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VIA EMAIL AND REGULAR MAIL

April 18, 2011

Mr. Galo Jackson Environmental Protection Agency Waste Management Division Superfund Program 61 Forsyth Street, SW Atlanta, GA 30303

RE: Draft Phase I/II Environmental Site Assessment for the Former Drive-in Theater Area, Prepared in 1993 by Southeastern Environmental Audits, Inc.

Dear Mr. Jackson:

Honeywell has reviewed the draft Phase I/II Environmental Site Assessment ("ESA") for the former drive-in theater area, which was prepared in 1993 by Southeastern Environmental Audits, Inc. ("SEAI").

It is our understanding that EPA discovered the document recently, which was included in LCP Chemical's CERCLA 104(e) information request response. Environmental Planning Specialists, Inc. ("EPS") and Honeywell were not aware of the existence of the draft ESA document prior to receiving a copy from EPA on March 8, 2011. We are not aware whether a final version of this document was issued by SEAI. Also, we have no information indicating whether SEAI ever finalized the draft ESA.

As we discussed during a conference call with EPA on March 28, 2011, EPS has identified numerous errors in the 1993 draft ESA which resulted in the preparer reaching flawed conclusions. The purpose of this letter is to provide Honeywell's initial comments on the 1993 draft ESA, which are described in detail in the first section of this letter below. The second section of the letter provides a brief description the site characterization work that has been performed in the former drive-in theater area that generally contradicts the (flawed) conclusions of the draft ESA.



Summary of Issues in the 1993 Phase I / II ESA

Significant Error #1: Soil Data Units Are Incorrect

The 1993 draft ESA inaccurately conveys the soils results by three orders of magnitude. On Page 21 of the draft ESA, there is an embedded table of volatile aromatics results for the four soil samples with values shown in parts per million, or ppm. However, a cross reference of the soil results to actual laboratory results sheets provided in Appendix D of the draft report clearly shows the values for volatile aromatics are in units of micrograms per kilogram, or parts per billion (ppb). Thus, the draft report inaccurately conveys the soils results by three orders of magnitude.

Significant Error #2: MCLs Do Not Apply To Soil Media

In addition to the error of listing the soil results in the wrong units, the 1993 draft ESA compares the soil results to maximum contaminant limits ("MCLs"). The term MCL, however, is reserved for federal drinking water standards and is not applicable to soils. Most importantly, the ESA soil results are below the current residential and industrial EPA Regional Screening Levels ("RSLs"), where such criteria are currently available. See the summary in Table A below.

Total recoverable petroleum hydrocarbon ("TRPH") was also characterized in the ESA study, which is an analytical measurement that represents a mixture of aromatic and aliphatic hydrocarbons containing between about eight and forty carbon atoms. Without a better understanding of the relative proportions of these different hydrocarbons in the sample, however, it is not possible to develop relevant soil screening levels. Most importantly, the ESA soil results are below risk-based screening levels for diesel fuel (both fresh and weathered) and heavier fuel oil mixtures developed by the Total Petroleum Hydrocarbon Criteria Working Group (TPHCWG 1999).

Table A: Soil Results Compared to Soil Screening Levels

Chemical	SB-1	SB-2	SB-3	SB-4	Residential RSL	Industrial RSL
Benzene	0.005U	0.005U	0.020	0.008	1.1	5.4
Ethylbenzene	0.005U	0.005U	0.112	0.066	5.4	27
Toluene	0.005U	0.005U	0.211	0.286	5,000	45,000
Total Xylenes	0.010U	0.144	1.648	1.926	630	2,700
TRPH	5U	5U	9,615	384	NV	NV

All units are mg/kg.

NV = no screening values available.



Significant Error #3: Groundwater MCL Values Are Inaccurate

On Page 20, Section E. of the 1993 draft ESA, the groundwater sampling results are compared with MCLs for several volatile aromatics including ethyl benzene and total xylenes. However, the draft ESA incorrectly identifies the MCLs for ethyl benzene as 2 micrograms per liter (μ g/L) and total xylenes as 5 μ g/L. In fact, the MCL for ethyl benzene is 700 μ g/L and the MCL for total xylenes 10,000 μ g/L. As set forth in the embedded Table B below, the sampling results for both of these parameters are <u>under</u> the MCLs.

