



Extra

Department of Environmental Protection

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Governor

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Virginia B. Wetherell
Secretary

April 18, 1997

Mr. Armando Gonzalez
Compliance Officer
Chemical Conservation Corporation
10100 Rocket Boulevard
Orlando, Florida 32824

OCD-HW/P-97-0166

Orange County - HW
Chemical Conservation Corporation (Chemcon)
Construction Permit Modification
HC02-279948 & HO02-279952
RE: Second Notice of Deficiency

Dear Mr. Gonzalez:

The Department has reviewed the response Chemical Conservation Corporation (Chemcon) has submitted to the First Notice of Deficiency given to us during the February 13, 1996 meeting as well as the additional information submitted on July 29, 1996. A General Second Notice of Deficiency (OCD-HW/P-97-0108) was sent to Chemcon on March 7, 1997. Consequently, a meeting held on April 8, 1997 clarified several concerns to the application. Listed below are items the Department believes to be deficient or in need of further explanation.

Part I - General Facility Information

1. Existing Facility Operations, pg. 8, paragraph 1 describes transfer facility waste that Chemcon will hold for 10 days or less.

*Inserting
para. 4*
Waste Receipt and Distribution, pg. 10, paragraph 3 describes the transfer facility waste which arrives at Chemcon and is routed to other TSD facilities.

→ Waste Receipt and Distribution, pg. 10, paragraph 4 describes how Chemcon originally proposed to distinguish the transfer facility waste from permitted waste.

Comment: Identify how an inspector can distinguish transfer facility waste from permitted waste while stored in the container storage unit.

2. Proposed Facility Operations, pg. 8, paragraph 4 describes the construction and operation of a Wastewater Treatment System.

*Look at
#6*
Contingency Plan, General Information, pg. 67, paragraph 5 describes a summary of activities proposed by Chemcon.

Comment: As discussed in the 4/8/97 meeting, indicate the hazardous wastewaters the facility plans to treat will consist only of characteristic hazardous waste.

- Will replace*
3. Waste Receipt and Distribution, pg. 10, paragraph 3 describes the transfer facility waste which arrives at Chemcon and is routed to other TSD facilities.

Comment: Clarify the term "short" by replacing it with "10 days or less".

- Will insert phrasing*
4. Evaluation of Treatment Parameters, pg. 10b paragraph 1 addresses the evaluation of waste for processing.

Comment: Before this process is placed into operation, bench test methods must be proposed to and approved by FDEP.

5. Evaluation of Waste Before Shipment, pg. 10b paragraph 3 discusses the waste codes for outbound loads.

Waste analysis Plan, Evaluation of Wastes for Shipment, pg. 189, paragraph 5 describes the waste codes assigned to wastes that are pumped out of the waste fuel tank.

Recordkeeping & Reporting, Processes at the Facility, pg. 226, paragraph 3 discusses the waste codes for outbound loads.

Comment: Modify this section with the method agreed upon in the 4/8/97 meeting. Shipments leaving the tank will contain all codes that were stored in the tank until the tank is emptied of all contents. Once emptied, codes will start accumulating as waste is placed in the tank.

- Armeds will change the application*
6. Wastewater Treatment, pg. 10f paragraph 2 discusses "low-risk" listed hazardous waste.

Will treat H2S char. Will take out "low-risk"

Comment: Modify this paragraph to state that Chemcon will treat hazardous wastewater identified by the characteristic codes only. A statement may be included to say Chemcon may modify this permit at a later date to treat "low-risk" listed hazardous waste. Chemcon will submit the permit modification request with appropriate fee and receive FDEP's permit modification prior to treating listed hazardous waste.

7. Wastewater Treatment, pg. 10g paragraph 1 describes wastewater consolidated in tote tanks.

Process Description, Wastewater Treatment System, pg. 300, paragraph 1 describes the corrosive wastewater being segregated into tote tanks.

Some acids they can't put directly into tank

Comment: Explain why the corrosive wastewater for treatment will be consolidated in tote tanks. This additional handling would appear to increase the processing cost as well as the opportunity for a release.

8. Wastewater Treatment, pg. 10g paragraph 2 identifies equipment to be used in the treatment process.

Process Description, Wastewater Treatment System, pg. 302, paragraph 3 describes recirculating the wastewater through the organic removal system if necessary.

