BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF: OPERATING PERMIT FORMALDEHYDE PLANT BORDEN CHEMICAL, INC. GEISMAR ASCENSION PARISH LOUISIANA PERMIT NO. 2631-VO	PETITION NO. 6-01-1

ORDER RESPONDING TO PETITIONER'S REQUEST THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF A STATE OPERATING PERMIT

I. INTRODUCTION

On August 24, 1999, Ms. Marylee Orr, Executive Director of the Louisiana Environmental Action Network (LEAN) [Petitioner], petitioned the United States Environmental Protection Agency (EPA) to object to the issuance of a permit to Borden Chemicals, Inc. (Borden) for a new formaldehyde facility in Geismar, Ascension Parish, Louisiana. The Louisiana Department of Environmental Quality (LDEQ) issued Borden a permit on August 25, 1999. The permit constitutes both a preconstruction permit issued pursuant to the Nonattainment New Source Review (NNSR) requirements of the Clean Air Act (Act), 42 U.S.C. § 7503, and a State operating permit issued pursuant to Title V of the Act, 42 U.S.C. §§ 7661 - 7661f.

The Petitioner requested that EPA object to the issuance of the Borden Permit pursuant to Section 505(b) of the Act,

42 U.S.C. § 7661d(b)(2) and 40 C.F.R. § 70.8(d), stating nine grounds in support of the Petition (see section IV., below).

However, just prior to my action on this petition, on December 13, 2000, LDEQ issued a final permit modification to Borden. Borden's newly revised permit no longer relies on Georgia Gulf's emission reduction credits (ERCs) as offsets, but instead relies on an "internal netting" credit analysis at the Borden facility to obviate the need for offsets.[1]

As a technical matter, the change in the permit to no longer rely on the Georgia Gulf emission reduction credits as offsets moots two of the issues raised in the Petition (specifically, items 2 and 3). However, I believe it is important to provide a substantive response to Petitioner on the offset questions because the validity of the ERCs could again be an issue if the recent amendment to the Borden Permit were to be challenged successfully; it is thus an issue capable of repetition.[2] In that context, because the record clearly shows that the ERCs are

---

[1] For the purpose of this decision, the "Borden Permit" will refer to the Borden CAA Title V permit as it existed at the time of Petitioner's challenge. We will refer to the "Revised Borden permit" when discussing the Borden permit as amended on December 13, 2000.

[2] However, EPA and LDEQ have had a number of productive discussions on this issue. EPA is pleased to note that LDEQ is now considering ways to ensure that emission reduction credits that are used as offsets go beyond -- *i.e.*, are "surplus" to -- any federal or state requirements, consistent with EPA's interpretation of CAA law and regulations. (See discussion in section VI.C, below.)

invalid, there is no reason not to address this issue now. Accordingly, I discuss herein my agreement with the Petitioner with respect to Item 2 that the ERCs with which Borden proposed to offset its emissions were not valid. Without the offsets, I also agree that the Borden Permit would not represent reasonable further progress in achieving the ozone standard in the Baton Rouge nonattainment area as required under Section 173(a)(1)(A) of the Act, 42 U.S.C. § 7503(a)(1)(A), as alleged in Item 3. However, because the Revised Borden Permit does not rely upon the ERCs on which the Borden Permit and the Petition were based, the Petitioner's objections on these two grounds are dismissed as moot. The remainder of the Petition is denied, for the reasons explained below.

II. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each State to develop and submit to EPA an operating permit program which meets 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. 40 C.F.R. Part 70, Appendix A. In September of 1995, EPA granted full approval to the Louisiana Title V operating permits program. 60 *Fed. Reg.* 47296 (September 12, 1995); 40 C.F.R. Part 70,

Appendix A.[3] 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 necessary to assure compliance with all applicable requirements of the Act. 42 U.S.C. §§ 7661a(a) and 7661c(a).

The Title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting, and other requirements to assure compliance by sources with existing applicable requirements. 57 *Fed. Reg.* 32250, 32251 (July 21, 1992). One purpose of the Title V program is to "enable the source, States, EPA, and the public to better understand the requirements to which the source is subject, and whether the source is meeting those requirements." *Id.* Thus, the Title V operating permits program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to facility emission units in a single document, and therefore enhance compliance with the requirements of the Act. *Id.*

Under Section 505(b) of the Act, 42 U.S.C. § 7661d(b), the Administrator is authorized to review state operating permits

[3] This program, which became effective on October 12, 1995, is codified in Louisiana Administrative Code (L.A.C.), Title 33, Part III, Chapter 5.

issued pursuant to Title V, and to object to permits that fail to comply with the applicable requirements of the Act, including the requirements of an applicable implementation plan. In this case, the applicable requirements include relevant Louisiana Air Quality regulations, the substantive and procedural requirements of Louisiana's NNSR program, the New Source Performance Standards (NSPS), and the National Emission Standards for Hazardous Air Pollutants (NESHAPs). Operating Permit, Formaldehyde Plant, Borden Chemical Inc. (August 25, 1999) (Borden Permit)[4]

---

[4] Sections 110(a)(2)(C) and 172(c) of the Act, 42 U.S.C. §§ 7410(a)(2)(C) and 7502(c) require each state to revise its state implementation plan (SIP) to include NNSR. EPA approved Louisiana's NNSR SIP revision for major sources on October 10, 1997. 62 *Fed. Reg.* 52948.

Under 40 C.F.R. § 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 40 C.F.R. § 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 that implements the relevant requirements of the Act, including any revisions to that plan promulgated in [40 C.F.R.] Part 52."

Louisiana 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." L.A.C. 33:III.502. Thus, the applicable requirements of the Borden Permit include the requirement to obtain an NNSR (preconstruction) permit that in turn complies with the applicable NNSR requirements under the Louisiana SIP.

(continued...)

When EPA declines to object to a Title V permit on its own initiative, Section 505(b)(2) of the Act, 42 U.S.C. § 7661d(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 all applicable requirements. *See also* 40 C.F.R. § 70.8(d). These petitions "shall be based only on objections 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)." 42 U.S.C. § 7661d(b)(2).

III. BACKGROUND

Borden proposed to build a new formaldehyde production, loading, and storage operation in Ascension Parish, near the town of Geismar, Louisiana. The new formaldehyde facility was projected to produce 500 million pounds of 50% formaldehyde solution annually. The facility would be located in a serious

---

[4](...continued)
The definition of "federally applicable requirement" also includes New Source Performance Standards (NSPS) promulgated pursuant to Section 111 of the Act, 42 U.S.C. § 7411, and standards for Hazardous Air Pollutants promulgated pursuant to Section 112 of the Act, 42 U.S.C. § 7412. L.A.C. 33:III.502.

nonattainment area,[5] and subject to NNSR, NSPS, NESHAPs, and the Louisiana Air Quality Regulations.[6]

Borden submitted a permit application to LDEQ dated March 10, 1999, for a Part 70 Operating Permit (Title V Permit). Additional information not relevant to this action dated March 15, and March 16, 1999, was also submitted to LDEQ. A notice requesting public comment on the proposed Borden Permit was published in *The Advocate*, Baton Rouge, Louisiana, on April 15, 1999, and in the *Gonzales Weekly*, Gonzales, Louisiana on April 16, 1999. LDEQ submitted the proposed Borden Permit[7] to EPA Region 6 for review on May 11, 1999. A public hearing was requested on April 30, 1999. Notice of a public hearing was published in *The Advocate* on May 27, 1999, and in the *Gonzales Weekly* on May 28, 1999. EPA's 45-day review period expired June 25, 1999. The public hearing was held on July 1, 1999 at the Ascension Parish Courthouse in Gonzales, Louisiana. Written and oral comments were received at the hearing, and the deadline to

---

[5] The Baton Rouge area is designated as a serious nonattainment area for ozone. 40 C.F.R. § 81.319.

[6] Borden Operating Permit; Basis for Decision, Formaldehyde Plant, Borden Chemical, Inc. (August 25, 1999) (Basis for Decision).

[7] Even though the permit was marked "draft", it meets the definition of "proposed permit" in L.A.C. 33:III.502. "Proposed permit" is defined as "the version of the permit for which the permitting authority (DEQ) offers public participation, affected state review, or *EPA review*." (emphasis added).

submit written comments was extended through July 16, 1999. On August 24, 1999, the Petitioner petitioned EPA pursuant to Section 505(b) of the Act, 42 U.S.C. § 7661d(b), and 40 C.F.R. § 70.8(d), to object to the issuance of the Borden Permit. On August 25, 1999, LDEQ issued the final permit to Borden.[8]

An NNSR permit must be obtained before constructing a major modification at an existing major stationary source in a non-attainment area. L.A.C. 33:III.504. The new formaldehyde plant is adjacent to the Borden Chemical and Plastics (BCP) plant. LDEQ considered the new formaldehyde plant as part of an existing major source because it is under common control with BCP, which was already a major source.[9] Thus, Borden's new facility would actually be a modification of an existing major stationary source. The question then becomes whether the modification would be considered a major modification under NNSR. A modification is major if, *inter alia,* there is "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emission increase, as listed in Table 1, of any regulated air pollutant for which the stationary source is already major." L.A.C. 33:III.504.G. That determination is made by first quantifying the increase of emissions of each regulated pollutant from the proposed project.

---

[8] Construction has been completed and the facility is now operating.

