



GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS

140 BROADWAY
 PROVIDENCE, RHODE ISLAND 02903
 (401) 421-4140
 FAX (401) 751-8613

LETTER OF TRANSMITTAL

DATE:	August 18, 2005	JOB NO.:	32795.09
ATTENTION:	Ms. Jill Eastman		
RE:	Charbert Facility		
	Alton, Rhode Island		

TO: Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

WE ARE SENDING YOU

- Shop Drawings
- Copy of Letter

- Reports
- Prints
- Change Order

- Under Separate cover via _____
- Plans Samples Specifications
- Other _____

HOW SHIPPED

- Overnight
- Courier
- Regular Mail
- Hand Delivered

COPIES	DATE	NO.	DESCRIPTION
1			Revisions to the text of the Site Investigation Report (SIR)
1			Revisions to boring logs
1			Revisions to Tables 5, 13 and 17
1			Notes for Times Series Plots
1			Figure A
1			Figures 1-15
			Response to RIDEM's Comments dated July 25, 2005

THESE ARE TRANSMITTED as checked below:

- For approval
- For your use
- As requested
- For review and comment
- FOR BIDS DUE _____ # _____
- Approved as submitted
- Approved as noted
- Returned for corrections
- Resubmit _____ copies for approval
- Submit _____ copies for distribution
- Return _____ corrected prints
- PRINTS RETURNED AFTER LOAN TO US

REMARKS:

cc: Cynthia Gianfrancesco, RIDEM-OWM
Mary Morgan, Richmond Town Hall
Clark, Memorial Library - Charbert Repository

Signed Edward Summerly

RECEIVED
 D.E.M./O.W.M.
 2005 AUG 19 A 9:30

GZA
GeoEnvironmental, Inc.

Engineers and
Scientists

August 18, 2005
File No. 32795.09



Ms. Jill Eastman
Office of Waste Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

Re: Charbert, Division of NFA
Phase II Site Investigation
Prepared by GZA dated 2 June 2005

140 Broadway
Providence
Rhode Island 02903
401-421-4140
FAX 401-751-8613
www.gza.net

Dear Ms. Eastman;

GZA GeoEnvironmental, Inc. (GZA) is pleased to provide responses to the comments dated July 25, 2005 provided by the Rhode Island Department of Environmental Management (RIDEM) regarding to the Phase II Site Investigation Report (SIR) submitted on June 2, 2005 for the above-referenced Site. To support your review, this letter presents the RIDEM's comment followed by our response.

GENERAL COMMENTS:

RIDEM'S Comment No. 1

As stated in the Consent Agreement Section 4 (u): Within thirty (30) days following RIDEM approval of the SIR, the Respondent shall submit a proposal to RIDEM that includes a bedrock aquifer investigation that characterizes any contaminants present in the bedrock aquifer that are related to the site that is based on the findings and results of the SIR. The proposal must include a schedule for completion of the work. Interim steps, including potential remedial actions proposed in the SIR, may be conducted prior to completion of the bedrock aquifer investigation; however, these steps must be consistent with the likely final site remedy and not preclude or impede future actions that may be required pursuant to the bedrock aquifer investigation. DEM shall only issue a final remedial action approval for the entire site after satisfactory completion of the bedrock aquifer investigation.

Upon satisfactory response to these comments and responses to public comments for the SIR, the RIDEM will issue an Interim Remedial Decision Letter for the Phase II SIR, at which time the 30-day clock will start for the bedrock investigation.



GZA's Response to Comment No. 1

Agreed, Charbert will abide by the terms of the Consent Agreement. As discussed at our meeting of July 27, 2005, we believe a stepwise approach to the bedrock evaluation will provide a technically sound and cost effective investigation of bedrock groundwater quality. This would include review of available bedrock information, supplemented with a surficial geophysical evaluation of the Site to select appropriate drilling location to investigate the bedrock aquifer at points of highest potential impact. Following our selection of drilling location we will provide RIDEM with a map showing the proposed drilling locations and a technical memorandum describing our rationale for the selection of each.

