BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF SHINTECH INC. AND ITS AFFILIATES' POLYVINYL CHLORIDE PRODUCTION FACILITY Permit No. 2466-VO No. 2467-VO No. 2468-VO	ORDER RESPONDING TO PETITIONERS' REQUESTS THAT THE ADMINISTRATOR OBJECT TO ISSUANCE OF STATE OPERATING PERMITS

ORDER PARTIALLY GRANTING AND PARTIALLY DENYING PETITIONS FOR OBJECTION TO PERMITS

On May 22, 1997, the Tulane Environmental Law Clinic on behalf of the St. James Citizens for Jobs & the Environment, Louisiana Environmental Action Network ("LEAN"), St. John Citizens for Environmental Justice, St. Charles Environmental Coalition, Gulf Coast Tenants Organization, Southern Christian Leadership Conference, Louisiana Citizen Action, Concerned Citizens of Iberville Parish, Action Against Waste and to Restore the Environment, Ascension Parish Residents Against Toxic Pollution, River Area Planning Group, Save Our Selves, North Baton Rouge Environmental Association, Neighbors Assisting Neighbors, Delta Greens, Louisiana Coalition for Tax Justice, League of Women Voters of Louisiana, and the Sierra Club, joined by Greenpeace ("Petitioners"), petitioned the Environmental Protection Agency ("EPA" or "the Agency") to object to the issuance to Shintech, Inc., and Its Affiliates ("Shintech") of proposed state operating permits issued pursuant to Title V of the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. §§ 7661-7661f ("Pet. of May 22").[1] The Louisiana Department of Environmental

[1] The Tulane Environmental Law Clinic first petitioned EPA to object to issuance of the proposed Shintech Title V permits on April 3, 1997. Because EPA received this petition prior to the expiration of the Agency's 45-day review period under section 505(b)(1) of the Act, Petitioners resubmitted the petition on April 16, 1997. On May 22, the Tulane Environmental Law Clinic filed a third petition incorporating the issues raised in the earlier petitions as well as raising additional issues. The Tulane Environmental Law Clinic subsequently withdrew the petition filed on April 16, 1997, with the exception of four

(continued...)

Quality ("LDEQ") had proposed to issue Title V permits to Shintech for the operation of a chlor-alkali production plant (the "Shintech Chlor-Alkali Permit"), the operation of a polyvinyl chloride (“PVC”) production plant (the "Shintech PVC Permit"), and the operation of a vinyl chloride monomer (“VCM”) production plant (the “Shintech VCM Permit”) in Convent, Louisiana, St. James Parish (collectively, the “Shintech Permits”). In addition, LDEQ had proposed to issue a single Prevention of Significant Deterioration (“PSD”) preconstruction permit for all three plants, pursuant to 42 U.S.C. §§ 7410(a)(2)(C) & 7471, under the State’s merged preconstruction-operating permit program (“Shintech PSD Permit”).

On May 30, 1997, LEAN and St. James Citizens for Jobs and the Environment filed an additional petition requesting that EPA terminate or revoke the Shintech Permits, which were issued as final permits by LDEQ on May 23, 1997 (“Pet. of May 30"). LEAN subsequently submitted a petition on July 29, 1997, more than 60 days after the expiration of EPA’s 45-day review period under section 505(b), requesting that EPA revoke the Title V permits issued to Shintech, based upon alleged objections that arose after the public comment periods provided by LDEQ (“Pet. of July 29").

All together, Petitioners requested that EPA object to the issuance of the Shintech Chlor-Alkali Permit, the Shintech PVC Permit, and the Shintech VCM Permit, and in their later petitions after issuance of the permits, that EPA terminate or revoke the three Shintech operating permits, pursuant to section 505(b)(2) of the Act. For the reasons set forth below, I grant Petitioners' requests in part and deny the remainder of their requests.

I. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act requires each state to develop and submit to EPA an operating permit program intended to meet the requirements of Title V. The State of Louisiana submitted a Title V program governing the issuance of operating permits on November 15, 1993, and subsequently revised this program on November 10, 1994. See 40 CFR Part 70, Appendix A. In September of 1995, EPA granted full approval of the Louisiana Title V operating permits program, which became effective in October, 1995. See 60 Fed. Reg. 47296 (Sept. 12, 1995); 40 CFR Part 70,

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[1](...continued)
footnotes and an attachment.

Appendix A. This program is codified in Louisiana Administrative Code ("LAC"), Title 33, Part III, Chapter 5, Section 507 et seq. Major stationary sources of air pollution and other sources covered by Title V are required to obtain an operating permit that includes emission limitations and such other conditions as are necessary to assure compliance with applicable requirements of the Act. See CAA §§ 502(a) & 504(a).

Under section 505(b) of the Act, the Administrator is authorized to review state operating permits issued pursuant to Title V and to object to permits that fail to comply with the applicable requirements of the Act. In particular, under section 505(b)(1) of the Act, EPA is to object to the issuance of a proposed Title V permit if the Agency determines that the permit is "not in compliance with the applicable requirements of this Act, including the requirements of an applicable implementation plan." For purposes of the Administrator's review and objection opportunity pursuant to section 505(b), the applicable requirements of a state implementation plan ("SIP") include the applicable substantive and procedural requirements of the relevant state PSD program.[2]

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[2] Sections 110(a)(2)(C) and 161 of the Act require each state to include a PSD program in its SIP. See also 40 CFR § 51.166. The EPA approved a PSD program in the State of Louisiana's SIP on April 24, 1987. See 52 Fed. Reg. 13671; see also 40 CFR § 52.986.

Where a state or local government has a SIP-approved PSD program, the merits of PSD issues can be ripe for consideration in a timely petition to object under Title V. Under 40 CFR § 70.1(b), "all sources subject to Title V must have a permit to operate that assures compliance by the source with all applicable requirements." Applicable requirements are defined in section 70.2 to include: "(1) any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the [Clean Air] Act...." The LDEQ defines "federally applicable requirement," in relevant part, to include "any standard or other requirement provided for in the Louisiana State Implementation Plan approved or promulgated by EPA through rulemaking under title I of the Clean Air Act that implements the relevant requirements of the Clean Air Act, including any revisions to that plan promulgated in 40 CFR part 52, subpart T." LAC 33:III.502. Thus, the applicable requirements of the Shintech Permits include the requirement to obtain a PSD permit that in turn complies with applicable PSD requirements under the Act, EPA regulations, and the Louisiana SIP.

When EPA declines to object to a Title V permit on its own initiative, section 505(b)(2) provides that any person may petition the Administrator to object to the issuance of a permit by demonstrating that the permit is not in compliance with applicable requirements. See also 40 CFR § 70.8(d). Pursuant to section 505(b)(2) of the Act, petitions "shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period)." Id.

II. BACKGROUND

Shintech submitted three applications to the LDEQ on July 23, 1996 for state operating permits issued pursuant to Title V of the Act, in order to operate a chlor-alkali production facility, a PVC production facility, and a VCM production facility in Convent, Louisiana, St. James Parish. At the same time, Shintech submitted an application for a PSD preconstruction permit for these three facilities.

The LDEQ noticed a single draft permit for the Shintech plants, addressing the PSD and operating permit applications, and opened a public comment period on the draft permit on November 7, 1996. The LDEQ submitted the draft permit to EPA's Region VI at this time. The EPA submitted written comments on the draft permit on November 20, 1996, and again on November 27, 1996. The LDEQ held a public hearing on the draft Shintech permit on December 9, 1996. The LDEQ twice extended the public comment period on the draft Shintech permit, from December 7, 1996 to January 8, 1997, and from January 8, 1997 to January 23, 1997.

