

Environmental Covenant

When recorded, return to:
Kerry Wrobel
Lehigh Valley Industrial Park, Inc. ("LVIP")
1720 Spillman Drive, Bethlehem, PA 18015

The County Parcel Identification No. of the Property is: P7 22 2-4-61 0204

GRANTOR: LVIP Lot 61 Owner, LLC, a Delaware limited liability
company ("Lot 61")

PROPERTY ADDRESS: 2485 Commerce Center Boulevard, Bethlehem, PA 18015

ENVIRONMENTAL COVENANT

This Environmental Covenant is executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 – 6517 ("UECA"). This Environmental Covenant subjects the Property identified in Paragraph 1 to the activity and/or use limitations in this document. As indicated later in this document, this Environmental Covenant has been approved by the Pennsylvania Department of Environmental Protection ("Department").

1. **Property affected.** The property affected by this Environmental Covenant is located in City of Bethlehem, Northampton County with a postal street address of 2485 Commerce Center Boulevard, Bethlehem, PA ("Property"). The latitude and longitude of the center of the Property affected by this Environmental Covenant is: 40° 36' 23.5", -75° 20' 6.4". The Property has been known by the following name(s): Bethlehem Steel Corporation, Bethlehem Commerce Center, Slag Bank 3, LVIP VII - Lot 61. The DEP Primary Facility ID# is 621613.

A complete description of the Property is attached to this Environmental Covenant as Exhibit A. A map of the Property and the installed engineering controls is attached to this Environmental Covenant as Exhibit B.

2. **Property Owner / GRANTOR/GRANTEE**

Lot 61 is the owner of the Property and the GRANTOR and GRANTEE of this Environmental Covenant.

3. **Holders**

Lot 61 and LVIP are the HOLDERS of this Environmental Covenant.

4. The mailing addresses of the holders are:

Lehigh Valley Industrial Park, Inc.
1720 Spillman Drive, Suite 150
Bethlehem, PA 18015.

and,

LVIP Lot 61 Owner, LLC
c/o Trammell Crow Company
300 Conshohocken State Road, Suite 250
West Conshohocken, PA 19428

5. **Description of Contamination & Remedy**

The Property is part of a larger tract previously owned and operated by Bethlehem Steel Corporation for the manufacturing of steel products. A Final Report ("FR") was submitted for approval on December 16, 2014 under the Land Recycling and Environmental Remediation Standards Act, as amended ("Act 2"). The FR was approved by the Department on December 19, 2014 and by the United States Environmental Protection Agency ("USEPA") on January 9, 2014.

The FR indicated that soil at the Slag Bank 3 area has been impacted as a result of historic uses of the area that included: disposition of slag, cinders, construction and demolition materials, and residual material from light oil refining and steel manufacturing. Specifically, soil analytical results indicate elevated concentrations of select volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs"), and heavy metals, above their respective Act 2 medium-specific concentrations ("MSCs"), throughout the Site. The FR identified levels of VOCs in soil gas above the applicable soil gas MSC values ("MSC_{SG}") as established within the Department's Bureau of Land Recycling and Waste Management's, Document #253-0300-100: Land Recycling Program Technical Guidance Manual – Section IV.A.4. Vapor Intrusion into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard – January 24, 2004 ("VI Technical Guidance Manual"). A site-specific risk analysis was subsequently performed using the Johnson & Ettinger ("JE") (1991) Model for Subsurface Vapor Intrusion into Buildings. The results of the JE model runs indicate that the sum of health risks associated with the soil gas concentrations detected exceed the applicable Hazard Quotient ("HQ") of 1 and/or the Incremental Risk ("IR") for Carcinogens of 1.00E-04 for the Site-Specific Standard. Based on those findings it was determined that vapor intrusion was considered a complete pathway.

The FR demonstrated attainment of the Site Specific Standard as established under Act 2 through pathway elimination. The engineering controls used at the Property to establish pathway elimination were capping of the entire Property and installation of a passive vapor control system. Institutional controls in the form of activity and use limitations were also established. A map of the Property and the installed engineering controls is attached as Exhibit B.

6. Activity and Use Limitations.

The Property is subject to the following activity and use limitations, which the then current owner of the Property, and its tenants, agents, employees and other persons under its control, shall abide by:

Institutional controls used include deed restrictions to prevent the future use of the groundwater underlying the Property, except as provided in paragraph 6.4 below, and to limit or control future subsurface activities. The subservice restrictions are as follows:

6.1. In no event shall the Property or any part thereof be used for any of the following purposes:

- Single family or multifamily dwellings or otherwise as a residence or dwelling quarters for any person or persons;
- Parks or playgrounds including, without limitation, parks with swing sets, sand boxes, swimming pools, or any other kind of equipment,
- Campgrounds,
- Daycare centers, nurseries, kindergartens, elementary and secondary schools, vocational or technical schools, or similar facilities,
- Hospitals, nursing homes, shelters, group homes, or similar facilities,
- Cemeteries, and
- The planting and raising of plants for crops for human consumption.

6.2. No digging, excavating, grading, pile-driving, or other earth-moving activities shall be conducted on the Property or any part thereof including, without limitation, the excavation or removal of asphalt, concrete, soil or other ground cover, and foundations and the digging of foundations for buildings and trenches for utilities, unless in compliance with all applicable federal, state, and local rules, regulations, and ordinances including, without limitation, those pertaining to the environment and those pertaining to human health and occupational safety, and in compliance with any Post-Remediation Care Plan ("PRCP") or Soil Management Plan ("SMP") approved by the Department and/or USEPA as part of a cleanup plan. See PRCP and SMP attached as Exhibit C.

6.3. Without limiting the generality of the foregoing, if any asphalt, concrete, soil, or other ground cover is excavated or removed from any part of the Property, such materials shall be stored, managed, transported, and disposed of in compliance with the SMP as approved by the Department and/or the USEPA as part of a cleanup plan.

6.4. Groundwater underlying the Property or any part thereof shall not be used for any purpose, and no wells for the extraction thereof shall be installed, permitted, or utilized on the Property or any part thereof. An exception to this restriction is that monitoring wells may be installed and operated on the property by LVIP, or its successors and assigns solely for the purpose of monitoring, treating, and remediating such groundwater.

6.5. The Property owner and/or its representatives shall perform operation and maintenance of the vapor control system and conduct system verification sampling and inspections in accordance with the Post Remediation Care Plan approved by the Department and/or USEPA as part of a cleanup plan.

7. **Notice of Limitations in Future Conveyances.** Each instrument hereafter conveying any interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.

8. **Compliance Reporting.** Within 21 days after (a) written request by the Department or USEPA, (b) transfer of title of the Property or of any part of the Property affected by this Environmental Covenant, (c) noncompliance with paragraph 6 (Activity and Use Limitations), (d) an application for a permit or other approval for any building or site work that could affect contamination on any part of the Property, the then current owner will send a report to the Department, the USEPA and any Holder. The report will state whether or not there is compliance with Paragraph 6. If there is noncompliance, the report will state the actions that will be taken to assure compliance.

9. **Access by the Department and by the USEPA.** In addition to any rights already possessed by the Department and by the USEPA, this Environmental Covenant grants to the Department and to the USEPA a right of reasonable access of the Property in connection with implementation or enforcement of this Environmental Covenant.

10. **Recording and Notification of Recording.** Within 30 days after the date of the Department's approval of this Environmental Covenant, this Environmental Covenant shall be recorded with the Recorder of Deeds for each County in which the Property is located, and send a file-stamped copy of this Environmental Covenant to the Department within 90 days of the Department's approval of this Environmental Covenant. Within that time period, the Owner also shall send a file-stamped copy to each of the following: City of Bethlehem, Northampton County, the USEPA, any Holder listed in Paragraph 3.