RIDEM'S Comment No. 2

As previously stated in the GZA Proposed Scope of Work (SOW)-Revised dated 22 December 2004 (Page 2, ¶1) The SOW indicates that at the conclusion of the SIR, Charbert will have enough information to establish the presence and extent of remedial objective exceedances in soil in the source areas (i.e. former Underground Storage Tank areas and spill areas etc...). Thorough delineation of the horizontal and vertical extent of soil and sediment contamination in these areas must be completed as part of the SIR or Remedial Action Work Plan (RAWP). In addition, please clarify on Figure 3 what the shaded areas are and that they are approximate.

GZA's Response to Comment No. 2

Regarding delineation of soil and sediment contamination, please refer to our Responses to Comments #4 and #13 for the additional work proposed to complete delineation of areas of concern. As discussed at our meeting of July 27, any further refinement of potential source areas will be conducted as part of a Limited Design Investigation during the remedial design phase of investigation.

The areas of environmental concern and the soil stockpiles were each individually labeled on Figure 2 and Figure 3. As requested, we have also incorporated these shaded areas into the legends.

RIDEM'S Comment No. 3

Nomenclature for Tables, Figures, boring logs do not match. Please be consistent.



GZA's Response to Comment No. 3

Agreed, the nomenclature on the boring logs for GZ-1 through GZ-4A have been changed and are attached. Table 3 has also been modified with a notes column to assist with identifying previously installed wells that have several designations (i.e., UIC MW-1/RIZ-10).

RIDEM'S Comment No. 4

Because source sampling revealed contamination near lagoon 5/old lagoon, specifically a combination of high levels of Total Petroleum Hydrocarbon (TPH) and perchloroethene (PCE), more testing will be necessary to fully characterize this area. As stated in GZA Responses to RIDEM 's Comments from the SIWP dated 22 December 2004, more testing can be done prior to or can be incorporated into the remedial design investigation.

GZA's Response to Comment No. 4

As discussed and agreed at our July 27th meeting, GZA will collect two surface water samples and two sediment samples from the former lagoon for laboratory analysis. The approximate sampling locations are shown on Figure A, attached. To fully characterize the samples, the laboratory analysis will be consistent with the Phase II Work Plan (December 22, 2004) and include testing for VOCs, SVOCs, Priority Pollutant 13 metals, PCBs, pesticides, and TPH/fingerprint.

Our geoprobe analysis in conjunction with previous data identified all but the western extent of contamination. To better identify the western boundary of contaminants, we propose two-hand auger borings with soil sampling between existing explorations GZ-7 and GP-33, as shown on Figure A, attached. Analysis will be consistent with the above mentioned Phase II Work Plan and consist of VOCs, PAHs and TPH/fingerprint; the only constituents identified in soil and groundwater from this area of the site.

RIDEM'S Comment No. 5

Table 17- The notes for this table state that yellow and bolded results are above the Method Detection Limit (MDL). It appears that the results that exceed the 'Standard (PALs)' (Preventative Action Limits) are yellow and bold. If this is the case, please clarify and also add a highlight for the barium results from the pump house.



GZA's Response to Comment No. 5

The note for Table 17 has been revised and the table attached. The PAL for Barium is 1,000 ppb and the highest detected level from pump house samples is 320 ppb. The text of the report has been revised to reflect the changes in the table.

RIDEM'S Comment No. 6

Figure 2- There is no reference in the legend for the yellow shading. Please add this to legend.

GZA's Response to Comment No. 6

See response to General Comment 2.

RIDEM'S Comment No. 7

Figures 4 & 5- Please provide legends in both figures.

GZA's Response to Comment No. 7

Each strata on the cross-sections was individually labeled. However, as requested, legends describing each of the labeled shaded areas have been added to Figures 4 and 5.

RIDEM'S Comment No. 8

Figures 10-15- Please provide sample dates for the results reported on these figures.