On February 18, the LDEQ issued proposed PSD and operating permits for the Shintech plants. The Agency's Region VI provided oral comments to the LDEQ on the proposed permits but did not provide written technical comments. The EPA's 45-day review period under CAA section 505(b)(1) of the proposed Shintech Permits submitted on February 18 ended on April 3. On May 23, 1997, LDEQ issued a final PSD permit and three final Title V operating permits to Shintech for its chlor-alkali, PVC, and VCM plants.

Under the authority of these permits, Shintech proposes to construct and operate a 1.30 billion pound per year PVC production complex. The complex will be considered a major

source of particulate matter ("PM/PM_{10}"), nitrogen oxides ("NO_x"), carbon monoxide ("CO"), volatile organic compounds ("VOCs"), and hazardous air pollutants ("HAPs"). It will include multiple sources of air emissions, including boilers, thermal oxidizers and scrubbers, furnaces, driers, storage vessels, and fugitive emissions.

III. ISSUES RAISED IN THE PETITIONS

Petitioners' Title V petitions challenge numerous provisions of the Shintech operating permits for alleged failures to comply with applicable requirements of the Clean Air Act. In addition, Petitioners raise environmental justice concerns and request that EPA object to the permits under the authority of Executive Order 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"), 59 Fed. Reg. 7629 (Feb. 16, 1994) (codified at 3 CFR at 859 (1995)), and section 505(b)(2) of the Act. Finally, Petitioners request that EPA object to the Shintech Permits on the basis of alleged procedural deficiencies under Title V in the issuance of the final permits. Each of these objections is addressed below.

A. Issues Warranting Partial Grant of the Petitions

To justify exercise of an objection by EPA to a Title V permit pursuant to section 505(b)(2) of the Act, Petitioners must demonstrate that the permit is not in compliance with the requirements of the Act, including the requirements of the Louisiana SIP. Petitioners have identified the following issue justifying the Agency's objection to the Shintech VCM Permit.

Petitioners claim that the VCM cracking furnaces are reactors and thus meet the definition of a process unit in 40 CFR § 63.111. Pet. of May 22 at 20. Petitioners further claim that as process units, the VCM cracking furnaces are subject to the control and venting requirements of the Hazardous Organic National Emission Standards for Hazardous Air Pollutants (the "HON"), 40 CFR Part 63, Subparts F, G & H, the requirements of which should be set forth in the VCM Title V permit. Id. These claims are correct.

The HON regulates emissions of certain gas streams (known as process vents) that are discharged from chemical manufacturing process units. Process units, in turn, are defined to include such equipment as reactors and distillation units. 40 CFR § 60.111. Therefore, if a piece of equipment fits within the definition of a reactor, it is considered to be part of a process

unit and is potentially subject to regulation under the HON.[3]

The HON defines a reactor as "a device or vessel in which one or more chemicals or reactants, other than air, are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed...." 40 CFR § 63.101. Because the cracking furnaces in the VCM plant use heat to alter the molecular structure of 1,2- dichloroethane to produce vinyl chloride and hydrogen chloride, the furnaces meet the definition of a reactor and should be considered to be a process unit. As a process unit, the cracking furnaces are subject to regulation under the HON and all process vents associated with these reactors must meet the venting and control requirements in 40 CFR § 63.113.

The Shintech VCM Permit thus must be revised to add process vent emission points for the cracking furnaces. Process vents include gas streams that are either discharged directly to the atmosphere or are discharged to the atmosphere after diversion through a product recovery device. 40 CFR § 63.101. The permit must also be further revised to require compliance with the appropriate gas stream emission controls required by the HON. The selection of appropriate controls will depend on whether the vents are categorized as "process vent 1's" or "process vent 2's." The permit shall also specify the appropriate monitoring, recordkeeping and reporting requirements of the HON for these emission points.

Although the EPA is not objecting to the Shintech Permits on the remaining grounds raised by Petitioners (discussed below), in the course of reviewing the Shintech Permits in response to the petitions, EPA has identified additional technical deficiencies in the permits that were not raised or demonstrated by Petitioners. These deficiencies have been discussed with LDEQ, and in a letter to EPA dated September 8, 1997, LDEQ has stated its intention to reopen the Shintech Permits for cause pursuant to LAC 33.III.529 and 40 CFR § 70.7(f) to address them.

B. Issues Warranting Partial Denial of the Petitions

1. Environmental justice.

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[3] To be subject to the HON, a process unit must also meet the applicability criteria specified in 40 CFR § 60.100(b)(1)-(3). 40 CFR § 63.101(b). The cracking furnaces in the VCM plant meet these applicability criteria.

The May 22 submittal from Petitioners requests that EPA object to the proposed Shintech Title V permits on the basis of environmental justice concerns.[4] Petitioners assert that issuance of the Shintech Permits would disproportionately burden the surrounding predominantly African-American and low-income populations with increased levels of pollution, and increased health and environmental risks. Pet. of May 22 at 6-14. Petitioners argue that permitting the Shintech facility in Convent would add too much additional air pollution to an area that Petitioners stress already bears a disproportionately high level of industrial pollution from existing facilities. Id. at 10. Specifically, the petition raises concerns about increased exposure to HAPs as a result of emissions from the facility. Id. at 11-14. Petitioners further claim that environmental justice concerns mandate that Shintech go beyond the requirements of the Act in controlling HAP emissions from the PVC plant. Id. at 22-27. Finally, Petitioners maintain that in assessing the possible impacts of the Shintech complex on the surrounding African-American and low-income communities, EPA should take into consideration what Petitioners characterize as LDEQ's ineffective enforcement record. Id. at 27-28.

For these reasons, Petitioners allege that the "proposed permit and underlying permit applications submitted by Shintech, Inc. and Its Affiliates...fail to satisfy certain provisions of the Clean Air Act and federal policies on environmental justice." Pet. of May 22 at 5. Specifically, Petitioners argue that Executive Order 12898 requires EPA to object to the proposed permits if issuance of the permits will have the environmental justice consequences alleged by Petitioners. Id. at 5-8, 22-23. Petitioners also suggest that the above-mentioned considerations constitute grounds under the Act for EPA to object to the Shintech Permits. Id. at 6-7. Finally, in separate administrative actions in May and July, some of the Petitioners filed a complaint and amended complaint with EPA against the LDEQ under Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d et seq. ("Title VI"), and EPA's implementing regulations, 40 CFR Part 7, alleging environmental justice claims of racial discrimination in the issuance of the Shintech Permits.

On February 11, 1994, the President issued Executive Order

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[4] Petitioners do not define their use of the term "environmental justice concerns," but it is apparent that their petitions use the term, in part, to refer to alleged disproportionate impacts and burdens from pollution levels, and health and environmental risks, on minority and low-income populations.

12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," 59 Fed. Reg. 7629, and an accompanying memorandum, 30 Weekly Comp. Pres. Doc. 279-80 (Feb. 14, 1994), to the heads of federal departments and agencies. Executive Order 12898 establishes the Administration's policy for identifying and addressing disproportionately high and adverse human health or environmental effects of federal agency programs, policies, and activities on minority communities and low-income communities.[5] As noted in the Presidential memorandum that accompanies Executive Order 12898, it is designed to focus the attention of federal agencies on the human health and environmental conditions in these communities to realize the goal of achieving environmental justice. The Presidential memorandum emphasizes several provisions of environmental, civil rights, and other statutes that provide opportunities for agencies to address environmental hazards in minority communities and low-income communities. In relevant part, it identifies Title VI of the Civil Rights Act as a tool for promoting environmental justice in programs or activities affecting human health or the environment that receive federal financial assistance.

