

**Georgia Department of Natural Resources**  
**Environmental Protection Division**

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March 28, 2016

**VIA EMAIL & REGULAR MAIL**

Atlanta Gas Light Company  
c/o Mr. Greg Corbett, Director of Environment & Sustainability  
Ten Peachtree Place  
Atlanta, Georgia 30309

Re: Voluntary Remediation Program Status Report 1 & 2  
Augusta MGP Site, HSI Site No. 10132  
August, Richmond County, Georgia

Dear Mr. Corbett:

The Georgia Environmental Protection Division (EPD) has received the following documents, submitted pursuant to the Georgia Voluntary Remediation Program Act (the Act) O.C.G.A. 12-8-100, by AMEC Foster Wheeler (AMEC) on behalf of Atlanta Gas Light Company (AGLC):

- May 29, 2015 *Voluntary Remediation Program (VRP) 1<sup>st</sup> Semi-Annual Status Report* (May 2015 Report) & *Appendix A Responses to EPD's December 3, 2014 Comment Letter* (Response)
- December 1, 2015 *VRP 2<sup>nd</sup> Semi-Annual Status Report* (December 2015 Report)

After completing its review of these document submittals and in accordance with the discussions held during the March 24, 2016 meeting, EPD has prepared the following comments:

**Response to EPD's December 3, 2014 Comments (Appendix A of the May 2015 Report)**

- 1) The information provided within the May 2015 Report properly addressed the surface water pathway comments noted in EPD's December 2014 comments letter (Comment 1). While it has been demonstrated that this surface water exposure pathway is not currently impacted above in-stream water quality standards, EPD recommends that an additional surface water monitoring event be conducted at the conclusion of the additional ISS measures to support the final VRP CSR certification for this exposure pathway. Additionally, EPD recommends that the TLC-001 sample location be moved to the northwest corner of the intersection of Fenwick Street and 9<sup>th</sup> Street.
- 2) According to the information provided within the May 2015 Report and the above referenced Response (Comment 2), AGLC has proposed to conduct additional groundwater investigations during and following the installation of the in-situ stabilization (ISS) corrective action. Please ensure that a sufficient amount of alluvium/galliard formation wells are available to determine the extent of shallow groundwater impacts, as the groundwater maximum concentration(s) from these shallow groundwater wells will be needed to update the vapor intrusion exposure pathway risk assessment.

- 3) EPD concurs with the Type 1 delineation criteria for groundwater that is indicated in Table 2-4, provided in response to EPD's December 2014 Comment (3).
- 4) The information provided in the May 2015 Report adequately addresses EPD's December 2014 Comment (4).
- 5) According to the above referenced Reports, additional investigation and corrective action activities will be completed and documented in future report submittals to address EPD's December 2014 Comments (5) & (6). Please ensure that the additional planned soil investigations described in Section 4.0 of the May 2015 Report include confirmation laboratory analyses, in addition to the visual assessment of the soil cores, for any parcels that are not within of the Type 5 corrective action boundary and that are subject to soil compliance certification requirements.
- 6) The information included in Appendix E of the May 2015 Report in response to EPD's December 2014 Comment (7) included the missing warranty deeds and restrictive covenants for the properties with a Type 4 risk reduction standard certification. However, the documentation did not provide clarification as to which legal deed applied to each of the qualifying parcels listed in Figure 3-1 of the May 2015 Report, specifically in relation to parcels 185, 189, 231, 372.1, 371.2, and 330. Please provide the applicable warranty deed documentation and any associated restrictive covenants for these specific property parcels.
- 7) Additional comments associated with the proposed institutional controls (specifically regarding the response to EPD's December 2014 Comment (8)) will be deferred until after the completion of the ISS remedy and the follow-up groundwater assessment activities.

