

## **Appendix C**

### **Traffic Safety and Control Plan (TSCP)**



Environment

Submitted to:  
PPG Industries  
Allison Park, Pennsylvania

Submitted by:  
AECOM  
Piscataway, New Jersey  
60240739.GA.RA.COS  
April 2012

# Traffic Safety and Control Plan – RAWP

Garfield Avenue Group  
Jersey City, New Jersey





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Jersey City, New Jersey

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## 1.0 Introduction

On behalf of PPG Industries, Inc. ("PPG"), AECOM has prepared this Traffic Safety and Control Plan ("TSCP") for the PPG Garfield Avenue Group ("Site"), which includes Site 114, Site 132, Site 133, Site 135, Site 137 and Site 143, located at Garfield Avenue, Jersey City, New Jersey. Due to its noncontiguous nature relative to these Sites, Site 186 will not be addressed as part of this TSCP. This is a working document and does not reflect work that will be completed south of Carteret Avenue (approximately 11.4 acres). When work progresses to the sites south of Carteret Avenue, this TSCP will be reviewed and amended as needed.

### 1.1 Summary and Purpose

Site 114 (north of Carteret Avenue) is a 16.6 acre property formerly used for processing of chromium ore. Soil and groundwater at the site are impacted primarily with hexavalent chromium. The TSCP is supplemental to the Remedial Action Work Plan ("RAWP") attached to this document. Approximately 720,000 to 820,000 tons of potentially impacted material (soil, concrete, and debris) will be excavated from the subsurface during the RAWP on Site 114. Site 114 is shown on **Figure 1**. Once soil or debris is excavated from Site 114, it will be loaded into trucks and removed to off-site disposal facilities or stockpiled for placement back into the excavated area. The Site will be partially backfilled and/or regraded to facilitate further redevelopment activities. Dewatering fluids will be collected in holding/process tanks on-site during Site activities, loaded out into tanker trucks for off-site disposal or treated in an on-site treatment plant prior to discharge to publicly owned treatment works ("POTW") facility. A robust Dust Control Plan ("DCP") has been developed and will be implemented during on-site activities so that dust levels do not exceed acceptable levels. The DCP provided in as Appendix B to the RAWP, details the dust monitoring and control measures, and other information related to the procedures and methods to be used during RAWP activities.

This TSCP has been prepared to assist in traffic control to address motorist and community safety during the RAWP trucking activities, and to facilitate early discussion with stakeholders regarding the potential impact of RAWP activities on local traffic and the community. In addition, emergency responders will be informed and consulted regarding the location of the truck routes and safety measures described in this plan. This TSCP may be updated as necessary and also used for future remedial activities at the Site.

The purpose of this plan is to provide a description of protocols to assist in traffic control and safety during RAWP activities on the Site. The TSCP includes specific information about truck travel routes, truck operator certifications, and perimeter road signage associated with activities at and around the Garfield Avenue Group sites during the RAWP. The following sections describe information on truck safety measures, travel routes and tracking, truck operator requirements, and recordkeeping procedures.

## 1.2 Prevention of Waste Releases during Transport to the Disposal Facility

### Shipment of Chromium Chemical Production Waste ("CCPW") and Chromium-impacted Soils:

The following onsite measures are used to improve or test soil properties for shipment.

- Soil is tested by the paint filter test.
- Soil is tested by an on-site vibration leaching test.
- Soil is tested using a moisture meter.
- Soils with moisture content above 50% may be held on-site for up to four days to assure that free water has drained. However, these soils will typically be shipped if other testing is satisfactory.
- A superabsorbent polymer is blended with the Chromite Ore Processing Residue ("COPR") soils and Green-Gray Mud exhibiting a high moisture content, typically at a rate of 0.5 to 1.5% (by weight).

Until site personnel are competent in the assessment of material type saturation, testing will be performed on a frequency of 1 sample per 100 cubic yards. As the project progresses and soil properties are easily identified through visual or tactile observations, testing frequency may be reduced. Typically, the 1 in 100 cubic yards sampling frequency will be conducted for the first 10 samples. Sampling will then decrease to 1 in 500 cubic yards. Upon failure of a sample for paint filter or vibration testing, the frequency of sampling will return to 1 in 100 cubic yards. As soil types change during excavation, AECOM may return to the higher frequency sampling until consistent results are obtained for that material.