In addition, the results for polyaromatic hydrocarbons follows in the third paragraph in Section E., noting the only parameter detected in this chemical group to be naphthalene. The paragraph incorrectly states that the MCL for naphthalene is 10 μ g/L. In fact, there is no MCL for naphthalene.

Table B: Groundwater Results Compared to MCLs

Chemical	MW-1	MW-2	MW-3	MW-4	MCL
Benzene	1U	1U	1U	1U	5
Ethylbenzene	1U	1U	1U	1U	700
Toluene	1U	1U	15	1U	1,000
Total Xylenes	2U	2U	142	2U	10,000
Naphthalene	13	10U	85	NA	NV
1-Methylnaphthalene	18	10U	100	NA	NV
2-Methylnaphthalene	18	10U	76	NA	NV

All units are μg/L. NA = not analyzed.

NV = no value for MCL promulgated.

The final paragraph in Section E. of the 1993 draft ESA describes the results of metals analysis of the groundwater samples, and provides an embedded table of results in comparison to MCLs. Note that the MCLs shown in the embedded table are not consistent with current MCL values. Current MCL values would show results that exceed MCLs for chromium in temporary well MW-4 (result of 0.105 milligrams per liter (mg/L) vs. MCL of 0.10 mg/L), and lead in temporary wells MW-1, MW-3 and MW-4 (maximum detect of 0.587 vs. MCL of 0.015). More discussion of the metals results follows below.

Additional Matter: Metals Results for Temporary Wells Are Likely Biased High

Although the metals results appear to indicate a potential issue, the sampling methods utilized by SEAI, which are described in Section VI.A. of the 1993 draft ESA, were not consistent with the industry standards and EPA Region 4 standard operating procedures. For example, the document describes that the temporary wells were installed by means of a hand auger with no mention of well development having been

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performed. It would appear the only "development" that occurred was to purge the well "using a pneumatic pump for five to ten minutes, until total evacuation had occurred at least once." There is also no mention of turbidity measurement during this well purging procedure, and it is likely that the amount of soil particulate matter in the well water was elevated owing to the well installation method, lack of development, and the sampling method used. Bailers were used to obtain the groundwater sample from the well and this method is prone to agitating soil particles within the well that are then captured in the bailed water. Naturally-occurring metals associated with soil particulates become dissolved in the groundwater sample when nitric acid is added to the sample container for field preservation. Slight amounts of soil particulates in the sample jar will skew high the metals results for the groundwater sample.

Additional Matter: Soil Samples with Volatile Aromatic Detections in the Draft ESA Were Obtained From Near/At the Water Table

In the conference call with EPA on March 28, 2011, EPA expressed some concern that the TRPH concentrations from the 1993 draft ESA potentially indicate a non-aqueous phase liquid ("NAPL") hydrocarbon associated with past product storage in aboveground storage tanks. The TRPH concentrations in the four soil borings reported in the draft ESA were from samples collected approximately 6 inches above the water table, and results ranged from non-detect (borings SB-1, -2) to 384 mg/kg (SB-4) to 9,615 mg/kg (SB-3). This depth is within the zone of seasonable water table fluctuation and, as EPA has agreed in the OU3 human health baseline risk assessment for the LCP site, is beyond the depth of consideration for direct human exposure.

The question is whether the more elevated TRPH concentrations are indicative of a NAPL being present. The term 'residual saturation' is used to describe a concentration threshold at which NAPL is present in the soil – concentrations above the residual saturation level indicate the NAPL is mobile and would flow into a well. The *Final TPH Action Level Derivation Report*, *Johnston Atoll*¹ presents a range between 13,074 to 22,560 mg/kg as being indicative of the Free Product Mobility Limit (i.e., the residual NAPL concentration). It is also noteworthy that this report presented even higher threshold concentrations for risk-based exposures (e.g., soil-to-groundwater leaching; direct contact), which provides some perspective on the seemingly "high" concentration of TRPH reported for boring SB-3 in the 1993 draft ESA.

