

ILLINOIS POLLUTION CONTROL BOARD
May 8, 1975

ALLIED CHEMICAL CORPORATION,)
)
 Petitioner,)
)
 vs.) PCB 75-69
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by Mr. Henss):

Allied Chemical Corporation owns and operates a facility in Metropolis, Illinois for the production of uranium hexafluoride, sulfur hexafluoride, fluorine, antimony pentafluoride and iodine pentafluoride. Approximately 300 persons are employed at this facility. In PCB 73-382 Allied was granted variance from Rule 921(a) (permits) and from Rule 408 of the Water Pollution Control Regulations for fluorides, suspended solids and pH, subject to conditions. Petitioner now requests variance from Rules 408(a) and 921(a) and from certain parts of the Board Order entered in the prior case.

Allied seeks:

1. Deletion of Part (c) of Order No. 2 (limiting fluoride concentrations) in view of the Board's final adoption of Amendments to Rule 408 which changed the effluent limitation for fluoride to 15 mg/l (See R73-15).
2. Extension to April 1, 1976 of the variance from Rule 408 for fluoride, suspended solids, pH and Rule 921 for permits.
3. To phase out the monthly reporting requirements once the NPDES permit becomes effective.
4. Amendment of Order No. 7 to require completion of the "U" recovery recycle project by March 1, 1975, and
5. Amendment of that portion of the Compliance Plan relating to Sulfide Wastes Elimination to reflect initial delays in selecting control equipment.

Petitioner states that: 1) the discharge of 95% sulfuric acid to the drainage ditch ceased on August 1, 1974; 2) conditions

relating to the natural drainage channel have not changed, c) fluoride concentrations in the 001 and 002 discharges have not exceeded permissible levels, 4) suspended solids concentrations in the 001 and 002 discharge have not exceeded permissible levels, 5) pH levels in the 001 and 002 discharges have not exceeded permissible limits, and 6) its diligent pursuit of all aspects of its Compliance Plan has been documented in monthly reports to the Environmental Protection Agency.

Pond earthwork and lining, roadways, storm sewers, a building, pipe bridge steel, site grading and fencing for the NOH Regeneration and HF Neutralization portions of the Compliance Plan have been completed. Construction of the concrete block building is almost finished and piping and electrical work are now about 30% completed. Over \$2 million of the \$3,500,000 combined cost for these project has been spent or committed as of February 1, 1975. Allied states that these two projects are on schedule for the September 1, 1975 completion date.

Difficulty in selecting the most suitable and cost effective process for the Sulfide Waste Elimination portion prevented the attainment of interim scheduling dates. A sulfur condensation--sulfide incinerator was finally selected and has received a top priority effort since April 1974 to offset the initial scheduling delay.

Preliminary engineering work has been completed for the incinerator and bids from vendors have been received. FAA has granted approval for erection of the stack. A construction and operating permit has been granted by the Agency's Water Pollution Division and a construction application is now pending with the Air Pollution Control Division.

The original compliance schedule and the amended schedule as of February 1, 1975 can be compared as follows:

| | <u>Original Schedule</u> <u>September 5, 1973</u> | <u>Amended Schedule</u> <u>February 1, 1975</u> |
|-----------------------------|------------------------------------------------------|----------------------------------------------------|
| Submit final plans & specs. | 9/1/74 | 3/1/75 |
| Corporate approval of funds | 10/1/74 | 7/1/75* |
| Award construction tracts | 12/1/74 | 7/15/75 |
| Start construction | 12/15/74 | 8/1/75 |
| Complete construction | 1/1/76 | 1/1/76 |
| Start full operation | 4/1/76 | 4/1/76 |

*Limited approval will be obtained prior to this date to authorize the ordering of equipment immediately upon issuance of a construction permit for this project by the IEPA Division of Air Pollution Control.