As a recipient of EPA financial assistance, the programs and activities of the LDEQ, including its issuance of the Shintech Permits, are subject to the requirements of Title VI of the Civil Rights Act and EPA's implementing regulations. As noted above, some of the Petitioners have filed an administrative complaint with EPA under Title VI challenging the issuance of the Shintech Permits. The Agency believes that the environmental justice claims raised by Petitioners in their Title VI complaint deserve serious attention. Consistent with the purpose of Executive Order 12898 and the use of Title VI as a tool for achieving the goal of environmental justice, EPA has accepted for investigation the Title VI complaint filed by Petitioners. Under EPA's Title VI regulations, the EPA Office of Civil Rights is conducting the investigation, which is ongoing. In addition, the State of Louisiana has agreed to address the environmental justice issues raised by Petitioners, and EPA has committed to work with the State to address the issues and find an appropriate resolution.

Petitioners argue in their petitions that Executive Order 12898 requires EPA to object under the Clean Air Act to the

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[5] While Executive Order 12898 was intended for internal management of the executive branch and not to create legal rights, federal agencies are required to implement its provisions "consistent with, and to the extent permitted by, existing law." Sections 6-608 and 6-609, 59 Fed. Reg. at 7632-33.

proposed Shintech Permits on environmental justice grounds. Under section 505(b)(2) of the Act, however, a petitioner must demonstrate that a permit is not in compliance with applicable requirements of the Act. While there may be authority under the Clean Air Act to consider environmental justice issues in some circumstances, Petitioners have not shown how their particular environmental justice concerns demonstrate that the Shintech Permits do not comply with applicable requirements of the Act. In light of the foregoing, in response to Petitioners' request that EPA object to the Shintech Permits on this basis, their petitions are hereby denied.

2. Technical issues.

Petitioners claim that the Shintech PVC and VCM Permits contain "numerous serious technical deficiencies" which mandate that EPA object to the permits. Pet. of May 22 at 14; see also Pet. of May 30. For the reasons set forth below, Petitioners have failed to demonstrate that the alleged technical deficiencies described in the petitions, with the exception of the issue identified above, warrant objection by EPA.

Petitioners claim that the Shintech PVC Permit fails to incorporate the requisite control technology requirements applicable to storage tanks contained in 40 CFR § 60.110b (New Source Performance Standards ("NSPS") Kb-Storage Tanks) to point source P-11, a 12,000 gallon storage tank. Pet. of May 22 at 15. Although storage tanks with a capacity of less than 75 m^3 (approximately 19,875 gallons) are subject to the recordkeeping provisions of 40 CFR § 60.116b(a) & (b),[6] Subpart Kb exempts such storage tanks from the control requirements of the NSPS. 40 CFR § 60.110b(b). Petitioners' claim regarding storage tank P-11 accordingly lacks merit, and their request for objection on this issue is denied.

Petitioners claim that all emission point sources in the VCM plant must meet the Maximum Achievable Control Technology ("MACT") standards of the HON. Pet. of May 22 at 15-17. On this basis, Petitioners argue that the permit incorrectly states that the VCM plant is not required to meet MACT standards for chlorine and hydrochloric acid and fails to address the emissions of other HAPs. Id. at 16. However, the requirements of the HON apply only to chemical manufacturing process units that manufacture or use as a reactant certain chemicals. 40 CFR § 63.100(b). The

[6] The Shintech PVC Permit lists the recordkeeping provisions of 40 CFR § 60.116b(a) & (b) as applicable requirements.

HON does not apply to emissions of HAPs that are emitted from units within the VCM facility that do not meet the HON's definition of a chemical manufacturing process unit. Id. Petitioners' claims regarding the application of the HON to all emission point sources in the VCM plant are without merit.

Petitioners claim that the thermal oxidizers and scrubbers in the VCM plant fail to meet the 99 percent halogen halide and halogen reduction efficiency required by the HON, 40 CFR § 63.113(c)(1)(i), and that the permit application does not contain the information necessary to evaluate scrubber performance. Pet. of May 22 at 17-18; Pet. of May 30 at 3. The VCM Permit correctly sets forth the required reduction efficiencies of the thermal oxidizer and scrubber.[7] In addition, sufficient information to evaluate the efficiency of the thermal oxidizer and scrubbers was provided in the VCM Permit application, see VCM Plant Permit Application, Section 3, and in the VCM Permit, see Emissions Inventory Questionnaire for emission sources M4 and M5. Petitioners' claims regarding the thermal oxidizer and scrubbers accordingly do not provide a basis for objecting to the VCM Permit.

Petitioners allege that emission point M-13 in the VCM plant is a process vent subject to control under 40 CFR § 63.113 rather than an analyzer vent as contended by Shintech. Pet. of May 22 at 18-19; Pet. of May 30 at 3. Emission point M-13 was originally classified in the proposed VCM Permit as an analyzer vent that was not subject to regulation under the HON. In the final VCM Permit, the emission point was re-classified as a group 2 process vent subject to monitoring, recordkeeping and reporting requirements under the HON. The information contained in the permit application, the permit and the petitions are insufficient to determine whether this emission point should be classified as a group 1 process vent (subject to monitoring, recordkeeping, reporting and control requirements) instead of a group 2 process vent, or whether the emission point is part of a sampling system that should be regulated by the equipment leak provisions in 40 CFR Part 63, Subpart H.

Therefore, there is insufficient information to grant the petitions' claims that emission point M-13 in the VCM plant is a group 1 process vent subject to control requirements under 40 CFR § 63.113. Petitioners have not demonstrated that the emission

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[7] The thermal oxidizer must achieve 98% destruction of total organic hazardous air pollutants, 40 CFR § 63.113(a)(2), while the scrubber must achieve 99% removal of hydrogen halides and halogens (which include chlorine), 40 CFR § 63.113(c)(1)(i).

point should be subject to these control requirements, and EPA is unable to make that determination with the information presently available. Accordingly, the petitions are denied on this basis. However, EPA is requesting that LDEQ re-evaluate applicability of the HON to emission point M-13, to provide additional information as necessary to clarify the regulatory classification of the emission point, and to correct the VCM Permit if its current terms and conditions do not properly reflect the appropriate requirements of the HON.

Petitioners argue that the VCM Permit does not correctly apply the requirements of the HON to emissions source M-15, which is listed as an "HCl Tank Scrubber Vent." However, the requirements of the HON do not apply to the HCl tank which is a storage collection vessel for the scrubber system. Although the HON mandates performance standards for some control devices,[8] the HON has no requirements for the individual components of a scrubber system, such as the HCL tank. In addition, the tank does not meet the definition of a chemical manufacturing process unit and does not otherwise meet the applicability requirements of the HON because HCl is not a regulated pollutant under the HON. See 40 CFR §§ 63.100, 63.101 & 63.110. Accordingly, there is not a basis to object to the VCM Permit on the grounds raised by Petitioners.

Petitioners also claim that the Shintech VCM Permit does not contain the correct standard for the control of fugitive emissions from pumps and compressors set forth in 40 CFR § 63.164. Pet. of May 22 at 21. In fact, the VCM Permit correctly states that fugitive emissions are subject to 40 CFR § 63.160. Section 63.160, in turn, establishes the applicability of the subpart H requirements, including the section 63.164 requirements, to pumps and compressors in operation 300 hours or more during the calendar year. Thus, the correct standard for the control of fugitive emissions from pumps and compressors is incorporated in the VCM Permit. Petitioners' claim on this issue is accordingly denied.

Petitioners allege that the Shintech Permits fail to include the general duty requirements of section 112(r)(1) of the Act to identify hazards that may result in an accidental release, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of an actual accidental release. Pet. of May 22 at 33.

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[8] For example, 40 CFR § 63.113(c)(1)(i) requires that additional control devices such as scrubbers reduce halogen and halogen halide emissions by 99 percent.

