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April 16, 1999

Nicholas Persampieri  
New Mexico Environment Department  
525 Camino de los Marquez  
P.O. Box 26110  
Santa Fe, New Mexico 87502

Re: Los Alamos National Laboratory  
Compliance Order HRM-98-03

Dear Nick:

On behalf of our clients, the University of California Board of Regents Los Alamos National Laboratory ("LANL"), thank you again for agreeing to meet with us regarding Compliance Order 98-03, and for engaging in the constructive discussion regarding this matter that we hope can lead to a fair and final resolution and settlement. This letter is to follow up on several issues raised by your memorandum of law addressing CO-98-03 as well as our discussion of this compliance order at our March 29, 1999 meeting.

The crux of the dispute between LANL and the New Mexico Environment Department ("NMED") regarding CO-98-03 centers on NMED's characterization of the demolished asphalt and soil removed from TA-54 Area L (the "asphalt") as a hazardous waste. LANL has provided a comprehensive response to this allegation in its answer to Compliance Order CO-98-03. This letter is not intended to replace that comprehensive response, but rather to provide additional discussion of issues subsequently raised by NMED in response to LANL's legal argument.

We understand that NMED's legal basis for seeking to regulate the asphalt as a hazardous waste is that environmental media or debris that *contains* a listed hazardous waste must be managed as a hazardous waste. NMED believes that the asphalt contains the listed waste solvent F002 because a plume of volatilized solvents (or "pore gas") originating from solid waste management units containing F002 waste contacted the asphalt and trace quantities of these volatilized solvents were adsorbed by the asphalt. Accordingly, we understand that NMED's argument is that the hazardous waste "contained-in" the asphalt is the adsorbed pore gas. LANL's response to this argument is conceptually very simple. While the Resource Conservation and Recovery Act ("RCRA") provides the agency with authority to control emissions from the treatment, storage, and disposal of hazardous wastes, RCRA is quite clear that uncontained gases are not solid wastes and



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accordingly cannot be hazardous wastes. The pore gas is not a listed hazardous waste, and therefore it cannot be the legal basis for a contained-in determination by NMED either before or after it adsorbs into the asphalt. In NMED's March 29, 1999 response, the agency raised several additional arguments as possible justification for regulation of the demolished asphalt as a "contained-in" hazardous waste. Nevertheless, as described in greater detail below, LANL does not believe that these additional arguments justify this legal result.

**The Authority Cited By NMED Does Not Support The Conclusion That Air Emissions From Treatment, Storage, Disposal Units Are Solid Wastes**

NMED distinguishes air emissions that originate from hazardous waste management units from those that originate from industrial or other types of processes, and argues that air emissions from hazardous waste management units are solid wastes under RCRA. See NMED Memorandum of Law, at 3 ("Whether or not uncontained gas is exempt from regulation under 42 U.S.C. § 6903(27) appears to depend on whether the gas directly results from an industrial process or directly results from treatment, storage, or disposal of hazardous waste"). As support for this distinction, NMED cites EPA's regulation of air emissions from hazardous waste management units under RCRA. This argument overlooks three factors that negate the proposed regulatory distinction:

- (1) The actual language of the RCRA solid waste definition does not support the proposed distinction between the different types of air emissions;
- (2) As far as LANL is aware, there are no regulations promulgated under RCRA nor are there any applicable regulatory determinations that make such a distinction; and
- (3) EPA has clear, separate authority to regulate air emissions from hazardous waste management units under 42 U.S.C. § 6924(n), and as a result this statutory authority is the basis for the RCRA air rules cited by NMED. The distinction proposed by NMED has not been cited by the agency in prior rulemaking, and indeed is not necessary to support EPA's historical regulation of vent gas emissions from hazardous waste management units.

Review of the solid waste definition text illustrates this first point. This definition states:

The term "solid waste" means any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities . . .

42 U.S.C. § 6903(27). This statutory language does not create an *uncontained* gas "exclusion" for "gaseous material resulting from industrial, commercial, mining, and agricultural operations" as

argued by NMED. Instead, the relevant part of the definition is structured as a list of what is included within the definition of solid waste — not as a list of exclusions. Thus, *contained* gases from industrial, commercial, and mining sources are *included* within the definition of solid waste. The distinction is important in context of NMED's argument because, if only certain contained gases are included within the definition of solid waste, all *uncontained* gases (as well as contained gases not from the listed sources) are impliedly excluded.<sup>1</sup> Because the pore gas is clearly not "contained" as contemplated by the statutory definition, it is not a solid waste.

There is also no apparent support for NMED's proposed construction of the solid waste definition within the regulations and guidance developed by EPA in its implementation of the hazardous waste regulatory program. As far as LANL is aware, EPA itself has never suggested the NMED proposed distinction with regard to the scope of the solid waste definition either as a basis for rulemaking or in a regulatory interpretation memorandum. Indeed, in a November 20, 1986 memorandum from Bruce Weddle and Jack Lehman, EPA reached the opposite conclusion. In this memorandum, the agency concluded that air emissions from a ground water stripping operation were not contained, and accordingly were not a solid waste (a copy of this memorandum is included as Attachment 1). Similarly, in a 1995 decision, the EPA Environmental Appeals Board ("EAB") concluded that air emissions from a hazardous waste stabilization facility (at a landfill) are not subject to regulation as a hazardous waste:

In order to meet the definition of hazardous waste, a substance must first meet the definition solid waste. . . . Section 1004(27) of RCRA defines "solid waste" to include "contained gaseous material" from industrial operations. "The Agency has interpreted this explicit inclusion of contained gaseous materials as constituting an implicit exclusion of uncontainerized gas." *In re BP Chemicals-America Inc., Lima Ohio*, 3 E.A.D. 667, 669 (Adm'r 1991). Thus, a substance in gaseous form is not considered a solid waste under RCRA unless it is containerized. *Id.* at 670. Because air emissions [from the stabilization facility] are not containerized, they would not meet the definition of solid waste and therefore would not constitute hazardous waste.

*In re Chemical Waste Management of Indiana, Inc.*, 6 E.A.D. 144, 160-61 (Adm'r 1995) (a copy of this decision is included with this letter as Attachment 2).<sup>2</sup>

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<sup>1</sup> Even if the solid waste definition were construed to include only an exclusion for *uncontained* gaseous material resulting from the listed sources, waste management activities are clearly "industrial operations" within the scope of this statutory language.

<sup>2</sup> The EAB ultimately concluded that EPA has limited authority to regulate air emissions from a permitted landfill pursuant to agency's authority to impose "such terms and conditions [in the permit] as the Administrator (or the State) determines necessary to protect human health and the environment." 42 U.S.C.

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NMED seeks support for its construction of the solid waste definition based on EPA's regulatory authority under RCRA to control air emissions from hazardous waste management units. This regulatory authority does not support NMED's argument, however, because EPA's authority to regulate air emissions from hazardous waste management units comes from an entirely separate part of the statute. Under 42 U.S.C. 6924(n), Congress specifically directed the agency to promulgate regulations for the monitoring and control of air emissions from hazardous waste management units. This is the regulatory authority that supports the air rules cited by NMED — not an over-extrapolation of the solid waste definition. Moreover, § 6924(n) and the rules promulgated thereunder do not provide any independent support for the assertion that the pore gas is a solid waste.

**The Regulatory Analysis In The Cited EPA Memos Does not Depend On A Regulatory Conclusion That Air Emissions Are A Solid Waste**

NMED relies on a series of regulatory interpretation memoranda drafted by EPA as support for its position that the pore gas can be regulated as a solid waste. These memoranda do not, however, generally address whether adsorbed gases are a solid waste, and accordingly do not depend on this conclusion to justify regulation of the specifically described air emissions. For example NMED cited an August 11, 1992 letter from Jeffery Derit with EPA (attached as Exhibit B to NMED's Memorandum of Law) in which the agency states:

You also state that Giant argues that off-gases from the resource recovery kilns fed to the cement kiln cannot be classified as a hazardous waste [because unconfined gases are not a solid waste]. We agree with the Region's interpretation that this distinction is irrelevant when determining our regulatory authority over the gases [specifically asserted in this case under the Boilers and Industrial Furnace ("BIF") rule]. Off-gases from the resource recovery kilns are regulated under RCRA since they originate from treatment of hazardous waste.

As noted above, the agency clearly has authority under RCRA to promulgate rules that would regulate air emissions originating from hazardous waste management units. See 42 U.S.C. § 6924(n). Based on this separate statutory authority, Giant's argument that resource recovery kiln vent

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§ 6925(c)(3). This permitting authority is, of course, not relevant to the instant dispute, which instead focuses on the waste classification of the asphalt. EAB also imposed two pre-conditions on the regulation of air emissions in a RCRA permit: "(1) There must be an adequate nexus between the air emissions and the hazardous waste activities being carried out at the facility; and (2) the challenged conditions must be necessary to protect human health and the environment." *Id.* at 161. NMED has not made findings that the asphalt presents any risk to human health and the environment, and LANL has provided substantial evidence in its response to compliance order 98-03 that such risk does exist. Thus, regulation of the asphalt is not justified even in the permit context.

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gas is not a solid waste, although true, is irrelevant to the agency's authority to promulgate and enforce the BIF rule.

With respect to compliance order HRM-98-03, however, neither EPA nor NMED has promulgated rules restricting air emissions from landfills or addressing wastes created from the control of such emissions. Importantly, § 6924(n) requires the agency to make a finding of necessity "to protect human health and the environment" before such rules are promulgated. In the absence of such rules, the agency cannot *ex post facto* bootstrap its unasserted regulatory authority under § 6924(n) and the inapplicable contained-in rule to create without rulemaking waste disposal standards applicable to the asphalt debris.

