RCRA Permit Appeal Fact Sheet **1992**

FACILITY: Laidlaw Environmental Services (Laidlaw)
Roebuck, South Carolina
SCD 981 467 616
RCRA Appeal No. 92-20

PETITIONERS:
- Judith W. Pruitt
- Michael S. Pruitt
- Angela Paterson
- Gayle Lee
- Julie Woodcock

PETITION FILED: June 5, 1992

STATUS OF PETITION: See Permit Appeal Status Report

ISSUE: Miscellaneous other issues (metals feed rates and emissions limits pending analysis of uncontrolled thermal relief vent openings)

Summary of Petition:

The petitioners are petitioning for review of the Class 3 permit modification issued by Region 4 to Laidlaw's incinerator facility in Roebuck, South Carolina. As residents of Roebuck, South Carolina, the petitioners oppose any increase of metals feed rates and believe that metals emissions limits are excessive and should be reduced. The petitioners argue increased feed rates and emissions should not be allowed until: (1) Region 4 has fully evaluated the thermal relief vent openings and can determine that they pose no danger to health or the environment; (2) the facility has installed all appropriate equipment to limit such openings; and (3) some appropriate method, in addition to the four second lag time, is applied to effectively limit emissions during openings.

- The petitioners contend that Laidlaw is unable to control its daily openings of the thermal relief vents. When the vents open, the petitioners maintain that metals and other hazardous wastes are emitted.

- Furthermore, the petitioners contend that residential soils near the facility have been contaminated by metals emissions from the facility's incinerator.

- The petitioners maintain the Region 4 is aware of the situation and even acknowledges that when waste feed is cut off, some remaining hazardous constituents (metals, organics, particulates, acid gases) that may not have gone completely through the air pollution control equipment, could be emitted.

Although Region 4 is requiring Laidlaw to provide equipment to limit bypass events in the future, the petitioners contend that feed rates or emissions should not be increased until the equipment is operational. In addition, because of Laidlaw's record of violations, deficiencies, and unpaid fines, the petitioners argue that feed rates should not be increased until the facility establishes a track record of substantial compliance and pays all fines and penalties.

(Slip Opinion)

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:	)	
Laidlaw Environmental Services Thermal Oxidation Corp., Inc. (TOC)	)	RCRA Appeal No. 92-20
Permit No. SCD 981 467 616	)	

[Decided October 26, 1993]

ORDER DENYING REVIEW IN PART
AND REMANDING IN PART

Before Environmental Appeals Judges Nancy B. Firestone, Ronald L. McCallum, and Edward E. Reich.

LAIDLAW ENVIRONMENTAL SERVICES, THERMAL OXIDATION CORP., INC. (TOC)

RCRA Appeal No. 92-20

ORDER DENYING REVIEW IN PART AND REMANDING IN PART

Decided October 26, 1993

Syllabus

Five individuals have filed a petition seeking review of a permit modification issued by Region IV to Laidlaw Environmental Services, Thermal Oxidation Corporation, Inc. (TOC), under the authority of the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act. The modification, among other things, allows TOC to increase the metals feed rate to its liquid injection incinerator in Roebuck, South Carolina.

The metals feed rate in TOC's original permit, issued on September 30, 1988, did not take into account the removal efficiency of the facility's air pollution control system. Rather, the 1988 permit assumed that all metals entering the incinerator would be emitted. Thus, in order to control metals emissions, the permit established very limited metals feed rates. Following issuance of the 1988 permit, TOC filed a petition for review under 40 C.F.R. §124.19 arguing, among other things, that the Region erroneously failed to give TOC credit for metals removed by its air pollution control system. The Administrator denied review on the ground that TOC did not provide sufficient data on the ability of the incinerator to remove metals. TOC then filed an appeal with the U.S. Court of Appeals for the Fourth Circuit. Before reaching the merits, the Fourth Circuit stayed the permit's metals feed rates until TOC could conduct a trial burn specifically designed to test the capacity of the incinerator to control metals emissions.

The test burn was conducted on August 20, 1990, and, based on its results, the Region proposed a modified permit that would allow TOC to increase its metals feed rate for various metals based on the effectiveness of TOC's air pollution control equipment. In addition, in response to comments on the draft permit modification concerning TOC's excessive reliance on its thermal relief stacks (TRSs) to release emissions that bypass its air pollution control equipment, the Region included provisions in the final permit modification that are intended to limit TOC's use of its TRSs to no more than one release per year and provide a procedure to reduce the number of bypass events if more than one such event should occur.

