RCRA Permit Appeal Fact Sheet **1988**

FACILITY: ThermalKEM, Inc. (ThermalKEM)
Rock Hill, South Carolina
SCD 044 442 333
RCRA Appeal No. 88-17

PETITIONER: ThermalKEM

PETITION FILED: August 15, 1988

STATUS OF PETITION: See Permit Appeal Status Report

ISSUES:
- Procedural issues
- Joint permitting
- Miscellaneous other issues (basis for permit condition)

Summary of Petition:

ThermalKEM is petitioning the Administrator to review the RCRA permit issued on June 28, 1988, to its existing hazardous waste incinerator and storage facility at Rock Hill, South Carolina. ThermalKEM objects to permit provisions that place a metals limitation on the waste feed stream. The petitioner's arguments fall into three categories: (1) procedural issues; (2) joint permitting issues; and (3) miscellaneous other issues.

- **Procedural Issues.** The petitioner contends that until EPA promulgates regulatory requirements for metals limitations on incinerator waste feeds, the imposition of a metals limitation on the incinerator's waste feed stream is inconsistent with administrative procedures and violates due process. In addition, ThermalKEM suggests that other EPA Regional offices are not incorporating a metals limitation requirement in hazardous waste incinerator permits issued in their respective Regions.

- **Joint Permitting.** The petitioner contends that EPA usurped South Carolina's authority to administer the RCRA program when the Agency included the metals limitation condition in the permit. The South Carolina Department of Health and Environmental Control (DHEC) had previously concluded that neither RCRA nor DHEC regulations set forth requirements for such a condition. While ThermalKEM concedes that DHEC is not authorized to administer requirements set forth in the Hazardous and Solid Waste Amendments (HSWA) of 1984, the petitioner argues that HSWA does not provide a basis for requiring the metals limitation condition.

- **Basis for Permit Condition.** ThermalKEM's trial burn was not designed or conducted to determine a worst case scenario for burning metals. The petitioner notes that there is no established testing methodology for these metals. Consequently, ThermalKEM contends that the risk assessment data, which were used by EPA to establish the permit conditions, are an inappropriate basis for making determinations related to limiting metals in the waste feed.

RCRA Permit Appeal Fact Sheet **1989**

FACILITY: ThermalKEM, Inc. (ThermalKEM)
Rock Hill, South Carolina
SCD 044 442 333
RCRA Appeal No. 89-15

PETITIONERS:
- League of Women Voters of South Carolina
- Environmentalists Inc.
- Citizens for Clean Air and Water, et al.

PETITIONS FILED: July 20, 1989

STATUS OF PETITIONS: See Permit Appeal Status Report

ISSUES:
- Procedural issues
- Miscellaneous other issues (incinerator feed rate)

Summary of Petitions:

Three petitioners contested the revised and increased toxic metals feed rate permit conditions for the ThermalKEM hazardous waste incineration facility. The petitioners had both procedural objections and technical objections to the revised metals permit conditions.

- **Procedural Issues.** Citizens for Clean Air and Water argued that the appeal by ThermalKEM, which resulted in the settlement providing for revised metals feed rates, was not properly considered because it was not timely filed, failed to show any proper basis for review, and failed to show that the issues raised for review were raised during the public comment period, all as required by 40 CFR Section 124.19.

  All of the petitioners argued that adequate opportunities for public input on the proposed permit revision to the ThermalKEM permit had not been provided. The petitioners argued that there has been no public hearing in the affected area, nor sufficient time for those who wish to critique the methodology whereby the EPA decision was reached to complete their work. Citizens for Clean Air and Water stated that no notice whatever was provided to the public of the matters under consideration despite the pendency of this appeal for a period of ten months and the prior expression of interest by the petitioner in the permit for this facility.

- **Incinerator Feed Rate.** Environmentalists Inc. and Citizens for Clean Air and Water, et al. argued that incinerator conditions are not technically appropriate for the following reasons:

- EPA failed to adequately consider the design of the ThermalKEM incinerator and its site (e.g., stack height, frequent thermal inversion conditions, nearby location of church);

- Use of inadequate and flawed trial burn data. The trial burn failed to include any methodology for testing for metals in waste feed and, instead, was conducted to test for the emissions of organics; and

- Use of flawed risk assessment information provided by ThermalKEM, and failures of EPA in predicting exposure risks, including:

  - Lack of consideration for significant public health issues;

  - Lack of scientific discipline;

  - Minimal use of evidence/data specific to the ThermalKEM incinerator;

  - Use of less-than-optimal "routine" analytical methods, justifiable only on non-safety economic grounds;

  - Heavy dependency on averages, estimates and assumptions;

  - Inadequate use of evidence contained in the files of the Department of Health and Environmental Control and EPA regarding the operation of the incinerator under both routine and accident conditions; and

  - Failure to explain how air emissions of organics from the ThermalKEM facility and air emissions from nearby industries were factored into EPA's risk assessment predictions.