**The EPA Regulatory Interpretation Memos Cited By NMED Are Factually Distinguishable Because They Deal With Manufacturing Vent Gas Emissions**

Each of the EPA memoranda cited by NMED is also based on a factual predicate that is readily distinguishable from the situation at issue in compliance order HRM-98-03. Specifically, the air emissions at issue in the cited memoranda are confined within a manufacturing process in duct work or vent piping, and the waste created from the air emissions is always associated with air emission control -- either a carbon adsorption system or a chiller to condense volatile constituents.<sup>3</sup>

The air emissions addressed in these memoranda are not in a "container" such that they are solid wastes, but they are certainly confined within a manufacturing or waste treatment process. Thus, the emissions and wastes created from the emissions are concentrated, are of environmental significance, and are physically amenable to control. None of the memoranda addresses factual circumstances similar to the adsorption of pore gas onto asphalt present in the unconfined environment. In summary, there are two important factual distinctions between the cited authority and the situation at issue in compliance order HRM-98-03:

- (1) the pore gas is not confined in duct work and is not actively managed in any way -- instead it exists in the unconfined environment; and
- (2) the asphalt, which contains trace amounts of adsorbed pore gas, is not an air emission control device used purposefully to transfer what would be air emissions to a solid waste --

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<sup>3</sup> Exhibit A to NMED's Memorandum of Law addresses vapor emissions from a spent solvent stripper; Exhibit B addresses vent gas from the resource recovery kiln in a cement manufacturing process; Exhibit C addresses carbon canisters used to adsorb phorate fumes from air emission vent lines on the product packaging line; and neither Exhibit D nor Exhibit E state whether the carbon canisters at issue were used for air emissions or wastewater control -- but the carbon clearly was not contaminated based upon exposure to ambient air (like the present situation).

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it is an environmental media or material that adsorbed by happenstance trace quantities of hazardous constituents.

The cited EPA memoranda are based on the control of process air emissions and the management of wastes created as a by-product to air emission control. While the agency's conclusions regarding the scope and necessity of regulation under RCRA may make sense in this factual context, these same conclusions do not make sense when extrapolated to passive contact with trace waste constituents occurring in the unconfined ambient environment.

**Extrapolation Of Rules Applicable To Process Waste Gas Emissions To Gases Present In The Environment Would Lead To Absurd Results**

LANL believes that reasonable environmental management policy does not support regulation of environmental media as a hazardous waste based on the inadvertent adsorption of trace quantities of hazardous constituents present in the unconfined environment. LANL understands that NMED's basic premise is as follows:

- (i) small amounts of hazardous constituents volatilize from a listed hazardous waste and create an ambient air mixture that contains small amounts of hazardous constituents;
- (ii) this volatilization is acceptable under applicable law;
- (iii) this contaminated air contacts material or media, which at the time of contact is not a solid waste;
- (iv) the material later becomes a solid waste (such as debris) for reasons unrelated to the contact with the contaminated air;
- (v) trace amounts of hazardous constituents are detectable within the material;
- (vi) when the material becomes a solid waste it is also a listed hazardous waste under the contained-in rule.

As discussed in our Memorandum of Law, under this same analysis, asphalt adjacent to or near the vent on a spent solvent storage tank controlled with a carbon adsorption system that is 95 percent efficient (in compliance with 40 CFR 264.1032) would be a listed hazardous waste (once it becomes a solid waste) if detectable concentrations of solvent constituents are present. Similarly, trees cleared from an area downwind of a wastewater treatment tank managing listed hazardous waste would also presumably need to be managed as a listed hazardous waste if they contain organic constituents present in the listed wastes—perhaps even if the organic constituents naturally occurred in the trees at some concentration. LANL firmly believes that this is not allowed by statute or by rule. Thus, NMED should avoid creation of an over-broad solid waste definition that will inevitably extend hazardous waste regulation to situations where such regulation is neither reasonable nor justified on the grounds of protecting human health and the environment.

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Please call if you have any questions or would like any additional information.

Sincerely yours,

  
Carol E. Dinkins

VEHICLE 102-11773 1

Exhibit 4

9441.1986(86)

November 20, 1986

**SUBJECT:** RCRA Status for Treatment of Contaminated Ground Water  
and Volatiles from Air Stripping

**FROM:** Bruce Weddle, Director  
Permits and State Programs Division

Jack Lehman, Director  
Waste Management Division

**TO:** Lloyd Guerci  
Office of Waste Program Enforcement

This memorandum is in response to the questions you received from Region III concerning treatment of contaminated ground water at RCRA sites. The first part of the memo deals with the general issues raised in the inquiry; the second with specific facts of the Uniform Tube Facility situation. The Characterization and Assessment Division of OSW, the Office of General Counsel, and Ginny Steiner, of your office, were consulted during the preparation of this response.

**Issue 1:** Is ground water contaminated with hazardous waste or hazardous waste constituents considered hazardous waste, and are air stripping units and holding basin surface impoundments used during treatment of contaminated ground water RCRA units?

Ground water is not a hazardous waste, since it does not fit the criteria for being either an "abandoned" or "discarded" material which would define it as a solid waste (see 40 CFR §261.2). However, when ground water contains hazardous wastes, treatment, storage, or disposal of it must be handled exactly as if the ground water itself were hazardous waste since the contaminants are subject to regulation under Subtitle C. Ground water no longer containing the hazardous waste would no longer be subject to Subtitle C regulation.

The air stripper may fit the definition of a tank (see 40 CFR §260.10). If so, it is subject to the hazardous waste tank standards, including the secondary containment provisions recently promulgated (July 14, 1986, 51 FR 25422-25488). Unless the unit is eligible for the 90-day accumulation exemption available to generators (see 40 CFR §262.34), is a wastewater treatment unit (§260.10), or is otherwise exempt from regulation, it requires a permit or interim status. The holding basin

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surface impoundment would be subject to standards for storage under Subpart K of Part 265 or Part 264, and the land treatment unit would be subject to Subpart M standards. Note that neither of these units is eligible for the ninety day accumulation exemption, which applies only to tanks or containers.

Units such as the ones described in the Region's inquiry may, in some cases, operate without a permit under provisions of 40 CFR §270.72 (changes during interim status). This would be the case where the construction and/or operation of such units is necessary to prevent threats to human health and the environment because of an emergency situation (see §270.72(c)(1)), or it is necessary to comply with Federal, state, or local regulations (40 CFR 270.72(c)(2)). In general, units added to comply with a §3008(h) order or an approved closure plan would be considered necessary to comply with Federal regulations and therefore could be constructed and operated as a change in interim status, without triggering a RCRA permit requirement. However, in any case, the cost of the unit should not exceed the limit established in §270.72(e). At this time, we are considering proposing an exemption to the fifty percent of reconstruction cost limitation established in §270.72(e) for actions taken to comply with corrective action orders at interim status facilities.

Issue 2: Are the volatile organic contaminants released to the atmosphere via air stripping considered hazardous waste under RCRA? Should a risk analysis be made to consider the trade-off between removal of a hazardous constituent from ground water and its release to air?

Volatile organics released to the air are not hazardous waste because they are not solid wastes. (They do not fit the definition established in §1004(27) of RCRA as "contained gaseous materials.") Nevertheless, releases of hazardous constituents to the air from hazardous waste management or solid waste management units at facilities with interim status are subject to corrective action under the authority of §3008(h).

No policy has been set concerning tradeoffs of releases of hazardous constituents from one medium to another. The statute requires that contamination of either or both the ground water and the air resulting from waste management at the facility be addressed to protect human health and the environment. Future proposals under §1004(n) will address air emissions for TSDFs. Use of a carbon unit on top of the air stripper would significantly reduce or eliminate the release to air.

Issues Specific to the Uniform Tube Facility:

Turning to the facts of the specific case, several issues came up during our discussions which need to be brought to the attention of the Region.

1. If the organics spill which occurred in 1977 was from a leaking underground storage tank containing a regulated substance (as defined in §9001(2)), and if that spill is subject to corrective action under §9003, RCRA §3008(h) is not applicable.
2. Spray irrigation of land with waste materials which have been treated through air stripping and/or stored in the holding basin impoundment constitutes land disposal. Land disposal of the wastes described will be restricted under the land disposal restrictions regulation in the future. How soon disposal at this facility will be affected depends on whether the spill is of spent solvents (F001-F005) or of a discarded commercial chemical product. Restrictions will be imposed for F001-F005 this November; other solvent disposal will come later.
3. How will the corrective action order address the chromium release? As the clean up progresses, the Region should follow development of land disposal restriction regulations for the California list, since chromium is included on that list.
4. The Superfund program has had several experiences with successfully applying carbon units to the top of air strippers to eliminate air releases of VOCs. If you are concerned about these releases, you may want to contact Nancy Willis at FTS 475-6707 for further information.

## IN RE CHEMICAL WASTE MANAGEMENT OF INDIANA, INC.

RCRA Appeal No. 95-4

### **ORDER REMANDING IN PART AND DENYING REVIEW IN PART**

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Decided August 23, 1995

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#### Syllabus

Chemical Waste Management of Indiana, Inc. ("CWMII") has appealed certain aspects of a final permit decision by U.S. EPA Region V concerning the renewal of the federal portion of a Resource Conservation and Recovery Act ("RCRA") permit and a Class 3 modification of the same permit for CWMII's Adams Center Landfill Facility, a treatment, storage and disposal facility for hazardous waste in Fort Wayne, Indiana. When the waste stream coming into the facility contains free liquids and hazardous metal bearing wastes, CWMII must first stabilize the waste before placing it in land disposal cells. The stabilization process takes place in special stabilization buildings that are equipped with dust suppression technology. To stabilize the waste, CWMII uses two immobilization technologies called macroencapsulation and microencapsulation.

CWMII's petition raises the following issues: (1) whether Condition I.D.10., which requires CWMII to notify the Region 30 days in advance of making any physical alteration or addition to the facility, is inconsistent with 40 C.F.R. part 270, subpart D, governing changes to permits; (2) whether Condition I.D.14., which requires CWMII to notify the Region within 15 days of certain instances of noncompliance is inconsistent with 40 C.F.R. § 270.50(TX10), which provides that a permittee shall report instances of other noncompliance at the time monitoring reports are submitted; (3) whether three permit conditions, which describe the responsibilities of permittees in their capacities as generators of hazardous waste, belong in a permit for a treatment, storage and disposal facility; (4) whether all macroencapsulation of contaminated debris should be conducted within the stabilization buildings and whether the permittee should take other measures to ensure that particulates and vapors emitted by the macroencapsulation process are controlled; (5) whether the Region has authority to require that, if microencapsulated debris are placed into the landfill as solidified masses, care will be taken so as to minimize breakage of the debris masses; (6) whether the Agency's corrective action authority provides a basis for requiring CWMII to conduct groundwater monitoring of a closed landfill at the facility, even though there has never been a release of hazardous waste from this landfill; (7) whether the Agency's corrective action authority provides a basis for requiring CWMII to impose ambient air quality monitoring for particulates and lead at the facility's perimeter; (8) whether and to what extent the Region should defer to and coordinate with State environmental officials in the regulation of air emissions from the facility; and (9) whether the open-path Fourier Transform Infrared System, the use of which is required in the permit, is an acceptable technology for monitoring volatile organic compounds.