Petitioners argue that the June 21, 1999 compliance date for the chemical accident prevention regulations at 40 CFR Part 68 in no way excuses Shintech from its legal obligation to meet the general duty requirements of section 112(r)(1), and the obligation to include such requirements in the Title V permits. Thus, Petitioners contend that EPA must object to the Shintech Permits. Id.

When EPA promulgated the final part 68 regulations governing the prevention of chemical accidents, the Agency made clear that compliance with the provisions of 40 CFR § 68.215 -- governing section 112(r) and Title V permit content requirements -- is sufficient to satisfy the legal obligations of section 112(r) for purposes of part 70. See 61 Fed. Reg. 31668, 31688 (June 20, 1996); see also 60 Fed. Reg. 13526, 13536 (March 13, 1995) (proposed part 68 regulations). The Shintech Permits satisfy the requirements of section 68.215 and therefore the requirements of section 112(r) for purposes of their Title V permits. Petitioners' request that EPA object to the Shintech Permits for failure to meet the requirements of section 112(r)(1) is therefore denied.[9]

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[9] The EPA does agree with Petitioners, however, that compliance with the requirements of part 68 does not relieve Shintech of its legal obligation to meet the general duty requirements of section 112(r)(1) of the Act to identify hazards that may result in an accidental release, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of an actual accidental release. Section 112(r)(1) remains a self-implementing requirement of the Act, and EPA expects and requires all covered sources to comply with the general duty provisions of 112(r)(1).

For this reason, EPA emphasizes that it would be improper for a permitting authority to grant a source a permit shield under part 70 identifying section 112(r)(1)'s general duty requirements as not applicable to a source, if in fact the source produces, processes, handles or stores any regulated substances listed in part 68 or any other extremely hazardous substance. See 59 Fed. Reg. 4478, 4481 (Jan. 31, 1994) (substances subject to section 112(r)(1) are not limited to any specific list). The LDEQ has not granted Shintech a permit shield covering 112(r)(1) general duty requirements, and the Act requires Shintech to comply with these requirements. If a permitting authority has granted or does grant a permit shield to a covered source relating to section 112(r)(1) general duty requirements, EPA may reopen or object to the Title V permit on that basis.

The Petitioners have also expressed concerns over the "potential for accidents on trains, ships, and underground pipelines that will be transporting toxic chemicals, notably ethylene dichloride and vinyl chloride monomer." Pet. of May 22 at 31. The risk management planning requirements of part 68 do not apply to ethylene dichloride because this substance is not a regulated toxic or flammable substance. See 40 CFR § 68.130. While vinyl chloride is not listed as a regulated toxic substance under part 68, it is listed as a regulated flammable substance. Id. However, section 112(r) and part 68 apply to "stationary sources" and do not apply to accidents involving regulated substances in transportation, such as "trains, ships, and underground pipelines that [are] transporting chemicals." See, e.g., CAA § 112(r)(2)(C) (stationary source definition); 59 Fed. Reg. at 4490 (explaining part 68 does not apply to transportation); H.R. Conf. Rep. No. 952, 101st Cong., 2d Sess., at 340 (1990) (Conferees explain that accident prevention provisions do not apply to transportation). Thus, Petitioners have failed to demonstrate the permits' noncompliance with applicable requirements of the Act. Petitioners' objection to the proposed permits on these grounds is therefore denied.

Petitioners further allege that the Shintech Permits do not adequately take into account the effect that fugitive emissions will have on the ambient air quality of St. James Parish, an area recently redesignated as attainment for ozone. Pet. of May 22 at 38-39; Pet. of May 30 at 3; see 60 Fed. Reg. 47280 (Sept. 12, 1995) (effective date Nov. 13, 1995). The EPA's review of the VOC and NO_x emissions budget in the ozone maintenance plan for St. James Parish and the current and projected VOC and NO_x inventories indicates that Shintech's VOC and NO_x emissions will not adversely affect the attainment status of St. James Parish.[10] Therefore, the petitions to object on this basis are denied.

Petitioners also allege that because "Shintech submitted a revision to the part 70 permits on November 6, 1996," the LDEQ did not have time to review the changes before including them in the draft permit published on November 7, 1996. Pet. of May 30 at 2. Petitioners have failed to identify any particular statutory or regulatory basis for their allegation that this series of events serves as grounds for EPA to object to the

[10] Total projected emissions of VOCs and NO_x for 1998 for St. James Parish, including projected emissions from the Shintech facility, are 1,877 tons of VOCs and 8,660 tons of NO_x. Projected emissions accordingly fall below the emissions caps set forth in the maintenance plan of 2,029 tons of VOCs and 14,677 tons of NO_x.

permits. Upon a permitting authority's release of a draft permit for public review, or a proposed permit for EPA review, the public and EPA have the opportunity to determine whether the permit complies with applicable requirements of the Act. Petitioners have not demonstrated why EPA's objection authority should extend to LDEQ's decision when to release the draft permit. Accordingly, their petitions are denied with respect to this claim.

Petitioners argue that Shintech should be required to make a reasonable effort to apply "currently available control technology" to its emissions at the PVC plant even though EPA has not yet promulgated a MACT standard applicable to such facilities. Pet. of May 30 at 2-3. Alternatively, Petitioners argue that the proposed Shintech facility should not be built until federal MACT standards for PVC facilities are issued. Id. Finally, Petitioners imply that the Shintech PVC Permit fails to meet state "MACT" requirements. Pet. of May 22 at 24.

Part 70 requires that a permit be reopened and revised when additional applicable requirements, such as a new MACT standard, become applicable to a major part 70 source with a remaining permit term of three or more years. See generally 40 CFR § 70.7(f)(1)(i). However, Petitioners have failed to identify any applicable regulatory or statutory basis justifying the delay of construction of the PVC plant, or justifying objection to the PVC Permit, because the PVC MACT standard has not been promulgated.[11] Similarly, Petitioners have failed to justify the application of more stringent control technology than otherwise required by applicable requirements to emissions from the PVC plant. Finally, Petitioners' objections to state "MACT" requirements in the PVC Permit relate to state toxics requirements that are state-only provisions, and thus are not federal applicable requirements that are properly within the scope of EPA's objection authority. See CAA § 505(b); 40 CFR § 70.8(c) & (d). These arguments accordingly do not provide a basis to object to the PVC Permit.

Petitioners also claim that neither the Shintech Permits nor the permit applications include a required statement that

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[11] Under section 112(g) of the Act, however, if construction of the Shintech PVC facility commences after the effective date of a section 112(g) program in the State of Louisiana, then the facility would be required to meet a case-by-case MACT emission limitation. See CAA § 112(g)(2); 40 CFR § 63.42(a). Application of the HON to the PVC facility could be considered by the State in such a case-by-case determination.

Shintech will meet applicable requirements that become effective during the permit term on a timely basis. Pet. of May 30 at 2. LAC 33:III.517.E.3 requires that "each application pertaining to a Part 70 source shall include...for applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis...." See also 40 CFR § 70.5(c)(8)(iii)(B) (requiring same statement in part 70 permit applications). The EPA notes that such statements were included in Shintech's operating permit applications, see Section 2 of Shintech's Application, although Petitioners are correct in noting that the Shintech Permits do not include this statement. However, Petitioners failed to raise these objections to the draft Shintech Permits during the public comment period provided for by LDEQ, and there is no indication that it was impracticable to raise such objections within this period, nor did the grounds for these objections arise after the public comment period. See 40 CFR § 70.8(d); LAC 33:III.533.E.2. Therefore, Petitioners may not base a petition to EPA on these grounds, id., and their petition is hereby denied with respect to these claims.