[9] Basis for Decision at 3 and 5.

In this case, the estimated emissions in tons per year (TPY) are:

Pollutant	Emissions
PM_{10}	5.68
SO_2	-
NO_X	-
CO	75.78
VOC	24.19

If these emissions meet or exceed a trigger value stated in L.A.C. 33:III.504, Table 1, then for that particular pollutant, the source is required to perform a calculation of the net emissions increase over the contemporaneous period.[10] As the estimated emissions of volatile organic compounds (VOCs) from the project of 24.19 TPY exceeded five (5) TPY, L.A.C. 33:III.504.A.4 dictated that Borden calculate the net emissions increase over the contemporaneous period. Since the formaldehyde plant was new, Borden would have to calculate the net emissions increase using emissions from the BCP facility. If the result of that calculation was less than 25 TPY,[11] then Borden would not have to undergo NNSR review. Borden did not use the emissions data from BCP to calculate the net emissions increase. Rather, Borden submitted an application to undergo review under NNSR as a major

---

[10] A "net emissions increase" is defined as "any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source and any other creditable increases and decreases in actual emissions at the major stationary source over a period including the calendar year of the proposed increase and the preceding four consecutive calendar years." L.A.C. 33:III.504.G.

[11] L.A.C. 33:III.504, Table 1.

modification.

In performing NNSR review, L.A.C. 33:III.504.D.5 requires a source to obtain offsets at the ratios expressed in Table 1. For VOC offsets in a serious nonattainment area, the ratio is 1.2:1 if a source elects to apply the lowest achievable emissions rate (LAER). Borden elected to apply LAER and thus was required to offset its VOC emissions at a 1.2:1 ratio, or 29.03 TPY (based on a net increase of 24.19 TPY). By letter dated March 12, 1999, Georgia Gulf Corporation notified LDEQ that Borden had purchased 32 TPY of their VOC emission reduction credits. Borden applied 29.1 tons of these credits to offset VOC emissions from the plant.[12]

IV. ISSUES RAISED BY PETITIONER

The Petition raises nine objections to the Borden Permit: (1) violation of public notice and comment provisions; (2) the emission reduction credits with which Borden proposes to offset its emissions are not valid; (3) the facility will hinder reasonable further progress in achieving the ozone standard for the Baton Rouge nonattainment area; (4) the environmental impacts of the facility significantly outweigh the social and economic benefits of the facility; (5) Borden failed to submit a complete

[12] EPA did not find any evidence that LDEQ issued an Emission Reduction credit (ERC) Certificate transferring the 32 TPY from Georgia Gulf to Borden, nor did EPA find any evidence that LDEQ reissued an ERC certificate to Georgia Gulf showing a decrease of 32 TPY from its balance, as required by L.A.C. 33:III.619 and 623.

application; (6) Borden's environmental assessment of the site was inadequate; (7) no risk management plan on file; (8) failure to meet MACT standards; and (9) Title VI civil rights complaint. Each of these grounds are discussed below.

V. PUBLIC NOTICE AND COMMENT

The Petitioner alleges that "LDEQ denied a member of LEAN, Mr. Gary Miller, access to application documents during the review period following public notice." Petition at 2. Specifically, the Petitioner claims that on April 26, 1999, Mr. Miller visited LDEQ and requested to see Georgia Gulf's permit and the Borden permit application.[13] Mr. Miller was allegedly told that both Georgia Gulf's permit and the Borden permit application were unavailable. Mr. Miller apparently returned a second time, but these documents were again unavailable. Mr. Miller then prepared a public record request pursuant to the Louisiana Public Records Act. On May 27, 1999, LDEQ provided Mr. Miller with the Borden permit application and the Georgia Gulf permit. Originally, the public comment period for the Borden Permit was to close on May 15, 1999. At the request of LEAN, however, the public comment period was later extended to July 16,

[13] Mr. Miller wanted to review the Georgia Gulf permit to determine if the ERCs which where transferred from Georgia Gulf to Borden were surplus, enforceable, permanent, and quantifiable. *Id.* at 2.

1999. *Id.* at 2-3.

EPA can only object to a Title V permit if it is not in compliance with the applicable requirements or the requirements of 40 C.F.R. Part 70. 40 C.F.R. § 70.8(c)(1). Thus, the failure of Louisiana to comply with the public participation requirements for Title V and preconstruction permits (L.A.C. 33:III.531) can be the basis for objecting to a permit. However, LDEQ did meet the applicable public participation requirements of L.A.C. 33:III.531.

Specifically, LDEQ provided thirty (30) days public notice to comment on the proposed permit. LDEQ also held a public hearing on the proposed permit and again provided at least thirty (30) days advanced notice. With respect to access to application documents, both the public notice requesting public comment and the notice of public hearing stated that a copy of the Borden permit application was also available at the Gonzales public library. According to LDEQ, both days that Mr. Miller sought to review the Borden permit application and the Georgia Gulf permit, the engineer who had possession of the files happened to be out of the office.

EPA agrees that access to information is a necessary prerequisite to meaningful public participation. As such, the proposed permit should be readily accessible to the public and it is a source of concern that the draft Borden permit was not.

However, in this case, it appears that the delay in LEAN's obtaining the Borden permit was addressed when LDEQ extended the public comment period to July 16, 1999, meaning that Mr. Miller had two months to review the permit. Accordingly, the error appears to have been harmless in this case. Mr. Miller and LEAN had ample opportunity to review the documents and meaningfully participate in the public comment process. Therefore, the request to object to the Borden Permit on this ground is denied.

VI. EMISSION REDUCTION CREDITS USED FOR OFFSETS

A. PETITIONER'S CLAIM

The Petitioner claims that the emission reduction credits (ERCs) on which Borden proposes to rely to offset its emissions increase are not valid. The ERCs purchased by Borden came from Georgia Gulf's phenol/acetone unit. The Petitioner asserts that the emission reductions claimed by Georgia Gulf are greater than the amount of emissions the company was permitted to emit at that time and thus cannot be credited as ERCs. Petition at 4. In addition, if the reductions took place prior to December 31, 1989, the Petitioner claims that Georgia Gulf should not have been allowed to bank the ERCs because the Louisiana regulations prohibited banking of reductions made prior to 1990. *Id.*

The Petitioner also contends that the emission reductions resulting from Georgia Gulf's installation of a thermal oxidizer (EIQ # 1-90) are not valid because the thermal oxidizer was

required under the Act, and under Section 173(c)(2) of the Act, "emission reduction credits otherwise required by this chapter shall not be creditable as emission reductions for purposes of any such offset requirement." *Id.* Finally, the Petitioner alleges that LDEQ's banking database is so inaccurate that it would be impossible for EPA or the public to determine whether the emissions in the database meet the requirements of the Act. *Id.* at 5.[14]

For the reasons discussed below, EPA agrees with the Petitioner that the ERCs purchased from Georgia Gulf were not valid. Specifically, EPA has concluded that the ERCs were not surplus at the time of generation or when banked,[15] and based on different grounds, that they were not surplus at the time they were used.

B. GEORGIA GULF'S EMISSION REDUCTIONS WERE NOT SURPLUS WHEN GENERATED OR BANKED

In order for Georgia Gulf to deposit its emission reductions in the ERC bank, the emission reductions must be surplus, permanent, quantifiable, and enforceable. L.A.C. 33:III.607.F.1.

---

[14] The issue of the accuracy of LDEQ's banking database is moot since I have concluded, as discussed below, that the credits purchased by Borden from Georgia Gulf were not valid when banked or when issued. Therefore, it is unnecessary to reach this issue.

[15] The relevant permitting history relating to Georgia Gulf from 1970 through the issuance of the ERC Certificate on October 26, 1995, is provided in Appendix A to this Order.

"Surplus Emission Reductions" are defined in L.A.C. 33:III.605 as

> emission reductions that are voluntarily created for an emissions unit and have not been required by any local, state or federal law, regulation, order, or requirement, and are in excess of reductions used to demonstrate attainment of federal and state ambient air quality standards.

As shown below, the emission reductions claimed by Georgia Gulf were required by state and federal law, regulations, or requirements.[16] Thus, the emission reductions were not surplus when generated in 1991, and the emission reductions should not have been placed in Louisiana's ERC Bank on October 25, 1995. Since the relevant emission reductions took place after 1990, the allegation that the banked reductions may have taken place prior to 1990 is rejected.

In its ERC Banking Application, Georgia Gulf sought credit for the reduction of 184.10 TPY of VOCs from four emission sources[17] resulting from the installation of the Secondary Carbon Adsorbers in 1991. Appendix A, Table 1. On October 26, 1995, LDEQ issued Georgia Gulf an ERC Certificate approving the 184.10

---

[16] Since an NNSR or Title V permit is required by the Louisiana regulations (e.g., L.A.C. 33:III.504 and 507), any permit (and the emission limitations contained therein) would be considered a state and/or federal requirement.

[17] Although the installation of the Secondary Carbon Adsorbers in 1991 resulted in the elimination of five point sources, Georgia Gulf only sought credit for four point sources. Georgia Gulf's February 17, 1995 Emission Reduction Credit (ERC) Banking Application.

