

IN THE MATTER OF
FORMALDEHYDE PLANT
BORDEN CHEMICAL, INC.
PROPOSED OPERATING PERMIT

Proposed by the Louisiana
Department of Environmental Quality

PETITION FOR OBJECTION TO PERMIT

Louisiana Environmental Action Network (LEAN) brings this Petition for Objection to Permit pursuant to Clean Air Act section 505(b) and 40 CFR 70.8(d). LEAN objects to issuance by the Louisiana Department of Environmental Quality (LDEQ) of a state preconstruction and Part 70 operating permit to Borden Chemicals, Inc. for its new Formaldehyde Plant in Geismar, Louisiana because the permit is not in compliance with the requirements of the Act. LEAN is an incorporated, non-profit organization. LEAN members live, work and recreate in the Geismar area. LEAN and its members participated in the state permit proceeding by submitting comments and attending the public hearing. LEAN opposes the proposed permit because LEAN believes that the new source will interfere with the attainment of the National Ambient Air Quality Standard (NAAQS) for ozone in the Baton Rouge area.

1. Violation of public notice and comment provisions.

Section 502(b)(6) of the Act and 40 CFR 70.7(h) provide for public participation in the permitting process. 40 CFR 51.161 provides for public availability of information. Meaningful public participation can only occur when members of the public have access to relevant information. However, in this case, LDEQ denied a member of LEAN, Gary Miller, access to application documents during the review period following public notice.

LLDEQ provided public notice of a proposed trade of emissions from Georgia Gulf Corporation to Borden Chemicals, Inc. on April 13, 1999. Two days later, LDEQ provided public notice of the proposed permit for Borden's Formaldehyde plant using the Georgia Gulf ERCs. The comment deadline for the ERC trade was therefore May 13, 1999. The comment deadline for the Borden permit application was May 15, 1999.

On April 26, 1999, Gary Miller visited LDEQ and requested documents relating to the ERC transfer from Georgia Gulf to Borden. Specifically, he asked to see Georgia Gulf's permit to determine whether the ERCs were surplus, enforceable, permanent and quantifiable as required by state and federal law and regulations. CAA §173(c)(2); LAC 33:III.607(F)(1). Miller also asked to see the Borden permit application. LDEQ staff told him both Georgia Gulf's permit and the Borden application were unavailable. LDEQ staff told Miller that they thought they knew who might have the requested documents but that both of these people were not in.

Miller returned to LDEQ a second time and the documents were again unavailable. After legal consultation, Miller prepared a public record request pursuant to the Louisiana Public Records Act, La. R.S. 44:1-43. Finally, on May 27, 1999, two weeks after the deadline for public comment,

LDEQ staff provided Miller with the Borden application and Georgia Gulf permit number 1267T M-5. This Georgia Gulf permit number was listed as the source of the ERCs in the noticed transfer between Georgia Gulf and Borden. However, examination of this permit revealed that it contained no source of reductions for banking purposes and was therefore useless for purposes of trading emissions under the ERC banking system.

Pursuant to a request by LEAN, LDEQ extended the public comment deadline and scheduled a public hearing. However, the failure of LDEQ to provide timely public access to documents relating to a permit application is a serious violation of the department's duty as a public trustee and the department's duty to provide the public access to these records. LDEQ had a duty to present these public records to any person who requested them. La. R.S. 44:32. The public record law provides that if the record applied for is not immediately available because of its being in active use at the time of the application, the custodian shall promptly certify this in writing to the applicant and shall fix a day and hour within three days for the exercise of the right to view the record. La. R.S. 44:33(B). LDEQ failed to provide this certification.

Based on LEAN's experience, other members of the public may well have been denied access and the right to comment on this proposed source of air pollution because of LDEQ's failure to provide the public with these documents. Because LDEQ denied the public access to information relevant to the permit, EPA should object to the issuance of this permit.

2. The ERCs with which Borden proposes to offset its emissions are not valid.

According to documents that LEAN was finally able to obtain from LDEQ, the ERCs that Georgia Gulf (GG) sold to Borden came from GG's Phenol/Acetone unit. GG claimed to have created emission reductions of 184.1 tpy in 1990 by a "Secondary Carbon Absorption" project. However, in GG's most recent application for a modification of the plant, GG lists a "History of Permitted Emissions." In 1970, GG was permitted to emit 967 tpy of VOCs. In 1979, GG was permitted to emit 40.1 tpy; in 1993, 33.3 tpy. Currently GG has permission to emit 22.30 tpy. If GG was only permitted to emit 40.1 tpy in 1979, the reduction of 184.1 tpy in 1990 cannot be credited as an ERC. Furthermore, if the reduction took place before 12/31/89, GG should not have been allowed to bank it according to the Louisiana Regulations, which prohibit banking of reductions made prior to 1990.

