EastStar Environmental Group, Inc.
Consulting and Field Services

February 12, 2015

Mr. Pat Evangelista
Office of Strategic Programs
Office of the Regional Administrator
U.S. Environmental Protection Agency – Region II
290 Broadway
19th Floor
New York, New York 10007

RE: Rahway Arch Site, Carteret, New Jersey - Response to Request for Information

Dear Mr. Evangelista:

On behalf of Rahway Arch Properties, LLC, EastStar Environmental Group, Inc. is submitting this response to questions regarding the Rahway Arch Site located at 300 Salt Meadow Road, Carteret, New Jersey. This information is being submitted in response to EPA's 104(e) Request for Information letter dated December 19, 2014. This Request was received via email by Rahway Arch Properties on December 29, 2014. The original letter was received by Rahway Arch Properties on January 9, 2015. On January 21, 2015, EPA set February 13, 2015 as the date for receipt of this response.

By way of introduction, I have been retained by Rahway Arch Properties and the Borough of Carteret as the Licensed Site Remediation Professional (LSRP) for the remediation of the Rahway Arch site. The site is comprised of five contiguous parcels, three of which are owned by Rahway Arch Properties, and two of which are owned by the Borough of Carteret. New Jersey regulations adopted pursuant to the Site Remediation Reform Act (SRRA – C.58:10C-1 et seq.) require that remediation of contaminated sites be performed under the direction and supervision of an LSRP.

The Rahway Arch site is currently being remediated in accordance with the Administrative Requirements for Remediation of Contaminated Sites (ARRCS – NJAC 7:26C), the Technical Requirements for Site Remediation (Tech Rule – NJAC 7:26E) and an approved Remedial Action Workplan (RAW). This RAW was extensively reviewed by the New Jersey Department of Environmental Protection (NJDEP) – Site Remediation Program (SRP) prior to the start of the remediation and was found to be in compliance with these regulations. Also in accordance with these regulations; when the remediation is complete, Rahway Arch Properties and Carteret will obtain a Remedial Action Permit from NJDEP and then I will issue a Response Action Outcome (RAO), which is the final remediation document.

Although, as seen below, I have made all efforts to fully answer the questions presented by EPA, I nonetheless note Rahway Arch Properties' objection to these questions because they seek information outside the scope of the topics enumerated in Section 104(e)(2) and seek information outside the scope of EPA's investigatory authority. In addition, they are unreasonable, too indefinite, and/or arbitrary and capricious.

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EPA, under to the authority of Section 104(e)(2), may request information relating to:

- The identification, nature and quantity of materials which have been or are generated, treated, stored or disposed at a site
- The nature of extent of a release or threatened release of a hazardous substance or pollutant or contaminant at a site
- Information related to the ability of a person to pay for or to perform a cleanup

These questions submitted by the EPA appear to go beyond that delegated authority.

In responding to these questions, I note that there are inaccurate statements, premises and assumptions that preface some of the questions. These errors are corrected on a case by case basis in the responses. I must also state for the record that all of the references in the letter to the remediation of this site as a "construction project" are in error. This site is a contaminated site that is being remediated in accordance with New Jersey regulations. The Site Remediation Reform Act (SRRA) places an affirmative obligation on Rahway Arch Properties and the Bureau of Carteret to remediate this site.

In responding to this Request for Information I will be making extensive reference to numerous documents that have previously been provided to Region 2 by NJDEP, Rahway Arch Properties, EastStar and the remediation contractor, Soil Safe Inc. A list of the documents that have been previously provided to Region 2 is contained in Attachment 1 to this letter. A list of additional documents that are being provided with this letter is contained in Attachment 2. These additional documents are provided on the enclosed CD.

I should also note that these issues were discussed in detail during EPA's site visit to the Rahway Arch site on June 24, 2014 and during our meeting at the EPA office in Edison, New Jersey on November 13, 2014.

For ease of review, I have provided each of the questions in italics, followed by the response. The reference numbers in the responses refer to the documents listed in Attachments 1 and 2.

