Section V

Coastal General Permit #15 Compliance Statement

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Compliance Statement
for
Coastal General Permit 15

For

Rahway Arch Properties Site Remediation

Block 602, Lot(s) 1 & 8; Block 603, Lot 1; Block 705, Lot(s) 17 & 18

(previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)

Borough of Carteret
Middlesex County, New Jersey

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JTK, Inc. File: KE12017

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for
Rahway Arch Properties - Site Remediation
Borough of Carteret
Middlesex County, New Jersey

TABLE OF CONTENTS

1.0 INTRODUCTION 1
- 1.1 Site Description 1
- 1.2 Project Description/ Disturbances 3

2.0 APPLICABLE COASTAL ZONE MANAGEMENT RULES UNDER N.J.A.C. 7:7E 3

3.0 SUBCHAPTER 3: SPECIAL AREAS 6
- 3.1 Rule 7:7E-3.5 Finfish Migratory Pathways 6
- 3.2 Rule 7:7E-3.23 Filled Water's Edge 6
- 3.3 Rule 7:7E-3.25 Flood Hazard Areas 7
- 3.4 Rule 7:7E-3.26 Riparian Zones 7
- 3.5 Rule 7:7E-3.27 Wetlands 8
- 3.6 Rule 7:7E-3.28 Wetlands Buffers 8
- 3.7 Rule 7:7E-3.36 Historic & Archeological Resources 8
- 3.8 Rule 7:7E-3.39 Endangered Species and Critical Wildlife Habitat 9
- 3.9 Rule 7:7E-3.41 Special Hazard Area 10
- 3.10 Rule &:7E-3.50 Lands and Water Subject to Public Trust Rights 10

4.0 SUBCHAPTER 4: GENERAL WATER AREAS 11

5.0 SUBCHAPTER 6: GENERAL LOCATION RULES 11
- 5.1 Rule 7:7E-6.2 Basic Location Rule 11
- 5.2 Rule 7:7E-6.3 Secondary Impacts 11

6.0 SUBCHAPTER 7: USE RULES 12
- 6.1 Rule 7:7E-7.7 Industry Use 12

7.0 SUBCHAPTER 8: RESOURCE RULES 12
- 7.1 Rule 7:7E-8.4 Water Quality 12
- 7.2 Rule 7:7E-8.7 Stormwater Management 13
- 7.3 Rule 7:7E-8.8 Vegetation 13
- 7.4 Rule 7:7E-8.10 Air Quality 14
- 7.5 Rule 7:7E-8.11 Public Trust Rights 14
- 7.6 Rule 7:7E-8.12 Scenic Resources & Design 15
- 7.7 Rule 7:7E-8.13 Buffers and Compatibility of Uses 15
- 7.8 Rule 7:7E-8.14 Traffic 15
- 7.9 Rule 7:7E-8.22 Solid and Hazardous Waste 16

Compliance Statement
Coastal General Permit 15
for
Rahway Arch Properties - Site Remediation
Borough of Carteret
Middlesex County, New Jersey

TABLE OF CONTENTS

8.0 MITIGATION UNDER N.J.A.C. 7:7E 16

9.0 COMPLIANCE WITH COSTAL PROGRAM RULES UNDER N.J.A.C.. 7:7 16

9.1 General Standards for Issuing Coastal General Permits and Permits-by-Rule (N.J.A.C. 7:77-7.1) 16

9.2 Requirements of Coastal General Permit 15 – Investigation, Cleanup, Removal or Remediation of Hazardous Substances (N.J.A.C. 7:7-7.15) 17

Note: For Compliance with NJ Flood Hazard Area Control Act Rules under N.J.A.C. 7:13, refer to the Flood Hazard Area Engineering Report submitted concurrently with this application.

COMPLIANCE STATEMENT
COASTAL GENERAL PERMIT 15

1.0 INTRODUCTION

J. Timothy Kernan, Inc. (JTKI), acting as the land use permitting consultant for Soil Safe, Inc. (reclamation contractor) and Rahway Arch Properties, LLC (property owner) is submitting this Compliance Statement pursuant to the *Coastal Permit Program Rules* (N.J.A.C. 7:7) for the proposed remediation of the Rahway Arch Properties site. The Rahway Arch site consists of approximately 85 acres of previously disturbed land comprised of six impoundments and their surrounding berms; and approximately 40 acres of surrounding wetlands known as Block 602, Lot(s) 1 & 8; Block 603, Lot 1; Block 705, Lot(s) 17 & 18 *(and previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)*, in the Borough of Carteret, Middlesex County, New Jersey. The site is bordered to the north, northeast and northwest by the Rahway River and the tidally influenced creeks and wetlands associated with the river; to the south and southeast by a Kinder-Morgan fuel terminal; to the west and southwest by a small equipment salvage yard and the I-Porte trucking terminal.

The proposed remediation activities include the construction of an on-site Class B facility to manufacture the required structural fill, grading operations for the capping and filling of the existing sludge disposal impoundments and stormwater runoff management.

1.1 Site Description

Land Use

The site presently consists of six (6) sludge impoundments surrounded by earthen containment berms totaling 85 acres and approximately 40 acres of adjacent wetlands. Several pathways have been built through the impoundments to allow access for maintenance and monitoring. The impoundments, previously owned by American Cyanamid, operated from the 1930's to the 1970's and received approximately 2,000,000 tons of cyanide-contaminated alum-YPS sludge. The alum/YPS sludge is a soft clay-like material that exhibits high natural moisture content and negligible shear strength. It cannot support any structure or pavement, rendering the impoundments impassible. The sludge exhibits very low infiltration rates trapping stormwater within the impoundments, creating bathtub like conditions in the impoundments as the stormwater slowly percolates through the sludge into the groundwater.

The site, in its current condition is unusable, and is not in compliance with the guidelines established by the Site Remediation Reform Act (SRRA) that require that every effort be made to select a remedial action that does not preclude or substantially restrict the use of a site for future redevelopment or recreational use.

Because of measured contamination and the poor geotechnical conditions, the site poses an environmental risk from direct contact and impact to adjacent surface water and groundwater, is unusable, and cannot be properly maintained.

As a result of the existing conditions, Rahway Arch Properties, LLC (the site owner) has decertified the April 2011 biennial report submitted to NJDEP pursuant to the NFA and have opted-in to the Licensed Site Remediation Professional Program. The owners intend to remediate the site in accordance with the requirements of the SRRA and N.J.A.C. 7:26C-2.4. The remediation will be performed under the direction of a New

Jersey Licensed Site Remediation Professional (LSRP). Rahway Arch Properties, LLC has contracted with Albert P. Free of EastStar to provide LSRP services for remediation of the Rahway Arch Properties site. For additional detail regarding the site's extensive history, need for remediation and recommended remedial action, please refer to the project's Remedial Investigation Report and Remedial Action Workplan as submitted by the site's LSRP to SRP.

Topography and Soils

The topography of the site is relatively level ranging from approximately 6 feet above mean sea level (MSL) to 14 feet above MSL. However, many of the existing earthen berms surrounding the existing impoundments have steep slopes down to adjacent wetlands. The subject property generally slopes in all directions towards the adjacent Rahway River tidal marshes and tidal creeks. In the tidal creeks adjacent to the site, the elevation drops to 2 feet above MSL. These creeks are tidally influenced twice daily by the Rahway River. Vegetative cover is either sparse or non-existent over most of the site area.

The parcel is located within the Rahway River (below Robinson's Creek) HUC 14, the Rahway River/Woodbridge Creek Watershed and the Arthur Kill WMA #07.

The predominate mapped-type soil within the project site is PsuB, Psamments, waste substratum. The site also contains areas mapped as Ur-Urban Land and TrkAv-Transquaking mucky peat.

Symbol	*Description*	*Slopes*	*HSG*
PsuB	Psamments, waste substratum	0-8	D
Ur	Urban Land	--	Non-Listed
TrkAv	Transquaking mucky peat, very frequently flooded	0-1	D

The linework and symbology for the soil types was determined by the NRCS Web Soil Survey, as specified in the New Jersey Department of Agriculture Technical Bulletin 2006-1.0, dated June 1, 2006. A copy of the Soil Survey has been provided in Section IV of the Application Report for reference.

PsuB – Psamments, waste substratum consists of reclaimed areas or areas used as sites for waste landfills. The properties and characteristics of this map unit differ greatly from place to place. For most uses onsite investigation and evaluation are needed. Generally runoff potential is low belonging to Soil Group D.

Ur – Urban Land consists of areas where industrial plants, shopping and business centers, and other structures cover more than 80 percent of the surface. These areas are nearly all in highly populated areas. Most are nearly level to moderately sloping, but there are some areas that are steep. Fill material has been used in some places to build up wet soils.

TrkAv – Transquaking mucky peat, are very poorly drained and frequently flooded by tidal waters. Surface runoff is slow or ponded. Generally belonging to Soil Group D.

1.2 Project Description/Disturbances

All of the proposed site improvements for the purposes of remediation are within a Waterfront Development regulated area. The following improvements are proposed as part of the required remediation of the Rahway Arch Properties site:

1. Office Trailer/Scale House

   ✓ *A mobile construction trailer, approximately 70' long x 12' wide is proposed to include an office and Scale House to serve the Class B Recycling Facility necessary to facilitate the onsite processing of the engineered fill required to effectively cap and remediate the site.*

2. Filling & Grading.

   ✓ *The site's topography will be filled and graded in order to 1) provide a minimum cap of 5 feet as quickly as possible from the edge of the existing perimeter berms, 2) insure long term positive drainage and 3) provide a stormwater management system that controls runoff, eliminates ponding and infiltration as well as protects the integrity of the existing berms, which contain the contaminated sludge from undesirable erosion and degradation.*

3. Onsite Parking and Access.

   ✓ *A gravel 19 space parking lot and gravel roadway will be provided onsite in accordance with the projects Borough of Carteret approvals to support the proposed Class B Recycling Facility and reclamation contractor's onsite processing and remediation activities. There's an existing gravel access road and bridge that provides access to the site and will continue to be utilized for the proposed remediation activities.*

4. Stormwater Management Facilities.

   ✓ *A stormwater management system consisting of perimeter swales and four (4) detention basins was designed in accordance with the requirements of the project's remedial action workplan.*

   ✓ *The attached Stormwater Management Report prepared by J. Timothy Kernan, Inc. details the proposed stormwater management facilities and compliance with N.J.A.C. 7.8.*

5. Utility Service Connections

   ✓ *New municipal water and sewer service connections are not proposed to serve the proposed Class B site during remediation activities. The Class B facility will be served by bottled water for potable use, and an onsite well for non-potable uses. Sanitary sewer waste will be collected in a holding tank and disposed of regularly as scavenger waste.*

2.0 APPLICABLE COASTAL ZONE MANAGEMENT RULES UNDER N.J.A.C. 7:7E

The State of New Jersey administers its coastal zone program through the New Jersey Department of Environmental Protection (NJDEP) Land Use Regulation Program. The Coastal Zone Management Rules (CZM) (N.J.A.C. 7:7E, as amended through 06/06/2011 regulate the applications under the Waterfront Development Act, (N.J.S.A. 12:5-3 et seq.) and Federal Consistency Determinations (307 of the Federal Coastal Zone Management Act) among others.

The Coastal Zone Management Rules were first adopted following Federal approval in September 1978, and were most recently amended in June 2011. The Coastal Zone Management rules constitute the substantive core of the program.

