



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

5 July 2012

Michele Leone, Manager
New England Site Investigation and Remediation
National Grid
40 Sylvan Road
Waltham, MA 02451

Dear Ms. Leone:

The Rhode Island Department of Environmental Management, Office of Air Resources (OAR) has reviewed National Grid's request for an evaluation of the applicability of Rhode Island Air Pollution Control Regulation No. 9 for the proposed earthwork activities related to an upgrade of the active substation at the Former Tidewater Facility, which was submitted by GZA on behalf of National Grid on 13 February 2012, as well as supplemental material submitted by GZA in response to OAR comments on 14 June 2012. Based on the information provided in these submittals, OAR agrees that emissions from this project will be substantially lower than the Minimum Quantities listed in Appendix A of Regulation No. 9 and, therefore, an air permit is not required.

The 13 February submission also delineates National Grid's plans for air monitoring during the above project. Specifically, the submission states that GZA/National Grid plans to monitor in real time for total volatile organic compounds (TVOC) and particulate matter in the work zone and at the property line, as described in the Air Quality Monitoring Plan (AQMP) submitted by GZA on behalf of National Grid in April 2011. However, the real-time monitoring for benzene and the time-integrated VOC sampling procedures identified in the April 2011 plan would not be conducted during this project because levels of benzene and other VOCs in the soil in the area that will be excavated are low.

Although the OAR does not have the authority to regulate air monitoring activities associated with hazardous waste sites, OAR has the following recommendations concerning air monitoring in conjunction with the above project:

- The TVOC property line Action Level should be 0.1 ppm, rather than the 0.5 ppm level listed in the April 2011 AQMP. The 0.1 ppm level is consistent with GZA's 5 May 2011 response to OAR comments on the AQMP, which is appended to the 13 February 2012 submittal.



- The February 2012 submittal says that “all monitoring activities described in the April 2011 AQMP will be immediately reinstated” if TVOC levels exceed applicable Action Levels for a period of 5 minutes. While this is an appropriate trigger for reinstating all monitoring activities, it is important that even transient exceedances of the Action Levels are investigated to determine the source of those elevated levels and that appropriate actions be taken to prevent further exceedances.
- As noted in previous OAR comments on the AQMP, since TVOC is composed of varying mixtures of VOCs with a wide range of toxicities, it is impossible to derive an Action Level for that parameter that is based on health effects. Therefore, TVOC measurements should also be considered in a qualitative vein – appropriate action to identify sources and to reduce ambient impacts should be initiated when TVOC levels in the area increase substantially or approach an Action Level, even if the Action Level is not exceeded.
- Although OAR agrees that routine benzene measurements are not indicated for this product, a real-time benzene monitor should be available and easily accessible on the site and should be employed immediately if the TVOC Action Level is exceeded, even if that exceedance is transient. Summa canisters should also be available for timely deployment if an Action Level is exceeded for a period of 5 minutes or more.

If you have any questions, feel free to contact me at (401) 222-4700, ext. 7012.

Very truly yours,



Barbara Morin, Supervising Environmental Scientist
Office of Air Resources