Chemical Conservation Corporation

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June 16, 1997

Mr. Robert Snyder
Section Manager
Hazardous Waste Program
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Re: Chemical Conservation Corporation FLD 980 559 728
Hazardous Waste Facility Permit Application HC02-279948 & HO02-279952

Dear Mr. Snyder:

Enclosed with this letter is a response to a Notice of Deficiency (NOD) dated April 18, 1997. The attach Response Summary, Second Notice of Deficiency describes the response criteria and changes made to the permit application. Please replace pages in the permit application with pages in this submittal having the same page number and insert pages that contain letters in the page number in alphabetical order.

If you have any questions, please call me at (407)859-4441.

Sincerely,

CHEMICAL CONSERVATION CORPORATION

Armando I. Gonzalez

cc: William F. Labadie
Patrick Sullivan

Date: 6/2/97 15:08
From: Mary McGehee ORL
Subject: Chemcon Meeting
To: Bob Snyder ORL
To: Lucy Albrecht ORL

Armando G. called today and would like to meet one more time before responding to the NOD. He is working on the list on constituents which can be consolidated and would like to discuss it with us.

According to the minutes, Thursday @ 2:00 was open and agreeable to Armando. Bob, if you have a conflict please let me know. Lucy, would you secure a conference room and e-mail Bob and I which one.

Thanks!

FLD-980-557-728

RESPONSE SUMMARY
SECOND NOTICE OF DEFICIENCY
FOR A HAZARDOUS WASTE FACILITY PERMIT APPLICATION
SUBMITTED NOVEMBER 1, 1995 AND REVISED JULY 29, 1996
FOR CHEMICAL CONSERVATION CORPORATION
ORLANDO, FLORIDA

REVISION OF JUNE 15, 1997

Part I - General Facility Information

1. Page 10, paragraph 4: The first sentence has been replaced with new sentences that describe the method used to distinguish "transfer facility waste" from "permitted waste".

   Page 224, paragraphs 4 and 5: Paragraph 4 is a new paragraph that describes the drum I.D. label and the information contained in it. It also references new Figure II.A.7-5a in page 225a that illustrates the drum I.D. label. The first sentence has been deleted in paragraph (current paragraph 4) to avoid redundancy with the previous paragraph.

   Page 232, paragraph 2 through 6: Paragraphs 2, 3, 4 and 5 have experienced minor changes, mainly to conform to new descriptions in page 224 and to reference new Figure II.A.7-8a in page 232a that shows staging areas.

2. Page 8, paragraph 4: Language has been added to indicate that only characteristic hazardous waste will be treated in the wastewater treatment process.

   Page 67, paragraph 4: The phrase "hazardous waste characteristic" has been inserted before the word "organic" in the last line shown in current page 67.

3. Page 10, paragraph 3: The last sentence has been modified by replacing the phrase "kept short" with "10 days or less".

4. Page 10b, paragraph 1: A sentence containing language that conforms to the comment request is now shown in paragraph 3 of this page..

5. Page 10b, paragraph 3: Except for the first and last sentence, this paragraph has been deleted and replaced with a description of a new method for assigning waste codes that conforms to the one contained in the NOD.

   Page 189, paragraph 5: The first two sentences have been replaced with a description of a new method for assigning waste codes that conforms to the one contained in the NOD.

Armando G - provided this Draft to us in the 6/6/97 informal meeting. NM

Page 226, paragraph 3: The first six sentences have been replaced with a description of a new method for assigning waste codes that conforms to the one contained in the NOD.

6. Page 10f, paragraph 2: This paragraph has been replaced with two new ones that contain the modifications requested in this comment. Changes to this paragraph mainly address comments found in item number 8 of the NOD.

7. Page 10g, paragraph 2: This paragraph contains new language that describes the instances in which wastewater is consolidated into tote tanks.

   Page 300, paragraph 1: New sentences inserted in this paragraph explain the reason for consolidating wastewater in tote tanks. This paragraph has been divided in two.