Citizens for Clean Air and Water, et al. asked that ThermalKEM be required to conduct new trial burns and risk assessments which accurately assess the emission and effects of burning toxic metals at this specific facility. The petitioner also stated that ThermalKEM should be required to employ optimal waste feed analytical techniques for detection of such toxic metals as beryllium.

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:	)	
ThermalKEM, Inc. Rock Hill, South Carolina	)	RCRA Appeal Nos. 88-17 & 89-15
Permit No. SCD 044 442 333	)	

ORDER DENYING REVIEW

Before me are two petitions for review filed under 40 CFR §124.19 by Environmentalists, Inc., and Citizens for Clear Air and Water, et al. The appeal involves a RCRA permit issued by Region IV and the South Carolina Department of Health and Environmental Control. The permit authorizes continued hazardous waste storage and incineration at a facility operated by ThermalKEM, Inc., in Rock Hill, South Carolina. [1] The federal portion of the permit sets forth requirements under the Hazardous and Solid Waste Amendments of 1984. It also contains metal-emission standards for the incinerator imposed under the Agency's omnibus authority set forth in RCRA §3005(c)(3). [2]

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[1] ThermalKEM also seeks authorization to build and operate a new hazardous waste incinerator and storage area. Although authority to do so was included in the draft permit, the state portion of the permit (as issued in 1988) does not include such authority.

[2] See 42 U.S.C.A. §6925(c)(3) ("Each permit issued under this section shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment."); see also 40 CFR §270.32(b)(2) (same). Region IV used the omnibus provision as authority for the permit terms on metal limits because the RCRA regulations do not contain direct controls for metal emissions

(continued...)

Background

To control metal emissions, the permit as originally issued set forth numerical wastefeed limits for eleven metals, and established procedures for specifying a limit for a twelfth metal. The numerical limits were derived from trial burn data submitted by ThermalKEM. These metal controls first appeared in the state portion of the draft permit, but after the public comment period they were moved to the federal portion of the permit under EPA's omnibus authority. Shortly after the permit was issued, ThermalKEM petitioned for review of the metal limits, arguing that the Agency has no legal authority to impose such conditions, and that the trial burn data (derived primarily to establish standards for organic emissions) are inappropriate for establishing metal-emission standards. ThermalKEM was the sole petitioner. [3/]

After extensive negotiations, Region IV and ThermalKEM entered into a settlement agreement in May 1989. Under the settlement, ThermalKEM agreed to withdraw its appeal and adhere to the limits specified in the permit for five of the metals (antimony, arsenic, cadmium, chromium, and lead). Region IV

[2/](...continued)
from hazardous waste incinerators. Use of the omnibus provision to impose metal controls is consistent with Agency policy. See 55 Fed. Reg. 17,889 (Apr. 27, 1990); In re Chemical Waste Management, Inc., RCRA Appeal No. 87-12 (May 27, 1988).

[3/] See Petition for Administrative Review of RCRA Permit Condition (Aug. 1, 1988). ThermalKEM's appeal was designated as RCRA Appeal No. 88-17. The citizen groups' petitions for review constitute RCRA Appeal No. 89-15.

agreed to delete the permit conditions for two metals (vanadium and nickel), and to raise the wastefeed limits for the other five metals (barium, beryllium, mercury, silver, and thallium). The revised limits were derived by using so-called "Tier III" site-specific dispersion modeling in accordance with a March 1989 version of Agency guidance on metal controls. [4/] Unlike the limits in the permit as issued, the revised limits were not based upon ThermalKEM's trial burn data. [5/]

Region IV did not solicit or accept public comment on the terms of the settlement prior to signing it. On June 15, 1989, the Region gave public notice of the settlement agreement and provided an explanatory fact sheet, but again did not solicit

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[4/] See Guidance on Metals and Hydrogen Chloride Controls from Hazardous Waste Incinerators (U.S. EPA Office of Solid Waste, March 1989). The 1989 guidance sets forth a three-tiered regulatory scheme for incinerator metal controls. Under all three tiers, the limits are risk-based and calculated to ensure that ambient metal levels pose no unreasonable risk to human health. Under Tier I, feed-rate limits are back-calculated from risk-based emission limits, with no credit given for metal partitioned to bottom ash or removed by air pollution control devices ("APCD"). Under Tier II, risk-based emission limits are set by using trial burn data to give credit for ash partitioning and APCD removal, and dispersion coefficients are based upon reasonable, worst-case assumptions. Tier III is similar to Tier II but allows the applicant to use site-specific dispersion modeling (as opposed to worst-case assumptions under Tier II).