TABLE 1: APPLICABLE COASTAL ZONE MANAGEMENT RULES						
Special Areas				*Applicable*		*Not Applicable*
7:7E-3.2		Shellfish Habitat				X
7:7E-3.3		Surf Clam Areas				X
7:7E3.4		Prime Fishing Areas				X
7:7E3.5		Finfish Migratory Pathways		X		
7:7E3.6		Submerged Vegetation Habitat				X
7:7E-3.7		Navigation Channels				X
7:7E-3.8		Canals				X
7:7E-3.9		Inlets				X
7:7E-3.10		Marina Moorings				X
7:7E-3.11		Ports				X
7:7E-3.12		Submerged Infrastructure Routes				X
7:7E-3.13		Shipwrecks & Artificial Reefs				X
7:7E-3.14		Wet Borrow Pits				X
7:7E-3.715		Intertidal & Subtidal Shallows				X
7:7E-3.716		Dunes				X
7:7E-3.717		Overwash Areas				X
7:7E-3.18		Coastal High Hazard Areas				X
7:7E-3.19		Erosion High Hazard Areas				X
7:7E-3.20		Barrier Island Corridor				X
7:7E-3.21		Bay Islands				X
7:7E-3.22		Beaches				X
7:7E-3.23		Filled Waters Edge		X		
7:7E-3.24		Existing Lagoon Edges				X
7:7E-3.25		Flood Hazard Area		X		
7:7E-3.26		Riparian Zones		X		
7:7E-3.27		Wetlands		X		
7:7E-3.28		Wetlands Buffers		X		
7:7E-3.31		Coastal Bluffs				X
7:7E-3.32		Intermittent Stream Corridors				X
7:7E-3.33		Farmland Conservation Areas				X
7:7E-3.34		Steep Slopes				X
7:7E-3.35		Dry Borrow Pits				X
7:7E-3.36		Historic & Archaeological Resources		X		
7:7E-3.37		Specimen Trees				X
7:7E-3.38		Endangered Species		X		
7:7E-3.39		Critical Wildlife Habitat		X		
7:7E-3.40		Public Open Space				X
7:7E-3.41		Special Hazard Areas		X		
7:7E-3.42		Excluded Federal Lands				X
7:7E-3.43		Special Urban Areas				X
7:7E-3.44		Pinelands Areas				X
7:7E-3.45		Hackensack Meadowlands				X
7:7E-3.46		Wild & Scenic River Corridor				X

7:7E-3.47		Geodetic Control Reference Marks				X
7:7E-3.48		Hudson River Waterfront Area				X
7:7E-3.49		Atlantic City				X
7:7E-3.50		Lands and Water subject to Public Trust Rights		X		
General Water Areas				***Applicable***		***Not Applicable***
7:7E-4.2		Aquaculture				X
7:7E-4.3		Boat Ramps				X
7:7E-4.4		Docks & Piers				X
7:7E-4.5		Recreational Docks & Piers				X
7:7E-4.6		Maintenance Dredging				X
7:7E-4.7		New Dredging				X
7:7E-4.8		Dredged Material Disposal				X
7:7E-4.9		Solid Waste/Sludge Dumping				X
7:7E-4.10		Filling				X
7:7E-4.11		Mooring				X
7:7E-4.12		Sand/Gravel Mining				X
7:7E-4.13		Bridges				X
7:7E-4.14		Submerged Pipelines				X
7:7E-4.15		Overhead Transmission Lines				X
7:7E-4.16		Dams & Impoundments				X
7:7E-4.17		Outfalls & Intakes				X
7:7E-4.18		Realignment of Water Areas				X
7:7E-4.19		Breakwaters				X
7:7E-4.20		Submerged Cables				X
7:7E-4.21		Artificial Reefs				X
General Location Rules				***Applicable***		***Not Applicable***
7:7E-6.1		Linear Development				X
7:7E-6.2		Basic Location		X		
7:7E-6.3		Secondary Impacts		X		
Use Rules				***Applicable***		***Not Applicable***
7:7E-7.2		Housing Rules				X
7:7E-7.3		Resort/Recreational Use				X
7:7E-7.3A		Marina Development				X
7:7E-7.4		Energy Facility Use Rules				X
7:7E-7.5		Transportation Use Rules				X
7:7E-7.6		Public Facility Use Rules				X
7:7E-7.7		Industry Use Rules		X		
7:7E-7.8		Mining Use Rules				X
7:7E-7.9		Port Use Rules				X
7:7E-7.10		Commercial Use Rules				X
7:7E-7.11		Coastal Engineering				X
7:7E-7.12		Dredge Spoil Disposal on Land				X
7:7E-7.13		Nat'l Defense Facilities Use Rules				X
7:7E-7.14		High Rise Structures				X

Resource Rules				*Applicable*		*Not Applicable*
7:7E-8.2		Marine Fish				X
7:7E-8.4		Water Quality		X		
7:7E-8.5		Surface Water Use				X
7:7E-8.6		Groundwater Use				X
7:7E-8.7		Stormwater Management		X		
7:7E-8.8		Vegetation		X		
7:7E-8.10		Air Quality		X		
7:7E-8.11		Public Trust Rights		X		
7:7E-8.12		Scenic Resources & Design		X		
7:7E-8.13		Buffers & Compatibility		X		
7:7E-8.14		Traffic		X		
7:7E-8.21		Subsurface Disposal Systems				X
7:7E-8.22		Solid & Hazardous Waste		X		

3.0 SUBCHAPTER 3: SPECIAL AREAS

The following is an assessment of applicable special areas pursuant to N.J.A.C. 7:7E and how the proposed project is in compliance with said rules.

3.1 Rule 7:7E-3.5 Finfish Migratory Pathways

Policy Summary:

Finfish migratory pathways are waterways (rivers, streams, creeks, bays and inlets) which can be determined to serve as passageways for diadromous fish to or from seasonal spawning areas, including juvenile anadromous fish which migrate in autumn and those listed by H.E. Zich (1977) "New Jersey Anadromous Fish Inventory" NJDEP Miscellaneous Report No. 41, and including those portions of the Hudson and Delaware Rivers within the coastal zone boundary.

Project Compliance:

✓ *The project will not affect Finfish Migratory Pathways.*

3.2 Rule 7:7E-3.23 Filled Water's Edge

Policy Summary:

Filled water's edge areas are existing filled areas lying between wetlands or water areas, and either the upland limit of fill, or the first paved public road or railroad landward of the adjacent water area, whichever is closer to the water. Some existing or former dredged material disposal sites and excavation fill areas are filled water's edge. On filled water's edge sites without direct access to navigable water, the area to be devoted to water related uses will be determined on a case-by-case basis. On all filled water's edge sites, development must comply with the Public Access to the Waterfront Rule (N.J.A.C. 7:7E-8.11).

Project Compliance:

✓ *The entire existing Rahway Arch Properties site is a filled water's edge area. The waterfront portion along the Rahway River is not currently accessible to the public for use. The proposed requested fill activity is for site remediation only. After remediation is complete the site will be left as open space until future redevelopment is sought by the property owner at which time would be subject to additional land use permitting.*

3.3 Rule 7:7E-3.25 Flood Hazard Areas

Policy Summary:

Flood Hazard Areas are areas subject to either tidal or fluvial flooding. In an undeveloped portion of a flood hazard area that is within 100 feet of a navigable water body, development is prohibited unless the development is for water dependent use. In a portion of an undeveloped flood hazard area that is 100 feet or farther from a navigable waterway, development is conditionally acceptable provided the development would not prevent water-dependent use in any portion of the flood hazard area within 100 feet of the navigable water body. An "undeveloped" area is an area that has no impervious cover. Retention and detention basins developed specifically for stormwater management purposes are conditionally acceptable provided they are constructed in accordance with the Stormwater Runoff Rule N.J.A.C. 7:7E-8.7. Development within a flood hazard area shall comply with the requirements for impervious cover and vegetative cover under N.J.A.C. 7:7E-5 and either N.J.A.C. 7:7E-5A or 5B as applicable. In addition development in flood hazard areas shall also conform with the Flood Hazard Area Control Act rules of N.J.A.C. 7:13.

Project Compliance:

✓ *The site is located on the Flood Insurance Rate Maps #34023C 0076 F & 77 F. A large portion of the site is located within Zone AE (EL 7). The proposed activities are for site remediation only and will be filled revising the flood hazard area limit. The remediated site will be left as open space until future redevelopment is sought by the property owner. The proposed vegetative cover will be in accordance with the site's approved remedial action workplan.*

Note: An Application for approval under the Flood Hazard Control Act for a Flood Hazard Area Verification and Individual Flood Hazard Area Permit has been submitted concurrently with this application. Refer to the project's Flood Hazard Area Engineering Report for compliance under N.J.A.C. 7:13.

3.4 Rule 7:7E-3.26 Riparian Zones

Policy Summary:

Development in riparian zones shall conform with the requirements for a Flood Hazard Area Individual Permit under the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-9, 10 and 11 or in the alternative as applicable, a flood hazard area permit–by-rule at N.J.A.C. 7:13-7 or a flood hazard area general permit at N.J.A.C. 7:13-8.

Project Compliance:

- ✓ *An Application for approval under the Flood Hazard Control Act for a Flood Hazard Area Verification and Individual Flood Hazard Area Permit has been submitted concurrently with this application. Refer to the project's Flood Hazard Area Engineering Report for compliance under N.J.A.C. 7:13.*

3.5 Rule 7:7E-3.27 Wetlands

Policy Summary:

Development in wetlands defined under the Freshwater Wetland Protection Act is prohibited unless the development is found to be acceptable under the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A).

Project Compliance:

- ✓ *The proposed site remediation activities do not include any fill or disturbance within freshwater wetlands, as delineated on the plan and verified under NJDEP File No. 1201-03-0003.1FWW08001.*

3.6 Rule 7:7E-3.28 Wetlands Buffers

Policy Summary:

Wetlands buffers (transition areas) associated with wetlands subject to the Freshwater Wetlands Protection Act shall be regulated in accordance with the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7A.

Project Compliance:

- ✓ *The proposed site remediation activities include fill and disturbance within the established 50′ and 150′ wetlands buffer or transition areas. Applications for approval under the Freshwater Wetlands Protection Act for a FWW General Permit 4 and General Permit 11 have been submitted concurrently with this application. Refer to the project's Freshwater Wetlands Compliance Statement for compliance under N.J.A.C. 7:7A.*

3.7 Rule 7:7E-3.36 Historic and Archeological Resources

Policy Summary:

Any development that detracts from, encroaches upon, or destroys the value of historic and archaeological resources is discouraged.

Project Compliance:

- ✓ *Onsite impact to these resources is not anticipated due to the highly disturbed nature of the land. In addition, according to the NJDEP Historic Preservation Office's New Jersey and National Registers of Historic Places (last updated 09/06/2011), there are no registered Historic or Archaeological sites located on or within the vicinity of the project site.*

3.8 Rule 7:7E-3.38 & 3.39 Endangered Species and Critical Wildlife Habitats

Policy Summary:

Areas known to be inhabited on a seasonal or permanent basis by, or to be critical at any stage of the life cycle of any wildlife or vegetation identified as endangered or threatened species on Federal or State lists, or under active consideration for Federal or State listing, are considered Special Areas. Development of a Special Area is prohibited unless it can be shown that the target species are not adversely affected. The required threatened or endangered species habitat buffer area shall be dependent upon the range of the species and the development's anticipated impacts to the habitat.

Project Compliance:

✓ *Potential habitats for endangered or threatened species or any critical habitats were not observed within the limit of disturbance during field investigations of the property. The area to be remediated consists of long standing existing industrial sludge impoundments that are surrounded by earthen berms. These existing structures are required to be maintained and have minimal vegetation other than phragmites which dominate the landscape of these former disposal impoundments.*

A natural heritage database search for rare species and ecological communities was conducted (report dated August 23, 2012) for the proposed remediation area. Searches of the Natural Heritage Database and Landscape Project (Version 3) yielded the following results:

Table 1 *Rare Wildlife Species or Wildlife Habitat Onsite Data Request Search Results*	
Rare plants/ecological communities possible onsite:	No
Rare plants/ecological communities possible onsite/immediate vicinity	No
Natural heritage priority sites on site	No
Landscape 3.1 species based patches on site	Yes*[1]
Landscape 3.1 vernal pool habitat onsite	No
Landscape 3.1 stream/mussel habitat onsite	No
Other animals tracked by ENSP onsite	Yes*[2]

Table 2 *Rare Wildlife Species or Wildlife Habitat Within 1 Mile for FHACA Searches*	
Rare plants/ecological communities within 1 mile	No
Natural heritage priority sites within 1 mile	No
Landscape 3.1 species based patches within 1 mile	Yes*[1]
Landscape 3.1 vernal pool habitat within 1 mile	No
Landscape 3.1 stream/mussel habitat within 1 mile	No
Other animals tracked by ENSP within 1 mile	Yes*[2]

The proposed activities will not result in any adverse impacts either directly or indirectly to the species listed in the NHD Report or their respective habitats. Existing site

[1] *Foraging habitat for four (4) colonial water birds of special concern, the Glossy Ibis, Little Blue Heron, Snowy Egret and Tri-colored Heron. Three (3) state threatened colonial water birds, the Black-Crowned Night Heron, Cattle Egret And Yellow-Crowned Night Heron; and breeding/sighting for one(1) state endangered colonial water bird, the Northern Harrier.*

[2] *Northern Diamondback Terrapin*

conditions have negatively impacted the quality of any potential habitats for these species. In fact the proposed activities will not only improve the quality of the wetlands buffer areas for area wildlife but will eliminate their direct contact exposure with surface contaminants and polluted water sources.

