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State of New Mexico **ENTERED**
ENVIRONMENT DEPARTMENT
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Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

July 6, 2017

Jeff Smith, General Manager
Advanced Chemical Treatment, Inc.
6133 Edith Boulevard NE
Albuquerque, NM 87107

**RE: ADMINISTRATIVELY INCOMPLETE DETERMINATION
HAZARDOUS WASTE TREATMENT AND STORAGE FACILITY PERMIT
APPLICATION
ADVANCED CHEMICAL TREATMENT, INC. EPA ID# NMD002208627
RNCH-11-01**

Dear Mr. Smith:

On March 22, 2017, the New Mexico Environment Department (NMED) received a revised permit renewal application (Application) for the Resource Conservation and Recovery Act (RCRA) Part B Hazardous Waste Facility Permit (Permit) for Advanced Chemical Treatment, Inc. (ACT or the Applicant). NMED has reviewed the revised Application and, based on the addition of proposed hazardous waste treatment, has determined that the Application is administratively incomplete. The permittee must address the following comments concerning treatment of hazardous wastes.

1. For the treatment of hazardous waste for energy recovery (fuel blending):
 - a. Consolidation of fuels, as described in the revised March 2017 Permit Application and observed during the May 16, 2017 NMED inspection, constitutes fuel blending. The Applicant is subject to 40 Code of Federal Regulations (CFR) 266.101(c). Hazardous waste burned in boilers and industrial furnaces has regulatory requirements for management prior to burning.

The New Mexico Hazardous Waste Management regulations at 20.4.1.100 New Mexico Administrative Code (NMAC) incorporating 40 CFR 260.10, defines treatment as "...any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amendable for storage, or reduced in volume."

The term "fuel blending" is generally used to describe the combination of hazardous wastes and other materials to create a material amenable to burning for energy recovery. Since processes that fit this description change the properties of a hazardous waste to meet a fuel specification and recover energy, both parts of the treatment definition are met. Hence, fuel blending is considered treatment by the U.S. Environmental Protection Agency (EPA).

Based on ACT's records for the May 4, 2017 Ash Grove-bound tanker truck, the following is an example of treatment. Combining multiple RCRA-listed hazardous wastes such as acetone and toluene waste (container# D147728-1, 2) and D001 flammable aerosols (container# D146459-8) with non-hazardous/non-RCRA wastes such as mineral oil (container# D147666-2,3) and polymeric resins (container# D147750-3), constitutes RCRA treatment for energy recovery (fuel blending). This type of activity is subject to the applicable permit requirements specified in 20.4.1.500 and 900 NMAC incorporating 40 CFR 264 and 270.

- b. In order to permit this treatment activity, the treatment process must meet requirements of 40 CFR 264 Subpart X (Miscellaneous Units). The Applicant has met some of the requirements to permit fuel blending in its most recent revision of the permit application; however, to complete the application to permit treatment by fuel blending, submit the following information:
 - i. Provide a description of the process for combining waste streams and transferring the waste streams to the tanker truck used for transport to the energy recovery facilities.
 - ii. Provide a specific list of all RCRA waste codes for all potential wastes to be treated for energy recovery. In addition, list all nonhazardous wastes that may be combined with hazardous wastes for the purpose of energy recovery. Describe how the chemical compatibility of waste streams will be determined and provide proposed chemical analytical methods to test all combinations to support compatibility.
 - iii. Provide a description and a diagram showing the location and design within the permitted facility where permitted fuel blending will be

conducted. Provide a complete description of the secondary containment system for the location where fuel blending will be conducted and the process for transferring the blended waste to the tanker truck for shipment.

iv. Provide a description of how the permitted fuel blending will meet the applicable RCRA air emissions requirements in 40 CFR 264 Subpart CC. Subpart CC emission control requirements apply to units with hazardous waste greater than or equal to 500 ppmw volatile organics at the point of generation.

1. Provide a list of all types of containers receiving the blended fuels (e.g., totes, 55-gallon drums, other containers greater than 26 gallons)
2. Provide documentation that all potential containers receiving the blended fuels meet DOT standards for design, construction, and are closed per DOT standards.

