

FILED

OCT 20 1976

Ardella M. Kistler, Clerk  
Environmental Quality Council

STATE OF WYOMING  
ENVIRONMENTAL QUALITY COUNCIL

IN THE MATTER OF THE NOTICE AND )  
ORDER OF MAY 12, 1976, BY THE )  
DEPARTMENT OF ENVIRONMENTAL )  
QUALITY, DOCKET 184-76, AND )  
PETITION BY ALLIED CHEMICAL )  
CORPORATION TO THE ENVIRONMENTAL )  
QUALITY COUNCIL FOR HEARING AND )  
MODIFICATION. )

DOCKET NO. 184-76

FINDINGS OF FACTS;  
CONCLUSIONS OF LAW; AND ORDER OF THE  
ENVIRONMENTAL QUALITY COUNCIL

This matter came on for hearing before the Environmental Quality Council on June 21, 1976, upon proper notice to all parties. Lee Keith, Environmental Quality Council member, acted as Hearing Officer.

Allied Chemical Corporation ("Allied") was represented by its attorneys, William H. Brown and Ralph F. Manning. The Department of Environmental Quality was represented by Marilyn S. Kite, its attorney.

Proposed Findings of Fact and Conclusions of Law submitted by the parties, which are not incorporated herein, are hereby rejected as immaterial, irrelevant, or not supported by the evidence.

The Council having heard the evidence presented by the parties and their respective contentions, and having received the proposed Findings of Fact and Conclusions of Law submitted by the

respective parties, and now having also received a transcript of all proceedings at said hearing and being fully advised, the Council makes the following Findings of Fact and Conclusions of Law:

#### FINDINGS OF FACT

1. Allied owns and operates a trona mine and processing plant in Green River, Sweetwater County, Wyoming, called the "Green River Works." At the Green River Works, Allied converts trona into soda ash, a commodity chemical widely used in the manufacture of many well known consumer products, e.g. glass, detergents, baking soda, pigments and dyes.

2. Allied commenced operations at the Green River Works in 1968 (GR-I) with the trona processing plant having a capacity of about 1,500 tons per day (TPD). Allied expanded operations in 1972 to a capacity of about 3,000 TPD (GR-II) and in 1975 to a capacity of about 6,000 TPD (GR-III).

3. There exist in Wyoming other trona mines and processing plants which are operated by firms other than Allied. Such trona processing plants are not identical, particularly with respect to processing and air pollution abatement equipment and technology employed. For example, FMC uses the sodium sesquicarbonate and monohydrate processes to produce soda ash from raw trona ore. On the other hand, Allied and Stauffer use the monohydrate process alone. In the monohydrate process, the trona ore is first calcined to impure soda ash and then solubilized and purified to produce soda ash. In the sodium sesquicarbonate process, raw trona ore is solubilized, purified and then calcined to produce soda ash; larger quantities of waste water are generated in this process per pound of product than in the monohydrate process.

4. From the commencement of operations in 1968 to May 1, 1976, Allied has invested in excess of \$20,000,000 in air pollution and water pollution abatement equipment at the Green River Works.

5. The Green River Works has more than 50 point sources for the emission of particulates into the atmosphere.

6. Allied originally submitted a compliance schedule request on December 15, 1972, addressing the crusher building and the housekeeping dust system baghouses. Upon request of Allied, the final compliance date was October 15, 1973. As a result of late equipment delivery, that date was extended to December 21, 1973, and then to January 21, 1974.

7. Allied recognized problems with the pulse air system in the crusher building and housekeeping dust system baghouses on April 16, 1974.

8. Allied requested an additional compliance schedule addressing the crusher building and housekeeping dust system baghouses on February 25, 1975, and requested an October 31, 1975, compliance date for the crusher and a June 30, 1975, compliance date for the housekeeping system.

9. On June 3, 1975, Allied requested a compliance schedule extension for the housekeeping dust system baghouses to August 1, 1976, to make specific modifications including installing a return heated air pulse system and/or enclosing or relocating the baghouse. It would appear that those modifications were not undertaken.

10. After receiving a Notice of Violation following a November 6, 1975, inspection by the Department of Environmental Quality, Allied submitted a new compliance schedule request on January 8, 1976.

11. Problems encountered by Allied since February, 1974, have included plugging and caking of the baghouses caused, in part, by condensation, and extreme maintenance and design problems.

12. The existing baghouses were designed inadequately for the grain loading that was experienced.

13. Allied has been continually involved in a process of maintenance, redesign, and adjustment of the baghouses in an attempt to achieve compliance.

14. An expeditor was assigned to the Green River facility's construction program June, 1976.

15. The coal dust handling system does not appear to be presently out of compliance with the regulations.

16. The Allied facility is located within an air quality maintenance area designated by the Department of Environmental Quality and the Environmental Protection Agency.

17. The GR-II and III housekeeping unit began operation in May, 1973. That baghouse was enclosed because the building was built large enough to accommodate it.

18. The GR-III crusher baghouse was not enclosed or heated.

19. Except for the GR-I and -III crusher building dust system ("crusher system") and the GR-I housekeeping dust vent system, the remainder of the Green River Works point sources are now or are expected to be in general compliance by the December 1 deadline date, including the ore gallery, the ore supply transfer house (GR-III), the calciners (GR-III), "D" boiler and "C" boiler.