3.9 Rule 7:7E-3.41 Special Hazard Area

Policy Summary:

Special hazard areas include areas with a known actual or potential hazard to public health, safety, and welfare, or to public or private property. Coastal development, especially residential and labor-intensive economic development, within special hazard areas is discouraged. All development within special hazard areas must include appropriate mitigating measures to protect the public health and safety. Approvals from the Department's Division of Solid and Hazardous Waste shall be obtained prior to the commencement of any hazardous substance investigations or cleanup activities at contaminated sites.

Project Compliance:

- ✓ *The remediation activities which includes a proposed onsite Class B Recycling facility to effectively cap and rehabilitate this former disposal site are being conducted in accordance with the requirements of SRRA, and under the direction of a N.J. Licensed Site Remediation Professional (LSRP) as well as all appropriate approvals from the NJDEP. At the completion of the remedial work, the Rahway Arch Properties site will no longer represent a special hazard area. Therefore, the proposed remediation activities are in compliance with this rule.*

3.10 Rule 7:7E-3.50 Lands and Water Subject to Public Trust Rights

Policy Summary:

Lands and waters subject to public trust rights are tidal waterways and their shores, including both lands now or formerly below the mean high water line, and shores above the mean high water line. Tidal waterways and their shores are subject to the Public Trust Doctrine and are held in trust by the State for the benefit of all the people, allowing the public to fully enjoy these lands and waters for a variety of public uses. Development that adversely affects lands and waters subject to public trust rights is discouraged.

Project Compliance:

- ✓ *The waterfront portion along the Rahway River is not currently accessible to the public for use. The proposed regulated fill activity is for site remediation only. After remediation is complete the site will be left as open space until future redevelopment is sought by the property owner at which time would be subject to additional land use permitting.*

4.0 SUBCHAPTER 4: GENERAL WATER AREAS

The project site is located adjacent to the Rahway River, which is classified as a medium river. No work will be conducted within any water areas; therefore this rule is not applicable.

5.0 SUBCHAPTER 6: GENERAL LOCATION RULES

5.1 Rule 7:7E-6.2 Basic Location Rule

Policy Summary:

A location may be acceptable for development under N.J.A.C. 7:7E-3, 4, 5, 5A, 5B and 6 but the Department may reject or conditionally approve the proposed development of the location as reasonably necessary to:

1. Promote public health, safety and welfare;
2. Protect public and private property, wildlife and marine fisheries, and
3. Preserve, protect and enhance the natural environment.

Project Compliance:

✓ *The proposed remediation project is consistent with the basic location rules and there are no alternatives for this project.*

5.2 Rule 7:7E-6.3 Secondary Impacts

Policy Summary:

Secondary impacts are the effects of additional development likely to be constructed as a result of the approval of a particular proposal. Secondary impacts can also include traffic increases, increased recreational demand and any other offsite impacts generated by onsite activities which affect the site and surrounding region.

Project Compliance:

✓ *It is anticipated that secondary impacts resulting from the proposed remediation of the site will be limited to temporary heightened traffic during construction activities. Traffic is expected to increase at and near the property entrance. The project is not anticipated to induce further development adjacent to the site.*

✓ *In addition, the outcome of the proposed remediation project will contribute to the good of the community by 1) providing a rehabilitated site and 2) eliminating continued insultt to surrounding wildlife, surface waters and groundwater resources due to contaminant exposure and leachates. There is no alternative to the proposed remediation, therefore no adverse secondary impacts are anticipated, and the project is in compliance with this rule.*

6.0 SUBCHAPTER 7: USE RULES

Use Rules are rules and conditions applicable to particular kinds of development. Use rules do not preempt location rules which restrict development, unless specifically stated.

6.1 Rule 7:7E-7.7 Industry Use

Policy Summary:

Industry uses are uses that involve industrial processing, manufacturing, storage or distribution activities. Industry uses are encouraged in special urban areas. Elsewhere, industrial uses are conditionally acceptable provided they comply will all applicable location and resource rules.

Project Compliance:

✓ *The subject property is a former industrial disposal site, and is zoned HI, Highway Industrial. The proposed remediation requires an onsite Class B Recycling facility to facilitate the required engineered fill to effectively cap and rehabilitate the property, which is a permitted use in this zone. The area is also designated as a redevelopment area. This complies with the industry use rule*

7.0 SUBCHAPTER 8: RESOURCE RULES

Resource rules are the standards the Department utilizes to analyze the proposed development in terms of its effects on various resources of the built and natural environment of the coastal zone, both at the proposed site as well as in its surrounding region. The following is an assessment of applicable special areas pursuant to N.J.A.C. 7:7E-8.0 and how the proposed project is in compliance with said rules.

7.1 Rule 7:7E-8.4 Water Quality

Policy Summary:

Developments which would violate the Federal Clean Water Act or State laws, rules and regulations enacted or promulgated pursuant thereto, is prohibited. Development that is consistent with the approved Water Quality Management (208) plan under the New Jersey Water Quality Planning Act N.J.S.A. 58:11A-1 et seq., is prohibited.

Project Compliance:

✓ *Violations of the Federal Clean Water Act or state laws, rules and regulations enacted or promulgated pursuant thereto are not expected as a result of this project. Surface water or groundwater resources will not be adversely impacted by this project. In fact, these resources will be greatly improved, benefitting from the proposed remediation cap which will eliminate surface runoff of contaminants and infiltration through contaminated sludge to groundwater. There will be no public sewage generated by the new development.*

7.2 Rule 7:7E-8.7 Stormwater Management

Policy Summary:

A project or activity that meets the definition of "major development" at N.J.A.C. 7:8-1.2 shall comply with the Stormwater Management Rules at N.J.A.C. 7:8.

Project Compliance:

- ✓ *The project meets the definition of "major development." Therefore, the proposed stormwater management system shall be in compliance with the Stormwater Management Rules (N.J.A.C. 7:8). Stormwater management measures have been designed to meet the erosion control, groundwater recharge, stormwater runoff quantity, an stormwater runoff quality standards as applicable to the proposed remediation in a tidal flood hazard area. The project will implement an approved Soil Erosion and Sediment Control (SESC) Plan to aid in minimizing the amount of sediment entering the local aquatic environment during and after construction.*

- ✓ *Erosion Control*
  The site is required to meet the Standards for Soil Erosion and Sediment Control in New Jersey and with certification by the Freehold Soil Conservation District, this component will be achieved.

- ✓ *Groundwater Recharge*
  Groundwater recharge is not required since the existing site is to undergo remediation and contains contaminants that are not suited to be recharged. Therefore, groundwater recharge has not been provided and is not required per the Rules at N.J.A.C. 7:8-5.

- ✓ *Stormwater Runoff Quantity*
  In accordance with NJAC 7:8-5.4(a) 3iv projects in tidal flood hazard areas are exempt from runoff quantity requirements unless the increase in volume could increase flood damages below the point of discharge. The Stormwater Management Report, dated November 2012 provides the existing and proposed analyses that show that water quantity is not a concern for this project. The Rahway River is a tidally influenced river. This project is not expected to adversely impact the river due to a post development runoff quantity increase.

- ✓ *Stormwater Runoff Quality*
  The project does not propose to add more than ¼ acre of new impervious surface to the site. Therefore, stormwater runoff quality has not been provided, and is not required per the Rules at N.J.A.C. 7:8-5.

7.3 Rule 7:7E-8.8 Vegetation

Policy Summary:

This policy encourages, to the extent possible, the preservation of existing vegetation and the use of appropriate native coastal vegetation species in replanting and landscape plans.

Project Compliance:

- ✓ *The property is a former industrial disposal site containing six (6) existing contaminated sludge impoundments. Therefore, very minimal native vegetation exists onsite. Upon completion of the remediation activities, the site will be replanted with native grass and other vegetative species associated with stabilization as open space until future development is sought by the property owner. Appropriate native coastal vegetation species will be used in replanting and landscape plans to the greatest extent practicable. Therefore, the project is compliance with this rule.*

7.4 Rule 7:7E-8.10 Air Quality

Policy Summary:

Development shall conform with all applicable State and Federal regulations, standards and guidelines and be consistent with the strategies of New Jersey's State Implementation Plan (PIP). Development shall also be located and designed to take full advantage of existing or planned mass transportation infrastructures and shall be managed to promote mass transportation services.

Project Compliance:

- ✓ *The proposed Class B facility proposed to facilitate the remediation activities will be constructed to conform with all applicable State and Federal regulations, standards and guidelines related to Air Quality.*

7.5 Rule 7:7E-8.11 Public Trust Rights

Policy Summary:

Public trust rights to tidal waterways and their shores established by the Public Trust Doctrine include public access which is the ability of the public to pass physically and visually to, from and along lands and waters subject to public trust rights as defined by N.J.A.C. 7:7E-3.50 and to use these lands and waters for activities such as swimming, sunbathing, fishing, surfing, sport diving, bird watching, walking and boating. Public trust rights also include the right to perpendicular and linear access. Public accessways and public access areas provide a means for the public to pass along and use lands and waters subject to public trust rights.

Project Compliance:

- ✓ *The waterfront portion along the Rahway River and its adjacent tidal marshes are not accessible to the public for use. The proposed activity is for remediation only. After remediation is complete the site will be left as open space until future redevelopment is sought by the property at which time would be subject to additional land use permitting.*

7.6 Rule 7:7E-8.12 Scenic Resources & Design

Policy Summary:

Development that is visually compatible with it's surroundings in terms of building and site design, and enhances scenic resources is encouraged. Development that is not visually compatible with existing scenic resources in terms of large-scale elements of building and site design is discouraged.

Project Compliance:

✓ *The subject property is surrounded by large industrial and commercial uses. The subject property and the proposed remediation activities including the proposed Class B Recycling facility are compatible with existing development. With completion of the remedial activity, the site will be left as open space until future redevelopment is sought by the owner at which time would be subject to additional land use permitting.*

7.7 Rule 7:7E-8.13 Buffers and Compatibility of Uses

Policy Summary:

Development shall be compatible with adjacent land uses to the maximum extent practicable.

Project Compliance:

✓ *The proposed project components are compatible with surrounding land uses. The ultimate goal of the proposed project is to effectively cap and rehabilitate an area which was formerly used for industrial waste disposal so that it may contribute to the welfare of the surrounding industrial and redevelopment zone.*

7.8 Rule 7:7E-8.14 Traffic

Policy Summary:

Coastal development shall be designed, located and operated in a manner to cause the least possible disturbance to traffic systems.

Project Compliance:

✓ *Temporary impacts to local traffic patterns are expected during construction since the site is located adjacent to an industrial area and major highway. Construction related vehicles and heavy equipment must enter and exit the site by way of a designated construction entrance off of an existing access easement to the property. Therefore, this will have temporary impacts to the traffic areas near the site. However, no long-term impact to local traffic patterns is anticipated. There may be a slight increase in traffic, but it will provide a benefit to the community at large. Therefore, the project is in compliance with this rule.*

7.9 Rule 7:7E-8.22 Solid and Hazardous Waste

Policy Summary:

Coastal development shall conform with all applicable State and Federal regulations, standards and guidelines for the handling and disposal of solid and hazardous wastes, including the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Solid Waste Management rules, N.J.A.C. 7:26, the Recycling rules, N.J.A.C. 7:26A, and the Hazardous Waste rules, N.J.A.C. 7:26G..

Project Compliance:

✓ *The remediation activities, which includes a proposed onsite Class B Recycling facility to effectively cap and rehabilitate this former disposal site, are being conducted in accordance with the requirements of SRRA, and under the direction of a N.J. Licensed Site Remediation Professional (LSRP) as well as all appropriate approvals from the NJDEP. At the completion of the remedial work, the Rahway Arch Properties site will no longer represent a special hazard area. Therefore, the proposed remediation activities are in compliance with this rule.*

8.0 MITIGATION UNDER N.J.S.A. 7:7E

Policy Summary:

Mitigation shall be selectively considered on a case-by-case basis as compensation for the loss or degradation of a particular natural resource. In general, mitigation should be similar in type and location tot eh resource disturbed or destroyed, that is, replacement in kind within the same watershed. The Department will, however, consider proposals for mitigation that differ in type and/or location from the disturbed or destroyed resource provided the mitigation would provide a major contribution to meeting the coastal goals and supplemental policies at N.J.A.C. 7:7E-1.1(c).