Held: (1) In the permit proceedings below the Region did not provide a coherent rationale for requiring 30 days advanced notice before CWMII may make any physical alteration or

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addition to the facility; Condition I.D.10. is therefore being remanded so that the Region may either supplement its response to comments with such a rationale, or modify the requirement if it is not supportable; (2) In the permit proceedings below the Region did not provide a coherent rationale for requiring CWMII to report "other instances of noncompliance" within 15 days; Condition I.D.14. is therefore being remanded so that the Region may supplement its response to comments to provide such a rationale, or to modify the requirement if not supportable; (3) Conditions II.B.2., II.B.3., and II.B.6, which describe the responsibilities of CWMII in its capacity as a generator of hazardous waste, are drawn almost verbatim from provisions in Part 268 that are directly applicable to treatment, storage, and disposal facilities, and thus belong in a permit for such a facility; review of this issue is therefore denied; (4) CWMII has failed to carry its burden of demonstrating that the Region's concerns about particulate and vapor emissions from the macroencapsulation process are based on a clear error of fact; review of this issue is therefore denied; (5) Conditions I.D.5.a. and c., which regulate air emissions from the macroencapsulation process, are not authorized by the Agency's corrective action provisions, as they apply to hazardous waste, because such gaseous emissions are not containerized and therefore do not constitute solid waste; however, it appears that the Agency would have authority to regulate such air emission under the Agency's omnibus clause; Conditions I.D.5.a. and c. therefore are being remanded so that the Region may revise its fact sheet (or statement of basis) to clarify that its statutory authority for requiring the inclusion of the challenged permit conditions is section 3005(c)(3) of RCRA (or to delete or modify such conditions if that is appropriate); (6) Condition II.D.6.f., which requires that if microencapsulated debris are placed into the landfill as solidified masses, care will be taken so as to minimize breakage of the debris masses, helps to ensure the success of the microencapsulation process and is therefore based on and authorized by 40 C.F.R. § 268.45(a)(1) & Table 1 (describing performance standards of microencapsulation); review of this issue is therefore denied; (7) Conditions III.A and III.A.1, which require groundwater monitoring of a closed landfill at the facility to detect future releases, are authorized under the Agency's corrective action authority; review of this issue is therefore denied; (8) Condition III.A.2., which requires monitoring of air emissions from the perimeter of the facility and from the stabilization buildings, is not authorized by the Agency's corrective action provisions, as they apply to hazardous waste, because such gaseous emissions are not containerized and therefore do not constitute solid waste; however, it appears that the Agency would have authority to regulate such air emissions under the Agency's omnibus clause; Condition III.A.2., therefore, is being remanded so that the Region may revise its fact sheet (or statement of basis) to clarify that its statutory authority for requiring the inclusion of the challenged permit condition is section 3005(c)(3) of RCRA (or to delete or modify the condition if that is appropriate); and (11) In view of the Region's obvious willingness to coordinate its efforts with the State of Indiana in regulating air emissions from the facility, the Board will not second-guess the Region's judgment as to what level of deference to, or cooperation with, the State of Indiana is appropriate; review of this issue is therefore denied. Review is also denied of CWMII's challenge to Condition I.D.5.e., relating to the use of an inert void filler in the macroencapsulation process, and CWMII's challenge to the use of the open-path Fourier Transform Infrared System for monitoring air emissions from the facility because neither issue was preserved for review. (In addition, the Region has agreed to modify or delete certain other challenged permit conditions to accommodate CWMII's concerns. Accordingly, review of such issues is also denied.)

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

*Opinion of the Board by Judge Reich:*

On March 1, 1995, U.S. EPA Region V issued a final permit decision approving the application of Chemical Waste Management of Indiana, Inc. ("CWMII") for the renewal of the federal portion of a Resource Conservation and Recovery Act ("RCRA") permit and a Class

3 modification of the same permit for its Adams Center Landfill Facility in Fort Wayne, Indiana.<sup>1</sup> The Environmental Appeals Board received three petitions challenging the Region's permit decision, one filed by the City of New Haven, one filed jointly by Cheryl Hitzemann and Deanna Wilkerson, and one filed by CWMII.<sup>2</sup> On June 29, 1995, the Board denied review of the first two petitions. This opinion addresses the petition filed by CWMII. For the reasons set forth below, we are remanding four issues to the Region to supplement or revise its explanations of the challenged permit conditions or to modify those conditions. With respect to the other issues raised by CWMII, we are denying review.

## I. BACKGROUND

### A. Statutory and Regulatory Framework

The Adams Center Facility is a hazardous waste treatment, storage, and disposal facility, occupying approximately 151 acres of industrial zoned property in Fort Wayne, Indiana. The facility has been in operation as a waste landfill since 1974. The facility currently receives and manages an average of 1.4 million pounds of hazardous wastes per day of operation. Declaration of Becky S. Eatmon, Exhibit B, CWMII's Memorandum Seeking Immediate Denial of Petitions for Review. When the incoming waste stream contains free liquids and hazardous metal bearing wastes, CWM must first stabilize the waste before placing it in land disposal cells. The stabilization process takes place in buildings located north of the site's active waste placement cells, within 100 yards of the north property line. Attachment F, Final Permit.

Because the facility engages in "land disposal" of hazardous wastes, it is subject to stringent statutory and regulatory treatment standards and requirements. "Land disposal" includes "any placement of [a specified] hazardous waste in a landfill, surface impoundment, waste

<sup>1</sup> The State of Indiana has received authorization to administer its own RCRA program, pursuant to section 3006 of RCRA, 42 U.S.C. § 6926. Indiana has not, however, received authorization to administer the requirements contained in the Hazardous and Solid Waste Amendments to RCRA ("HSWA"). Consequently, when a RCRA permit is issued in Indiana, the State issues the part of the permit relating to the non-HSWA requirements and EPA issues the part of the permit relating to the HSWA requirements.

<sup>2</sup> The Board also received amicus briefs filed by the following persons: Mark Souder, U.S. Congressman, 4th District, Fort Wayne, Indiana; Archie Lunsey, Councilman, First District, Fort Wayne, Indiana; Dennis Andrew Gordon, Allen County Zoning Administrator; Elizabeth Dohynes, President, Fort Wayne Indiana Branch, NAACP; and Charles Redd, Chairman, Political Action Committee, NAACP.

pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave." Section 3004(k) of RCRA, 42 U.S.C. § 6924(k). In the Hazardous and Solid Waste Amendments of 1984, Congress amended RCRA to place severe restrictions on land disposal, reflecting a congressional determination that:

[Certain classes of land disposal facilities are not capable of assuring long-term containment of certain hazardous wastes, and to avoid substantial risk to human health and the environment, reliance on land disposal should be minimized or eliminated, and land disposal, particularly landfill and surface impoundment, should be the least favored method for managing hazardous wastes \* \* \*.

Section 1002(b)(7) of RCRA, 42 U.S.C. § 6901(b)(7). The HSWA Amendments ban most forms of land disposal of hazardous waste, unless it can be demonstrated "to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous." Sections 3004(d)(1), (e)(1) and (g)(5), 42 U.S.C. §§ 6924(d)(1), (e)(1) and (g)(5). Land disposal is allowed, however, if the waste is first treated to meet certain treatment standards that the statute directs EPA's Administrator to promulgate. Section 3004(m) of RCRA, 42 U.S.C. § 6924(m). The treatment standards promulgated by the Administrator are meant to "substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized." *Id.* The universe of wastes for which the Administrator was directed to promulgate treatment standards was divided into three broad classes. For each class of wastes, both the ban on land disposal and the treatment standards promulgated by the Administrator were to go into effect on the same date according to a staggered schedule set out in the statute. Treatment standards for the third and final class of wastes were promulgated on May 8, 1990.

The treatment standards for all covered wastes are located at 40 C.F.R. Part 268. Of particular interest for our purposes are the standards for treating hazardous debris. Hazardous debris can either be treated to meet the treatment standard developed for the particular hazardous waste that contaminates the debris or it can be treated to meet one of the alternative treatment standards specifically developed for treating hazardous debris set out at 40 C.F.R. § 268.45. The treatment technologies in section 268.45, which are set out in Table 1 of

that section, are broken down into three main categories: Extraction technologies, destruction technologies and immobilization technologies. Some of the issues raised in CWMII's petition relate to two immobilization technologies used by CWMII to stabilize hazardous waste: macroencapsulation and microencapsulation. Macroencapsulation is described in Table 1 as the:

Application of surface coating materials such as polymeric organics (e.g., resins and plastics) or use of a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media.

40 C.F.R. § 268.45 (Table 1). Microencapsulation is described in Table 1 as the:

Stabilization of the debris with the following reagents (or waste reagents) such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/pozzolans (e.g., fly ash and cement kiln dust). Reagents (e.g., iron salts, silicates, and clays) may be added to enhance the set/cure time and/or compressive strength, or to reduce the leachability of the hazardous constituents.

*Id.* (footnote omitted).

#### **B. Procedural History**

The facility has been authorized to operate as a RCRA-authorized waste treatment, storage, and disposal facility since September of 1988. In 1993, CWMII requested a Class 1 permit modification to allow it to conduct "debris management" employing the immobilization technologies of macroencapsulation and microencapsulation described above. Letter from Len W. Necaise of CWMII to Hak Cho of EPA (Sept. 17, 1993), Exhibit L, Region's Response to CWMII's Petition. On March 4, 1994, the Region approved CWMII's request for this Class I permit modification. Letter from Karl E. Bremer of EPA to Leonard Necaise of CWMII (Mar. 4, 1994), Exhibit P, Region's Response to CWMII's Petition.