[5/] Although Region IV used site-specific modeling under Tier III to revise the metal limits during settlement, its approach was more conservative than that set forth in the 1989 guidance on metal controls. Rather than relying on ThermalKEM's trial burn data, the Region disregarded the data and instead gave no credit for ash partitioning or APCD removal. See Region Response to Petitions for Review Filed By Environmentalists, Inc. and Citizens for Clean Air and Water, at 13-16 and Exhs. 4 & 5 (Oct. 12, 1989).

public comment. The fact sheet provides an extensive justification for the Region's decision to enter into the settlement and to increase or delete the seven metal limits revised by that agreement. The fact sheet also indicated that any interested person could file an administrative appeal under 40 CFR §124.19 within 30 days of the public notice, and specified that any appeal should be limited to issues regarding the seven revised limits. This appeal followed. [6/]

Analysis

Under the rules that govern this proceeding, a RCRA permit ordinarily will not be reviewed unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. See 40 CFR §124.19; 45 Fed. Reg. 33,412 (May 19, 1980). The preamble to Section 124.19 states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional level * * *." Id. The burden of demonstrating that review is warranted is thus on Petitioners.

Petitioners first contend that Region IV erred in not subjecting the settlement agreement to prior public notice and comment. Although the Agency's rules do not address the precise

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[6/] At the request of a local citizen, the Region extended the deadline for filing an administrative appeal by 30 days from July 15 to August 14, 1989. On August 25, Regional officials held a public meeting with local citizens to explain the terms of the settlement and answer questions about it.

issue presented in this case, they certainly contemplate the possibility that permit terms will be added or revised in response to comments on the draft permit without being subject to additional notice and comment. The issue of whether a comment period should be reopened is generally left to the sound discretion of the Regional Administrator. See 40 CFR §124.14. Factors to be considered in exercising this discretion include (1) whether reopening the comment period "could expedite the decisionmaking process," and (2) whether comments on the draft permit have given rise to "substantial new questions." Id. §124.14(a)(1) & (b).

Because this case involves an analogous issue, it is appropriate to apply similar factors here. In my view, Region IV did not commit clear error or abuse its discretion in declining to subject the settlement agreement to prior public notice and comment. The Region correctly concluded that the revised metal limits do not raise substantial new questions, but instead involve questions no different from those raised by the draft and final permits -- namely, the appropriate limits on metal feed rates necessary to protect human health. Interested persons, including the citizen-group Petitioners, had a full and fair opportunity during the original comment period to present their views (pro or con) as to the draft permit's limits on feed rates. Moreover, the procedures for administrative appeal set forth in the settlement agreement provide an opportunity to present substantive objections to the Agency, an opportunity which

Petitioners are exercising in this case. By setting forth its rationale on the record in the explanatory fact sheet, the Region ensured that any interested party could adequately prepare a petition for review of the revised metal limits, and that these limits would be subject to effective review on the merits under 40 CFR §124.19. Region IV provided Petitioners with all the process due under the Agency's rules. [7/] In short, Petitioners have failed to show that the revised permit terms established under the settlement agreement are procedurally defective. [8/]

Petitioners argue that the changes to the permit made by the settlement constitute a permit modification that requires notice and comment under 40 CFR Part 270. Region IV correctly responds,

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[7/] Section 124.14(a)(1) gives the Regions discretion to reopen a public comment period even where comments on the draft permit do not raise substantial new questions. Likewise, today's decision should not be read to suggest that the Regions should generally decline to receive public comment on settlement agreements. Where a settlement involves significant changes to the permit, it will often be preferable to solicit additional comment on the changes prior to deciding whether to accept the settlement, even where the changes raise no substantial new question. It must be recognized, however, that in any particular case additional public comment might be impracticable, or perhaps even an insurmountable obstacle to obtaining a settlement that serves to protect human health and the environment. These determinations are best made at the Regional level and will generally be reviewed only for clear error or abuse of discretion.