In the ERC application submitted by GG, the source of the reduction is listed as EIQ # 1-90. However, EIQ #1-90 did not meet the requirements of the Clean Air Act (CAA) and was replaced by a thermal oxidizer. CAA §173(c)(2) states that "[e]mission reductions otherwise required by this chapter shall not be creditable as emissions reductions for purposes of any such offset requirement." Because EIQ #1-90 was replaced to comply with the CAA, the associated reductions cannot be creditable as emissions reductions for the purposes of the offset requirement Borden must satisfy.

EPA should have objected to this permit because the offsets were not valid. Furthermore, LDEQ's banking database is so inaccurate that it would be impossible for EPA or the public to determine whether any emissions in

the database meet Clean Air Act requirements.

3. A new facility in the Baton Rouge non-attainment area will hinder reasonable further progress in achieving the ozone standard.

The Clean Air Act §173(a)(1) provides that, in this case, a permit may be issued if LDEQ has determined that by the time Borden begins operation, sufficient offsetting emissions reductions will have been obtained such that total emissions will present reasonable further progress. Reasonable further progress (in this case) means reductions in emissions of VOCs for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date. CAA §171.

LDEQ has admitted in the 1998 Air Quality Annual Report that the Baton Rouge area "will fail to meet the ambient ozone standard by November 15, 1999." (p. 26). Even though LDEQ calculated for new emissions in its reasonable further progress demonstration, it is obvious that additional new emission sources will hinder attainment. Yet LDEQ is proposing to grant a permit to Borden for an entirely new source of emissions. EPA should have objected to Borden's permit in light of the area's failure to meet ozone attainment.

We further contend that the requirements for reasonable further progress are included in, but not limited to, Section 173(a)(1)(A). This section is referenced by Sections 172(c)(5) and 182(a)(2)(C). This permitting provision first requires an emissions reduction below the baseline value, and in accordance with Section 182(c)(10) for serious ozone nonattainment areas. In addition, 173(a)(1)(A) requires that these reductions also represent reasonable further progress as defined in Section 171, which requires adequate emissions reductions "for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date."

The only emissions reductions achieved by the Borden permit was the proposed 1.2 to 1 reduction required in Section 182(c)(10). Unfortunately, this degree of reduction will not ensure attainment by November 15, 1999, the applicable date for the Baton Rouge nonattainment area. The emissions reduction proposed to be used by Borden was banked in the early 1990's, a time in which Baton Rouge was making progress towards attainment, and a time when attainment by 1999 looked very probable.

Since the early 90's, the ozone problems in the Baton Rouge nonattainment area have gotten much worse, with the last four years being especially bad. At the start of 1999 Baton Rouge had four of its eleven monitors in noncompliance and three more very close to noncompliance. Baton Rouge is assured of having monitors in noncompliance by the November, 15, 1999, attainment date.

This compares to 1994 when Baton Rouge had only two monitors out of compliance and the hope of achieving attainment by 1999. There have been several policy decisions that have pushed Baton Rouge farther away from attainment, and allowing the increased emissions from the proposed Borden formaldehyde plant in the manner proposed in the permit would do the same. The proposed permit for this facility can only make the ozone problems worse, and can't possibly meet the requirements of Title I of the CAA.

4. The environmental impacts of this facility significantly outweigh the social and economic benefits of the facility.

CAA §173(a)(5) provides that permits to construct and operate may be issued if LDEQ determines that an analysis of the alternative sites demonstrates that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location. Under Louisiana State regulations, LDEQ must consider whether the environmental impact costs of this new facility are significantly outweighed by the social and economic benefits of the facility. LAC 33:III §504(D)(7).

Borden proposes to release methanol, formaldehyde, ethylene glycol and biphenyl, into the air of the most polluted parish in the state. According to the 1997 Toxic Release Inventory, Ascension Parish is far and away the leader in toxic releases in Louisiana with almost 62 million pounds of total toxic discharges. Ascension Parish is also the leader in total releases to air with 18.6 million pounds of toxic chemicals.

In exchange for further pollution of their air, the residents of Geismar were promised an estimated eleven (11) new jobs at the facility. At the public hearing, company officials revised this estimate to eight jobs and admitted that current Borden employees already filled some of these positions. Realistically, this plant will provide three or four new jobs. This is hardly a social and economic benefit to the Geismar area. Borden officials offered no guarantee that these jobs or construction jobs would be given to local residents most affected by the facility.