8. Paragraph 8 of the Second Notice of Deficiency refers to page 10g, paragraph 2 and page 302, paragraph 3. Comments indicate the lack of information about several topics pertaining to the wastewater treatment system. These topics are listed below.

   - Treatment methodology
   - Treatment capacity
   - Quality assurance
   - Sampling schedules and procedures
   - Inspection and maintenance schedules
   - Alternative management plan in the event of equipment failure
   - Air emission permitting requirements

   Paragraphs below indicate locations in the permit application where information addressing those topics is provided.

   <u>Treatment methodology.-</u>

   Information related to this topic has been located in page 10f. The existing paragraph 2 has been repalced with two new paragraphs.

Treatment capacity.-

This topic is addressed at the end of the first paragraph in the new information referenced above describing the treatment methodology.

Quality assurance.-

A new paragraph addressing this topic has become paragraph 1 in page 10b. Also, additional information concerning this issue is inserted in separate paragraphs immediately after existing paragraph 1 in page 10b and after paragraph 2 now present in page 10g. The last sentence in existing paragraph 1 in page 10b has been deleted; it is now shown at the beginning of the new one.

Sampling schedules and procedures.-

Wastewater sampling schedules and procedures are summarized in the Waste Analysis Plan. Analysis methods utilized to characterize the effluent from the wastewater treatment process and the waste fuel blending process will conform to the EPA analysis methods published in the SW-846. The same methods will be used to determine the hazardous waste characteristics of waste derived from the wastewater treatment process, such as the filter cake from the filter-press, solids removed from the bottom of the air-stripper receiving tank and hazardous waste storage tanks, ion exchange resins and filter media. Laboratory analysis is not required to characterize waste derived from the fuel blending process because it can be done with the use of the hazardous waste codes assigned to the waste that was processed for fuel. Field test will be performed with materials, equipment and procedures that have been proved successful elsewhere, or following technical specifications for widely use test methods and manufacturers. If there is room for improvement on this topic, please let know where and what type of information you would like to see.

Inspection and maintenance schedules.-

A new narrative addressing this topic has been inserted at the end of Section II.C.11 in page 323.

Alternative management plan in the event of equipment failure.-

Information concerning this topic is shown at the end of the one addressing inspection and maintenance schedules referenced in the previous paragraph. It will be inserted also at the end of existing second paragraph in page 10g and at the end of the line now present in page 303.

Air emission permitting requirements.-

A new paragraph addressing this issue has been inserted at the end the end of Section I.D.2 that begins in page 10.

9. Reserved

Part II - A. General

10. Pages 33, 34, 35, 36, 36a and 38: A note has been included at the end of page 34 to address the property purchase referenced in the comment. Figure II.A.1.a-2a has been added in page 36a to show the topography, orientation and location of the new lot with respect to the existing facility site. Figure II.A.1.a-1, II.A.1.a-2, and II.A.1.c-1 in pages 35, 36 and 38, respectively, have been revised to reflect changes brought about by the annexation of the new lot. Modified figures also show a new stormwater retention pond built in the new lot, as well as changes to the stormwater underground piping. Sub-sections II.A.1.a.(9) and II.A.1.a.(11) in page 34 have experienced modifications to account for changes brought about by the new stormwater pond. A reference to new Figure II.A.1.a-2a has been included in paragraph 2 of page 33.

11. Page 69, paragraph 1: The word "hazardous" in the second line has been deleted.

12. Page 70: Florida's DEP Tallahassee and Orlando emergency response telephone numbers have been included as requested in the comment. Also, the telephone number of Orange County Fire Department's Haz-Mat team has been changed.

13. Page 72, paragraph 5: The name of the individual that appears in the paragraph has been changed to "Deputy Chief, Operations".