On October 5, 1989, CWMII applied to EPA and Indiana for a Class 3 modification to its permit, authorizing it to expand its landfill capacity ("the Phase IV expansion"). In June of 1992, the State issued the non-HSWA portion of the modification, but the permit expired on October 30, 1993, before the Agency had acted on the federal HSWA portion of the modification. Consequently, in these proceedings, CWMII seeks both a Class 3 modification and a renewal of the HSWA

portion of the permit. See 40 C.F.R. § 270.42(c) (regulations governing Class 3 modifications). On March 1, 1995, the Region issued the final permit decision. CWMII appealed.

CWMII's petition raises the following issues:<sup>3</sup> (1) whether Condition I.D.10., which requires CWMII to notify the Region 30 days in advance of making any physical alteration or addition to the facility, is inconsistent with 40 C.F.R. part 270, subpart D, governing changes to permits; (2) whether Condition I.D.14., which requires CWMII to notify the Region within 15 days of any instance of noncompliance that is not specifically required to be reported under any other permit condition, is inconsistent with 40 C.F.R. § 270.30(I)(10), which provides that a permittee shall report instances of other noncompliance at the time monitoring reports are submitted; (3) whether three permit conditions, which describe the responsibilities of permittees in their capacities as generators of hazardous waste, belong in a permit for a treatment, storage and disposal facility; (4) whether all macroencapsulation of contaminated debris should be conducted within the stabilization buildings which are permitted by the State of Indiana and whether the permittee should take other measures to ensure that particulates and vapors emitted by the macroencapsulation process are controlled; (5) whether the Region has authority to require that, if microencapsulated debris are placed into the landfill as solidified masses, care will be taken so as to minimize breakage of the debris masses; (6) whether the Agency's corrective action authority provides a basis for requiring CWMII to continue operating ten groundwater monitoring wells that are downgradient of the closed Sanitary Landfill at the facility, even though there has never been a release of hazardous waste from this landfill; (7) whether the Agency's corrective action authority provides a basis for requiring CWMII to impose ambient air quality monitoring for particulates and lead at the facility's perimeter; (8) whether and to what extent the Region should defer to and coordinate with State environmental officials in the regulation of air emissions from the facility; and (9) whether the open-path Fourier Transform Infrared System, the use of which is required in the permit, is an acceptable technology for monitoring volatile organic compounds.

On May 22, 1995, at the request of the Board, the Region filed a response to CWMII's petition.<sup>4</sup>

<sup>3</sup> The petition also raises certain issues that the Region has agreed to resolve by modifying the permit to accommodate CWMII's concerns. Those issues are identified *infra* in section II.H. of this opinion but will not otherwise be discussed.

<sup>4</sup> On May 18, 1995, the Board also received an amicus brief filed by Cheryl L. Hitzmann, responding to CWMII's petition.

## II. DISCUSSION

Under the rules governing this proceeding, the Regional Administrator's permit decision 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 Ross Incineration Services, Inc.*, 5 E.A.D. 813, 816 (EAB 1995); *In re Metalworking Lubricants Company*, 5 E.A.D. 181, 183 (EAB 1994).

For the reasons set forth below, we conclude that four of the permit conditions challenged by CWMII should be remanded to allow the Region to reopen the permit proceedings to clarify its rationale for each of the conditions or alternatively to modify or delete the condition if an acceptable rationale does not exist. With respect to the other issues raised by CWMII's petition, the Board concludes that CWMII either failed to preserve them for review or failed to carry its burden of demonstrating that the Region's permit decision was based on a clear error or an exercise of discretion or important policy consideration that warrants review. Review of each of those issues is therefore denied.

### A. *The 30-Day Waiting Period for Alterations or Additions*

Permit Condition I.D.10. requires CWMII to notify the Region 30 days in advance of making any physical alteration or addition to the facility.<sup>1</sup> CWMII argues that this condition is inconsistent with 40 C.F.R. part 270, subpart D, governing changes to permits. In particular, section 270.42(a)(1)(i) of subpart D allows the facility to implement certain changes, such as replacement or upgrading of functionally equivalent components, without prior notice to the Agency and then to notify the Agency seven days *after* making those alterations. This contrasts with the permit condition, which requires a 30-day waiting period before a physical alteration or addition occurs. In addition, section

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<sup>1</sup> Condition I.D.10. provides as follows:

*Reporting Planned Changes.* The Permittee shall give notice to the Regional Administrator of any planned physical alterations or additions to the permitted facility at least 30 days before construction of such alteration or addition is commenced.

270.30(1)(1) (in subpart C of part 270, listing the so-called "boilerplate" permit conditions) provides as follows: "*Planned changes.* The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility."

In its comments on the petition, CWMII proposed to change the language in the challenged permit condition so that it would require the facility to give notice, "to the Regional Administrator *as soon as possible (as per 40 C.F.R. § 270.30(1)(1))* of any planned physical alterations or additions to the permitted facility before construction of such alteration or addition is commenced *except as per 40 C.F.R. § 270.42(a).*" Response to Comments at 22 (Comment 45) (emphasis indicating CWMII's proposed changes to the permit condition). The thrust of this comment is that to the extent that prior notice is required, it should only be required "as soon as possible" and only to the extent that section 270.42(a) does not permit changes without prior notice.

In its response to comments, the Region defended the 30-day notice requirement in the following response:

It is stated at 40 C.F.R. § 270.30(1) that the Permittee shall report all instances of noncompliance *not reported* (emphasis added) under paragraphs (1), (4), (5) and (6) of this section (or 40 C.F.R. § 270.30(1)(1), (4), (5), and (6)) at the time that monitoring reports are submitted. Therefore the regulations contemplate that the reporting required under 40 C.F.R. § 270.30(1)(1) shall be made prior to the time that monitoring reports are submitted, if the monitoring report is not submitted as soon as the Permittee plans physical alterations or addition to the permitted facility.

Response to Comments at 23 (response to Comment 45). In its response to the petition, the Region invokes section 270.42(a)(2), which requires a permittee to receive written approval from the Agency prior to making certain Class I permit modifications set forth in Appendix I. On the basis of section 270.42(a)(2), the Region contends that the language in the permit is not inconsistent with the regulations. (We note that the Region's response to comments made no mention of section 270.42(a)(2).)

We conclude that the Region has not adequately explained its basis for requiring CWMII to give the Region 30 days advance notice before commencing an alteration or addition to the facility. In partic-

ular, we are not persuaded by the Region's belated reliance on section 270.42(a)(2). That explanation is advanced for the first time on appeal, and, as such, we are reluctant to accept it based on the present state of the administrative record.<sup>6</sup> The Region's response to comments does not address the 30-day notice requirement in the challenged permit condition. Rather, it focuses instead on why CWMII cannot wait until the monitoring report is filed before giving notice. Nor does the Region explain why the boilerplate condition at section 270.30(1)(1), requiring notice of planned alteration "as soon as possible," is inadequate for this permittee. As such, the "response to comments" is not truly responsive to CWMII's comments.

In addition, section 270.42(a)(2) does not apply to all alterations or additions to the facility covered by the permit condition, and CWMII's proposed changes to the permit, by reference to section 270.42(a), would incorporate an exception for changes governed by section 270.42(a)(2).

In sum, the Region has not articulated *any* coherent reason for requiring an absolute 30-day waiting period. There may very well be a good reason for the requirement, but it is not discernible in either the Region's response to comments or the Region's response to the petition. We are therefore remanding Condition I.D.10. to the Region so that it may reopen the permit proceedings to either supplement its response to comments with an explanation of why a 30-day waiting period is reasonable or modify the permit condition if it is not supportable.

#### B. The 15-Day Reporting Period for Noncompliance

Permit Condition I.D.14. requires CWMII to notify the Region of any instance of noncompliance that is not specifically required to be reported under any other permit condition.<sup>7</sup> Two other provisions in

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<sup>6</sup> See *In re Waste Technologies Industries, East Liverpool, Ohio*, 4 E.A.D. 106, 114 (EAB 1992) (Rejecting invocation of Agency's omnibus authority because: "It appears that invoking § 3005(c)(3) as legal authority for adding the Port Authority to the permit is nothing more than a *post hoc* decision by the Region in response to the Port Authority's appeal."); *In re Amoco Oil Company*, 4 E.A.D. 954, 964 (EAB 1993) (Where Region's rationale for denying requested conditional remedies in permit was provided for the first time on appeal, issue was remanded for the Region to "provide a detailed explanation supported by those portions of the administrative record not currently before us indicating why conditional remedies are not appropriate, or reopen the permit proceedings to supplement the administrative record with such information.").

<sup>7</sup> Permit Condition I.D.14. provides as follows:

Continued

the permit require CWMII to report instances of actual or anticipated noncompliance: one requires CWMII to give advance notice of planned changes that may result in noncompliance and the other requires CWMII to report within 24 hours any instances of noncompliance that may endanger human health or the environment. CWMII argues that by requiring it to report other instances of noncompliance within 15 days, Condition I.D.14 does not reflect the wording in 40 C.F.R. § 270.30(I)(10). Section 270.30(I)(10), one of the boilerplate permit provisions, provides in pertinent part as follows: "*Other non-compliance.* The permittee shall report all instances of noncompliance not reported under paragraphs (I)(4), (5), and (6) of this section, at the time the monitoring reports are submitted." Based on section 270.30(I)(10), CWMII requested in its comments on the draft permit that the language of the permit condition be changed to require that other instances of noncompliance be reported "at the time monitoring reports are submitted as per 40 C.F.R. § 270.30(I)(10)."

In its response to comments, however, the Region justified the 15-day reporting requirement in the same paragraph that was meant to justify the 30-day notice comment discussed above:

It is stated at 40 C.F.R. § 270.30(I) that the Permittee shall report all instances of noncompliance *not reported* (emphasis added) under paragraphs (1), (4), (5) and (6) of this section (or 40 C.F.R. § 270.30(I)(1), (4), (5), and (6)) at the time that monitoring reports are

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*Other Noncompliance.* The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within 15 days of when the Permittee becomes aware of the noncompliance.

\* Section 270.30(I)(4) provides as follows:

*Monitoring reports.* Monitoring results shall be reported at the intervals specified elsewhere in this permit.