The EPA notes, however, that 40 CFR § 70.6(c)(3) requires part 70 permits to include this statement as a permit condition, as part of each permit's schedule of compliance. See also 40 CFR § 70.5(c)(8)(iii)(B). The EPA regulations at 40 CFR §§ 70.8(c)(1) and 70.8(d) provide for objection to an operating permit that is not in compliance with the requirements of part 70. Similarly, the Louisiana operating permit regulations provide that EPA may object to the issuance of any proposed permit pertaining to a part 70 source if "the permit would not result in compliance with federally applicable requirements or with the requirements of the approved Louisiana Part 70 program or with 40 CFR part 70." LAC 33:III.533.D.1.a. The public may petition EPA to object to a permit on this same basis. LAC 33:III.533.E.1.

As noted, the Shintech Permits do not include a statement that Shintech will meet applicable requirements that become effective during the permit term on a timely basis, nor do the permits incorporate such a statement by reference. Accordingly, the Shintech Permits do not comply with 40 CFR § 70.6(c)(3), which requires part 70 permits such as the Shintech Permits to contain such a statement.[12] Therefore, these omissions have been

[12] Because of the particular way in which Louisiana's regulations are written, whereby EPA may object to a proposed part 70 permit if it would not result in compliance with "the (continued...)

identified in the list of technical deficiencies that EPA has discussed with LDEQ by letter, and for which LDEQ has stated its intention to reopen the permits for cause.

Petitioners claim that the proposed permit for the PVC plant showed lower emissions of vinyl chloride monomer than were stated in the draft permit or the application. Pet. of May 30 at 6. Shintech amended its calculations of vinyl chloride emissions in order to comply with state requirements that are more stringent than federal standards. The change in the proposed permit accordingly was to correct an error in the draft permit and application and does not form the basis for an objection. In addition, Petitioners claim that the lower VCM emissions rates were not included in the PSD portion of the proposed permit or in the Emissions Inventory Questionnaire for the applicable emissions sources. Id. at 7. However, the final PSD Permit reflects the lower emissions rate. Therefore, Petitioners' claims do not warrant an objection to the PVC Permit.

Petitioners claim that the PSD Permit and VCM Permit do not appropriately treat fugitive emissions of hydrochloric acid and chlorine. Pet. of May 30 at 7. First, however, the PSD provisions of the Act do not apply directly to hazardous air pollutants listed under section 112, including hydrochloric acid and chlorine. See CAA § 112(b)(1) & (b)(6). Therefore, fugitive emissions of hydrochloric acid and chlorine are not required to be regulated directly under PSD. Id.; see also CAA § 165(a). Moreover, Petitioners are incorrect in their allegation that 40 CFR Part 63, Subpart H covers fugitive emissions of hydrochloric acid and chlorine. See Pet. of May 30 at 7. This rule regulates only the list of organic HAPs identified in 40 CFR Part 63, Subpart F (Table 2). See also 59 Fed. Reg. 19568 (April 22, 1994). Hydrochloric acid and chlorine are not included on this list and are not regulated by the equipment leak provisions in 40

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[12](...continued)
requirements of the approved Louisiana Part 70 program or with 40 CFR part 70," there may be instances in which an irreconcilable conflict exists between the approved state regulations and federal regulations, and it would not be possible for a permit to meet both sets of regulations. Here, however, there is no such conflict: while the Louisiana part 70 program does not expressly require that permits contain the statement in question, neither does it prohibit inclusion of the statement, and the federal part 70 regulations do require the statement in permits. Thus, the Shintech Permits must satisfy the requirements of the approved Louisiana part 70 program and 40 CFR part 70 by including the statement.

CFR Part 63, Subpart H. Id. Finally, the provisions of Subpart H apply only to a specified list of equipment "intended to operate in organic hazardous air pollutant service 300 hours or more during the calender year...." 40 CFR § 63.160(a). The final VCM Permit appropriately reflects this applicability requirement. Therefore, Petitioners are mistaken in their claims that the PSD Permit and the VCM Permit do not treat hydrochloric acid and chlorine fugitive emissions correctly. Thus, the petition is denied with respect to these issues.

Petitioners also argue that Shintech voluntarily reduced emissions at specific emissions points and that Title V does not allow for such voluntary reductions. Pet. of May 30 at 7-8. Petitioners reference a letter written by Shintech to LDEQ, in which Petitioners allege that Shintech agreed to greatly reduce emissions at specific emission points throughout the plant, but that these reductions would be voluntary. Finally, Petitioners allege that Shintech has been allowed to make these voluntary emissions reductions in lieu of meeting applicable MACT standards. Pet. of May 30 at 7.

The referenced letter addressed changes to six emission points within both the VCM plant and the PVC plant. In the letter, Shintech informs the LDEQ that the company would voluntarily reduce emissions at points P-1 and P-2 (the scrubbers) in the PVC plant from 50 ppm vinyl chloride to 35 ppm vinyl chloride on a quarterly rolling average. Upon final permit issuance, the LDEQ required this level of emissions reduction as an enforceable emission limit in the final permit, consistent with comments made during the public comment period by Petitioners. Accordingly, as an enforceable emission limit, this permit term is not a voluntary limit in the PVC Permit.

The second issue raised in Shintech's letter to the LDEQ requested a correction of a typographical error on emission points M-4 and M-5 in the VCM plant. The required emission reduction was correctly revised from 95% reduction to 99% reduction, in accordance with 40 CFR § 63.113(c)(1)(i).

The final area addressed in the Shintech letter concerned emission points M-12 and M-13 in the VCM plant. Shintech states that emissions from these vents will be directed to either the thermal oxidizers or activated carbon beds. As addressed earlier in this Order, supra at 9-10, emission points M-12 and M-13 have been classified as process vent 2's, and gas streams from these emission points do not currently require control under 40 CFR Part 63, Subpart G; however, EPA is requesting that LDEQ re-evaluate the control requirements on these emission points and

correct the VCM Permit if the current terms and conditions do not properly reflect those requirements.

None of the three changes to the permits discussed in the referenced letter allows Shintech to make voluntary emissions reductions in lieu of meeting applicable MACT requirements. Moreover, should Shintech voluntarily agree to reduce emissions beyond that required by federal or state law, nothing in Title V would prevent such action and, indeed, such steps should be encouraged. The petitions, accordingly, are denied on this basis.

Petitioners allege in a July 29, 1997 petition that LDEQ failed to follow its own operating permit regulations, by making substantial changes to the proposed Shintech Permits submitted to EPA on February 18 as the result of consideration of public comments, and then issuing the final Shintech Permits without first sending the changes to EPA as required by LAC 33:III.533. Pet. of July 29 at 1-2. Petitioners allege further that -- rather than issuing the final permits -- LDEQ should have submitted corrected proposed permits to EPA for an additional 45-day EPA review period, followed by an additional public petition period. Id. Petitioners argue that the Shintech Permits should therefore be revoked, rather than reopened, because the permits were not issued in accordance with LAC 33:III.533 in the first instance. Id. at 2. Finally, Petitioners argue that section 505(a)(1)(B) of the Act required that LDEQ submit changes to the proposed Shintech Permits to EPA for review. Id.

Section 533.B.3 of the Louisiana operating permit regulations requires that "[t]he permitting authority shall promptly provide to EPA notice of any intended changes to a proposed permit resulting from consideration of public comment...." During the period before final issuance of the Shintech Permits, LDEQ did provide prompt notice to EPA's Region VI of intended changes to the proposed Shintech Permits. Such notice was provided by LDEQ in conversations with Region VI staff, which appears to satisfy the notice requirement of LAC 33:III.533.B.3. In any event, LDEQ further provided the changes to the permits to Region VI in writing. In these instances, EPA is aware that LDEQ did satisfy the requirements of LAC 33:III.533.B.3. Petitioners have failed to offer information sufficient to demonstrate that there are other instances in which LDEQ failed to comply with section 533.B.3. Accordingly, the petition is hereby denied on this issue.