¹ United States Air Force 15th Airlift Wing, Environmental Restoration Program. January 21, 2004. Final TPH Action Level Derivation Report, Johnston Atoll.

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Results of Site Characterization Work in the Former Drive-In Theater Area Conducted by Honeywell

Since the time that the limited number of soil and groundwater samples were collected by SEAI as part of the 1993 draft ESA, Honeywell conducted extensive soil and groundwater sampling across Quadrant 1, including the former drive-in theater parcel, as part of the remedial investigation ("RI") site characterization. These data provide additional context to the results presented in the 1993 draft ESA.

Petroleum Hydrocarbon Indicator Constituent Concentrations in Groundwater

Groundwater sampling conducted as part of the RI site characterization included one monitoring well cluster (MW-314) and one geoprobe location (10 GP) within the former drive-in theater parcel, and seven additional locations in the remainder of Quadrant 1 to the south of the former theater, consisting of three well clusters (MW-106, -107 and -108) and four geoprobe/temporary well locations (001-TW, 011-TW, SP-217A to -217C, and SP-223 A to -223B). None of these monitoring wells have ever exhibited results exceeding MCLs for any parameter.

Figures 1 through 5 enclosed with this letter illustrate the maximum groundwater concentrations of benzene, ethylbenzene, toluene, xylene, naphthalene, and benzo(a)pyrene detected in samples collected between 1995 and 2009. Each figure shows the concentration range for a single constituent broken into intervals based on an automated geometric scaling procedure. This format is useful in evaluating the TRPH measurements from the 1993 draft ESA in the former theater area to specific chemical constituent indicators of petroleum hydrocarbon product across the site as a whole. Note from Figures 1-5 that all of the indicator constituents show a similar pattern of distribution, with low to non-detect concentrations across the majority of the eastern portion of the site (i.e., Quadrants 1 and 2) and higher concentrations across the western portion of the site (where hydrocarbon products have been observed and factored in to the upland removal action work).

Closing

In conclusion, the 1993 draft ESA does not present credible evidence of contamination in the former drive-in theater parcel. The larger body of work from the more recent RI site characterization further corroborates the lack of contamination across the northeast portion of the LCP site, including the former drive-in theater area.

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Once you have had the opportunity to review our comments we would like to schedule a telephone call or a meeting to discuss closure of this matter.

Sincerely,

Kirk Kessler, P.G.

Principal

Environmental Planning Specialists, Inc.