14. Page 72, paragraph 8: The word "shortly" in this paragraph has been replaced with the phrase "within 30 days".

15. Pages 94 and 124: The words "listed", "characteristics", "hazardous" and "non-hazardous" have been either deleted or replaced with words that denote orientation of the equipment in Figure II.A.4.b-7 and II.A.4.d-5. Tanks and pumps have been assigned new identification numbers that conform to the changes made in the legend.

16. Page 97, paragraph 1: The phrase "Spills that exceed 20% of the reportable quantity" that appears in a sentence before the last one has been replaced with "All spills".

17. Page 97. item number 5 of sub-section 7.0: The Orlando Regional Medical Center has been replaced with the Florida DEP Central District Hazardous Waste Section.

18. Page 102, paragraph 6: This paragraph has been deleted.

19. Page 110, paragraph 4 and page 111, paragraph 5: The present language addressing reduction of air contaminants in sub-section II.A.4.c.(3), found in paragraph 4 of page 110 of the permit application has been replaced. Also, sub-section II.A.c.(6), in paragraph 5 of page 111 has been completely modified. The rationale for the changes mentioned above and the location where they were made is explained below.

    This item of the NOD refers to a topic discussed in page 110, paragraph 4 dealing with potential exposures of employees to air contaminants in the workplace. There are concerns about the level of air contaminants generated by operations and processes proposed in the application that may affect operators laboring at those locations.

    The same NOD item references another topic discussed in paragraph 3 of pages 188 and 302 that deals with removing organic contaminants from wastewater by the air stripper and carbon absorption unit. The topic described in this paragraph refers to contaminants in a media that differs from the one considered in the previous paragraph, one is wastewater in the treatment process and the other is air at the workplace.

    There are two other topics that should not be confused with the ones described above, one is air emissions posing environmental concerns and the other is prevention of emissions from accidental releases that may affect on-site and off-site human receptors.

    Air emissions are subject to permitting and regulatory requirements by the Clean Air Act (CAA) and RCRA. Requirements under the CAA have been discussed in a response to item number 8 of the NOD. RCRA has permitting requirements for process vents (Subpart AA), equipment leaks (Subpart BB), and containers and tanks (Subpart CC). The only process vent proposed in this application is the one where contaminants removed from wastewater are vented out to the atmosphere. Process vent requirements are addressed in Section R of the permit application, and it consists of a method to control organic emissions exhausted by the air stripper. Requirements for equipment leaks addressed in the application in Section S proposes a monitoring and repair program for leaks in waste fuel piping components and pumps to prevent organic emissions. Section Sa of the application explains that container requirements will be met by using covered DOT containers and propose control methods for organic emissions emanating from tanks.

    Accidental releases should be addressed separately from employee exposure to air contaminants in the workplace. The first usually involves emissions that occur during a short period of time but result in a highly toxic or explosive condition because of the type and/or quantity of the release. The second deals with emissions typical of some operations and processes that may have adverse effect in human health if exposure above certain concentration levels continues for a long period of time. However, both are somehow related because methods used to control one usually affect the other.

The permit application intents to address employee exposure to air contaminants in sub-section II.A.4.c.(3) under Air Contaminants Reduction and accidental releases in sub-section II.A.4.c.(6), both sub-sections are found in Section II.A.4.c, Mitigation Procedures.

20. Page 110, paragraph 5: This paragraph as been replaced with new paragraphs containing a new language. Most of it is devoted to revise explosion prevention methods proposed in the current application. These methods are related to operations presenting a greater degree of hazard because they are more likely to form an explosive environment. Consolidation operations have little potential of forming explosive dust, mist or vapor levels. Prevention of explosions in consolidation operations is addressed at the end of the changes made in this paragraph to comply with the NOD request.

21. Page 111, paragraph 5: This has been replaced with five paragraphs containing new language in response to item number 19 of the NOD. The new language describes how CCC will prevent releases to the atmosphere.