[8/] Citizens for Clean Air and Water rely upon the Agency's rules for public participation set out in 40 CFR Part 25. Although these rules apply to the issuance or modification of a RCRA permit (§25.2(a)(2)), Region IV complied with these requirements when it followed the procedures under Part 124 for notice and comment on the draft permit. For the reasons set forth above, the settlement agreement does not constitute a separate permit issuance or modification that requires additional public participation under Parts 25 or 124.

however, that at the time of settlement the contested metal limits had not become effective due to ThermalKEM's administrative appeal. See id. §124.15(b)(2) (final permit decision becomes effective 30 days after service of notice of the decision unless review is requested under §124.19). The rules governing permit modifications define "permit" to exclude "any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit." Id. §270.2 (definition of "permit"); id. §124.2 (same). For purposes of judicial review, final agency action in a RCRA permit proceeding occurs only upon exhaustion of agency review procedures. Id. §124.19(f)(1). Thus, due to ThermalKEM's appeal, at the time of settlement the contested permit conditions on metal limits had not been subject to final agency action, and thus were not effective final permit conditions subject to formal modification under Part 270 of the rules.

Petitioners also challenge the merits of the settlement. The Agency recently proposed amendments to the RCRA rules to include direct, risk-based metal controls. See 55 Fed. Reg. 17,862 (April 27, 1990). Region IV's decision to delete the metal limits for vanadium and nickel reflects the Agency's current position, as reflected in the preamble to the proposed rule, that these metals do not require regulatory control to protect human health. 9/ Petitioners' primary argument appears

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9/ See 55 Fed. Reg. 17,877 (specifying as "metals of concern" the same ten metals regulated under the settlement).

to be that the revised metal limits are based on flawed trial burn data submitted by ThermalKEM. As explained above, however, the revised limits were not derived from trial burn data, but are instead based on the conservative, health-protective assumption that none of the metals in the wastefeed would remain in the ash or be removed by the incinerator's air pollution control equipment. [10/]

Petitioners also attack the settlement by arguing that ThermalKEM's petition for review, which gave rise to the settlement, was deficient. Regardless of the merits of ThermalKEM's petition, however, it was certainly within the Region's discretion to resolve ThermalKEM's appeal, thereby achieving immediate compliance with at least five of the contested metal limits, and compliance with the other limits upon resolution of any petition for review of these terms. [11/]

Although the citizen-group petitions raise several other substantive issues in summary fashion, they failed to show that

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[10/] Three of the five limits increased by the settlement (barium, mercury, and silver) fall significantly below those calculated by using this conservative assumption. See Region Response, supra note 5, at 15 and Exh.4. In other words, for these three metals ThermalKEM agreed to abide by limits more protective of human health than those calculated by Region IV when conservatively assuming zero removal efficiency.

[11/] As explained above, none of the permit terms regarding metal limits were effective during the pendency of ThermalKEM's appeal. See 40 CFR §124.15(b)(2). Because the interim status requirements impose no direct controls on metal emissions, ThermalKEM's incinerator was not subject to any direct controls for metals until the settlement agreement was executed and became effective.

the revised metal limits are based on clear error, fail to protect human health, materially deviate from the Agency's general approach to regulating metal emissions as set forth in the 1989 guidance and 1990 proposed rule, or otherwise warrant review. For the reasons set forth above and in the Region's response to the petitions, review is denied. In accordance with 40 CFR §124.19(f)(1), the Regional Administrator shall issue a final permit decision consistent with this order. [12/]

So ordered.

Dated: OCT 19 1990

William K. Reilly
Administrator

[12/] Unlike the seven metal limits that were increased or deleted under the settlement agreement, the five permit limits that were unchanged by the settlement are based on ThermalKEM's trial burn data. Only ThermalKEM petitioned for review of the unchanged permit terms in a timely fashion. In view of the settlement, ThermalKEM's petition is hereby dismissed as moot.

Any attempt by others to challenge the unchanged permit terms now would be untimely under 40 CFR §124.19. It is important to note, however, that Region IV subsequently called into question ThermalKEM's trial burn data and the permit metal limits derived from that data. See Region Response, supra note 5, at Exh. 5. The Region intends (and is hereby directed) to require ThermalKEM to conduct a new trial burn, and the Region should modify the permit if necessary in view of the new trial burn data.

I hereby certify that copies of the foregoing Order Denying Review in the matter of ThermalKEM, Inc. RCRA Appeal Nos. 88-17 & 89-15 were sent to the following persons in the manner indicated:

By First Class Mail, Postage Prepaid:

Ruth Thomas, President
Environmentalists, Inc.
1339 Sinkler Road
Columbia, SC 29206

Robert Guild
314 Pall Mall
Columbia SC 29201

Mary C. Johnson
Assistant Regional Counsel
345 Courtland St., N.E.
Atlanta, GA 30365

Mary T. Kelly
2838 Devine St.
Columbia, SC 29205

Richard H. Willis
P.O. Box 11070
Columbia, SC 29211

Dated: OCT 22 1990

Brenda H. Selden, Secretary
to the Chief Judicial Officer