TPY as ERCs.[18] However, even prior to the installation of the Secondary Carbon Adsorbers, these four emission sources were subject to Louisiana's Waste Gas Disposal Regulation. The 1982 version (Rule 22.8) of the regulation as well as the 1987 version (L.A.C. 33:III.2115) required controls on any waste gas disposal stream containing organic compounds from any emission source to be controlled. Nonhalogenated hydrocarbons were required to be controlled by an afterburner, but other methods of control, including carbon adsorption and recycling or vapor recovery could be approved by LDEQ.

In November 1990, however, the Waste Gas Disposal Regulation (L.A.C. 33:III.2115) was amended to require nonhalogenated hydrocarbons to be controlled within one year by an afterburner or equally effective device which achieves a removal efficiency of at least 95%, or to reduce emissions to 50 ppm by volume, whichever is less stringent. L.A.C. 33:III.2115.[19]

---

[18] Acetone was delisted as a VOC on June 16, 1995. 60 *Fed. Reg.* 31633. Assuming that the emission reductions were actually surplus, the correct amount of ERCs listed on the certificate should have been 152.33 TPY, not 184.10 TPY. *See* Response to Comments at 8.

[19] Other methods of control (such as the carbon adsorption system installed by Georgia Gulf) were acceptable, provided that they achieved the same level of removal efficiency and were approved by the "administrative authority*". "Administrative authority*" was defined in L.A.C. 33:III.111 to include both EPA and LDEQ. Thus, in order to use carbon adsorbers (or other devices) instead of afterburners to comply with L.A.C. 33:III.2115, LDEQ would have had to submit the proposal to EPA as a SIP revision. EPA has not received nor approved a site

(continued...)

Therefore, by November 1991, Georgia Gulf was required by regulation to achieve a removal efficiency of 95% for these four emission points. Only emission reductions in excess of 95% could be considered "surplus emission reductions". The Secondary Carbon Adsorbers did not meet the 95% control requirement. According to the emission inventory questionnaire attached to Georgia Gulf's ERC application, Georgia Gulf only estimated an overall VOC control efficiency of 85%. However, even this amount seems questionable, given that of the six pollutants controlled, the two largest (methanol and acetone) were controlled at 50% efficiency, whereas the remaining four pollutants were controlled at 85% efficiency. LDEQ later stated that the control efficiency was 80%.[20]

In conclusion, the emissions reductions achieved by Georgia Gulf were required by regulation to be controlled, and the emissions were not reduced in excess of 95%. As such, the emission reductions were not "surplus," were not eligible to be banked as ERCs, and could not be relied upon as valid offsets for

---

[19](...continued)
specific SIP revision for Georgia Gulf.

LDEQ also set a 200 ppmv limit for Georgia Gulf instead of a 50 ppmv limit required by the regulation. The SIP revision process would also have been required to operate at an emission limit greater than 50 ppmv.

[20] Response to Comments at 8.

Borden's permit.[21]

C. GEORGIA GULF'S EMISSION REDUCTION CREDITS (ERCs) WERE NOT SURPLUS AT TIME OF USE BY BORDEN

EPA has concluded, as discussed above, that the emission reductions achieved by Georgia Gulf (from which the offsets in question occurred) were not surplus at the time they were generated in 1991 and banked in 1995. EPA also concludes that the ERCs banked by Georgia Gulf were not surplus at the time they were used as offset credits in Borden's permit. Under Clean Air Act section 173(c)(2), ERCs must be surplus at the time they are used as offsets. EPA approved Louisiana's permitting and banking regulations (L.A.C. 33:III.504.F.10 and 623.B.1) on the basis that the regulations required that ERC's must be surplus at the time of use as offsets. Any other interpretation of the State's regulations would not have been consistent with Section 173(c)(2) of the Act, which requires that "emissions reductions otherwise required by [the Act]" cannot be used as offsets. Relying explicitly on this interpretation of the Clean Air Act, EPA proposed to approve Louisiana's banking regulations, explaining that "the requirement that the emission reductions be surplus when actually used is adequately addressed by [Louisiana's]

[21] Because the application of the waste gas disposal regulation, L.A.C. 33:III.2115 renders the ERCs ineligible for banking, there is no need to apply other regulations (e.g., state air toxics) or permit limits for this analysis, nor determine if the reductions were in excess of reductions used to demonstrate attainment.

regulations." [i.e., the State's NSR regulations]. 63 Fed. Reg. 44192, 44200 n.2 (Aug. 18, 1998). *See also* 62 Fed. Reg. 52948, 52949 (Oct. 10, 1997) (granting final approval of Louisiana's NNSR program based, in part, on finding that L.A.C. 33:III.504.F.5 and 504.F.10 satisfy Section 173(c)(2) of the Act by "prevent[ing] emissions reductions otherwise required by the Act from being credited for purposes of satisfying the part D offset requirements").[22]

As a result, even if an ERC certificate has been validly issued, LDEQ must certify the ERCs as surplus at the time the credits are used to account for any new federal or state statutes, regulations, or permits which establish new baseline emission limits. In addition, LDEQ must ensure that the ERCs were not later relied upon to demonstrate attainment of any

---

[22] In the course of discussing this petition with LDEQ, it came to light that LDEQ has applied its regulations in a manner that does not comport with EPA's interpretation of the state's permitting and banking regulations regarding the applicability of a "surplus when used" requirement. In EPA's view, the language of the state regulations is consistent with Section 173(c)(2) of the Act, and it was on that basis that the Agency approved LDEQ's NSR regulations in 1997 and LDEQ's banking regulations in 1999. *See, e.g.*, Section 173(c)(2) of the Act, 42 U.S.C. § 7503(c)(2), which provides that "emissions reductions otherwise required by [the Act] shall not be creditable as emission reductions for purposes of any such offset requirement." *See also* L.A.C. 33:III.504.F.10, which provides in part that "emission reductions otherwise required by the Federal Clean Air Act or by state regulations shall not be credited for purposes of satisfying the offset requirement," and L.A.C. 33:III.623.B.1, which provides that "an ERC may be used to offset increased emissions from new or modified sources in nonattainment or attainment areas in accordance with L.A.C. 33:III.504."

federal or state ambient air quality standard.

EPA finds that the Georgia Gulf ERCs relied upon in Borden's permit are invalid for use as offsets for two reasons. First, when LDEQ issued Borden its permit on August 25, 1999, the emissions reductions banked by Georgia Gulf were required by the Clean Air Act and thus not eligible for use as offsets. Second, Georgia Gulf's emissions reductions were not below the emissions limit in the applicable SIP in effect at the time the application to construct was filed and, again, not eligible for use as offsets.

1. Emission Reductions Required by the Clean Air Act Cannot be Used as Offsets

Section 173(c)(2) of the Act, 42 U.S.C. § 7503(c)(2) provides that "emission reductions otherwise required by [the Act] shall not be creditable as emission reductions for purposes of any such offset requirement." For example, EPA has explained that "reductions required to meet [reasonably available control technology] RACT and acid rain reductions pursuant to statutory authority are not creditable for emission offsets." 57 *Fed. Reg.* at 13498, 13552 (April 16, 1992). As to banked ERCs, this means that the use of ERCs which were surplus some years ago when they were banked, cannot be used as valid offsets if they are no longer surplus at the time of use because of other regulations enacted after the ERCs were banked. *See* 65 *Fed. Reg.* 76576, 76569 (Dec. 7, 2000) (limited disapproval of Ventura County,

California's State Implementation Plan for failing "to ensure that ERCs are surplus to all requirements of the Act at the time they are used, even though they were discounted at the time of generation and even though [Ventura County] has not relied on the ERCs for its attainment demonstration."). This helps ensure that emission reductions required under current law are not undermined by the use of outdated offsets that were placed in a bank before the emission control requirements became effective.

The corresponding state regulation to Section 173(c)(2) of the Act is L.A.C. 33:III.504.F.10. This regulation states that "emission reductions otherwise required by the Federal Clean Air Act or by state regulations shall not be credited for purposes of satisfying the offset requirement." L.A.C. 33:III.504.F.10 is a statutorily mandated provision of the Louisiana SIP. 42 U.S.C. § 7503(c)(2). EPA stated that this provision satisfied Section 173(c)(2) of the Act when it approved Louisiana's NNSR rules. 62 *Fed. Reg.* at 52949.[23]

The application of the "surplus when used" requirement can be illustrated by the following example. Assume that a source has uncontrolled emissions of 300 TPY. A RACT regulation promulgated in 1995 (and incorporated into the SIP) requires an 80% destruction efficiency (reduce VOC emissions by 80%, to 60

[23] EPA also determined that L.A.C. 33:III.504.F.5 satisfies Section 173(c)(2) of the Act. 62 *Fed. Reg.* at 52949.

TPY). The source installs controls which reduce VOC emissions by 95%, to 15 TPY. A permit modification is issued which sets an emission limit of 15 TPY. The 45 additional tons of emission reductions beyond those required by the RACT regulation in the SIP are considered "surplus",[24] and then banked according to the State's banking regulations.[25]

Now assume that in 1998 a maximum achieveable control technology (MACT) requirement is promulgated which requires a 95% destruction efficiency (reduce uncontrolled emissions by 95%, to 15 TPY).[26] A major source (located in a serious nonattainment area) wants to build a new unit at an existing major source which will emit 37.5 TPY (major modification). Thus, it needs to obtain 45 TPY in offsets (37.5 TPY x 1.2). L.A.C. 33:III.504, Table 1. Since the 1998 MACT requirement requires a 95% destruction efficiency, the 45 TPY credit in the bank is no longer valid for use as offsets because those emission reductions were required by the Clean Air Act in 1998. Section 173(c)(2) of the Act and L.A.C. 33:III.504.F.10 explicitly provide that

---

[24] This example assumes the emission reductions met the definition of "surplus emission reductions" in L.A.C. 33:III.605.

