



CHARBERT

DIV. OF NFA CORP.

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September 29, 2005

Mr. David Chopy
Supervising Sanitary Engineer
Rhode Island Department of Environmental Management
Office of Compliance and Inspection
135 Promenade Street
Providence, Rhode Island 02908-5767



Re: Charbert, Division of NFA Corp.
Wastewater Alternatives Report

Dear Mr. Chopy:

This letter is a request for an extension for noticing a public meeting on Charbert's Wastewater Alternatives Report (the "Report") as required by the Section C(4)(e) of the Consent Agreement. As set forth below, Charbert believes that holding a public meeting on this Report at this time would be premature, given that Charbert is still actively evaluating the feasibility of two treatment options which, as detailed in the Report, involve evaluating data from an ongoing activated sludge treatment pilot plant study, an infiltration study and an aerated wastewater treatment ponds pilot plant.

Charbert believes that it will be able to determine in approximately six months whether data from its activated sludge pilot plant will prove that this option is viable, and that the public meeting would be more productive if held after Charbert has definitively completed this evaluation and is able to propose it as a viable treatment option. I have set forth in detail, below, the basis for Charbert's extension request along with a summary of the work Charbert has conducted thus far in assessing and selecting a disposal option, and then in evaluating the potential treatment options.

As you know, Charbert timely submitted its Wastewater Alternatives Report to RIDEM on September 6, 2005, as required by Section C(4)(d) of the Consent Agreement. In this Report, Charbert set forth its evaluation of several discharge options for its wastewater, and determined that discharging to rapid infiltration beds was its proposed alternative.

In general, the tasks required to complete an evaluation of the wastewater alternatives included the following:

- Collection of data on the chemical characteristics of the wastewater;
- Determination of the volume of water generated;
- Evaluation of treated wastewater disposal options; and
- Evaluation of the treatability of the process wastewater using appropriate treatment technologies.

As set forth in the Report, Charbert initiated these tasks in the spring of 2004, well before DEM's Notice of Violation and Charbert's agreement to include this work in the Consent Agreement settling that NOV. Charbert has monitored the chemical characteristics of the process wastewater for over a year and, similarly, has metered the volume of process wastewater for about a year. Charbert continues both of these tasks as part of its Pilot Plant evaluations.

As also detailed in the Report, Charbert evaluated the possible disposal options and proposes to discharge its wastewater into rapid infiltration basins. Charbert chose this disposal method because, for reasons set forth in the Report, including a series of meetings started in July 2004 with RIDEM, surface water disposal proved not to be a viable option. Charbert conducted several sampling and data analyses to evaluate this option, but concluded, after consultation with RIDEM, that a surface water discharge was not viable because data presented by RIDEM and water samples collected by Charbert indicated current surface water discharges to the Pawcatuck River already equaled 80% of the water quality standards for several parameters.

From July 19, 2005 to August 23, 2005, Charbert conducted and completed a 35-day duration hydraulic loading test in the area south of the existing lagoons. The data and test results from this study indicate that this area of the site is likely capable of accepting the volume of treated wastewater anticipated. The number, location and size of the recharge basins will be determined after further analysis of the data.

The selection of a potential disposal method for the treated wastewater was critical to interpreting any data from the pilot plants, and the quality of the treated wastewater quality is driven in part by the chosen method of disposal. Thus, after determining this method of disposal, Charbert was able to then evaluate potential treatment options.

As detailed in the Report, the evaluations of the treatment technologies started in the spring of this year after and have included Physical/Chemical Precipitation Technology, design, construction and operation of an Activated Sludge Treatment Plant, and the design of Aerated Wastewater Treatment Ponds. As concluded in the Report, the Physical/Chemical Precipitation Technology Pilot Plant determined that this technology alone could not provide an acceptable level of treatment.

Charbert then started the design, construction and operation of an Activated Sludge Treatment Pilot Plant. This pilot plant was on-site and operating on June 2, 2005, and has been running continuously. It is a common practice with activated sludge treatment plants to seed the plants with sludge from other plants several times as part of the acclimation process to achieve peak operating performance. The pilot plant has reduced the COD and BOD in the wastewater by about 70 and 80 percent, respectively. However, the pilot plant has failed to reach a degree of treatment typically achieved from activated sludge treatment plants.

Due to the time required for the acclimation process, Charbert decided on August 25, 2005 to start the process of design and construction of an Aerated Wastewater Treatment Ponds Pilot Plant, as described in the Report. Charbert decided to start this third pilot plant so that we can begin evaluating this technology now, rather than wait more time before it determines the sludge plant is not a viable option. In addition, the Aerated Wastewater Treatment Ponds require 30 days for the water to move through the aerated ponds, meaning this pilot plant will take longer than the activated sludge plant (which typically requires only a few days for water to move through) to provide the data necessary to evaluate its feasibility.

If the data from the Activated Sludge Treatment Pilot Plant indicates that this technology is feasible, Charbert will stop running the Aerated Wastewater Treatment Ponds Pilot Plant. Charbert expects that it will have enough data and be able to complete this evaluation in six months.

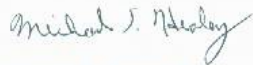
If the Activated Sludge Pilot Plant is not successful, then additional time will be needed to complete the Aerated Wastewater Treatment Ponds Pilot Study to reasonably assess its performance, effectiveness and feasibility. It is estimated that the Aerated Wastewater Treatment Ponds Pilot Plant would require a minimum of 6 to 8 months of operation because, as described above, since data is only provided after the 30 day time period it takes water to flow through the pilot plant, it would take 6 to 8 months of operation to obtain data from the 6 to 8 volume changes in the pilot plant. The components for the construction of the Aerated Wastewater Treatment Ponds Pilot Plant are due to arrive at Charbert this week, and it is expected that this third pilot plant would be in operation by the end of October 2005.

Notwithstanding the obstacles encountered to date, Charbert believes the Activated Sludge Treatment Plant may be the preferred treatment method because it has been used historically on textile facility waste streams and has the potential to produce an effluent with a quality suitable for recycling and thus resulting in a further decrease in its water consumption, and thus a decrease in effluent volume.

Charbert has had several meetings with RIDEM as it has moved through this evaluation process, and believes meeting on a regular basis would only help to better facilitate Charbert's evaluation and RIDEM's review of these options. It is my understanding that John Hartley has already contacted Terry Simpson of the UIC program to set up such a meeting. I will follow up with you and John to finalize a date for such a meeting.

If you or your staff have any questions please do not hesitate to call me at (401) 364-7751 ext. 127.

Sincerely,



Michael S. Healey, P.G.
Director of Environmental Affairs

Cc: Town clerk, Town of Richmond, 5 Richmond Townhouse Rd., Wyoming, RI 02898

Clark Memorial Library, PO Box 190 Carolina, RI 02812

Mr. John Hartley, P.E., GZA GeoEnvironmental, Inc.

Mr. William Ball, P.E. Acheron, Inc.