1. *How will the cap construction activities be performed and monitored to avoid berm failure and releases to areas outside such berms including to the Rahway River?*

   This question is fully addressed in Reference 1-22, the Geotechnical Engineering Report. It was also fully addressed in the redacted Geotechnical Engineering Report, Reference 1-8. The recommendations from the Geotechnical Engineering Report are provided in the RAW, Reference 1-14.

   The geotechnical investigation and analysis were performed by Michael Baker International (Baker), who will also be responsible for the ongoing geotechnical monitoring and analysis during cap installation. The purpose of the extensive geotechnical investigation of the site, which included borings, cone penetrometer testing, geotechnical laboratory analyses of the various strata, research into similar geotechnical conditions and geotechnical modeling; was

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to determine if the site could be capped without causing berm failure or releases outside the berms into the adjacent wetlands or into the Rahway River.

The evaluations described in Sections 7.1 through 7.4 of the Geotechnical Engineering Report provide a concise overview of the detailed analysis performed using highly conservative metrics associated with:

- Cap dimensions and loading conditions
- Berm dimensions, slope and lateral loading
- Engineering properties of foundation soils
- Engineering properties of engineered fill material used for the cap
- Cap slope and stability
- Overall bearing capacity
- Rotational shear stability
- Internal shear stability
- Lateral spreading (sliding)
- Settlement evaluation
- Seismic considerations

When reviewing these analyses, note the conservative loading assumptions described in Section 7.2.1. To be conservative, Baker assumed the maximum cap elevation was 36 feet above MSL. In reality, the maximum cap elevation is 29 feet above MSL. In other words, Baker assumed 7 feet more engineered fill would be placed over the entire site than will actually be placed. With an average cap thickness of approximately 8 feet, this means the geotechnical analyses and modeling were performed with 47% more weight on the subgrade than will actually exist when the cap is complete. This is over and above the Factors of Safety and other conservative assumptions used in the Report.

Despite the 47% excess weight, the analyses show the cap, the site, the subgrade and the berms will all be stable and safe. The results of these evaluations are all clearly documented in Section 7.2 of the Geotechnical Engineering Report. Please review that section if you have any questions at all regarding these analyses or that the site will be stable during and after remediation.

The results of this conservative analysis showed the site could be remediated without causing berm failure or releases outside the berms. The results were then used to develop specific cap installation procedures and work sequencing. The geotechnical recommendations contained in Section 8 of the Geotechnical Engineering Report provide the procedure to install the cap without a berm failure or release.

As we have discussed in each of our meetings, the site conditions will be monitored by the geotechnical engineer during cap installation. Monitoring will be performed using geotechnical instrumentation including settlement plates, vibrating wire piezometers and inclinometers to ensure that failures or releases do not occur. The cap installation sequence will be modified, if necessary, based upon the ongoing monitoring results. Refer to Section

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7.5 of the Geotechnical Engineering Report for details on the geotechnical monitoring program.

The geotechnical analyses that will be performed during installation of the cap go well beyond the monitoring and instrumentation described in the Geotechnical Engineering Report. As part of the Geotechnical Investigation, a finite element model (FEM) of the geotechnical conditions of the site was developed and analyzed by Baker. These FEM analyses were conducted using the c/phi reduction method to determine the maximum rate of displacement that would be indicative of a failure from cap installation.

The instrumentation will be monitored to obtain pore pressures, settlement and horizontal displacement; all of which will be compared to FEM slope, seepage and limit equilibrium analysis results. The displacement rates and pore pressures will be checked against measured values in the field to evaluate whether failure conditions are potentially building, and hence, give us the ability to mitigate these conditions before failure could occur. The ratio of measured horizontal displacement to vertical settlement in the field should be lower than what was predicted from FEM analyses.