Project Compliance:

✓ *The existing use and condition of the site have degraded the minimal native vegetation that surrounds the outside perimeter of the existing impounds. Evasive species such as phragmites dominate the ponded and frequently flooded portions of the property. The proposed wetland transition area and riparian disturbances are required to effectuate longstanding site remediation are unavoidable and there are no alternatives. There is minimal quality vegetation in these areas. Replanting with tree growth is in direct conflict with the project's remedial action workplan and would compromise the integrity of the existing berms where maintenance is critical to their continued containment of the existing contaminated sludge materials.*

9.0 COMPLIANCE WITH COASTAL PERMIT PROGRAM RULES UNDER N.J.S.A. 7:7

9.1 General Standards for Issuing Coastal General Permits and Permits-by-Rule (N.J.A.C. 7:7-7.1)

a. **7:7-7.1a** - The Department may issue a coastal general permit or permit-by-rule only if all of the following conditions are met:

1. The Department determines that the regulated development will cause only minimal adverse environmental impacts when performed separately, will have only minimal cumulative adverse impacts on the environment and is in keeping with the legislative intent to protect and preserve the coastal area from inappropriate development;

   ✓ *The remediation will cause minimal adverse environmental impacts and cumulatively positive environmental impacts with the effective capping of the present hazardous conditions onsite. Remediation and rehabilitation of this former disposal site protects and preserves the adjacent resources from further degradation and unsolicited harm.*

2. The Department determines that the development will be in conformance with the purposes of applicable statutes; and

   ✓ *The project's compliance with the requirements and policies of the Coastal Permit Program rules have been outlined in detail throughout this report.*

3. The Department has provided public notice and an opportunity for a public hearing with respect to the proposed coastal general permit or permit-by-rule. After a coastal general permit has been issued by the Department, the Department will not hold hearings on individual applications for a coastal general permit.

   ✓ *Public notice in accordance with the Coastal General Permit Application guidelines has been provided.*

9.2 Requirements of Coastal General Permit 15 – Investigation, Cleanup, Removal or Remediation of Hazardous Substances (N.J.A.C. 7:7-7.15)

a. **7:7-7:15a** - Coastal General Permit 15 authorizes all regulated activities above the mean high water line that are undertaken, authorized or otherwise expressly approved in writing by the Department for the investigation, cleanup, removal or remediation of hazardous substances as defined by or pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 *et seq.*, or pollutants, as defined by the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 *et seq.*, provided the following conditions are met:

   1. If the proposed cleanup activity is to take place in Special Areas as defined at N.J.A.C. 7:7E-3, the coastal general permit authorization shall be issued only if the Department finds that there are no practicable alternatives to the investigation, cleanup, removal and remediation of the hazardous substances or pollutants that would involve less or no disturbance or destruction of Special Areas as defined at N.J.A.C. 7:7E-3;

      ✓ *Extensive environmental investigations and geotechnical evaluations have been performed on the subject property. There is documented contamination necessitating an effective remediation which addresses the special conditions found on the site relative to existing topography, surface and subsurface material properties. A detailed remedial action workplan has been prepared by the site's designated LSRP. There are no alternatives to the proposed remediation that would involve less or no disturbance of the special areas outlined in the chapter.*

The no-action alternative is a continuance of the current property condition, underlain by contaminated soils with daily direct contact exposure and infiltrated release to adjacent surface waters and ground water. The no-action alternative poses a continued negative impact to the environment and surrounding community at large.

2. Mitigation may be required in accordance with the Coastal Zone Management rules, N.J.A.C. 7:7E, for disturbance to Special Areas a defined at N.J.A.C. 7:7E-3; and

   ✓ *The existing use and condition of the site have degraded the minimal native vegetation that surrounds the outside perimeter of the existing impounds. Evasive species such as phragmites dominate the ponded and frequently flooded portions of the property. The proposed wetland transition area and riparian disturbances are required to effectuate longstanding site remediation are unavoidable and there are no alternatives. There is minimal quality vegetation in these areas. Replanting with tree growth is in direct conflict with the project's remedial action workplan and would compromise the integrity of the existing berms where maintenance is critical to their continued containment of the existing contaminated sludge materials.*

3. For coastal wetlands, mitigation shall be performed according to the procedures for mitigation at N.J.A.C. 7:7E-3.27 and 7:7E-3B. The mitigation plan may be incorporated as part of the document by which the Department approves the clean-up or it may be submitted as part of the coastal general permit application. The coastal general permit will not be issued until the mitigation plan is submitted and approved by the Program according to the standards at N.J.A.C. 7:7E-3.27 and 7:7E-3B.;

   ✓ *This site contains freshwater wetlands; as such this condition is not applicable.*

Section VI

Freshwater Wetlands General Permit #4 & #11 Compliance Statement

kernan
Consulting Engineers

Compliance Statement for Freshwater Wetlands General Permit(s) 4 & 11

For

Rahway Arch Properties Site Remediation

Block 602, Lot(s) 1 & 8; Block 603, Lot 1; Block 705, Lot(s) 17 & 18

(previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)

Borough of Carteret
Middlesex County, New Jersey

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Date: November, 2012
JTK, Inc. File: KE12017

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Consulting Engineers

Compliance Statement
Freshwater Wetlands General Permit (s) 4 & 11
for
Rahway Arch Properties Site Remediation
Borough of Carteret
Middlesex County, New Jersey

Table of Contents

		Page
1.0	Introduction	1
2.0	History of Ownership	1
3.0	Delineation of Wetlands	1
4.0	Project Description	2
5.0	Regulated Activities	2
6.0	Conditions that Apply to All General Permits (N.J.A.C. 7:7A-4.3)	3
7.0	Requirements for General Permit 4 - Hazardous Site Investigation and Clean up (N.J.A.C. 7:7A-5.4)	6
8.0	Requirements for General Permit 11 – Outfalls and Intake Structures (N.J.A.C. 7:7A-5.11)	7

COMPLIANCE STATEMENT
FRESHWATER WETLANDS GENERAL PERMIT(S) 4 & 11

1.0 INTRODUCTION

On behalf of our client, Soil Safe, Inc., and property owner, Rahway Arch Properties, LLC, J. Timothy Kernan, Inc. is hereby submitting this stormwater management report as part of an application for land use permitting approval for the proposed remediation of the Rahway Arch Properties site. The Rahway Arch site consists of approximately 85 acres of previously disturbed land comprised of six impoundments and their surrounding berms; and approximately 40 acres of surrounding wetlands known as Block 602, Lot(s) 1 & 8; Block 603, Lot 1; Block 705, Lot(s) 17 & 18 *(and previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)*, in the Borough of Carteret, Middlesex County, New Jersey. The site is bordered to the north, northeast and northwest by the Rahway River and the tidally influenced creeks and wetlands associated with the river; to the south and southeast by a Kinder-Morgan fuel terminal; to the west and southwest by a small equipment salvage yard and the I-Porte trucking terminal.

The proposed remediation activities include the construction of an on-site Class B facility to manufacture the required structural fill, grading operations for the capping and filling of the existing sludge disposal impoundments and stormwater runoff management.

2.0 HISTORY OF OWNERSHIP

Prior to June 30, 1988, the site was owned by the American Cyanamid Company. On December 17, 1993, Cytec Industries took possession. Carteret Development, LLC then took title on August 27, 1999 and most recently Rahway Arch Properties, LLC purchased it on January 15, 2010.

Per the tax assessor, the properties were subdivided prior to the 1940's. With the Borough's re-evaluation for the 2012 tax year, all the tax maps were updated. Properties that were contiguous and in common ownership were merged and assigned new block and lot numbers.

3.0 DELINEATION OF WETLANDS

Wetland areas cover approximately 35 acres of the 124.7 acre site. Wetlands were delineated in July 1997, and a Freshwater Wetlands Letter of Interpretation (LOI) (File No. 1201-97-0004.1) was issued by NJDEP Land Use Regulation Program (LURP) on March 13, 1998. Freshwater Wetland LOI extension packages were submitted in February 2003 and May 2008 to NJDEP LURP to extend the LOI. Both extensions were approved, and the current LOI (File No 1201-03-003.1 FWW 08001) is valid through September 22, 2013. A copy of the current LOI is provided in Section XI of the application report.

Wetlands onsite consist of tidal saltmarsh wetlands and high-marsh wetland ecotonal edges. Wetland areas exist on the edges of impoundment areas and continue to the Rahway River. New Jersey Administrative Code 7:9B classifies the Rahway River near the site as SE3, a saline estuarine water body. Hydrology of site wetlands is dominated by fluctuating tidal levels of the Rahway River. Wetland soils onsite consist of Psamments (somewhat poorly drained sandy fill

material) and Sulfaquents/Sulfihemists (very poorly drained organic and mineral soils subject to tidal flooding.

Wetland vegetation in saltmarsh areas is dominated by the herbaceous species Spartina patens (saltmeadow cordgrass), Phragmites australis (common reed), and Juncus gerardii (saltmeadow rush). Trees and shrubs, such as Ailanthus altissima (Chinese tree-of-heaven), Prunus serotina (wild black cherry), Bacharis halmifolia (Eastern false-willow), and Iva frutescens (big-leaf sumpweed), are the dominant vegetation in the high-marsh ecotonal edge wetlands.

There is no indication of any intentional placement of alum-YPS sludge outside the impoundments or in the wetland areas. However, berm overtopping and berm failure events have been documented.

4.0 PROJECT DESCRIPTION

Based upon the LSRP's preliminary assessment and subsequent remedial investigation, the Rahway Arch site has been deemed in need of remediation and is required to be remediated in accordance with SRP regulations and guidelines.

The proposed remediation activities will include placement of compacted low permeability structural soil fill to 1) eliminate direct contact with contaminated materials 2) provide stable surfaces 3) prevent ponding in the impoundments and 4) eliminate any impact to groundwater hazards from the contaminants. The proposed remediation plan effectively caps and rehabilitates the site, eliminating environmental risk and pathways for migration of containments to natural resources, rendering it useable space for future redevelopment or recreational use per the guidelines of the Site Remediation Reform Act (SRRA).

5.0 REGULATED ACTIVITIES

Portions of the proposed site improvements for the purposes of remediation are within a regulated area, being conducted in Freshwater Wetlands Transition Areas. The proposed remediation activities include fill and disturbance within the established 50′ x 150′ wetlands transition areas totaling approximately 25 acres± of wetland transition area disturbance. The proposed disturbance is required to effectively cap and rehabilitate this site in accordance with the design parameters outlined in the site's Remedial Action Workplan.

1. Office Trailer/Scale House

   ✓ *A mobile construction trailer, approximately 70′ long x 12′ wide is proposed to include an office and Scale House to serve the Class B Recycling Facility necessary to facilitate the onsite processing of the engineered fill required to effectively cap and remediate the site. Portions of these improvements are temporarily located in a Wetland Transition Area.*

2. Filling & Grading.

   ✓ *The limit of remediation according to the project's Investigation Report Remediation and Remedial Action Workplan requires filling and grading in a significant portion of onsite wetland transition areas. The site's topography will be manipulated in order to 1) provide a minimum cap of 5 feet as quickly as possible from the edge of the existing*

perimeter berms, 2) insure long term positive drainage and 3) provide a stormwater management system that controls runoff, eliminates ponding and infiltration as well as protects the integrity of the existing berms, which contain the contaminated sludge from undesirable erosion and degradation.

