



**FUSS & O'NEILL**

*Disciplines to Deliver*

November 17, 2005

Mr. Jeffrey Crawford  
Principal Environmental Scientist  
Rhode Island Department of Environmental Management  
Office of Waste Management  
235 Promenade Street  
Providence, RI 02908

RE: Clarification of Comments  
Bay Street Suspected Fill Areas  
Tiverton, Rhode Island

Dear Mr. Crawford:

The purpose of this letter is to provide you with clarification of public comments provided to the Rhode Island Department of Environmental Management (RIDEM) by Fuss & O'Neill, Inc. (Fuss & O'Neill), on behalf of the Environmental Neighborhood Awareness Committee of Tiverton (ENACT). Fuss & O'Neill prepared this letter in response to recent conversations with RIDEM in order to clarify public comments we have offered on behalf of ENACT through November 14, 2005.

Based on the results of the investigation conducted to date, the nature of the contamination, the current and foreseeable site use, as well as the substantive public comments and concerns provided by ENACT and other stakeholders to date, we feel the only acceptable remedial option for the site is that all manufactured gas plant (MGP) waste, fill material, and any native soil impacted by the presence of MGP related contaminants or fill material be excavated and removed from all areas of the site in the most expeditious manner possible. Remediation must result in the elimination of health risks posed by the release and result in the site being safe for unrestricted residential use for all time. As expressed in writing and verbally on multiple occasions over the past sixteen months, we feel that that the only acceptable solution to the environmental issues facing the residents of the Bay Street neighborhood (the site) is that a comprehensive investigation be completed in an expeditious manner that identifies the full nature and extent, both vertical and horizontal, of all fill material and MGP waste in the area to support the implementation of the remedial approach outlined above.

Since the identification of fill and MGP waste was first identified at the site, Fuss & O'Neill has requested that NEGC develop and provide in writing, as required in section 7.04 of the RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material

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Releases (Remediation Regulations) an evaluation of at least three viable remedial alternatives, and identify which alternative is the preferred alternative. To date, NEGC has not complied with this requirement.

## **1.0 BACKGROUND**

Fuss & O'Neill, on behalf of ENACT has provided formal comments regarding the above-referenced site on three previous occasions. Fuss & O'Neill attended a meeting at RIDEM on July 7, 2004 with representatives of RIDEM, New England Gas Company (NEGC), Vanasse Hangen Brustlin, Inc. (VHB), and ENACT. In addition, we provided written comments to RIDEM in correspondence dated August 11, 2004 and November 14, 2005.

In all three of these communications, Fuss & O'Neill expressed the following:

- The release of MGP waste at the site poses significant health risks to the residents of the Bay Street neighborhood. These health risks are exacerbated by delays in implementing remediation to eliminate the health risks.
- In order to mitigate these risks most effectively, response actions including complete assessment, removal actions, and thorough remediation of the site, must occur in the most expeditious manner and must remediate the site to the point that the site is safe for unrestricted residential use.

## **2.0 CLARIFICATION OF PREVIOUS COMMENTS**

In regards to the presence, investigation, and remediation of contamination at the site, the primary objectives of ENACT are to ensure that:

- a site-wide remedial program is implemented in an expedited fashion,
- all health and environmental risks posed by the MGP waste release are eliminated so that the site can be utilized for unrestricted residential use, and
- all response actions, including assessment and remediation, comply with the RIDEM Remediation Regulations, as well as all other federal, state and local laws, and other relevant public concerns.

Remediation must address soil and groundwater, including direct exposure risks, leaching of contaminants to groundwater, and groundwater quality in accordance with the RIDEM Remediation Regulations.

### **2.1 Specification of the Preferred Remedial Alternative**

As discussed in detail at the meeting on July 7, 2004, and our two previous public comment letters, a paramount deficiency in the Site Investigation activities and reports completed to date is the fact that NEGC has not conducted an evaluation of remedial alternatives for the site, and has failed to identify a preferred remedial alternative for restoring the environmental quality of the site. During the July 7, 2004 meeting Mr. John Chambers of Fuss & O'Neill



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questioned representatives of both VHB and NEGC regarding the remedial alternatives under consideration. Fuss & O'Neill stated in our August 11, 2004 correspondence that "Any conceptual remedial strategies under evaluation by NEGC should be identified to RIDEM in writing, and utilized in the development of the proposed (assessment) work scope." Furthermore, in our November 14, 2005 letter we stated "A minimum of two remedial alternatives in addition to the no action/natural attenuation alternative were not evaluated as required by Section 7.04 of the Remediation Regulations," and "Appropriate consideration has not been given to the preferred remedial alternative..."

RIDEM has identified NEGC as the responsible party at the site and required NEGC to complete a Site Investigation Report in accordance with Section 7 of the Remediation Regulations. As specified in Section 7.04 of the Remediation Regulations, "The Site Investigation Report must contain a section proposing remedial alternatives" and as the responsible party at the site, development of the remedial alternatives at the site is the responsibility of NEGC. Despite mandates from RIDEM, and Fuss & O'Neill's consistent request over the past sixteen months on behalf of ENACT for identification of remedial alternatives, NEGC has not met the requirements of Section 7.04 by identifying the required remedial alternatives under evaluation. Fuss & O'Neill and ENACT continue to request proactive, expedited remediation by NEGC at the site that will restore the site to a safe environment for unrestricted residential use.

