

AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY BOARD ORDER

INCIDENT ID 02142

This order is issued by the Air Pollution Control Board of Jefferson County (Board) pursuant to Kentucky Revised Statutes Chapter 77 AIR POLLUTION CONTROL.

COMPANY: BORDEN CHEMICAL, INC.
6200 CAMP GROUND ROAD
LOUISVILLE, KENTUCKY

REGULATIONS INVOLVED: 2.16, 2.17, 5.02, 5.11, and 7.25

Regulation 2.16 Title V Operating Permits

This regulation establishes procedures for the District to issue operating permits under Title V of the federal Clean Air Act.

Regulation 2.17 Federally Enforceable District Origin Operating Permits

This regulation establishes procedures for the District to issue federally enforceable District origin operating permits to limit a source's emissions to below the major source threshold levels.

Regulation 5.02 Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference
This regulation lists the title and location of federal emission standards for hazardous air pollutants incorporated by reference.

Regulation 5.11 Standards of Performance for Existing Sources Emitting Toxic Air Pollutants
This regulation establishes emission standards for toxic air pollutants from existing sources.

Regulation 7.25 Standards of Performance for New Sources Using Volatile Organic Compounds
This regulation provides for control of volatile organic compounds from new sources.

NOTICE OF VIOLATION LETTER: 01201 dated July 11, 2001

BACKGROUND AND DISCUSSION:

Company operates a formaldehyde and phenolic resin manufacturing facility pursuant to Federally Enforceable District Origin Operating Permit (FEDOOP) No. 0055-97-F. Company's FEDOOP imposed limitations on emissions of certain Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) which were to be achieved through the operation of certain pollution control equipment and other operating limitations. Under the FEDOOP, emissions of any single HAP are limited to 10 tons per year and total HAPs are limited to 25 tons per year.

In October 1999, Company voluntarily disclosed to the District that it had discovered several permit noncompliances at its facility. At the same time, Company outlined measures it had already taken and proposed to take to bring the facility back into compliance with its FEDOOP as soon as

possible. The following matters were reported as noncompliances and potential noncompliances by Company.

1. Company reported that the PF-2 flaker and surge tank emissions were no longer ducted to control equipment as required by the FEDOOP due to the inability of the system to adequately exhaust the work area. Company applied for a construction permit and has since completed the necessary engineering and construction work to again duct these emissions to the boiler control system in conformance with the facility's permit. Company has begun and shall continue to maintain and operate the collection hoods and exhaust system consistent with good engineering and operating practices.
2. Emissions of phenol from the PF-1 scrubber were reported by Company to be higher than represented in the permit application and recent emission inventories. Company submitted plans to the District for improving the operational efficiency of the scrubber to achieve a higher level of phenol removal. The improvements have been completed and a stack test was performed in December 2000. Company has begun and shall continue to maintain the caustic injection system of the pH control loop added to the PF-1 scrubber consistent with good engineering and operating practices.
3. Emissions from the recovered phenol storage tank were reported by Company to be higher than estimated in the permit application and emission inventories due to an unanticipated elevated storage temperature. This resulted in emissions of phenol above the adjusted significant level from one storage tank. Company proposed to install a heat exchange system to reduce the storage temperature and phenol emission rates to below the emission limitations established in the FEDOOP. The heat exchange system has been installed and the facility reported that phenol emission rates have been reduced to below the permitted level. Company has begun and shall continue to maintain and operate this system consistent with good engineering and operating practices.
4. Non-HAP VOC emissions of butyl acetate from the wastewater treatment system were reported to exceed the allowable FEDOOP limit for the phenol and methanol recovery system established pursuant to Regulation 7.25. The butyl acetate emissions are estimated at 98 pounds per day. Company has installed an antifouling agent injection system between the raffinate filter and pump to allow resole distillate raffinates to be processed to recover butyl acetate and methanol rather than discharging the raffinates to the wastewater ponds. This has reduced emissions below the threshold applicability level of Regulation 7.25.
5. Emissions of formaldehyde from the formaldehyde storage tanks scrubber were reported to be in excess of the adjusted significant level of Regulation 5.11. To comply with Regulation 5.11, Company has increased the stack height on the scrubber from 18 feet to 26 feet. Based on the concentration and emission rate of 455 lb./yr., a BACT analysis is unlikely to result in further emission reductions.

6. As a result of the above-listed permit noncompliances, the facility reported that the 10 ton per year source-wide limitation on phenol emissions was likely exceeded beginning in May 1997. Company reported that the projected phenol emissions were approximately 13 tons per year during calendar years 1998 and 1999. Monthly phenol emissions were reduced to below an annualized 10 tons per year emission rate beginning in November 1999. Since March 2000, Company has emitted less than 10 tons per year of any one HAP and less than 25 tons per year of all HAPs combined on a rolling 12 month basis. Company has agreed to apply for a source-wide Title V permit in accordance with Regulation 2.16. Company will accept emission limitations to ensure that the facility does not emit regulated pollutants, including HAPs, above major source levels.

As a result of exceeding the FEDOOP source-wide emission limitation on phenols, Company has agreed to implement controls established under 40 CFR Part 63 subparts A, F, G, and H [the Hazardous Organic NESHAPs (HON)] as incorporated by reference in Regulation 5.02 at the two existing formaldehyde process units at the facility. Company has implemented programs to comply with applicable requirements for process vents, storage tanks, transfer operations, heat exchange systems, and leak detection and repair for the two process units consistent with the HON requirements. Company agrees to achieve compliance with other wastewater aspects of the HON with respect to the two formaldehyde process units consistent with regulatory requirements for existing minor sources that increase emissions to above major source thresholds.

