

BEFORE THE ADMINISTRATOR  
U.S. ENVIRONMENTAL PROTECTION AGENCY

PETITION OF MS. ALBERTHA HASTEN AND LOUISIANA ENVIRONMENTAL ACTION NETWORK

FOR EPA OBJECTION TO LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY PART 70 PERMITS:

DOW CHEMICAL COMPANY LOUISIANA OPERATIONS COMPLEX CELLULOSE AND LIGHT HYDROCARBONS (LHC) III PLANTS PLAQUEMINE, IBERVILLE PARISH, LOUISIANA REVIEW NOS. 31848 & 29458, AGENCY INTEREST (AI) NO. 1409

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**PETITION FOR OBJECTION**

1. Pursuant to 42 U.S.C. § 7661d(b)(2) and 40 C.F.R. § 70.8(d), Ms. Albertha Hasten and the Louisiana Environmental Action Network (“LEAN”) (collectively “Petitioners”), appearing through undersigned counsel, respectfully petition the Administrator of the U.S. Environmental Protection Agency (“EPA”) for an objection to two October 29, 2002 Louisiana Department of Environmental Quality (“LDEQ”) Part 70 permit decisions. The LDEQ decisions at issue grant two major air permit modifications to Dow Chemical Company’s (Dow’s) Louisiana Operations Complex in Plaquemine, Louisiana. One permit authorizes increases in Volatile Organic Compound (“VOC”) emissions from the Cellulose plant and the other permit authorizes increases in VOC emissions from the Light Hydrocarbon (“LHC”) III plant. In total, the two permit modifications allow an increase of more than 60 tons per year in permitted emissions of VOCs in Iberville Parish, an area that already violates federal health protection standards for ozone pollution. Both permits rely on a VOC ERC application approved illegally by LDEQ.

Petitioners file this Petition because the LDEQ decisions to grant these permit modifications threaten the health and welfare of Ms. Hasten and LEAN's members.

2. All citations to provisions of state law in this Petition are to federally enforceable provisions of the Louisiana State Implementation Plan.

### **INTRODUCTION**

3. LDEQ illegally issued Dow two Clean Air Act permitting decisions – one increasing allowed emissions at Dow's Light Hydrocarbon (LHC) III Plant in Iberville Parish, Louisiana, the second at Dow's Cellulose Plant, also in Iberville Parish. Both rely on invalid "emission reduction credits" to justify emission increases in an area that already violates federal health protection standards for ozone air pollution. EPA must object to these illegal LDEQ decisions because: (1) Dow's so-called emission reduction credits rely on emission reductions that were required by law, whereas valid credits must be based on reductions above and beyond legal requirements; (2) Dow and LDEQ failed to identify valid credits because the record contains no evidence that the reductions underlying the credits occurred less than 10 years ago; and (3) Dow's application for the credits was not timely under LAC 33:III.615.

4. Under the Clean Air Act, residents of "nonattainment" areas (where the air fails to meet minimum health-protection standards) are entitled to the assurance that for every new ton of pollution added, LDEQ will require "offsets" to avoid exacerbating what is already a serious problem. Clean Air Act §§ 173(a)(1)(A), 182(c)(10), 42 U.S.C. §§ 7503(a)(1)(A), 7511a(c)(10). These offsets must represent real reductions in air pollution that are over and above reductions that are already required by law. Clean Air Act § 173(c), 42 U.S.C. § 7503(c). In no uncertain terms, EPA has clarified LDEQ's duty to review such credits and certify that the credits are "surplus," i.e., do not represent reductions that are legally required. EPA, Order Responding to Petitioner's Request that the Administrator Object to the Issuance of a State Operating Permit

[For Borden Chemicals, Inc.], at 19, ¶ 2 (“LDEQ must certify the ERC as *surplus* at the time the credits are used”). In this case, however, LDEQ has purported to identify emission reduction credits to use as “offsets” for Dow without regard to the fact that those credits are for reductions that are otherwise required by law.