Only gasketed dump trucks are used to transport COPR-type soil waste. Prior to loading, the trucks are lined (see **Section 2.1**). Other soil materials are shipped via dump trucks from the site include chromium-impacted soils and CCPW and Manufactured Gas Plant ("MGP") mixed waste. Plastic lined intermodal transport boxes are used to transport Green-Gray Mud soil waste. Shipments containing hazardous soils, concrete and other debris will be lined with plastic and covered prior to transport. Trucks and intermodal boxes are closely inspected to ensure that there are no leaks before the containers leave the site.

### Shipment of Concrete and Other Debris:

There have been no issues or problems associated with the shipment of concrete and other debris. However, to prevent any future issues which may arise, steel body trucks or roll-off boxes will be used for off-site debris disposal so that site soils will no longer be necessary as bedding material for trucks leaving the Site.

## 2.0 Truck Safety

The measures described in the following sections will be implemented to maintain truck safety, and reduce the potential for spreading any impacts from the Site to public streets or the community.

### 2.1 Bed Liners

Prior to loading of soil into the hauling trucks, liners will be installed in the truck bed. These liners will be installed onsite once the truck has passed through the entrance truck washing station. Following liner installation, the haul trucks will proceed to the loading area. Once the soil is loaded, the cover of the liner will be secured over the load so as to not allow fugitive soil to escape from the truck bed during travel. Liners will be inspected prior to installation, upon completion of soil loading, and prior to the truck exiting the Site. Trucks, boxes, and/or roll-offs will be lined with plastic and covered for hazardous soils, concrete and other debris. Liners will not be required for nonhazardous waste.

### 2.2 Truck Washing

Trucks will be washed once immediately following completion of loading at the excavation area. Immediately prior to leaving the site, trucks will be inspected by site personnel for soils that may not have been removed during the washing processes. If necessary, trucks will be sent back to the decontamination area to be rewashed if initial cleaning was not sufficient. If trucks pass inspection following washing, the trucks travel through a tire wash to remove any residual dirt and/or debris from truck tires prior to exiting the Site. These measures will reduce the potential for tracking soils onto public roadways.

### 2.3 Placards

All hazardous material carriers will be properly labeled in accordance with United States Department of Transportation ("USDOT") regulations, depending upon the material being hauled. In the event of an accident, these measures notify emergency responders of the materials being hauled, so they may consider how to respond to a release. In addition, all trucks will be properly manifested according to applicable laws and regulations such as the Hazardous Materials Transportation Regulations.

### 2.4 Inspections

Prior to exiting the site, loaded trucks and intermodal boxes will be visually inspected by the driver for obvious safety defects. These inspections will be performed to increase safety awareness, and to help prevent accidents due to unsafe vehicle conditions. Loaded trucks will be also inspected for the proper transportation documentation, including valid decals and stickers.

### 3.0 Travel Routes and Tracking

Truck access to Site 114 will be limited to the gate on Carteret Avenue (see **Figure 1**). The figure will be updated or revised as remediation progresses to areas south of Carteret and provided as an addendum to this Plan. Truck travel route between Site 114 and the transfer station, located at 5800 West Side Avenue, North Bergen, New Jersey is depicted on **Figure 2**. The same route is anticipated to be used throughout the remediation period. Truck routes have been restricted to primarily commercial areas; residential streets will be avoided as much as possible. Off-site truck progress will be tracked using global positioning system (“GPS”) units or verbal communications. Operator contact numbers will be listed in the Site trailer for quick access in case of an emergency. Truck operators will retain contact information for the Site Supervisor and local emergency authorities. Site activities will be scheduled to minimize the need for off-site staging time for hauling trucks. Ample space is available on-site to stage trucks prior to loading just inside the Carteret Avenue entrance as depicted on **Figure 1**. A maximum excavation rate will be set at a low and achievable rate for the safe execution of the project.



## 4.0 Operator Requirements

Truck operators will be required to maintain current Occupational Safety and Health Association (“OSHA”) hazardous waste operations and emergency response (“HAZWOPER”)/emergency response action certifications. In addition, truck operators will maintain current Hazardous Material Transportation certifications. Copies of these certifications will be kept on file at the Site construction office for the duration of RAWP activities. These certifications and training are required by law, and confirm that haul truck operators are aware of potential hazards and protocols for responding to emergencies.

## 5.0 Recordkeeping

All inspection forms and operator certifications will be kept on file at the Site for the duration of RAWP activities. In addition, Standard Operating Procedures (“SOPs”) are provided in the Contingency and Communications Plan (“CCP”) as an Appendix in the RAWP for incident/accident investigations to evaluate root cause and recommend future preventative measures, vehicle operation safety (on- and off-site), truck washing and securing/covering the liner following loading.