Pending completion of the modification process, the Fourth Circuit imposed alternative metals feed rates under which TOC is currently operating. In addition, the stay order, as amended on August 15, 1991, contains various provisions designed to limit the number of TRS bypass events. In compliance with this stay order, TOC has apparently submitted a report describing the design and operational changes needed at the facility to limit the number of TRS openings to one per year. According to the Region, TOC has already begun to implement many of these changes and plans to implement the rest when the permit modification becomes effective.

The Region issued notice of its final decision to modify TOC's permit on March 12, 1992. This appeal followed. On appeal, petitioners contend that the Region's decision to issue the modification contains findings of fact and conclusions of law that are clearly erroneous and should be reviewed for the following reasons: 1) increasing the

metals feed rate will result in excessive metals emissions, given TOC's excessive use of its thermal relief stacks; 2) TOC's claims with regard to the facility's destruction removal efficiency are unreasonable; 3) the Region did not adequately consider the potential dangers of air inversions in the area surrounding the facility; and 4) the Region did not give adequate consideration to TOC's prior compliance history.

Held: The permit modification is remanded with regard to those provisions designed to limit the number of TRS bypass events. On remand, the Region is ordered to reopen the modification to incorporate the design and operating changes the Region determines are necessary to protect human health and the environment, which we presume will include the changes approved by the Region in accordance with Condition V.D.20.c. of the Fourth Circuit's stay order. In addition, the Region must provide the public with an opportunity to comment on these changes. With regard to the remaining issues raised in the petition, Petitioners have failed to satisfy their burden under 40 C.F.R. §124.19 of establishing that the Region's determination was clearly erroneous or was based on an exercise of discretion or an important policy consideration warranting review. Review is therefore denied.

Before Environmental Appeals Judges Nancy B. Firestone, Ronald L. McCallum, and Edward E. Reich.

Opinion of the Board by Judge Firestone:

I. *BACKGROUND*

On March 12, 1992, EPA Region IV modified a permit originally issued to Laidlaw Environmental Services, Thermal Oxidation Corporation, Inc. (hereinafter "TOC") on September 30, 1988, under the Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C.A. §§6901-6992k, for TOC's liquid injection incinerator in Roebuck, South Carolina. [1] The facility provides contract treatment services for hazardous and other wastes generated by a wide range of industries and processes. The Class III modification, [2] among other things, increases the maximum allowable feed rate for certain metals burned at TOC's facility.

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[1] The non-HSWA portion of the permit was issued by the State of South Carolina, an authorized State under RCRA §3006(b), 42 U.S.C. §6926(b).

[2] 40 C.F.R. §270.42.

This matter has a complicated procedural history which we will briefly summarize below. The original 1988 TOC permit contains health-based emissions limits for ten metals. These are: arsenic, beryllium, cadmium, chromium, antimony, barium, lead, mercury, silver, and thallium. [3] Region IV set these limits pursuant to its omnibus authority under §3005 of RCRA. [4] Because there are no specific metals limits established in RCRA or the implementing regulations, Region IV, in accordance with Agency guidance, set ambient health-based limits based upon an established risk assessment methodology. [5] In setting these limits the Region assumed that no metals would be removed by the facility's air pollution control equipment and that all metals fed into the incinerator would be emitted. [6] Thus, in order to keep metals emissions within health-based

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[3] When the 1988 permit was issued, nickel and selenium were excluded from the list of regulated metals because, at that time, data on the health effects of these metals were not available. The permit modification, however, includes emissions limitations for these two metals. *See* Permit Condition IV.E.11.

[4] *See* RCRA §3005(c)(3), 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."); 40 C.F.R. §270.32(b)(2) (same).