Section 270.30(I)(5) provides as follows:

*Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

Section 270.30(I)(6) provides in part as follows:

*Twenty-four hour reporting.* (i) The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances \* \* \*

submitted. Therefore the regulations contemplate that the reporting required under 40 C.F.R. § 270.30(D)(1) shall be made prior to the time that monitoring reports are submitted, if the monitoring report is not submitted as soon as the Permittee plans physical alterations or addition to the permitted facility.

Response to Comments at 23 (response to Comment 45).

In its response to the petition, the Region argues that the State of Indiana has been authorized to administer the base RCRA program, and that the monitoring reports referenced in 40 C.F.R. § 270.30(D)(10) must be sent to the State of Indiana. The Region explains that it has included a "date certain" in the permit for reporting "other noncompliance" that is not tied to the time when CWMII must submit monitoring reports to the State.

As with the previous issue, we conclude that the Region did not adequately explain its reasons for including the 15-day requirement in the proceedings below. The response to comments quoted above offers no insight into the Region's thinking. In fact, it is virtually incomprehensible. The explanation in the Region's response to the petition, though more coherent, appears to have been advanced for the first time on appeal. As such, we decline to accept it.<sup>9</sup> In addition, it is not clear from the Region's explanation whether a 15-day notification requirement is significantly shorter than the typical period for submitting a monitoring report, or whether the submissions of monitoring reports would occur more frequently or more regularly if they were required in the federal portion of the permit, rather than in the State portion of the permit. The Region may have a perfectly good justification for the 15-day requirement, but since its response to comments does not explain what that justification is, we are remanding Condition I.D.14 to the Region so that it may reopen the permit proceedings to supplement its response to comments to provide a detailed explanation of why it chose to include a 15-day reporting requirement for instances of "other noncompliance," or to modify the permit condition if an adequate basis for it does not exist.

#### *C. Restricted Wastes Generated at the Facility*

CWMII challenges three permit conditions requiring CWMII to test certain wastes (Condition II.B.2., Condition II.B.3., and Condition

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<sup>9</sup> See *supra* n.6.

II.B.6.).<sup>10</sup> CWMII has requested that the permit conditions be modified to make it clear that they apply only to wastes generated at the facility. The Region has agreed to modify the three conditions to accommodate CWMII's request by adding language that makes it clear that they apply only to wastes generated by the facility.

CWMII also objects to the conditions because they merely recite CWMII's responsibilities as a generator of hazardous waste and therefore do not belong in a permit for a treatment, storage, and disposal facility. We disagree. The regulations governing the issuance of RCRA permits specifically authorize the Region to incorporate requirements from Part 268 that are applicable to treatment, storage, and disposal facilities.<sup>11</sup> The challenged conditions incorporate, almost verbatim,

<sup>10</sup> Permit Condition II.B.2. provides as follows:

For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 C.F.R. § 268.41, the Permittee shall test the treatment residues, or an extract of such residues developed using the test methods described in Appendix II of 40 C.F.R. Part 261 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the treatment residues or extract meet the applicable treatment standards of 40 C.F.R. Part 268, Subpart D. Such testing shall be performed as required by 40 C.F.R. § 264.13.

Permit Condition II.B.3. provides as follows:

For restricted wastes under 40 C.F.R. § 268.32 or Section 3004(d) of RCRA, which are not subject to any treatment standards under 40 C.F.R. Part 268, Subpart D, the Permittee shall test the treatment residues according to the generator requirements specified under 40 C.F.R. § 268.32 to assure that the treatment residues comply with the applicable prohibitions of 40 C.F.R. Part 268, Subpart C. Such testing shall be performed as required by 40 C.F.R. § 264.13.

Permit Condition II.B.6. provides as follows:

For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 C.F.R. § 268.43, the Permittee shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards of 40 C.F.R. Part 268, Subpart D. Such testing shall be performed as required by 40 C.F.R. § 264.13.

<sup>11</sup> See 40 C.F.R. § 270.32(h)(1) ("Each RCRA permit shall include permit conditions necessary to achieve compliance with the Act and regulations, including each of the applicable requirements specified in parts 264 and 266 through 268 of this chapter. In satisfying this provision, the Administrator may incorporate applicable requirements of parts 264 and 266 through 268 of this chapter directly into the permit or establish other permit conditions that are based on these parts.")

certain requirements in part 268 (specifically 40 C.F.R. §§ 268.7(b)(1) - 268.7(b)(3)), and these requirements are expressly applicable to treatment, storage, and disposal facilities. We conclude, therefore, that it was entirely proper for the Region to include the challenged conditions in the permit. Accordingly, we conclude that CWMII has not carried its burden of demonstrating that the challenged permit conditions are based on a clear error or an exercise of discretion or policy consideration that warrants review. Review of this issue is therefore denied.

**D. The Macroencapsulation Process**

CWMII questions the need for Permit Conditions I.D.5.a., I.D.5.c., and I.D.5.e., which provide as follows:

a. All macroencapsulation of contaminated debris shall be conducted within the stabilization buildings which are permitted by the State of Indiana.

. . . . .

c. During macroencapsulation operations all dust emission control devices associated with the stabilization buildings are to be functioning so as to prevent the release of airborne particles outside of the stabilization buildings.

. . . . .

e. If the selected inert void filler has the potential of generating dust, the filler shall be placed into the capsules in a manner which is effective in controlling fugitive dust.

Final Permit, Exhibit G, Region's Response to Petitions. Macroencapsulation is one of the alternative treatment standards for hazardous debris listed at Table 1 of 40 C.F.R. § 268.45.<sup>12</sup> CWMII has described its macroencapsulation process as follows:

The process of macroencapsulation involves the placement of large debris items into a roll-off box that is lined with [a high density polyethylene] capsule. The separation and placement of large debris items, e.g.,

<sup>12</sup> See *supra* section I.A. of this opinion.

chunks of concrete, pipes, pieces of steel beams/rebar, etc., into the capsule lined roll-off box is not an inherently dusty operation. A Knuckle Boom Loader or similar device would be used to lift the large debris out of the delivery vehicle and place it into the capsule lined roll-off box. This operation will occur within the confines of either the North or South Stabilization Building. When the lined roll-off box is filled to capacity, void spaces within the box would have to be filled with an inert material to provide structural stability to the debris-filled capsule in the landfill.

Depending on the type of inert material used to fill the void spaces between the large items of debris, some dust could be potentially generated. If a 'flowable fill' (low grade cement product) is used, no dust will be generated because of the liquid nature of the product. If vermiculite or other dry inert material were used to fill the void spaces, some dust would be generated. The amount of dust would be dependent upon the nature of the fill material. However, any dust that might be generated during the void filling process would not be a hazardous waste and would not leave the confines of the building. The dust suppression measures to be employed for this operation is the proper selection of inert void filler, i.e. 'flowable fill', asphalt chips, or other non-dusty, flowable, inert material. This material will be loaded into the lined roll-off box through a shroud or similar device to control placement of the void filler. After the void filler material is added to the lined roll-off box, the top of the capsule will be fuse-welded into place. Placement of the sealed capsule into the landfill is not a dusty operation.

Letter from Len Necaise of CWMII to Hak Cho of EPA (Dec. 9, 1993), Exhibit M, Region's Response to CWMII's Petition.

In its petition, CWMII argues that its macroencapsulation process does not generate emissions of particulates and vapors because no treatment occurs when debris is placed in the high density polyethylene ("HDPE") capsule and because CWMII will use "flowable fill material" such as lowgrade concrete to fill the void spaces in the HDPE. CWMII also argues that the placement and handling of debris is not subject to RCRA regulation. Petition at 7-8.

In its Response to Comments, the Region defended its decision to require CWMII to conduct its macroencapsulation process in the stabilization buildings, as follows:

[T]he macro- and microencapsulation operations carry the potential of generating emissions which may be particulate (from the debris, treatment reagents, fillers, etc.) or as chemical vapors or fumes (chemical reactions during treatment, volatilizing of organic coatings, etc.) For these reasons, the U.S. EPA maintains that the encapsulation [of] contaminated debris within the existing and future air emission controls, which are features of the Stabilization Buildings, offer[s] the best available protection for human health and the environment.

Response to Comments at 27 (response to Comment 49). The Region also notes in its response to CWMII's petition that when CWMII requested authorization to conduct macroencapsulation operations in a Class 1 permit modification request in 1993, it represented that: "This operation [macroencapsulation] will occur within the confines of either the North or South stabilization building." Letter from Len Necaise of CWMII to Hak Cho of EPA (Dec. 9, 1993), Exhibit M, Region's Response to CWMII's Petition. The Region approved the permit modification request on the condition that:

All macroencapsulation of contaminated debris shall be conducted within the stabilization buildings which are permitted by the State of Indiana.

Letter from Karl E. Bremer of EPA to Leonard Necaise of CWMII (Mar. 4, 1984), Exhibit P, Region's Response to CWMII's Petition. The Region contends that CWMII cannot now argue that it disagrees with the Region's generalization that the macroencapsulation process has the potential of generating emissions in the form of particulate and chemical vapors and therefore must be conducted in the stabilization building.

In its response to the petition, the Region elaborates on its statement in the response to comments that "macroencapsulation operations carry the potential of generating \* \* \* chemical vapors or fumes \* \* \*." Response to Comments at 27 (response to Comment 49). The Region notes that a principal solidification/stabilization technique employed by CWMII is the combining of hazardous wastes with water and Portland cement or other pozzolanic (lime or silica powdered material that reacts with moisture to form a strong slow-hardening

cement) to harden and stabilize the wastes. These cements harden via the process of hydration, which has the concomitant effect of chemically generating heat. The Region states that experience with such techniques in the CERCLA<sup>13</sup> context shows that the heat of hydration readily releases organic emissions to the air. The Region cites, for example, the possibility that concrete or brick fragments heavily stained or saturated with petroleum products and/or chlorinated solvents might be exposed to the hydration reaction of macroencapsulation, thereby liberating organic vapors. The Region also notes that CWMII is authorized to use polymeric organics (e.g., resins and plastics) as surface coating materials on the contaminated debris. The Region asserts that some polymeric organics release substantial amounts of vapor to the air, as the liquefying agents evaporate and the resins or plastics harden. Region's Response to CWMII's Petition at 11.