11. **Termination or Modification.**

(a) This Environmental Covenant runs with the land unless terminated or modified in accordance with 27 Pa. C.S. §§ 6509 or 6510, or in accordance with this paragraph.

(b) This Environmental Covenant may be amended or terminated as to any portion of the Property that is acquired for use as state highway right-of-way by the Commonwealth provided that: (1) the Department waives the requirements for an environmental covenant and for conversion pursuant to 27 Pa. C.S. §6517 to the same extent that this Environmental Covenant is amended or terminated; (2) the Department determines that termination or modification of this Environmental Covenant will not adversely affect human health or the environment; and (3) the Department provides 30-days advance written notice to the current Property owner, each Holder, and, as practicable, each person that originally signed the Environmental Covenant or successors in interest to such persons.

(c) This Environmental Covenant shall terminate upon attainment, in accordance with 35 P.S. §§ 6026.101 – 6026.908, with an unrestricted use remediation standard for the above-described contamination at the Property. The Department must approve, in writing, of such termination.

(d) In accordance with 27 Pa. C.S. § 6510(a)(3)(i), Any amendment to or termination of this Environmental Covenant by consent in accordance with this Paragraph requires only the following signatures on the instrument amending or terminating this Environmental Covenant: (i) the Holder at the time of such amendment or termination; (ii) the then current owner of the Property and (iii) the Department.

12. USEPA.

(a) Notification. The then current owner shall provide the USEPA written notice of:

- (1) the pendency of any proceeding that could lead to a foreclosure as referred to in 27 Pa. C.S. § 6509(a) (4), within seven calendar days of the owner's receiving notice of the pendency of such proceeding;
- (2) any judicial action referred to in 27 Pa. C.S. § 6509(a) (5), within seven calendar days of the owner's receiving notice of such judicial action;
- (3) any judicial action referred to in 27 Pa. C.S. § 6509(b), within seven calendar days of the owner's receiving notice of such judicial action; and
- (4) termination or amendment of this Environmental Covenant pursuant to 27 Pa. C.S. § 6510, within seven calendar days of the owner's becoming aware of such termination or amendment.

(b) Enforcement. A civil action for injunctive or other equitable relief for violating this Environmental Covenant may be maintained by the USEPA.

13. Department's and USEPA's address. Communications with the Department and the USEPA regarding this Environmental Covenant shall be sent to:

Pennsylvania Department of Environmental Protection
Regional Environmental Cleanup & Brownfields Manager
2 Public Square
Wilkes-Barre, PA 18701-1915

United States Environmental Protection Agency Region III
Project Manager
Land and Chemicals Division/PA Remediation
1650 Arch Street
Philadelphia, PA 19103

14. **Severability**. The paragraphs of this Environmental Covenant shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

ACKNOWLEDGMENTS by Owner and any Holders, in the following form:

LVIP Lot 61 Owner, LLC,
a Delaware Limited Liability company

Grantor/Grantee/Holder

By: LVIP Lot 61 Venture, LLC,
a Delaware Limited Liability company
its sole member

By: Lion TCC Development II, LLC,
a Delaware Limited Liability company
its sole member

By: TC Industrial Associates, Inc.,
a Delaware corporation

Date: 3/12/15

By: [Signature]
Name: Jeffrey T. Goggins
Title: President

Lehigh Valley Industrial Park, Inc.,
Holder

Date: 3/13/15

By: [Signature]
Name: Kerry A. Wrabel
Title: President

APPROVED, by the Commonwealth of Pennsylvania
Department of Environmental Protection

Date: 3/17/15

By: [Signature]
Name: Eric Supay
Title: ECB Manager

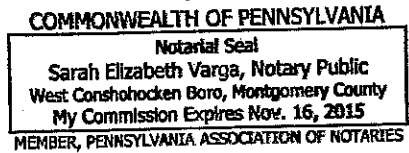
COMMONWEALTH OF PENNSYLVANIA

COUNTY OF Montgomery SS:

On this 12th day of March, 2015, before me, the undersigned officer, personally appeared Jeffrey T. Goggins, who acknowledged himself/herself to be the President of LVIP Lot 61 Owner, LLC, Grantor/Grantee/Holder, whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Sarah Elizabeth Varga
Notary Public



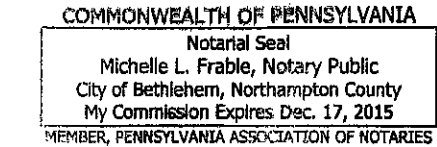
COMMONWEALTH OF PENNSYLVANIA

COUNTY OF Northampton) SS:

On this 13 day of March, 2015, before me, the undersigned officer, personally appeared Kerry A. Wrobel, Holder, who acknowledged himself/herself to be the person whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Michelle L. Frable
Notary Public



COMMONWEALTH OF PENNSYLVANIA

COUNTY OF Luzerne SS:

On this 17th day of March, 2015, before me, the undersigned officer, personally appeared ERIC SUFEY, who acknowledged himself/herself to be the MANAGER [Title] of the Commonwealth of Pennsylvania, Department of Environmental Protection, Northeast regional office, whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Miriam Stas
Notary Public

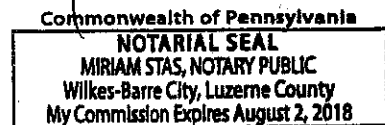
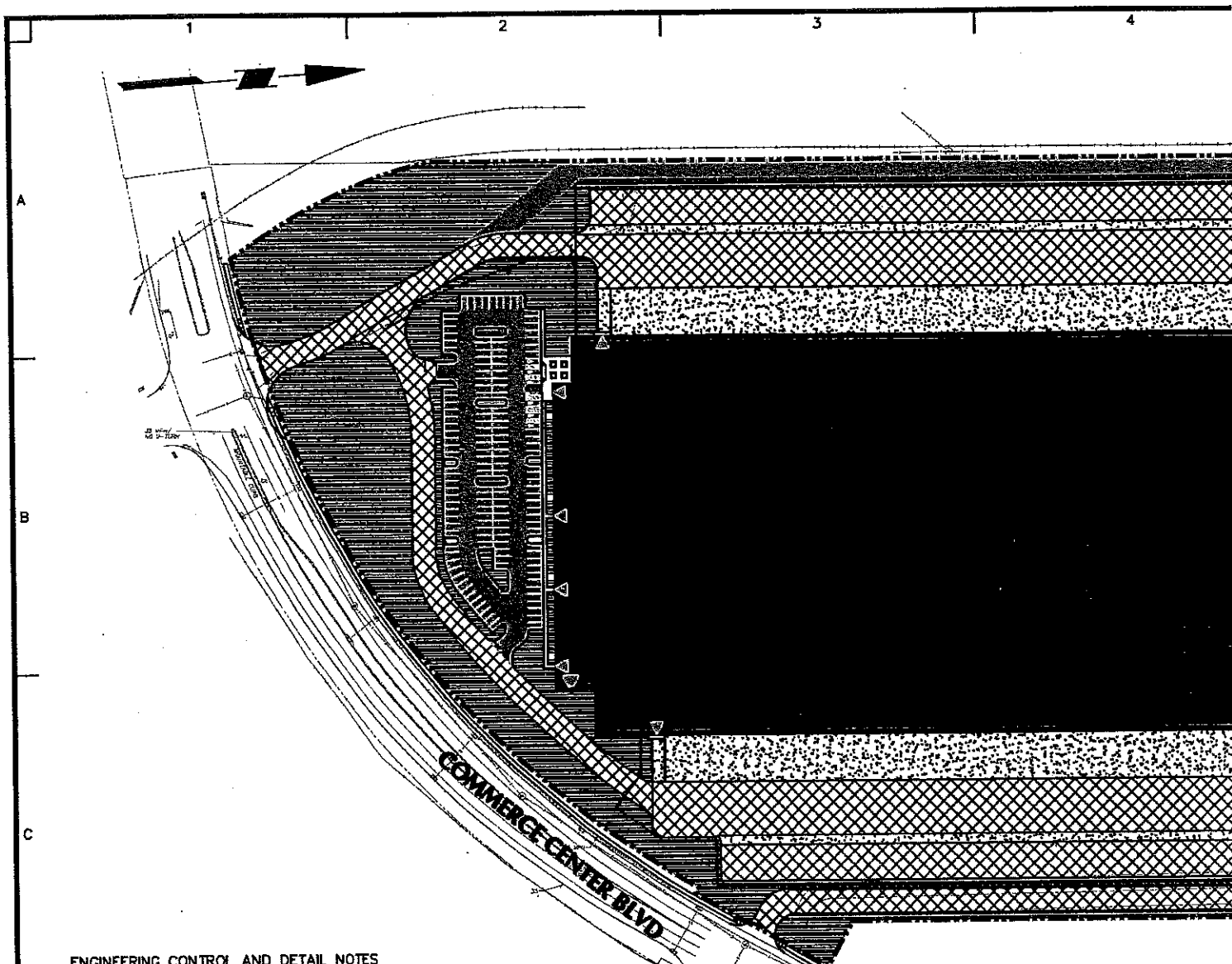


