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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

February 2, 1988

MEMORANDUM

SUBJECT: Totally Enclosed Treatment System Proposal
from TDJ Group, Inc.

FROM: Joseph S. Carra, Director
Waste Management Division

TO: David A. Wagoner, Director
Waste Management Division
EPA Region VII

This is in response to your memorandum to Marcia Williams, which has been referred to my division for a response. I have reviewed your request for a determination of the applicability of the totally enclosed treatment (TET) exemption as it applies to the process proposed for generic marketing by TDJ Group, Inc. TDJ Group has claimed confidential business information for the description of their treatment system. You have requested clarification on three issues:

1. whether the TDJ Group's proposal meets the TET exemption;
2. guidance on what parts of the treatment train would be considered TET; and
3. the location at which samples must be taken to demonstrate the success of treatment.

The Agency defines a totally enclosed treatment system in CFR as a treatment system that:

1. must be connected to an industrial process; and
2. constructed and operated to prevent the release of hazardous waste and any constituent thereof into the environment during treatment.

In your memorandum, you stated that the TDJ Group's proposal

is similar to the proposal received by Region V for the Grede Foundry. The differences between the TDJ proposal and the Grede Foundry are the location of treatment and the method of collecting emissions dust from the cupola. In the TDJ proposal, treatment occurs between the cupola and the baghouse; while treatment occurs after the baghouse at the Grede Foundry. In the TDJ proposal, the flue dust from the cupola is connected to the treatment system via ducts. In the Grede Foundry, the hood that collects the flue dust was not connected to the cupola but to the baghouse. Because the cupola was open to the environment, the Grede's Foundry treatment system would not qualify for the exemption. In the OSWER directive #9432.00-1, the Agency clarified to Region V that the cupola is part of an industrial production process and that the baghouse is part of a waste treatment process. Therefore, treatment downstream of a baghouse would not qualify for the TET exemption.

The Agency also responded to a letter received by Mr. Swed of RMT, Inc., dated December 22, 1986, requesting guidance on the application of the TET exemption to the treatment prior to the disposal of baghouse dust. In this letter, the Agency restated that cupolas are part of an industrial process while baghouses are part of a treatment process. Any totally enclosed processing that occurs in the ducts directly connecting the cupola to the baghouse would not be treatment subject to the RCRA permitting requirements. However, the baghouse and any treatment downstream of the baghouse would not qualify because the baghouse is open to the environment. This should answer your first and second questions.

Your third question refers to the location at which samples must be taken to demonstrate the success of treatment. Because the treatment system prior to the baghouse qualifies for the TET exemption, the equipment is not subject to the RCRA permitting process. The TDJ Group would have to show, through the design of the treatment system, that the system is totally enclosed. That is, there are no routine leakages of flue dust from the cupola throughout the treatment system. No other sampling is necessary, unless your office believes a sampling program is necessary to assure that no releases occur.

Attached to your memorandum, you have included a detailed description and drawing of the TDJ proposal. Based on our review of the design of the system and our best engineering judgement,

the treatment system is totally enclosed because the flue dust from the cupola is transferred through the treatment system via closed ducts. Therefore, there appears to be no possibility of routine releases of the dust to the environment.

In summary, the treatment system prior to the baghouse would qualify for the exemption, but the baghouse and treatment downstream of the baghouse would not qualify for the exemption. In order to determine the effectiveness of the treatment system enclosure, the design of the system must show that the cupola and the treatment train are sealed, thereby preventing routine releases of constituents to the environment. Our review indicates that the TDJ Group design appears to meet these requirements. If your staff has any questions, they should contact Monica Chatmon of my staff on FTS 475-7236.

cc: Marcia Williams
Waste Management Division Directors, Regions I-X