Furthermore, Borden has applied for an Industrial Tax Exemption that further reduces any economic benefit to the Ascension area. Company officials admit that Borden will pay no local property taxes for five years.

At the public hearing residents raised concerns about additional traffic on local roads. Despite Borden's repeated touting of the benefits of its pipelines to transport formaldehyde, Borden admits in its environmental assessment that its facility will result in an additional five trucks per day on local roads transporting formaldehyde and other chemicals. Clearly, the costs to the environment in Ascension Parish are not outweighed by social and economic benefits.

Alternative sites exist that would offer more protection to the environment. Borden can build the cleanest formaldehyde plant in the world but it should not be built in Ascension Parish. No matter how clean Borden's plant operates, the facility will add to the desperate pollution problem in Ascension. This parish leads the state and the nation in toxic releases. There are other parishes and other states which are not already unduly burdened with pollution where this plant would have far less adverse effect on the environment.

LDEQ failed to make an independent alternative sites demonstration. LDEQ relied solely on Borden's self-serving analysis of alternative sites. Borden discusses the economic benefits to the corporation's bottom line of siting the facility in Geismar and ignores the environmentally logical alternative of siting the facility in a more suitable location where pollutant levels are not already dangerously high. EPA should object to this permit

being issued because the environmental costs are not outweighed by the benefits, alternative sites exist that offer more protection to the environment, and the state agency failed to make an independent finding that the benefits significantly outweigh the environmental costs imposed as a result of its location.

5. Borden has failed to submit a complete application.

Louisiana Revised Statute 30:2014.2 required the Secretary of LDEQ to adopt rules by July 1, 1998 setting out the qualifications and requirements for a person to be granted a permit. These rules were finally promulgated in 1999. However, Borden's application for its air permit fails to comply with LAC 33.I.1701: Requirements for obtaining a permit. This regulation requires Borden to have no history of environmental violations that demonstrate an unwillingness to achieve and maintain compliance and to owe no outstanding fees or penalties. Also Borden must submit a list of states where it has permits similar to the one which is being applied for. Even though this regulation was finalized after Borden initially applied for its permit, Borden should be required to comply with this regulation.

6. The environmental assessment of the site conducted by Borden was inadequate.

The proposed site is a former chemical process facility that has lain abandoned for nearly 30 years. The site contained an abandoned anhydrous hydrochloric acid (HCl) manufacturing operation. During Morton Chemical Company's operation at this site, the chemical industry lacked regulation and had limited technology to control releases of toxic substances. The circumstances under which this site was in use, as well as the potential for contamination, mandate intensive testing of the site. In addition to the past contamination of the site, the area is an existing hotbed for large-scale chemical process facilities. The proximity of the proposed facility to existing operations increases the concentration of generated pollutants in a region already suffering from non-attainment status. In a time when dispersion of such contaminants is mandatory for the survival of ecosystems, Borden is proposing to put in place the devastating blow to an area crippled by pollution just because of the site's economic viability.

Borden has only conducted a remedial Phase I environmental assessment. Surface soil testing revealed no contamination of the site; however, the testing of a site with such a history demands a more extensive testing process. At a minimum, soil cores should be drawn for inspection by mass spectrometry to test the soil below the surface. The close proximity of the Mississippi Alluvial Aquifer, the Norco Aquifer and the Gonzales-New Orleans Aquifer to the proposed site dictates extensive testing to insure there has been no contamination from previous use. The implementation of monitoring wells for all three aquifers is necessitated by the very real possibility of extensive contamination.

Borden has not conducted any subsidence studies to insure the safety of the proposed plant and the fore-mentioned aquifers. The land sustained a considerably smaller facility more than thirty years ago. The proposed plant will place strains upon the land never before seen. The consideration of the land's ability to support such a facility is a real and significant concern.

Therefore, a permit should not be issued until thorough testing of the site, including soil borings, testing of the aquifer beneath the property, and subsidence studies have been completed.

EPA should object to the issuance of this permit until sufficient testing determines that the site will not need to be placed on CERCLIS.

7. Borden does not have a Risk Management Plan on file.

A Risk Management Plan should be provided before Borden is allowed to begin construction. The 98 million gallons per year of methanol and formaldehyde that will pass in and out of the plant have an immense potential for disaster. Of those 98 million gallons, 56% will ship via pipeline from adjacent facilities. Approximately 210,000 gallons per day will travel underground in a system that borders three aquifers. A leak would cause an environmental catastrophe unparalleled to date. Approximately 35% of the chemicals will ship via rail tank car, and the remaining 9% will ship via tank truck adding five trucks per day to the roadways. On-site storage of formaldehyde presents a major threat to the community of an irritating, odorous and gaseous compound. The dangers are real and demand serious attention before the people of Geismar and the ecology are exposed to these hazards.