Exhibit A

Description of the Property

P7 22 2-4 61 0204= 2485 Commerce Center Boulevard, Bethlehem City, Northampton County,
Bethlehem School District.
Deed: 2013-1 141102

Exhibit B



ENGINEERING CONTROL AND DETAIL NOTES

1. ENGINEERING CONTROLS:

a. SLAB ON GRADE BUILDING WITH VAPOR CONTROL SYSTEM - 677,088 FT² (~15.5 ACRES) WAREHOUSING FACILITY CONSTRUCTED SLAB ON GRADE WITH AN INTEGRATED VAPOR CONTROL SYSTEM.

b. ASPHALT PAVEMENT AREAS - AN ASPHALT PARKING LOT AND DRIVEWAY SURROUNDING THE BUILDING (~13.5 ACRES). BASED ON USE, THE PAVEMENT CONSTRUCTION IS AS FOLLOWS:

i. HEAVY DUTY PAVEMENT CONSTRUCTION (TRUCK TRAFFIC AREAS): 2-INCH ID-2 BITUMINOUS WEARING COURSE, UNDERLAIN BY 3-INCH BITUMINOUS CONCRETE BASE COURSE (BCBC), UNDERLAIN BY 8 INCHES TYPE 2A OF MODIFIED AGGREGATE, UNDERLAIN BY A SHAPED AND COMPACTED SUBGRADE.

ii. LIGHT DUTY PAVEMENT CONSTRUCTION (CAR TRAFFIC AREAS): 1 1/2-INCH ID-2 BITUMINOUS WEARING COURSE, UNDERLAIN BY 1 1/2-INCH ID-2 BITUMINOUS BINDER COURSE, UNDERLAIN BY 6 INCHES OF TYPE 2A MODIFIED AGGREGATE, UNDERLAIN BY A SHAPED AND COMPACTED SUBGRADE.

c. REINFORCED CONCRETE AREAS - A REINFORCED CONCRETE AREA ON THE EAST AND WEST SIDES OF THE BUILDING FOR TRUCK UNLOADING (~5.8 ACRES). THE AREA IS CONSTRUCTED OF A REINFORCED 6-INCH LAYER OF 4,000 POUNDS PER SQUARE INCH (PSI) CONCRETE UNDERLAIN BY AN 8-INCH LAYER OF TYPE 2A MODIFIED AGGREGATE.

d. CONCRETE SIDE WALK AREAS - CONCRETE SIDEWALKS CONSTRUCTED OF 4 INCHES OF 3,000 PSI CONCRETE UNDERLAIN BY 4 INCHES OF AASHTO #57 STONE, PLACED OVER PREPARED SUBGRADE (~0.1 ACRES).

e. LANDSCAPED AREAS - AREAS LANDSCAPED WITH GRASS, SHRUBS AND/OR TREES. THE CAP IN THESE AREAS ARE COMPRISED OF THE PLACEMENT OF ONE FOOT OF CLEAN FILL PRIOR TO FINAL LANDSCAPING AND COVERS APPROXIMATELY 9.1 ACRES.

2. SITE PROCEDURAL REQUIREMENTS WERE ESTABLISHED TO ENSURE THAT THE ENGINEERING CONTROLS ARE PROPERLY MAINTAINED. THE PROCEDURAL REQUIREMENTS ARE IN THE FORM OF AN AGENCY- APPROVED SOIL MANAGEMENT PLAN AND AN OPERATION AND MAINTENANCE PLAN.