Pore pressure measurements made with the vibrating wire piezometers will provide direct information of the degree of consolidation of the underlying soft soils, and indirectly, whether local yielding is taking place due to shear stresses being generated. The pore pressures will also be used to evaluate slope stability. Excessive pore pressures could potentially lead to slope failure. In addition, in-situ shear strength testing, using cone penetrometer testing (CPT) and vane shear testing (VST), will be conducted to evaluate the increase in strength of the foundation soils as excess pore pressures dissipate.

2. *How will the volume of contaminated water and other materials expected to be displaced from the impoundments during cap construction be managed to ensure that the following issues are addressed? New compressive and vertical load forces will increase downward pressure on the mounded groundwater and contribute towards changing the hydrostatic conditions and thereby potentially resulting in changes to contaminated groundwater migration, direction and flow; and the new cap will introduce lateral forces on the existing berms, whose structural integrity has not been determined. Please provide any analyses, data and documentation to support such management techniques.*

The initial statement in this question makes an incorrect assumption that contaminated water and other materials will be displaced from the impoundments during the cap installation. When the cap is being installed, pore water will be displaced from the compressible strata underlying the site as these materials consolidate. This water is non-potable Class IIIB groundwater. Any contaminants in this water will be evaluated as part of the remedial action. No "other materials" will be displaced as a result of the cap installation.

This question also incorrectly states that the structural integrity of the berms has not been determined. The berms were fully evaluated as part of the Geotechnical Engineering Investigation.

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Looking beyond the incorrect statements in this question, we assume the question asks "How the groundwater will be monitored during cap installation?" This question is fully addressed in References 1-7, 1-14 1-15 and 1-22. It was also thoroughly discussed in the November 13 meeting. Refer to the response to Question 1 regarding monitoring the berms during cap installation.

Approximately 70,000 gallons of pore water will be released during the first year of cap installation. This contrasts with the approximately 25,000,000 gallons per year of water from precipitation that currently infiltrate through the un-remediated site into the groundwater. In other words, the anticipated volume of pore water released by the cap system installation is only 0.28% of the annual volume of water that migrates through the site into the groundwater today. It is also important to remember that this water would be released anyway, as part of the much larger annual volume, if the site were not capped. However, this small volume of pore water will be actively monitored during installation of the cap.

Upon completion of the remedial action, the pore water pressure will stabilize and the pore water release will stop. The water balance model, based upon site specific parameters, calculated that the cap will reduce the annual volume of water released due to infiltration from 25,000,000 gallons per year to 38,300 gallons per year, 0.15% of the current annual volume. In other words, there will be a 99.85% reduction in the annual volume of water releases due to infiltration. Refer to Appendix G in Reference 1-7 for the water balance calculations.

3. *Please explain why engineering controls (such as groundwater collection/extraction/treatment and site containment i.e., slurry walls, sheet piling and/or reactive walls/cap in the area of discharge) are not needed to protect human health and the environment from current and future releases from the Site.*

   Additional engineering controls are not included in the remedial design because they are not needed to protect human health and the environment. This question is fully addressed in References 1-14 and 1-19.

   The cap system that is currently being installed on this site will eliminate the current releases from the site and will prevent future releases. Additional engineering controls are not necessary to accomplish this requirement or to achieve all of the remediation objectives listed in the RAW; and site-specific conditions neither warrant nor support such additional engineering controls in that regard.

4. *The Site documents indicate that contaminated sludge has gone beyond the berm perimeter and that certain areas of the berm have been compromised. How will compromised berm areas be repaired and contaminated sludge release and migration be addressed?*

   This question is fully addressed in References 1-7 and 1-14.

   This question implies that significant amounts of sludge exist outside the berms and that there are multiple berm failures, both of which are incorrect. In fact, only minimal amounts

of sludge have been detected in borings outside the berms and, as discussed below, there are no areas of the berms that are compromised at this time. Historically, sludge was detected under the berms as far back as 1981, as evidenced in the reports of the geotechnical investigations by M. Disko Associates contained in References 2-1 and 2-2. This limited amount of sludge has had no measured impact on the berms or the surrounding areas over the past 34 years.

