

ILLINOIS POLLUTION CONTROL BOARD  
June 3, 1993

GENERAL CHEMICAL CORPORATION, )  
(Chemical Manufacturing Plant), )  
 )  
Petitioner, )  
 )  
v. ) PCB 92-217  
 ) (Variance)  
ILLINOIS ENVIRONMENTAL )  
PROTECTION AGENCY, )  
 )  
Respondent. )

ORDER OF THE BOARD (by B. Forcade):

This matter comes to the Board on a Motion to Reconsider filed on May 7, 1993 by General Chemical Corporation, Chemical Manufacturing Plant (GCC). GCC seeks reconsideration of the Board's April 8, 1993 order. The Environmental Protection Agency (Agency) has not filed a response to the motion for reconsideration.

The Board in its April 8, 1993 order, granted GCC a variance from the provisions of 35 Ill. Adm. Code 201.141 and 212.322(a) regarding air pollution and emissions of particulate matter for its facility located in Fairmont City, Canteen Township, St. Clair County, Illinois. The Board granted the variance with the conditions requested by the Agency.

GCC had previously filed a motion for reconsideration on April 16, 1993. The Board on April 22, 1993, denied the motion for reconsideration because it did not clearly specify what portions of the order GCC was requesting the Board to reconsider. The Board noted that it did not consider the response filed by GCC on April 9, 1993, because it was received after the Board had issued its order granting the variance and further it was not filed within the time permitted by the Board's procedural rules. The Board further noted that GCC could file a second motion for reconsideration clearly stating the requested changes.

GCC is requesting the Board to reduce the maximum allowable emission rates of 84.23 lbs/hour of particulate matter (PM) to a rate of 40 lbs/hour PM. GCC is also requesting an amendment to the construction schedule and the completion schedule.

GCC notes that it did not request a specific level of allowable particulate emissions in its variance petition. The Agency suggested a limit of 84.23 lbs/hour of PM. Stack tests conducted in January of 1993 revealed that the plant could be operated at an expected maximum particulate emission rate of 34.75 lbs/hour. GCC is requesting a maximum allowable emission rate of 40 lbs/hour to allow for unforeseen upsets. GCC notes

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that the requested level is approximately half the level suggested by the Agency and previously allowed by the Board.

The schedule as set forth in the variance was established from information submitted to the Agency by GCC. After preparing specifications and seeking bids, GCC discovered that additional time was needed to prepare additional engineering documents. Due to the additional time required GCC is unable to meet the proposed schedule. GCC states that the amendments to the construction schedule are relatively minor especially considering the reduced level of PM emissions.

GCC also notes that the Agency recommendation refers to particulate emission limit as 8.16 lbs/hr. GCC contends that this a typographical error and that the limit required by its permit issued on November 18, 1992 is 8.17 lbs/hr allowable particulate matter. The Board will correct the emission limit to 8.17 lbs/hr.

The Board grants the motion for reconsideration and issues a new order in this matter incorporating the changes as requested by GCC.

#### ORDER

Petitioner General Chemical Corporation (Chemical Manufacturing Plant) (GCC) is hereby granted a variance from the provisions of 35 Ill. Adm. Code 212.322(a) for its facility located in Fairmont City, Canteen Township, St. Clair County, Illinois subject to the following conditions:

1. This variance shall expire on December 1, 1993.
2. The allowable emissions during the variance period shall be 40 pounds per hour of particulate matter, with the same process weight rate (2.8 tons per hour) and the same operating hours as currently permitted (6,384 hours per year), until thirty (30) days after the fabric baghouse dust collector and related components are installed or October 1, 1993, whichever occurs first. Thereafter, the allowable emissions rate shall be 8.17 pounds per hour of particulate matter, with the same process weight rate and operating hours as currently permitted, until the expiration of this variance.
3. Petitioner shall comply with the following conditions:
  - a. A fabric baghouse dust collector, with appropriate modifications to the stack and hardware components, shall be installed on the SAS roaster on or before August 28, 1993.
  - b. An emergency quench system with an alarm system shall be installed on the stack on or before August 28, 1993

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c. A manometer shall be installed as part of the fabric baghouse dust collector to monitor a pressure drop across the fabric baghouse dust collector on or before August 28, 1993.

d. GCC shall submit progress reports to the Agency at the beginning of each month detailing all progress made towards installing and testing the fabric baghouse dust collector and other items required to be installed and listed above. These progress reports shall be signed by an authorized officer of GCC, certifying that the progress report in question is true, correct and complete, to the best of such officer's knowledge.

e. On or before May 1, 1993, GCC shall submit to the Agency a copy of an appropriately executed and delivered purchase contract for a fabric baghouse dust collector, manometer, water quench system and related items necessary to install and operate the fabric baghouse dust collector. The contract shall be certified by an authorized officer of GCC to be true, correct and complete, and in full force and effect, to the best of such officer's knowledge.

f. On or before May 1, 1993, GCC shall submit to the Agency a copy of an appropriately executed and delivered construction or engineering contract for a fabric baghouse dust collector, manometer, water quench system and related items necessary to install and operate the fabric baghouse dust collector. The contract shall be certified by an authorized officer of GCC to be true, correct and complete, and in full force and effect, to the best of such officer's knowledge.

g. Items listed in subparagraphs (d) through (f) above shall be sent addressed as follows:

State of Illinois EPA  
 Division of Legal Counsel  
 2200 Churchill Road  
 P.O. Box 19276  
 Springfield, Illinois  
 Attention: IEPA #734-92

State of Illinois/EPA  
 Regional Manager/Bureau of Air  
 2009 Mall Street  
 Collinsville, Illinois 62234  
 Attention: John Justice