5. To be used to offset proposed increases of emissions, reductions must be “surplus,” *i.e.*, not required under the Clean Air Act or by state law. 42 U.S.C. § 7503(c)(2), LAC 33:III.607.B.1. But the credits at issue are from Dow’s legally required closure of a wastewater pond. Louisiana’s Industrial Wastewater Regulation required Dow to close the pond in order to comply with the regulation’s exemption clause. See LAC 33:III.2153.G.4 (“Wastewater components are exempt from the control requirements of Subsection B of this Section if overall control of VOC emissions from the wastewater of affected source categories is at least 90% less than the 1990 baseline emissions inventory....”). By reducing overall VOC emissions from its wastewater by more than 90% below the 1990 baseline, Dow avoided control requirements of the wastewater regulation. LDEQ has accepted Dow’s argument that about 220 tpy of VOC reductions from the closure may be used as emission reduction credits because they were attributable to a wastewater stream (leading to the pond) that Dow claims was not subject to the wastewater regulation. But the plain language of the exemption clause is inconsistent with Dow’s theory. That clause applies broadly to wastewater “components” and requires emission reductions from “wastewater of affected source categories,” *i.e.*, Dow’s facility. LAC 33:III.2153.G.4. The wastewater pond is a regulated “component.” LAC 33:III.2153(A). *See also* 40 CFR § 63.111.

6. Because 90% of the 606 tpy VOC reductions in emissions from the wastewater pond were required by law, that leaves only 61 TPY of potentially surplus credits. But according to Dow’s unsigned application for emission reduction credits dated 7/11/2002 (which LDEQ relied

on and made part of its record), Dow has (a) already used 53.63 TPY for Dow's wastewater treatment and handling system, (b) "donated" 100 tpy to LDEQ," and (c) sold 63 TPY to Weyerhaeuser. Because only 61 credits could potentially be considered "surplus," Dow is overdrawn by at least 155.63 TPY.

7. Louisiana's Emission Reduction Banking regulations allow facilities to identify and hold qualifying emission reduction credits for up to ten years from the time the reductions were made. LAC 33:III.607.B.2. The record does not support LDEQ's conclusion that the reductions have not expired, and in fact suggests that the pond closed more than ten years ago.

8. Emission reductions are invalid as offsets unless the application to bank the reductions is submitted "by March 31 following the year in which the reductions occurred." LAC 33:III.615.A. Dow submitted its current application to "bank" reductions from Dow's 1992 pond closure in 2002, not by March 31, 1993, which renders all reductions associated with the closure invalid as a matter of law.

9. LEAN and Ms. Hasten commented before LDEQ, including but not limited to comments submitted by undersigned counsel on October 25, 2002. Those comments reserved the right to rely on comments submitted by others, including Earthjustice's comments submitted on or about October 22, 2002. The issues raised in this Petition were raised specifically before LDEQ in public comments. On October 29, 2002, three business days after the close of public comment, LDEQ granted Dow's permits. LDEQ's decision allows Dow's facilities to increase air emissions of VOCs by more than 60 tons per year in an area that already fails to meet federal health protection standards.

#### **DETAILED GROUNDS SUPPORTING AN EPA OBJECTION**

10. The Cellulose plant and the LHC III plants are a part of the Dow Chemical Complex in Plaquemine, LA. Plaquemine is part of a serious non-attainment area for ozone. *See* 66 Fed.

Reg. 23,646 (May 9, 2001). Together, the Cellulose and LHC III plant modifications will increase permitted VOC emissions, a precursor of ozone, by more than 60 tons annually.

11. On March 29, 2001, Dow Chemical Company submitted an application requesting a Part 70 operating permit modification with the Air Permitting Division of the LDEQ for the LHC III plant. Dow supplemented the application with additional information on various later dates. Among other emission increases, the modifications to Dow's LHC III plant permit will increase permitted emissions of Volatile Organic Compounds by 19.98 tons per year.

12. On February 8, 2002, Dow Chemical Company submitted an application requesting a Part 70 operating permit modification with the Air Permitting Division of the LDEQ for the Cellulose plant. Dow supplemented the application with additional information on various later dates. Among other emission increases, the modifications to Dow's Cellulose plant permit will increase permitted emissions of Volatile Organic Compounds by 46.2 tons per year, due to (a) an increase in cellulose production in the Low Salt Project; and (b) changes characterized by the LDEQ as "improvements in calculation methodology." LDEQ, Air Permit Briefing Sheet, Cellulose Plant at p. 6.

13. The modifications to Dow's Cellulose plant permit characterized as "improvements in calculation methodology" will increase permitted emissions of VOC from three source points designated by Dow as C6, C7, and LN, by a total of 33.34 tons per year.

14. Previously, on February 20, 1995, Dow Chemical Company submitted an application requesting VOC Emission Reduction Credits for the closure of a wastewater pond ("Wastewater Pond EC-2" or "Pond EC-2") that Dow had taken out of operation some time in 1992. Dow submitted subsequent applications requesting VOC ERCs for the closure of Pond EC-2 on October 20, 2000, and July 11, 2002.

