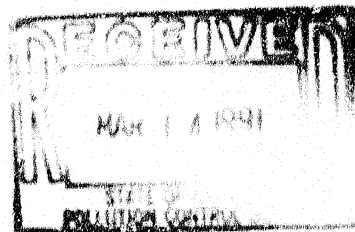


BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

OLIN CORPORATION (Joliet Plant), )  
 )  
 Petitioner, )  
 )  
 v. )  
 )  
 ILLINOIS ENVIRONMENTAL, )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

PCB 89-72



NOTICE FOR MODIFICATION OF FINAL ORDER

Olin Corporation ("Olin"), by its attorneys Winston & Strawn, hereby moves the Illinois Pollution Control Board ("Board") to modify the Order adopted in this variance proceeding and, in support thereof, states as follows:

1. A public hearing was held in connection with Olin's variance petition on November 12, 1990.
2. The Illinois Environmental Protection Agency ("Agency") filed its Recommendation on November 26, 1990, and recommended approval of Olin's variance request subject to certain conditions.
3. On February 7, 1991, the Board adopted its Opinion and Order in connection with this proceeding. The Board granted Olin a variance from 35 Ill. Admin. Code § 212.321 subject to certain conditions, adopting most of the terms recommended by the Agency, with some changes.
4. The terms of the Board's Order require that Olin take certain actions at each of Olin's four scrubbers according to

the timetable set forth in the compliance schedule adopted by the Board, as follows:

a. Paragraph 2 of the Order requires completion of modifications, testing and evaluation at the A-North scrubber by February 28, 1991.

b. Based on work performed at the A-North scrubber, paragraph 3 of the Order requires completion of modifications and testing at the B-North scrubber by April 1, 1991 and evaluation by July 31, 1991.

c. Paragraph 4 of the Order requires installation of a new scrubber at the B-South scrubber by January 31, 1991, testing and optimization of unit performance by June 30, 1991, and evaluation of further changes by September 1991.

d. Based on work performed at the A-North, B-North and B-South scrubbers, paragraph 5 of the Order requires completion of modifications at the A-South scrubber by January 1, 1992 and testing by March 1, 1992.

5. Most of the conditions of the Board's Order and compliance plan are acceptable to Olin, however the compliance work required for the A-North and A-South scrubbers is no longer necessary due to recent changes in production operations necessary at Olin's Joliet plant, as further explained below.

6. Prior to the variance hearing, Olin had already achieved marginal compliance at the A-North kiln during production of certain products under optimal conditions. See Order at p.6. Due to shifting customer demands, however, Olin had to achieve higher quality control for its various phosphate products. See Direct Testimony of Jaswant Gill at pp. 4-5; Olin's Third Amended

Petition at p.12. Because of greater production flexibility and more consistently higher quality products achievable at Building B, Olin concluded that consistent operation of both the B-North and B-South kilns was the only technically feasible way to meet these market demands. Id. Therefore, Olin focused its production efforts, and thus its compliance efforts, on operations at the B Building.<sup>1/</sup> Id.

7. This shift in production focus led Olin in October 1990 to expedite work at the B Building and apply for a construction permit to upgrade the B-North and B-South scrubbers, which was issued by the Agency on November 26, 1990. See Affidavit of Jaswant Gill at § 3, attached hereto as Exhibit A.

8. Olin has achieved substantial progress for the B-North and B-South scrubbers, as contemplated in the compliance schedule. See Exhibit A, Gill Affidavit at § 4.

9. For the B-South scrubber, Olin installed the new scrubber and completed other modifications by early December 1990, three weeks ahead of schedule. See Letter from Olin dated February 7, 1991 (notifying the Agency of activities at the B Building), attached hereto as Exhibit B. Olin has also begun emissions testing at B-South, which thus far has yielded

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<sup>1/</sup> Even though Olin had not achieved full compliance at A-North and had not completed final modifications there, Olin was still able to benefit from the knowledge of successful modifications previously made at A-North by adapting this knowledge to compliance work at B-North.

significantly reduced emissions. See Olin's first monthly report dated March 5, 1991, attached hereto as Exhibit C.

10. For the B-North scrubber, Olin completed modifications and improvements by January and has begun emissions testing to evaluate emissions performance. See Exhibits B and C.