3. Onsite Parking and Construction Roadway.

   ✓ *A gravel 19 space parking lot and gravel roadway will be provided onsite in accordance with the projects Borough of Carteret approvals to support the proposed Class B Recycling Facility and reclamation contractor's onsite processing and remediation activities. Portions of these improvements are temporarily located in a Wetland Transition Area.*

4. Stormwater Management Facilities.

   ✓ *A stormwater management system consisting of perimeter swales and four (4) detention basins was designed in accordance with the requirements of the project's remedial action workplan. The proposed detention basins and swales have been placed outside of the site's wetlands and wetlands transition areas.*

   ✓ *The attached Stormwater Management Report prepared by J. Timothy Kernan, Inc. details the proposed stormwater management facilities and compliance with N.J.A.C. 7.8.*

5. Utility Service Connections

   ✓ *New municipal water and sewer service connections are not proposed to serve the proposed Class B site during remediation activities. The Class B facility will be served by bottled water for potable use, and an onsite well for non-potable uses. Sanitary sewer waste will be collected in a holding tank and disposed of regularly as scavenger waste. (Overhead electric service is to be provided to the site. Permitting for this activity will be submitted under separate cover).*

6.0 CONDITIONS THAT APPLY TO ALL GENERAL PERMITS (N.J.A.C. 7:7A-4.3)

1. Activities performed under a general permit shall be associated with a proposed project.

   ✓ *The activity to be performed under the requested General Permit is limited filling and stormwater outfalls proposed within transition areas necessary for the required remediation of the Rahway Arch Properties site in accordance with the project's Remedial Action Workplan.*

2. The regulated activity shall not occur in the proximity of a public water supply intake.

   ✓ *A review of the NJDEP GIS database for locations of public community water supply wells in the vicinity of the site did not identify any public water supply intakes in the vicinity of the project site, therefore, the subject property is not located in proximity of a public water supply intake.*

3. The activities shall not destroy, jeopardize or adversely modify a present or documented habitat for threatened or endangered species; and shall not jeopardize the continued existence of any local population of a threatened or endangered species.

Potential habitats for endangered or threatened species or any critical habitats were not observed within the limit of disturbance during field investigations of the property. The area to be remediated consists of longstanding, existing industrial sludge impoundments that are surrounded by earthen berms. These existing structures are required to be maintained and have minimal vegetation other than phragmites which dominate the landscape of these former disposed impoundments.

A natural heritage database search for rare species and ecological communities was conducted (report dated August 23, 2012 for the proposed remediation area. Searches of the Natural Heritage Database and Landscape Project (Version 3) yielded the following results:

Table 1 ***Rare Wildlife Species or Wildlife Habitat Onsite Data Request Search Results***	
Rare plants/ecological communities possible onsite:	No
Rare plants/ecological communities possible onsite/immediate vicinity	No
Natural heritage priority sites on site	No
Landscape 3.1 species based patches on site	Yes*[1]
Landscape 3.1 vernal pool habitat onsite	No
Landscape 3.1 stream/mussel habitat onsite	No
Other animals tracked by ENSP onsite	Yes*[2]

Table 2 ***Rare Wildlife Species or Wildlife Habitat Within 1 Mile for FHACA Searches***	
Rare plants/ecological communities within 1 mile	No
Natural heritage priority sites within 1 mile	No
Landscape 3.1 species based patches within 1 mile	Yes*[1]
Landscape 3.1 vernal pool habitat within 1 mile	No
Landscape 3.1 stream/mussel habitat within 1 mile	No
Other animals tracked by ENSP within 1 mile	Yes*[2]

The proposed activities will not result in any adverse impacts either directly or indirectly to the species listed in the NHD Report or their respective habitats. Existing site conditions have negatively impacted the quality of any potential habitats for these species. In fact the proposed activities will not only improve the quality of the wetlands buffer areas for area wildlife but will eliminate their direct contact exposure with surface contaminants and polluted water sources.

[1] *Foraging habitat for four (4) colonial water birds of special concern, the Glossy Ibis, Little Blue Heron, Snowy Egret and Tri-colored Heron. Three (3) state threatened colonial water birds, the Black-Crowned Night Heron, Cattle Egret And Yellow-Crowned Night Heron; and breeding/sighting for one(1) state endangered colonial water bird, the Northern Harrier.*

[2] *Northern Diamondback Terrapin*

4. The activity will not occur in a component of either the Federal or State Wild and Scenic River System; nor in a river officially designated by Congress or the State Legislature as a "study river" for possible inclusion in either system while the river is in an official study status.

   ✓ *The Rahway River is not listed as a wild or scenic river nor is it listed as a study river.*

5. The activity shall not adversely affect properties that are listed or are eligible for listing on the National Register of Historic Places.

   ✓ *There are no known historic resources on the subject property. If conditions of a historic property become eligible for listing in the National Register before or during the work authorized, the applicant will immediately notify NJDEP and proceed as directed.*

6. Any discharge of dredged or fill material shall consist of clean, suitable material free from toxic pollutants in toxic amounts, and shall comply with all applicable NJDEP rules regarding use of dredged or fill material.

   ✓ *Only clean, suitable fill material, complying with all applicable NJDEP and SRRA rules will be used on the project.*

7. Any structure or fill authorized shall be maintained as specified in the construction plans.

   ✓ *All proposed improvements will be maintained as specified on the Land Use Permitting Plans submitted.*

8. During construction activities, all excavation must be monitored for the presence of acid-producing deposits.

   ✓ *If acid-producing deposits are encountered during construction, the applicant shall implement the mitigation and disposal standards in the Standards for Soil Erosions and Sediment Control in New Jersey and standards outlined in the Flood Hazard Area Control Act Rules Technical Manual.*

9. The activity will not result in a violation of the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 or implementing rules at N.J.A.C. 7:13.

   ✓ *The activity within the disturbance area will not result in a violation of the Flood Hazard Control Act or its rules. An application for a Flood Hazard Area Verification and Individual permit for the remediation activities has been submitted concurrently with this application.*

10. Stormwater resulting from the proposed project will be treated in accordance with the water quality requirements in the NJDEP's Stormwater Management rules at N.J.A.C. 7:8.

    ✓ *The remediation activities have been designed in compliance with the stormwater management rules and the project's Remedial Action Workplan. Further discussion and*

explanation of compliance are provided within the Stormwater Management Report, (enclosed separately) with this application.

11. If the activities under the general permit involve excavation or dredging, the applicant shall use an acceptable disposal site for the excavated or dredged material.

    ✓ *No soil export is anticipated. The remediation activities have been specifically designed to leave existing hazardous soil in place, to be suitably capped and rehabilitated for future re-use.*

12. The amount of rip rap or other energy dissipating material shall not exceed the minimum necessary to prevent erosion, as calculated under the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.

    ✓ *Riprap or other energy dissipating materials for the proposed outfalls have been designed in accordance with the minimum standards for soil erosion and sediment control in New Jersey.*

13. Best management practices, as defined at N.J.A.C. 7:7A-1.4 shall be followed whenever applicable.

    ✓ *Methods, measures, design, performance standards, maintenance procedures, and other management practices which prevent or reduce adverse impacts upon or pollution of freshwater wetlands, State open water and adjacent aquatic habitats will be incorporated into the proposed improvement design and construction. The remediation activities have been designed within the allowable standards of the Freshwater Wetland Protection Act rule (N.J.A.C 7:7A), Flood Hazard Area Control Act Rules (N.J.A.C 7:13), Coastal Program Permit Rules (N.J.A.C 7:7), Coastal Zone Management Rules (N.J.A.C 7:7E) and Stormwater Management Rules (N.J.A.C. 7:8).*

14. If the general permit activities are subject to the NJDEP's Water Quality Management Planning rules at N.J.A.C. 7:15, the activities shall be consistent with those rules and with the applicable approved Water Quality Management Plan (208 Plan) adopted under the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.

    ✓ *Not applicable. The general permit activity is not subject to the Department's water quality management planning rules at N.J.A.C. 7:15.*

15. The timing requirements for waters with fishery resources, as listed at N.J.A.C. 7:7A-4.3(c) shall be met.

    ✓ *The proposed activity is adjacent to the Rahway River which is an SE3 stream. The Rahway River contains adnadromous fish species, therefore the timing requirements listed at N.J.A.C. 7:7A-4.3(c) apply. No site disturbance within any watercourse nor any activity which may introduce sediment into a stream or cause a stream to become turbid shall be performed during the time period of April to June 30 as set forth in Table A of N.J.A.C. 7:7A-4.3(c).*

16. Activities authorized under a general permit shall not take place in a vernal habitat, as defined at N.J.A.C. 7:7A-1.4, or in a transition area adjacent to a vernal habitat.

    ✓ *Wetlands associated with the area of interest have not been classified as vernal habitat as indicated in the Letter of Interpretation, NJDEP File No. 1201-03-0003.1 (FWW080001).*

7.0 REQUIREMENTS FOR GENERAL PERMIT 4 HAZARDOUS SITE INVESTIGATION AND CLEAN UP (N.J.A.C. 7:7A-5.4)

a. General permit 4 authorizes activities in freshwater wetlands, transition areas, and State open waters, which are undertaken by the Department or expressly approved pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, for the investigation, cleanup or removal of:

   1. Hazardous substances as defined in the Department's rules governing hazardous substances at N.J.A.C. 7:1E, Appendix A; or

      ✓ *The applicant seeks a FWW General Permit 4 authorization for the proposed remediation of hazardous substances outlined in the project's Remedial Investigation Report and Remedial Action Workplan.*

   2. Pollutants, as defined in the New Jersey Water Pollution Control Act implementing rules at N.J.A.C. 7:14A.

b. There is no acreage limit on activities under general permit 4. However, disturbance shall be the minimum that is necessary for compliance with the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and mitigation shall be performed for all disturbances of freshwater wetlands or State open waters caused by a cleanup authorized under this general permit except that mitigation is not required to compensate for disturbance of wetlands or State open waters that have formed as a direct result of the remediation activities. The mitigation shall meet the substantive and procedural requirements at N.J.A.C. 7:7A-15.

   ✓ *The proposed remediation in accordance with the prescribed Remedial Action Workplan is the minimum necessary to comply with the Department's Technical Requirements for site remediation and proposes disturbance of wetland transition areas only.*

c. The mitigation proposal required under (B) above may be incorporated into the document approved pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, and/or it may be submitted as part of the General permit application. The Department shall not issue an authorization under general permit 4 until the mitigation proposal, or an equivalent document that ensures that the requirements of N.J.A.C. 7:7A-15 are met, is approved. Mitigation shall be performed prior to or concurrently with cleanup activities.

✓ *Not applicable. Wetlands and State open waters will not be disturbed, therefore mitigation in accordance with B above is not required.*

d. Activities under general permit 4 shall comply with all applicable requirements at N.J.A.C. 7:7A-4.3, Conditions that apply to all general permits, and N.J.A.C. 7:7A-13.2, Establishing permit conditions.

✓ *Refer to Section 4.0 for compliance with conditions that apply to all general permits under N.J.A.C. 7:7A-4.3.*

8.0 REQUIREMENTS FOR GENERAL PERMIT 11 – OUTFALLS AND INTAKE STRUCTURES (N.J.A.C. 7:7A-5.11)

b. Statewide general permit 11 authorizes activities in freshwater wetlands, transition areas, and State open waters necessary for the construction of a stormwater outfall structure.

c. General permit 11 does not authorize the construction or placement of a detention or retention facility in freshwater wetlands, transition areas or State open waters.

d. Activities under general permit 11 shall comply with the following limits:

1. The activities shall disturb no more than one quarter acre of freshwater wetlands, transition areas, and/or State open waters, including both temporary and permanent disturbance

✓ *The proposed outfall piping and headwall construction disturbance has been limited to the transition area only which is already being disturbed for filling and regrading activities under FWW General Permit 4.*

2. The area disturbed during construction of a conveyance structure shall be no wider than is necessary to comply with the United States of Occupational Safety and Health Administration safety standards for excavations, set forth at 29 CFR Part 1926, Subpart P; and

✓ *Proper construction notes have been added to the Permitting Plan set referencing compliance with OSHA requirements.*

3. The amount of riprap or other energy dissipation material used shall be the minimum necessary to prevent erosion, and shall not exceed 200 CY of fill below the top of bank or high water mark, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.

✓ *The rip-rap apron or other energy dissipation material used for the outfall structures has been designed in accordance with the minimum Standards for Soil Erosion and Sediment Control in New Jersey.*

e. Intake structures

✓ *Not applicable.*

f. All activities under general permit 11 shall comply with the specifications and requirements in the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90, including activities which are exempted from or not regulated by those standards.