No impacts to the wetland areas outside the berms were identified in the historic reports prepared for Cytec or in the Remedial Investigation. However during the ongoing cap system installation, additional investigations of these areas will be performed in accordance with Section 4.8(b) and 4.8(c) of the Tech Rule and NJDEP's *Ecological Evaluation Technical Guidance Document* (August 29, 2012) to ensure there has been no impact. An RAO will not be issued for the entire site until this investigation has been completed, and any impacts identified in this additional investigation have been addressed.

Reference 1-12 documents one small (approximately 10 feet long) area of erosion damage to the containment berm near the northwest corner of Impound 1. This damage allowed stormwater runoff from Impound 1 to discharge into the tributary to Deep Creek that separates Impounds 1 and 2. The damage was above the normal high tide elevation and did not provide a conduit for water from the tributary to flow into the impoundment. This damage has been repaired, and stormwater runoff from Impound 1 no longer discharges directly into this tributary.

The berms are being monitored during the remediation and will continue to be monitored following completion of the remediation and any subsequent erosion will be corrected. Refer to the Geotechnical Engineering Report and the RAW for the monitoring during remediation and Subchapter 7 of ARRCS for the post-remediation monitoring requirements.

5. *Is there financial assurance for the construction, long term monitoring and maintenance of the cap? If so, please provide any and all documentation relating to such assurances and include cost estimates supporting such assurances. If no long term financial assurances mechanisms are in place, please describe what finances (including the specific amount of funding) or plans are in place to ensure the long term monitoring and maintenance of the Site. Please indicate how these assurances/finances will be reviewed and replenished if necessary during the life of the capping remedy.*

This question was addressed directly with the Regional Administrator during the June 24, 2014 on-site meeting. It was also addressed by the Assistant Commissioner of NJDEP for Site Remediation, the Director of Remediation Management at NJDEP and the LSRP during the meeting at EPA offices in Edison, New Jersey on November 13, 2014. However, the response is repeated here.

This question is fully addressed by New Jersey regulation, specifically the Administrative Requirements for Remediation of Contaminated Sites (ARRCS). Refer to Subchapter 5 of ARRCS (NJAC 7:26C-5) for the financial assurance requirements. Also see NJAC 7:26C-7.10.

Under the requirements of ARRCS, a Remediation Funding Source (RFS) is not required for this site during the installation of the cap system. Upon completion of the remedial action, Financial Assurance must be provided as part of the Remedial Action Permit application. The Financial Assurance will comply with the regulatory requirements in ARRCS.

The LSRP is responsible for calculating the dollar amount required for Financial Assurance and updating this dollar amount, as necessary. At a minimum, the Financial Assurance amount must be reviewed every two years as part of the biennial remedial action protectiveness certification. Rahway Arch Properties will obtain and maintain the Financial Assurance using one of the approved mechanisms listed in ARRCS.

6. *Please submit a copy of all correspondence (or in the absence of such correspondence, describe all communications) with the National Marine Fisheries Service and the Fish and Wildlife Service concerning impacts from Site contaminants or the cap construction.*

Rahway Arch Properties has had no correspondence or communications with the above referenced agencies regarding this site.

Cytec investigated the site for rare plants, animals and natural communities through the National Heritage Database. No records of rare plants, animals or natural communities were identified on the site. A copy of this correspondence is contained in Reference 2-3.

Additional investigation was performed by Rahway Arch's consultants as part of the application for the NJDEP Division of Land Use Regulation permits. This application is contained in Reference 2-4.

7. *Please provide a complete list of all expected chemical constituents and their corresponding maximum concentrations in the imported fill.*

This question is fully addressed in References 1-14, 1-15 and 1-16.

To summarize, the engineered fill used for the cap will be manufactured from Class B recyclable materials that have been reviewed and approved prior to being accepted at the site for recycling. In accordance with NJDEP's *Alternative and Clean Fill Guidance for SRP Sites* (December 29, 2011), a sample must be collected, analyzed and approved for every 1,000 yd^3 of engineered fill before it is placed in the cap. The samples will be analyzed for TAL/TCL parameters and extractable petroleum hydrocarbons (EPH).