11. Despite the progress in compliance work at Building B, economic conditions affecting the Joliet plant have deteriorated during the past few months. Since December 1990, one of Olin's major phosphate customers unexpectedly and significantly reduced its production order for 1991. In addition, other production orders are lower than originally anticipated. As a consequence, both current and short-term projected production levels at the Joliet plant are substantially lower than 1990 levels as well as levels originally projected for 1991. See Exhibit A, Gill Affidavit at ¶¶ 6-8.

12. This lower production demand has caused the Joliet plant to temporarily discontinue operations at Building A and thereby has prevented Olin from returning to compliance efforts at A-North or A-South, since stack testing can only be performed during production activity.<sup>2/</sup> See Exhibit A, Gill Affidavit at ¶¶ 9-11.

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<sup>2/</sup> Production capacity at Buildings B and C currently meets and will for the foreseeable future meet the market demands for Olin's phosphate products. See Exhibit A, Gill Affidavit at ¶ 10. Emissions at Building C have consistently been far below compliance levels and consequently operations in Building C were not part of the variance request. *Id.*; see Exhibit C of Third Amended Petition.

13. Olin has undertaken numerous cost-cutting measures to mitigate the financial effect of decreased production, such as shutting down certain administrative buildings at the plant by consolidating personnel and operation of only one of the plant's three coal-fired boilers. See Exhibit A, Gill Affidavit at ¶ 13.

14. In sum, although Olin is in compliance with conditions of the variance relating to Building B, Olin is unable to comply with the variance conditions related to Building A due to adverse economic conditions.

15. Olin does not anticipate further compliance work at Building A under the compliance plan unless operations at A-North and/or A-South are resumed in order to increase overall production of phosphate products based on future market demands.

16. If Olin resumes operations at A-North and/or A-South, Olin proposes to also resume compliance efforts for these kilns according to the relative time periods indicated by the Board's Order. See Exhibit A, Gill Affidavit at ¶ 14. Under any scenario, however, Olin does not propose to extend the overall period of the variance granted by the Board. Under any scenario, however, Olin does not propose to extend the overall period of the variance.

17. Unless the Board modifies its Order to account for the recent, temporary shutdown of Building A, Olin will be in violation of the terms of the Board's Order with respect to Building A. Furthermore, since there will be no particulate

emissions from the STPP stacks in Building A, such a modification of the Order will result in no adverse impact on the environment, but, in fact, will result in reduced particulate emissions from Buildings A and B overall.<sup>2/</sup>

WHEREFORE, Olin respectfully requests that the Board modify its February 7, 1991 Order as follows:

1. Substitute the following for paragraph 2(A):

*Not later than four weeks after resuming operation of the A-North kiln, Olin shall complete all engineering matrix tests and the evaluation of any modifications, if necessary. In addition, Olin shall notify the Agency in the first monthly report subsequent to Olin's resuming of operations at A-North.*

2. Substitute the following in paragraph 3 (eliminating reference to A-North):

*Olin shall complete modifications at the B-North scrubber, as follows:*

*(A) Not later than April 1, 1991, Olin shall complete modifications to the B-North scrubber and perform engineering matrix tests for all products . . .*

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<sup>2/</sup> Furthermore, the shutdown of certain administrative buildings and coal-fired boilers also will decrease particulate emissions from these sources and result in even further reduction of particulate emissions plant-wide.

3. Substitute the following for paragraph 5:

(A) Not later than five months after resuming operation of the A-North kiln, Olin shall complete its evaluation of the impact of engineering modifications at A-North.

(B) Not later than July 1, 1991, Olin shall complete its evaluation of the impact of engineering modifications at B-North, as well as the performance of the additional scrubber at B-South.

(C) If operation of the A-South kiln will be resumed on or before January 1, 1992, then not later than January 1, 1992, Olin shall complete engineering modifications to the A-South scrubber, based on the evaluations made pursuant to paragraphs 5(A) and 5(B).<sup>4/</sup> In addition, Olin shall also notify the Agency in the first monthly report subsequent to Olin's resuming of operations at A-South.

(D) If operation of the A-South kiln is resumed on or before January 1, 1992, then not later than March 1, 1992, Olin shall complete matrix tests and optimize unit performance and complete any further engineering modifications, if necessary.