15. The application for VOC ERC's dated February 20, 1995, identified 554.9 tons per year of VOC reductions associated with the closure of Pond EC-2. The application for VOC ERCs dated October 20, 2000, identified 552.37 tons per year of VOC reductions associated with the closure of Pond EC-2. The application for VOC ERCs dated July 11, 2002 identified 606 tons per year of VOC reductions associated with the closure of Pond EC-2.

16. Dow states on the application for VOC ERCs dated July 11, 2002, "163 tons of credits have been consumed with the donation to the [L]DEQ (100 tons) and the sale to Weyerhaeuser (63 tons)."

17. Along with the application dated July 11, 2002, Dow submitted supporting spreadsheets, including one entitled "Environmental Operations Pond EC-2 Removal."

18. After receipt of the applications, LDEQ reviewed the applications for administrative and technical completeness.

19. LDEQ prepared a Draft Analysis of Validity of the ERCs. LDEQ included data from all three applications in the analysis. The LDEQ analysis used 606 tons per year actual emissions from Pond EC-2. The LDEQ analysis did not include any deduction for the VOC ERCs assigned to LDEQ and to Weyerhaeuser.

20. LDEQ then published a single notice for public comments covering the two Major Modifications, the two associated Environmental Assessments, and the Emission Reduction Credits on September 19, 2002, with the comment period expiring on October 22, 2002. All told, these documents total more than 1,000 pages.

21. LDEQ stated in the Public Notice dated September 19, 2002, that a total of 68.42 tons per year of VOC ERCs were required to offset the proposed increase in VOC emissions associated with the two permit major modifications. Dow supplied to LDEQ supporting documentation to the ERC application VOC-10 indicating that the balance of ERCs remaining from the closure of

Pond EC-2 equals 57.22 tons per year, after deducting the VOC reductions assigned to LDEQ and to Weyerhaeuser – an amount insufficient to offset Dow’s current increase.

22. Because of the volume of documents and technical complexity of the proposed modifications, LEAN requested an extension to the comment period in writing on October 3, 2002. LDEQ published a revised public notice to its website indicating a revised deadline date of October 29, 2002.

23. On October 22, 2002, LDEQ held four public hearings as follows: the first to cover major modifications to the Cellulose Plant Part 70 (Title V) Operating Permit; the second to cover major modifications to the LHC III Plant Part 70 (Title V) Operating Permit; the third to cover the VOC Emission Reduction Credits associated with the removal of the Environmental Wastewater Pond EC-2 (“ERC application VOC-10”); and the fourth to cover the Environmental Assessment Statements associated with the permit modifications.

24. At the October 22, 2002 hearing, LDEQ announced a new deadline for public comments of October 25, 2002, rather than October 29, 2002. LDEQ terminated the public comment period on October 25, 2002. [FN1]

25. As late as October 22, 2002, LDEQ’s summary table published on its website indicated the closing date for comments was October 29, 2002.

26. By LDEQ’s estimation, the emission reductions associated with ERC application VOC-10 could not be approved as ERCs after October 30, 2002. Unless LDEQ approved Dow’s ERC application VOC-10 prior to October 30, 2002, LDEQ believed that the two air permit applications relying on the proposed ERCs would lack sufficient offsetting credits to be approvable.

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FN1 To the extent that EPA may believe that any issue here was not sufficiently raised during the comment period, the Petitioners note that LDEQ’s decision to cut short the comment period rendered any greater specificity impracticable.

27. Only three working days elapsed between the date LDEQ terminated the public comment period and the last date LDEQ determined it could approve Dow's ERC application VOC-10.

28. Petitioner Ms. Hasten testified at the hearing covering the Environmental Assessment associated with the air permits, opposing the permit modifications because of serious concern that the increase in permitted emissions would have a detrimental impact on her health and the health of citizens living near the Dow facility.

29. Petitioners submitted written comments on October 25, 2002 to the LDEQ, citing numerous deficiencies with Dow's permit applications and the ERC application VOC-10. Petitioners explicitly reserved the right to rely on all public comments submitted. Earthjustice submitted comments on or about October 22, 2002.

30. On October 29, 2002, only two working days after the expiration of the comment period, the LDEQ granted the Cellulose Plant Part 70 (Title V) Operating Permit Major Modifications; the LHC III Plant Part 70 (Title V) Operating Permit Major Modifications; and the ERC application VOC-10. Petitioners received notice by regular mail of LDEQ's decision on November 11, 2002. The notice is postmarked November 8, 2002.