[5] *See Guidance on Metals and Hydrogen Chloride Controls for Hazardous Waste Incinerators, Volume IV of the Hazardous Waste Incineration Guidance Series*, Office of Solid Waste, Waste Treatment Branch; *See also* 40 C.F.R. Part 266, Subpart H (Hazardous Waste Burned in Boilers and Industrial Furnaces). 40 C.F.R. Part 266, Subpart H regulates hazardous wastes burned or processed in boilers or industrial furnaces and includes health-based limitations on emission of both carcinogenic and non-carcinogenic metals. Although these rules do not apply to incinerators, the Agency currently uses them as guidance in establishing metals limitations. The objective of this guidance is to ensure that emissions of individual metals reaching a hypothetical maximum exposed individual (MEI) do not exceed ambient health-based levels which could present an unacceptable health risk. For carcinogenic metals (arsenic, beryllium, cadmium, and chromium), the standards limit the increased lifetime cancer risk to the MEI to a maximum of 1 in 100,000. Metals Guidance, at 2. The emissions standards for non-carcinogenic metals (antimony, barium, lead, mercury, silver, and thallium) are based on reference air concentrations, below which adverse health effects have not been observed. *Id.* The Agency has established acceptable ambient levels in appendices IV (Reference Air Concentrations) and V (Risk Specific Doses) to 40 C.F.R. Part 266.

[6] TOC apparently failed to provide sufficient data to show that the facility's air pollution control equipment could successfully limit metals emissions.

limits, the 1988 permit established stringent metals feed rates. [7] *See* Fact Sheet accompanying draft permit modification, at 6.

Following issuance of the 1988 permit, TOC filed a petition for review pursuant to 40 C.F.R. §124.19 challenging the permit's metals feed rates. TOC argued, among other things, that the Region erroneously failed to give TOC credit for metals removed by the facility's air pollution control system. *See In re Thermal Oxidation Corporation*, RCRA Appeal No. 88-28, at 2-3 (Adm'r, July 26, 1990). The Administrator denied review, however, because TOC did not present sufficient data regarding the incinerator's metals removal efficiency. [8] The Administrator therefore concluded that the Region did not abuse its discretion in assuming zero removal efficiency. *Id.* at 4-5. The Region indicated, however, that it would consider a permit modification request when TOC supplied sufficient trial burn data supporting an increase in the allowable metals feed rates. *Id.* at 5 n.9.

TOC then filed a petition for review with the United States Court of Appeals for the Fourth Circuit challenging the 1988 permit's metals feed rates. Before reaching the merits of the appeal, however, the Fourth Circuit, on September 4, 1990, stayed the permit's metals

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[7] The metals feed rate refers the amount of metals entering the incinerator, measured in pounds per hour. The metals feed rates in the 1988 permit were as follows:

Name of Metal	Emissions Rate (lbs/hr)
Antimony	0.73
Arsenic	0.0014
Barium	120
Beryllium	0.025
Cadmium	0.0034
Chromium	0.00051
Lead	0.22
Mercury	4.9
Silver	7.3
Thallium	0.73

Permit Condition IV.A.

[8] "Removal efficiency" refers to the ability of the incinerator's air pollution control equipment to remove hazardous constituents, including metals.

feed rate limits and established revised limits in the meantime. *Laidlaw Environmental Services (TOC), Inc. v. United States Environmental Protection Agency*, No. 90-2156 (4th Cir. September 4, 1990) (order granting stay). During the pendency of the appeal, TOC and Region IV agreed that TOC would conduct a trial burn designed to test the capacity of the air pollution control equipment to control metals emissions. The Region and TOC further agreed that if the test burn indicated that the facility could control emissions while burning metals at the metals feed rates sought by TOC, the Region would modify the permit accordingly.

On August 20, 1990, TOC conducted the agreed-upon test burn. The test burn established to the Region's satisfaction that the incinerator could effectively control metals emissions while incinerating wastes at feed rates significantly above those provided for in TOC's 1988 permit. In particular, the Region concluded that the test burn demonstrated that under TOC's proposed metals feed rates, metals emissions would not exceed acceptable ambient health-based levels and, therefore, TOC was entitled to a permit modification. [9] Although the Region acknowledged in the fact sheet accompanying the draft permit that the modification increases the permit's metals feed rates, it noted that the ambient health-based metals emissions limits and operational requirements are stricter than those in the 1988 permit. *See* Fact Sheet Accompanying Draft Permit, at 6-7 (exh. 5 to Region's Response). [10]

The Region issued the draft permit modification for public comment on April 25, 1991. During the public comment period several commenters raised concerns regarding TOC's repeated use of its thermal relief stacks (TRSs) to bypass the facility's air pollution control equipment. The record indicates that between May 22 and October 31,

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[9] Recognizing that this process would take several months, the Fourth Circuit established revised metals feed rates for TOC's facility under the stay order. These rates now govern TOC's operation.