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<sup>4/</sup> Paragraph 5(B) of the Board's Order reads "... based on the evaluations made pursuant to paragraph E(1)." Since there is no paragraph E(1), Olin interprets this as referring to paragraph 5(A). In addition, paragraph 5(B) refers to modifications to be completed to A-South by January 1, 1992. Olin notes for the record that paragraph 31 of the Agency's Recommendation states that modifications to "B-South" should be made by December 31, 1991. However, the context and sequence of paragraphs 30 and 31 suggest that the Agency may have meant to refer to A-South in paragraph 31 of its Recommendation. This apparent error does not appear to have prevented the Board from setting forth the proper sequence in its Order. Nevertheless, to the extent that the Board modifies its Order, these clerical errors or oversights should be corrected, pursuant to 35 Ill. Admin. Code § 103.241.

4. Insert new paragraph 12:

In any event, the period of this variance shall end  
March 1, 1992.

Respectfully submitted,

OLIN CORPORATION

By: Mark R. Sargis  
One of its attorneys

Date: March 14, 1991

Barbara B. Guibord  
Mark R. Sargis  
WINSTON & STRAWN  
38 West Wacker Drive  
Chicago, Illinois 60601  
(312) 558-5600



BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

OLIN CORPORATION (Joliet Plant), )  
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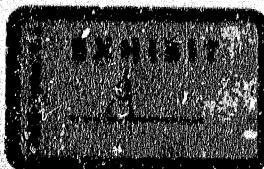
AFFIDAVIT OF JASWANT S. GILL

The undersigned, being duly sworn on oath, deposes and says that he is duly qualified and authorized in all respects to make this Affidavit, and states as follows:

1. My name is Jaswant (Jas) S. Gill and I have been the Plant Manager at the Joliet Plant for the Chemical Group of Olin Corporation since September 1, 1990.

2. I have previously submitted written Direct Testimony and Supplemental Direct Testimony in connection with this variance proceeding concerning efforts at the Joliet plant to achieve compliance for particulate emissions from Olin's sodium tripoly phosphate ("STPP") stacks.

3. On October 12, 1990, Olin applied to the Illinois Environmental Protection Agency ("Agency") for a construction permit to upgrade the B-North and B-South scrubbers, including the installation of one new scrubber on the B-South kiln. The Agency issued this permit on November 26, 1990.



4. Olin has completed most modifications at Building B and filed its first monthly progress report with the Agency on March 5, 1991, as contemplated in the compliance schedule.

5. After completing and evaluating modifications at Building B, Olin had planned on resuming compliance efforts at Building A.

6. In December 1990, after the variance hearing, one of the Joliet Plant's major phosphate customers unexpectedly informed Olin that in calendar year 1991 it would require product only through the First Quarter of 1991, and only a small percentage of the total production it ordered during 1990.

7. In January 1991, Olin became aware that production orders from at least one other customer would be lower in 1991 than originally anticipated.

8. Due to decreased production orders, both current and projected short-term STPP production levels at the Joliet Plant are substantially lower than both 1990 levels and levels originally projected for 1991.

9. Because of the significant decrease in production demand recently resulting in excess STPP production capacity among Buildings A, B and C, Olin determined that it was necessary to shut down STPP production operations at one of its three Buildings in order to continue operating the Joliet plant as cost-effectively and efficiently as possible.

10. Olin decided to temporarily shut down operations at Building A because: (a) production capacity at Buildings B and C

currently meets and will for the foreseeable future meet the market demands for Olin's STPP products; (b) emissions from Building C have consistently been lower than actual allowable emissions; (c) Olin is further along with compliance efforts at Building B than at Building A; and (d) certain phosphate products can only be produced at the kilns in Building B.

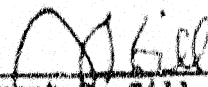
11. Without ongoing operations at Building A, Olin is unable to resume compliance work at either the A-North or A-South stacks as previously contemplated. However, the suspension of all operations in Building A will result in no particulate emissions from the STPP stacks in that building.

12. The continuing uncertainty in market demand for STPP products makes it impossible to predict if or when Olin will resume operations, and thus compliance work, at Building A.

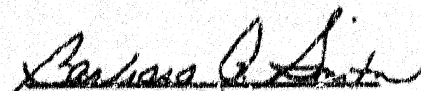
13. Because of the financial hardship created by decreased production, the Joliet plant has undertaken numerous cost-cutting measures in order to continue operating. These measures include: (a) operation of only one of its three coal-fired boilers; (b) a shutdown of certain administrative buildings, with consolidation of personnel; and (c) a reduction in work force.