31. Ms. Hasten lives within ten miles of Dow Chemical's Louisiana Operations Complex in Plaquemine, Louisiana, and has a real and actual interest in this matter because she is concerned about the health, aesthetic, safety, and environmental risks associated with the additional emission of more than 60 tons per year of Volatile Organic Compounds into the air. She is directly impacted by the LDEQ decision granting the permit modifications for increased VOC emissions. Ms. Hasten suffers from asthma. EPA has determined that "[i]nhalation of even low levels of ozone can trigger a variety of health problems including chest pains, coughing, nausea, throat irritation, and congestion. It also can worsen bronchitis and asthma. Exposure to ozone can also reduce lung capacity in healthy adults." 66 Fed. Reg. 36,913, 36,914 (July 16, 2001).

32. LEAN members include non-profit community organizations concerned with maintaining and improving the air and water quality of Iberville Parish, as well as protecting the health, safety and welfare of the citizens and the environment. Member organizations include, among others, Concerned Citizens of Iberville Parish, Myrtle Trailer Park Associates, LEAN Youth in Motion of Iberville Parish. Members of these organizations reside, own property, recreate and work near Dow Chemical's Louisiana Operations Complex in Plaquemine, Louisiana. Members are directly impacted by LDEQ's decision to grant these permit modifications.

33. The LDEQ decision to approve Dow's ERC application VOC-10 violates LAC 33:III.607.B.1, because any emission reductions of Volatile Organic Compounds resulting from the closure of Environmental Wastewater Pond EC-2 were legally required by the Industrial Wastewater Regulations of Louisiana's State Implementation Plan ("SIP") and, therefore, were not "surplus" as that term is used in 33:III.607.B.1.

34. The LDEQ decision to approve Dow's ERC application VOC-10 is based on LDEQ's erroneous legal conclusion that only the wastewater streams feeding the pond EC-2 -- and not the pond itself -- are subject to the control requirements of the Louisiana State Implementation Plan ("SIP"), and that therefore the closure of Environmental Wastewater Pond EC-2 was not required by the Industrial Wastewater Regulations of Louisiana's SIP.

35. The LDEQ decision to approve Dow's ERC application VOC-10 violates LAC 33:III.607.B.1, because the record supports the conclusion that a critical amount of VOC reductions are not "surplus," but were transferred to LDEQ and to Weyerhaeuser. Applicant LEAN has requested an audit of LDEQ's emissions banking system, precisely because of this sort of confusion over whether ERCs are currently valid or have been previously used.

36. The DEQ decision to approve Dow's ERC application VOC-10 violates the 10-year window for using valid reductions as offsets as provided in LAC 33:III.607.B.2, because Dow

failed to show that the reduction occurred within that ten-year window. Indeed, the record supports the conclusion that the date of actual emission reduction of VOCs attributable to the closure of Environmental Wastewater Pond EC-2 occurred more than ten years prior to the date DEQ granted Dow's ERC application. Although Dow states unambiguously that a sister pond was "closed" one month earlier, on September 29, 1992, for the pond at issue here (EC-2), Dow says only that "EC-2 was out of service on October 30, 1992" – avoiding a statement about when the pond actually closed. Notably, the floating-roof tanks that replaced the wastewater pond were already in operation the previous February. Clearly, the record fails to support LDEQ's apparent conclusion that the reductions occurred less than 10 years ago.

37. LAC 33:III.605.A requires submission of all applications for banking emission reductions by March 15 following the year in which the reductions occurred. In this case, emission reductions from the closure of Environmental Wastewater Pond EC-2 occurred sometime in 1992, while Dow's ERC application VOC-10 approved by the LDEQ is dated July 11, 2002. Therefore, the LDEQ decision to approve Dow's VOC ERC application violated LAC 33:III.615.A.

38. At the time Dow filed its original application for VOC ERCs, LAC 33:III.6052.B required that all applications for banking reductions be submitted within six months of August 20, 1994, or by February 19, 1995. Dow did not file its original application in this case, however, until February 20, 1995. Therefore, Dow's original application was untimely.

39. The LDEQ decision document addressing Dow's ERC application VOC-10 fails to respond to all reasonable public comments, including: (a) the fact that all emission reductions were legally required and, therefore, were not surplus "credits;" (b) the ERC banking application was not timely filed; (c) the failure of LDEQ or Dow to establish in the record that the emission reductions occurred more than ten years prior to the date Dow sought to use the "credits;" and

(d) failure to determine which data from which year is the most representative of actual operations.

