

August 7, 2006
File No. 32795.11-C

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



Re: Old Lagoon 5 Sediments
Supplemental Site Investigation Report
Charbert, Division of NFA
Alton, Rhode Island

140 Broadway
Providence
Rhode Island
02903
401-421-4140
Fax: 401-751-8613
www.gza.com

Dear Ms. Taylor:

At RIDEM's request a site reconnaissance and meeting was held between RIDEM, Charbert and GZA personnel on May 24, 2006. The primary purpose of the visit was to discuss GZA's latest supplemental SIR submittal (April 28, 2006 **Additional Sediment Sampling Report**) which addressed the findings of the March 2006 Old Lagoon sediment sampling program. Additionally, we provided Ms. Taylor with an overview of facility operations and current site conditions and observed the progress being made on the geophysical investigations.

In our April 28 submission GZA had concluded: 1) the sediments were now adequately characterized; 2) that materials remaining to the west of the sluiceway was not contaminated by facility operations or contaminated materials had been removed during the 1978 closure activities; and 3) materials in the sluiceway and to the east of the sluiceway were contaminated with petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs) and metals from past usage as a waste-water disposal lagoon and/or petroleum releases at the facility and would require remediation.

Based on RIDEM's review of the April 28 submission two verbal comments were provided to GZA: 1) were materials excavated from the western portion of the former lagoon or covered with clean soil? And 2) if materials were excavated where were they disposed of?

Discussion with plant personnel, a review of documents available at the facility, and old Polaroid photos of the closing of Old Lagoon 5 revealed the following:

- After the infiltration lagoons were opened in the late 1970s, the pond now called Old Lagoon 5 was closed by Charbert personnel and contractors in response to a RIDEM request (copy attached).
- The lagoon was drained, pumped out, and the sediments were dredged with a bulldozer and a track mounted excavator (see Photographs 1 to 4).
- The sediments removed from the lagoon were then deposited on-site and buried, likely in the vicinity of the 2001/2004 soil stockpiles, located south

of the facility (see Photographs 5 and 6). Two sets of analytical results of the sediments were generated (copies attached). The results show there were no metals detected above current RIDEM quality soil criteria although the testing was limited to total and TCLP metals.



With this information it was concluded that the western portion of Old Lagoon 5 has been remediated by excavation not filling over of potentially contaminated sediments, and the sediment removed from the lagoon were buried on-site in the southern gravel pit area.

GZA will present a remediation alternative for the impacted "eastern channel" portion of Old Lagoon 5 in the forthcoming Remedial Action Work Plan (RAWP) for the site. Additionally, when the 2001/2004 soil stockpiles are moved from their current location, an effort will be made to locate the Old Lagoon 5 sediments through a test pit exploration program. If the sediments are located, several samples will be collected for a suite of analysis similar to the 2001/2004 soil stockpile analysis. This information will be evaluated with respect to relevant RIDEM soil quality standards and appropriate remedial action will be taken.

We believe this information addresses your final comments to the SIR and we look forward to receiving a *Program Letter*. If you have any questions or comments please call Stephen Andrus or Edward Summerly at (401)-421-4140.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'S. Andrus', written over a light blue horizontal line.

Stephen Andrus
Project Engineer

A handwritten signature in blue ink, appearing to read 'Igor Runge', written over a light blue horizontal line.

Igor Runge, P.H., Ph.D.
Project Reviewer

A handwritten signature in blue ink, appearing to read 'Edward A. Summerly', written over a light blue horizontal line.

Edward A. Summerly, P.G.
Associate Principal

EAS:mac

Attachments: 1987 and 1988 Correspondence
1987 Sediment Analytical results
Photos 1 thru 6

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

APR 29 1987



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management
DIVISION OF WATER RESOURCES
83 Park Street
Providence, R.I. 02903

April 27, 1987

CERTIFIED MAIL

Mr. Leo Spagnolo, Vice President
Charbert, Inc.
Alton Road
Alton, RI 02894

Dear Mr. Spagnolo:

On April 14, 1987, Jay Manning of the Permits Staff inspected your facility in response to a complaint that Charbert, Inc. was discharging dye wastes to the Wood River. Although no direct discharge was observed, it was discovered that a former dye waste lagoon was tainting the groundwater which flowed up through it, a dark shade of blue. Due to the high level of the river and water table, the lagoon was overflowing into the Wood River.