[25] In Louisiana, sources must deposit emission reductions in the bank in order to preserve them for use as offsets. L.A.C. 33:III.603. This example assumes that all other requirements for banking emission reductions are met.

[26] The 95% destruction efficiency is used as an example. Many MACT regulations require a 98% destruction efficiency (e.g., 40 C.F.R. § 63.113).

reductions required by the Clean Air Act cannot be used as offsets. Therefore, the 45 tons which were previously banked are no longer valid to be used as offsets.[27]

This is essentially what happened with respect to the Georgia Gulf ERCs at issue here (if we assume for the moment that the credits were valid when banked). On October 13, 1995, LDEQ issued a permit modification, designated as Permit 1267T(M-3) to allow Georgia Gulf to construct a new purification column. Six months later, on April 18, 1996, LDEQ issued a permit modification, designated as Permit 1267T(M-4) to allow Georgia Gulf to expand the production capacity of the phenol/acetone plant. As part of the project, Georgia Gulf replaced the Secondary Carbon Adsorbers with a new regenerative thermal oxidizer (RTO). Georgia Gulf also added an eighth oxidizer to the phenol/acetone plant (a new emissions source within the process unit).

These permit modifications (M-3 and M-4) triggered the applicability of several federal and state emission control requirements. Perhaps most important, the emission reductions achieved by installation of the RTO were required, in part, by the waste gas disposal rule, L.A.C. 33:III.2115 (which requires a 95% control efficiency for VOCs), and the National Emission

---

[27] L.A.C. 33:III.623.B.1 requires ERCs used as offsets to comply with Louisiana's NNSR regulations found at L.A.C. 33:III.504.

Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry (SOCMI) sources, 40 C.F.R. § 63.113 (incorporated by reference in L.A.C. 33.III.5122)(which requires a 98% control efficiency of total organic hazardous air pollutants). The addition of a new, eighth oxidizer/reactor was subject to the requirements of the New Source Performance Standards (NSPS) Subpart III (which require a 98% reduction of total organic compounds) (incorporated in L.A.C. 33.III.3003). Further, the new purification unit and the numerous distillation columns/towers that were modified or replaced were subject to the requirements of the New Source Performance Standards (NSPS) Subpart NNN (which require a 98% reduction of total organic compounds) (incorporated in L.A.C. 33.III.3003).

Based on these new requirements, the 184.10 TPY of ERCs banked by Georgia Gulf in 1995 must be re-evaluated pursuant to section 173 of the Clean Air Act and the state's permitting and banking regulations to determine the extent to which the earlier emission reductions may now be required by federal and/or state law.[28] This evaluation was not conducted by LDEQ prior to issuance of Borden's permit on August 25, 1999. Further, there is no indication that the RTO emission limit is more stringent than the 98% level of control requirements triggered by Georgia

[28] As discussed at supra, footnote 20.

Gulf's expansion. As such, the ERCs relied upon in Borden's permit appear to be otherwise required by law and thus were invalid for offset purposes.

2. Emission Reductions Must be Below the Emissions Baseline in the SIP in Order to be Used as Offsets

The other requirement that must be considered in determining the validity of ERCs for use as offsets is the "baseline" for calculating ERCs. EPA regulations require each SIP to:

> provide that for sources and modifications subject to any preconstruction review program adopted pursuant to this subsection the baseline for determining credit for emission reductions is the emissions limit in the applicable SIP in effect at the time the application to construct is filed.

40 C.F.R. § 51.165(a)(3)(i). LDEQ has incorporated 40 C.F.R. § 51.165 into its banking regulations.[29] This provision provides that the permitting authority must determine the appropriate baseline below which offsetting emissions are obtained by using the emission limitations set forth in the SIP. This means that the amount of emissions which can be used as offsets from a source will be based on emission reductions below these SIP limits.[30]

---

[29] Specifically, L.A.C. 33:III.601.A provides that "this regulation [ERC banking regulations] does not alter new source review requirements nor exempt owners or operators from compliance with applicable preconstruction regulations in accord with 40 C.F.R. § 51.18 . . . [recodified as 40 C.F.R. § 51.165]." Therefore, L.A.C. 33:III.601 requires compliance with 51.165(a)(3)(i).

[30] Since the example below provides an emission limit for (continued...)

This can also be illustrated by the prior example, this time focusing on how new SIP limits affect the baseline for determining surplus credits. Again assume that a source has uncontrolled emissions of 300 TPY.[31] A RACT regulation promulgated in 1995 (and incorporated into the SIP) requires an 80% destruction efficiency (reduce VOC emissions by 80%, to 60 TPY). The source installs controls which reduce VOC emissions by 95%, to 15 TPY. A permit modification is issued which sets an emission limit of 15 TPY. The baseline for the emission reductions that may be used for offsets is 60 TPY (the current level in the SIP). This baseline sets the limit for which surplus emissions from this source can be used for offsets. The 45 additional tons of emission reductions are considered "surplus", and then banked according to the State's banking regulations.

In 1998, a MACT requirement is promulgated which requires a 95% destruction efficiency (reduce uncontrolled emissions by 95%, to 15 TPY). The facility's NNSR permit is modified to reflect the MACT requirement. Since the permit was issued pursuant to an

---

[30](...continued)
the source in the SIP, one uses the emission limit in the SIP to determine the baseline, rather than actual emissions. 40 C.F.R. § 51.165(a)(3)(i).

[31] This example again assumes that the emission reductions met Louisiana's regulatory definition of "surplus emission reductions" and were appropriately banked to preserve them as offsets.

EPA-approved NNSR program, it would be considered part of the Louisiana SIP. *See National Mining Association v. U.S. EPA,* 59 F.3d 1351, 1363 (D.C. Cir. 1995). Therefore, the new baseline for determining whether there are any surplus emissions from this source that can be used as offsets is 15 TPY.

In 1999, the major source (located in a serious non-attainment area) wants to build a new unit at an existing major source which will emit 37.5 TPY (major modification). Thus, it needs to obtain 45 TPY in offsets (37.5 TPY x 1.2). L.A.C. 33:III.504, Table 1. Since the new baseline is now 15 TPY, any emission offsets must come from additional reductions below the 15 TPY baseline (e.g., increase destruction efficiency to 98%). Because of the recalculation of the baseline, the 45 TPY credit in the bank is not valid for use as offsets.[32]

To determine whether the Georgia Gulf ERCs are valid to be used as offsets in Borden's permit, we therefore need to evaluate the emissions limit in the applicable SIP in effect at the time that Borden's application to construct was filed on March 10, 1999. As noted above, LDEQ approved permit modification (M-4) on April 18, 1996, to allow Georgia Gulf to expand the production

[32] There may be situations where the two methods set forth in Section VI.C.1 and 2 will result in two different figures. For example, a MACT requirement may be part of the Section 173(c)(2) calculation as a requirement of the Act, but not part of the baseline calculation because a State may not have incorporated the MACT requirement into its SIP. If this occurs, one would use the lower of the two calculations.

capacity of the phenol/acetone plant. The project involved replacing the Secondary Carbon Adsorbers with a new regenerative thermal oxidizer (RTO) and adding an eighth oxidizer/reactor to the phenol/acetone plant. After this permit modification, the emission limit permitted by LDEQ for the RTO and the phenol/ acetone production unit to meet the various control requirements was 4.55 TPY. The new baseline for Georgia Gulf thus became 4.55 TPY.

In light of this recalculated baseline, the 184.10 TPY of ERCs banked in 1995 by Georgia Gulf are not valid for use by Borden in 1999. In fact, even if the entire phenol/acetone plant was shut down at the time Borden sought to use the Georgia Gulf ERCs as offsets (which it was not), the maximum conceivable surplus of Georgia Gulf ERCs would have been 4.55 TPY. Thus, the ERCs banked by Georgia Gulf were not below the emissions baseline of 4.55 TPY in the SIP that was in effect when Borden submitted its 1999 application and could not be used as valid offsets.

In sum, based on the fact that the ERCs relied upon by Borden for offsets were not surplus at the time of generation, when banked, or at the time they were used, the Petitioner’s objection on this ground has merit. However, as noted earlier, LDEQ has issued a permit modification to Borden which relies upon netting credits rather than the external ERCs upon which the Borden Permit and the Petition are based. Accordingly, the Petitioner’s objection on this ground is dismissed as moot.

VII. REASONABLE FURTHER PROGRESS TOWARDS ATTAINMENT

The Petitioner also challenges Borden's Title V permit on the grounds that a new facility in the Baton Rouge area will hinder "reasonable further progress" (RFP) in achieving the ozone National Ambient Air Quality Standard (NAAQS). The Petitioner broadly argues that air quality in Baton Rouge is actually getting worse, not better. As a result, the Petitioner asserts that the RFP requirements of Sections 172, 173, and 182 of the Act are not being met since the emissions allowed under Borden's Title V permit can only make the ozone problems worse. Further, the Petitioner argues that the emission reductions achieved in Borden's permit, namely, the 1.2 to 1 offset required by Section 182(c)(10) of the Act, do not meet the RFP demonstration required by Section 173(a)(1)(A) of the Act, because they will not ensure ozone attainment by November 15, 1999, the applicable date for the Baton Rouge nonattainment area. Petition at 5-7.