Petitioners suggest further that LDEQ issued the final Shintech Permits without properly awaiting the completion of

EPA's 45-day review period, in violation of sections 533.B and 533.C of the Louisiana regulations. However, these regulations allow EPA to notify LDEQ prior to the close of the 45-day review period that no objection will be made to the intended changes. See LAC 33:III.533.C.2. In such a situation, LDEQ may issue a final permit reflecting such changes prior to the end of EPA's 45-day review period. Id. As discussed above, LDEQ provided prompt notice to EPA's Region VI of intended changes to the Shintech Permits, as well as the changes themselves, and Region VI communicated with LDEQ that EPA would not object to the changes presented by LDEQ. Therefore, EPA effectively waived the remainder of its 45-day review period in these instances, as provided for under LAC 33:III.533.C.2. Accordingly, LDEQ appears to have followed the requirements of section 533 in this respect, and Petitioners have not demonstrated grounds to reopen or revoke the Shintech Permits on this basis.

Finally, it is not necessary to resolve Petitioners' argument that section 505(a)(1)(B) of the Act requires permitting authorities to submit each change to a proposed permit -- no matter how minor -- to EPA for a new 45-day review period, followed by a new 60-day public petition period. See Pet. of July 29 at 2-3. As noted above and as far as EPA is aware, LDEQ did submit each change to the proposed Shintech Permits to EPA for review. Therefore, even accepting Petitioners' argument about the requirements of section 505(a)(1)(B) as true for purposes of their petition, Petitioners have failed to offer information sufficient to demonstrate that LDEQ failed to comply with section 505(a)(1)(B). Petitioners' request that EPA object to or revoke the Shintech Permits for this reason is therefore denied.

Finally, Petitioners allege generally that the Shintech Permits are unenforceable as written and that it is the duty of EPA to review the permits and disclose all inconsistencies. Pet. of May 22 at 28-29. Moreover, Petitioners advance the general claim that the VCM and PVC Permits contain inconsistencies and inaccuracies too numerous to enumerate. Id. at 22. In addition, Petitioners argue as a general proposition that EPA should object to the Shintech Permits on the basis of the LDEQ's allegedly ineffective enforcement record. Id. at 28.

Petitioners mischaracterize the scope of EPA's duty with respect to the review of operating permits issued under Title V. In a petition action such as this under section 505(b)(2) of the Act, it is the responsibility of a petitioner to demonstrate to the Agency that the terms of a permit, including any alleged inconsistencies in those terms, are not in compliance with the

requirements of the Act. Petitioners have failed to make such a demonstration in the instances addressed above or in any other instance, and in the absence of such a demonstration as to at least some instance of inconsistent or unenforceable permit terms, EPA has no generalized duty to review the permits and to determine and rectify all inaccuracies and inconsistencies. In addition, with respect to Petitioners' allegations that the permits are unenforceable, EPA notes that compliance with the terms of the Shintech Permits does not shield Shintech from an action to enforce any applicable federal requirements.

In sum, the general allegations raised by Petitioners above do not provide a specific enough basis for objection to meet a petitioner's burden to demonstrate that provisions of a permit fail to comply with applicable requirements of the Act.[13] Accordingly, the petitions are denied for purposes of the general allegations made by Petitioners.

Although the Agency is denying Petitioners' requests to object to the Shintech Permits on the grounds discussed above in Section III.B of this Order, in the course of reviewing the Shintech Permits in response to the petitions, EPA has identified specific technical deficiencies in the permits which the Agency has discussed with LDEQ. The LDEQ has expressed its intention to reopen each of the Shintech Permits for cause to remedy the deficiencies identified by EPA.

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[13] As the only specific example of an alleged inconsistency, Petitioners note that while the Shintech VCM Permit correctly states at one point that emission sources M-12, M-13, and M-14 are subject to the HON, the remainder of the permit states that these emission sources do not require control technology. These emission sources are currently classified in the VCM Permit as group 2 vents under the HON. These vents, accordingly, are not subject to the control technology requirements of the HON. See 40 CFR § 63.113; see also supra at 9-10 & 16. However, as indicated earlier, EPA is requesting that LDEQ re-evaluate applicability of the HON to these emission points. See supra at 10.

As to the other general objection by Petitioners, while Title V and part 70 require permitting authorities such as LDEQ to have adequate enforcement authority to enforce permits and assure compliance with the Act, see generally CAA § 502(b)(5) & 40 CFR § 70.11, Petitioners have failed to support their allegations of enforcement deficiencies sufficiently to demonstrate the Shintech Permits' noncompliance with applicable requirements of the Act.

IV. CONCLUSION

For the reasons set forth above, I partially grant the May 22 petition of the Tulane Environmental Law Clinic on behalf of the Petitioners, joined by Greenpeace, requesting that the Agency object to the Shintech Permits for a PVC complex, and I hereby object to the Shintech VCM Permit. I deny the remainder of the May 22 petition from the Tulane Environmental Law Clinic, and the May 30 and July 29 petitions of LEAN and St. James Citizens for Jobs and the Environment. This disposition of the issues raised by Petitioners is not intended to address the substance of Petitioners' environmental justice Title VI claims regarding the Shintech Permits. These claims will be addressed separately by EPA under its Title VI process.

Pursuant to sections 505(b) and 505(e) of the Clean Air Act and 40 CFR §§ 70.7(g) and 70.8(d), the LDEQ shall have 90 days from receipt of this Order to resolve the objection identified in Section III.A above, and to submit a proposed determination of termination, modification, or revocation and reissuance of the Shintech VCM Permit in accordance with this objection.

_____ _____

Date

Carol M. Browner
Administrator

ATTACHMENT

EPA has identified the following deficiencies in the permits issued to Shintech, Inc. and Its Affiliates ("Shintech") for the construction and operation of a chlor-alkali production plant, polyvinyl chloride ("PVC") production plant and vinyl chloride monomer ("VCM") production plant. Upon reopening the Shintech permits to address these deficiencies, proceedings to reopen, revise, and reissue a permit must follow the same procedures as apply to initial permit issuance, including an opportunity for public comment and a hearing on the issues that are addressed in the reopening. See LAC 33:III.529.A.2 & 40 CFR § 70.7(f)(2).

General Comments

1. The permits are structured to include anticipated final emission points, but does not include all "emissions points" as defined by applicable regulations. For example, process vents subject to the HON which are intended to be on closed vent systems routed to control devices such as the thermal oxidizers are not specifically listed in the VCM Permit along with the applicable requirements for those emission points. Another example is the failure of the PVC Permits to identify the gas streams from the distillation operations in the vinyl chloride recovery unit. Notwithstanding the apparent intent that these "emission points" (process vents) be routed to control devices as required by applicable rules such as the HON, such requirements are not clear in the permits. As such, potential emission points are not explicitly covered by the permits, and additional applicable requirements, beyond the requirement to route emissions from process vents to a control device, are not included. Thus, the permits do not include provisions to assure compliance with all applicable requirements as required by 40 CFR § 70.1(b). The permits must be modified to include all emission points and the applicable requirements for those emission points.

2. Similarly, the applicability of many of the regulations at issue in the permits should not be based on final release or discharge points. The requirements of the regulations must be applied to the individual emission points, units, or processes as defined in the applicable regulations. All emission points and their applicable requirements must be identified regardless of where emissions are routed prior to release. For example, the cracking furnaces must be listed as process vents subject to the HON and 40 CFR Part 61 Subpart F, with the thermal oxidizer and scrubber identified as the control equipment.