14. If the Joliet plant resumes operation at either A-North or A-South during the period of the variance granted by the Board, then Olin can and will resume compliance work in accordance with the relative time frames indicated in the Board's Order.

Further affiant sayeth not.

  
\_\_\_\_\_  
Jaswant N. Gill

Subscribed and sworn to  
before me this 14 day  
of March, 1991.

  
\_\_\_\_\_  
Notary Public

**OFFICIAL SEAL**  
BARBARA A. SMITH  
NOTARY PUBLIC STATE OF FLORIDA  
MY COMMISSION END. APR. 9, 1994

February 7, 1991

Bharat Mathur, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control  
P. O. Box 19276  
Springfield, IL 62794-9276

Dear Mr. Mathur:

Pursuant to Permit Application No. 90100035, Olin Corporation I.D. 197809AAP, located at Patterson and Laraway Roads in Joliet, IL, is making the following notifications of activity.

The date of completion of modifications and improvements to the B-North scrubber was January 31, 1991. The product recovery system was installed December 15, 1990. This unit has also not achieved maximum production capacity.

The B-South scrubber was installed December 7, 1990. The product recovery system installation on this kiln is projected for March, 1991. This unit has not yet achieved maximum production capacity.

Please advise if you would like additional information. I can be reached at 615/336-4489.

Best Regards,

OLIN CORPORATION

Vickie J. Ray  
Environmental Specialist

VJR/vrp  
111

cc: Sy Lavine  
C. Psihos  
S. Passmore  
R. Hyland



March 5, 1991

Martin Tippin  
Division of Air Pollution Control  
Illinois Environmental Protection Agency  
1701 First Avenue  
Maywood, IL 60157

Dear Martin:

Per Olin Corporation's variance conditions, I am submitting the first monthly progress report.

As reported earlier, Olin has completed all modifications to the B-North kiln and installed the new BECO scrubber on the B-South kiln. The combined particulate emissions from the "B" building are slightly higher than compliance. Specifics of work on each kiln are as follows:

#### B-North

Modifications to the B-North kiln included installation of stock flow straighteners and rebuilding the outside fan to increase speed and static pressure.

Emissions testing on this kiln were higher than we anticipated. The Baume' of the scrubber liquor was high and quench sprays were not functioning during the test. Further modifications were made to this kiln following this test. These include a high pressure and volume quench spray pump (3 to 16 gpm), modifications to the Venturi to increase delta P, increasing the length of the quench duct to allow longer residence times, and instrumentation was added so conditions could be monitored during testing and day-to-day operations.

After replacement of duct gaskets, we are planning another test to measure emissions.

#### B-South

During the months of October through December, the following activities were conducted:

- 1) Installation of flow straighteners
- 2) Rebuilding the fan



Martin Tippin  
Page 2  
March 5, 1991

- 3) Installation of the quench system
- 4) Installation of the BECO scrubber
- 5) Instrumentation was added in December through January.

On January 15, stack particulate emissions were measured. The results were significantly lower than before the modifications but slightly above the 4 lbs/hr guaranteed by BECO Engineering.

However, we had a discrepancy on gas flow rates at the outlet and the cyclone. The outlet DSCFM was 18% higher than the cyclone DSCFM. Currently we calculate emissions rates by outside flow rates. If we use the cyclone air flow, the test results would be correspondingly lower. We will continue to work with Fred Smith to determine the correct way to calculate the emissions.

Please advise if you need additional information. At any time, please feel free to contact me or Chris Psihos at Joliet to update Olin's progress on achieving compliance as soon as possible. If you would like me to present these reports in a particular format, please advise.

Best Regards,

OLIN CORPORATION

Vickie J. Ray  
Environmental Specialist  
615/336-4489

Chris Psihos  
Joliet Plant Engineer  
815/740-5496

VJR/vrp  
116

STATE OF ILLINOIS     )  
                                  )     SS  
COUNTY OF COOK        )

**PROOF OF SERVICE**

The undersigned being duly sworn on oath deposes and states that he caused to be sent via U.S. mail to the below-named party true and correct copies of the Motion For Modification of Final Order on March 14, 1991;

Renee A. Stadel, Esq.  
Assistant Counsel  
Illinois EPA  
2200 Churchill Road  
P.O. Box 19276  
Springfield, IL 62794

William C. X

SUBSCRIBED and SWORN to  
before me this 14th day  
of March, 1991.

Antoinette L. Uzen  
Notary Public