For the reasons discussed below, Petitioner's argument with respect to the RFP requirements of Sections 172 and 182 of the Act is denied as they are not "applicable requirements" for a source receiving an operating permit under Title V. EPA has previously determined that the original offsets obtained by Borden are invalid (as discussed in Section VI above), and thus the Borden Permit would not satisfy the RFP requirement of Section 173(a)(1)(A) of the Act, 42 U.S.C. § 7503(a)(1)(A).

Petitioner's request that EPA object to the permit on this ground is not being granted, however, because as noted above, the Revised Borden Permit does not rely upon ERCs on which the Borden Permit and the Petition were based. Accordingly, the Petitioner's objection on this ground is dismissed as moot.

A. REASONABLE FURTHER PROGRESS UNDER SECTIONS 172 and 182

As previously stated, to justify an objection by EPA to a Title V permit pursuant to Section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), the Petitioner must demonstrate that the permit is not in compliance with the applicable requirements of the Act, including the requirements of the Louisiana SIP. However, the general issue of whether the proposed Borden permit should be denied because the Baton Rouge ozone nonattainment area is not making RFP under Sections 172 or 182 of the Act cannot be addressed here because the RFP requirement that the State develop and submit a SIP that provides for RFP is not, as to any individual source, an applicable requirement of the Act for purposes of an NNSR permit or an operating permit issued under Title V.[33]

Under the Act, States are required to develop SIPs for nonattainment areas that provide a pathway for achieving the

[33] The Act defines RFP as "such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date." 42 U.S.C. § 7501(1).

NAAQS. The SIP generally will include planning documents, such as an RFP demonstration applicable to the state. *See* 42 U.S.C. §§ 7502(c)(2) and 7511a(c)(2)(B). The SIP will also include control requirements that are directly applicable to sources. Although such control requirements may be adopted by the State to satisfy the State's planning obligation to achieve RFP, this does not change the fact that planning obligations such as the RFP provisions of Sections 172 and 182 are requirements applicable to States under the SIP. These requirements do not have any direct application to sources even where the RFP plan or attainment plan relies on specific control requirements that are applicable to the source and that are adopted into the SIP. Therefore, it is only the underlying control requirements, if any, not the general obligation of the State to achieve a certain level of reduction, that can be reflected in (and are, therefore enforceable under) a source-specific operating permit issued under Title V. Since planning obligations of the State, such as the requirements of Section 172 and 182, cannot be directly implemented by a specific source through a Title V permit, it is not an applicable requirement under Title V of the Act. 57 *Fed. Reg*. 32250, 32276 (July 21, 1992).

This interpretation is consistent with the Agency's long-standing explanation of the relationship between Title V and SIPs. For example, in the preamble to the final rule

promulgating 40 C.F.R. Part 70 (State Operating Permit Programs), EPA stated:

> The EPA proposed that the NAAQS is a SIP requirement, not an "applicable requirement" for title V permits. In the case of large, isolated sources such as power plants or smelters where attainment of the NAAQS depends entirely on the source, EPA proposed that the NAAQS may be an applicable requirement and solicited comment on this position.
>
> An environmental group commented that excluding protection of ambient standards, PSD increments or visibility requirements as applicable requirements are unlawful and bad policy. It argued that section 504(e) expressly defines "requirements of the Act" as "including, but not limited to, ambient standards and compliance with applicable increment or visibility requirements under part C of title I." Although this provision applies only to temporary sources, the group asserts that it would be anomalous for Congress to impose more comprehensive permit requirements for temporary sources than for permanent sources.
>
> The EPA disagrees with the comment that would apply section 504(e) to permanent sources. Temporary sources must comply with these requirements because the SIP is unlikely to have performed an attainment demonstration on a temporary source. To require such demonstration as on every permitted source would be unduly burdensome, and in the case of area-wide pollutants like ozone where a single source's contribution to any NAAQS violation is extremely small, performing the demonstration would be meaningless. Under the Act, NAAQS implementation is a requirement imposed on States in the SIP; it is not imposed directly on a source. In its final rule, EPA clarifies that the NAAQS and the increment and visibility requirements under part C of title I of the Act are applicable requirements for temporary sources only.

Id.; 40 C.F.R. § 70.2 (definition of applicable requirement).

In sum, the Petitioner’s request that EPA object to the Borden permit on these grounds is denied because the general

issue of whether the Baton Rouge ozone nonattainment area as a whole is making RFP toward attainment in accordance with Sections 172 or 182 of the Act is a SIP obligation applicable to the State, not to individual sources. As such, it is not an "applicable requirement" for a source receiving an operating permit under a Title V program.

B. REASONABLE FURTHER PROGRESS UNDER SECTION 173

The Petitioner also contends that under Section 173(a)(1)(A) of the Act, 42 U.S.C. § 7503(a)(1)(A), Title V permits cannot be issued unless sufficient offsetting emissions reductions have been obtained to achieve RFP. Petition at 5. As noted earlier, Section 171(1) of the Act, 42 U.S.C. § 7501(1), defines RFP as requiring annual incremental emission reductions “for the purpose of ensuring attainment of the applicable NAAQS by the applicable date.” The Petitioner argues that Borden’s permit should not have been issued as Baton Rouge will not be in attainment by November 15, 1999, the applicable date for the Baton Rouge nonattainment area. *Id*.

EPA’s long-standing interpretation is that the RFP requirement of Section 173(a)(1)(A) of the Act is satisfied as long as the source meets the more specific offset requirements established under Section 182(c)(10) of the Act. Specifically, EPA stated in 1992 that the Agency:

> interprets section 173(a)(1)(A) to ratify current EPA regulations requiring the emissions baseline for offset

> purposes be calculated in a manner consistent with the emission baseline used to demonstrate RFP. Regarding the amount that is necessary to show noninterference with RFP, EPA will presume that so long as a new source obtains offsets in an amount equal to or greater than the amount specified in the applicable offset ratio..., the new source will represent RFP.

57 *Fed. Reg.* at 13552. This interpretation is consistent with the legislative history, discussed above, explaining that the specific emission reductions required under Section 182 of the Act provide "a concrete translation of how much an area must do to achieve 'reasonable further progress.'" House Report No. 101-490(I) at 236.

Although Borden submitted the 1.2 to 1 emissions offsets required for a serious ozone nonattainment area pursuant to Section 182(c)(10) of the Act, EPA has found that the Georgia Gulf ERCs Borden relied on for use as emissions offsets were invalid,[34] and thus EPA presumes that RFP would not have been achieved. *See* 57 *Fed. Reg.* at 13552. The petition to object on this ground is not being granted, however, because as previously stated, the Revised Borden Permit does not rely upon the ERCs on which the Borden Permit and the Petition were based. Accordingly, the Petitioner's objection that the Borden Permit does not satisfy the RFP requirement of Section 173(a)(1)(A) of the Act, 42 U.S.C. § 7503(a)(1)(A), is dismissed as moot.

VIII. ENVIRONMENTAL IMPACTS OF FACILITY AND ENVIRONMENTAL

[34] Section VI, supra.

ASSESSMENT

The Petitioner alleges that the environmental impacts of this facility significantly outweigh the social and economic benefits of the facility. Petition at 7 - 9. In a related but distinct claim, the Petitioner also claims that Borden's environmental assessment of the site is inadequate. *Id.* at 9 - 11. With respect to the latter claim, the Petitioner has failed to cite any applicable State or Federal legal authority which Borden is alleged to have violated. Nonetheless, liberally interpreting the allegation, EPA construes it as an alternative contention that Borden's alternate site analysis is flawed as a result of its failure to properly conduct a site assessment.

The Act requires States to observe certain requirements in developing state implementations plans (SIPs). Among others, Section 172(c)(5) of the Act, 42 U.S.C. § 7502(c)(5), requires that a nonattainment SIP must include a permit program for the construction and operation of new or modified major sources in nonattainment areas. Under this major "new source review", the plan must include, *inter alia*, provisions requiring that the state has determined that based on,

> an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

42 U.S.C. § 7503(a)(5). On October 10, 1997, EPA approved the

State of Louisiana's NNSR program. In so doing, EPA found that L.A.C. 33:III.504.D.7 was consistent with Section 173(a)(5). 62 *Fed. Reg.* 52948, 52949 (October 10, 1997).[35]

The Act contains no detailed requirements concerning the particular contents of the required "alternatives analysis," nor has EPA promulgated regulations or guidance addressing the analysis. However, this statutory requirement must still be fulfilled. *See Oregon Environmental Council v. Oregon Department of Environmental Quality,* 775 F.Supp. 353, 356 (D. Or. 1991) ("if . . . EPA determines that the provisions of an approved implementation plan are not being properly implemented in issuing a permit to a new source, the state cannot issue the permit"); *In Re Campo Landfill Project, Campo Band Indian Reservation*, 6 E.A.D. 505, 520 (1996) [EPA Environmental Appeals Board reviewing major NSR permit under Section 173(a)(5)].