2. For compaction of hazardous waste (treatment), the following were either incomplete or not provided in the renewal application:

- a. Provide a specific list and physical description (e.g., RCRA containers, rags, liquids, types of solids, semi-solids) of all RCRA-regulated wastes that may be treated in the compactor. List the RCRA waste codes of all potentially compacted hazardous wastes. List all combinations of RCRA waste that could be compacted together. Provide estimated volumes of liquids that could be generated. Describe how compatibility is determined and provide the proposed chemical analytical methods to support compatibility testing.
- b. Provide the total volume of the compactor itself at maximum capacity. Include the length of time needed to fill the roll-off containers that will receive the compacted waste as well as the time intervals between loading, treating, and filling the roll-off.
- c. Provide the following to determine if the unit is subject to 40 CFR 264 Subpart CC (air emissions from tanks, containers, and surface impoundments):
 - i. Describe the maximum time that any hazardous waste could be present in the compactor and roll-off container.
 - ii. Subpart CC emission control requirements apply to units (e.g., the roll-off container) receiving RCRA hazardous waste containing greater than or equal to 500 parts per million weight (ppmw) volatile organic compounds (VOCs) at the point of waste generation.

iii. Compliance options for the roll-off container include:

1. Document that VOCs of the hazardous waste are less than 500 ppmw at point of waste generation.
2. If the hazardous waste generated by compaction will contain VOC concentrations over 500 ppmw, document the following (level 2, 40 CFR 264.1086(d)) for the containers receiving the waste:
 - a. The roll-off container is DOT-compliant.
 - b. The roll-off container has no detectable emissions (describe the method to document and provide analytical results for each roll-off container batch).
 - c. Describe the method to document that the roll-off is a vapor-tight container.
 - d. Describe the method to document how loading/transfer minimizes volatilization.
3. Additionally, NMED has included technical comments regarding compaction of hazardous waste.
 - a. Based on observations from the May 16, 2017 inspection, the existing secondary containment system for this unit is incomplete. A three-sided containment area was observed. Provide a detailed description and figure of the secondary containment system for the compaction unit.
 - b. Containers holding ignitable or reactive wastes must be located at least 50 feet from the facility's property line. State if any ignitable or reactive wastes will be treated in the compactor and stored in the roll-off boxes that will receive the compacted waste. If yes, describe how the facility will meet 40 CFR 264.176 (special requirements for ignitable or reactive waste) for the compactor and roll-off boxes.
4. Several items in the September 2016 NOD letter were not adequately addressed in the 2017 revised permit renewal application:
 - a. Question 16. Water content alone cannot determine the BTU value of a waste material. Demonstrate a relationship between BTU values and percent water content for unconsolidated wastes. Provide a demonstration of the relationship between BTU values and percent water content for unconsolidated wastes or state that this BTU-water relationship will not be used to categorize wastes.

- b. Question 19. The application does not state whether ACT will accept dioxin-containing wastes, wood-treating wastes, or PCB-containing wastes. Specifically state if ACT does or plans to accept dioxin-containing wastes, wood-treating wastes, or PCB-containing wastes.
- c. Questions 22.c. and 22.d. Analytical demonstration or documentation was not provided to show that the representative sampling in the WAP will provide accurate results for establishing a relationship between water and BTU values or determining BTU values. Provide this information.
- d. Question 22. e. No procedures for determining and confirming the BTU values of incoming wastes were included. Provide this information.
- e. Question 32. No as-built diagrams were included with the permit application. Provide this information or state that the diagrams are unavailable.
- f. Question 45.h. No maximum volumes for each consolidation event were included and consolidation locations were vague (e.g., "only allowed where certified grounding system is in place" for flammable liquids). Provide this information.
- g. Question 48. The containment system design and operation, as well as diagrams of the containment system, is not found in B.2. or anywhere else in the application. Provide this information.

The New Mexico Hazardous Waste Permit and Corrective Action Fee regulations, Section 20.4.2.201D, require the assessment of a fee to renew a permit when NMED determines that a Permit Application is administratively complete. A renewal fee for container storage was paid by the Applicants on February 2, 2012. The Applicant has added two hazardous waste treatment processes to the Application (fuel blending and compaction), which requires a reassessment of the Application for completeness. After the Applicants submit an administratively complete Application, NMED will begin its technical review of the Application.

The Applicant must submit a revised Section B.2, Process Descriptions; Section C. Waste Characteristics and Waste Analysis Plan; and Section D, Process Information no later than **August 31, 2017**. The submittal of an entire revised Application is not required at this time.

Mr. Smith
July 6, 2017
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If you have any questions regarding this letter, please contact Stacie Singleton at (505) 476-6056.

Sincerely,

Handwritten signature of John E. Kieling in cursive, followed by the word "for" in a smaller, less distinct script.

John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
S. Singleton, NMED HWB
K. Wood Harsono, ACT