✓ *The rip-rap apron or other energy dissipation material used for the outfall structures has been designed in accordance with the minimum Standards for Soil Erosion and Sediment Control in New Jersey.*

g. For any excavated area in freshwater wetlands, transition areas, and/or State open waters, the following requirements apply:

1. The excavation shall be backfilled to the preexisting elevation.

✓ *The area of pipe installation is graded so that the trench is backfilled to either the preexisting elevation or proposed elevation as required under the sites Remedial Action Workplan.*

2. The uppermost 18 inches of the excavation shall be backfilled with the original topsoil material, if feasible; and

✓ *Outside the limit of remediation, the uppermost 18 inches of the excavation will be backfilled with original topsoil, otherwise, structured engineered fill will be utilized in accordance with the sites Remedial Action Workplan.*

3. The area above the excavation shall be replanted, in accordance with the applicable BMPs, with indigenous wetland species.

✓ *The land use permitting plans have a construction performance notation, indicating that the areas disturbed for construction activities within freshwater wetlands transition areas shall be replanted with indigenous wetland species permitted under the project's Remedial Action Workplan.*

h. Any pipes laid through wetlands, transition areas, or State open waters shall be:

1. Properly sealed so as to prevent leaking or infiltration.

✓ *Construction details and notes have been added to the land use permitting plans, indicating that stormwater conveyance pipes shall be properly sealed.*

2. Designed so as not to form a path for groundwater to be discharged or drained from the wetland; and

✓ *The wetland area is downstream of the proposed outfall, therefore, the proposed pipe installation should not impact groundwater by discharging or draining the wetland area.*

3. Placed entirely beneath the pre-existing ground elevation unless the applicant shows that placing some or all of the pipe above ground would be more environmentally beneficial.

   ✓ *The pipe installation has been designed so that the pipe is constructed below the proposed grade required by the Remedial Action Workplan.*

i. A swale in a wetland or transition area shall not be used as a substitute for stormwater treatment. However, a swale may be used to convey stormwater through a wetland or transition area if:

   1. Conditions on the site make it impracticable to use a buried pipe; and

   2. The applicant demonstrates that the swale will not result in drainage of the wetlands or transition areas. To demonstrate this, the applicant shall provide profiles and cross-sections along the entire length of the swale, and any other information necessary to demonstrate that drainage will not occur.

      ✓ *Not applicable. The proposed swale is located along a new perimeter berm for conveyance of site runoff to the proposed onsite detention basins. The proposed swale is located outside of the wetland transition area limit.*

j. Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement.

   ✓ *Not applicable. Wetlands and State Open Water will not be disturbed, therefore mitigation under this chapter will not be required.*

k. Activities under general permit 11 shall comply with all applicable requirements at N.J.A.C. 7:7A-4.3, Conditions that apply to all general permits, and N.J.A.C. 7:7A-13.2, Establishing permit conditions.

   ✓ *Refer to Section 4.0 for compliance with conditions that apply to all general permits.*

Section VII

Flood Hazard Area Environmental Report

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FLOOD HAZARD AREA ENVIRONMENTAL REPORT

for

Rahway Arch Properties – Site Remediation

(including Soil Safe – Metro 12 Class B Facility as proposed for Rahway Arch Properties Site Remediation)

Block 602, Lot 1 & 8; Block 603, Lot 1; Block 705, Lot 17 & 18

(previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)

Borough of Carteret
Middlesex County, New Jersey

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November 2012

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Table of Contents

Page

1.0 Project Description 1

2.0 Potential Adverse Impact Analysis 1

- **2.1** Channel (N.J.A.C. 7:13-10.2) 1
- **2.2** Riparian Zone (N.J.A.C. 7:13-10.2) 1
- **2.3** Fishery Resources (N.J.A.C. 7:13-10.5) 1
- **2.4** Threatened and Endangered Species (N.J.A.C. 7:13-10.6) 2
- **2.5** Regulated Waters 2

3.0 Jurisdiction 3

4.0 Alternative Analysis 3

5.0 Measures to Reduce Temporary and Permanent Detrimental Impacts 4

6.0 Mitigation Plan 4

1.0 Project Description

The proposed site remediation, including the proposed onsite Class B Recycling facility, has been determined to be a regulated activity per N.J.A.C. 7:13-2.4 consisting of: 1) the alteration of topography through grading and placement of fill, 2) the construction of a temporary Office Trailer/Scale House, 3) construction of a gravel roadway and parking area and 4) stormwater management. The regulated activity is located in a regulated area per 7:13-2.3, characterized as a tidal flood hazard area. (Refer to the overall Project Description provided in front of the Application Report for a detailed description of the proposed remediation project).

2.0. Potential Adverse Impact Analysis

2.1 Channel (N.J.A.C. 7:13-10.1)

The regulated activities associated with the proposed site remediation are not located within a channel.

2.2 Riparian Zones (N.J.A.C. 7:13-10.2)

The majority of the riparian zone contains existing impoundment structures. The existing use and condition of the site have degraded the minimal native vegetation that surrounds the outside perimeter of the existing impounds. Evasive species such as phragmites dominate the ponded and frequently flooded portions of the property. The proposed wetland transition area and riparian disturbances are required to effectuate longstanding site remediation are unavoidable and there are no alternatives. There is minimal quality vegetation in these areas. Replanting with tree growth is in direct conflict with the project's remedial action workplan and would compromise the integrity of the existing berms where maintenance is critical to their continued containment of the existing contaminated sludge materials.

2.3 Fishery Resources (N.J.A.C. 7:13-10.5)

The Rahway River is classified as SE3, Saline estuarine waters. The river is stocked with trout by the New Jersey Division of Fish & Wildlife each spring. As such the regulated water contains fishery resources.

The following construction notes have been added to the site plan:
No unset or raw cement shall come in contact with water in the channel;
No logs or boulders shall be moved from the channel;
Low-flow aquatic passage will be maintained during and upon completion of the construction.

Timing restrictions will be complied with.

2.4 Threatened and Endangered Species (N.J.A.C. 7:13-10.6):

Potential habitats for endangered or threatened species or any critical habitats were not observed within the limit of disturbance during field investigations of the property. The area to be remediated consists of longstanding, existing industrial sludge impoundments that are surrounded by earthen berms. These existing structures are required to be maintained and have minimal vegetation other than phragmites which dominate the landscape of these former disposed impoundments.

A natural heritage database search for rare species and ecological communities was conducted (report dated August 23, 2012 for the proposed remediation area. Searches of the Natural Heritage Database and Landscape Project (Version 3) yielded the following results:

Foraging habitat for four (4) colonial water birds of special concern, the Glossy Ibis, Little Blue Heron, Snowy Egret and Tri-colored Heron. Three (3) state threatened colonial water birds, the Black-Crowned Night Heron, Cattle Egret And Yellow-Crowned Night Heron; and breeding/sighting for one(1) state endangered colonial water bird, the Northern Harrier. Northern Diamondback Terrapin

The proposed activities will not result in any adverse impacts either directly or indirectly to the species listed in the NHD Report or their respective habitats. Existing site conditions have negatively impacted the quality of any potential habitats for these species. In fact the proposed activities will not only improve the quality of the wetlands buffer areas for area wildlife but will eliminate their direct contact exposure with surface contaminants and polluted water sources.

2.5 Regulated Waters:

Water quality, soil erosion and turbidity due to stormwater runoff will not be impacted by the proposed construction. A Flood Hazard Area Engineering Report are provided as part of this application which address the projects compliance with Stormwater Management and Flood Hazard Area Control Act Rules. Proper soil erosion and sediment control measures will be put in place prior to and during construction to prevent sediment from entering the adjacent Rahway River, associated creeks and tidal marshes

Disturbed areas will be permanently stabilized and restored. The project area is not located in an area known or suspected to contain acid-producing soils. During construction activities, all excavation or disturbance shall be monitored for the presence of acid-producing deposits. If acid-producing deposits are encountered during construction, the applicant shall implement the mitigation and disposal standards in the Standards for Soil Erosion and Sediment Control in New Jersey as well as the standards outlined in Section 7:13-10.7(c) of the Flood Hazard Control Act Rules.

3.0 Justification

Extensive environmental investigations and geotechnical evaluations have been performed on the subject property. There is documented contamination necessitating an effective remediation which addresses the special conditions found on the site relative to existing topography, surface and subsurface material properties.

The remediation activities which includes a proposed onsite Class B Recycling facility to effectively cap and rehabilitate this former disposal site are being conducted in accordance with the requirements of SRRA, and under the direction of a N.J. Licensed Site Remediation Professional (LSRP) as well as all appropriate approvals from the NJDEP. A detailed Remedial Action Workplan has been prepared by the site's designated LSRP.

The remediation will cause minimal adverse environmental impacts and cumulatively positive environmental impacts with the effective capping of the present hazardous conditions onsite. Remediation and rehabilitation of this former disposal site protects and preserves the adjacent resources from further degradation and unsolicited harm.

In addition, the outcome of the proposed remediation project will contribute to the good of the community by 1) providing a rehabilitated site and 2) eliminating continued insult to surrounding wildlife, surface waters and groundwater resources due to contaminant exposure and leachates. At the completion of the remedial work, the Rahway Arch Properties site will no longer represent a special hazard area.

4.0 Alternative Analysis

The proposed activities required to effectuate longstanding site remediation are unavoidable and there are no alternatives. In addition there are no alternatives to the proposed remediation that would involve less or no disturbance of the special areas outlined in this chapter.

The no-action alternative is a continuance of the current property condition, underlain by contaminated soils with daily direct contact exposure and infiltrated release to adjacent surface waters and ground water. The no-action alternative poses a continued negative impact to the environment and surrounding community at large.

5.0 Measures to Reduce Temporary and Permanent Detrimental Impacts

The primary purpose of the proposed remediation activities is to eliminate the site's detrimental impacts as a special hazard area. Compliance with outside agencies such as the Middlesex County Soil Conservation District have been implemented into the design to minimize temporary and permanent impacts associated with the remediation activities to regulated areas.

6.0 Mitigation Plan

Disturbed areas will be restored to the maximum extent possible, stabilized and replanted with indigenous grasses in accordance with the site's Remedial Action Workplan (RAWP). The RAWP calls for the removal of any existing tree growth on the impound berms as necessary to ensure their long term integrity and stability as required to contain the contaminated sludge within them after capping. Replanting any disturbed treed areas with new tree growth would be in direct conflict with the RAWP.

Section VIII

Flood Hazard Area Engineering Report

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Flood Hazard Area Engineering Report

for

Rahway Arch Properties – Site Remediation

(including Soil Safe – Metro 12 Class B Facility as proposed for Rahway Arch Properties Site Remediation)

Block 602, Lot 1 & 8; Block 603, Lot 1; Block 705, Lot 17 & 18

(previously known as Block 9.03, Lot 21; Block 10, Lot(s) 8-10, 11, 12-21; Block 11.01, Lot(s) 8, 9, 10-14 & 28)

Borough of Carteret
Middlesex County, New Jersey

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Table of Contents

Page

1.0 Project Description 1

2.0 Determining the Flood Hazard Area and Floodway (N.J.A.C. 7:13-3.4) 1

3.0 Determining the Riparian Zone (N.J.A.C. 7:13-4.1) 1

4.0 General Provisions for Verifications (N.J.A.C. 7:13-6.1) 1

5.0 General Provisions for Individual Permits (N.J.A.C. 7:13-9.1) 2

6.0 Individual Permit Requirements Within Various Regulated Areas (N.J.A.C. 7:13-10) 2

- **6.1** Channel 2
- **6.2** Riparian Zone 2
- **6.3** Floodway 4
- **6.4** Flood Fringe 4
- **6.5** Fishery Resources 5
- **6.6** Threatened or Endangered Species 6
- **6.7** Acid Producing Soils 7

7.0 Individual Permit Requirements for Various Regulated Activities (N.J.A.C. 7:13-11) 7

- **7.1** Requirements that Apply to All Regulated Activities 7
  - **7.1.1** Potential Adverse Impact
  - **7.1.2** Soil Erosion and Sediment Control
- **7.2** Requirements for Stormwater Management 8
- **7.3** Requirements for Excavation and Filling 9
- **7.4** Requirements for a Building 9
- **7.5** Requirements for a Railroad, Roadway or Parking 11
- **7.6** Requirements for a Stormwater Outfall 12
- **7.7** Requirements for the Placement, Storage or Processing of Solid Waste 13

1.0 Project Description

The proposed site remediation, including the proposed onsite Class B Recycling facility, has been determined to be a regulated activity per N.J.A.C. 7:13-2.4 consisting of: 1) the alteration of topography through grading and placement of fill, 2) the construction of a temporary Office Trailer/Scale House, 3) construction of a gravel roadway and parking area and 4) stormwater management. The regulated activity is located in a regulated area per 7:13-2.3, characterized as a tidal flood hazard area. (Refer to the overall Project Description provided in front of the Application Report for a detailed description of the proposed remediation project).

