

PPC 9488.00-3

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

ACCEPTABILITY OF THERMAL RELIEF VENTS ON HAZARDOUS WASTE
INCINERATORS

JUN 30 1986

MEMORANDUM

SUBJECT: Acceptability of Thermal Relief Vents on
Hazardous Waste Incinerators

FROM: Bruce Weddle, Director
Permits and State Programs Division

TO: James H. Scarbrough, Chief
Waste Management Division, Region IV

Marcia Williams asked that I respond to your June 20, 1986, memorandum in which you requested guidance on the acceptability of using a thermal relief vent (dump stack) on a commercial incinerator seeking a RCRA permit. As was discussed with Beverly Spagg of your staff on June 26, dump stacks are allowed on hazardous waste incinerators to protect the air pollution control system (APCS) during failure of ancillary systems, such as, power and water cooling systems. However, the use of dump stacks during operation of the incinerator should be severely limited since direct venting of stack emissions is expected to result in violations of the Part 264, Subpart 0, performance standards.

The operation of a dump stack should be limited either through the use of a back-up power and water cooling system, or through adding an emission control system (e.g., fume incinerator and an APCS if particulate or acid emissions pose a risk) on the dump stack. Also, a condition should be included in the permit that limits the use of the dump stack. Discussions with Don Oberacker of the Office of Research and Development, indicate that back-up power and water systems are in common use in Europe and Canada to avoid the necessity of venting emissions through the dump stack. We believe, however, that there may be occasions (e.g., back-up power system or water cooling system fails) when emissions must still be vented through the dump stack to avoid damage to the APCS and their inclusion in the design may be a reasonable option.

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The use of dump stacks should be limited via the methods discussed above or equivalent methods and the permit should include a limit on the frequency of the dump stack use. The use of these measures does not preclude the necessity of automatic waste feed shut off during episodes of primary power or water coolant failure. Please contact Robin Anderson at FTS-382-4498 if you have questions or comments on this issue.

cc: Susan Bromm
Ken Schuster
Art Glazer
Robin Anderson
Hazardous Waste Branch Chiefs, Region I-III and V-X
Incinerator Permit Writer's Workgroup