As a preliminary matter, we consider whether CWMII's challenge with respect to Condition I.D.5.e., relating to the use of an inert void filler, was preserved for review. In its comments on the draft permit, CWMII requested that the language of Condition I.D.5.e. be modified, but it did not request the deletion of the condition. Response to Comments at 26 (Comment 49). The implication of CWMII's comment was that if the requested modification were made, CWMII would have no objection to the inclusion of the condition in the permit. In the final permit, the permit condition contains the modification that CWMII requested. Thus, any objections to Condition I.D.5.e. raised in the petition are new and were not raised during the comment period. To preserve an issue for appeal, however, the issue must have been raised during the comment period or petitioner must demonstrate that it could not have raised the issue at that time because the issue was not reasonably ascertainable. See 40 C.F.R. § 124.19(a) ("The petition shall include a \* \* \* demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations \* \* \*"). We conclude, therefore, that the issue as raised in the petition was not preserved for review. See 40 C.F.R. §§ 124.13 & 124.19(a) (an issue that is reasonably ascertainable during the comment period must be raised at that time by someone if it is to be preserved for review). *In re Masonite Corporation*, 5 E.A.D. 551, 559 n.9 (EAB 1994).

With respect to the other two issues relating to macroencapsulation, we conclude that CWMII has failed to carry its burden of demon-

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<sup>13</sup> CERCLA is the Comprehensive Environmental Response, Compensation, and Liability Act, more popularly known as "Superfund." 42 U.S.C. §§ 9601 *et seq.*

strating that the challenged permit conditions are based on clear error or an exercise of discretion or policy consideration that warrants review. The Region has presented persuasive reasons why it believes that the macroencapsulation process is capable of generating vapors. CWMII has offered nothing to cast doubt on the Region's reasons. Moreover, in the description of CWMII's macroencapsulation process quoted above, CWMII admits that the process could emit particulates depending on the type of inert filler used to fill the empty space in the HDPE capsule. CWMII represents that it plans to use a type of filler that does not generate particulate emissions, but the permit does not mandate the use of such filler, and there is nothing to prevent CWMII from switching to the type of filler that does generate particulate emissions.<sup>14</sup> In sum, we are not persuaded that the Region's concerns about vapor and particulate emissions are based on clear error of fact.

CWMII also contends that the Region lacks statutory authority to regulate the placement and handling of hazardous debris. The Region's regulation of the placement and handling of hazardous debris, however, is simply a way of regulating air emissions generated by the macroencapsulation process. As authority for regulating such air emissions, the Region cites its corrective action authority under section 3004(u) of RCRA and its implementing regulation at 40 C.F.R. § 264.101. These corrective action provisions, however, only apply if there is a release of "hazardous waste or constituents" from a solid waste management unit ("SWMU"). In order to meet the definition of hazardous waste, a substance must first meet the definition of solid waste. 40 C.F.R. § 261.3(a) (definition of hazardous waste). Section 1004(27) of RCRA defines "solid waste" to include "contained gaseous material" from industrial operations. "The Agency has interpreted this explicit inclusion of contained gaseous materials as constituting an implicit exclusion of uncontainerized gas." *In re BP Chemicals America Inc., Lima, Ohio*, 3 E.A.D. 667, 669 (Adm'r 1991). Thus, a substance in gaseous form is not considered a solid waste under RCRA unless it is containerized. *Id.* at 670. Because the air emissions that the Region seeks to regulate are not containerized, they would not meet the definition of solid waste and therefore would not

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<sup>14</sup> We also note that CWMII does not address in its appeal the statement it made when it first requested a permit modification to the effect that it intended to conduct the macroencapsulation process in the stabilization buildings. If it was a good idea to conduct the macroencapsulation process in a stabilization building then, why is it no longer a good idea to continue the practice? CWMII represents that the process would now be carried out in "containment areas," but it is not clear whether these containment areas would adequately protect against particulate and vapor emissions.

constitute hazardous waste. The corrective action provisions, as they apply to hazardous waste, therefore do not apply to the air emissions and do not provide authority for the challenged permit conditions.<sup>15</sup>

Nevertheless, the Agency does have authority to regulate such air emissions under the Agency's omnibus authority at section 3005(c)(3) of RCRA, 42 U.S.C. § 6925 (and its implementing regulation at 40 C.F.R. § 270.32(h)(2)), provided the following two conditions are met: (1) There must be an adequate nexus between the air emissions and the hazardous waste management activities being carried out at the facility, and (2) the challenged conditions must be necessary to protect human health and the environment within the meaning of the omnibus clause at section 3005(c)(3) of RCRA.

The required nexus between uncontainerized air emissions and hazardous waste management activities was discussed in the *BP Chemicals* decision cited above. In that case, the Administrator made the following observations on the subject:

There are, of course, situations where the proper regulation of hazardous waste management requires permit terms that address materials that are not hazardous waste. For example, a RCRA permit may properly regulate cigarette smoking at a hazardous waste management facility where smoking poses a threat to flammable hazardous waste. On the other hand, the permit could not include restrictions on smoking based exclusively on health risks to the smoker posed by smoking itself because such risks do not have an adequate nexus to hazardous waste management. To take a more pertinent example, the Agency may regulate air emissions associated with hazardous waste manage-

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<sup>15</sup> As noted in the text above, the corrective action requirement at section 3004(u) of RCRA is triggered not only by releases of hazardous wastes, but also by releases of hazardous constituents from SWML's at RCRA facilities. When invoking section 3004(u) in defense of the challenged permit conditions, the Agency alludes not only to hazardous waste, but also to hazardous constituents. In our discussion of this issue in the text above, however, we have focused exclusively on the scope of the term "hazardous waste," electing not to consider the scope of the term "hazardous constituents." Although the Region mentioned the term "hazardous constituents," neither party briefed the issue of its scope as applied to air emissions. Since the Region almost certainly has authority to include the challenged permit conditions under the Agency's omnibus authority at section 3005(c)(3) (see discussion in text *infra* concerning Agency's omnibus authority), and the parties have moved for an expedited decision on this appeal, we have determined not to engage in a protracted analysis of the scope of the term "hazardous constituent" as a possible basis for supporting this provision. Accordingly, this opinion should not be read as addressing this issue.

ment, as well as emissions from equipment that contains or contacts hazardous waste derivatives, even though such emissions might not be solid waste. These emissions are subject to RCRA regulation because they pose risks that are ultimately tied to hazardous waste management.

*BP Chemicals*, 3 E.A.D. at 671 (footnote omitted).

In this case, the emissions that prompted the inclusion of the challenged conditions are clearly "associated with hazardous waste management activities," within the meaning of the quoted passage. Such emissions will be generated by the macroencapsulation process, a treatment method specifically listed as an alternative treatment standard for hazardous debris under the land disposal restrictions of part 268. We conclude, therefore, that under the standard articulated in *BP Chemicals*, set out above, an adequate nexus exists in this case between the challenged permit conditions and hazardous waste management activities carried out at the facility.

The challenged permit condition must also meet the requirements of the omnibus clause at Section 3005(c)(3) of RCRA. That provision authorizes the Agency to include permit conditions that are not explicitly authorized by other regulations.<sup>16</sup> Such authority, however, may only be exercised if the record contains a properly supported finding that the permit condition is necessary to protect human health or the environment.<sup>17</sup> As previously noted, the Region's Response to Comments includes the following finding relating to the challenged permit conditions:

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<sup>16</sup> Section 3005(c)(3) provides in pertinent part as follows:

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.

42 U.S.C. § 6925(c)(3).

<sup>17</sup> See *In re Sandos Pharmaceuticals Corporation*, 4 E.A.D. 75, 80 (EAB 1992) ("Accordingly, the Region may not invoke its omnibus authority unless the record contains a properly supported finding that an exercise of that authority is necessary to protect human health or the environment."); 56 Fed. Reg. 7147 (Feb. 21, 1991) ("EPA notes that permit writers choosing to invoke the omnibus authority of § 270.32(h)(2) to add conditions to a RCRA permit must show that such conditions are necessary to ensure protection of human health and the environment and must provide support for the conditions to interested parties and accept and respond to comment. In addition, permit writers must justify in the administrative record supporting the permit any decisions based on omnibus authority.")

[M]acro- and microencapsulation operations carry the potential of generating emissions which may be particulate (from the debris, treatment reagents, fillers, etc.) or as chemical vapors or fumes (chemical reactions during treatment, volatilizing of organic coatings, etc.). For these reasons, the U.S. EPA maintains that the encapsulation [of] contaminated debris within the existing and future air emission controls, which are features of the Stabilization Buildings, offer[s] the best available protection for human health and the environment.

Response to Comments at 27 (response to Comment 49). The above-quoted finding suggests that there exists a sufficient basis for an exercise of the Agency's omnibus authority.<sup>18</sup>

Thus, it appears that the Region does have a sufficient statutory basis for including the challenged permit conditions, namely the omnibus clause at section 3005(c)(3) of RCRA. The problem is that the Region did not invoke section 3005(c)(3) as justification for the challenged permit conditions. As noted above, it erroneously relied instead on its corrective action authority under section 3004(u) of RCRA. The practical significance of this error may be slight, since an exercise of the Agency's corrective action authority also requires a finding that the permit condition is necessary to protect human health and the environment. See *In re American Cyanamid Company, Kalamazoo, Michigan*, 3 E.A.D. 657, 665 n.26 (Adm'r 1991) ("[T]he Region's finding that corrective action is necessary under §3004(u) also demonstrates that corrective action is necessary for the protection of human health and the environment for purposes of §3005(c)(3)."). Nevertheless, it is conceivable that CWMII's comments on, and challenge to, the permit conditions might have taken a different form, but for the Region's erroneous reliance on its corrective action authority. We are therefore remanding Conditions 1.D.5.a. and c. On remand, assuming the Region wants to retain these conditions, the Region is directed to revise its fact

<sup>18</sup> The Region concedes that it based its decision to include the challenged permit conditions on two conversations with officials of Indiana's environmental regulatory agency, but did not include any mention of such conversations within the administrative record for the permit. We consider this harmless error. The gist of the conversations was that the State of Indiana's efforts to regulate air emissions from the facility would not obviate the need for the challenged permit conditions. In its response to comments, however, the Region had arrived at the same conclusion based on information that was not obtained during the two conversations. See Response to Comments at 34 (response to Comment 56), Exhibit J, Region's Response to Petition. In any event, the Region will have the opportunity to supplement the record on remand.

sheet (or statement of basis) accompanying the draft permit as necessary to clarify that the Region's statutory authority for requiring the inclusion of the challenged permit conditions is section 3005(c)(3) of RCRA and to make the findings necessary to invoke that authority. (While we assume the Region will make such findings and invoke such authority, it is of course free to withdraw the permit conditions if for some reason it decides it must do so.)<sup>19</sup>

#### E. *The Microencapsulation Process*

CWMII challenges Permit Condition II.6.f., which provides as follows:

If microencapsulated debris are placed into the landfill as solidified masses, care will be taken so as to minimize breakage of the debris masses.