LOT 62

200

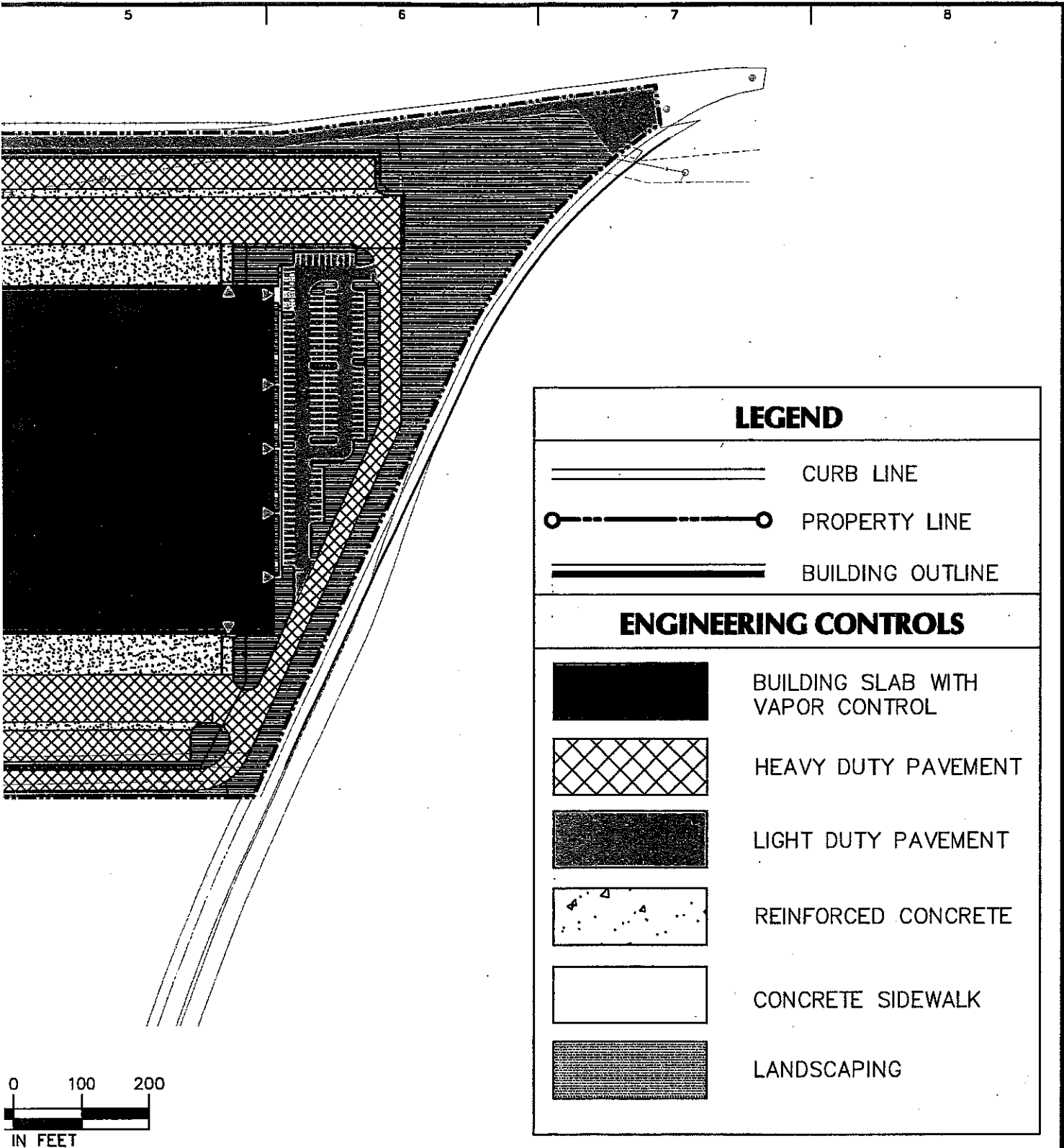
LANGAN

One West Broad Street, Suite 2
Bethlehem, PA 18018




T: 610.984.8500 F: 610.984.8501 www

Langan Engineering, Environmental, &
Landscape Architecture, D.P.
Langan Engineering and Environmental
Langan International LLC




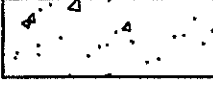


Collectively known as Langan

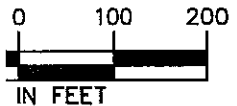


LEGEND

-  CURB LINE
-  PROPERTY LINE
-  BUILDING OUTLINE

ENGINEERING CONTROLS

-  BUILDING SLAB WITH VAPOR CONTROL
-  HEAVY DUTY PAVEMENT
-  LIGHT DUTY PAVEMENT
-  REINFORCED CONCRETE
-  CONCRETE SIDEWALK
-  LANDSCAPING



Project LVIP VII LOT 61 CITY OF BETHLEHEM NORTHAMPTON COUNTY PENNSYLVANIA	Drawing Title ENGINEERING CONTROLS PLAN	Project No. 240027401	Drawing No. EXHIBIT B
		Date 1-23-2015	
		Scale 1"=200'	
		Drawn By WLS Checked By DW	
		Submission Date	
		Sheet 1 of 1	

Exhibit C

Lot 61 POST-REMEDIAL CARE PLAN

In order to ensure compliance with the Act 2 Site-Specific Standard, post-remediation procedures will be implemented to ensure the ongoing integrity of areas where engineering controls (caps) are utilized to eliminate potential exposure pathways. Details of these procedures are described below:

A. Annual Inspection

To ensure the integrity of engineering controls, the capped areas will be inspected by the Site Owner for damage to the cap on an annual basis. Inspections will document damage to the cap and identify the corrective actions taken to mitigate the conditions. With the exception of the vapor control system, corrective actions involving the repair/replacement of the engineering controls shall be performed in accordance with the SMP, which details procedures for material management and cap replacement. Any repairs/replacement activities involving the vapor control system will follow the procedures outlined in Section 6.3 of this report. Inspection reports will be maintained on file within the Site facility and copies will be forwarded to the central office of PADEP and EPA Region 3 office upon request. Appendix H presents the suggested format for the inspection reports.

B. Planned Cap Disturbances

Future development and/or maintenance activities performed on the property may require existing engineering controls to be temporarily disturbed or removed. Procedures set forth in the SMP shall be followed by any parties that perform the work. As such, any engineering control addressing direct contact and soil exposure issues that is disturbed or removed must be replaced with the same engineering control or another approved engineering control as described in the Cleanup Plan. If replacing the engineering control is not desired, the Site Owner will characterize regulated substances in the soils/materials beneath the removed engineering control and manage or remediate those soils/materials in accordance with Act 2 and all applicable laws and regulations. The material management procedures cited in the SMP will be required at all times when conducting any intrusive activities that breach capped areas.

C. Institutional Controls

In order to ensure ongoing compliance with the Act 2 Site Specific Standard, institution controls will be recorded in an environmental Covenant for the subject property which will be submitted under a separate cover. Details of the institutional controls, which will be referenced in the Covenant to the property, are presented in Section III. A. of this report.

D. Operation and Maintenance of the Vapor Mitigation System

i. System Verification and First Quarterly Sampling Events

Two rounds of post-construction sampling events (System Verification and First Quarterly Sampling Events) were completed on June 14 and 15, 2014 and on October 16 and 17, 2014 by Langan as discussed in section III. C. vi. The analytical results of the indoor air and sub-slab vapor samples collected and analyzed from both sampling events were all below their respective action levels. Considering there were no exceedances of the indoor air or sub-slab vapor action levels, construction proceeded and quarterly monitoring has been continued.

ii. Monthly Inspection

PASSIVE VAPOR CONTROL SYSTEM

On a monthly basis, the building owner will inspect the vent pipes to ensure that there are no obstructions. Additionally, during the first year of the vapor control system operation the building owner will collect sub-slab vapor samples from the vapor collection pipes on a quarterly basis (i.e., every three months) to determine the ongoing effectiveness of the vapor controls system. One collection pipe sample will be drawn from each gas collection area as presented in Drawing N-102. Additionally, one blind duplicate sample will be collected for each sampling round. The sub-slab vapor samples will be analyzed for benzene, toluene, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene using EPA Method TO-15. Detailed procedures for collecting the sub-slab vapor samples are presented in Appendix G. Should the resulting data exceed the applicable action levels presented in Table 1 then the decision matrix presented in Appendix E will be employed to establish the appropriate response action. The recommended response action will then be submitted to the AWT for review and approval.

ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (IF NECESSARY)

On a monthly basis, the building owner will inspect the pressure gauges in the vent pipes and the system alarm to ensure that the fan is maintaining adequate negative pressure to depressurize the sub-slab area. If the fan is not functioning properly, the building owner will determine the cause of the problem and rectify it.

iii. Annual Inspection

PASSIVE VAPOR CONTROL SYSTEM

On an annual basis, a more detailed inspection will be conducted by the building owner. This inspection will include:

1. Inspect the discharge locations of the vent pipe to ensure that no air intake has been located nearby, and that a building usage change has not placed the exhaust near operable windows.

2. Check the Heating Ventilation and Air Conditioning (HVAC) system to determine if it is being maintained and operated as designed.
3. Check floor slab for cracks and seal if necessary.

In addition, during the second through fifth year of operation, the building owner will collect sub-slab vapor samples from the vapor collection pipes on an annual basis to determine the ongoing effectiveness of the vapor control system. One collection pipe sample will be drawn from each gas collection area as presented in Drawing N-102 and one trip blank and one blind duplicate sample will be collected. The sub-slab vapor samples will be analyzed for benzene, toluene, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene using EPA Method TO-15. Should the resulting data exceed the applicable action levels presented in Table 1 then the decision matrix presented in Appendix E will be employed to establish the appropriate response action. The recommended response action will then be submitted to the AWT for review and approval. After the fifth year of operation, the sampling frequency will be reviewed with AWT and may be reduced or eliminated based on the analytical results collected to date.

ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (IF NECESSARY)

On an annual basis, a more detailed inspection will be conducted by the building owner. This inspection will include:

- 1) Inspect the fans for bearing failure or signs of abnormal operation, and repair or replace if required.
- 2) Inspect the discharge locations of the vent pipe to ensure that no air intake has been located nearby, and that a building usage change has not placed the exhaust near operable windows.
- 3) Check the HVAC system to determine if it is being maintained and operated as designed.
- 4) Check floor slab for cracks and seal if necessary.

iv. Record Keeping and Reporting

Inspection reports for the monthly and annual inspections will be maintained on file within the Site facility and copies will be forwarded to the USEPA Region 3 and the central office of the PADEP upon request.