[10] The Region notes that emissions limits were reduced as a result of a second round of dispersion modeling with meteorological data from the Greenville-Spartanville airport. *See* Response to Comments, at 22. This information was not available at the time the original 1988 permit was issued. *Id.*

1991, TOC had apparently opened its thermal relief stacks approximately 135 times.[11] The frequency of these uncontrolled emissions, together with evidence from a May 23, 1991 EPA/OSHA Task Force report on the problems and potential dangers associated with this type of release,[12] led the Region to renotice the draft permit for public comment with additional provisions designed to control the number of TRS bypass events.[13] The permit modification provides that if more than one such event should occur within a 365-day period, TOC must conduct a "fault tree analysis" of the causes for the occurrence, and determine what design and other changes are necessary to reduce the number of these occurrences.

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[11] Memoranda to File from Pamela B. Childress, South Carolina Department of Health and Environmental Control, Environmental Quality Control, Appalachia III District, dated June 18, 1991, July 8, 1991, August 5, 1991, September 25, 1991, and November 1, 1991 (Schedule A to Petition for Review).

[12] Response to Comments, at 8.

[13] The Region explained the need for such limitations as follows:

> EPA tests have shown that unburned organics can continue to exit stack gases after the ceasation [sic] of cofiring hazardous waste in boilers, an effect which has been termed hysteresis. In those tests it appeared principal organic hazardous constituents (POHCs) and products of incomplete combustion (PICs) can be absorbed on soot deposited on boiler surfaces during cofiring and desorbed back into the combustion gases after waste cofiring ceases. Further EPA tests have shown that this hysteresis effect can be observed both in the gas phase (stack emissions) and in the solid, sorbent phase (soot) * * *.
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> Although the hysteresis effect has only been demonstrated in boilers, the hysteresis effect may occur at TOC since soot can build up in the incinerator chamber and associated boilers. It is therefore possible that when a TRS opens after waste is cut off from entering the chamber that measurable levels of POHCs and PICs may exit the TRS openings without passing through air pollution control equipment.
>
> EPA is establishing conditions in the permit modification to restrict the number of TRS openings at TOC in order [to] address the possible threat to human health and the environment from the hysteresis effect. EPA's goal is to reduce the probability of a TRS opening at TOC to one per year.

Response to Comments, at 26-27.

Importantly, on August 15, 1991, the Fourth Circuit, pursuant to an agreement between TOC and the Region, also amended its stay order to include provisions designed to limit the number of TRS openings. Stay Order, Condition V.D.20. Pursuant to Condition V.D.20.c. of the amended stay order, TOC submitted an analysis specifying the design changes and revised operating procedures necessary to reduce the number of TRS openings to no more than one per year. It appears that the Region has approved, and TOC is now implementing, the results of that analysis. *See* Region's Amended Response, at 9. The permit modification before the Board does not appear to require continued compliance with the design changes and revised operating procedures approved by the Region under the stay order. In fact, the March 12, 1992 final permit does not explicitly mention any of the design or operational changes suggested in the report prepared by TOC under the stay order and referenced in the Region's amended response (p. 9).

On June 5, 1992, five citizens, Judith W. Pruitt, Michael S. Pruitt, Angela Paterson, Gayle Lee, and Julie Woodcock (hereinafter "Petitioners") filed a timely petition for review under 40 C.F.R. §124.19 challenging the modified permit provisions. Petitioners submitted an Amended Petition for Review on October 26, 1992. [14] In brief, Petitioners argue that the modification should be reviewed for the following four reasons: 1) the increase in the metals feed rates will result in excessive metals emissions, given TOC's excessive use of its TRS openings which bypass the air pollution control equipment; 2) TOC's claims with regard to the incinerator's destruction removal efficiency for metals based upon the test burn are not supported; 3) the

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[14] By order dated August 19, 1992, the Board denied the Region's motion to dismiss the appeal on the grounds that it was filed out of time. *See In re Laidlaw Environmental Services (TOC), Inc.*, RCRA Appeal No. 92-20 (Aug. 19, 1992) (Order Denying Motion to Dismiss). The Board concluded that the Region's notice of the final permit decision was incomplete because it failed to include any reference to the Agency's appeal procedures as required by 40 C.F.R. §124.15. *Id.* at 4. The petition for review, in which all five petitioners joined, was therefore treated as timely and the Region was ordered to renotice the issuance of the final permit decision in accordance with the requirements of 40 C.F.R. §124.15(a). The Region reissued the final permit modification on September 23, 1992. Thereafter, petitioners submitted the amended petition for review now before the Board.