GZA's Response to Comment No. 8

Dates have been added to each of the above referenced figures in the form of a general note on each figure as discussed at our meeting.

RIDEM'S Comment No. 9

Figure 10- Please provide additional information in the legend for oil line and existing sewer force main.

GZA's Response to Comment No. 9

Agreed, the oil line, force main and old leach field have been added to Figures 10 to 15.



RIDEM'S Comment No. 10

Figure 11- Two data points for CB-1 are shown on this figure. One of them is pointing to GP-24. Please clarify. In addition, PALs for chromium for CB-1 were left blank.

GZA's Response to Comment No. 10

One of the data tables for CB-1 (that with no PAL for chromium) has been removed from the figure and the arrows adjusted.

RIDEM'S Comment No. 11

Appendix E-Time Series Plots- Please note that the legends do not correlate with the graph. Some detects are bold (orange not black) and some detects are incorrectly marked ND. Please revise accordingly.

GZA's Response to Comment No. 11

A notes sheet for the times series plots has been created and is attached. For those results that are non-detects, the method detection limit was utilized. The method detection limits varied with time, and at times exceeded previous detected values, thus making some data appear erroneous. All values were checked against Table 17 and are correct as shown. The detects all appear in orange, not black as the legend states. The program does not allow editing of these colors.

Address the following Specific Comments regarding the SIR:

RIDEM'S Comment No. 12

Section 2.6.1- Wastewater Disposal System, Page 5- Information regarding the discharge of groundwater at 1800 gallons (gal) per minute from two pumps compared to the 250,000 gal of groundwater per day total doesn't add up. 180 gal per minute would be closer to 250,000 gal per day. Please verify these numbers.

GZA's Response to Comment No. 12

Each pump in the wet well is capable of pumping 325 to 375 gallons per minute (gpm), depending on the water level in the receiving lagoon. According to Charbert personnel the combined maximum pumping rate is approximately 450 gpm; however, the pumps are rated at 900 gpm with no head loss. Under normal operation the pumps do not run constantly or simultaneously, they are set on a start/stop float switch and rotate in usage. Note, at the present time only one pump is operational. The text of the report will be expanded to include this information.

RIDEM'S Comment No. 13



Section 2.80-Sanitary Sewer System, Page 9- This section does not clarify whether the 'colored water' was similar to the purple tinted water found in previous groundwater samples collected from RIZ-14. If they were similar, please provide information on RIZ-14 and potential impact from the lagoons or both the lagoons and the failed Individual Sewage and Disposal System (ISDS). This section states that tinted water originated from the dye room. Please provide information regarding reporting this incident to either the Underground Injection Control (UIC) or ISDS departments.

Complete an investigation of this potential source area (former leach field and associated piping) to determine if groundwater contamination is coming from the lagoons/process water or the leach field and/or its associated piping.

GZA's Response to Comment No. 13

Charbert personnel are continuing to evaluate the source of the colored water. Once the source has been determined, it will be rerouted to the waste water handling system and RIDEM will be notified. Regarding prior notifications, the only notification given was to the Office of Waste Management via the Site Investigation report.

Note, however, that the former leaching field had not failed (i.e., septage waste visible at ground surface), but had deteriorated to the point that maintenance of the beds was needed. As you will recall Charbert elected to relocate the leaching field to provide additional distance between the ISDS and the adjacent residents.

An investigation of the old leach field and associated piping will be conducted by GZA. The three old galleys will be opened and a soil sample will be removed from beneath the leach field material in each. The samples will be characterized by the following laboratory analysis:

Semi-volatiles via 8270 with TICs
Volatiles via 8260
TPH/Fingerprint via 8100
PP-13 Metals

The results will be compared to the results for stockpiled soils from prior lagoon scraping activities that were extensively characterized. Our rationale in selecting this avenue of evaluation is that the soils in the leach field are above the groundwater table, and therefore should not contain constituents similar to the soil stockpiles, unless process waste water has been released to them.