Accordingly, we must first analyze the framework under which Louisiana implements the alternative sites analysis required under L.A.C. 33:III.504.D.7. Second, we must evaluate the facility specific factors considered and whether those factors

---

[35] L.A.C. 33:III.504.D.7 provides that "as a condition for issuing a permit to construct a major stationary source or major modification in a nonattainment area, the public record must contain an analysis, provided by the applicant, of alternate sites, sizes, production processes, and environmental control techniques and demonstrate that the benefits of locating the source in a nonattainment area significantly outweigh the environmental and social costs imposed."

were balanced in a manner consistent with the statutory and regulatory framework. Although EPA found that the Georgia Gulf ERCs upon which the initial permit was based were invalid, as noted these ERCs are no longer part of the original permit due to a recent permit modification.[36] Absent any future issue regarding the validity of ERC's, Louisiana's alternatives analysis appears to satisfy the statutory requirements of Section 173(a)(5) of the Act. As a result, the petition to object to Borden's permit on this ground is denied.

A. THE FRAMEWORK FOR ANALYZING ALTERNATIVES USED BY LDEQ IS CONSISTENT WITH SECTION 173(A)(5) OF THE ACT

In implementing the alternative sites analysis required under L.A.C. 33:III.504.D.7, LDEQ considered a set of criteria known as the "*IT Requirements*" (named for a state court decision involving the IT Corporation).[37] Under the *IT Requirements*, LDEQ must address whether:

1. the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible;

2. a cost benefit analysis of the environment impact costs balanced against the social and economic benefits of the project demonstrate that the latter outweighs the former;

3. there are alternative projects or alternative sites or

---

[36] *See* Sections VI and VII *supra*.

[37] *Save Ourselves, Inc., et al. v. The Louisiana Environmental Control Commission and the Louisiana Department of Natural Resources*, 452 So. 2d 1152 (La. 1984).

> mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing nonenvironmental benefits to the extent applicable.

In the Matter of Rubicon Inc., 670 So.2d at 483. The Basis of Decision prepared by the LDEQ in considering the Borden permit contains an extensive analysis of the *IT Requirements*.

While the weighing of costs and benefits required under the *IT* decision has been interpreted as a "rule of reasonableness," the *IT* Court and subsequent courts have noted that "[t]he DEQ's role as the representative of the public interest does not permit it to act as an umpire passively calling balls and strikes for adversaries appearing before the Secretary; the rights of the public must receive active and affirmative protection at the hands of DEQ." *In the Matter of American Waste and Pollution Control Company*, 642 So.2d at 1262, (internal punctuation omitted) (*quoting IT*, 452 So.2d at 1157). Therefore, while the *IT Requirements* and the Act's requirements [42 U.S.C. § 7503(a)(5) and L.A.C. 33:III.504.D.7] are not identical, EPA finds that the framework employed by LDEQ in implementing the alternatives analysis is sufficient to meet the Act's requirements.

B. LDEQ'S ALTERNATIVES ANALYSIS WOULD SATISFY SECTION 173(A)(5) OF THE ACT.

As explained in the Basis of Decision document, LDEQ determined that the *IT* Requirements had been met. Examining the

facts presented, the LDEQ determined that adverse environmental impacts had been minimized or avoided as much as possible. The State also found that the facility complied with all applicable federal and state requirements concerning alternative sites, alternative projects, and mitigation measures.

The three requirements and a summary of LDEQ's analysis of the requirements are as follows:

1. **Whether the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.**

LDEQ considered emission controls, equipment, design standards, construction practices and training in analyzing this requirement. LDEQ found that the planned emission control technology for the proposed facility would meet the requirements of all applicable regulations (including lowest achievable emission reductions (LAER), maximum achievable control technology (MACT), new source performance standards (NSPS), and Louisiana's Air Quality Regulations, including the State Implementation Plan). Planned emission control technology in some cases exceeds that required by regulation. For example, "regulations require that emissions from the formaldehyde storage tanks be reduced by 95%; the proposed plan will achieve 99% control of VOC emissions by recycling the emissions back into the formaldehyde process units." Volatile organic compound emissions are required to be

offset at a ratio of 1.2 to 1.[38] LDEQ found that the facility will meet all National Ambient Air Quality Standards at the property line and will not cause air quality impacts which would adversely affect human health or the environment. LDEQ also determined that soil and groundwater will be protected from contamination through the use of impervious diking and paving materials. Basis for Decision at 10-13 and 16.

Borden will create an emergency response plan to address accidental releases and off-site consequences for 140 toxic and/or flammable substances. LDEQ determined that the plant has been subjected to a detailed process hazard analysis to reduce the likelihood of accidental airborne emissions. Materials of construction for tanks, equipment, piping and accessories will be compatible with process fluids to prevent failure from corrosion, stress cracking or fatigue. Personnel will also be trained and tested in the use of operation of appropriate safety equipment and will be able to identify potential hazardous associated with the chemicals and processes at the facility. *Id.* at 12 - 13.

2. Whether a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the project demonstrate that the latter outweighs the former.

LDEQ found that the social and economic benefits of the project will greatly outweigh its environmental impact costs.

---

[38] EPA determined that the emission reduction credits (ERCs) relied upon by Borden were not surplus, and therefore could not be used as offsets. Section VI, *supra*.

Formaldehyde is used as raw material in a variety of chemical processes. LDEQ found that a number of chemical facilities in the region are expanding their production capacity for the chemicals that they manufacture. Therefore a derived demand for the raw material, formaldehyde, has increased. There is no excess supply of formaldehyde in the region. Alternate shipping would increase the amounts of formaldehyde solution which would traverse the parish via rail tank car and over the roadways. *Id.* at 27.

LDEQ noted that the proposed facility will be located in an area of property zoned for industrial development and previously used for industrial purposes. In addition, the proposed plant will be located in an area designated as an enterprise zone, which was established to encourage growth and development of the private sectors in depressed economic areas of the State of Louisiana. *Id.* LDEQ also found that

> "construction and operation of the new plant will create both temporary and permanent jobs, and an increase in the tax base. The capital phase of the project will create direct spending in the state's economy."

Id. Borden will also employ several full time equivalent employees. *Id.*

In addition, Borden utilized the Regional Input-Output Modeling System (RIMS II), created by the U.S. Department of

Commerce, Bureau of Economic Analysis to determine the indirect economic impacts from this project. According to the author of the Report, this system "is the most widely used tool for estimating the direct and indirect impact on (1) business sales of Louisiana firms, (2) personal earnings of Louisiana households, (3) the number of jobs created by the proposed construction and operation of [the proposed" units.[39] The results of the modeling indicate that $1,738,000.00 will be paid in sales taxes resulting from the purchase of equipment and construction of the project. Basis for Decision at 28.

3. Whether there are alternative projects or alternative sites or mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.

The proposed plant will be located in an industrialized area adjacent to Borden's primary customer and its raw material supplier. This raw material supplier (Borden Chemicals and Plastics) will provide utility services to Borden via pipeline using existing water supply and purification capacity thus minimizing utility wastewater discharge at Borden's plant. No new land will be consumed for the construction of the formaldehyde plant and the planned use does not require rezoning.

---

[39] Dr. James A. Richardson, *The Economic Impact of the Construction and Operation of Two Formaldehyde Process Units by Borden Chemical, Inc. in Ascension Parish on the Regional and State Economy* (Basis for Decision, Attachment A).

Id. at 5-6. LDEQ determined that Borden's process has a very low risk of off-site emissions, and public and environmental exposures are minimized during transport since feedstock and most product will transfer via pipeline. LDEQ found that there are few residences nearby and there are no schools or hospitals in close proximity to the proposed plant. The existing abandoned chemical process equipment will be removed, and thus the site will once again contribute to the local economy. LDEQ also determined that the project will not have an impact on sensitive wildlife or wildlife habitats, and that no rare or endangered species or critical habitats are located with the area of the project. Further, no estuaries, historical, culturally significant, or archaeological sites or culturally significant resources are affected. *Id.* at 6 and 8.

"The planned emission control technology meets and in some cases exceeds that required by the regulations." *Id.* at 11. The sale of steam from the plant may actually reduce emissions at neighboring sites because it would replace emissions from fuel fired boilers. *Id.* at 7. Therefore, LDEQ found that there were no mitigating measures which would offer more protection to the environment without unduly curtailing non-environmental benefits.

Other sites considered were located in Alexandria, Louisiana, Luling, Louisiana, and Vicksburg, Mississippi. All three sites had insufficient space. Additionally, methanol would

have to be imported to all three sites. One required re-zoning. Formaldehyde would have to be shipped by truck or rail at two of the sites. Thus, these sites were either not economically viable or would cause increased potential impacts on the environmental due to truck and rail usage. *Id*. at 6 - 7.

As previously noted, the Georgia Gulf ERCs originally relied upon by Borden were not surplus, and therefore could not be used as offsets. However, these ERCs are no longer part of the original permit due to the recent permit modification, discussed earlier. *See* Sections VI and VII. Absent any future issue regarding validity of ERCs, Louisiana's alternatives analysis seems to satisfy the statutory requirements of Section 173(a)(5) of the Act. In short, the site selected by Borden and the controls imposed by LDEQ under the Title V permit maximize the social, economic and environmental benefits to the local community while minimizing the potential adverse impacts. As a result, the petition to object to Borden's permit on this ground is denied.

