RCRA Permit Appeal Fact Sheet **1989**

FACILITY: BP Chemicals America, Inc. (BPCA)
Lima, Ohio
OHD 042 157 644
RCRA Appeal No. 89-4

PETITIONER: BPCA

PETITION FILED: January 17, 1989

STATUS OF PETITION: See Permit Appeal Status Report

ISSUES: Miscellaneous other issues (burning of hydrogen cyanide vapor; technical issues associated with burning of hydrogen cyanide vapors; incinerator cutoff provisions and other operating requirements; deepwell treatment process; pre-1987 submittals in the permit application record; dilution of restricted waste; classification of reactive wastes; errors in the final permit)

Summary of Petition:

BPCA is seeking review of conditions in the hazardous waste permit issued to its Lima, Ohio incinerator. The majority of contested provisions address the burning of hydrogen cyanide (HCN) vapor, specific cutoff parameters and other requirements for the incinerator, and operations of the deepwell treatment process. In addition, the petitioner contests the classification of waste streams, the Agency's interpretation of the land disposal restrictions (LDRs) with respect to mixing of wastes, and the inclusion of outdated facility submittals in the permit application record.

- **Burning of Hydrogen Cyanide Vapor.** The petitioner contends that permit conditions regulating the burning of HCN vapor as a hazardous waste are unlawful because: (1) HCN vapor is not, by definition, a solid waste and cannot be defined as a hazardous waste; and (2) these vapors are regulated by the Ohio EPA under its Federally approved Clean Air Act (CAA) program. The petitioner claims that allowing this air emission to be regulated by RCRA sets a precedent of intrusions into State CAA programs.

- **Technical Issues Associated with Burning of Hydrogen Cyanide Vapors.** The petitioner contends that the permit imposes technical requirements on handling HCN vapors which are unsound, and believes that the HCN vapor feed should not be restricted by the permit.

- Specifically, BPCA claims that the limits on the vapor pressure supply and the carbon monoxide waste feed will trigger increased use of a less-efficient back-up flare system for burning HCN vapor. This flare system has a destruction efficiency of 95 percent. In contrast, the primary air pollution control devices for the incinerator achieve a 99.99 destruction efficiency, even with waste feed values above the permit limits. Consequently, BPCA contends that these provisions are not only technically unsound, but also fail to promote the protection of human health and the environment.

- The petitioner states that cyanide gas exceeding 1 ppm is protective of human health and the environment, given that the Occupational Safety and Health Administration has set the standard for workplaces at 10 ppm.

- The permit requires BPCA to prepare and submit a written contingency procedure to contain and treat the toxic cyanide gas feed to the thermal oxidizer (i.e., the primary air pollution control device) when permit conditions disallow treatment of the gas stream to the oxidizer (i.e., when the back-up flare system is used). The petitioner contends that the requirement to submit a contingency procedure is erroneous.

- **Incinerator Cutoff Provisions and Other Operating Requirements.** The petitioner contests numerous incinerator cutoff provisions, including limits on the absolute pressure in the combustion zone and loss of atomization steam. In addition, BPCA challenges the feasibility of continuous monitoring and of calibrating instruments while incinerating hazardous waste.

  - The permit requires automatic cutoff of hazardous waste feed to the incinerator if the absolute pressure in the combustion zone exceeds the atmospheric pressure. Because momentary positive pressure could exist in the combustion zone, BPCA argues that the waste feed need not be cut off unless the absolute pressure continuously exceeds the atmospheric pressure for more than ten seconds.

  - The permit requires BPCA to cut off hazardous waste feed to the incinerator if atomization steam is lost. The petitioner contends that if atomization steam were lost, the carbon monoxide level would increase as a result of the loss of combustion efficiency. The petitioner also notes that the permit includes separate monitoring requirements for carbon monoxide. Therefore, BPCA contends that the condition regarding loss of atomization steam is not justified, since it does not relate to attainment of the performance standard of the incinerator, and it is redundant to monitoring provisions for carbon monoxide.

  - The petitioner contends that continuous monitoring for carbon monoxide and oxygen concentrations, as now required by the permit, has the potential to fail in extended

service. Consequently, the petitioner requests permission to use the standard Orsat gas analysis to verify compliance twice an hour in the event of monitor failure, enabling BPCA to cut off the waste feed manually.

- The petitioner contends that the permit condition requiring calibration of instruments is unsafe and would cause an automatic waste feed cutoff.

- **Deepwell Treatment Process.** The permit requires that deepwell waste be treated through either a mixing process or clarification, followed by filtration. BPCA contends that its deepwell waste treatment system has been designed so that wastes can be mixed, or clarified, or filtered and stored. Consequently, the petitioner argues that the permit provision as written would unnecessarily restrict treatment flexibility by requiring mixing or clarification prior to filtration.

  - In addition, the permit requires shipment of these solid residues to an offsite land disposal facility. BPCA contends that this provision may not be lawful pursuant to 40 CFR Part 268 land disposal restrictions, given the status of the deepwell solids as "derived from" wastes still subject to designation as listed "K" wastes. The petitioner contends that these filtrate streams are intended to be recycled for further treatment as appropriate and will ultimately be disposed of with the other deepwell fluids.