The engineered fill must meet New Jersey Residential Direct Contact Soil Remediation Standards (Residential Standards) as listed in NJCA 7:26-D for all parameters except six PAH compounds that currently exist on the site at concentrations far in excess of the Residential Standards. For these six PAH compounds, no individual sample may exceed the mean of the existing concentrations of these compounds on the site. Additionally, the overall maximum concentrations of these six compounds in the cap will not exceed 1.25 times the 75th percentile. These specific concentrations are provided in Reference 1-16.

8. *Please provide a complete list of all chemical constituents found at the Site and their corresponding maximum concentrations.*

   This question is fully addressed in References 1-7 and 1-14.

   Additional information is contained in Reference 1-6 which provides the details of the investigation of undocumented fill on the site and Reference 2-23 which documents the evaluation and review of the site conditions evaluated for EPA by NJDEP.

   The above referenced reports document the results of all of the sampling and analyses that have been performed on this site by NJDEP, New Jersey Turnpike Authority, Cytec, Soil Safe and Rahway Arch Properties.

9. *Please provide all data related to the wetlands identified in the November 15, 2012 Remedial Investigation Report as "exceptional resource wetlands" on the Site that serve as habitat for colonial water birds. Please provide any sampling results related to documented reports of sludge overtopping berms and berm failure events. Please provide maps that document the exceptional resource wetlands as well as areas of documented berm failures and sludge overtopping berms? Please provide any reports of nearby fish kills or bird/animal mortalities. Please provide all analyses of the impact of the construction project on such wetlands. What baseline data will be collected to establish current conditions? Describe any long- term monitoring that will be performed to determine any impacts from the construction project to the wetlands.*

   This question poses a number of sub-questions, each of which is addressed in the following paragraphs.

   - All of Rahway Arch Properties documents related to wetlands are provided on the enclosed disk. A list of these documents is provided as References 2-5 through 2-17 in Attachment 2. None of these documents identify the site as habitat for colonial water birds. Note that the current LOI approval letter states that the approval is valid through September 22, 2013. However, the New Jersey Permit Extension Act extends this approval through June 30, 2016.

   - The wetlands delineation map is provided as Reference 2-16.

   - There are no documented instances of sludge overtopping the berms on the site.

     Berm maintenance events were reported by Cytec, who performed the berm repairs. No sampling data is associated with these repair activities. Documents regarding the berm repairs are provided on the enclosed disk as References 2-18 through 2-20.

   - There have been no reports of any fish kills in the vicinity of the site.

   - One report of bird mortalities was reported on the un-remediated site by American Cyanamid in 1982. The cause of the mortalities was not determined. See Reference 2-21.

- The site remediation will have no negative impact on the wetland areas. The 124.7 acre site contains approximately 40 acres of wetlands, all of which are located outside the containment berms, the impoundments and the limit of remediation. Studies to date show that these wetlands are not contaminated and that they are supportive, diverse and functional. The cap system will not impact these wetlands. The Class B facility will be located on one of the contaminated impoundments and will not be located in a wetland area.

  This site remediation will only have a positive impact on the wetlands areas. The wetland transition areas within the impoundments were destroyed years ago when the site was used by Cytec for alum-YSP disposal, making them unsuitable as transition areas. Once remediated, these areas will be planted with native grasses and will be left as habitat, forming truly protective wetland transition buffers which will enhance and protect the existing wetlands.

  Note that the RAW does require additional investigation in the wetland areas directly adjacent to the impoundments to further verify that they have not been adversely impacted by the contaminated site.

- The long-term monitoring requirements for the site are mandated by ARRCS. A biennial remedial action protectiveness certification must be prepared to ensure the long term effectiveness of the remedial action and no impact to surrounding properties. Refer to NJAC 7:26C-7.8.