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building

P.O. Box 8471

Harrisburg, PA 17105-8471

August 23, 2004

Office Of Land Recycling and
Community Revitalization Services

717-783-7816

Mr. Kerry Wrobel
Executive Vice President
LVIP, Inc.
100 Brodhead Road
Suite 160
Bethlehem, PA 18017

RECEIVED

SEP 09 2004

Lawler, Matusky &
Skelly Engineers LLP

Dear Mr. Wrobel:

The Pennsylvania Department of Environmental Protection (DEP) and the USEPA Region 3 approve the use of the Soil Management Plan (dated April, 2004-attached) for the Bethlehem Commerce Center (BCC) project. The approval of this plan will provide future purchasers and developers of the property at BCC the procedures that will be required to be followed during all intrusive activities that involve the excavation of soil and fill materials. In general, materials excavated during construction activities may be utilized as fill or grading material on-site, unless the material is unsuitable for that purpose. Future property owners will be permitted to use soil and fill materials in accordance with the applicable laws and regulations, including but not limited to Chapter 287.101(e), Chapter 250.3 and the DEP Management of Fill Policy, effective April 24, 2004 (Document # 258-2182-773).

If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Thomas K. Fidler
Director
Land Recycling & Community
Revitalization Services

Sincerely,

Paul J. Gotthold
Chief of PA Operations
EPA

Attachment

cc: J. Brogna (NERO)
G. Olenick (NERO)
P. Gotthold (EPA Region 3)
L. Matyskiela (EPA Region 3)
~~W. Abicht (LMS)~~
T. Fidler
R. Roush

SOIL MANAGEMENT PLAN

BETHLEHEM COMMERCE CENTER

The purpose of this document is to provide purchasers of property at the Bethlehem Commerce Center (BCC) and their contractors with the soil management procedures that will be required to be followed during all intrusive activities that involve the excavation of soil/fill material.

As a general matter, material excavated during construction activities may be utilized as fill or grading material on site, unless the material is unsuitable for that purpose. This plan identifies the procedures that shall be utilized to determine if the material is unsuitable for reuse on site, and what actions must be taken to properly manage excavated materials during future site redevelopment activities.

Prior to initiating any intrusive activities, all contractors will be required to review and abide by the Site Access and Security Procedures (Attachment A). In addition to the information required by the Site Access and Security Procedures, the site owner or their designated representative (Owner's Representative) also will be required to provide Lehigh Valley Industrial Park (LVIP) or their designated representative with the following information:

- Cut and fill plans for the project;
- Erosion and Sediment Control Plans;
- Excavation plans that identify where intrusive work will be performed; and
- Anticipated work schedule.

Unsuitable Material for Reuse On-Site

Consistent with the remedial approach for the BCC, soil and other excavated materials shall be permitted to be reused on site or remain in place, unless reuse is likely to interfere with implementation of the approved Cleanup Plan for the project. Materials which are likely to interfere with implementation, and are therefore considered "unsuitable," include:

- Sludge;
- Flowable Product;
- Soil/fill saturated with separate phase liquids (e.g., oil, grease); and
- Storage tank remains containing flowable product and/or separate phase liquids.

On the other hand, soil which is visibly stained or discolored without being saturated and soil/slag combinations are suitable for reuse beneath the engineering controls as described in the approved site Cleanup Plan.

LVIP shall have a representative, with experience in assessing environmental conditions, available whenever intrusive activities are being conducted on the BCC Site. If the Owner encounters unsuitable materials, as described in this Plan, Owner's Representative shall contact the designated LVIP representative immediately. The LVIP representative shall respond within two (2) hours and will evaluate site conditions and the suitability of the materials for reuse on site. It shall be LVIP's responsibility to remove unsuitable material from Owner's property; the facility and methods of management shall be determined by LVIP and their designated contractor. The cost of removal and management of these materials shall be the responsibility of LVIP. LVIP shall endeavor to remove the materials in question from the Owner's property in the shortest time frame reasonably achievable based on conditions. LVIP shall verbally notify the Owner's representative of LVIP's method and anticipated schedule for managing and removing unsuitable materials within twenty four (24) hours of discovery of the materials, with written confirmation of the plan and schedule within three (3) days of discovery of the materials.

If construction and demolition (C&D) debris (e.g., rebar, railroad ties, steel structural members) is excavated from the ground during construction activities, it will be Owner's responsibility to take that material off site and manage it in accordance with all local, state and federal regulations. Asphalt, concrete and those materials specified in the facility's General Permit (a copy of which is provided in Attachment B), are not considered C&D debris and may be reused on site.

Any C&D debris that is found to be commingled with unsuitable materials (e.g., tank remains containing sludge and/or flowable product), shall be removed from the Owner's property and managed by LVIP and their designated contractor. The cost of removal and management of these materials shall be the responsibility of LVIP. LVIP shall endeavor to remove the materials in question from the Owner's property in the shortest time frame reasonably achievable based on conditions. LVIP shall verbally notify the Owner's representative of LVIP's method and anticipated schedule for managing and removing unsuitable materials within twenty four (24) hours of discovery of the materials, with written confirmation of the plan and schedule within three (3) days of discovery of the materials.

Engineering Controls

In order to ensure compliance with Pennsylvania's Land Recycling Program (Act 2), it is important that future property owners of the BCC Site understand the nature of the engineering controls that will be used

site-wide. For example, cleanup of the Site will include the use of engineering controls in the form of capping to eliminate exposure pathways. These controls must be maintained by the property owner. If removed temporarily or disturbed after final redevelopment, they must be replaced to ensure that the proper engineering controls are maintained.

In addition to engineering controls, institutional controls in the form of deed restrictions will be used to ensure that the pathway eliminators are maintained in the future. Individual, site specific deed restrictions are contained within the approved Cleanup Plan for each project. The deed restrictions restrict future use of the BCC Site, groundwater underlying the BCC Site and subsurface soil activities. The deed restrictions also require that all engineering controls must be replaced if removed or disturbed to ensure compliance with the approved Cleanup Plan for the project. If replacing the engineering control is not desired, future owners will be required to characterize regulated substances in the soils/materials beneath the removed engineering control and manage or remediate those soils/materials in accordance with Act 2 and all applicable laws and regulations. Future property owners may consider the use of a new engineering control that competently mitigates the exposure pathway.

Redevelopment and/or maintenance activities performed on the BCC Site will likely require existing engineering controls to be temporarily disturbed or removed in accordance with the owner's plans. Provided below are some examples of how to manage excavated materials during various types of activities that are likely to take place. The management procedures cited above will be required at all times when conducting any intrusive activities that breach capped areas. Examples of some intrusive activities include, but are not limited to, those outlined in the following sections.

Regrading Surface Materials

As part of BCC Site redevelopment activities future owners may have to perform regrading to meet specific use requirements. All pre-existing soil/fill materials that will remain within one foot of the ground surface after grading and complete built-out will be required to be capped with appropriate engineering controls which can include any combination of buildings, parking lots, roadways, landscaping and/or one foot of clean fill.

Normal construction procedures should be followed, including OSHA regulations for protection of construction workers. If unsuitable materials are encountered during regrading activities, LVIP and/or its

designated representative must be contacted immediately and the procedures outlined above shall be followed.