Comment: Nowhere in the application is information provided on treatment methodology, capacity, quality assurance program, sampling schedules and procedures, and inspection and maintenance schedules to maintain integrity of the

define max. capacity

see this as one - follow the manufacturers recommendations

Permit conditions sealed by engineers before they can be put into service.

Need to have a complete list to do bench test to determine how they will be treating.

Address what they are going to do when equipment goes down.

processes. This information must be incorporated into the wastewater treatment process description. Also, what alternative procedures for management of incoming waste will be in place in the event of equipment failure?

Please indicate results of calculations made to determine whether or not an air permit(s) will be required for the treatment units.

9. Table I.D.3 Waste Table for Chemical Conservation Corporation, pgs. 25-32a indicate the (storage) process codes, waste descriptions, hazardous waste codes and (estimated) annual quantity for each waste listed.

Comment: This table partially satisfies Item #2 of our 3/7/97 letter, however, it must indicate which wastes are associated with fuel blending, wastewater treatment, permitted storage, transfer facility waste or consolidation operations. If this information is provided elsewhere, this table may be omitted.

Part II - A. General

10. Facility Information, pg. 33 addresses the topographic map of the facility.

Comment: Since Chemcon has recently acquired the property on the eastern border, this portion of the application should be updated to correctly indicate property lines and possibly show planned changes to the traffic pattern.

11. Contingency Plan, General Information pg. 69 paragraph 1 indicates wastewater after treatment may be shipped to hazardous and non-hazardous treatment facilities.

Comment: If only characteristic wastewater is to be treated, what circumstance would require shipment of the "treated wastewater" as a hazardous waste?

12. Contingency Plan, Emergency/Organization pg. 70 lists the telephone numbers of various emergency organizations.

Comment: Under the Hazardous Materials Spill or Release portion include the telephone number for FDEP's 24 hour State Warning Point (904) 413-9911. FDEP's Orlando Emergency Response Section can be reached during normal business hours at (407) 894-7555.

13. Contingency Plan, Fire Department, pg. 72, paragraph 5 identifies copies of the contingency plan that are mailed out.

Comment: It may be more appropriate to mail the contingency plans to the "Department Head" rather than individuals who may no longer be stationed there.

14. Contingency Plan, Sheriff's Department, pg. 72, paragraph 8 identifies when copies of the contingency plan will be mailed out.

Comment: Replace the word "shortly" with "within 30 days".

15. Contingency Plan, Figure II.A.4.b-7, pg. 94 is the Wastewater Treatment System - Plan View.

Preparedness and Prevention, Figure II.A.4.d-5, pg. 124 shows the Wastewater Treatment System - Plan View.

Comment: Correct this diagram to reflect only characteristic hazardous wastewater will be treated by this system.

16. Contingency Plan, Implementation of Contingency Plan, pg. 97, paragraph 1 identifies guidelines for implementing the contingency plan.

Comment: Replace "spills that exceed 20% of the reportable quantity will be documented in inspection records" with "all spills will be documented in inspection records".

17. Contingency Plan, Emergency Procedure, pg. 97, item #5 describes the organizations Chemcon will seek assistance from.

Comment: Include the Florida DEP Central District Hazardous Waste Section as being notified when Chemcon has had a release of hazardous waste.

18. Contingency Plan, Emergency Equipment, pg. 102, paragraph 6 identifies the topography of the area surrounding the active portion of the facility is sloped toward a stormwater retention pond, ensuring that any waste release is contained within the pond.

Comment: Modify this wording to be consistent with Chemcon's planned facility modifications which will eliminate this retention area.

19. Mitigation Procedures, pg. 110, paragraph 4 identifies air contaminants reduction.

Waste Analysis Plan, Evaluation of Wastes for Processing, pg. 188, paragraph 3 discusses the air stripper and carbon absorption units.

Process Description, Wastewater Treatment System, pg. 302, paragraph 3 describes the air stripper and carbon absorption units that strip the remaining organic constituents off the wastewater.

Comment: Specific information regarding monitoring and control of air contaminants must be explained and addressed individually in discussions of fuel blending, wastewater treatment and consolidation processes.

20. Mitigation Procedures, pg. 110, paragraph 5 identifies explosion protection.

Comment: Describe the manner in which consolidation operations will be conducted to prevent the formation of explosive dust, mist or vapor levels.

21. Mitigation Procedures, pg. 111, paragraph 5 describes how Chemcon will prevent releases to the atmosphere.

Comment: See Comments #19 & #20.