Region has not given adequate consideration to the potential danger of air inversions in the area surrounding the facility; and 4) the Region did not give adequate consideration to TOC's prior compliance history. At the request of the Environmental Appeals Board, Region IV filed a response to the amended Petition for Review (Region's Response). Petitioners filed a reply to the Region's Response dated May 27, 1993 (Petitioners' Reply). In response to a request from the Board for additional record information, the Region submitted an amended response to the amended petition for review (Amended Response) dated August 13, 1993.

II. *DISCUSSION*

Under the rules governing 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 C.F.R. §124.19; 45 Fed. Reg. 33,412 (May 19, 1980). The preamble to section 124.19 states that "this power of review should only be 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 on the Petitioner. *See In re Allied-Signal, Inc.*, RCRA Appeal No. 90-27, at 3 (EAB, July 29, 1993).

A. *Metals Emissions*

Petitioners oppose any increase in the permit's allowable metals feed rates. Although it is not entirely clear from their petition for review, Petitioners appear to be making two arguments regarding metals emissions. First, petitioners contend TOC's excessive use of its facility's thermal relief stacks to bypass the air pollution control system will result in excessive metals emissions, and that this will create an unreasonable risk of exposure. Thus, according to petitioners, these releases must be effectively controlled. Second, Petitioners argue that the Region erred in relying on TOC's August 1990 test burn results because they are inconsistent with the results of test burns at other facilities. Each of these arguments will be discussed in turn.

1. *Thermal Relief Stack Openings*

Petitioners focus their objections to the revised metals feed rates on TOC's alleged overuse of its thermal relief stacks to bypass the facility's air pollution control equipment. Petitioners argue that such releases have not been adequately addressed in the modification. According to Petitioners, no increase in the allowable metals rates should be allowed until:

> (1) the EPA has fully evaluated thermal relief vent openings and can prove without question, that such openings pose no danger to health or environment; (2) The facility has installed all appropriate equipment to limit such openings except in the event of a grave emergency; and (3) Some appropriate method, in addition to the four second lag time, is applied to effectively limit emissions during such openings. [15]

Amended Petition for Review, at 7. Although the Region has conceded that there have been an excessive number of TRS openings, [16] it contends that the modified permit provisions, designed to limit the number of TRS openings to no more than one per year, adequately address Petitioners' concerns. We disagree.

As noted above, during the initial comment period, several commenters expressed concern regarding the number of bypass events occurring at the facility and the possibility that significant amounts of hazardous constituents were released during these events. *See* Response to Comments, at 6-8. In response to these comments, as well

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[15] Modified Permit Condition IV.E.7.a. provides that the thermal relief stacks "shall remain closed until a minimum of four (4) seconds residence time occurs following waste feed shutoff." According to the Region, this should eliminate the threat of hazardous emissions by allowing combustion gases sufficient time to pass through the facility's air pollution control equipment before the TRS is opened. *See* Region's Response, at 8; Response to Comments, at 8. The Region acknowledges, however, that this conclusion is not supported by sufficient test data, and that the possibility exists that hazardous constituents can be released when a TRS is opened. Response to Comments, at 8.

[16] Response to Comments, at 8-9.

as to an EPA/OSHA Task Force Report concluding that incinerators often use their bypass stacks in an "excessive and abusive manner to accommodate poor operations," the Region revised the draft permit modification to include provisions designed to control the number of bypass events. *See* Modified Permit Condition IV.E.7.; Response to Comments, at 8-9. The revised draft permit modification was then renoticed for further comment. [17] Region's Response, at 5. The proposed modification requires that TOC record and maintain data on the thermal relief stacks. Modified Permit Condition IV.E.7.b. It further mandates that TOC perform a "fault tree analysis" in the event a TRS bypass event occurs more than once during a 365-day period. The fault tree analysis must analyze the events leading up to a TRS opening and specify design and other changes necessary to minimize such events. Once approved by the Region, TOC must then implement these changes. Modified Permit Condition IV.E.7.c. & d.