Constructing a Building

Construction of buildings will require the excavation of soils for the placement of footers or a foundation. Removed soils should be managed in accordance with the procedures outlined above. Suitable materials may be stockpiled within the project area for future use as grading and/or fill material within the confines of the project. If Owner has excess suitable material that cannot be used as fill and/or grading material on the Owner's property, Owner may take it to another location on the BCC Site, designated by LVIP, at no cost to Owner (other than the cost of transporting the material).

Normal construction procedures should be followed, including OSHA regulations for protection of construction workers. If unsuitable materials are encountered during construction activities, LVIP and/or its designated representative must be contacted immediately and the procedures outlined above shall be followed.

Installing or Removing Utilities and Roadways

Activities such as installing or removing utilities or roadways will expose soils along narrow corridors. Suitable soil/fill materials that are excavated to install or replace utilities or roadways should be reused in the excavation to the greatest extent possible. The removal of an existing roadway shall be considered the removal of an existing engineering control, which will need to be replaced to ensure pathway elimination is maintained. The construction of a new roadway will establish a new engineering control. Management of the soils/fill under the roadway should be managed in accordance with the procedures outlined above.

Normal construction procedures should be followed, including OSHA regulations for protection of construction workers. If unsuitable materials are encountered during construction activities, LVIP and/or its designated representative must be contacted immediately and the procedures outlined above shall be followed.

Landscaping

For plantings that require the removal of soil/fill, the removed material shall be managed in the same manner as those soils addressed in the regrading section of this plan.

Normal construction procedures should be followed, including OSHA regulations for protection of construction workers. If unsuitable materials are encountered during landscaping activities, LVIP and/or its designated representative must be contacted immediately and the procedures outlined above shall be followed.

Use of Fill Materials

Future property owners will be required to use fill in accordance with applicable laws, regulations and DEP policy. Fill materials that have originated from on-site sources and have either been characterized in accordance with Act 2 or fall within the facility's General Permit (see Attachment B) will be approved, on a case by case basis. Any requests to use such material should be brought to the attention of LVIP or their Site representative. Fill materials from off-site sources must meet current DEP policy for clean fill.

SPECIAL CONDITIONS
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1. The approval herein granted is limited to the beneficial use of residual waste ("waste") from a remediation site owned by the permittee as construction fill at an adjacent Act 2 remediation site, also owned by the permittee. Only beneficial use of the following types of residual wastes related to the manufacturing of iron and steel, is authorized under this permit: refractories, foundry sands, slags, air emission control solids, manganese dioxide ore, chromium oxide ore, mill scale, and the media associated with their excavation. A list of individual wastes covered under each of these types of residual wastes is found in the Appendix.
2. The beneficial use of the waste under this permit is limited to areas covered by a "Notice of Intent to Remediate Under Act 2."
3. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall conduct beneficial use activities as described in the approved application.
4. Prior to beneficial use of a waste under this permit, the permittee shall submit to the Department's Northeast Regional Office, for approval, the results of detailed chemical analysis of a sufficient number of samples to be representative of the waste and a description of waste's physical properties. In lieu of analysis for specific parameters, the permittee may certify the absence of those parameters based upon the permittee's knowledge of the manufacturing or pollution control process.
5. As specified below, representative samples of each waste shall be obtained using sampling procedures in *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance or in accordance with an appropriate standard from the American Society for Testing and Materials (ASTM). Determinations shall be made on each sample for the appropriate constituents to demonstrate beneficial use of the waste is consistent with the requirements of this condition. The waste may be beneficially used if representative samples of the waste taken from the site where the waste originated do not exceed any level in the standards under 25 Pa. Code 287.621(b)(5)(v), except those standards under 25 Pa. Code 287.621(b)(5)(v) based on secondary maximum contaminant levels (SMCLs). Should 1/20th of the total level for a constituent exceed the standard for that constituent under 25 Pa. Code 287.621(b)(5)(v), the toxicity characteristic leaching procedure (EPA Method 1311) or the synthetic precipitation leaching procedure (EPA Method 1312) shall be used to demonstrate that the standards is not exceeded. Should an individual sample of waste exceed the above standards, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data. Other industry accepted methods may be used for the statistical treatment of data, if approved by the Department.

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- a. Should the quantity of any individual waste identified in the Appendix except iron or steel slag exceed 10,000 tons, a minimum of one grab sample shall be collected every 1000 tons of waste for determinations of inorganic and nonvolatile organic species and every 5000 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 10,000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.

- b. Should the quantity of any individual waste identified in the Appendix except iron or steel slag exceed twice the amount identified in the permittee's application, the waste shall be sampled as follow:
 - i. Should the quantity exceed 10,000 tons, Condition 5a applies.

 - ii. Should the quantity be between 1000 and 10,000 tons, a minimum of one grab sample shall be collected every 500 tons of waste for determinations of inorganic and nonvolatile organic species and every 2500 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 5000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.

 - iii. Should the quantity be between 100 and 1000 tons, a minimum of one grab sample shall be collected every 100 tons of waste for determinations of inorganic and nonvolatile organic species and every 500 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 1000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.

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- iv. Should the quantity be below 100 tons, a minimum of one grab sample shall be collected.
 - c. Should the quantity of iron or steel slag exceed 100,000 tons, a minimum of one grab sample shall be collected every 10,000 tons of waste for determinations of inorganic species as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 100,000 tons of each waste for determinations of inorganic. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples.
6. The waste shall not be hazardous waste.
 7. The waste beneficially used under this permit shall not be comingled with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or residual waste other than those approved by permit.
 8. The waste beneficially used under this permit shall not be placed in the waters of the Commonwealth.
 9. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site of use of waste to the land or waters of the Commonwealth. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.
 10. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
 11. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of waste, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained or produced. (See Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.

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12. Failure of the measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
13. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to compliance history review by the Department, upon Department request, as specified by the Pennsylvania Solid Waste Management Act of 1980, as amended.
14. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.
15. Persons or municipalities that propose to operate under the terms and conditions of this general permit after the date of permit issuance must apply for a determination of applicability to the Department's Bureau of Land Recycling and Waste Management, Division of Municipal and Residual Waste, P.O. Box 8472, Harrisburg, PA 17105-8472. At a minimum, the following information must be provided on forms available from the Department's Bureau of Land Recycling and Waste Management:
 - a. Name and street address of applicant;
 - b. A description of the waste that characterizes its chemical composition and physical properties;
 - c. Site location of source of the waste;
 - d. Location of construction fill;
 - e. Number and title of general permit;
 - f. A plan for the sampling and analysis to comply with the requirements in Condition 5.
 - g. A plan for storage and placement of waste at the site which includes a timeline for beneficial use activities on the site
 - h. Proof that the waste and waste management activities will be consistent with the general permit;
 - i. Signed and notarized statement by the applicant who seeks to operate under the terms and conditions of this permit that states that the person accepts all conditions of this general permit;
 - j. An application fee in the amount specified in the residual waste regulations, payable to the "Commonwealth of Pennsylvania";
 - i. Proof that copies of the application have been submitted to the municipality, county, county planning agency and county health department in which the remediation activities will be conducted;
 - j. Information that identifies the applicant (i.e., individual, corporation, partnership, government agency, association, etc.), including the names and addresses of every officer that has a beneficial interest in or otherwise controls the operation of the company;