22. Preparedness and Prevention, pg. 117, paragraph 2, last sentence describes the operation of fans to exhaust the gases outside the unit.

Comment: Indicate where the fans are located and whether the flammable gas vapors will be vented outside the facility or be captured in a filtering system? Explain Chemcon's rationale, if there is no capture method.

23. Preparedness and Prevention, pg. 125, paragraph 1 discusses the air exhaust system in the booths used to consolidate lab packs.

Segregation & Separation, Consolidation of Labpack Containers, pg. 263, paragraph 1 describes the air exhaust system at the booths used to consolidate lab packs.

Comment: Does the exhaust system inside the booths have any filtering mechanisms or does it vent directly to the outside. Has Chemcon investigated whether or not an air permit is required for this system?

24. Waste Analysis Plan, Waste Management Methods at the Facility, pg. 171, paragraph 2 discusses the removal of liquids from spray cans.

Comment: Describe the process to be used, it's location, what provisions will be made to capture remaining liquids, how the liquid will be characterized for disposal, and provisions to for the capture of gaseous emissions. If this is to be a regular process, it's location should be indicated on all diagrams of the facility. This discussion should be included with other consolidation sections of the application as well.

25. Waste Analysis Plan, Waste Verification Process, pg. 186 identifies the what Chemcon describes as a compatibility test.

Ignitable and Incompatibles, Waste Fuels, pg. 319, paragraph 2 describes mixing a sample of the waste received with a sample of the waste that is stored in the tank to determine reaction.

Comment: The explanation of the compatibility test should take into account relative volumes of tank and incoming waste and address time intervals allowed for a reaction to develop. Explain criteria for determining whether a reaction has occurred and criteria for using other .

26. Waste Analysis Plan, Evaluation of Wastes for Shipment, pg. 191, paragraph 3 describes testing parameters for wastewater effluent.

Comment: Under what circumstances will characteristic hazardous waste codes need to be assigned to treated wastewater?

27. Recordkeeping & Reporting, Unauthorized Waste Shipments, pgs. 232-232 discuss how Chemcon will handle transfer facility waste sent back to the Orlando facility.

Comment: Verify that rejected waste is handled in the following manner.

- a. The facility uses the Transfer Facility to manage rejected waste, logging the waste into a rejected drum log (similar to the transfer facility log) and has 10 days in which to resolve the situation. During the ten days, a waste evaluation is

conducted to determine whether Chemcon can accept the waste into the permitted storage area.

b. The waste may be accepted into storage, "find a new home", or be returned to the generator.

c. If Chemcon can accept the waste into storage, the problem is solved and they then have time to find an alternate disposal site. If Chemcon can't accept the waste into storage or find an alternate disposal site within the ten days, they must return the waste to the generator.

Part II-C. Tanks

28. Tanks Information, Figure II.C.2-6, pg. 288 shows the Tank Detail / Specifications for the Reactor Tanks (#1 & #2).

Comment: Include the identification of R1, R2, and R3 codes in the Nozzle and Opening Information diagram.

29. Process Description, Waste Fuel Blending System, pg. 297, paragraph 2 indicates some of the components may not be installed or in operation for some time after the issuance of the permit requested by this application.

Comment: Provide a schedule for the installation of the components identified in this section. If a firm installation schedule is included these items can be included in the permit without need for a modification at a later date, provided installation is consistent with the schedule and permitted process.

30. Process Description, Waste Fuel Blending System, pg. 292: Does not address how a tanker truck with "waste fuel" will/(would) be processed.

Comment: The Waste Fuel Blending System describes waste with a heating value which comes into the Chemcon facility in drums. Please identify the procedures in place if Chemcon intends on receiving tanker trucks with a high BTU value waste.

31. Process Description, Wastewater Treatment System, pg. 297, paragraph 4 describes the order of usage of the process tanks.

Comment: Since Chemcon will be alternating the tank usage, indicate how the employees will be able to distinguish the process purpose of the tanks.

32. Process Description, Figure II.C.3/4.-4, pg. 298 shows the Wastewater Treatment System - Plan View.

Comment: Clarify configuration of the secondary containment berm surrounding the Reactor Tanks. Figure II.C.3/4-4 does not match Figure I.D.2-1 (Facility Equipment Layout).

