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Manager
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July 7, 2011

Ms. Julie Nora, Ph.D., Director
International Charter School
334 Pleasant Street #1
Pawtucket, Rhode Island 02860

Re: Tidewater Site
Pawtucket, RI

Dear Dr. Nora:

Thank you for your letter dated May 24, 2011. National Grid and its contractor for the Tidewater Site, GZA GeoEnvironmental, Inc. ("GZA"), want to maintain an open and on-going dialogue with the International Charter School and surrounding community as they move forward with the cleanup of the Tidewater site. National Grid believes that a cleaned up site at Tidewater will be beneficial to the neighborhood and the environment. National Grid will take this opportunity to address certain issues raised in your May 24 letter.

As to the recently completed gas holder dismantling project, the air monitoring program involved a robust, two-tiered system from AirLogics®. The first tier of the system included the use of monitoring equipment that allowed for real-time 24 hour per day/7 day per week air quality monitoring for total volatile organics (VOCs) and particulate dust surrounding the work area and site perimeter. This AirLogics® system is considered state of the art technology and has been used at over 90 former Manufactured Gas Plants (MGPs) in 11 states over the past 14 years to monitor air quality during remediation activities. Its ability to continuously monitor VOCs and dusts provides a real-time, practical means of continuously monitoring air quality during implementation of remediation efforts such as the gas holder dismantling project. Compounds from an air quality perspective associated with former MGP sites (such as benzene and naphthalene) are typically detected together in a group. Therefore, the AirLogics system, which detects a wide variety of these compounds, provides an effective means for monitoring air quality in real time. One of the other unique advantages of the AirLogics® system is the ability to set early detection or "warning levels" for both VOCs and dust. Much in the same way as a local "weather advisory", these early detection levels serve to put on-site personnel on notice to a potential issue. Response to a detection in excess of these early detection levels often involve implementation of additional controls such as odor suppressants, application of water to control dust, and work modifications. In consideration of the surrounding community, the early detection levels were set very low during the gas holder dismantling activities (*i.e.*, 0.5 ppm for VOCs and 100 ug/m^3 for dust[1]). Because these early detection levels were set so low, short duration exceedences of these levels during

[1] Typical MGP site remediation early detection limits for VOCs range from 0.5 ppm to 5 ppm. The lowest end of this range was used in this case. The 100 ug/m^3 limit for dust is 50% below the National Ambient Air Quality Level of 150 ug/m^3.

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certain work activities were expected. The ability to respond immediately on these occasions served to limit their duration and levels.

The second tier air monitoring included the collection and laboratory analyses of air quality samples designed to supplement the continuous data from the AirLogics® system. Your letter suggested that the results of this laboratory testing were in excess of "limits set by EPA." While we do not know the specific EPA limits to which you refer, there are several published air quality standards available from EPA (including National Ambient Air Quality Standards {NAAQS} established to be protective of regional ambient air quality inhalation reference concentrations {RfC} available from their Integrated Risk Information System {IRIS} (specifically for use in quantitative risk assessments) and RIDEM's Acceptable Ambient Levels {AALs}. Depending on which standards are used, one must consider that comparisons of air quality data to these published values requires consideration of several factors including: time weighted averaging of the collected samples to match the standard, completion of potential exposure pathways, dispersion/dilution of measured concentrations to the location of nearby receptors, and actual exposure duration.

Your letter also included suggestions with respect to vapor control mechanisms and air quality monitoring for subsequent site remediation work. We are currently performing a *Remedial Alternative Evaluation* which, combined with the recently completed *Site Investigation Data Report* will complete the *Site Investigation Report* (SIR) consistent with the requirements of Section 7.07 of the RIDEM Remediation Regulations. This remedial alternative selection process involves consideration of many factors, including potential air quality issues and community concerns such as those described in your May 24, 2011 letter. Key to the protectiveness of vapor control systems and air monitoring programs is an understanding of the potential emissions associated with the remedial activity being monitored. For example, appropriate engineering controls and air quality monitoring for a remedy involving significant excavation and off-site disposal of impacted materials would likely be more aggressive when compared to a remedy involving less extensive disturbance of impacted materials. These factors will be carefully considered as part of the remedial alternative evaluation for the Tidewater site.

With respect to schedule and sequence, we currently anticipate submittal of the *Remedial Alternative Evaluation Report* to RIDEM by the end of July 2011. As required by the Remediation Regulations, RIDEM will review the completed SIR and issue a *Program Letter* confirming completion of the SIR and the acceptance of the preferred remedial alternative. In accordance with the regulations, public notice is required prior to RIDEM's formal approval of the remedy. Consistent with your May 24, 2011 letter, a public meeting will be held in the early Fall to discuss the site investigation results and remedial alternative evaluation process, as part of the RDIEM public notice requirement. Subsequent to this public meeting and assuming RIDEM concurs with the remedy, RIDEM will issue a *Remedial Decision Letter* identifying the preferred alternative. Upon receipt of the *Remedial Decision Letter*, National Grid will prepare a *Remedial Action Work Plan* (RAWP), which, in accordance with Section 9.00 of the Remediation Regulations will include design standards and specifications, environmental controls and monitoring (including air monitoring) and a proposed remedy implementation schedule. RIDEM must approve the RAWP prior to its implementation. We anticipate being in contact with RIDEM, ICS, the City of Pawtucket, and other members of the community throughout this process.

We look forward to meeting with the stakeholder group and other members of the community in the fall to discuss this project. As always, National Grid is available to discuss any concerns you may have in the meantime. You can reach me at (781) 907-3651 should you have any questions. Please note, I have forwarded this letter to the individuals listed below and trust that you will distribute it to interested parents and other members of the stakeholder group.

Sincerely,
NATIONAL GRID

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