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- k. A list of all previous permits or licenses issued to the permittee by the Department or federal government under the environmental protection acts; the date of issuance and current status of those permits; and the permittee's compliance history concerning the environmental protection acts;
 - l. Proof that any independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with Department regulations as required in Condition 13;
 - m. Proof that the applicant has legal right to enter the land where beneficial use will take place under this permit;
 - n. An irrevocable written consent from the landowner giving the Department permission to enter upon the land where the applicant will be conducting waste management activities;
 - o. Additional information the Department believes is necessary to make a decision.
16. Any person that operates under the provisions of this permit shall immediately notify the Department (see address in Condition 15) via certified mail of any changes in: the company name, address, owners, operators and responsible officials; the location of the beneficial use; land ownership and the right to enter and operate on any land where waste is beneficially used under this permit; the physical or chemical characteristics of the waste; the site which is the source of the waste; and the status of any permit issued by the Department or federal government under the environmental protection acts.
17. Incoming waste shall be stored in a manner that prevents harm to public health, safety, welfare, or the environment. Storage shall be in a manner that prevents dispersal of waste by wind or water erosion or a risk of fire or explosion. Waste may not be stored in a manner that causes groundwater or surface water contamination.
18. The permittee shall immediately notify the Department's Emergency Hotline at (717) 787-4343 and the Department's Northeast Regional Office in the event of a discharge or spill of waste that reaches the waters of the Commonwealth and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less than 1000 pounds of waste that reach the waters of the Commonwealth need not be immediately reported, but should be recorded as specified in Condition 20.
19. Records of any analytical evaluations conducted on waste pursuant to the residual waste regulations and this permit shall be kept by the permittee at the permittee's place of business for a minimum of 5 years and shall be available to the Department for inspection. At a minimum, these records shall include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies, and person collecting the sample.

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20. The permittee shall maintain records that contain: the type and source of incoming waste, the date and quantity of waste beneficially used at each location, and the results of analyses as required in Condition 4. The permittee shall also maintain records of all spills and releases as specified in Condition 18 or that equal or exceed any reportable quantity under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that contain: location, date, time, identification and quantity of spilled or released material, a description of how the material was cleaned up, and the destination of clean-up wastes. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.
21. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the people or the environment.
22. The waste approved and used for beneficial use under the terms and conditions of this permit shall cease to be a waste upon completion of the construction activity.

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Appendix

Approved Residual Waste:
Foundry Sand
Iron Foundry Knockout Sand
Brass Foundry Knockout Sand
Ingot Mold Foundry Sand
Steel Foundry Grey Sands
Slag
Iron Slag
Steel Slag
Refractory Material
Coke Oven Refractory
Ingot Mold Foundry Hot Metal Mixer Refractory
Steel Foundry Refractory
Soaking Pit Reline Refractory
Press Forge Refractory
Treatment Refractory
Boiler House Refractory
Bell Bung Furnace Refractory
Pilot Plant Annealing Furnace Refractory
Electric Furnace Melting Refractory
Rust Furnace Refractory
Steel Foundry Ladle Refractory
Tempering Refractory
Chrome Brick Pile
Basic Oxygen Furnace Carbon Refractory
Blast Furnace Refractory
Treatment Dust and Sediment
Blast Furnace Dirt
Blast Furnace Screened Flue Dirt/Filter Cake
Blast Furnace Unscreened Flue Dirt/Filter Cake
Blast Furnace Dropout Chamber Dust
Basic Oxygen Furnace Dropout Chamber Material
Basic Oxygen Furnace Precipitator Dusts
Basic Oxygen Furnace Pellets
Electric Furnace Melting Ferrous Baghouse Dust
Electric Furnace Melting Non-Ferrous Baghouse Dust
Non-Petroleum Contaminated Soil/Debris
Railroad Car Cleanout
Railroad Cleanup
Ores
Manganese Dioxide Ore
Chromium Oxide Ore
Miscellaneous
Mill Scale



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTE MANAGEMENT

February 8, 2011

CERTIFIED MAIL NO. 70032260000436258822

Mr. Kerry A. Wrobel
Lehigh Valley Industrial Park, Inc.
1720 Spillman Drive
Bethlehem, PA 18015-2164

Re: General Permit Number WMGR065D001

Dear Wrobel:

Enclosed is General Permit Number WMGR065D001 for beneficial use of various wastes from steelmaking and foundry operations taken from a remediation site as construction fill at an adjacent Act 2 remediation site.

The approval granted under this permit is contingent on Lehigh Valley Industrial Park operating as described in the approved application, complying with the enclosed permit conditions, and complying with the applicable provisions of the Residual Waste Management Regulations.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you want to challenge this action, your appeal must reach the Board within 30 days. You do not need a lawyer to file an appeal with the Board.


Kerry A. Wrobel

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February 8, 2011

Important legal rights are at stake, however, so you should show this document to a lawyer at once. If you cannot afford a lawyer, you may qualify for free pro-bono representation. Call the secretary of the Board (717-787-3483) for more information.

Sincerely,-



Stephen M. Socash, Chief
Division of Municipal and Residual Waste

Enclosure

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

**General Permit
For
Processing/Beneficial Use of Residual Waste**

Permit No. WMGR065D001

Date Amended January 14, 2011

Date Issued February 8, 2011

Date Expires November 29, 2020

The Department of Environmental Protection, Bureau of Waste Management, Division of Municipal and Residual Waste hereby approves the:

Beneficial Use Processing prior to Beneficial Use Other

of: the following types of residual wastes related to the manufacturing of iron and steel permit: refractories, foundry sands, slags, air emission control solids, manganese dioxide ore, chromium oxide ore, mill scale, and the media associated with their excavation.

for use as: construction fill at an adjacent Act 2 remediation site.

This approval is granted to: Lehigh Valley Industrial Park, Inc.

Office: 1720 Spillman Dr., Suite 150

Site: 1805 East Fourth Street

Bethlehem, PA 18015-2164

Bethlehem, PA 18016-7699

subject to the attached conditions and may be revoked or suspended for any project which the Department of Environmental Protection determines to have a substantial risk to public health, the environment, or cannot be adequately regulated under the provisions of this permit.

The processing of wastes not specifically identified in the documentation submitted for this approval, or the beneficial use of wastes not approved in this permit, is prohibited without the written permission of the Department.

This permit is issued under the authority of the Solid Waste Management Act (35 P.S. §§ 6018.101-6018.1003), The Pennsylvania Used Oil Recycling Act (58 P.S. §§ 471-480), The Clean Streams Law (35 P.S. §§ 691.1-691.1001), Sections 1905-A, 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§ 510-5, 510-17 and 510-20) and the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§ 4000.101-4000.1904).

This approval is granted:

By: 

Statewide Regional

Title: Environmental Program Manager

THIS PERMIT IS NON-TRANSFERABLE

GENERAL PERMIT WMGR065
BENEFICIAL USE WASTE FROM IRON AND STEEL MAUFACTURING
AS CONSTRUCTION MATERIAL

Rev. 2/2011

A. Description:

1. This general permit authorizes the beneficial use of residual waste ("waste") from an Act 2 remediation site as construction fill at an adjacent Act 2 remediation site, where both sites were owned by the same owner at the time the Notice of Intent to Remediate under 25 Pa. Code 250.3 was submitted to the Department. The sites may currently be owned by different permittees.
2. Only beneficial use of the following types of residual wastes related to the manufacturing of iron and steel is authorized under this permit: refractories, foundry sands, slags, air emission control solids, manganese dioxide ore, chromium oxide ore, mill scale, and the media associated with their excavation. A list of individual wastes covered under each of these types of residual wastes is found in the Appendix.
3. The beneficial use of the waste under this permit is limited to areas covered by a "Notice of Intent to Remediate Under Act 2."
4. The beneficial use of the waste under this permit is limited to areas in the following counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming.

B. Determination of Applicability Requirements:

A person or municipality that proposes to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" ("DOA") from the appropriate Department Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed (i) General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application), (ii) Form B (Professional Certification), (iii) Form 20 (Application For A Municipal or Residual Waste General Permit), (iv) Form 27R (Acceptance of General Permit Conditions), and (v) a DOA application fee in the amount identified in Section A (General Information) of the Form 20 must be submitted to the appropriate Department Regional Office. A check shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by the Department.