33. Process Description, Wastewater Treatment System, pg. 300, paragraph 1 describes drums holding wastewater being unloaded to the Consolidation Pad adjacent to the Wastewater Tank Storage Unit.

Comment: Will drums be left in the Consolidation Pad overnight?

34. Process Description, Wastewater Treatment System, pg. 300, paragraph 1 describes the future treatment of listed hazardous wastewater.

Comment: Chemcon will need to apply for a permit modification prior to the treatment of listed hazardous wastewater.

35. Process Description, Wastewater Treatment System, pg. 300, paragraph 1 describes the testing of batches of treated wastewater.

Process Description, Wastewater Treatment System, pg. 302, paragraph 3 describes the filter press used to remove the precipitate and other solids in the suspended wastewater.

Comment: Does the reference to "constituents" mean underlying hazardous waste constituents?

36. Process Description, Wastewater Treatment System, pg. 301, paragraph 2 describes adjusting the pH and temperature of the hazardous wastewater in the treatment tanks.

Comment: What temperature will correspond to "the pre-set maximum level"? What will be "the pre-set pH value"?

37. Process Description, Wastewater Treatment System, pg. 301, paragraph 2 describes use of the treatment tanks to adjust the temperature and pH of the hazardous wastewater.

Comment: Include the proposed cooling tower in all sketches and diagrams. This may be a unit requiring a permit from the Industrial Waste Section of FDEP prior to using it in the treatment process.

38. Process Description, Wastewater Treatment System, pg. 302, paragraph 1 describes the precipitation of metals.

Comment: Describe in greater detail the "specific signs" which are manifested by the treatment process. Specifically, how will Chemcon determine when the metals have been adequately precipitated?

39. Spill Prevention, Figure II.C.7/9.-2, pg. 313 shows the Tank Storage Addition.

Comment: This figure indicated the existing waste fuel storage tank area measures 42' X 32' which conflicts with several other figures showing the measurement as 32' X 32', please correct this discrepancy.

Part II. - K. Closure

40. Verification of Decontamination, Figure II.K.1c.-1, pg. 343 identifies Facility Closure Sampling Locations.

Comment: Sampling is also appropriate in areas where waste is or will be consolidated. Sampling locations should also include the area adjacent to the vent discharge from the consolidation booths and the Consolidation Pad which houses the air stripper and filter press as well as other treatment units.

The Hazardous & Solid Waste Amendments (HSWA) permit should be modified to include additional solid waste management units (SWMUs) created as part of this permit.

41. Closure Cost Estimate, pgs. 347-361, describes justification for the financial estimate Chemcon has put in a trust fund as required under 40 CFR Part 264.

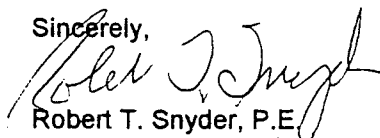
Comment: The closure cost estimate should be modified to reflect changes required in response to this Notice of Deficiency (NOD).

42. Tanks and Container Emissions, Requirements for Tanks and Containers, pg. 410 describes vapors from the tanks being collected through an opening in the cover and routed to a carbon absorption system where organic contaminants will be stripped from the vapors before being exhausted to the atmosphere.

Comment: Indicate criteria that will be used to monitor and maintain the carbon absorption systems. Specifically basis for changing carbon (i.e., testing, efficiency, preventative maintenance schedule, processing volume)?

Prior to submittal of your response, the Department would welcome an opportunity to discuss this NOD. Please do not hesitate to contact Mary McGehee or me at (407) 893-3323 with any questions you may have or to establish a convenient time to meet.

Sincerely,


Robert T. Snyder, P.E.
Program Manager
Hazardous Waste

RTS/mm

cc: Satish Kastury, FDEP
Kent Williams, EPA Region IV

Date: 4/15/97 07:45
From: Mary McGehee ORL
Subject: Chemcon

FYI - Called Armando to let him know the NOD will be in the mail Thursday. Would like to propose getting a conference room for 9:00 that morning to discuss items in the NOD. That will give me plenty of time to finalize it and get it in the mail. There is nothing on the schedule showing a conflict.

Since coming to an agreement with Chemcon regarding: 1. The waste codes leaving the tanks, and 2. The fact that they will not be treating wastewater containing listed hazardous waste, the application has become a great deal less difficult to review. John has helped me a couple of compliance points, so hopefully there won't be too much fine tuning necessary.

Thanks!