Vapor Intrusion Assessment Comments (Appendix F of the May 2015 Report)

- 8) According to the vapor intrusion (VI) risk assessment included in the May 2015 Report (Appendix F), the VI exposure pathway will be the only cleanup criteria that will be used in relation to groundwater, as the direct groundwater exposure pathway will be addressed through institutional controls on qualifying properties. While institutional controls may be a viable option to control exposure, additional groundwater data will be required to better characterize the groundwater impacts and define which specific properties will require the proposed institutional controls to maintain the exposure pathway conditions. Therefore, please take this requirement into account when installing the groundwater wells proposed in accordance with Section 4.2 and 4.4 of the May 2015 Report.
- 9) Regarding Attachment A in Appendix F of the May 2015 Report, when conducting an initial screen using the latest version of EPA's Vapor Intrusion Screening Level (VISL) calculator, EPD recommends that the target hazard quotient be set equal to 0.1 instead of 1.0 to account for additive effects. The maximum detected concentration should then be compared to the resulting chemical-specific VISLs to determine the COPCs for the groundwater-to-indoor air pathway as illustrated in Table 5-1. Based on this recommendation, toluene was identified as a COPC for the vapor intrusion pathway. The COPC status for all other constituents remains the same. However, the VISLs presented in Table 5-1 should be revised as follows:

<b>COPC</b>	<b>Target Groundwater Concentration Protective of Indoor Air, µg/L</b>
Ethylbenzene	51
Toluene	2700
Trichloroethylene	0.71
Xylenes, total	72
Naphthalene	28

- 10) Although the incremental target risk for carcinogens was correctly listed as  $1 \times 10^{-5}$  in Table 5-2 of the May 2015 Report, please note that the J&E 2004 spreadsheets list  $1 \times 10^{-6}$ .
- 11) EPD does not concur with the use of the 95% UCL as the groundwater concentration for the site-specific evaluation J&E model provided in Attachment C, Appendix F of the May 2015 Report. The J&E model is a screening model that needs to be applied conservatively. Therefore, the model evaluations should be performed using the maximum contaminant concentrations to reduce uncertainty. Additional assessment is generally warranted when the model indicates that risk goals may be exceeded. The estimated indoor air concentrations from this conservative model screen should then be used to calculate the indoor air vapor risk and/or hazard (target non-cancer hazard quotient of 1.0). The cumulative cancer risk to on-site/off-site receptors attributable to the COCs should be less than  $1 \times 10^{-5}$ .
- 12) It is uncertain from the presentation of the results in the May 2015 Report whether data was assessed spatially and in a site-specific manner using defined enclosed floor space width and length dimensions of buildings overlying the groundwater VOC plume. As a line of evidence, it is recommended that further investigation be conducted based on the spatial relationship of the risk drivers identified for the site and any current or potential buildings, residential or non-residential, located within 100 feet of groundwater contamination exceeding the conservative groundwater VISLs (see Comment 9). Other lines of evidence could include collection of sub-slab vapor and/or indoor air data using Summa canisters to collect 24-hour samples from buildings overlying the vapor plume. Alternatively, vapor mitigation may be proposed on a case-specific basis coupled with continued groundwater monitoring as suggested in Section 6.0.

#### General Comments

- 13) EPD concurs with the approach noted during the March 24<sup>th</sup> meeting to conduct additional subsurface investigation around the MW-603 monitoring location, and to base further actions regarding delineation and remediation on the results of these investigations. EPD also agreed that the additional groundwater characterization(s) associated with the impacts at monitoring location MW-318 can be incorporated into the planned groundwater investigations to be conducted during and following the ISS corrective action.

- 14) EPD has no objections to the abandonment of recovery well MW-308BR and the groundwater wells on the Block D property parcel, as it is indicated that additional groundwater monitoring locations will be installed during and following the ISS in order complete the groundwater characterization.
- 15) Section 2 of the December 2015 Report indicated that the presence of numerous utilities restricted the installation of the additional bedrock groundwater well in the area of MW-318. Please provide a new figure, or update an existing figure, to illustrate the approximate location of these utilities, specifically in area that may be at risk for VI exposure pathway.
- 16) Please provide EPD with an update on the status of incorporating additional qualifying properties into the site, specifically the property parcels with confirmed source materials or parcels that may directly affected by the ISS remedy (i.e., parcels 229, 374.2, and 162).
- 17) Please provide a figure illustrating the abutting property owner information and property uses.

The above comments must be addressed to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards and policies of the Act. Please include the responses to the above listed comments in the next Semi-Annual VRP Progress Report, scheduled for submittal by no later than June 1, 2016. Should you have any additional questions or concerns please contact Mr. Kevin Collins of the Response and Remediation Program at (404) 657-8660.

Sincerely,



David Brownlee  
Unit Coordinator  
Response and Remediation Program

cc: Carol Geiger, KMCL  
File: VRP – August MPG Site #10132