

**Rockaway Park Former Manufactured Gas Plant (MGP) Site
Rockaway Park, Queens County, New York**

September 14, 2009 Field Change Request: FCR-04

On-Site Concrete Crushing Operation

On behalf of National Grid US, PS&S Engineering, PC (PS&SPC) has prepared this Field Change Request # 4 (FCR-04) to address the planned on-site concrete crushing operation at the Rockaway Park Former MGP Site (Site). PS&SPC and National Grid's remediation contractor, Posillico Environmental, Inc. (Posillico) have prepared the following procedure for the on-site concrete crushing operation and the proposed on-site re-use of processed concrete as Shallow Excavation Area backfill material.

Section 3.3.2, Former MGP Features Not Containing Source Material, of the 100 percent RDR Remedial Design Report (RDR) dated November 2009 stated "*Former MGP features within the planned remedial excavation areas (that do not potentially contain source material) will be removed only to the planned excavation depth (i.e., eight feet bgs). These features will be removed from the excavation, crushed on-site in a mobile processing plant and either re-used on-site as backfill material or disposed off-site as construction debris at a facility (ies) approved by National Grid US.*" In addition, Section 3.10.1.4, Re-Use of On-Site Materials, of the 100 percent briefly discussed the on-site re-use of clean crushed concrete; however a description of the proposed on-site concrete crushing operation was not included.

As further discussed herein below, National Grid US and their remediation contractor, Posillico, propose to use a hoe ram and a jaw crusher attached to an excavator to process the concrete on-site in lieu of the RDR proposed mobile processing plant.

ON-SITE CONCRETE CRUSHING OPERATION

Visually unimpacted concrete (i.e., concrete free of NAPL, NAPL staining, or impacted soils) excavated during the Shallow Excavation Area remedial activities will be removed from the temporary fabric enclosure and staged on-site for processing and re-use. Visually unimpacted concrete is currently staged in the southwest corner of the site (refer to the sketch included in the attached Posillico ***Proposed Procedure for Crushing and Re-Using Concrete Removed from Excavations***).

Posillico plans to use a hoe ram to process large concrete slabs into smaller pieces that can be easily managed by the jaw crusher. The jaw crusher has interlocking teeth on each jaw spaced at approximately six inches resulting in processed material approximately three inches to four inches in size. The hoe ram and jaw crusher will be attached to track hoe excavators. The hoe ram and jaw crusher operation is a change from the RDR referenced mobile processing plant. At the present time, Posillico plans to operate the jaw crusher operation and does not plan to mobilize and operate the mobile processing plant.

To significantly reduce dust that is generated by the concrete crushing operation, a laborer will be stationed in proximity to the jaw crusher to continuously spray the jaw crusher and the processed concrete with a hose. Additional sprinklers will be placed around the concrete crushing operation as required by the weather conditions at that time.

HEAVY CONSTRUCTION EQUIPMENT AND PERSONNEL DECONTAMINATION PROCEDURES

Decontamination procedures and material disposal activities will be managed in accordance with applicable regulations and as specified in the RDR.

PROCESSED MATERIAL ON-SITE RE-USE

The processed concrete material will be reused as a backfill material at the bottom of the Shallow Excavation to bridge the observed groundwater. The processed material will be placed in a one foot thick lift at the bottom of the Shallow Excavation when groundwater is present and then capped with a crushed stone (imported backfill material) in order to fill-in the coarse processed concrete material voids. Consecutive controlled compacted lifts of imported backfill material (common fill) will be placed above the imported clean crushed stone material.

FCR-04 CONCLUSIONS

The on-site concrete crushing operation will be relocated as the remedial activities progress across the Site and will be subject to the volume of visually unimpacted concrete.

Visually unimpacted concrete generated from the Shallow Excavation Area remedial activities will be segregated and staged on-site; where the concrete will be further processed with a hoe ram and a jaw crusher to generate a processed material. Dust (particulate) emissions and noise will be readily managed with the planned hoe ram and jaw crusher on-site concrete crushing operation and this operation will produce significantly less dust and noise than the RDR proposed mobile processing plant. The processed material will be reused as backfill material at the bottom of the Shallow Excavations to bridge the observed groundwater.

The remedial design intent of the RDR will be achieved with this planned on-site concrete crushing operation.



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Attachment A

Proposed Procedure for Crushing and Re-Using Concrete Removed From Excavations

NATIONAL GRID

Rockaway Park Former Manufactured Gas Plant Site
Rockaway Park, Queens County, New York

Technical Specification Section: 3.10.1.4 Re-Use of On Site Materials

PROPOSED PROCEDURE FOR CRUSHING AND RE-USING CONCRETE REMOVED FROM EXCAVATIONS:

In order to process the large blocks of concrete that have been and will be removed from the shallow excavations in a manner that will minimize the generation of concrete dust and noise, Posillico proposes the following procedures.

1.0 Equipment

Posillico proposes to utilize a CAT excavator with an A-Ward AQH-2 Crushing Jaw attachment. The Jaw interlocking teeth with spacing on approximately 6 to 8". Each Jaw fits space of the complementary Jaw to provide a gap of 3 to 4" for the broken concrete. The Jaws are expected to reduce the blocks into pieces 6" in diameter with one pass through the machine.



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1.1. Dust Control

To reduce or eliminate any dust that is generated by the concrete crushing operation, a laborer will be stationed in proximity to the Jaws so that he can continuously spray the jaws and the concrete being processed with a hose. Additional sprinklers may be placed around the operation as deemed necessary by the weather conditions at the time.



1.2. Staging Area

The existing concrete stockpile which is located in the West side of the yard in grids H1, C5, A2, SEA 129, SEA 131 and A5 will serve as the feed pile for the concrete crusher. The concrete crusher will begin processing the concrete on South side of the pile and proceed north, until the pile is exhausted. The processed material will be placed on clean mole rock in cells SEA 149 and B1 for pick up and transport by payloaders to the enclosure.

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