Since NEGC has not presented potential remedial alternatives for the site, we have identified the remedial alternative that will best address the primary objectives of ENACT. This alternative was identified based on the results of the investigation conducted to date, the nature of the contamination, the current and foreseeable use of the site as a residential neighborhood, as well as the substantive public comments and concerns provided by ENACT and other stakeholders to date. Based on these factors, the preferred remedial alternative for soil at the site is complete excavation and removal of all MGP waste, fill material, and any native soil impacted by the presence of MGP waste or fill material from the site.

Our November 14, 2005 correspondence states, "Moreover, it is the opinion of ENACT and Fuss & O'Neill that compliance with the Method 1 criteria is the best approach to adequately protect the interests, including financial and health priorities, of the Bay Street area community." This statement was the result of a discussion between ENACT and Fuss & O'Neill during which ENACT expressed an interest in having their concerns resolved while continuing to live in the neighborhood that is their home. While ENACT intends to cooperate with NEGC in implementing expedited remediation that fully remedies the aforementioned interests, the soil remediation alternative proposed herein is the best approach to remediate soil at the site while allowing residents to remain in their homes and to retain the property rights they hold dear. At present, the residents are unwilling to have any Environmental Land Usage Restrictions or other deed or use limitations imposed on them due to contamination at their properties.



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## 2.2 Evaluation of Appropriateness of Method 3 Risk Assessment

As discussed in detail in Section 4.0 of our August 11, 2004 comment letter and Section 2.0 of our November 14, 2005 comment letter, the preferred remedial alternative must be considered when determining the appropriate level of investigation necessary to adequately characterize the nature and extent of any release. The level of investigation conducted at some portions of the site identified to date may be sufficient to support the commencement of the preferred remedial alternative for soil discussed in the preceding section. However, the level of investigation conducted to date does not delineate either the vertical or horizontal extent of contamination and is inadequate to support a Human Health Risk Assessment, as initially proposed by NEGC.

In addition, the RIDEM Remediation Regulations do not allow use of a Method 3 Risk Assessment at the site. As specified in Section 8.08(A)(ii) of the Remediation Regulations, "The performing party shall take affirmative steps to manage the contaminated-site such that the contaminated-site does not impact property which is not within the control of the performing party, by ensuring that, at a minimum, the following requirements are met:

1. The concentration of any hazardous substance in soil does not exceed the Method 1 Residential Direct Exposure Criterion as described in Rule 8.02 (Soil Objectives) and as specified in Table 1 at any point beyond the control of the performing party;"...

Furthermore, Section 7.04C requires that the preferred remedial alternative must comply with "...State and local laws..." and "other public concerns." As the residents of the Bay Street area are unwilling to accept any type of restrictions on the current or future uses or activities on their properties, and the residents have expressed that they require remediation of the site to result in safe and unrestricted use of their properties in perpetuity, a Method 3 Risk Assessment is not feasible, nor do the Remediation Regulations allow RIDEM to approve use of a Method 3 Risk Assessment as part of the preferred remedial alternative at the site.

## 2.3 Continuation of Additional Investigation Activities

Fuss & O'Neill and ENACT have identified the remedial alternative discussed above as the best solution to the significant issues facing the residents of the Bay Street neighborhood in regards to soil at the site. It is critical that NEGC move forward expeditiously with the implementation of the preferred remedial alternative to bring the site into compliance with respect to the Method 1 Residential Direct Exposure Criteria and the GA Leachability Criteria detailed in the Remediation Regulations to provide residents of the Bay Street neighborhood with immediate resolution regarding health risks and the current property use restriction issues. At some properties of the site, the remedial approach outlined herein may begin immediately. However, even if this proposed remedial alternative for soil is implemented, additional investigations are still necessary to fully delineate the lateral extent of MGP waste, fill material, and native soil impacted by MGP waste and fill material at the boundaries of the site.



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Consequently, these additional investigations should be implemented concurrently with the remedial activities at the portions of the site identified to date.

Additionally, preliminary investigations have indicated that contaminants have also been detected in groundwater at concentrations approaching or exceeding the RIDEM GA Groundwater Objectives. As discussed in detail in Section 1.2(C) of our November 14, 2005 public comment letter, the level of groundwater investigation conducted to date is not sufficient. However, although additional investigations of groundwater contamination are necessary prior to developing a comprehensive groundwater remediation approach, these additional investigations should not impede the implementation of the remedial activities necessary to reduce the immediate exposure risks associated with soil throughout the site.

Consequently, it is paramount that NEGC move forward expeditiously with soil remediation to address direct exposure risks on a property by property basis, while collecting additional soil and groundwater data where necessary to support the further delineation of the site boundaries, as well as the evaluation and implementation of a remedial approach for groundwater.

If you have any questions or comments regarding this letter, please do not hesitate to call.

Sincerely,

Patrick J. Dowling  
Senior Hydrogeologist

John A. Chambers, PG, LSP  
Associate Hydrogeologist

cc: Ms. Gail Corvello, ENACT