2.0 Determining the Flood Hazard Area and Floodway (N.J.A.C. 7:13-3.4)

The flood hazard area design flood elevation, flood hazard area and/or floodway limits have been determined in accordance with N.J.A.C. 7:13-3.4.

The Flood Hazard Area Control Act rules establish the methods by which the flood hazard area and floodway shall be determined. In the absence of an existing department delineation and the availability of FEMA mapping, the flood hazard area and Floodway was determined using Method 2, based on a FEMA flood insurance study as depicted on FIRM-Community Panels 34023C0076F & 77F which provides a 100-year flood elevation of 7.0 (NAVD '88). Under Method 2 (FEMA tidal method), the flood hazard area design flood elevation shall be equal to the FEMA 100-year flood elevation. (Refer to mapping in Section IV of the Application Report) The flood hazard area, as depicted by FEMA mapping is found to be relatively consistent with existing topography. The floodway, however, as depicted in FEMA Mapping is inconsistent with existing conditions, wherein the floodway Elevation 7) falls outside of the existing impoundment berms.

3.0 Determining the Riparian Zone (N.J.A.C. 7:13-4.1)

The riparian zone limits have been determined in accordance with N.J.A.C. 7:13-4. The Rahway River, Cross Creek, Deep Creek and their associated tidal marshes are neither Category One waters nor trout producing. They do not flow through any documented habitat for any threatened or endangered species of plant or animal which are critically dependent on the regulated water for survival, and all upstream water (including tributaries) within one linear mile as measured along the length of the regulated water nor do they flow through an area that contains acid producing soils. As such, the riparian zone shall by 50′ feet wide along both sides of all waters identified above.

The limits of a 50′ riparian zone are depicted on the plans. As a discernable bank was not always evident, the riparian zone as shown has been measured 50′ feet from the MHWL.

4.0 General Provisions for Verifications (N.J.A.C. 7:13-6.1)

The flood hazard area design flood elevation and the limits of the flood hazard area, floodway and riparian zone as determined for the site required are to be reviewed and approved by the Department and issued verification.

The flood hazard area design flood elevation, flood hazard area limit, floodway limit and riparian zones have been determined in accordance with this chapter. Verification is requested

as part of this application for an Individual Flood Hazard Area permit for the proposed site remediation activity.

5.0 General Provisions for Individual Permits (N.J.A.C. 7:13-9.1)

A regulated activity in a regulated area that requires an individual permit is typically subject to multiple requirements. Standards associated with the location of a project in a particular regulated area, such as a flood fringe, are set forth at N.J.A.C. 7:13-10 and standards associated with a particular regulated activity, such as the construction of a building are set forth at N.J.A.C. 7:13-11.

An individual permit is requested for the proposed remediation of the Rahway Arch Properties site and the related filling, grading and temporary Class B facility operation onsite to facilitate said remediation. The project's compliance with the applicable New Jersey Flood Hazard Area Control Act Rules is summarized in the following sections.

6.0 Individual Permit Requirements within Various Regulated Areas (N.J.A.C. 7:13-10)

6.1 Rule 7:13-10.2 – Requirements for a Regulated Activity in a Channel

Policy Summary:

A regulated activity proposed within a channel must meet specific design and construction standards.

Project Compliance:

✓ *The regulated activities associated with the proposed site remediation are not located within a channel.*

6.2 Rule 7:13-10.2 – Requirements for a Regulated Activity in a Riparian Zone

Policy Summary:

A regulated activity proposed in a riparian zone must meet specific design and construction standards. The width of the riparian zone is set forth at N.J.A.C. 7:13-4.1. The riparian zones established by this chapter are separate from and in addition to any other similar zones or buffers established to protect surface waters. The rules establish limits on the area of vegetation within a riparian zone that may be disturbed, for various regulated activities provided requirements for each activity are satisfied.

7:13-10.2(h). The Department shall issue an individual permit for the expansion or improvement of an existing private roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table C in 7:13-10.2.

2. The width of the roadway is minimized.

3. If the expansion or improvement impacts a 150-foot or 300-foot riparian zone, the applicant demonstrates the proposed reconstruction is necessary for the continued safe access to the site.

Project Compliance:

✓ *There is an existing gravel access drive through the riparian zone from the existing bridge. The majority of the riparian zone for the site contains existing impoundments and contaminants which have degraded it measured quality. Further disturbance will be of little consequence. The proposed disturbance specifically for the private roadway expansion is to push it further away from the bank of the adjacent wetlands area.*

7:13-10.2(r). The Department shall issue an individual permit for a regulated activity not listed in (e) through (q) of 7:13-10.2, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table C above.

2. No building is constructed within 25 feet of any top of bank or edge of water.

3. The applicant demonstrates the following:

   i. There is no other reasonable means of accomplishing the project, which would reduce or eliminate the impact to the riparian zone

   ii. There is no other feasible location onsite to undertake the project, which would impact to the riparian zone.

   iii. All disturbance within the riparian zone is located as far from the regulated water as possible.

4. The applicant provides 2:1 compensation for all cleared, cut and removed vegetation in the riparian zone in a manner described in 7:13-10.2(t).

Project Compliance:

✓ *The limits of the proposed site riparian zone disturbances have been determined based on the limits of site remediation as required in the Remedial Action Workplan and are the minimal limits permitted to effectively cap and remediate the existing disposal site in accordance with SRRA as determined by the site's Licensed Site Remediation Professional. The area of proposed disturbance exceeds the limits set forth in Table C (See 7:13-10.2(s)).*

7:13-10.2(s). The Department determines that requiring an applicant to meet a limit of disturbance set forth in Table C under 7:13-10.2 constitutes a hardship under N.J.A.C. 7:13-9.8, and the Department subsequently grants an individual permit for an activity that exceeds that limit, the applicant shall provide 2:1 compensation for all cleared, cut and removed vegetation in excess of that limit set forth in Table C in a manner described in 7:13-10.2(t).

Project Compliance:

✓ *The majority of the riparian zone contains existing impoundment structures. The existing use and condition of the site have degraded the minimal native vegetation that surrounds the outside perimeter of the existing impounds. Evasive species such as phragmites dominate the ponded and frequently flooded portions of the property. The proposed wetland transition area and riparian disturbances required to effectuate longstanding site remediation are unavoidable and there are no alternatives. There is minimal quality vegetation in these areas. Replanting with tree growth is in direct conflict with the project's Remedial Action Workplan and would compromise the integrity of the existing berms where maintenance is critical to their continued containment of the existing contaminated sludge materials.*

6.3 Rule 7:13-10.3 – Requirements for a Regulated Activity in a Floodway

Policy Summary:

A regulated activity proposed in a floodway must meet specific design and construction standards.

Project Compliance:

✓ *The regulated activities associated with the proposed site remediation are not located in a floodway.*

6.4 Rule 7:13-10.4 – Requirements for a Regulated Activity in a Flood Fringe

Policy Summary:

A regulated activity proposed in a flood fringe must meet specific design and construction standards, which includes the volume of material that may be placed above ground in a flood fringe as well as construction (i.e. building, etc.) that would reduce the flood storage volume on a site. Flood storage volume displacement limits and applicability are outlined in 7:13-10.4.

Project Compliance:

✓ *An individual permit is requested for the proposed site remediation activities. The regulated activities associated with the proposed remediation of the Rahway Arch Properties site are located in a tidal flood hazard area. As such, per 7:13-10.4(c)1 the regulated activity is not subject to the flood storage volume displacement limits of Section 7:13-10.4.*

6.5 Rule 7:13-10.5 – Requirements for a Regulated Activity in or Along A Water With Fishery Resources

Policy Summary:

7:13-10.5(c). The Department shall issue an individual permit for regulated activity in the channel and/or riparian zone of regulated water containing fishery resources only if the following requirements are satisfied:

1. Except as provided in (e) below, the activity meets the timing restrictions of (d) below;
2. Unset or raw cement is not allowed to come into contact with water in the channel during construction;
3. No logs or boulders that provide fish habitat are removed from the channel, unless the Department determines that such removal is necessary to accomplish the project; and
4. Low-flow aquatic passage is maintained in the channel throughout the entire area of disturbance during and after the performance of the regulated activity. In order to provide low-flow aquatic passage, the depth of flow in the modified channel during low-flow conditions must be equal to or greater than pre-project conditions. Where feasible, the applicant shall also provide low-flow aquatic passage in areas that do not currently contain low-flow aquatic passage.

Project Compliance:

- ✓ *The Rahway River is classified as SE3, Saline estuarine waters. The river is stocked with trout by the New Jersey Division of Fish & Wildlife each spring. As such the regulated water contains fishery resources.*
- ✓ *The following construction notes have been added to the site plan:*
    1. *No unset or raw cement shall come in contact with water in the channel;*
    2. *No logs or boulders shall be moved from the channel;*
    3. *Low-flow aquatic passage will be maintained during and upon completion of the construction.*

Policy Summary:

7:13-10.5(d). Except as provided at (e) below, certain activities are prohibited during times when fish are breeding or are especially sensitive to disturbance. The following activities are prohibited during the restricted periods listed in Table E in 7:13-10.5(d):

1. Any construction, excavation, filling or grading in the channel; and;
2. Any construction, excavation, filling or grading in the riparian zone, unless the applicant demonstrates that appropriate soil erosion and sediment control measures are in place which will prevent sediment

from reaching the channel. All proposed measures shall meet the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.

Project Compliance:

✓ *The Rahway River is classified as SE3, Saline estuarine waters. The river is stocked with trout by the New Jersey Division of Fish & Wildlife each spring. As such the regulated water contains fishery resources and any timing restrictions will be complied with.*

6.6 Rule 7:13-10.6 – Requirements for a Regulated Activity in a Documented Habitat for Threatened and Endangered Species

Policy Summary:

7:13-10.6(d). The Department shall issue an individual permit for a regulated activity only if the activity will not adversely affect either of the following:

1. A threatened or endangered species; or
2. A documented habitat for a threatened or endangered species.

Project Compliance:

✓ *Potential habitats for endangered or threatened species or any critical habitats were not observed within the limit of disturbance during field investigations of the property. The area to be remediated consists of longstanding, existing industrial sludge impoundments that are surrounded by earthen berms. These existing structures are required to be maintained and have minimal vegetation other than phragmites which dominate the landscape of these former disposed impoundments.*

✓ *A natural heritage database search for rare species and ecological communities was conducted (report dated August 23, 2012 for the proposed remediation area. Searches of the Natural Heritage Database and Landscape Project (Version 3) yielded the following results:*

Table 1 ***Rare Wildlife Species or Wildlife Habitat Onsite Data Request Search Results***	
Rare plants/ecological communities possible onsite:	No
Rare plants/ecological communities possible onsite/immediate vicinity	No
Natural heritage priority sites on site	No
Landscape 3.1 species based patches on site	Yes*[1]
Landscape 3.1 vernal pool habitat onsite	No
Landscape 3.1 stream/mussel habitat onsite	No
Other animals tracked by ENSP onsite	Yes*[2]

[1] *Foraging habitat for four (4) colonial water birds of special concern, the Glossy Ibis, Little Blue Heron, Snowy Egret and Tri-colored Heron. Three (3) state threatened colonial water birds, the Black-Crowned Night Heron, Cattle Egret And Yellow-Crowned Night Heron; and breeding/sighting for one(1) state endangered colonial water bird, the Northern Harrier.*

[2] *Northern Diamondback Terrapin*

Table 2 *Rare Wildlife Species or Wildlife Habitat Within 1 Mile for FHACA Searches*	
Rare plants/ecological communities within 1 mile	No
Natural heritage priority sites within 1 mile	No
Landscape 3.1 species based patches within 1 mile	Yes*[1]
Landscape 3.1 vernal pool habitat within 1 mile	No
Landscape 3.1 stream/mussel habitat within 1 mile	No
Other animals tracked by ENSP within 1 mile	Yes*[2]

The proposed activities will not result in any adverse impacts either directly or indirectly to the species listed in the NHD Report or their respective habitats. Existing site conditions have negatively impacted the quality of any potential habitats for these species. In fact the proposed activities will not only improve the quality of the wetlands buffer areas for area wildlife but will eliminate their direct contact exposure with surface contaminants and polluted water sources.