If this investigation provides evidence of industrial waste water discharge to the old ISDS system we will evaluate the need to conduct a visual inspection of the associated piping between the facility and the leaching field using a pipe inspection camera.

RIDEM'S Comment No. 14

Section 2.80-Sanitary Sewer System, Page 9- In addition to ISDS and OCI, please notify OWM when the floor drains are no longer discharging to the sanitary sewer system and the new sanitary sewer system is on-line.

GZA's Response to Comment No. 14

The new system has been operating since early May. As noted in Comment Response #13, the plant personnel are trying to identify the source of industrial wastewater flow to the ISDS. When the source is located and eliminated Charbert will formerly notify OWM, OCI and UIC.

RIDEM'S Comment No. 15

Section 2.11.1-Underground Storage Tanks, Page 11- Due to the fact that no confirmatory soil samples were collected during the removal of the waste oil tank, please be advised that further investigation of this area is necessary.

GZA's Response to Comment No. 15

Test results from groundwater and soil in this area (i.e., GZ-6, RIZ-3, CB-4 and CB-9) do not suggest the presence of a significant petroleum release from these two tanks. The tank graves are currently covered by a concrete waste oil storage bunker (labeled as "Southwest Bunker Oil Storage Area"). We feel it is not prudent to compromise the integrity of the bunkered area. We will revise Section 2.11.1 to reflect this information.

RIDEM'S Comment No. 16

Section 3.3-Public Water Supplies, Page 15- Please specify which Wellhead Protection Area (WPHA) the site is located in.

GZA's Response to Comment No. 16

Further research shows the well head protection area is # 1858431, which is for the on-site potable water well at the Charbert facility. Prior to 1988, this well also supplied water to the village of Alton. The well currently supplies only the facility. Section 3.30 has been revised accordingly.



RIDEM'S Comment No. 17

Section 3.40 Groundwater Classification/Quality, Page 15- RIDEM no longer uses GA-NA classification per the revised Rules and Regulations for Groundwater Quality March 2005. The lower portion of the site is now classified as GA.

GZA's Response to Comment No. 17

The revisions to the groundwater regulations were pending at the time this section of the report was prepared. Section 3.40 and Figure 1 have been revised to show that the groundwater is classified as GA for the lower portion of the property not GA/NA.

RIDEM'S Comment No. 18

Section 4.40-Soil Sampling, Page 18 and Table 5- This section states that sample selection was based upon screening results, visual and olfactory evidence. Table 5 shows that soil samples were collected from sections of soil borings that either did not exhibit the highest Flame Ionization Detector (FID) reading, or in some cases had the lowest reading or not detected (ND). Please clarify how the field screening and subsequent sample selections were conducted and provide rationale as to the criteria used to select soil samples.

Furthermore, please verify that well screens were placed in the areas of highest possible contamination according to the field screening results, and if they were not, please provide an explanation for the selected placement.

GZA's Response to Comment No. 18

Samples were collected for laboratory analysis based on several criteria: field screening results, visual and olfactory evidence and/or volume of sample obtained. Based on our goal of characterizing and delineating source areas, we preferentially analyzed soil samples collected from above the groundwater surface as estimated on the date of exploration. The evaluation of analytical results from soil samples collected below the water table is complicated because it is not possible to determine the relative contribution of soil and groundwater contamination in the results. For deep aquifer wells the samples from the bottom of the exploration, believed to be a confining layer of glacial till, were generally analyzed regardless of their screening levels to assess the possible presence of pooled DNAPL. The volume of sample available was also a factor in selecting samples for analysis. The full characterization required three 8-ounce driller's jars and a methanol preserved VOA vile. This was not always available from one sample zone.