3. The method of compliance with the opacity limitations and the

frequency of monitoring must be stated in the permit. See 40 CFR § 70.6(a)(3)(permit must contain all emissions monitoring and test methods required under the applicable requirement; where applicable requirements do not require periodic testing or instrumental or noninstrumental monitoring, permit must contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit).

4. The Benzene Waste Operations NESHAP, 40 CFR Part 61 Subpart FF, is an applicable requirement and must be included in the permits. See 40 CFR § 70.6(a)(1).

5. The permits must be modified to identify relief valves along with a low level citation to the applicable regulations of 40 CFR Part 61 Subpart F (and the HON where applicable). See 40 CFR § 70.6(a)(1).

6. Transfers of process streams between plants are not clearly identified in the permits. For example, the PVC Plant Permit does not identify individual process wastewater streams generated from that facility and routed to the wastewater treatment train and the thermal oxidizers and scrubbers in the VCM plant. Such clarity is fundamental to determining whether all applicable requirements have been incorporated as required by 40 CFR § 70.1(b).

7. Table 1 in each of the permits must be modified to consistently identify those requirements which apply, those from which the unit is exempt, and those which do not apply. For example, Table 1 in the PVC Plant Permit identifies LAC 33:III Chapter 21 as an applicable requirement for emission points P-1 and P-2, but Table 2 of the permit states that these points meet exemption criteria. Such clarity is fundamental to determining whether all applicable requirements have been incorporated as required by 40 CFR § 70.1(b).

8. The permits contain insufficient detail. Part 70 requires that a source submit detailed information regarding emissions, including an identification and description of points of emission, the requirements that apply to that point, and appropriate compliance assurance provisions. 40 CFR § 70.5(c). The requirement in the HON that sources submit an implementation plan imposes a similar requirement. See 40 CFR § 63.151(c). In lieu of submitting an implementation plan, however, a new source subject to the HON may elect to provide the required information with its application for a Title V permit. Id. However, Shintech submitted neither the implementation plan nor the specified information with its operating permit application.

Because neither the HON implementation plan nor the required information was submitted, the permits contains an inadequate level of detail.

9. The permits must identify the General Provisions of 40 CFR Parts 60, 61, and 63 as applicable requirements.

10. All state-only requirements should be clearly identified as such. See LAC 33:III Chapter 59.

11. All BACT limitations must be expressed in enforceable terms in the operating permits. For example, the BACT limit for NOx emissions from the boilers in the Chlor-Alkali Plant must be included as a specific emission limitation in the BACT Compliance Method/Provision established by Table 2. 40 CFR § 70.6(a)(1) requires that permits contain applicable emission limitation. Such emission limitations must be unambiguous. In addition, the NOx emission limits expressed in the permits must be expressed in lbs of NOx per million BTU for NOx emitting units throughout the facility. Thus, for example, Table 2 of the VCM permit must contain an emission limit of 0.057 lbs of NOx per million BTU for the cracking furnaces.

12. The last sentence in the first section of the General Conditions, which is a part of all the operating permits and the PSD permit, appears to indicate that if emissions are greater than those allowed under the permit, then the source may apply for a permit modification as opposed to implementing measures to bring the source into compliance. The permit must be clear that application for a permit modification, while permissible, should not be suggested as the means of attaining compliance in the event that "emissions are determined to be greater than those allowed in the permit or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency." An application for a modification does not negate non-compliance with existing permit terms. This provision should be modified so that it does not prescribe an application for permit modification as the means to rectify exceedences of emissions limits or other violations of permit terms.

13. The permits should include, for applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. See 40 CFR §§ 70.6(c)(3) & 70.5(c)(8)(iii)(B). A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term will suffice, unless a more detailed schedule is expressly required by an applicable requirement. Id.

Chlor-Alkali Plant Permit

1. The permit does not require periodic monitoring for the cooling towers. Although there is no insignificant activity exemption for cooling towers in the Louisiana regulations, the LAC does allow a source to obtain an exemption by previously submitting a request to the Louisiana Department of Environmental Quality ("LDEQ"). If such an exemption has been obtained, it must be noted in the permit. If an exemption has not been obtained, the permit must require periodic monitoring of the cooling towers. See 40 CFR § 70.6(a)(3).

VCM Plant Permit

1. The permit identifies 40 CFR § 61.60 as an applicable requirement for point source M-16. See VCM Permit, Table 2. However, the cited provision establishes the criteria for applicability of 40 CFR Part 61 Subpart F (Vinyl Chloride NESHAP) rather than the applicable requirements of the standard. The permit must be modified to correctly cite the applicable emissions standards, monitoring, and recordkeeping and reporting requirements. See 40 CFR §§ 70.6 (a)(1) & (3).

2. The permit contains a number of mistakes with respect to the Process Wastewater Streams. First, the permit identifies the applicable compliance method for the Process Wastewater Streams as 40 CFR §§ 63.160(b) & (c) and 63.110(d) & (f)(1)-(3). See VCM Permit, Table 2. However, the permit must include lower level citations to 40 CFR §§ 63.132-63.149 to identify the applicable recordkeeping and reporting requirements. See 40 CFR § 70.6(a)(3)(permit must contain all required emissions monitoring and analysis or test procedures and incorporate all applicable recordkeeping and reporting requirements). Moreover, the permit incorrectly states that the HON will be used to demonstrate compliance with both the HON and 40 CFR Part 61 Subpart F (Vinyl Chloride NESHAP). The permit must include terms demonstrating compliance with both standards as each standard imposes independent requirements. Finally, both standards require that each wastewater stream be identified as well as the applicable control requirements. .

3. The permit identifies the applicable compliance method for the Oxyhydrochlorination Vent and Direct Chlorination Vent as 40 CFR §§ 63.160(b) & (c). See VCM Permit, Table 2. However, the cited provisions establish the criteria for applicability of 40

CFR Part 63 Subpart H (HON Equipment Leaks Standard) rather than the applicable requirements of the standard. As discussed above, the permit must be modified to correctly cite the applicable emissions standards, monitoring, and recordkeeping and reporting requirements. See 40 CFR §§ 70.6 (a)(1) & (3).

4. The permit contains an apparent typographical error with respect to the Oxyhydrochlorination Vent, the Direct Chlorination Vent, the EDC Purification Vent, and the Loading Vents as there is no 40 CFR § 61.113. See VCM Permit, Table 2.

5. The permit indicates that 40 CFR § 63.160 (b) & (c) apply to the thermal oxidizers, M-4 and M-5. See VCM Permit, Table 1. However, 40 CFR § 63.160(b) & (c) concern equipment leak requirements, provisions which should not be applicable to thermal oxidizers.

6. The permit fails to specify that 40 CFR Part 63 Subparts F & G are applicable to the wastewater streams. See VCM Permit, Table 1.

7. The permit incorrectly identifies the monitoring times for the scrubber liquid flow and pH as once every four hours. See VCM Permit, Specific Conditions. Appropriate monitoring times range from continuous to at least once every 15 minutes. See e.g. 40 CFR § 63.114(a)(4). The gas flowrate and liquid to gas ratio in the scrubber in the VCM plant are also required to be monitored and recorded and must be included in the permit with the reference to the citation indicating the monitoring methods. Table 3 should be amended to include this information. The scrubber is also required to continuously monitor the vinyl chloride concentration per 40 CFR Part 61 Subpart F (Vinyl Chloride NESHAP), and though the permit includes the 10 ppm limit, it must also specify that it is for a 3-hour average.

8. The permit fails to include citations to the applicable monitoring, recordkeeping, and reporting requirements for the EDC storage vessels. See VCM permit, Table 2.

