



*Many Voices Working for the Community*

# Oak Ridge Site Specific Advisory Board

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July 6, 2000

Mr. Rod Nelson  
Assistant Manager for Environmental Management  
DOE-ORO  
P.O. Box 2001, EM-90  
Oak Ridge, TN 37831

Dear Mr. Nelson:

***Recommendations and Comments on the Draft Notice of Intent to Comply with Final Standards for Hazardous Air Pollutants from Hazardous Waste Combusters (TSCAI 0108)***

The Oak Ridge Site Specific Advisory Board reviewed and approved the enclosed recommendations and comments on the subject document at our July 5, 2000, Board meeting.

We appreciate the opportunity to comment on the document and look forward to receiving your written response to our recommendations and comments.

Sincerely,

A handwritten signature in black ink that reads "Steven H. Kopp".

Steven H. Kopp, Chair

Enclosure

SHK/plo

cc: Dave Adler, DOE-ORO  
Jason Darby, DOE-ORO  
Susan Gawarecki, LOC  
John Hankinson, EPA  
Earl Leming, TDEC  
Joy Sager, DOE-ORO  
Bryan Westich, DOE-ORO



**Oak Ridge Site Specific Advisory Board**  
**Recommendations and Comments**  
**on the *Draft Notice of Intent to Comply***  
**with *Final Standards for Hazardous Air Pollutants***  
**from *Hazardous Waste Combusters (TSCAI 0108)***

**RECOMMENDATIONS**

1. Continue to perform continuous sampling of stack metals emissions with periodic sample recovery and laboratory analysis in conjunction with metals feed rate limits.
2. Continue to evaluate emerging technologies for continuous or near real-time emissions monitoring, ensuring availability of adequate technical resources not encumbered with facility operational and compliance responsibilities and adequate support from equipment developers and vendors.
3. Evaluate impact of likely feed rate and concentration controls on the available disposal options for waste streams from the DOE Complex.

**COMMENTS**

Pages 1-2. Some additional explanation of the regulatory requirement to prepare the notification of intent to comply needs to be added, including consequences of merely operating until effective date of the rule or potentially shutting down before conducting the comprehensive performance test that demonstrates compliance.

Page 1, paragraph 1. The process by which the permit was modified to add IT Corporation as co-operator needs summary explanation.

Page 1, paragraph 4. Nitrogen oxide emissions have been demonstrated during previous trial burns and performance tests but not continuously measured.

Page 2, paragraph 1. The air performance test as conducted in 1990 and 1995 would not provide a worst-case condition for establishing metal feed rate restrictions unless waste was fed to the secondary combustion chamber (SCC) and kiln and SCC exit temperatures and chlorine feed rate were at maximum conditions.

Page 2, (I) (B). All of the criteria which cause the facility to be a major source need to be outlined.

Page 3, (I) (C). The section title implies that waste minimization for activities that generate wastes be addressed. All of the discussion is about emission control techniques. For the control of metals emissions, anticipated target feed rates or concentrations and their comparison to present operating conditions and waste acceptance criteria are not provided.

Page 3, (I) (C) (2). The standard is for total mercury not mercury vapor. Specify whether pH control of scrubber solution, off-gas temperature reduction, or activated carbon addition has been considered for mercury removal.

Pages 3-4, (I) (C) (5). Specify whether a total hydrocarbon continuous emissions monitor will be installed for normal operation and whether presence of methane is anticipated to cause difficulty in achieving the hydrocarbon limit.

Pages 4-5, (I) (D) (1). Available data from the evaluation of particulate matter continuous emissions monitoring systems should be provided for stakeholder review.

Page 5, (I) (C) (2). Attachment B or C does not provide present or future anticipated limits for the monitored parameters.

Pages 6-7, (I) (E). The removal efficiencies for metals and the particulate matter emission levels cited for the air performance test were determined under conditions with no waste feed to the secondary combustion chamber. Although some past EPA guidance for boilers and industrial furnaces (EPA/625/R-93/008, 1993) would establish metals feed rate limits for pumpable waste, all hazardous waste, and all feed streams, increased volatility of metals could be expected with waste fed to the secondary combustion chamber. Waste feed limits may need to be established separately for each combustion chamber.

Page 8, (I) (F) (1). An attachment with feed rate limits based current permits and approvals should be provided.

Page 9, (I) (E) (6). The pH of the scrubbing solution is controlled and adjusted with 20% sodium hydroxide. The scrubbing solution itself is not 20% sodium hydroxide.

Page 9, (I) (F) (3). Whether the operating parameters associated with control techniques demonstrated during the comprehensive performance test will become enforceable permit conditions needs to be stated.

Page 9, (ii) (A). It is apparent that some preliminary evaluation of process and feed operational changes has already been performed and is the basis for a preliminary decision to comply with the standards without capital expenditures. Additional information from that preliminary evaluation would add credibility to this draft notice.