IX. PERMIT APPLICATION

The Petitioner alleges that "Borden's application for its air permit fails to comply with L.A.C. 33:I.1701: Requirements for obtaining a permit. L.A.C. 33:I.1701 requires, among other things, that a permit applicant cannot have a history of environmental violations that demonstrate an unwillingness to achieve and maintain compliance. In addition, the applicant must

submit a list of states where it has permits similar to the one which is being applied for." This regulation became effective on the date it was published in the Louisiana Register, April 20, 1999. The Petitioner contends that Borden should be required to comply with this regulation even though it was finalized after it submitted its application. Petition at 9.

The state regulation referenced by the Petitioner, L.A.C. 33:I.1701, is not an applicable requirement under the Act because it has never been made a part of Louisiana's federally-approved SIP. As a result, it is beyond the scope of the Title V petition process. 42 U.S.C. § 7661d(b).

X. RISK MANAGEMENT PLAN

The Petitioner contends that EPA should have objected to the permit because a risk management plan (RMP) was not submitted prior to Borden beginning construction. The Petitioner asserts that the estimated 98 million gallons per year of methanol and formaldehyde that will pass in and out of the plant creates a potential for disaster. Requiring a RMP prior to construction would result in the incorporation of preventive measures into the project. Petition at 11-12.

The requirements for submitting a RMP are found in 40 C.F.R. § 68.150. This regulation requires the owner or operator of a facility that has more than a threshold quantity of a regulated substance in a process to submit a RMP by the latest of the following dates: (1) June 21, 1999; (2) three years after the

date on which a substance is first listed under 40 C.F.R. § 68.130; or (3) the date on which a regulated substance is first present above a threshold quantity in a process. 40 C.F.R. §§ 68.10(a) and 68.150(b). 40 C.F.R. § 68.130 establishes two lists: a list of toxic substances and a list of flammable substances. Both lists include threshold quantities.

The Petitioner specifically mentions the presence of formaldehyde and methanol at the plant site. Petition at 11. Formaldehyde (solution) is required to be addressed in a risk management plan when it is present above 15,000 pounds. 40 C.F.R. § 68.130, Tables 1 and 2. Methanol and its synonyms, methyl alcohol, carbinol and wood alcohol, are not listed on the flammable substances or toxic substances lists.

The Borden permit lists 40 C.F.R. § 68.150(b)(3) as an applicable requirement. Borden Permit, Table 2. This regulation requires the facility to submit an RMP on the date on which a regulated substance is first present above the established threshold quantity. The permit further instructs the company to "comply with all applicable provisions of 40 CFR 68, including the submittal [of] a Risk Management Plan no later than the date on which a regulated substance is first present above a threshold quantity in a process." Borden Permit, Table 2.

Thus, until Borden has more than 15,000 pounds of formaldehyde (solution) on site in a process, it is not required to submit a RMP. Therefore, the request to object on this ground

is denied.

XI. MACT STANDARDS

The Petitioner claims that the proposed permit fails to meet the maximum achievable control technology (MACT) required in Title III of the Act and in L.A.C. 33:III, Chapter 51, including the emission standards required in Section 112(d)(3) of the Act. Specifically, the Petitioner claims that Borden's catalytic oxidizers, oxidizer 1 and oxidizer 2, do not meet the emission standards in Section 112(d)(3) of the Act, because the process vent emissions standards in 40 C.F.R. Part 63, Subpart G (known as the Hazardous Organic NESHAP or HON) do not meet the requirements of Section 112(d)(3) of the Act. Petition at 12-13.

The HON establishes levels of performance for devices used to control emissions of hazardous air pollutants from process vents at facilities that manufacture synthetic organic chemicals. The HON applies to all subject sources regardless of whether they are existing or newly constructed sources. For process vents, the performance level established by the HON is 98% removal efficiency.[40] EPA regulations specify monitoring parameters for several different types of control devices that may be used to

[40] As an alternative to complying with the 98 weight percent reduction, sources may (1) reduce emissions of organic hazardous air pollutants to an outlet concentration of 20 parts per million by volume, (2) use a flare that meets the criteria in 40 CFR section 63.11, or (3) install additional recovery equipment to achieve and maintain a TRE index value >1.0. 40 C.F.R. § 63.113(a).

achieve this performance standard, including catalytic incineration, although other control devices may be used under proper circumstances. *See* 40 C.F.R. §§ 63.100(b) and 63.114.

The Petitioner claims that the oxidizers do not meet the MACT standards, citing an EPA document *Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards*, Volume 1B, Control Technologies.[41] The Petitioner also claims that the EPA document grossly underestimates the control efficiency of incinerators and that these devices can achieve destruction efficiencies of 99.99 percent and beyond. The Petitioner implies that catalytic oxidizers must have the same destruction efficiency as incinerators. Petition at 13.

Section 112(d) of the Act requires the Administrator of the

---

[41] The Petitioner asserts that the EPA technical document, *Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards*, "clearly states that catalytic oxidation is the poorest control device of the six types discussed." Petition at 13. However, this technical background document does not rank the various control devices nor imply that catalytic oxidation does not meet the MACT requirements. Rather the document describes the various control technologies, discusses the factors affecting performance, evaluates the applicability of the technologies to the Synthetic Organic Chemical Manufacturing Industry (SOCMI) and provides information on control efficiency (including both VOC destruction efficiencies and HAP destruction efficiencies where available). Although there may be more limitations on the applicability of catalytic incinerators than other technologies, when properly applied in appropriate circumstances, there is no reason to believe that performance of catalytic incinerators should be inferior to any other combustion device.

EPA to promulgate regulations establishing emission standards that the Administrator determines meet certain criteria. The requirements that are applicable to the source are the regulations promulgated by the EPA. The Petitioner concedes that the permit meets the requirements of the HON regulation, but requests that the regulation be reevaluated. *Id.* at 12.

However, a petition under Title V is not the appropriate forum for seeking reconsideration of a final regulation. In short, it is beyond the scope of the Title V petition process to reopen existing regulatory requirements. Section 505(b)(2) of the Act authorizes the Administrator to object to a permit only when the petitioner demonstrates that "the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable [state] implementation plan." *See also* 40 C.F.R. § 70.8(c)(1) ("The Administrator will object to the issuance of any proposed permit determined by the Administrator not to be in compliance with the applicable requirements or requirements under [Part 70]"). Here, the petitioner acknowledges that the permit is consistent with the HON standards for process vent emissions. As such, the Administrator has no basis for objecting to the permit under Title V of the Act and the request to object on this ground is denied.

XII. ALLEGED DISCRIMINATION UNDER TITLE VI OF THE CIVIL RIGHTS ACT

Section 601 of the Civil Rights Act of 1964 provides the following:

> No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

42 U.S.C. § 2000d.

Specifically, the Petitioner alleges that the permit should be denied because of the "discriminatory effects resulting from the issuance of pollution control permits by the State of Louisiana and [LDEQ] in and near the Geismar area of Louisiana." Petition at 14-15. The Petition "further alleges that the granting of a permit allowing air emissions from the proposed Borden formaldehyde facility will be a discriminatory act and will create a disparate impact that adds to an existing disparate impact on a racial or ethnic population, creates a disparate impact on a racial or ethnic population, or adds to a disparate impact on a racial or ethnic population." *Id*. at 15. Finally, the Petitioner requests that

> EPA and the Department of Justice investigate all permitting efforts by the State of Louisiana and determine if civil rights violations have occurred due to effects resulting from the issuance of pollution control permits by the State of Louisiana and [LDEQ] in the Geismar area, and that these and other federal agencies find a method or remedy for alleviating these civil rights violations.

Id.

As a recipient of EPA financial assistance, the programs and

activities of LDEQ, including its issuance of the Borden Permit, are subject to the requirements of Title VI of the Civil Rights Act and EPA's implementing regulations (40 C.F.R. Part 7). EPA is reviewing the Petitioner's Title VI complaint to determine whether to accept the complaint for investigation. EPA's Office of Civil Rights will notify the Petitioner about its decision.

However, to justify exercise of an objection by EPA to a Title V permit pursuant to Section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), the Petitioner must demonstrate that the permit is not in compliance with the requirements of the Act, including the requirements of the Louisiana SIP. While there may be authority under the Clean Air Act to consider civil rights issues in some circumstances, the Petitioner did not demonstrate that the Borden permit fails to comply with the applicable requirements of the Act. *See Shintech, Inc.* Permit No. 2366-VO, 2467-VO, 2468-VO (Sept. 10, 1997), at 9. Thus, the request to object on this ground is denied.

XIII. CONCLUSION

As set forth more fully in Sections VI and VII above, the ERCs with which Borden proposed to offset its emissions are not valid. Without the offsets, Borden's Permit also failed to represent reasonable further progress in achieving the ozone standard in the Baton Rouge nonattainment area as required under Section 173(a)(1)(A) of the Act, 42 U.S.C. § 7503(a)(1)(A). However, for the reasons set forth above, these deficiencies are

now moot in light of LDEQ's recent revisions to the Borden Permit. Accordingly, I dismiss as moot those portions of the petition. I deny the remainder of the LEAN petition.

Date: December 22, 2000

Carol M. Browner
Administrator

APPENDIX A - GEORGIA GULF PERMITTING HISTORY THROUGH 1995[42]

Georgia Gulf's phenol/acetone unit was constructed in 1970 - 1971. At the time, the plant site was owned and operated by Georgia-Pacific Corporation. The original permit application for construction was submitted to the Louisiana Air Control Commission on March 26, 1970. The permit application was approved on December 18, 1970, and assigned number LA-41.