The Division of Water Resources believes that the muck at the floor of the lagoon is so steeped with dye waste that it poses a threat to the water quality of the Wood River and the groundwater at the site. The Division would like to have Charbert dredge out the lagoon according to the following schedule:

1. The water in the former waste lagoon shall be drawn down and pumped to any of Charbert's currently active waste lagoons.
2. The exposed muck shall be sampled for toxins using the EP Toxicity Test. The results shall be furnished to the Division of Water Resources before the lagoon is dredged and the Division will review the test results and grant approval before dredging.
3. Upon completion of the project, the Division of Water Resources shall be notified in writing. Charbert shall have until November 5, 1987 to complete this project.

Mr. Leo Spagnolo
April 27, 1987
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Due to the limited scope of this problem, the Division of Water Resources would prefer to avoid issuing a Notice of Violation and Fine and engaging in the lengthy legal process associated with such Notice. It is therefore suggested that Charbert consent to the terms of the above-mentioned schedule. If these terms are acceptable to Charbert, a letter of consent must be sent within 15 days of receipt of this letter.

If you have any questions, please feel free to contact Jay Manning at 277-3961.

Sincerely,



Michael Annarummo, Chief
Division of Water Resources
Department of Environmental Management

MA/kls



CHARBERT
INC.

August 19, 1988

Edward Szymanski, P.E. Chief
Division of Water Resources
Department of Environmental Management
83 Park Street
Providence, Rhode Island 02903

Dear Mr. Szymanski:

Please be advised that the project as requested by your division and referenced in your letter to Charbert, dated 19 January 1988, has been completed as required. The pond bed has been scraped and the soil from the bottom has been removed. Project completion date was 18 August 1988. We will now allow the pond to seek its own natural level.

If you have any questions, please feel free to contact me.

Sincerely yours,
CHARBERT, INC.



Robert Anderson Jr.
Technical Director

RA/ba

Certified Mail - Return Receipt Requested



T. H. Baylis Company
Chemicals For All Industries

P. O. Box 7271

67 Glenham Avenue, Warwick, Rhode Island 02886. 401-739-8110

October 20, 1987

Charbert, Inc.
Route 91
Alton, Rhode Island 02894

Attention: Robert Anderson

ANALYTICAL REPORT
POND SEDIMENT SAMPLE

Arsenic	less than 0.02 ppm
Barium	less than 0.02 ppm
Cadmium	less than 0.005 ppm
Chromium	less than 0.02 ppm
Copper	less than 0.02 ppm
Lead	less than 0.01 ppm
Mercury	less than 0.001 ppm
Selenium	less than 0.005 ppm
Silver	less than 0.01 ppm

Samples were composited from different sites on the surface. All analysis performed in accordance with "Test Methods for Evaluation of Solid Waste, Physical Chemical Methods" SW-846.

Very truly yours,

T. H. BAYLIS COMPANY

Kevin E. Donahue
Laboratory Director

KED/mal



J. H. Baylis Company
Chemicals For All Industries

P. O. Box 7271

61 Glenham Avenue, Warwick, Rhode Island 02886. 401-739-8110

November 25, 1987

Charbert Inc.
Church Street
Alton, RI 02894

ATTENTION: Bob Anderson

Analytical Report

Lagoon Sample

September

pH	6, 9
Arsenic	less than 0.02 ppm
Barium	0.17 ppm
Cadmium	less than 0.02 ppm
Chromium	0.14 ppm
Lead	less than 0.09 ppm
Copper	less than 0.03 ppm
Selenium	less than 0.005 ppm
Silver	less than 0.01 ppm
Mercury	less than 0.001 ppm

All metals expressed as "Total Metals."