The field screening for most GZA explorations was performed during cold weather in January of 2005. As such, the samples had to be warmed in a running vehicle before they could be field screened. Samples were not necessarily field screened in order of depth, causing field screening results for well GP-20 to be transposed in Table 5, this has been corrected and a revised Table is attached. Approximate groundwater depths and screen placement depths have also been added to Table 5 to help clarify our sample selection rational. As shown on the revised table, samples from above the groundwater surface with sufficient sample volume, and the highest PID readings were selected for laboratory testing. As discussed in Section 6.21 of the SIR, the PID readings were more consistent and the PID performed more reliably than the FID. We also believe the FID was detecting methane below the groundwater table.

Soil samples from the area of the former dry cleaning operation (i.e., GZ-8, GP-27A, GP-27B and GP-31) were also screened with a black light. No fluoresce (indicating the potential presence of DNAPL) was observed in any of the samples.

As for well screen placement, in accordance with the SIWP, 10-foot well screens were set just above the confining glacial till layer at the bottom of the explorations for the eight deep aquifer wells (GZ-1, GZ-2, GZ-3, GZ-4A, GZ-5, GZ-6, GZ-7 and GZ-8). The bottom of the deep borcholes was judged to be the most appropriate place to look for evidence of DNALP contamination.

Also in accordance with the SWIP, shallow aquifer wells received 10-foot well screens spanning the upper surface of the water table. The top of the groundwater surface would be the likely location of petroleum and LNALP contamination. To ensure the screens would span the upper water table during seasonal high water and still contain enough groundwater volume to sample during low water, some shallow wells in the facility area received 12 to 13-foot screens. Each screen is placed to span the area of highest observed field screening readings within proximity to the groundwater table.

The three new interior wells were set to span the majority of the groundwater column at various depths. Well GP-27A is screened from approximately 10 to 20-feet below the factory floor, well GP-27B is screened from approximately 24 to 34-feet below the factory floor, and well GZ-8 is screened from approximately 42 to 52-feet below the factory floor. (See boring logs and Figure 3, Exploration Location Plan).

RIDEM'S Comment No. 19

Section 5.10-Site Geology, Page 22- Please be more specific regarding GZA 'geologic mapping and other work in the area' (i.e., how it relates to the site, confirm information with on-site borings).



GZA's Response to Comment No. 19

This statement refers to exploratory work conducted by GZA at the former Carroll Products facility site located approximately 1.7 miles to the east of the Charbert facility. These findings are document in a report entitled "Phase 2 Interim Data Report – Carroll Products Facility, Wood River Junction, Rhode Island" dated April 1994 that was previously submitted to RIDEM. The text has been revised to include this reference.

RIDEM'S Comment No. 20

Section 5.4.1- Groundwater Elevations and Fluctuations, Page 26- This section refers to 8 deep aquifer wells. RIDEM is unable to determine which wells are being referenced since only 4 were installed in July 2004. Please clarify.

GZA's Response to Comment No. 20

There are 8 deep explorations designated GZ-1 through GZ-8. Four (GZ-1, GZ-2, GZ-3 and GZ-4A) were installed during our first exploratory program conducted in the summer of 2004 and an additional four (GZ-5, GZ-6, GZ-7 and GZ-8) were installed in January and February of 2005. All explorations are described in Section 4.20 of the SIR.

RIDEM'S Comment No. 21

Section 6.10-Analytical Testing, Page 32- Due to the fact that the site does not currently have an Environmental Land Use Restriction on it, the RIDEM Residential Direct Exposure Criteria must be cited here and throughout the report.

GZA's Response to Comment No. 21

As discussed at the July 27, 2005 meeting with RIDEM, Charbert will be pursuing the implementation of the ELUR as opposed to revising the report.

RIDEM'S Comment No. 22

Section 6.21- Subsurface Soils, Page 33- Please see comment #18.

GZA's Response to Comment No. 22

Please see Response to Comment 18.