22. Page 117, paragraph 2: The container storage unit is not subject to air pollution requirements as long as the drums are handled in the manner explained in the application. The operational methods described in this paragraph do not intent to address regular emissions, but rather unexpected ones. This type of emissions usually result from drums having faulty gaskets used to seal bung hole plugs and top-head closing-rings. The cost of investment and operation of a pollution control equipment designed to capture and treat emissions from the container storage unit would not be justified nor result in a significant environmental gain. The operational methods described in this paragraph are conceived to prevent incidents that may result from the unexpected accumulation of explosive vapors in the unit.

23. Experience has demonstrated that the booths proposed in the current permit application are not practical. Emissions generated by consolidation of labpacks do not pose an environmental concern because they are insignificant. The use of proper consolidation methods and personal protective equipment prevent emissions and threats to human health. Consolidation of labpack involves small containers and quantity of materials. A worse-case-scenario accident will result in a small scale incident because of the small amount of waste involved. Therefore, CCC wants to delete the use of booths for consolidation of labpacks.

    Page 10g, paragraph 4: A sentence referencing the booths in the lower half of this paragraph has been deleted. New language has been added before the last sentence that addresses consolidation of labpacks.

    Page 123, paragraph 3 and page 125, paragraph 1: Several sentences at the bottom of current page 123 and at the top of current page 125 have been replaced with others

that do not reflect the use of booths for the consolidation of labpacks. New language indicates that mobile tables are used to segregate the contents of labpack drums.

Page 263, paragraph 1: The last sentences in this paragraph have been replaced with a language similar to the one used to modify pages 123 and 125.

24. The removal of waste liquids from aerosol cans is accomplished with a simple system that consists of a small device where the can is confined while punctured. Liquids drain from the puncture hole to the bottom of the device from where they are conducted through a hose to a 55-gallon liquid collection drum. Gaseous emissions from the can are confined to the interior of the device that consists of two pieces, an upper piece that slides over a similar lower piece. Emissions are prevented from escaping the chamber-like device by an o-ring gasket that seals the space between the two pieces. Instead, they are released through the same hose used to transfer the liquids to the liquid collection drum. Gaseous emissions inside the drum are then exhausted through another top bung hole to which a hose is connected, and directed to an activated carbon absorption canister. All emissions generated by the aerosol can liquid removal system are controlled by the canister mentioned in the previous sentence. An enclosed booth with an air removal and emission control equipment is not needed to operate the system. This application amendment proposes to use regular mobile tables to conduct this operation. It also describes a simple method to characterize the material inside the aerosol cans.

    Page 171, paragraph 2: The phrase ", which the regulations do not consider treatement or storage" has been deleted from this paragraph.

    Page 263, paragraph 4: A new paragraph labeled Consolidation of Liquid Wastes from Aerosol Cans has been added after this paragraph. It describes the system used to puncture the can, capture emissions, and recover and characterize the liquid. It also references new Figure II.B.3-3 in page 265.

25. Page 186, paragraphs 1,8 and the last one in the page, and page 187, paragraph 3: Sentences and phrases explaining the compatibility test have been replaced with a phrase indicating that it must be conducted in accordance with procedures contained in new Exhibit II.A.5/6.-1. Exhibit II.A.5/6.-1 beginning in page 214a of the permit application contains detailed procedures for conducting compatibility test on waste materials.

    Page 204, paragraph 3: This paragraph contains new sub-section 14.0, Compatibility Test Method that references compatibility test procedures found in new Exhibit II.A.5/6.-1.

    Page 214a through 214o: They contain Exhibit II.A.5/6.-1, Waste Compatibility Test Manual that describes procedures used at the facility to determine compatibility between waste materials.

Page 319, paragraph 2: The sub-section identification number has been changed new sub-section 14.0 in the Waste Analysis Plan.

26. Page 191, paragraph 3: The second sentence has been modified to read that analysis results are used to verify that characteristic hazardous waste constituents concentrations have been lowered below regulatory levels.