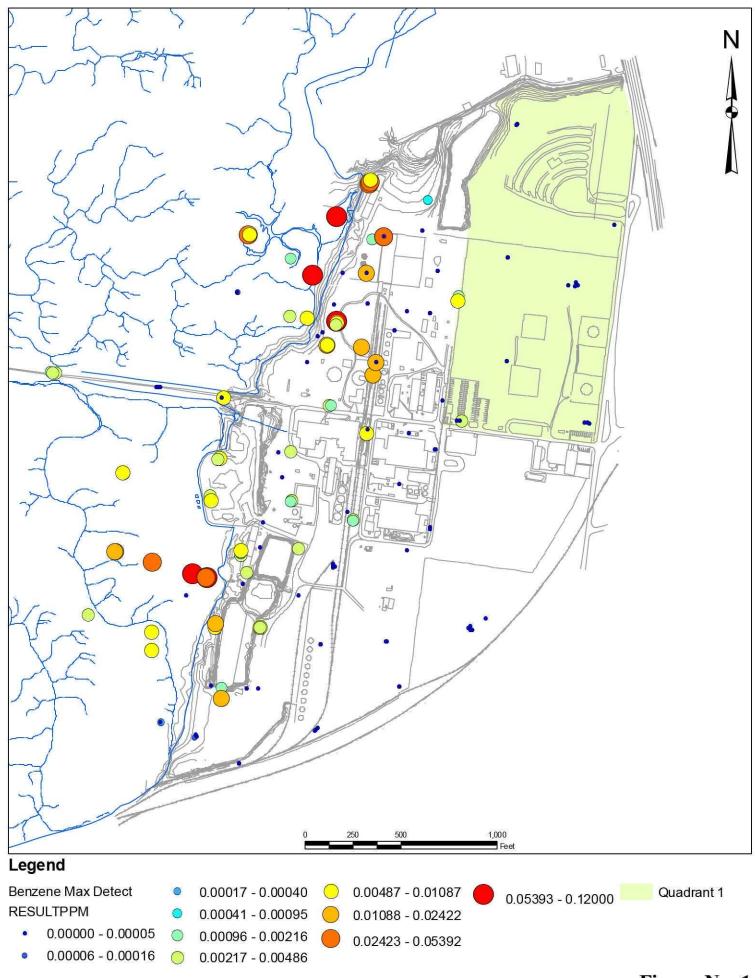
Enclosures

cc: Jim McNamara, GaEPD

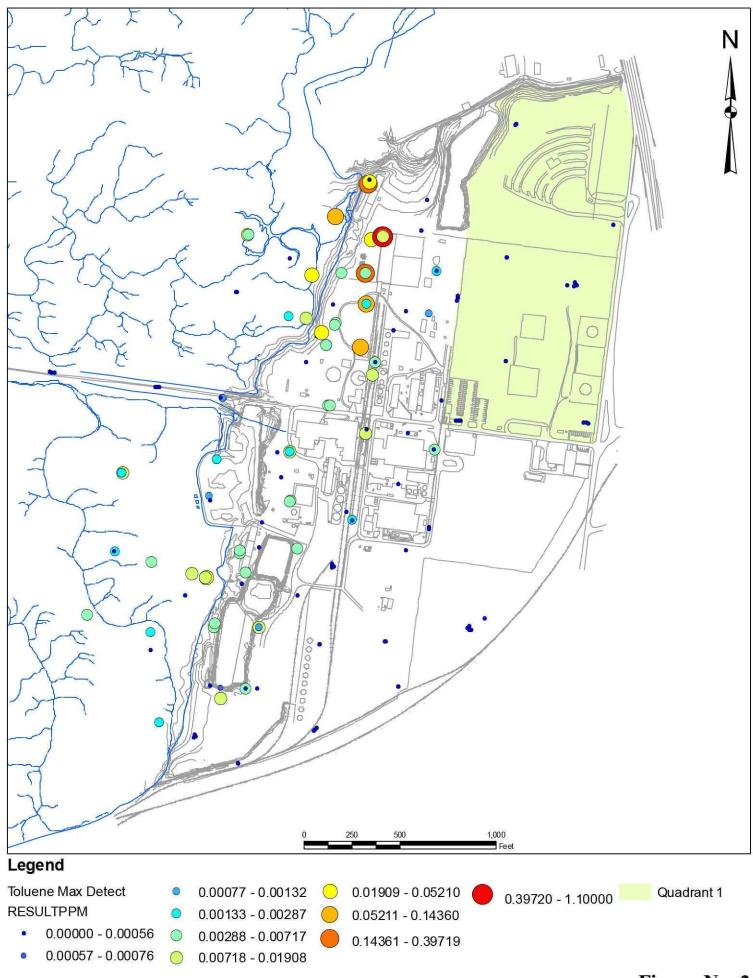
Prashant Gupta, Honeywell

ENCLOSURES

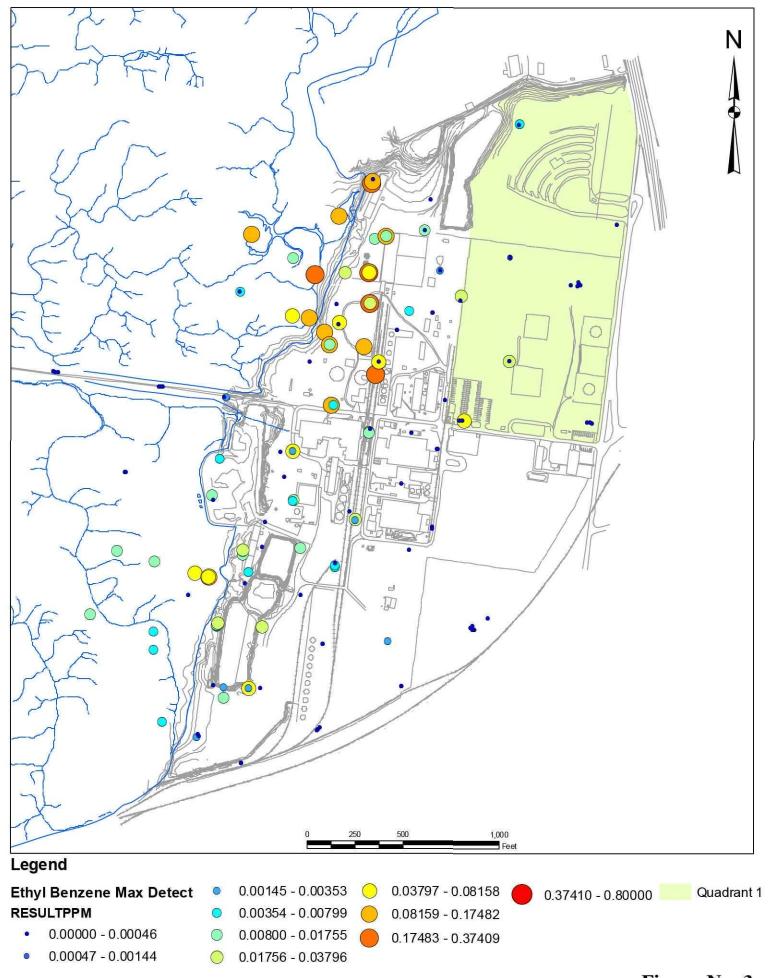
Maximum Detections of Benzene in Groundwater Since 1995