RIDEM'S Comment No. 23

Section 6.21.1-VOCs in Subsurface Soils, Page 34- Please be advised that due to the selection of the depth of the samples collected for analysis vs. the soil depth of possible contamination via field screening detections, RIDEM is reluctant to concur with any conclusions as to where contamination exists without at least a further explanation. In several occasions, it appears that samples were not collected from the appropriate depth to make a sound conclusion. (See comment #18)

GZA's Response to Comment No. 23

Please see responses to Comments 4, 13, 18.

RIDEM'S Comment No. 24

Section 6.33- VOCs in Groundwater, Page 40, ¶1- RIDEM strongly disagrees with the statement: "*The combined evaluation of the soil and groundwater results provide no indication that dense non-aqueous phase liquids (DNAPLs) are present or have migrated to a significant depth within the aquifer*". The term 'significant depth' is ambiguous. 3 of the 4 deep wells had VOCs detected in samples taken from the deepest section of the well. RIDEM believes the conclusions should be revised to state that bedrock information is lacking at this time and contamination at depths greater than the 'deep wells' is still unknown.

GZA's Response to Comment No. 24

In accordance with the SIWP, GZA performed two monthly rounds of groundwater monitoring with an oil/water interface probe to screen all wells for the presence of floating (LNAPL) or sinking (DNAPL) non-aqueous phase liquids (March 4, 2005 and April 5, 2005). A light sheen was detected on three wells during the March round, (RIZ-3, GZ-6 and RIZ 18) but no evidence of DNAPL was detected. No sheen or DNAPL was detected in any well during the April round.

Soil samples taken from the bottom of each deep well (with the exception of GZ-5 and GZ-8 which did not yield good bottom sample recoveries). These samples were screened with a PID, a FID and a black light for the presence of elevated VOC concentrations and/or DNAPL and none was detected. An aliquot of each of these samples was then submitted to the laboratory for analysis including VOCs and again no evidence of the presence of DNAPL was detected. Although no bottom soil samples were collected from wells GZ-5 and GZ-8, it should be noted that neither of the monitoring wells installed in these boreholes had any GA Ground Water Objective exceedances or PAL exceedances.



EPA in their guidance entitled "Estimating Potential for Occurrence of DNAPL at Superfund Sites" provides a frame work for evaluating the likelihood of DNAPL in an aquifer. This guidance indicates that: 1) if soil samples and groundwater samples from borings and wells placed within or immediately downgradient of potential source areas (i.e., wells GZ-6, GZ-7/GP-26 and GZ-8/GP-27A and GP-27B) exceed 10,000 mg/kg for soils or 1% of solubility for water; or concentrations of DNAPL-related chemicals (i.e., PCE, TCE, cis-1,2-DCE or vinyl chloride) in groundwater increase with depth the presence of DNAPL is likely. As shown on Figure 10, the maximum concentrations of DNAPL-related chemicals in soils within suspected source areas is 230 mg/kg (GZ-8, 7 to 7.5 feet below ground surface).

The aqueous solubility of PCE is approximately 150 mg/l¹, the solubility of TCE is 1,100 mg/l¹, of cis-1,2-DCE is 3,500 mg/l² and vinyl chloride is 2,670 mg/l². While EPA's 1% guidance is based on effective solubility which can't be calculated here because no DNAPL has been recovered, the observed site concentrations are all less than 1% of solubility and are generally less than 0.1% of solubility as shown on Figure 11. Additionally, clusters wells installed with the shallow and deep soil aquifer show significant decreases in contaminant concentrations with depth rather than increasing concentrations.

We believe that analysis of the results of site data collected to date supports our conclusion. However, we have modified the text to define "significant depth" as relating to the soils aquifer overlying bedrock. Charbert has agreed to conduct an evaluation of water quality within the bedrock aquifer, and as note in our response to Comment #1 stands by this commitment.

RIDEM'S Comment No. 25

Section 6.33.1-VOC Distribution in Groundwater, Page 41- In addition to the secondary release to lagoons from contaminants that have been drawn into the process water supply well hypothesis for the fourth potential source, the failed ISDS galleys and associated piping are also a potential source. If the ISDS was shown on the isopleth maps it would show the system running right through the contaminated groundwater area. Per comment #13, the ISDS galleys and associated piping must be further investigated.