9. The permit language must be clarified to indicate that both the Vinyl Chloride NESHAP and the HON apply to the thermal oxidizer and scrubber. See VCM Permit, Table 2. The current reference in the permit to 40 CFR § 63.110(f) in Table 1 is not sufficient to clearly indicate that both rules apply.

10. The permit lists the thermal oxidizer and scrubber with a merged entry. See VCM permit, Table 2. Table 2 should be revised to clarify either that emissions points M-4 and M-5 are a combination of the thermal oxidizer and scrubber or to identify

each unit separately. In addition, the 98% emission limit should be clearly specified as “98 % by weight of total organic HAP emissions,” and the 99% removal requirement should be clearly specified as “reduce halogen halides and halogens by 99% or reduce the outlet mass of total halogen halides and halogens to less than 0.45 kilograms per hour, whichever is less stringent.” 40 CFR § 63.113.

11. The reporting requirments in the permit are inconsistent. General Condition K of the permit requires semi-annual reporting while the specific conditions of the permit require an annual report of the hours that the scrubbers operate out of range. The permit must be corrected to reference the correct reporting period of six months.

12. A requirement to measure the temperature in the incinerator and record a reading at least once every 15 minutes should be added to the permit. See 40 CFR § 63.114(a)(1).

13. The reference in Table 3 of the PVC permit to 40 CFR § 60.64 should be to 40 CFR § 61.64.

14. The permit and the permit application are unclear whether the emission points M-12 and M-13 are process vents under the definitions of the HON and 40 CFR Part 60 Subparts III, NNN, and RRR or are sampling connection systems under the definitions of the HON (Subpart H) and 40 CFR Part 60 Subpart VV. Additional information needs to be obtained to determine whether these emission points are diversions of part of the process vents from the reactors and/or distillation operations or if these emission points are from the sample purge flow for these analyzers. The applicability of the control and monitoring requirements of 40 CFR Part 61 Subpart F (Vinyl Chloride NESHAP) should also be reflected in the permit.

15. The applicability of the sampling provisions of 40 CFR Part 61 Subpart F (Vinyl Chloride NESHAP) to emission points should be evaluated, and the permit revised to explicitly include a low level citation to the Subpart F requirements, as appropriate.

PVC Plant Permit

1. Although the permit indicates that VCM concentration will be monitored at emission point P-15, see PVC Permit, Table 3, the permit does not indicate that records are required to be kept. See 40 CFR § 70.6(a)(3).

2. Instead of including just the monomer recovery system in the PVC plant, the permit must also list the No. 1 Gas Holder, the Knockout Tank, and the No. 2 Gas Holder and must require these pieces of equipment to be subject to the Vinyl Chloride NESHAP requirements. See 40 CFR § 61.64(c) and 40 CFR § 70.6(a)(1).

3. The centrifuge, dryer, separator, and delivery silos must be included in the permit as sources following the stripper, with the Vinyl Chloride NESHAP as the applicable requirements and with the equipment subject to the vinyl chloride concentration standard and the monitoring, recordkeeping and reporting requirements of the Vinyl Chloride NESHAP. 40 CFR § 61.64(e) and 40 CFR § 70.6(a)(1).

4. The permit is unclear as to whether emission point P-15 and the PVC reactors refer to the same emission point. See PVC Permit, Table 2.

5. The permit must identify how a "daily" average is obtained (how many times a day will the concentration be monitored) for emission points P-1 and P-2. In addition, P-1 and P-2 are also subject to the 10 ppm VCM concentration requirement of 40 CFR Part 61 Subpart F. This standard, as well as the applicable monitoring, recordkeeping and reporting requirements must be included in the permit. See 40 CFR § 70.6(a)(1) and (3).

6. The statement in the permit with respect to emission point P-16 that leaks will be repaired before the end of the next process unit shutdown, see PVC Permit, Table 2, is inconsistent with the repair requirements of the HON, which is stated as the requirement to be met, regardless of applicability. This inconsistency must be corrected.

7. The citation to 40 CFR § 61.240 in Table 2 is incorrect. The correct citation is to the applicable emissions standards, monitoring and recordkeeping and reporting requirements of 40 CFR Part 61 Subpart V.

8. The permit fails to include the requirement that tank dimension records must be kept for emission point P-11. See 40 CFR § 60.116b.

9. A 99.99% particulate removal requirement for the scrubbers and silos needs to be added to the permit, with BACT identified as the applicable regulation. In addition, continuous monitoring and performance test requirements need to be added to demonstrate compliance with this limit.

10. The Vinyl Chloride NESHAP is identified as an applicable

requirement in Tables 1 and 2 for the Process Wastewater Streams, but no reference is made to the applicable wastewater monitoring, recordkeeping and requirements. These should be identified and addressed in Tables 3 and 4, as appropriate.

11. The slurry stripper should be identified with appropriate emission standards and monitoring, recordkeeping and reporting requirements.

PSD Issues

1. The State should include for each emission unit its NOx limits in lbs NOx/mm BTU as PSD permit limits to specify BACT as an emission limitation for each applicable emission point and have the applicable averaging time and source test method for each of the BACT limits listed in the permit.

2. The State should define the averaging time associated with the maximum lb/hr NOx limits contained in the PSD permit as well as the applicable compliance methods or testing and recordkeeping associated with those limits. This is necessary to ensure that the source complies with both the short and long term emission limits.

3. The operating permit should clearly outline the compliance method, NOx BACT limit, and the reporting requirements of the PSD permit. Consequently the 0.05 lb/mm BTU BACT emission limit, in addition to the requisite technology, should be included in Table 2. This comment applies to all combustion units subject to NOx BACT requirements.

4. Where particulate control devices are utilized, the BACT emission limits for PM/PM10 should be written in grains/dscf as well as lbs/hr to ensure that BACT is achieved at all operating levels. For these emission points, the State should require the source to verify initial and subsequent compliance with PM/PM10 emission limits with a stack test. In addition, appropriate periodic monitoring of operating parameters should also be required to assure continuous compliance with the PM/PM10 emission limits. See 40 CFR § 70.6 (a)(3)(i)(B). An opacity limit is not an acceptable method of assuring compliance, continuous or otherwise, with a PM/PM10 BACT control limit of 99.99% or a mass emission limit of 0.04 grains/dscf.

5. The State should ensure that a BACT analysis for the four cooling towers is performed and have the appropriate emission limit and compliance testing for those emission limits in the

permit.

6. Any VOC emission associated with wastewater treatment prior to the biological treatment unit must be subject to BACT and must be included in the permit.

7. The state's BACT analysis for PM/PM10 lacks technical data supporting 99.99% removal efficiency as the most stringent control option available for the units in question. A baghouse is generally considered the most stringent control device for particulates. If the state concludes that cyclones can achieve equal or greater efficiency, there must be technical data supporting this analysis, and the analysis of collection efficiency should take particle size into account. (Test data from a similar source can be used to verify the projected control level.)

8. LDEQ determined that compliance with LAC 33:III.5109 satisfied BACT for the scrubbers (P-1 and P-2). Consequently, the PSD permit includes the requirement that VCM in the PVC slurry be stripped to a quarterly average of < 35 ppmw; however, the PSD permit does not include the requirement that the daily average be < 150 ppmw. See VCM Permit, Table 2. This requirement should be added to the permit.

9. Specific Condition 4 of the PSD permit provides,

> Permittee shall continuously monitor NOx emissions from the Boilers A, B, C, D, Emission Points C-4, C-5, C-6, C-7, as required by New Source Performance Standards, 40 CFR 60, Subpart Db. After the initial stack test, permittee may apply for alternative monitoring of operating conditions.

This provision suggests that parametric monitoring could be substituted for emissions monitoring which is not permissible in this case. The last three words from the above permit provision (“of operating conditions”) should be deleted and replaced with “emissions.”