Petitioners contend that the above-noted provision in the current modification is insufficient to ensure protection of public health, and that additional design and operational changes should be added to the permit to ensure that TOC's TRS openings do not present any danger to human health or the environment. Amended Petition for Review, at 7. In response, the Region states that TOC, pursuant to Condition V.D.20.c. of the Fourth Circuit's stay order, has already submitted a report describing the design and operating changes necessary to limit the number of TRS openings to no more than one per year. Further, according to the Region, TOC has begun to implement many of these changes under an approved schedule of compliance. *See* Exh. 3 to Region's Response; Region's Response, at 9. More specifically, the Region states that TOC:

> [H]as submitted the requisite report and implemented some of the necessary controls and intended, with the

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[17] The Region states that after the modification was revised and renoticed, "[a] public meeting and hearing were then held on September 25, 1991, and November 24, 1991, respectively." Region's Response, at 5. In addition, the Region states that it considered additional comments from these two events and from an informal citizens meeting in establishing conditions in the modification. *Id.* at 5. The Region, however, has failed to provide the Board with a transcript of any of these meetings.

> permit modification in issue, to implement the remainder, such as installing a more efficient baghouse, the development of new operating procedures and the implementation of new programming of the process control computer.

Region's Amended Response, at 9 (footnote omitted). [18]

Our review of the administrative record reveals that TOC's commitments under the Fourth Circuit's stay order are not explicitly part of the present permit modification. Thus, it is unclear whether and to what extent TOC must implement any of these changes under this permit. Moreover, it does not appear that Petitioners or other interested parties have had an opportunity to comment on the changes.

Under the circumstances, the permit modification must be remanded. The manner in which a facility treats, stores, or disposes of hazardous waste is governed by the conditions specified in a properly issued permit. *See* RCRA §3005(a), 42 U.S.C.A. §6025(a); 40 C.F.R. §270.1. On remand, the Region must reopen the permit to include the design and operating changes the Region determines are necessary to protect human health and the environment, which we presume will include the changes approved by the Region in accordance with Condition V.D.20.c. of the Fourth Circuit's stay order. In addition, the public must be given an opportunity to submit comments on such changes before they become part of any final permit modification. [19]

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[18] The Region also indicates that TOC has already installed micro switches to detect movement of the relief vents and automatic waste feed shut off devices in compliance with the stay order. Region's Amended Response, at 9 & n.5.

Although the Region states that the permit modification eliminates the chances of hazardous waste being emitted through a TRS opening by requiring that TOC maintain negative pressure in the combustion chamber (Permit Condition IV.E.4), the Region, by including additional permit conditions designed to limit the number and harmful effects of by-pass events, apparently believes that additional measures are required to protect human health and the environment. Further, the Region's suggestion that TOC must complete its obligations under Condition V.D.20. of the amended stay order, reflects its belief that additional steps are required.

[19] *See* 40 C.F.R. §§124.10 & 270.41.

2. *Removal Efficiency*

Petitioners also argue that the Region erred in setting metals emission limits based on the removal efficiency of TOC's air pollution control system. Amended Petition for Review, at 3. According to the August 1990 trial burn, the average air pollution control system removal efficiency is as follows: antimony - 99.9253%, arsenic - 99.9946%, barium - 99.9850%, beryllium - 95.8584%, cadmium - 99.9897%, chromium - 99.9798%, lead - 99.9802%, mercury - 96.2974%, silver - 99.8967%, and thallium - 99.2776%. Region's Amended Response, at 13-14. Petitioner's contend that the accuracy of the above-noted test results is "subject to grave questions" and thus the test burn does not support an increase in the metals feed rate. *Id.* at 5. In support of this assertion, Petitioners point to data collected from test burns at other incinerators that reflect wide variations in the removal efficiency for metals, particularly mercury. Specifically, Petitioners rely on reports from the Midwest Research Institute and the Oak Ridge National Laboratory. According to Petitioners, "[t]he Midwest Research Report mentions one incinerator was able to remove forty-nine percent (49%) of one metal. The Oak Ridge Report states that as much as fifty-three percent (53%) of a metal may be emitted into the air * * *." Amended Petition for Review, at 3-4. Petitioners also cite a report entitled "Metals Partitioning from Kiln Incineration of Hazardous Waste" [20] stating that "removal of mercury at one incinerator varied at times from 58% to 99% * * *." *Id.* at 5.