10. *Please provide all analyses of the impact of the construction project on the Site hydrology (surface and groundwater). The November 15, 2012 Remedial Investigation Report indicates groundwater beneath the impoundments flows radially outward, ultimately discharging to the adjacent surface waters of the Rahway River, Deep Creek, Cross Creek, and the Arthur Kill. What monitoring will be conducted to establish a baseline for current conditions? Describe any long- term monitoring that will be performed to determine any impacts from the construction project to the Site hydrology.*

    This question is fully addressed in References 1-14 and 1-15.

    Groundwater has been and will continue to be monitored using the existing eight monitoring well clusters. This monitoring will continue during cap installation and for as long as necessary after completion of the cap until the site specific Class IIIB groundwater quality objectives have been met. Temporary, localized groundwater monitoring will be performed while the cap is being installed.

11. *Please provide all analyses of the impact of the construction project on the Site's ecological receptors. What monitoring will be conducted to establish a baseline for current conditions? Describe any long- term monitoring that will be performed to determine any impacts from the construction project on ecological receptors.*

This question is fully answered in Reference 1-14. Also see the answers to Questions 5, 9 and 10 above.

No impacts to ecological receptors were identified in the historic reports prepared for Cytec or during the Remedial Investigation. However during the ongoing cap system installation, additional ecological evaluation will be performed in accordance with Section 4.8(b) and 4.8(c) of the Tech Rule and NJDEP's *Ecological Evaluation Technical Guidance Document* (August 29, 2012) to ensure there has been no impact. An RAO will not be issued for the entire site until this investigation has been completed, and any impacts identified in this additional investigation have been addressed.

Completion of the remediation project will improve the ecological conditions around the site and reduce the impact of the contaminated site on the ecological receptors. The present site consists of open sludge impoundments containing cyanide contaminated sludge and undocumented fill containing high concentrations of PAHs. The remediation project will cap these contaminated materials and create approximately 65 acres of vegetated habitat adjoining the wetlands, Rahway River, Deep Creek, Cross Creek and the tributaries.

12. *How does the cap to be constructed specifically take into account the potential effects of increased sea level rise and an increase in the number and severity of storm events to ensure that the bermed impoundments do not erode, wash away, or fail? How will the berms be reinforced? How will the cap extending above the berm elevation be protected from sea level rise and flooding?*

This question is highly speculative and not particularly relevant to the remediation of this site. Any potential sea level rise will likely be insignificant and will have no impact on this remediation project. Additionally as was discussed in the beginning of this letter, EPA's authority under Section 104(e) is only for submittal of documents already in the respondent's possession. It does not extend to requiring respondents to prepare studies or conduct additional investigations, especially those that are not relevant to the ongoing site remediation.

As a result of the remediation, the berms will be strengthened by the engineered fill cap constructed from cement amended soil and will not need to act as a stand-alone defense against overtopping waters.

Refer to the design plans for cap in Reference 1-17. The cap extends above the Base Flood Elevation (BFE) for the site of 12 feet NAVD that was established by FEMA in July 2013. In fact, the tops of most of the existing berms are already above this elevation. Also refer to Reference 2-24 for a discussion of the remediation relative to the BFE.

Note that the existing berms along the Rahway River have been armored with rip-rap. These berms showed no damage from the severe storm events over the past few years, including Hurricane Sandy.

The design drawings show that the cap is sloped from the center of the site towards the berms. Any water on the surface of the cap will flow via the grading plan to the stormwater management system and will be discharged to the Rahway River and surrounding streams through the permitted outfalls. The cap system was designed with a stormwater management system capable of handling and managing 100% of the runoff from the site. This will protect the cap, berms and surrounding areas from erosion.

Additionally, the cement amended soil used in the engineered fill cap offers superior erosion protection compared to traditional cap materials. Use of cement amended soil is well documented, including, for example, the Santa Clara River in Los Angeles County, California where miles of riverbank are now protected with cement amended soil. California environmental regulators agree this material offers superior flood protection and erosion control benefits.

Also refer to the requirements for post remediation monitoring of the site, required under ARRCS, NJAC 7:26C-7.8.