To fully resolve the above-mentioned noncompliances with its FEDOOP and District regulations, the parties agree to this Order requiring Company to pay an administrative settlement of \$180,800 and to implement compliance measures set forth herein. Payment of the administrative settlement shall be as follows: \$45,200 to be paid by check, and the equivalent of at least \$135,600 to be expended toward approved supplemental environmental projects (SEPs). If within 120 days of the entry of this Order, the District has not approved Company's proposed SEPs with a total value of \$135,600 in capital expenditures, Company shall pay the balance of the administrative settlement within 30 days.

On July 18, 2001, a public hearing was held before the Board on the proposed settlement. Based upon the evidence presented at that hearing, the Board determined that the proposed resolution and requirements were reasonable under the circumstances.

NOW THEREFORE BE IT ORDERED THAT:

1. Company shall pay \$45,200 to the Air Pollution Control District of Jefferson County (District) by August 26, 2001.

2. Within 120 days of the issuance of this order, Company shall submit to the District one or more proposed SEPs with a capital expenditure value of at least \$135,600. Company shall include with its submittal a justification as to why the proposed projects should be approved as SEPs. If the District has not approved the Company's proposed SEPs with a total value of \$135,600 in capital expenditures after 120 days of the date of entry of this Order, Company shall pay the balance of the administrative settlement to the District within 30 days.

3. Pursuant to Regulation 7.25, Company shall monitor and record the pH of the scrubbant of the PF-1 fume scrubber at least once every 15 minutes. The performance indicator range established to reasonably assure emissions from the PF-1 fume scrubber remain below five tons per year shall be a pH at or above 11.0 (standard units) as a 3 hour average. In the event of an excursion, defined as any departure from the established performance indicator range, Company shall immediately initiate corrective action to raise the pH. Company shall maintain records of each excursion including any corrective action taken.

4. Pursuant to Regulation 7.25, Company shall seal all valves and all open-ended lines with plugs or caps in all pipes in the phenol and methanol recovery system from the extractor to the stripping column that may be used to direct raffinate to the wastewater treatment ponds. Company shall propose a method to quantify and monitor the VOC emissions from the stripping column bottoms by no later than November 1, 2001.

5. Pursuant to Regulation 2.16, Company shall submit to the District not later than December 31, 2001, an administratively complete application for a Title V permit.

6. Pursuant to Regulation 5.02, section 3.6, Company shall submit to the District within 15 days of the date of entry of this Order, an initial notification that it is subject to 40 CFR Part 63, Subparts A, F, G, and H (the HON). The initial notification shall meet the requirements of 40 CFR § 63.151.

7. Pursuant to Regulation 5.02, section 3.9, Company shall implement a leak detection and repair program for its two formaldehyde process units that meets the applicable requirements of 40 CFR § 63.151.

8. Pursuant to Regulation 5.02, sections 3.7 and 3.9, Company shall comply with the applicable requirements for process vents, heat exchange systems, storage vessels, and transfer operations at 40 CFR Part 63, Subparts F and G for existing sources for its two formaldehyde process units.

9. Pursuant to Regulation 5.02, sections 3.7 and 3.9, by May 15, 2002, Company shall comply with the applicable requirements for wastewater streams at 40 CFR Part 63, Subparts F and G for existing sources for its two formaldehyde process units.

10. Company shall submit a notification of HON compliance status to the District within 60 days after the entry of this order or the date it is required by the HON, whichever is later. The notifications shall contain the applicable information as required in 40 CFR § 63.152(b) and .182(c).

11. Company shall record monthly emissions of total VOCs from the PF-1 fume scrubber and the phenol and methanol recovery system for the phenol and formaldehyde resin Plant 1 and all HAPs, by compound, emitted at the facility and shall submit, to the District on a calendar quarter basis within 60 days of the end of the quarter, a report on monthly emissions of total VOCs and HAPs, by compound. The first report shall cover the months of August and September, 2001. Fugitive VOC and HAP emissions shall be included in the same manner as stack emissions.

12. Company has reviewed this Order and consents to all its requirements and terms. Further, Company agrees to pay the cost of publishing legal notice on the public hearing.

13. Nothing herein shall be deemed to preclude Company from seeking future permit revisions for physical or operational changes at its facility consistent with District regulations.

14. In the event that it may be necessary for the District to seek a court order to enforce this Order, Company agrees to pay filing fees and costs of any such action.

15. This Order fully resolves the noncompliances listed in Incident No. 02142.

16. Company shall submit written notice to the District when all requirements have been performed. Company's obligations under this Order shall terminate upon Company's completion of all the requirements described in this Order to the satisfaction of the District and the District's issuance of a Title V permit. Company shall continue to comply with all District regulations after termination of this Order.

Dated this _____ day of _____, 2001.

AIR POLLUTION CONTROL BOARD
OF JEFFERSON COUNTY

BORDEN CHEMICAL, INC.

BY: _____
ROBERT W. POWELL, M.D.
CHAIRMAN

BY: _____
JON E. SQUIRE
Director of Operations
PRG North America

Board Order
Borden Chemical, Inc.

August 15, 2001
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AIR POLLUTION CONTROL DISTRICT
OF JEFFERSON COUNTY

BY: _____
JESSE GOLDSMITH
ENGINEERING/ENFORCEMENT MANAGER

APPROVED AS TO FORM AND LEGALITY:
AIR POLLUTION CONTROL DISTRICT
OF JEFFERSON COUNTY

BY: _____
GAYLORD B. BALLARD
ATTORNEY