6.7 Rule 7:13-10.7 – Individual Permit Requirements for Acid-Producing Soils

Policy Summary:

A regulated activity proposed in an area containing acid-producing soils must meet specific design and construction standards.

Project Compliance:

✓ *The regulated activities associated with the proposed site remediation are not located in an area known or suspected to contain acid-producing soils. During construction activities, all excavation or disturbance shall be monitored for the presence of acid-producing deposits. If acid-producing deposits are encountered during construction, the applicant shall implement the mitigation and disposal standards outlined in the Standards for Soil Erosion and Sediment Control in New Jersey as well as the standards outlined in Section 7:13-10.7(c) of the Flood Hazard Control Act Rules.*

7.0 Individual Permit Requirements for Various Regulated Activities (N.J.A.C. 7:13-11)

7.1 Rule 7:13-11.1 – Requirements that Apply to all Regulated Activities

7.1.1 Potential adverse impact:

The proposed construction will not adversely impact water quality; aquatic biota; water supply; flooding; drainage; channel stability; threatened or endangered species or habitat; navigation; energy production or fishery resources. Refer to the Environmental Report submitted with this application for further detail.

[1] *Foraging habitat for four (4) colonial water birds of special concern, the Glossy Ibis, Little Blue Heron, Snowy Egret and Tri-colored Heron. Three (3) state threatened colonial water birds, the Black-Crowned Night Heron, Cattle Egret And Yellow-Crowned Night Heron; and breeding/sighting for one(1) state endangered colonial water bird, the Northern Harrier.*

[2] *Northern Diamondback Terrapin*

7.1.2 Soil Erosion and Sediment Control:

All necessary approvals from the local Soil Conservation District prior to commencing any activity approved in a individual permit issued under this chapter shall be obtained by the permitee.
Agree to comply.

7.2 Rule 7:13-11.2 – Requirements for Stormwater Management:

Policy Summary:

7:13-11.2(b). The Department shall issue an individual permit for a regulated activity associated with a major development only if the requirements of the Stormwater Management rules at N.J.A.C. 7:8 are satisfied.

Project Compliance:

✓ *The proposed development's stormwater management system has been designed in accordance with the Stormwater Management Rule (N.J.A.C. 7:8). Refer to the Stormwater Management Report submitted with this application for further detail.*

Policy Summary:

7:13-11.2(c). The Department shall issue an individual permit for a stormwater management basin located within or discharging within a flood hazard area only if the following requirements are satisfied.

1. The basin is designed and constructed to function properly during both flood and non-flood conditions;
   Complies

2. The effects of flooding and tailwater conditions on any proposed discharge are accounted for in the stormwater management calculations for the proposed basin. Tailwater conditions refer to situations where the discharge pipe will be submerged during a flood in such a way that floodwaters prevent the basin from draining properly. The effect of flooding and tailwater conditions are of particular concern in the following areas:

   i. The basin will be overtopped and flooded during the flood hazard area design flood, because it is not feasible to construct the emergency spillway in accordance with (c)3 below;
   Not applicable.

   ii. The drainage area of the basin is similar in size to the drainage area of the water receiving the proposed discharge;
   Not applicable.

iii. The basin reaches its maximum storage volume during or near the time flooding peaks within the water receiving the proposed discharge; and/or
Not applicable.

iv. The elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation.
Not applicable.

3. If a basin is proposed within the flood hazard area, the emergency spillway shall be constructed above the flood hazard area design flood elevation where feasible, in order to prevent floodwaters from overtopping the berm and flooding the basin; and
Complies

4. If the elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation, the discharge pipe shall be equipped with mechanical devices where appropriate to prevent floodwater from backing up the pipe into the basin.
Not applicable.

7.3 Rule 7:13-11.3 – Requirements for Excavation, Fill and Grading Activities

7:13-11.3(b) – The department shall issue an individual permit for excavation, fill and/or grading only if the following requirements are satisfied:

1. The overland flow of stormwater is not impeded and floodwaters can freely enter and exit the disturbed area.
Complies, to the maximum extent permitted per the sites Remedial Action Workplan.

2. Any slope of greater than 50 percent (2:1) is stabilized using soil bioengineering, retaining walls, rip rap or other appropriate slope protection.
Not applicable.

3. The excavation, fill and/or grading does not endanger the integrity of any existing structure.
Complies

4. All excavated material is to be disposed of lawfully.
Not applicable – Excavation of or removal of materials from the site is not proposed.

7.4 Rule 7:13-11.5 – Requirements for a Building

The proposed development proposes a building to be constructed in a flood hazard area. The proposed scale house and office trailer is in conformance with the applicable individual standards for a building per Section 7:13-11.5 of the Flood Hazard Area Control Act Rules as outlined below:

Policy Summary

7:13-11.5(c) - The Department shall issue an individual permit to construct or reconstruct a building of any kind only if the following requirements are satisfied:

1. Any new building is located at least 25 feet from any top of bank or edge of water;
   Complies.

2. If an existing building located near any top of bank or edge of water is to be expanded, the expanded portion is located at least 25 feet from the top of bank or edge of water, where possible;
   Not applicable.

3. If an existing building located near any top of bank or edge of water is to be reconstructed, the new building shall be relocated at least 25 feet from the top of bank or edge of water, where possible;
   Not applicable.

4. Any exterior wall being constructed or reconstructed is designed to resist hydrostatic and hydrodynamic pressure caused by flooding up to the flood hazard area design flood elevation;
   Not applicable, the proposed building will be set above the flood hazard elevation, and

5. All applicable requirements contained in (d) through (q) below are satisfied.
   (See Below).

7:13-11.5(d) - The Department shall not issue an individual permit for the construction of a new building in a floodway, except for the construction of a building on a pier in the Hudson River satisfying the requirements of N.J.A.C. 7:7E-3.48.
Not applicable.

7:13-11.5(i) - The Department shall issue an individual permit to construct or reconstruct a habitable building that is neither a private residence nor a public building, only if one of the following requirements is satisfied:

1. The lowest floor of the building meets the elevation requirements at (k) below (which states that for a new building, the lowest floor shall be constructed at least one foot above the flood hazard area design flood elevation); or
   Complies

2. The applicant does the following:
   Not applicable.

   i. Demonstrates that it is not feasible to meet the elevation requirements at 9k) below;

ii. constructs the lowest floor of the building as close to one foot above the flood hazard area design flood elevation as feasible; and

iii. Certifies that the building will be constructed in accordance with the dry flood-proofing requirements t (q) below.

7:13-11.5(l) - The Department shall issue an individual permit for a habitable building with an enclosed area beneath the flood hazard area design flood elevation only if the enclosed area meets one of the following requirements:

1. The enclosed area is a crawl space that meets the requirements of (m) below;

2. The enclosed area is a garage that meets the requirements of (n) below; or

3. The enclosed area is open to floodwaters as described at (o) below.

Not applicable, the proposed building will not have an enclosed area beneath the flood hazard area design flood elevation.

7.5 Rule 7:13-11.6 – Requirements for a Railroad, Roadway or Parking Area

Policy Summary

7:13-11.6(f) - The Department shall issue an individual permit to construct or reconstruct a private roadway and/or parking area that serves a building, or group of buildings, not covered by (c), (d) or (e) of this section, such as a commercial business, house of worship, office complex, shopping center or residential subdivision of two or more private residences, only if one of the following requirements is satisfied:

1. The travel surface of each proposed private roadway and parking area that serve the building or group of buildings is constructed at least one foot above the flood hazard area design flood elevation;
   Complies

2. The applicant demonstrates the following:

   i. Each building or group of buildings is already served by one or more roadways having a travel surface at least one foot above the flood hazard area design flood elevation, which is of adequate size and capacity to serve the building or group of buildings;

   ii. The travel surface of each proposed roadway is constructed as close to one foot above and flood hazard area design flood elevation as feasible; and

   iii. The travel surface of each proposed parking area is constructed at least one foot above the flood hazard area design flood elevation; or

3. The applicant demonstrates the following:

i. It is not feasible to construct the travel surface of each private roadway and parking area at least one foot above the flood hazard area design flood elevation pursuant to (g) below;

ii. The travel surface of each private roadway and parking area is constructed as close to one foot above the flood hazard area design flood elevation as feasible;

iii. Every effort has been taken to provide some parking areas or sections of roadway in the overall development that are situated at least one foot above the flood hazard area design flood elevation so that vehicles can be moved to higher ground during a flood;

iv. No extraordinary risk is posed to any person using each private roadway or parking area that I constructed at an elevation less than one foot above the flood hazard area design flood elevation; and

v. An adequate number of permanent signs are posted in prominent locations indicating which private roadways and parking areas are subject to flooding in the following cases:

(1) The roadway and/or parking area serves a residential subdivision of two or more private residences; or

(2) The parking area has 10 spaces or more.

Project Compliance

The regulated activity is a gravel parking area and private roadway to serve the temporary Class B Recycling facility proposed onsite for the sole purpose of generating structural engineered fill for the proposed site remediation. The proposed parking area is between elevations 8.0 and 9.0. The proposed gravel roadway is also above the 100-year design flood elevation (EL 7.0). The parking area and private gravel roadway complies with these standards.

7.6 Rule 7:13-11.10 – Requirements for the Stormwater Outfall Structure

Policy Summary

7:13-11.10(b) - The Department shall issue an individual permit to construct or reconstruct a stormwater outfall structure only if the following requirements are satisfied (examples of acceptable designs are provided in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g)):

1. The structure is built with a concrete headwall or flared-end section with footings that extend no less than three feet below grade;
   Complies

2. The structure does not obstruct flow n a channel or floodway;
   Complies

3. The structure includes adequate conduit outlet protection where required by the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;
   Complies

4. If the structure includes a rip-rap apron, a three feet deep by three feet wide rip-rap toe wall is constructed at the end of the apron; and
   Complies

5. The structure does not interfere with the normal flow of the channel or threaten to change the dimensions or location of the channel. For example, a large discharge of stormwater into a small channel, or a discharge situated at a significant angle to the normal flow in a channel, may cause the channel to move over time, interfere with the direction of flow and/or cause increased erosion or deposition of sediment within the channel.
   Complies

7.7 Rule 7:13-11.18 – Requirements for the Placement, Storage of Processing of Solid Waste

The proposed onsite Class B Recycling facility necessary to produce the required engineered fill to perform the remediation of the Rahway Arch Properties site is located within a mapped flood hazard area. The FEMA flood insurance rate map showing the mapped flood hazard area is provided in Section IV of the application report. The proposed Class B facility is predominately located within Zone AE, defined as areas within a 100-year floodplain. The 100-year floodplain is defined as an area that has a 1% annual probability of flooding one foot or more above existing grade. The map indicates that the base flood elevation in this area of the site is seven (7) feet above msl. (NAVD '88)

In accordance with current Flood Hazard Regulations (specifically N.J.A.C. 7:13-11.18) the processing of solid waste is not permitted in a flood hazard regulated area except as stipulated by this section for a lawfully existing solid waste facility on or before October 2, 2006. As such, the proposed Class B facility being proposed as part of the site's remediation plan would not comply with the rule and a permit could not be issued without a hardship exception.

It is the applicant's intent to raise the designated Class B Recycling operations area above the base flood elevation thereby eliminating the area from potential flooding and out of a flood hazard area. This initial fill plan shall be completed prior to the construction of the Class B facility. The proposed initial grading plan is shown on Sheet 6 of 20 of the Land Use Permitting plans listed in Section XV of the application report (enclosed separately).

A hardship exception is requested in accordance with N.J.A.C. 7:13-9.8 regarding compliance with the requirements of N.J.A.C. 7:13-11.18. Please refer to the Flood Hazard Area Hardship Exception Report listed in Section XVII of the Application Report (enclosed separately) for further detail, demonstrating that 1) compliance with this chapter would result in an exceptional and/or undue hardship for the applicant, 2) the proposed activities will not adversely affect the use of contiguous or

nearby property, 3) the proposed activities will not pose a threat to the environment or to the public health, safety and welfare; and 4) the hardship was not created by any action or inaction of the applicant's or it's agents.