13. *Currently the Rahway River routinely flows in and out of at least one of the impoundment areas. How will the cap be protected from flooding? Although the cap construction is proposed to significantly reduce the amount of water infiltrating the Site, the impoundments will still be under the tidal influence of the Rahway River surface water infiltrating the groundwater beneath the impoundments. Has this communication between the Rahway River and the impoundments been evaluated in the context of protecting human health and the environment? Please explain.*

    The opening statement to this question is incorrect. The Rahway River does not routinely flow in and out of any of the impoundments. This incorrect statement impacts the response to the remainder of this question.

    Refer to the design plans for the cap in Reference 1-17. The cap extends above the Base Flood Elevation (BFE) for the site of 12 feet NAVD established by FEMA in July 2013. In fact, the tops of most of the existing berms are above this elevation.

    Installation of the cap will have no impact on the tidal movements of the Rahway River. However, we expect that the cap will reduce the tidally influenced groundwater flow under the site. As documented in the Geotechnical Engineering Report (Reference 1-22), consolidation of the subsurface strata is expected to occur as the cap is installed. This consolidation will reduce the void ratios of these strata thus reducing the volume of water in these strata and the volume of water that would be impacted by tidal influence to the groundwater under the site.

14. *When will the on-Site sludge be tested and characterized to determine if it is a RCRA characteristic hazardous waste and to comprehensively identify the form(s) of cyanide and other contaminants that are present in it?*

The hazardous waste question was fully addressed in Reference 1-10 and Reference 2-22. The alum-YPS sludge is not a characteristic hazardous waste. See the response to Question 8 regarding the remainder of this question.

If you have any questions regarding these responses, please contact me at (410) 290-8777.

Sincerely,
EastStar Environmental Group, Inc.

Albert P. Free, P.E., CS, LSRP
President

cc: Ron D'Argenio – Rahway Arch Properties, LLC
Mr. Mark Pedersen, NJDEP SRP
Mr. Ken Kloo – NJDEP SRP
Mr. Mark Smith – Soil Safe Incorporated
The Honorable Daniel Reiman – Mayor, Borough of Carteret
Mr. Chris Gibson, Esq. – Archer Greiner
Mr. Tim Henderson, Esq – Rich and Henderson
Ms. Amy Chester, Esq – U.S. EPA Region 2

ATTACHMENT 1 - DOCUMENTS PREVIOUSLY PROVIDED TO EPA - REGION 2

Documents Provided From the On-site Meeting June 24, 2014

1-1. EastStar Environmental Group, Inc., *Rahway Arch Site Remediation Project – Presentation to U.S. EPA,* June 24, 2014

1-2. EastStar Environmental Group, Inc., *Rahway Arch Site Remediation Project – Summary of Site Visit,* July 10, 2014.

1-3. U.S. EPA, *Technology Performance Review – Selecting and Using Solidification/Stabilization for Site Remediation*, November 2009.

Documents Submitted via CD on August 20, 2014

1-4. EastStar Environmental Group, Inc., *Preliminary Assessment of the Rahway Arch Properties Site*, August 7, 2012.

1-5. SESI Consulting Engineers, *Preliminary Assessment Report for American-Cyanamid/Cytec Impoundments, Block 9.03, Lot 21; Block 10, Lots 8-10 & 12-21; Block 11.01, Lots 8, 10-14 & 28, 55 Salt Meadow Road, Carteret, NJ 07008*, draft, October 26, 2006.

1-6. EastStar Environmental Group, Inc., *Environmental Investigation of Fill Material at the Rahway Arch (Old Cytec Landfill) Site*, October 17, 2011.

1-7. EastStar Environmental Group, Inc., *Remedial Investigation Report for the Rahway Arch Properties Site*, November 15, 2012.

1-8. Michael Baker, Jr., Inc., *Geotechnical Engineering Report – Rahway Arch Property, Carteret, New Jersey*, November 2012. (redacted version, report and appendices)

1-9. Hydrosystems, Inc., *Groundwater and Surface Water Assessment Carteret Impounds, American Cyanamid Company, Linden, New Jersey*, February 9, 1987.