40. The LDEQ decision to approve Dow's LHC III and Cellulose plant permits violates LAC 33:III.504.D.3, because Dow is a major source of VOCs in a serious non-attainment area for ozone, and must use lowest achievable emission rate technology (LAER) unless it validly produces offsets or credits. Dow has not demonstrated sufficient offsets or valid credits.

41. The LDEQ decision to approve Dow's Cellulose Part 70 (Title V) Operating Permit major modification application without requiring ERC offsets for VOC emission increases of 33.34 tons per year from sources C6, C7, and LN violates LAC 33:III.504 *et. seq.*, because it represents a significant increase in permitted emissions due to a change in the method of operation – a switch to a higher emission product mix – for which no offsets were provided.

42. LDEQ takes inconsistent positions regarding Dow's past emission levels: To support its decision that New Source Review was not required for the 33.34 tpy increase from emission points C6, C7, and LN, LDEQ stated as fact that "these emissions have existed since ... 1960." LDEQ, Air Permit Briefing Sheet, Cellulose Plant, at 6. But in response to LEAN's comment that "Dow has been emitting in excess of its permit," LDEQ replied that "[t]he 'fact' that Dow has been emitting in excess of its permit limits cannot be substantiated by the commentor." Pet. Public Comments at p. 5; LDEQ, Public Comments Response Summary, ERC (VOC-10) and Cellulose Plant, at p. 2. LDEQ's acceptance of past emission levels for one purpose and not for another is illegal.

43. The LDEQ decision to approve Dow's LHC III Part 70 (Title V) Operating Permit and major modification application violates 40 CFR § 52.21(b)(21)(ii), because LDEQ did not require Dow to provide actual emission data from the two year period preceding the modification. 40 CFR § 52.21(b)(21)(ii) defines "actual emissions" for purposes of evaluating

net emissions increase as the average of emissions “during a two-year period which precedes the particular date,” unless LDEQ determines a different time period is more representative of normal source operation. In determining whether the net increase in SO<sub>2</sub> emissions from the modification triggers Prevention of Significant Deterioration (“PSD”) review, LDEQ allowed Dow to use SO<sub>2</sub> actual emission data from 1997 without making any factual determination that the 1997 data is more representative of normal source operation.

44. The LDEQ determination that the net increase in SO<sub>2</sub> emissions from the modification did not trigger PSD review is arbitrary and capricious because LDEQ did not determine that the SO<sub>2</sub> emission data used by Dow is representative of normal source operation.

#### **REQUEST FOR RELIEF**

Petitioners respectfully request that EPA object to the Cellulose Plant Part 70 (Title V) Operating Permit major modification and the LHC III Plant Part 70 (Title V) Operating Permit major modification; clarify that LDEQ may not legally rely on the VOC Emission Reduction Credits associated with the removal of the Environmental Wastewater Pond EC-2; and take such other actions that EPA determines are appropriate to correct LDEQ’s violations of the Clean Air Act.

Respectfully Submitted,

TULANE ENVIRONMENTAL LAW CLINIC

By: /s/ December 27, 2002  
Adam Babich, Louisiana Bar Number 27177  
6329 Freret Street  
New Orleans, Louisiana 70118  
(505) 862-8800; [albabich@law.tulane.edu](mailto:albabich@law.tulane.edu)  
Counsel for LEAN and Ms. Hasten

This Petition is based on the work of Leslie Keig, Student, Tulane Environmental Law Clinic

## **CERTIFICATE OF SERVICE**

I declare under penalty of perjury under the laws of the United States that I have provided copies, via U.S. Mail, to the persons or entities listed below, on December 27, 2002:

CHRISTINE T. WHITMAN,  
ADMINISTRATOR  
U.S. EPA HEADQUARTERS  
MAIL CODE 1101A  
ARIEL RIOS BUILDING  
1200 PENNSYLVANIA AVENUE, N. W.  
WASHINGTON, DC 20460  
202-564-4700

GREGG A COOKE, MAIL CODE 6RA  
U.S. EPA REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733  
214-665-2100

LOUISIANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
7290 BLUEBONNET BLVD  
BATON ROUGE, LA 70810.

DOW CHEMICAL CO.  
LA. HWY. 1  
(P. O. BOX 150)  
PLAQUEMINE, LA 70765-0150

DOW CHEMICAL CO.  
c/o C T CORPORATION SYSTEM  
8550 UNITED PLAZA BLVD.  
BATON ROUGE, LA 70809

/s/

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Adam Babich