In response to these comments on the draft modification, the Region stated that the Midwest Research Institute and Oak Ridge National Laboratory studies, even if accurate, are not relevant to the present proceeding. Response to Comments, at 23-24. More specifically, the Region explained that these studies show that without proper controls, metals emissions can be high and may vary widely depending on the waste feed and the efficiency of the air pollution control equipment. *Id.* at 24. Because these factors vary at different facilities, however, a trial burn is required for the facility to be permitted to determine the *actual* amount of stack emissions. In the

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[20] Exh. A to amended Petition for Review.

present case, the trial burn demonstrated the ability of the incinerator to meet the permit's emissions limits while incinerating metals in the quantities listed in the modification. Data on removal efficiency rates of other incinerators with different waste feeds and/or control equipment are not relevant to this facility and are insufficient to support Petitioners' assertions regarding the results of TOC's trial burn. Similarly, the data set forth in "Metals Partitioning from Kiln Incineration in Hazardous Waste" do not support Petitioners' argument. As the Region noted in its response to the Board, that study involved a rotary kiln incinerator with different air pollution control equipment than TOC's liquid injection incinerator and thus the results of that study are of no use in evaluating TOC's permit modification. [21] *See* Region's Response, at 17.

In sum, none of the articles cited by Petitioners demonstrate that the August 1990 trial burn was in any way flawed, or that the reported removal efficiency rates were inaccurate, nor do we find any evidence in the record on appeal supporting these assertions. We therefore deny review of the metals emissions limits in the permit modification on this basis. [22]

B. *Air Inversions*

Petitioners argue that the Region, in setting metals emission limits and allowable feed rates, failed to consider adequately the potential dangers of air inversions in the Spartanville area surrounding TOC's facility. The record on appeal, however, does not support this

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[21] We note that the article cited by Petitioners ("Engineering Analysis of Metals Emissions from Waste Incinerators Field Data," at 80), concludes that emissions are dictated by the type of air pollution control devices used. Exh. A to Amended Petition for Review.

[22] Petitioners erroneously assume that the facility is required to achieve a destruction and removal efficiency (DRE) of 99.99% for metals entering the incinerator. Although the regulations require a DRE of 99.99% for principal organic hazardous constituents burned in incinerators (*see* 40 C.F.R. §264.343), this requirement does not apply to metals emissions. Rather, as stated above, incinerator's are required to demonstrate that metals emissions will not exceed ambient health-based limits which could present an unacceptable health risk. *See supra* note 5 and accompanying text.

assertion. In its response to comments on this issue, the Region stated that the Agency conducted a risk analysis:

> [B]ased on site-specific dispersion modeling using meteorological data from Greenville-Spartanville (GSP) airport to determine the highest allowable metals emissions which would not surpass ambient health based levels which the EPA deems protective of human health.

Response to Comments, at 38. This modeling included consideration of the "site specific effects of climatic conditions, the variability in meteorology, terrain and stack height as factors in the formulation of the metals dispersion from stack emissions." *Id.* Petitioners provide no evidence supporting the assertion that the Region's analysis in this regard was flawed or incomplete, nor is there any such evidence in the record on appeal. Review of metals emissions and feed rates on the grounds that the Region did not adequately consider air inversions is therefore denied. *See In re LCP Chemicals*, RCRA Appeal No. 92-25, at 4 (EAB, May 5, 1993) (petitioner must demonstrate why Region's response to comments is clearly erroneous or otherwise warrants review).

C. *Compliance History*

Finally, Petitioners argue that the Region erred in failing to adequately consider TOC's compliance history in granting the permit modification. In particular, Petitioners' note that the facility has an extensive record of violations, and that these violations "can cause dangerous pollution of the air, the land and the water threatening the health of the people of the region." Amended Petition for Review, at 8. As evidence of TOC's failure to comply with its obligations, Petitioners state that TOC has been cited for 483 NPDES permit violations as to mercury and has agreed to pay $100,000 to the South Carolina

Department of Health and Environmental Control for these violations. [23] Amended Petition for Review, at 8; Petitioner's Reply, at 5.