In light of the recent tragedy at Kaiser Aluminum and Chemical Corp. in Gramercy, LA, preparedness is not only important but also essential. Requiring Borden to meet the imposed responsibilities of EPA's new law requiring "worst credible scenarios" for potential accidental releases of hazardous materials, along with the development of a Risk Management Plan for dealing with those accidents, supplements the goals of the construction permitting process. Considering the potential hazards before construction incorporates preventative measures into the project. Such planning creates proactive problem prevention as opposed to reactive remediation that never benefits the environment.

EPA should have objected to the permit for the failure to include a Risk Management Plan.

8. Failure to Meet MACT Standards.

The proposed permit fails to meet the Maximum Achievable Control Technology (MACT) standards required in Title III of the CAA and in LAC 33:III Chapter 51, including the emissions standards required in 112(d)(3) of the CAA. For new sources the federal and state requirement for MACT emissions standards is; "The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source".

Specifically, the catalytic oxidizers, oxidizer 1 and oxidizer 2, do not meet the state or federal MACT emissions standards requirements. We do agree that this control equipment meets the requirements of the HON Subpart G providing Borden can pass its performance tests and compliance demonstration. However, these catalytic oxidizers don't meet the emissions standards stated in 112(d)(3).

The EPA developed process vent emissions standards in CFR 40, Chapter 1, Subchapter C, Part 63, Subpart G that were supposed to meet the MACT emissions standards of the CAA. CFR 40, Chapter 1, Subchapter C, Part 63, Subpart G is commonly referred to as part of the HON. Unfortunately these HON process vent provisions do not meet the MACT emissions standards required in the CAA.

The EPA agrees that the oxidizers don't meet the MACT standards in the 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". In this background information document (BID) the combustion control devices are discussed in Chapter 2.1.

This discussion of combustion control devices clearly states that catalytic oxidation is the poorest control device of the six types discussed, which included elevated flares, ground flares, boilers, process heaters, incinerators and catalytic oxidation. The discussion states that EPA tests have shown process heaters to have much higher control efficiencies than catalytic oxidation. In addition, the BID grossly underestimates the control efficiency of incinerators by stating, "Performance tests demonstrate that thermal incinerators can achieve 98 percent destruction efficiency". It is well understood in the scientific and engineering communities that incinerators have the capability of achieving destruction efficiencies of 99.99 percent and beyond.

This EPA BID clearly demonstrates that catalytic oxidation is far from the best control technology utilized by SOCM facilities. We agree with this analysis and again state that the proposed use of catalytic oxidizers does not meet the requirements of the CAA.

We request that the EPA reevaluate and set new process vent emissions standards for the HON and that the new process vent emissions standards meet the MACT emissions definition and requirements in the CAA. In doing this we request that the EPA determine the best controlled process vent for each similar source, as required for new sources in state and federal law, see 112(d)(3). In this case the similar sources would be SOCM facilities covered under the HON. We also request that the EPA determine the average of the top performing twelve percent of existing process vents for each similar source. Again, these similar sources would be SOCM facilities covered under the HON. This is required to set the MACT standards for existing sources, as stated in 112(d)(3), but was not accomplished when the EPA finalized the HON.

We are requesting that the EPA develop improved process vent provisions for the HON that meet the requirements of the CAA. These are needed to ensure the proposed Borden facility is in compliance with the MACT provisions of the CAA and state regulations. In addition, we request that all other NESHAPs that reference the HON process vent provisions also adopt these improved and CAA compliant HON process vent control requirements so these NESHAPs too can meet the MACT emissions requirements of the CAA.

9. Submission of a Civil Rights Violation.

This is our submission of a civil rights violation and complaint under Title VI of the Civil Rights Act. This complaint is alleging that discriminatory effects resulting from the issuance of pollution control permits by the state of Louisiana and the Louisiana Department of Environmental Quality have occurred in and near the Geismar area of Louisiana. This complaint 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 an existing disparate impact on a racial or ethnic population.

In addition to submitting a civil rights complaint, we request that the Environmental Protection Agency and the Justice Department investigate all permitting efforts by the state of Louisiana and determine if civil rights violations have occurred in the past due to effects resulting from the issuance of pollution control permits by state of Louisiana and the Louisiana Department of Environmental Quality in the Geismar area, and that these and other federal agencies find a method or remedy for alleviating these civil rights violations.

Respectfully submitted,

Marylee Orr, President