As noted above, microencapsulation is one of the alternative treatment standards for hazardous debris listed at Table 1 of 40 C.F.R. § 268.45.<sup>20</sup> The purpose of the process is to stabilize the debris to reduce leachability of the hazardous contaminants contained therein.

In its comments on the draft permit, CWMII requested the deletion of Condition II.6.f., arguing that: "[T]his condition is not applicable and has no regulatory requirement associated with it." Response to Comments at 30 (Comment 50). In its petition, CWMII similarly argues that: "The permit condition as written is arguably not applicable to the microencapsulation process and therefore does not apply as a permit condition." Petition at 8.

<sup>19</sup> If the Region determines that it has statutory authority under the omnibus clause at section 3005(c)(3) to include the challenged permit conditions, it must reopen the record for comment on this determination. See *In re Adcom Wire, D/B/A Adcom Wire Company*, 5 E.A.D. 84, 90 (EAB 1994) (requiring Region to reopen record for comment on jurisdictional determination).

<sup>20</sup> The microencapsulation process is described in Table 1 of section 268.45 as follows:

*Microencapsulation:* Stabilization of the debris with the following reagents (or waste reagents) such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/pozzolans (e.g., fly ash and cement kiln dust). Reagents (e.g., iron salts, silicates, and clays) may be added to enhance the set/cure time and/or compressive strength, or to reduce the leachability of the hazardous constituents.

(Footnote omitted.)

The Region responds that the challenged permit condition is meant to reduce the leachability of hazardous contaminants in and on the debris by minimizing the breakage of encapsulating materials through careless handling. The Region emphasizes that:

Condition II.D.6.f. requires the Permittee to *minimize* breakage, rather than *require* that the Permittee ensure that absolutely no breakage will occur. That is, Region 5 is setting a realistic permit condition which requires the Permittee to exercise reasonable care when disposing of microencapsulated debris to minimize a potential danger to human health and the environment.

Region's Response to Petition at 18. As regulatory authority for the condition, the Region cites Table 1 of 40 C.F.R. § 268.45, discussed above.

We agree with the Region. The goal of microencapsulation is to reduce the leachability of hazardous contaminants in and on hazardous debris. Condition II.D.6.f. helps to ensure the success of microencapsulation by minimizing the chance that encapsulating materials will break, thereby exposing hazardous contaminants. We conclude, therefore, that Condition II.D.6.f. is based on, and authorized by, 40 C.F.R. § 268.45(a)(1) & Table 1 (describing performance standards of microencapsulation). Accordingly, we conclude that CWMII has failed to demonstrate that the challenged permit condition is based on a clear error or involves an exercise of discretion or a policy consideration that warrants review. Review of this issue is therefore denied.

#### *P. Groundwater Monitoring Requirements*

CWMII challenges Permit Conditions III.A. and III.A.1., which require CWMII to continue operating ten groundwater monitoring wells that are downgradient of the closed Sanitary Landfill at the facility.<sup>21</sup> CWMII has been voluntarily monitoring these ten wells as part

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<sup>21</sup> Conditions III.A. and III.A.1. provide as follows:

1. The Permittee shall continue to implement a ground water monitoring workplan to document any evidence of a release of hazardous waste or hazardous constituents to the ground water from the Sanitary Landfill. The contents of the Workplan are found in the Attachment C.

a. All data generated by the continued ground water monitoring of the Sanitary Landfill shall be submitted in their entirety to the U.S. EPA.

of its groundwater monitoring program for the past several years; however, it now wishes to discontinue this practice. CWMII notes in its petition that it has completed an Investigative Workplan study of the Sanitary Landfill unit and has voluntarily collected additional groundwater data related to the unit. On the basis of these data, CWMII asserts that "there has been no release from the Sanitary Landfill unit." CWMII Petition at 9. CWMII also correctly points out that the Region, in its response to comments, concedes that no release has been detected to date from the Sanitary Landfill. Response to Comments at 33 (response to Comment 55). CWMII argues that the only conceivable regulatory authority for ordering the continued operation of the groundwater monitoring wells is the Agency's corrective action authority at 40 C.F.R. § 264.101.<sup>22</sup> CWMII argues, however, that because there has been no release from the Sanitary Landfill, the Agency's corrective action provision, which applies to releases of hazardous waste, does not provide authority for the challenged permit conditions.

In its comments on the draft permit, CWMII requested that it not be required to continue operating the groundwater monitoring wells. The Region, however, rejected the request, explaining that:

[T]he bottom and sides of the Sanitary Landfill are unlined natural soil, and that "special" industrial wastes have been disposed there, before the effective date of the RCRA statute. Although no release has been detected, to date, from the Sanitary Landfill, the U.S. EPA remains very concerned about potential releases of hazardous wastes or constituents from the Sanitary Landfill.

Because of the U.S. EPA's concerns, as stated above, regarding this potential threat to human health and the environment, the U.S. EPA has a basis for determining whether and to what extent corrective measures are

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<sup>22</sup> Section 264.101(a) provides as follows:

The owner or operator of a facility seeking a permit for the treatment, storage or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(Emphasis added.)

needed to protect human health and the environment in accordance with RCRA Section 3004(u).

Response to Comments at 33 (response to Comment 55), Exhibit J, Region's Response to Petitions. In its response to the CWMII's petition, the Region essentially repeats its response to comments and again invokes section 3004(u) as authority for the challenged permit condition.

The Region's response to comments presents what appear to be well-founded concerns about potential releases from the Sanitary Landfill unit. CWMII's petition does not point to any information in the record that would cause us to question the Region's position. We conclude, therefore, that the CWMII has not met its burden of demonstrating that the challenged permit condition is based on a clear error of fact.

Nor are we persuaded by CWMII's legal argument that the Region has no authority to regulate the unit because no release from the unit has been detected. The purpose of the monitoring requirement is to detect *future* releases of hazardous waste. The Agency's corrective action authority under section 3004(u) is broad enough to require a permittee to monitor for future releases, at least in some circumstances. The circumstances in which such monitoring would be appropriate were discussed in the case of *In re EnviroSAFE Services of Idaho, Inc.*, 3 E.A.D. 165 (Adm'r 1990). In that case, the permit in question required EnviroSAFE Services to monitor specified existing wells and to construct and monitor a number of new wells to detect any future releases from more than 30 SWMUs at the facility. The Administrator held that: "Apart from the authority to require investigation of existing releases, however, the Region has legal authority under RCRA §3004(u) to require groundwater monitoring to detect *future* releases from SWMUs. See 52 Fed. Reg. 45,789 (December 1, 1987)." *Id.* at 170. The Administrator also made the following observations:

The 1987 preamble [cited above] suggests that monitoring will be required where a SWMU is likely to have a future release, but this assertion should not be read to overstate the evidentiary threshold needed for future release monitoring. RCRA §3004(u) was intended to apply to releases that occur after permit issuance. See S. Rep. No. 284, 98th Cong., 1st Sess. 32 (1983); 53 Fed. Reg. at 45,789. Its terms are broad enough to authorize monitoring for future releases as necessary to protect human health and the environment, particu-

larly when read in conjunction with the Agency's omnibus authority \* \* \*. The record in a given case might not allow for a conclusive finding that a future release is likely to occur, but might nevertheless reveal a serious or substantial risk of a future release that warrants monitoring to protect human health and the environment.

*Id.* at 170 n.13. Under the standard articulated in *Envirosafe*, we conclude that the challenged permit condition is authorized under the Agency's corrective action authority. The Region's response to comments includes a statement that the permit condition is necessary to protect human health and the environment, which statement is supported by an adequate factual basis indicating that a future release may occur. We therefore conclude that the challenged permit conditions are authorized under section 3004(u) of RCRA. Review of this issue is therefore denied.

#### G. Ambient Air Quality Monitoring Requirements

CWMI challenges the necessity for Permit Condition III.A.2., which provides as follows:

The Permittee shall implement ambient air monitoring at the facility. The ambient air monitoring shall meet the workplan found in Attachment E and shall implement the ambient air study for inorganic compounds as found in Attachment F.

Attachment E, mentioned above in the quoted permit condition, requires implementation of an ambient air monitoring plan for particulates and lead at the perimeter of the facility, and Attachment F requires implementation of an ambient air monitoring study designed to measure the extent to which volatile inorganic compounds (e.g., ammonia, hydrogen chloride, hydrogen cyanide, hydrogen sulfide, and sulfuric acid mist) may be emitted during the stabilization process. In its comments on the draft permit, CWMI requested the deletion of Condition III.A.2.:

CWMI has submitted an application for the registration of source emissions, to the IDEM, which is claimed to moot Attachment E. Also CWMI is in the process of enclosing the Stabilization Buildings and adding an air pollution control system, which is claimed to moot the need for Attachment F.

## Response to Comments at 34 (Comment 56).

In its response to Comment 56, the Region rejected CWMII's request, arguing that the monitoring required in Attachment E is necessary to protect human health and the environment. Attachment E is designed to address migration of airborne particulate emissions off-site, providing valuable data regarding both the effectiveness of dust suppression measures at the facility and the potential impact of off-site particulate emissions upon the surrounding community. To achieve this purpose, Attachment E requires the use of several particulate collection stations around the perimeter of the landfill. Indiana's regulation of individual air emissions sources at the facility will not supply the Region with comparable monitoring information. With respect to Attachment F, the Region noted that CWMII's proposed pollution control equipment in its stabilization buildings will be designed for the control of particulate matter only, while the air monitoring study of emissions from the stabilization buildings called for in Attachment F will address airborne chemical vapors as well. The Region believes that implementation of Attachment F will be valuable for the collection of data to protect human health and the environment. For all these reasons, the Region decided to leave Attachments E and F in the permit.