GZA's Response to Comment No. 25

Agreed, see our response to Comment 13.

¹ Handbook of Environmental Data on Organic Chemicals, Second Edition, Karel Verschuren 1983.
² CONCAWE, April 1979, Protection of Groundwater from Oil Pollution.



RIDEM'S Comment No. 26

Section 6.37-Water Quality Parameters, Page 43, ¶2- RIDEM does not have Maximum Contaminant Levels (MCL's) for drinking water. Please clarify that the Rhode Island Department of Health (RIDOH) regulates MCL's.

GZA's Response to Comment No. 26

So noted, Section 6.37 has been revised.

RIDEM'S Comment No. 27

Section 6.38-Residential Well Results, Page 45, ¶from previous page- Please clarify that the treated water referenced in this section meets EPA's drinking water standards for those compounds that have a standard. Not all compounds analyzed for have an EPA standard.

GZA's Response to Comment No. 27

Accepted, Section 6.37 has been revised to incorporate this statement.

RIDEM'S Comment No. 28

Section 6.39-Underground Injection Control (UIC) Program Testing, Page 45- Comments pertaining to the UIC permit and lagoons will be addressed directly by the RIDEM UIC program.

GZA's Response to Comment No. 28

So noted.

RIDEM'S Comment No. 29

Section 7.00-Summary and Conclusions, Page 51, 1st bullet- RIDEM does not agree that enough data exists to make this statement. The first bullet states that no DNAPL or LNAPL are present or have migrated to significant depth within the aquifer. The data indicates, however, that PCE and breakdown products to significant depths and may be impacting the bedrock aquifer. Please clarify or revise this statement accordingly.

GZA's Response to Comment No. 29

See response to Comment 24.



RIDEM'S Comment No. 30

Section 8.00 –Development of Remedial Alternatives, Page 51- RIDEM does agree that the sources of contamination have been generally delineated. As per the GZA response to RIDEM's comments on the Proposed Scope of Work Phase II Subsurface Investigation dated 22 December 2004: *If contaminant levels are found through laboratory testing, the issue will be addressed as part of the Remedial Action Plan phase project as a Limited Design Evaluation (LDE).* RIDEM expects further characterization of the contamination found near the "Former Lagoon" and Wood River to be part of the LDE.

GZA's Response to Comment No. 30

Refer to response to General comment 4.

RIDEM'S Comment No. 31

Section 8.00 –Development of Remedial Alternatives, Page 53, ¶4- If leaving soil contaminated with petroleum hydrocarbon is to be left on site, please be advised that it will probably require an appropriate engineered cap.

GZA's Response to Comment No. 31

So noted. If the selected remedy includes leaving soils with petroleum contamination at concentrations above the Method 1 Industrial/Commercial Direct Exposure Criteria and/or GA Leachability Criteria an appropriate engineered control will be put in place.

RIDEM'S Comment No. 32

Section 8.00 –Development of Remedial Alternatives, Page 55, E- Please be advised that RIDEM will require a minimum number of confirmatory laboratory analyzed soil samples in addition to Photoionization Detector (PID) screening.

GZA's Response to Comment No. 32

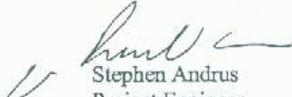
Accepted.

We trust that this information fulfills your present needs and look forward to discussing our responses. If you have any questions or comments please call Stephen Andrus or Edward Summerly at (401)-421-4140.



Very truly yours,

GZA GEOENVIRONMENTAL, INC.


Stephen Andrus
Project Engineer


John P. Hartley
Consultant/Reviewer


Edward A. Summerly, P.G.
Associate Principal

EAS:clz

cc: Cynthia Gianfrancesco, RIDEM-OWM
Mary Morgan, Richmond Town Hall
Clark, Memorial Library - Charbert Repository