Waste manifests will accompany disposal loads from loading through off-loading at the disposal facility. Upon completion of disposal, the proper manifest copy will be returned to the Site Supervisor and kept onsite for the duration of the RAWP activities. The required signatures will be obtained on waste manifests, with an AECOM representative signing as an “agent” for the generator (PPG).

## 6.0 Emergency Planning

The procedures described below provide general information on preparing for and responding to emergencies. Once engaged, the selected trucking company will be required to furnish and abide by a written plan detailing emergency prevention, preparedness and response. The written plan will be appended and become a part of this TSCP.

### *Vehicular Accidents*

AECOM and PPG are committed to safe operations, both on and off the work site. Only trucking companies with good safety records will be contracted for this project. Drivers will be required to comply with federal, state, and local traffic laws. Of particular importance is use of vehicles in good working order, obeying speed limits and other traffic regulations, and observing cell phone and other prohibitions.

In the event of a traffic accident, the first priority is the protection of personal protection and the protection of the accident victim (life safety). If the accident is a "fender bender" (no one is hurt and minimal damage occurred), the truck will be moved from the travel lane and police will be contacted. Relevant information will be exchanged with the other driver(s) involved (make, model and years of vehicles, names, drivers' license numbers, license plate numbers, insurance information, etc.), and the truck driver will record the time of the accident, location, names of witnesses, etc. The driver will then contact his dispatcher. The AECOM Site Supervisor will also be informed.

For accidents involving injury or significant property damage, emergency services will be contacted immediately (911). Depending on the circumstances, vehicles may or may not be moved from the travel lane. The driver will cooperate with the police investigation. The driver will contact his dispatcher as soon as feasible after the accident. The trucking company or the driver will then inform the AECOM Site Supervisor.

### *Hazardous Materials Releases*

Hazardous materials may be released as a result of a vehicular accident or mechanical failure. The driver will move the vehicle from the travel lane if possible, and stop the vehicle. The driver will call local emergency services (911) and contact his dispatcher, who will contact the hauling company's emergency response contractor. The trucking company or the driver will then inform the AECOM Site Supervisor. The AECOM Site Supervisor will continue the chain of command and inform the PM. If it can be performed safely, the driver will place reflective triangles or flares to assist in traffic control until the police arrive. Additionally, the protocols identified in an updated CCP (provided as an Appendix in the RAWP) and the sequence identified in the Site-specific Spill Reporting Card will be used for environmental spill/release reporting. The CCP and sequence identified in the Site-specific Spill Reporting Card will be maintained in the Site construction trailer.

It is also the responsibility of the trucking company to report releases and notify incidents in accordance with the requirements of applicable local, State, and Federal agencies, which include the hazardous materials incident reporting requirement of the USDOT.

*Breakdown*

The truck will be moved from the travel lane, if possible. Depending on the location of the breakdown, and potential risks to public safety, Jersey City Police Department non-emergency services (201-547-5477) may be contacted. The driver will then contact his dispatcher to arrange for repair or towing. The AECOM Site Supervisor will also be informed.

