, cleaning solvents and detergents (spills or leaks), herbicides, fossil fuel combustion products (SVOC's), PCB's leaked from in older transformers and capacitors used in train controls and electric generation, and a variety of residual metals.

Previous environmental investigations conducted by BEM on behalf of NJ Transit included soil sample collection along the railroad tracks and adjacent right-of-way located on the north side of the Site. Based on analytical results soil remedial actions were conducted where contaminants exceeded NJDEP restricted use Soil Cleanup Criteria applicable at the time. Where contaminants remained above the most stringent cleanup criteria, administrative measures (Deed Notices) were put into place to ensure these issues were managed appropriately in the future.

It is important to note that the presence of CCPW was not reported at any time during the previous investigations of Site 203.

Based upon these findings, and the fact that this AOC is not specifically related to CCPW and/or the presence of CCPW-impacted material, No Further Action for this AOC is proposed.

2.8.12 Underground Storage Tank and Associated Piping

Underground storage tanks that were addressed under ECRA Case #84322 are discussed above under **Section 2.6**.

Based upon these findings, and the fact that this AOC is not specifically related CCPW and/or the presence of CCPW-impacted material, No Further Action to address on-site USTs is proposed.

2.8.13 Other Areas of Concern

Historic Coal Yard Operations

From the late 1800's through early 1900's the Site was operated primarily as a coal storage yard. Based on the configuration of the facility as depicted on the Sanborn maps, it appears that coal was transported to the Site primarily via rail car, which entered the Site via a rail spur from the main line. It should be noted that coal, and in particular coal combustion byproducts (coal ash) generally contain

rather high concentrations of trace PAHs and metals including lead, arsenic, thallium, zinc, beryllium and chromium.

No information regarding previous investigations related to this historic use of the Site were found in the available records reviewed.

Based upon these findings, and the fact that this AOC is not specifically related CCPW and/or the presence of CCPW-impacted material, No Further Action for the AOC is proposed.

2.9 Case Inventory Document

The Case Inventory Document (“CID”) is a summary of all AOCs and major case components that serve to form the basis for remedial decisions. A CID is provided with this PA in accordance with the requirements for conducting a preliminary assessment (N.J.A.C. 7:26E-3.2(a)6).

Figures

Appendix A
Site Photographs

Appendix B1

Sanborn Maps

Appendix B2

Historic Topographic Maps

Appendix B3

Historic Aerial Photographs

Appendix B4

EDR Chain of Title Report

Appendix B5

EDR Radius Map with GeoCheck

Appendix B6

EDR City Directory Abstract

Appendix C

PAECE Report – BEM Systems

Appendix D

NJ Transit Parcel 76 – Analytical Results Summary

Appendix E

NJDEP Data Miner Search Results

Appendix F

USEPA ECHO Database Search Results

Appendix G

USEPA EPI Preliminary Assessment Report for Corona Lighting Corp.

Appendix H

**NJDEP Negative Declaration
for Lightolier, Inc. dated
October 21, 1988**

Appendix I

**AECOM Memo to Michael
McCabe – January 24, 2011**

Appendix J

NJDEP Preliminary Assessment Form and Certifications

Appendix K

Excerpts of e-RAR