In 1979, the phenol/acetone unit was expanded. A permit application for the expansion was submitted to the Louisiana Air Control Commission on October 11, 1979. The application stated that the VOC emissions from the expansion were expected to be 70 TPY. The permit was issued on October 25, 1979, and assigned number 1267T.[43]

After the expansion was complete, actual emissions were found to be much higher than the expected 70 TPY. On March 19, 1981, the Louisiana Department of Natural Resources sent a letter to Georgia-Pacific requiring emission reductions for compliance with the Louisiana SIP by December 31, 1982. To accomplish this,

---

[42] This permitting history section only relates to certain emission points necessary for the Order and not to the entire facility.

[43] According to LDEQ, Permit No. 1267T, issued October 25, 1979, was simply a one page letter referencing the application. It contained no emission limits. Memo from Brian D. Johnston, Permits Division, LDEQ to Mary Stanton, EPA dated December 2, 1999. Presumably the 70 TPY emission limit was set by the data in the permit application. One page of the application lists emissions from a revised emission inventory questionnaire dated October 10, 1979 which lists 69.839 TPY of non-methane hydrocarbon emissions in 1979.

a centralized vent recovery system was installed. This system controlled vents from 26 sources which had previously vented to the atmosphere. The system reduced total VOC compounds by 1530 TPY.[44]

LDEQ also contends because of permitting procedures at the time, a 1984 Emission Inventory Questionnaire submitted by Georgia Gulf became a part of Permit No. 1267T. LDEQ claims that the submission of this document set a new permitted limit of 397 TPY for the unit.[45] However, for the reasons set forth below, EPA cannot accept this assertion.

In 1979, Georgia Gulf expanded its phenol/acetone unit, claiming that the expansion and the subsequent increased production would occur without an increase in emissions.[46] However, actual emission were found to be much higher.[47] Permit 1267T, which set a 70 TPY limit, stated that a new application must be submitted if the reported emissions are exceeded after operation begins. In addition, an increase in emissions due to a plant expansion would meet the definition of a "modification"

---

[44] Georgia Gulf's February 25, 1993 Permit Modification Application [Permit No. 1267T(M-1)].

[45] *See* Memo from Brian D. Johnston, Permits Division, LDEQ to Mary Stanton, EPA dated December 2, 1999; Georgia Gulf's February 25, 1993 Permit Modification Application [Permit 1267T(M-1)].

[46] Letter to James F. Coerver, Louisiana Air Control Commission from James J. Davies dated October 11, 1979.

[47] Georgia Gulf's February 25, 1993 Permit Modification Application [Permit 1267T(M-1)].

under then Louisiana Environmental Control Commission Air Quality Regulation (Air Quality Regulation) 4.38 (1982). A change in the permitting limit from 70 TPY to 397 TPY should have triggered the permit modification requirements of then Air Quality Regulation 6. Also, Air Quality Regulation 6.6 provides that a permit modification cannot be acted upon unless, *inter alia*, notice and public comment is given. A review of LDEQ's permitting files did not reveal that this occurred.

In addition, then Air Quality Regulation 17.12 required an annual submission of an emission inventory questionnaire if emissions changed significantly (5% or more from an emission source from levels on file). Thus, an increase of over 300 TPY qualifies as a significant increase, and Georgia Gulf was therefore required to submit an emission inventory to LDEQ even if LDEQ did not request a submittal. This regulation also provides that LDEQ could require Georgia Gulf to submit an emission inventory, which occurred in this case. There is nothing in Air Quality Regulation 17.12 which indicates that submission of an emission inventory constitutes a permit modification. Therefore, simply appending an emission inventory questionnaire to a permit cannot be considered a modification to the permit, and thus the correct permit limit for Permit 1267T should be 70 TPY.[48]

---

[48] Georgia Gulf's Title V permit application lists the permitted limit as 40.1 TPY. However, the 70 TPY corresponds to (continued...)

On October 28, 1985, LDEQ requested additional information concerning emissions from the Phenol Unit Carbon Adsorbers (now referred to as the Primary Carbon Adsorbers), EIQ point 4-70. The 1985 emissions inventory for this point source indicated emissions in excess of the 1982 hydrocarbon compliance schedule. Georgia Gulf explained that a cumene oxidation air rate corresponding to annual production of 280 million pounds per year phenol had been used in the calculations rather than the air rate of design production. In addition to the error in flow rate, new analytical technology employed in 1983 allowed for detection of light components in the Carbon Adsorbers vent stream that had not been accounted for. Thus, the reported emissions for EIQ point 4-70 increased by 173 TPY to 301 TPY although no actual process change occurred.[49]

On June 12, 1991, Georgia Gulf applied for a permit exemption in order to install a control device formally referred to as the Secondary Carbon Adsorbers (EIQ Point 1-90). LDEQ granted the permit exemption for this project on September 10, 1991. This project routed vents from several different point sources to existing control devices and further controlled vents

---

[48](...continued)
the limit set forth in the permitting history section of Georgia Gulf's February 25, 1993 Permit Modification application [1267T(M-1)]. However, whether it is 70 TPY or 40 TPY is irrelevant for the purposes of this Order.

[49] Georgia Gulf's February 25, 1993 Permit Modification Application [Permit 1267T(M-1)].

from the existing control devices with the Secondary Carbon Adsorbers. More specifically, the Oxidizer "A" Feed Drum (EIQ Point 52-73) was directed to the Primary Carbon Adsorber (EIQ Point 4-70), and the AMS Tower Rundown Tank and the AMS Day Tank Vent (EIQ Points 55-73 and 56-73, respectively) were routed to the Centralized Vent Recovery System (CVRS) (EIQ Point 6-83). These four emission points (EIQ Points 52-73, 4-70, 55-73, and 56-73) previously discharged into the atmosphere. Additionally, the Primary Carbon Adsorber, the CVRS, and the Methanol Fusel Oil Tank (EIQ Point 5-73) were vented through the Secondary Carbon Adsorbers. The net result was an elimination of five (5) point sources and approximately 184.10 TPY of VOC emissions. The permit exemption estimated emissions of 45.04 TPY, and set a limit for hydrocarbon exhaust gas of less than 200 ppmv.[50]

Permit 1267T(M-1) issued July 2, 1993, consolidated the existing permitted unit, including the changes previously implemented by the September 10, 1991 permit exemption, into a single permit. This permit also set the limit for the exhaust gas hydrocarbon concentration from the Secondary Carbon Adsorbers at 200 ppmv, based on a three hour average. The permitted limit for VOCs for EIQ 1-90 was 27.20 TPY.

Permit 1267T(M-2), issued October 6, 1994, involved the

---

[50] Public Response to Comments, Formaldehyde Plant, Borden Chemical Inc. at 8 (Response to Comments); Georgia Gulf's February 17, 1995 Emission Reduction Credit (ERC) Banking Application; September 16, 1991 Permit Exemption.

replacement of the heavy ends tank with a larger tank. This tank vented to the CVRS and the Secondary Carbon Adsorbers (EIQ 1-90). The permit limit for VOCs for EIQ 1-90 was 26.07 TPY.

On February 17, 1995, Georgia Gulf submitted an Emission Reduction Credit (ERC) Banking Application to LDEQ. Georgia Gulf sought, *inter alia,* to bank 184.10 TPY of VOC emissions reductions resulting from the installation of the Secondary Carbon Adsorbers. Georgia Gulf calculated the emission reductions as follows:

Table 1

Secondary Carbon Adsorption Beds, EIQ 1-90, Start up 11/91

Emission Sources Eliminated				
		1989	1990	2 Yr Avg
Source	EIQ No.	TPY	TPY	TPY
A Oxidizer Feed Drum	52-73	6.16	6.16	6.16
Fusel Oil Tank	58-73	1.71	1.77	1.74
Primary Carbon Beds	4-70	201.86	161.88	181.87
Vent Recovery System	6-83	20.41	20.41	20.41
				210.18
Permitted VOC Emissions, TPY - 26.07				
Previous 2 year Average Emissions, TPY				210.18
Current Application Emission Limits, TPY				26.07
VOC Reduction Credit, TPY				184.11

On October 26, 1995, LDEQ issued Georgia Gulf an ERC

Certificate approving the 184.10 TPY as ERCs.[51]

[51] Acetone was delisted as a VOC on June 16, 1995. 60 *Fed. Reg.* 31633. Assuming that the emission reductions were actually surplus, the correct amount of ERCs listed on the certificate should have been 152.33 TPY, not 184.10 TPY. *See* Response to Comments at 8.

In addition, since L.A.C. 33:III.617.G provides that ERC bank balance sheets shall be reviewed in accordance with state and federal rules *in effect at the time of submittal* of the ERC bank balance sheet, this analysis does not include Permit No. 1267T(M-3). Permit 1267T(M-3), which set a limit of 18.11 TPY for EIQ 1-90, was issued on October 13, 1995, thirteen days before LDEQ issued the ERC Certificate to Georgia Gulf. Ordinarily, LDEQ should have taken this into account at the time the ERC Certificate was issued. In addition, since the Clean Air Act and Louisiana's regulations as approved by EPA require that the ERCs be surplus at time of use(*see* Section VI.C, *supra*), this should have been taken into account when LDEQ reviewed the ERCs Borden purchased during the permit review process.