A strike by plant construction workers from June 22, 1974 through September 8, 1974 caused a 3 month delay in completion of the "U" recovery recycle project, however, full operation of that part of the facility was scheduled by March 1, 1975. The Agency approved the necessary schedule change because of the strike (Petitioner's Exhibit C).

On December 19, 1974 Allied submitted a draft NPDES permit to the U. S. EPA which had been prepared by the Illinois EPA. Allied states that the draft permit appears to be generally consistent with conditions and terms of the PCB 73-382 variance with the exception of the date of completion for the "Sulfide Liquor Waste Abatement System". Order No. 6 of PCB 73-382 (based upon Allied Exhibit #11) established January 1, 1976 as the scheduled date for completion of construction of this project. The draft NPDES permit gives May 1, 1976 as the required date for "start-up of all operations".

Allied states that it will bring this inconsistency and other "relatively minor technical discrepancies" in the draft to the attention of the U. S. EPA and the IEPA and will attempt to insure that the NPDES permit, when issued, will be fully consistent with the Board's Order in this matter.

The draft NPDES permit requires that:

1. Routine monitoring for specific parameters commence with the issuance of the permits and that quarterly reports on this monitoring be submitted.
2. Periodic progress reports on the compliance schedule be submitted at specific times.

Copies of these reports are to be sent to both the U. S. EPA and the IEPA.

Petitioner believes that the reporting requirements of our prior Order should be extended only to such time as the NPDES permit becomes effective. Allied seeks to avoid "unproductive duplication of reporting requirements".

The EPA recommends extension of the prior variance with certain changes in the conditions. The Agency agrees that Allied should be required to meet only the current standard for fluoride but questions whether the standard should be applied before or after dilution. Although Rule 401 specifically rules out dilution as a method of treatment, Allied was permitted to dilute the process waste water because the Board accepted Allied's contention and the Agency's opinion that Allied's Compliance Plan

would yield the best degree of treatment consistent with technological feasibility, economic reasonableness and sound engineering judgment. According to the EPA, paragraph 2(c) of the Order should be rephrased to read: "That Petitioner shall continue to pursue diligently a program to reduce the fluoride content of its effluent to 15 mg/l, excluding any effects of dilution".

The Board notes that Allied is well into its multi-million dollar control program. This program was designed to provide the best treatment possible for Allied's unique process and treatment problem. Allied contends that the Agency's Recommendation would force a reopening of the program to investigate means of achieving the 15 mg/l fluoride level without dilution. This action would not only disrupt the ongoing control program but it would also serve to impose additional financial burdens on Allied. Allied submits that the additional financial burden is clearly unreasonable and unwarranted especially in view of the substantial capital and operating costs associated with the already approved control program.

When the Board adopted the 15 mg/l effluent limitation for fluoride, it did so in full consideration of extensive Allied testimony and exhibits. At the forefront of such consideration was the understanding that Allied was deeply involved in the search for methods available to bring its effluent into compliance. It was clear that Allied's program would involve some dilution. Thus, when the Board stated in the Opinion on R73-15 that "the 15 mg/l fluoride is both economically reasonable and technically feasible when applied to Allied Chemical" the Board was fully aware that Allied's fluoride reduction program would incorporate the best degree of treatment possible but that even with such treatment, some dilution would still be necessary.

When the Board approved Allied's Compliance Program in PCB 73-382, it recognized Allied's unusual problems and the effort to which Allied had committed. It would be inconsistent with the findings in PCB 73-382 and R73-15 to now require Allied to halt its compliance project midstream and start its investigation anew.

Another issue raised by the Agency concerns Allied's request for variance from Rule 921(a) (Order No. 8). Variance from Rule 921(a) was granted for the limited purpose of allowing issuance of permits for Allied's proposed facilities. These permits have now been issued and there appears to be no need for further variance from that Rule. Variance from Rule 921(a) will, therefore, be denied.