## FIGURES

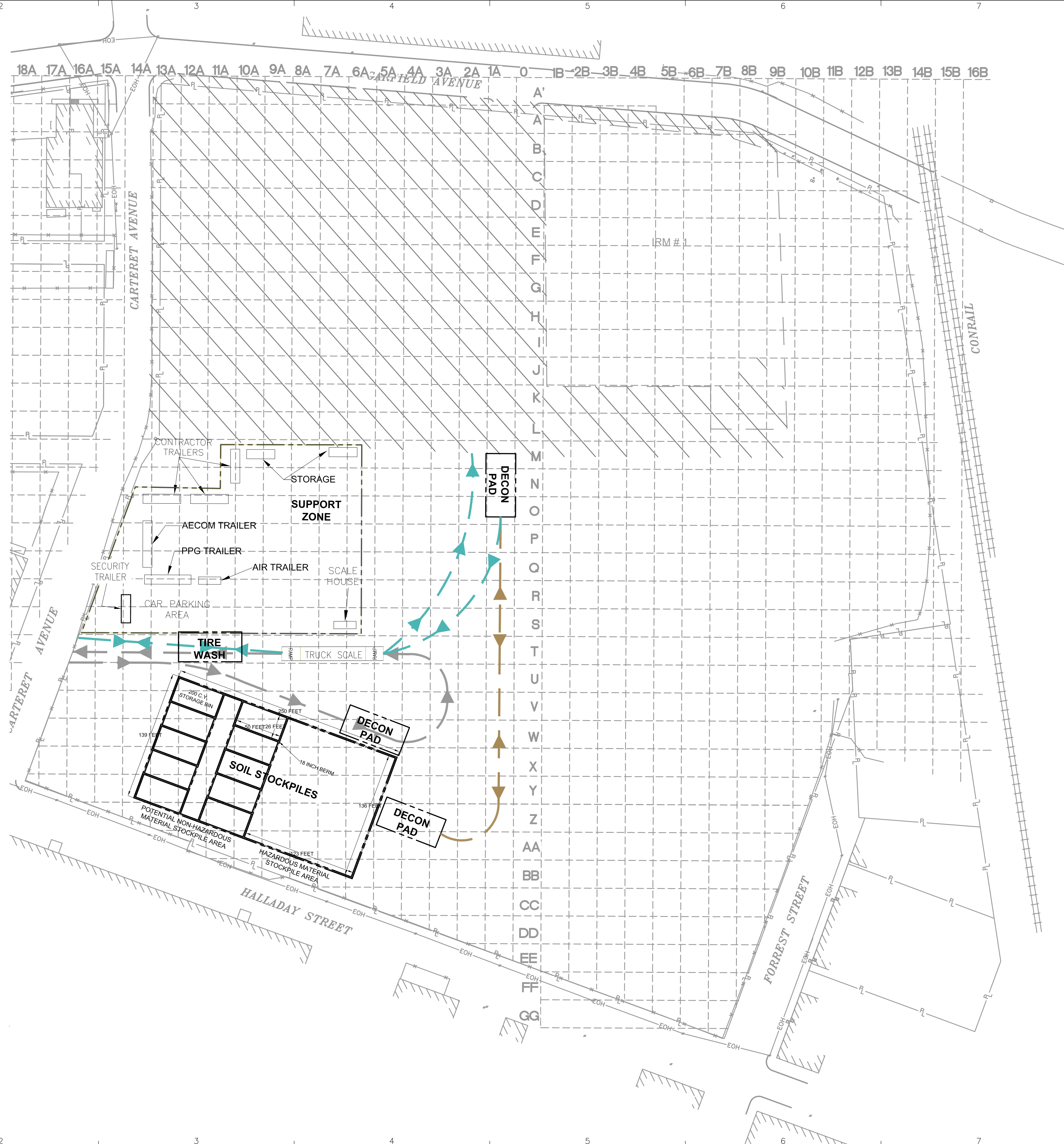
File: \\portal.enr.com\projects\ppg\chrome\conf\deliver\ppg\plans\reports\AECOM\only\PPMP\Appendices\Appendix C\TSCP\DRAWINGS.dwg Layout: TSCP FIGURE User: mssr Plotter: Dec 02, 2011 - 11:03am Ver: 5

**LEGEND**

- UTILITY POLE
- OVERHEAD WIRES
- PROPERTY LINE
- EDGE OF PAVEMENT
- CURB
- DEPRESSED CURB
- FIRE HYDRANT
- CATCH BASIN INLET
- MANHOLE
- BOLLARD
- CHAIN LINK FENCE
- RAILROAD TRACKS
- EXISTING BUILDING
- EXCAVATION AREA
- HAUL ROAD TRAFFIC ROUTE
- ONSITE TRAFFIC ROUTE
- BACKFILL TRAFFIC ROUTE

NEW JERSEY STATE PLANE  
COORDINATE SYSTEM NAD 83

SCALE IN FEET



**DRAFT - NOT FOR CONSTRUCTION**

NO.	DRWN/DATE	REVISION	CHKD/DATE	APPVD/DATE

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PROJ. NO.: 60158739      DATE: 12/05/11

**PROPOSED ON-SITE  
TRUCK TRAVEL ROUTE**

TRAFFIC SAFETY CONTROL PLAN

FIGURE NUMBER:  
**1**

SHEET NUMBER:  
**1 of 1**

REVISION **A**





	<p><b>PPG Industries</b> Jersey City, Hudson County, New Jersey</p> <p>Scale: 1" = 2 miles Source: Google Maps 2010</p>	<p><b>Proposed Truck Route</b></p> <p><b>Figure 2</b></p>
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