4. In addition to the standard permit conditions, and any other special permit conditions the Agency may specify, GCC shall operate the Plant during the term of the variance under the

following special permit conditions:

a. GCC shall maintain records of the following items, and such other items as may be appropriate, to allow the Agency to review compliance with the emission limits in Paragraph 2 above:

- (i) SAS liquor flow rate (gal/min) to the SAS Evaporation and Roasting Process;
- (ii) SAS liquor specific gravity for each shift; and
- (iii) The hourly process weight rate for the SAS Evaporation and Roasting Process based on the SAS liquor flow rate and specific gravity.

b. The records listed in subparagraph (a) above shall be retained for two years and shall be available for inspection by the Agency.

c. On or before August 31, 1993, the particulate matter and SO<sub>2</sub> emissions of the SAS Evaporation and Roasting Process shall be measured by an approved testing service during conditions that are representative of maximum emissions, and a final report of the results of the tests shall be submitted to the Agency on or before September 22, 1993.

d. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Agency (Refer to 40 CFR 60, Appendix A for USEPA test methods):

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Particulate Matter	USEPA Method 5
Sulfur Dioxide	34 Ill. Adm. Code 214.101(a) (USEPA Method 6)

As part of the measurement of particulate matter emissions, GCC shall measure and report both the inorganic and organic condensable particulate matter in the USEPA Method 5 impinger catch.

e. During the above-referenced tests, the following process information shall be determined:

- (i) Process liquor flow rate, concentration and process weight rate:

- (ii) Process operating temperatures; and
- (iii) Pressure drop across the baghouse.

Process liquor feed rate, concentration, process weight rate, and process operating temperatures shall be determined based on the SAS operating log and SAS concentration feed rate record sheet. Pressure drops across the baghouse shall be measured with a permanently installed manometer as part of the particulate matter collection system.

f. At least thirty (30) days prior to the actual date of testing, GCC shall submit a written test plan to the Agency for review and approval. This plan shall describe the specific procedures for testing, including at a minimum:

- (i) The person(s) who will be performing sampling and analysis and their experience with similar tests;
- (ii) The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- (iii) The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations;
- (iv) The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods
- (v) Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;
- (vi) Any proposed use of an alternative test method, with detailed justification; and
- (vii) The format and content of the Source Test Report.

g. The SAS Evaporation and Roasting Process shall be operated during testing in accordance with normal operating practices. Process or pollution control equipment modifications prior to the tests shall be documented. The report shall include any changes that may enhance particulate matter control efficiency or reduce emissions through changes in operating conditions.

h. Prior to carrying out these tests, GCC shall notify the Agency's regional office and the Agency's Source Emission Test Specialist, at the addresses for notice set forth below, a minimum of thirty (30) days prior to the expected date of these tests and a minimum of five (5) working days prior to the test of the exact date, time and place of these tests, to enable the Agency to witness these tests.

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
2009 Mall Street  
Collinsville, Illinois 62234

Illinois Environmental Protection Agency  
Attn: Source Emission Test Specialist  
Division of Air Pollution Control  
Intercontinental Center  
1701 First Avenue  
Maywood, Illinois 60153

i. GCC shall submit three (3) copies of the Final Report(s) to the Agency within fourteen (14) days after the test results are compiled and finalized.

j. GCC shall submit a copy of the Summary of Results, General Information and Conclusions, as contained in the Final Report, to the Source Emission Test Specialist.

k. The Final Report shall include at a minimum:

- (i) A summary of results;
- (ii) General information;
- (iii) Description of test methods(s), including description of sampling points, sampling train, analysis equipment, and test schedule;
- (iv) Detailed description of test conditions;
- (v) Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption;
- (vi) Control equipment information, i.e., equipment condition and operating parameters during testing;
- (vii) A discussion of any preparatory action taken, i.e., inspections, maintenance, repair, etc.;

- (viii) Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration; and
- (ix) An explanation of any discrepancies among individual tests or anomalous data.

l. GCC shall, in accordance with the manufacturer(s)' and/or vendor(s)' recommendations, perform periodic maintenance on the pollution control equipment such that the pollution control equipment shall be kept in proper working condition and not cause a violation of the Act or regulations promulgated thereunder.

m. GCC shall maintain an operating log for the SAS Evaporation and Roasting Process air pollution control system for the dryer, which at a minimum includes status of the SAS particulate matter control system at least one per shift, adjustments of the baghouse operating parameters, the results of inspections, and maintenance and repair activity.

n. GCC shall perform daily inspections on the SAS Evaporation and Roasting Process and the new SAS air pollution control system for the dryer to assure proper operation of equipment.

o. GCC shall maintain maintenance records at the Plant and the maintenance records shall be subjected to inspections by the Agency as specified in Condition Number 8 of the Agency's Standard Conditions for Operation Permits.

5. Within forty-five (45) days after the date of this order, GCC shall execute a certification of acceptance of this variance, by which it agrees to be bound by its terms and conditions, and send it to:

L.L. Kroack  
 Assistant Counsel  
 Bureau of Air  
 Illinois Environmental Protection Agency  
 P.O. Box 19276  
 Springfield, Illinois 62794-9276

This forty-five (45) day period shall be held in abeyance for any period during which this matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

General Chemical Corporation, having read the Order of the Illinois Pollution Control Board in PCB 92-217, understands and accepts said order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

General Chemical Corporation

By: \_\_\_\_\_  
As Authorized Agent

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

Failure to execute and forward the Certification within 45-days renders this variance void and of no force and effect as a shield against enforcement of rules from which this variance is granted.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act, (415 ILCS 5/41 (1992)), provides for appeal of final orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246, Motion for Reconsideration.)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above order was adopted on the 3rd day of June, 1993, by a vote of 6-0.

Dorothy M. Gunn  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board