1-10. Cytec Industries, *Remedial Action Plan Addendum, Carteret Impoundments, Borough of Carteret, New Jersey*, revised February 1995.

1-11. EastStar Environmental Group, Inc., *Rahway Arch Site Remediation – Detailed Alternatives Analysis*, January 17, 2013.

1-12. Kloo, Kenneth J., NJDEP, *Letter to Cytec Industries Rescinding the September 26, 2002 No Further Action/Covenant Not to Sue*, March 15, 2014

1-13. NJDEP, *Recycling Center General Approval for Petroleum Contaminated Soil, Concrete Asphalt, Brick and Block for the Soil Safe Inc., Metro12 Facility*, June 2, 2014

1-14. EastStar Environmental Group, Inc., *Final Remedial Action Workplan for the Rahway Arch Properties Site*, July 16, 2013

1-15. EastStar Environmental Group, Inc., *Addendum to the Final Remedial Action Workplan for the Rahway Arch Properties Site*, August 15, 2013

1-16. EastStar Environmental Group, Inc., *Quantification of Variance on PAH Concentrations, Rahway Arch Site Remediation*, August 23, 2013

1-17. J. Timothy Kernan, Inc., *Land Use Permitting Plans for Rahway Arch Properties – Site Remediation – 29 Sheets*, May 17, 2013

1-18. J. Timothy Kernan, Inc., *Stormwater Management Report for Rahway Arch Properties – Site Remediation*, revised January 2013.

1-19. EastStar Environmental Group, Inc., *Remedial Action Monitoring During Construction and Long Term*, August 18, 2014.

1-20. Hydrosystems, Inc., *Environmental Assessment of the Carteret Impoundments, American Cyanamid, Linden, NJ*, June 3, 1988.

1-21. Hydrosystems, Inc., *Environmental Assessment of the Carteret Impoundments, American Cyanamid, Linden, NJ*, March 10, 1989.

Documents Submitted by Soil Safe Inc., September 9, 2014

1-22. Michael Baker, Jr., Inc., *Geotechnical Engineering Report – Rahway Arch Property, Carteret, New Jersey*, November 2012. (complete, unredacted report and appendices)

ATTACHMENT 2 - ADDITIONAL DOCUMENTS BEING PROVIDED WITH THIS LETTER

2-1. M. Disko Associates, *Preliminary Report of Soil Borings and Measurement of Permeabilities at the Warner Plant Impounds*, September 1981.

2-2. M. Disko Associates, *Preliminary Report of the Test Borings and Dike Evaluation at the Warner Plant Impounds*, January 1982.

2-3. NJDEP National Heritage Program, *Letter Regarding Rare Species Information for the Cytec Industries Site - Carteret*, May 2, 1997.

2-4. Cytec, *Letter regarding Cytec Carteret Impoundments Wetlands Status*, August 29, 1997.

2-5. J. Timothy Kernan, Inc., *Application for: Coastal General Permit #15, Freshwater Wetlands General Permits #4 and #11, Flood Hazard Area Verification, Flood Hazard Area Individual Permit and Flood Hazard Area - Hardship Exception*, November 2012.

2-6. Shisler Environmental Consultants, *Wetland Delineation Report*, November 5, 1997.

2-7. NJDEP Land Use Regulation Program, *Letter of Interpretation, Line Verification*, March 13, 1998.

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Mr. Evangelista
February 12, 2015

CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

State of Maryland

County of Howard

I certify under penalty of law that I have personally examined and am familiar with the document submitted in response to EPA's Request for Information, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted document is complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that I am under a continuing obligation to supplement my response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information or the Company response thereto should become known or available to the Company.

Albert P. Free
NAME (print or type)

President
TITLE (print or type)

SIGNATURE

Sworn to before me this day 12th
of February, 2015

Notary Public
Shawn R. Ray

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