27. Page 232, paragraphs 7 and 8, entire page 233, and page 235, paragraph 1: Sub-section 8.0, Unauthorized Waste Shipments has been reworded to conform to recommendations provided in this comment.

Part II - C. Tanks

28. Page 288, Figure II.C.2.-6: The Nozzle and Opening Information table in the drawing has been amended to include information on R1, R2 and R3.

29. Reserved

30. Page 296, paragraph 3: This is a new paragraph indicating how waste fuel will be received in tankers at the facility.

31. Page 297, paragraph 4: A new sentence inserted at the end of this paragraph explains that signs attached to handles of stop valves that direct the flow to receiving, feed, loading and accumulation tanks indicate the current status of the tanks in question.

32. Page 24a, Figure I.D.2.-1: The configuration of the secondary containment berm surrounding the reactor tanks in this drawing has been amended to match the one shown in Figure II.C.3/4.-4.

33. Page 300, paragraph 1: A sentence added at the point where the paragraph was divided in two in response to item number 7 of the NOD indicates that drums and tote tanks not processed at the end of the workday are transferred to the container storage unit.

34. Page 300, paragraph 1: The sentence that refers to treatment of listed hazardous wastewater in the future has been deleted from this paragraph.

35. Page 300, paragraph 1: The comment in this item of the NOD inquires whether the term "constituents" found in page 300, paragraph 1 and page 302, paragraph 3 refers to underlying hazardous waste constituents. A sentence inserted at the end of paragraph 1 in page 300 provides a clarification of such a term. This issue is resolved by indicating that CCC plans to ship treated wastewater only to treatment facilities permitted under the Clean Water Act. This type of facilities only accept waste

containing constituents in concentration levels below the regulatory levels listed in the hazardous waste identification regulations of Part 261.

36. Page 301, paragraph 2: The criteria used to establish the maximun temperature level and the highest pH value for the treatment operation is stated in two new sentences. Each has been inserted after references to the pre-set maximun temperature level and the pre-set pH value are found.

37. Page 301, paragraph 2: The last three sentences describing the cooling system have been deleted. A more practical treatment method has been conceived that requires less reagent and lower treatment temperatures. This method results in smaller wastewater volume for disposal and lower reagent cost, as well as in lower treatment temperatures. The method basically consists of utilizing the non-corrosive wastewater to neutralize the pH of acidic wastewater.

38. Page 302, paragraph 1: Changes have been made to the last sentence to reflect more accurately the method used to determine the point at which the precipitation process is complete.

    A sample of the wastewater batch is analyzed to qualify and quantify the constituents of concern before the treatment process begins. Analysis results are utilized to select parameters in the bench test that is performed on a separate portion of the same sample. The sample portion used to conduct the bench test is subject to additional analysis to establish whether the parameters selected for the bench test obtain an adequate precipitation of the constituents contained in the wastewater. Once the appropriate bench test parameters have been established, they are the same used in the reactor tanks to conduct the treatment operation.

39. Page 313, Figure II.C.7/9.-2: A revised drawing showing the correct measurements for the waste fuel tank storage area has replaced the previous one in this figure.

Part II - K. Closure

40. Page 343, Figure II.K.1.e.-1 and page 344, Table II.K.1.e.-1: The figure has been revised to show one sampling location in the consolidation pad and two in the consolidation area. Changes in the table conform to revisions in the figure and list contaminants of concern for the new sampling locations, as well as corresponding analysis methods.

41. Page 359, Table II.K.1.g.-4 and page 361, Table II.K.1.g.-6: Changes were made to closure cost estimate in both tables to reflect additional soil sampling and analysis that resulted from comment in item number 40 of the NOD.

Part II - R. Process Vents

42. Page 410, paragraph 2: Language has been added to the paragraph indicating that the method and frequency recommended by the manufacturer will be used to monitor the efficiency of the carbon absorption system. The monitoring method and frequency will be submitted to the Florida DEP for approval before the system is put into operation.