The final issue raised by the EPA involves the submission of monthly reports as required by Order No. 10. The Agency agrees with Allied that dual reports (one report under the NPDES permit requirements and another report under Board Order) would be unnecessarily duplicative. However, the Agency seeks to receive "all information...at the same frequency, as is presently being furnished by Petitioner under Paragraph 10 of the prior Order".

Allied responds that its current reports to the Agency include both monitoring data and progress information on the water pollution control program. Under the proposed NPDES permit Allied would be required to submit monthly monitoring reports to the Agency, quarterly monitoring reports to the U. S. EPA and the IEPA and compliance program reports to both Agencies at irregular intervals of up to 4 months. Allied contends that a requirement to submit compliance program reports to the Agency on a more frequent basis than required by the NPDES permit is "completely unwarranted and unjustified".

We will not order any reports beyond those required in the NPDES permit after it is issued. If the Agency really needs the additional information it would seem a simple matter to include such a requirement in the NPDES permit. Compliance with two different reporting requirements would bring unnecessary expense and confusion. The policy is to avoid a dual system where possible.

Although Allied seeks extension of Order No. 4 which pertains to allowable pH ranges in the 001 and 002 effluents, the record shows that the discharge of 95% sulfuric acid into the drainage channels ceased on August 1, 1974. Elimination of this acid discharge should have placed Allied in position to achieve compliance with the Regulation. Since neither party directly addressed this important issue, the Board is of the opinion that Allied has not justified a need for continuance of the very liberal pH range allowed in the prior Order and that it is not unreasonable to expect Allied to comply with the 5-10 range for pH as specified in Rule 408.

Extension of the PCB 73-382 variance until April 1, 1976 involves a period of 13 months. Since Section 36(b) of the Environmental Protection Act authorizes the granting of variances for up to five years for discharges requiring an NPDES permit, there is legal authority for the grant of variance for the time sought by Allied.

We believe that Allied is making good progress and has shown a need for continued variance with regard to fluorides and suspended solids.

This Opinion constitutes the findings of fact and conclusions of law of the Pollution Control Board.

ORDER

It is the Order of the Pollution Control Board that:

1. Allied Chemical Company is granted variance from Rule 408 of the Water Pollution Control Regulations regarding fluorides, and suspended solids until April 1, 1976 for its Metropolis Works subject to the following conditions:

A. Effluent in the 001 discharge shall not exceed:

- i. 45 mg/l fluoride on a daily average
- ii. 90 mg/l suspended solids on a daily average nor 60 mg/l on a monthly average.

B. Effluent in the 002 discharge shall not exceed:

- i. 545 mg/l fluoride on a daily average nor 425 mg/l on a monthly average
- ii. 200 mg/l suspended solids on a daily average nor 110 mg/l on a monthly average.

C. Allied shall continue to pursue diligently a program to reduce the fluoride content in its effluent to 15 mg/l.

D. Allied shall diligently pursue all applicable aspects of its Compliance Plan, as contained in Exhibit 11 of PCB 73-382 (as amended by Orders 2 and 4 in this proceeding), and shall seek to expedite the completion date of said Compliance Plan wherever possible.

2. Order No. 7 of PCB 73-382 is hereby amended to require completion of the "U" recovery recycle by March 1, 1975.

3. All effluent concentrations shall be based on cooling water flow rates submitted on February 11, 1975 (Petitioner's Response to Interim Order of the Board). Any subsequent increases in cooling water flow shall not be used as a basis for calculating final effluent concentrations.

4. Allied Chemical shall be allowed to amend its compliance plan (as contained in Exhibit No. 11 of PCB 73-382) to reflect the schedule changes as itemized on page 2 of this Opinion.

5. Petitioner shall continue to send reports to the Environmental Protection Agency as specified in PCB 73-382 but after the issuance of NPDES permit the reporting requirement shall be as specified in the NPDES permit.

6. Variance from the pH requirement of Rule 408 and variance from Rule 921(a) of the Water Pollution Control Regulations are hereby denied.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 8th day of May, 1975 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board