While TOC's compliance history under the Clean Water Act is disturbing, it is not relevant to this HSWA permit proceeding. *See In re Sequoyah Fuels Corporation*, NPDES Appeal No. 91-12, at 6 (EAB, August 31, 1992) ("The scope of an NPDES permit proceeding does not extend to issues of RCRA regulation unless * * * permit proceedings for a facility have been consolidated."). [24] Moreover, Petitioners' generalized concerns regarding TOC's past violations do not, without more, establish a link to a "condition" of the present permit modification, and thus do not provide a jurisdictional basis for the Board to grant review. *See* 40 C.F.R. §124.19 (only "condition[s] of the permit decision" are reviewable on appeal to the Board); *In re Waste Technologies Industries, East Liverpool, Ohio*, RCRA Appeal Nos. 92-7, *et alia*, at 19 (EAB, July 24, 1992) (concerns regarding alleged laxity in the Region's enforcement initiatives do not establish a link to a condition of the permit). Of course, we would expect that Region IV would act responsibly with respect to its oversight of the final permit and, in its discretion, initiate enforcement actions or a permit revocation proceeding should violations arise. [25] *See In re California Thermal Treatment Services, Inc.*, RCRA Appeal No. 88-47, at 5 n.8

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[23] We note for the record that the modified permit actually decreases the maximum allowable feed rate as well as the emissions limit for mercury from 4.9 lbs/hr. to 0.17 lbs/hr. *Compare* 1988 Permit Condition IV.A. *with* Modified Permit Condition IV.C.3. *and* Modified Permit Condition IV.E.11.

TOC has submitted various studies documenting the dangers of excessive amounts of metals to public health, as well as a report prepared at the request of Petitioners' attorney indicating that the soil surrounding the facility contains high levels of various metals. These submissions however, do not identify a clear error of fact or law by the Region in issuing the modification. Rather, they appear to challenge the basis for issuing the original permit. Such a challenge may not be raised in the current proceeding. *See In re Waste Technologies Industries East Liverpool, Ohio*, RCRA Appeal Nos. 92-7, *et alia*, at 13 n.16 (EAB, July 24, 1992).

[24] Petitioners also contend that TOC has failed to pay all previously levied fines. Amended Petition for Review, at 9. Petitioners fail to explain, however, exactly which fines have not been paid and what relevance this may have to the current proceeding.

[25] Citizens also have a right to initiate a civil action to enforce the provisions of HSWA permits. *See* RCRA §7002, 42 U.S.C.A. §6972.

(Adm'r, Feb. 1, 1990) ("Although the Agency has the authority to deny a permit where necessary to protect human health and the environment, (*see* 50 Fed. Reg. 28,723), the primary means of deterring future noncompliance is through enforcement.").

III. *CONCLUSION*

The permit modification is remanded with regard to those provisions designed to limit the number of TRS bypass events. On remand, the Region is ordered to reopen the modification to incorporate the design and operating changes the Region determines are necessary to protect human health and the environment, which we presume will include the changes approved by the Region in accordance with Condition V.D.20.c. of the Fourth Circuit's stay order. [26] In addition, the Region must provide the public with an opportunity to comment on these changes. With regard to the remaining issues raised in the petition, Petitioners have failed to satisfy their burden under 40 C.F.R. §124.19 of establishing that the Region's determination was clearly erroneous or was based on an exercise of discretion or an important policy consideration warranting review. Review is therefore denied.

So ordered. [27]

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[26] Although 40 C.F.R. §124.19 contemplates that additional briefing typically will be submitted upon a grant of a petition for review, a direct remand without additional submissions is appropriate where, as here, it does not appear as though further briefs on appeal would shed light on the issues addressed on remand. *See, e.g., In re Beazer East, Inc., and Koppers Industries, Inc.*, RCRA Appeal No. 91-25, at 15 (EAB, March 18, 1993).

[27] Petitioners' request for oral argument is denied.

CERTIFICATE OF SERVICE

I hereby certify that copies of the forgoing Order Denying Review in Part and Remanding in Part In the Matter of Laidlaw Environmental Services, Thermal Oxidation Corp., Inc. (TOC), RCRA Appeal No. 92-20, were sent to the following persons in the manner indicated:

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Dated: OCT 27 1993

Mildred T. Johnson
Secretary