- **Pre-1987 Submittals in the Permit Application Record.** The petitioner argues that process changes completed at the facility in 1988 render invalid pre-1987 submittals to the facility record. BPCA submitted additional materials in 1987 that were intended to supersede its earlier submittals. Consequently, the petitioner contends that failure to delete the pre-1987 submittals creates a confusing and inaccurate record.

- **Dilution of Restricted Wastes.** The permit prohibits dilution of a restricted waste as a substitute for treatment in order to comply with the LDRs. BPCA contends that dilution is allowed when the wastes are commingled to facilitate a combined treatment.

- **Classification of Reactive Wastes.** The petitioner contends that its K011, K013, and K014 wastes do not exhibit a reactive characteristic and, therefore, are not subject to the permit's special provisions for handling reactive wastes.

- **Errors in the Final Permit.** BPCA contends that it had requested a number of changes to the permit, but that these changes were not made. These corrections and modifications address the following conditions:

  - The size of the deepwell wastewater storage and treatment tanks;
  - Standing liquids in containers destined for treatment facilities rather than landfills;
  - Numerous log sheets, diagrams, figures, and exhibits;
  - The "Basic Training Document" and video training tapes;
  - The list of equipment supplied to all operators; and
  - Labeling commercial chemical products, or mixtures of commercial chemical products, as wastes that contain hazardous constituents.

EXTRA

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

In the Matter of:	)	
BP Chemicals America Inc. Lima, Ohio	)	RCRA Appeal No. 89-4
RCRA Permit No. OHD 042 157 644	)	

ORDER GRANTING REVIEW

BP Chemicals America Inc. seeks review of a RCRA permit issued by Region V. The permit authorizes continued operation of BP's hazardous waste tank and container storage facility, as well as its tank and incinerator treatment facility, in Lima, Ohio. BP's petition, filed under 40 CFR §124.19, seeks review on thirteen issues. As requested by the Agency's Chief Judicial Officer, Region V submitted a response to the petition ("Region Response"), which argues that review should be denied.

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. 33412 (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 the Petitioner.

For most of the issues raised by the petition, BP has failed to show clear error or other grounds for review. For others, Region V has agreed to alter the permit in the manner requested by BP, thereby rendering the issues moot. One matter, however, warrants additional briefing and consideration.

The permit regulates the burning of hydrogen cyanide (HCN) gas vapors in BP's hazardous waste incinerator. BP argues (Petition at 4) that, "by definition," these vapors are not "contained gaseous material" and that they thus fall outside the statutory definition of "solid waste." [1/] BP also notes that its HCN vapors are already regulated by the Ohio Environmental Protection Agency under the state's federally approved clean air program. It contends that these vapors should not be subject to duplicative RCRA regulation, citing RCRA §1006(b)(1). [2/] In its Response to the Petition, Region V does not argue that the HCN vapors are solid waste, but instead invokes the Agency's omnibus authority under RCRA §3005(c)(3) [3/] to justify its regulation of these vapors. It also argues that the permit does not impose

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1/ See RCRA §1004(27), 42 U.S.C.A. §6903(27) ("solid waste" includes "contained gaseous material" from industrial operations).

2/ See 42 U.S.C.A. §6905(b)(1) ("The Administrator shall integrate all provisions of this chapter for purposes of administration and enforcement and shall avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act * * *.").

3/ 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.").

duplicative regulation because it regulates HCN vapors more stringently than the state.

The submissions to date do little to describe the process by which BP's HCN gas is generated and managed. In particular, it is unclear what BP means by its assertion that the HCN vapors are "by definition" not contained gaseous material. On the other hand, Region V has not yet disputed this conclusion. Although BP has not demonstrated clear error by the Region, it has raised the following important legal and factual issues that warrant review: (1) whether BP's HCN vapors are "solid waste" as defined in RCRA §1004(27); (2) if not, whether the RCRA omnibus provision can be used to justify a permit condition that regulates material that is not solid waste; and (3) whether the permit's regulation of BP's HCN vapors conflicts with the Agency's obligation under RCRA §1006(b)(1) to avoid RCRA regulation that duplicates regulation under the Clean Air Act?

BP's petition is therefore granted with respect to the permit conditions governing HCN vapors. These and any non-severable conditions, to be identified by the Regional Administrator, are stayed under 40 CFR §124.16(a). The parties shall file opening briefs with the Chief Judicial Officer, limited to 20 pages, within 30 days of the date of this order (computed under §124.20). Reply briefs, limited to 10 pages, shall be filed within 45 days of the date of this order. The briefs shall include appropriate portions of the administrative record, which shall not be counted against the page limitations.

As directed by §§124.10 and 124.19(c), the Regional Administrator shall give public notice of this limited grant of review. The public notice shall set forth the issues to be briefed, and state that any interested person may file comments or an amicus brief within 30 days of the date of the public notice. Upon written request and for good cause, the Judicial Officer may modify the briefing schedule.

In all other respects, review is denied.

So ordered.

Dated: AUG 6 1990

William K. Reilly
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Granting Review in the matter of BP Chemicals America Inc., RCRA Permit Appeal No. 89-4, were sent to the following persons in the manner indicated:

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Charise E. Page
for Brenda H. Selden, Secretary
to the Chief Judicial Officer