All analysis performed in accordance with "Methods for Chemical Analysis Of Water and Wastes," EPA-600/4-79-020 (revised March, 1983).

Very truly yours,
T.H. Baylis Co.

Kevin E. Donahue
Laboratory Director



Name: Photo No. 1

Description: Removal of Sediments from Old Lagoon 5.



Name: Photo No. 2

Description: Removal of Sediments from Old Lagoon 5.



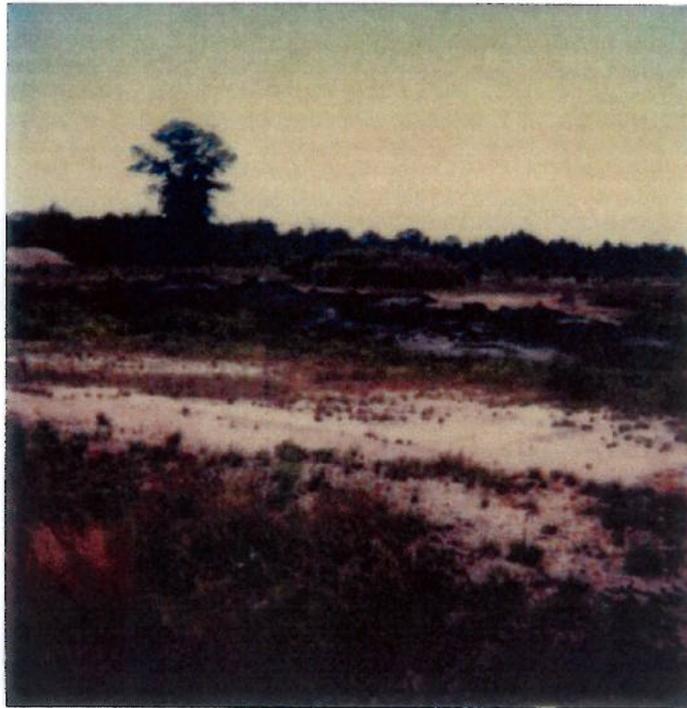
Name: Photo No. 3

Description: Dredge Soil Stockpile #1.



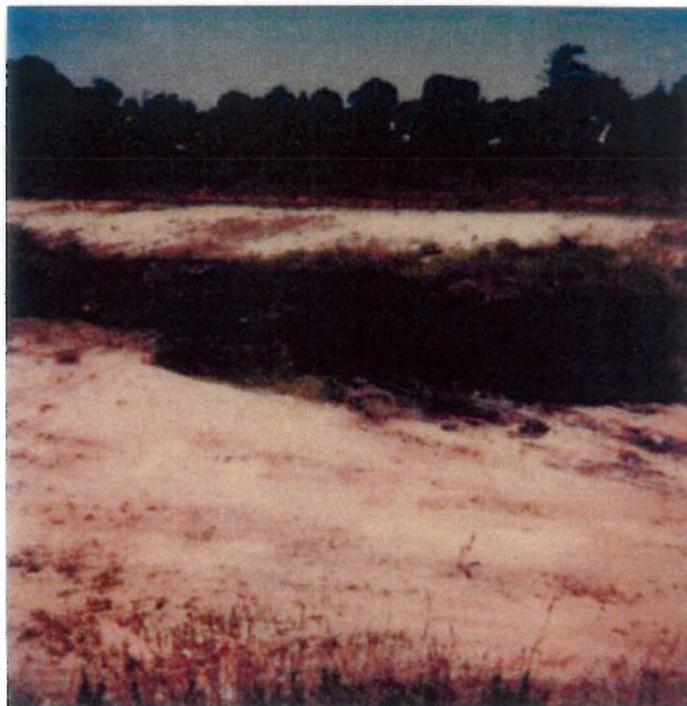
Name: Photo No. 4

Description: Removal of Sediments from Old Lagoon 5.



Name: Photo No. 5

Description: Removal of Sediments from Old Lagoon 5.



Name: Photo No. 6

Description: Dredge Soil Stockpile #2.