On appeal, CWMII raises three objections to Permit Condition III.A.2., as follows: (1) The Region has no authority under RCRA to impose *facility* ambient air quality monitoring; (2) CWMII is working with the State of Indiana under the Clean Air Act to address air emissions issues from the stabilization process on-site, and USEPA ought to defer to, and coordinate with, IDEM's regulatory effort; (3) The open-path Fourier Transform Infrared System described in Attachment F is barely beyond bench-scale testing and is not an accepted scientific basis for monitoring volatile organic compounds.

With respect to the first issue, it appears that the Region has sufficient statutory authority to support the challenged monitoring requirements. However, as with the permit conditions relating to macroencapsulation (discussed in section D above), we conclude that the Region has invoked an inapplicable statutory authority. As its authority for requiring the challenged air monitoring requirements, the Region has invoked the corrective action provision at section 3004(u) of RCRA. The air emissions subject to the monitoring requirements, however, will not be containerized, so they will not constitute releases of hazardous waste. The Agency's corrective action authority, as applied to hazardous waste, therefore, does not apply.<sup>23</sup>

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<sup>23</sup> See *supra* n.15.

As noted earlier, however, noncontainerized air emissions may be regulated under the Agency's omnibus clause at section 3005(c)(3) of RCRA, 42 U.S.C. § 6925, provided the record contains a properly supported finding that such regulation is necessary to protect human health or the environment and provided there is an adequate nexus between the air emissions and the hazardous waste management activities carried on at the facility. In this case, the air emissions that the Region seeks to regulate will be generated by the macroencapsulation and microencapsulation processes to be conducted in the stabilization buildings. These two processes are specifically listed as alternative treatment standards for hazardous debris at 40 C.F.R. § 268.45 (Table 1). The air emissions to be monitored, therefore, have a clear nexus to the hazardous waste management activity being carried out at the facility.

As for the Agency's omnibus authority, the Region included in its response to comments a finding that the ambient air monitoring required in Attachments E and F is necessary to protect human health and the environment. The response to comments also includes sufficient factual information to support the Region's finding. It appears, therefore, that the Region has sufficient statutory authority to include the challenged permit conditions.

Unfortunately, the Region did not invoke the Agency's omnibus authority at section 3005(c)(3). It relied instead on the Agency's corrective action authority. On remand, assuming the Region wants to retain these conditions, the Region is directed to revise its fact sheet (or statement of basis) accompanying the draft permit as necessary to clarify that the Region's statutory authority for requiring the inclusion of the challenged permit conditions is section 3005(c)(3) of RCRA. (While we assume the Region will want to invoke such authority, it is, of course, free to withdraw the permit condition, if for some reason it decides it must do so.)<sup>24</sup>

With respect to CWMII's second argument — that the Region should coordinate its efforts with, and defer to, the regulatory efforts of the State of Indiana — we note that the Region, in its Response to Comments, stated that it would "evaluate any State requirements to avoid conflicting Federal and State requirements." Response to Comments at 34. Moreover, the Region represents that it has been in communication with State officials to determine whether the State's reg-

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<sup>24</sup> If the Region determines that it has statutory authority under the omnibus clause at section 3005(c)(3) to include the challenged permit condition, it must reopen the record for comment on this determination. See *supra* n.19.

ulatory efforts have obviated the need for ambient air monitoring in the RCRA permit. In view of the Region's obvious willingness to coordinate its efforts with the State of Indiana to avoid duplicative requirements, we decline to second-guess the Region's judgment as to what level of deference to, or cooperation with, the State of Indiana is appropriate.<sup>25</sup>

We also reject CWMII's third argument, that the open-path Fourier Transform Infrared System described in Attachment F is barely beyond bench-scale testing and is not an accepted scientific basis for monitoring volatile organic compounds. The Region argues that this issue was not raised during the comment period and, accordingly, may not be raised at this stage of the proceedings. We agree. CWMII did not demonstrate in its petition either that it raised the issue during the comment period or that the issue was not reasonably ascertainable at the time, as it is required to do under the procedural rules governing appeals.<sup>26</sup> We conclude, therefore, that the issue has not been preserved for review. See 40 C.F.R. §§ 124.13 & 124.19(a) (an issue that is reasonably ascertainable during the comment period must be raised at that time by someone if it is to be preserved for review). *In re Masonite Corporation*, 5 E.A.D. 551, 559 n.9 (EAB 1994).<sup>27</sup>

<sup>25</sup> See *In re Metalworking Lubricants Company*, 5 E.A.D. 181, 185-86 (EAB 1994) (where permittee had already done corrective action work in response to a State enforcement action, Board denied review of permittee's concerns about duplicative corrective action requirements, because the Region had indicated that the permittee could submit work done for the State as a means of at least partially satisfying its permit requirements); *In re Beazer East, Inc. and Koppers Industries, Inc.*, 4 E.A.D. 536, 544 (EAB 1993) (where permittee had already done corrective action work for the State, Board denied review of permittee's concerns about duplicate corrective action requirements, because Region had evidenced "willingness to take advantage of [the permittee's] prior efforts and to consider the data generated to date in determining whether [the permittee] has satisfied the permit's corrective action requirements"); *In re General Electric Company*, 4 E.A.D. 358, 365 (EAB 1992) ("We believe the Regions should be accorded a large measure of discretion in determining the appropriate level of and mechanism for cooperation with State programs. It is sufficient that the Region has evidenced a good faith willingness to coordinate its efforts with those of Massachusetts consistent with Agency policy. Having made that determination, we will not second-guess the Region's judgment as to the particular mechanism used to effect such cooperation."); *In re General Motors Corporation*, 4 E.A.D. 334, 340-41 (EAB 1992) (Board denied review because the Region had agreed to consider all data generated by the permittee through the ongoing remediation efforts it has conducted with the approval of all State and local officials).

<sup>26</sup> See 40 C.F.R. § 124.19(a) ("The petition shall include a \* \* \* demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations \* \* \*.") Our review of the record confirms that there is no indication that CWMII objected to the challenged technology during the comment period.

<sup>27</sup> We note that Attachment F requires a study of emissions of volatile *inorganic* compounds, whereas CWMII argues that the Open-Path Fourier Transform Infrared Spectrometer

Continued

#### H. *Permit Modifications In Response to Petition*

The Region has agreed to modify the following conditions in accordance with CWMII's objections:

- Conditions II.D.1.a. and b. (the Region will remove these provisions altogether);
- Conditions II.D.2.a. and b. (the Region will remove these provisions altogether);
- Condition II.E.6. (the Region will correct a typographical error);
- Condition IV.B.4. (the Region will add a definition of the term "storm").

Accordingly, we are denying review of such objections.

### III. CONCLUSION

For all the foregoing reasons, we are remanding the following permit conditions to the Region: (1) Condition I.D.10., so that the Region may supplement its response to comments with an explanation of why a 30-day waiting period is reasonable (or modify the requirement if not supportable); (2) Condition I.D.14., so that the Region may supplement its response to comments to provide an explanation of why it chose to include a 15-day reporting requirement for instances of "other noncompliance" (or modify the requirement if not supportable); (3) Conditions I.D.5.a. and c., so that the Region may revise its fact sheet (or statement of basis) to clarify that its statutory authority for requiring the inclusion of the challenged permit

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system is not an accepted method of measuring volatile *organic* compounds. CWMII also cites Method 25D at 40 C.F.R. Part 60, Appendix A, which is a measurement method designed to determine the volatile organic concentration of waste samples. Because the issue has not been preserved for review, however, we need not determine the significance, if any, of this discrepancy.

We also note the Region's assertion that CWMII itself proposed the technology that it is now challenging. Region's Response to CWMII's Petition at 22. It is hard to know how much weight to give this assertion for two reasons. First, in support of its assertion, the Region cites page one of Attachment F. The text on the cited page indicates that CWMII contracted with Midwest Research Institute ("MRI") to perform the study and that MRI "will use a Midac portable Fourier transform infrared (FTIR) spectrometer to monitor emissions of these compounds." The implication of the Region's argument is that it was CWMII's contractor, not the Region, who chose to use the challenged technology. Attachment F, however, does not provide any direct support for this implication other than the statement that MRI will use the technology. Second, the Region contends that CWMII proposed the technology for the purpose of monitoring "volatile organic compounds," even though the purpose of Attachment F is to monitor emissions of *inorganic* compounds. In any event, because this issue was not preserved for review, we need not determine who proposed the use of the challenged technology.

conditions is section 3005(c)(3) of RCRA (or modify or delete the condition if not supportable); (4) Condition III.A.2., so that the Region may revise its fact sheet (or statement of basis) to clarify that its statutory authority for requiring the inclusion of the challenged permit condition is section 3005(c)(3) of RCRA (or modify or delete the condition if not supportable).<sup>28</sup> With respect to the other issues raised in CWMII's petition, the Board concludes that CWMII either failed to preserve them for review or failed to carry its burden of demonstrating that the Region's decision is based on a clear error of fact or law or an exercise of discretion or important policy consideration that warrants review. Review of each of those issues is therefore denied.

So ordered.

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<sup>28</sup> Although section 124.19(c) of the procedural rules governing this appeal contemplates that additional briefing will be submitted upon the grant of a petition for review, a direct remand without additional submissions is appropriate where, as here, it does not appear that further briefs on appeal would shed light on the issues to be addressed on remand. See, e.g., *In re Exxon Company, U.S.A. (Baton Rouge Refinery)*, 6 E.A.D. 32, 47 n.15 (EAB 1995); *In re Amoco Oil Company*, 4 E.A.D. 954, 982 n.38 (EAB 1993); *In re Sandoz Pharmaceuticals Corporation*, 4 E.A.D. 75, 85 n.11 (EAB 1992).

Upon completion of the remand proceedings, CWMII will not be required to appeal to the Board to exhaust its administrative remedies. For purposes of judicial review, the Region's actions on remand will constitute final agency action. See 40 C.F.R. § 124.19(f)(1)(iii).