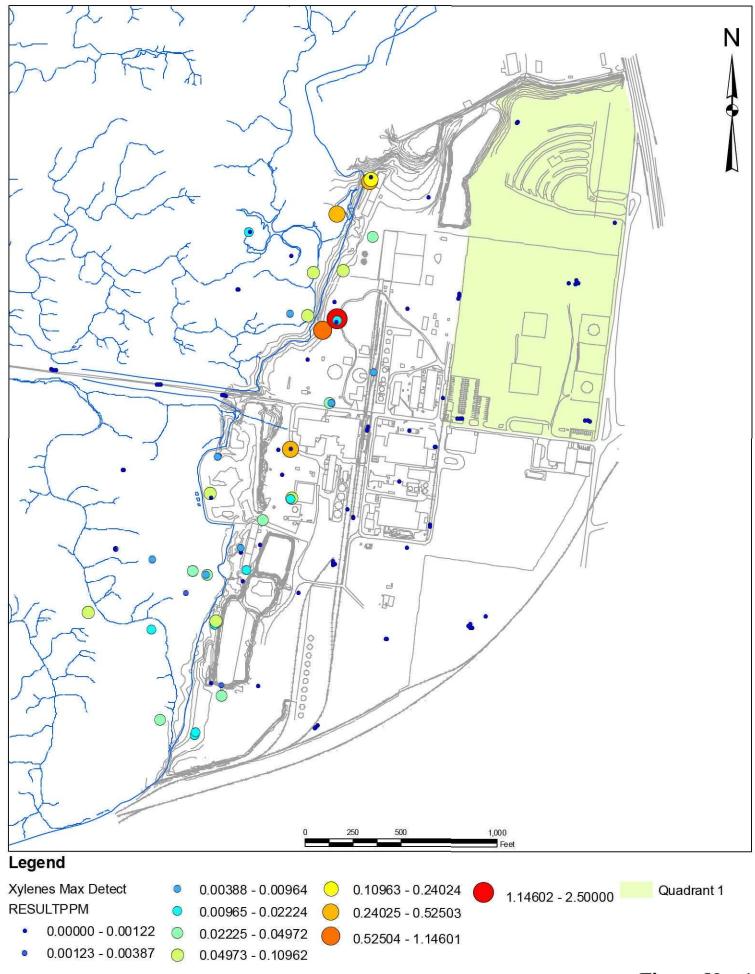
Maximum Detections of Toluene in Groundwater Since 1995



Maximum Detections of Ethyl Benzene in Groundwater Since 1995



Maximum Detections of Xylenes in Groundwater Since 1995



Maximum Detections of Naphthalene in Groundwater Since 1995