C. Operating Conditions:

1. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall conduct beneficial use activities as described in the approved application.

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BENEFICIAL USE WASTE FROM IRON AND STEEL MAUFACTURING
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Rev. 2/2011

2. Prior to beneficial use of a waste under this permit, the permittee shall submit to the Department's Northeast Regional Office, for approval, the results of detailed chemical analysis of a sufficient number of samples to be representative of the waste and a description of waste's physical properties. In lieu of analysis for specific parameters, the permittee may certify the absence of those parameters based upon the permittee's knowledge of the manufacturing or pollution control process.

3. As specified below, representative samples of each waste shall be obtained using sampling procedures in *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance or in accordance with an appropriate standard from the American Society for Testing and Materials (ASTM). Determinations shall be made on each sample for the appropriate constituents to demonstrate beneficial use of the waste is consistent with the requirements of this condition. The waste may be beneficially used if representative samples of the waste taken from the site where the waste originated do not exceed any level in the standards under 25 Pa. Code 287.621(b)(5)(v), except those standards under 25 Pa. Code 287.621(b)(5)(v) based on secondary maximum contaminant levels (SMCLs). Should 1/20th of the total level for a constituent exceed the standard for that constituent under 25 Pa. Code 287.621(b)(5)(v), the toxicity characteristic leaching procedure (EPA Method 1311) or the synthetic precipitation leaching procedure (EPA Method 1312) shall be used to demonstrate that the standards is not exceeded. Should an individual sample of waste exceed the above standards, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data. Other industry accepted methods may be used for the statistical treatment of data, if approved by the Department.
 - a. Should the quantity of any individual waste identified in the Appendix except iron or steel slag exceed 10,000 tons, a minimum of one grab sample shall be collected every 1000 tons of waste for determinations of inorganic and nonvolatile organic species and every 5000 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 10,000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.

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BENEFICIAL USE WASTE FROM IRON AND STEEL MAUFACTURING
AS CONSTRUCTION MATERIAL

Rev. 2/2011

- b. Should the quantity of any individual waste identified in the Appendix except iron or steel slag exceed twice the amount identified in the permittee's application, the waste shall be sampled as follow:
 - i. Should the quantity exceed 10,000 tons, Condition 3a applies.
 - ii. Should the quantity be between 1000 and 10,000 tons, a minimum of one grab sample shall be collected every 500 tons of waste for determinations of inorganic and nonvolatile organic species and every 2500 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 5000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.
 - iii. Should the quantity be between 100 and 1000 tons, a minimum of one grab sample shall be collected every 100 tons of waste for determinations of inorganic and nonvolatile organic species and every 500 tons of waste for determinations of volatile organic species, as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 1000 tons of each waste for determinations of inorganic and nonvolatile organic species. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples. Grab samples must be used for all determinations involving volatile organic species.
 - iv. Should the quantity be below 100 tons, a minimum of one grab sample shall be collected.
 - c. Should the quantity of iron or steel slag exceed 100,000 tons, a minimum of one grab sample shall be collected every 10,000 tons of waste for determinations of inorganic species as the material is prepared for transport to the site of beneficial use. The grab samples may be used to prepare a composite sample representing a maximum of 100,000 tons of each waste for determinations of inorganic. Should visual observations of the grab samples indicate variability in the waste, determinations shall be made on the individual grab samples.
4. The waste shall not be hazardous waste.

GENERAL PERMIT WMGR065
BENEFICIAL USE WASTE FROM IRON AND STEEL MAUFACTURING
AS CONSTRUCTION MATERIAL

Rev. 2/2011

5. The waste beneficially used under this permit shall not be comingled with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or residual waste other than those approved by permit.
6. The waste beneficially used under this permit shall not be placed in the waters of the Commonwealth.
7. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site of use of waste to the land or waters of the Commonwealth. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.
8. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
9. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of waste, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained or produced. (See Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.
10. Failure of the measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
11. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to compliance history review by the Department, upon Department request, as specified by the Pennsylvania Solid Waste Management Act of 1980, as amended.

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12. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.
13. Any person that operates under the provisions of this permit shall immediately notify the Department's Northeast Regional Office via certified mail of any changes in: the company name, address, owners, operators and responsible officials; the location of the beneficial use; land ownership and the right to enter and operate on any land where waste is beneficially used under this permit; the physical or chemical characteristics of the waste; the site which is the source of the waste; and the status of any permit issued by the Department or federal government under the environmental protection acts.
14. Incoming waste shall be stored in a manner that prevents harm to public health, safety, welfare, or the environment. Storage shall be in a manner that prevents dispersal of waste by wind or water erosion or a risk of fire or explosion. Waste may not be stored in a manner that causes groundwater or surface water contamination.
15. The permittee shall immediately notify the Department's Emergency Hotline at (717) 787-4343 and the Department's Northeast Regional Office in the event of a discharge or spill of waste that reaches the waters of the Commonwealth and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less than 1000 pounds of waste that reach the waters of the Commonwealth need not be immediately reported, but should be recorded as specified in Condition 17.
16. Records of any analytical evaluations conducted on waste pursuant to the residual waste regulations and this permit shall be kept by the permittee at the permittee's place of business for a minimum of 5 years and shall be available to the Department for inspection. At a minimum, these records shall include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies, and person collecting the sample.

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17. The permittee shall maintain records that contain: the type and source of incoming waste, the date and quantity of waste beneficially used at each location, and the results of analyses as required in Condition 2. The permittee shall also maintain records of all spills and releases as specified in Condition 15 or that equal or exceed any reportable quantity under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that contain: location, date, time, identification and quantity of spilled or released material, a description of how the material was cleaned up, and the destination of clean-up wastes. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.
18. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the people or the environment.
19. The waste approved and used for beneficial use under the terms and conditions of this permit shall cease to be a waste upon completion of the construction activity.
20. A person or municipality that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by the Department for submission at a later date. The renewal application shall be made using the "Form 20 (Application For a Municipal or Residual Waste General Permit)."

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the issuance or denial of the renewal for permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit.

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Appendix

Approved Residual Waste:
Foundry Sand
Iron Foundry Knockout Sand
Brass Foundry Knockout Sand
Ingot Mold Foundry Sand
Steel Foundry Grey Sands
Slag
Iron Slag
Steel Slag
Refractory Material
Coke Oven Refractory
Ingot Mold Foundry Hot Metal Mixer Refractory
Steel Foundry Refractory
Soaking Pit Reline Refractory
Press Forge Refractory
Treatment Refractory
Boiler House Refractory
Bell Bung Furnace Refractory
Pilot Plant Annealing Furnace Refractory
Electric Furnace Melting Refractory
Rust Furnace Refractory
Steel Foundry Ladle Refractory
Tempering Refractory
Chrome Brick Pile
Basic Oxygen Furnace Carbon Refractory
Blast Furnace Refractory
Treatment Dust and Sediment
Blast Furnace Dirt
Blast Furnace Screened Flue Dirt/Filter Cake
Blast Furnace Unscreened Flue Dirt/Filter Cake
Blast Furnace Dropout Chamber Dust
Basic Oxygen Furnace Dropout Chamber Material
Basic Oxygen Furnace Precipitator Dusts
Basic Oxygen Furnace Pellets
Electric Furnace Melting Ferrous Baghouse Dust
Electric Furnace Melting Non-Ferrous Baghouse Dust
Non-Petroleum Contaminated Soil/Debris
Railroad Car Cleanout
Railroad Cleanup
Ores
Manganese Dioxide Ore
Chromium Oxide Ore
Miscellaneous
Mill Scale