20. Prior to January 1, 1976, there were numerous violations of the 24-hour particulate ambient air quality standard as measured at all five ambient air quality stations in the vicinity of the Green River Works, but from January 1, 1976, to May 24, 1976, there have only been three violations.

21. (a) The original crusher building came into operation at the time of commencement of operations at the Green River Works in 1968. In the crusher building the trona ore transported from the mine is crushed and sized for delivery to the ore gallery and then to the calciners. The crushed ore contains moisture which has created problems in the dust collection system, especially during severe winter conditions.

(b) In 1968, the crusher building contained multiple screening units with a dust collection system and cyclone.

(c) On December 15, 1972, Allied submitted to the Wyoming Air Resources Council an air quality compliance schedule for Green River Works covering, among other things, the crusher building. Allied agreed in this schedule to redesign the ducts and hoods in the crushing and sizing area and to install a new bag-type dust collector to replace the cyclone. A compliance date of April 1, 1974, was projected in the compliance schedule.

(d) This date was later revised to an October 15, 1973, completion date. Because of major equipment delays, installation of the bag dust collector in the crusher building was not completed until January 1974.

(e) Allied's February 25, 1975, request for a compliance schedule extension to October 31, 1975, was approved with respect to the crusher building. This schedule indicates that further modifications might be required beyond those schedules for completion by October 31, 1975. All modifications to be com-

pleted by October 31, 1975, were completed by that date.

(f) In January 1976, Allied requested additional time to June 13, 1977, to construct and install new and additional improvements to achieve continuous compliance. The compliance schedule extension for the crusher building was intended to add more dust collection capacity and enclose and heat the crusher building dust collection systems to achieve compliance on a year-round basis.

(g) By expediting equipment deliveries and construction, Allied is now requesting a final compliance date of March 14, 1977, for completion of the additional dust collector capacity and reliability modifications in the crusher building.

(h) During the intervening period, Allied is committed to maintaining efficient operation of the present systems and, as an interim step, is expected to install two cyclone units by February 7, 1977, to reduce winter-time particulate emissions by an estimated 70 percent (as estimated by Allied) in the event the bag collectors become inoperative or ineffective in cold weather in the crusher building.

22.(a) The housekeeping dust vent system (GR-I) was installed in 1968 in order to collect fugitive dust particulates emitted at various points in the product sizing and handling system. Ductwork and a high efficiency cyclone were installed in 1968.

(b) On December 15, 1972, Allied submitted to the Wyoming Air Resources Council an air quality compliance schedule for the Green River Works covering, among other things, the housekeeping dust vent system (GR-I). As part of the schedule, Allied Chemical agreed to replace the existing cyclone collector with a bag-type dust collector by June 1, 1974. Allied with the assis-

tance of a third party contractor completed this installation in January 1974.

(c) Installation of the bag dust collector was made outside of the building which housed the housekeeping dust vent system because there was insufficient room within the building to accommodate a bag dust collector. Allied personnel and third party contractors undertook various modifications which were unsuccessful to achieve a full compliance. As a result of these problems, Allied's February 25, 1975, request for a compliance schedule extension to the fourth quarter of 1975 was approved. Installation of modifications was made by June 30, 1975, but operation was still unsatisfactory.

(d) Subsequent actions to modify the dust collector system to achieve full compliance were again unsuccessful.

(e) In January 1976, Allied requested additional time to replace the entire bag dust collector system for the housekeeping source.

23. Of the ten point sources covered by the 1976 compliance schedule request, emission control systems necessary to achieve compliance can be complete by December 1, 1976, upon the basis of delivery commitments for equipment, appliances and construction materials by manufacturers except for two sources which require additional time, namely the crusher system and the housekeeping dust vent system. The time at which the new equipment and machinery for these point sources can be completely installed and made operational is established to be: for the GR-I housekeeping dust vent system, March 28, 1977, but with a dryer scrubber by January 15, 1977, as an interim measure; for the crusher system, March 14, 1977, but with the installation of two new supplementary cyclone units for that source by February 7, 1977.

24. The Air Quality Advisory Board reviewed the request of Allied for a new compliance schedule and recommended that the request be denied and the Cease and Desist Order in question in this matter be issued.

25. The Department of Environmental Quality issued a Notice of Violation (including a Cease and Desist Order) May 12, 1976, requiring compliances with the Wyoming Air Quality Standards and Regulations by December 1, 1976.

26. All parties agreed to a number of stipulated facts which are hereby accepted by the Council.

27. Allied has not fully utilized the previous extensions of time granted to it; however, since the Advisory Committee's action and the Department's issuance of the Notice of Violation, Allied has made substantial efforts to achieve compliance.

28. Any request for an extension of time in excess of 104 days (crusher system) and 118 days (GR-I housekeeping dust vent system) would far exceed a reasonable time for achieving compliance.

#### CONCLUSIONS OF LAW

1. The Council has jurisdiction over this matter pursuant to W.S. 35-502.46.

2. Allied is subject to the Wyoming Air Quality Standards and Regulations. W.S. 35-502.16.

3. Allied is responsible for attaining compliance with said regulations.

4. The granting to Allied of additional time for completion of the emission control equipment for the crusher system until March 14, 1977, and the GR-I housekeeping dust vent system



up to and including March 28, 1977, is within the authority and jurisdiction of the Council.


5. An extension of the December 1, 1976, deadline date in the subject order to March 14, 1977, and March 28, 1977, for the respective point sources is within the maximum allowable date of May 15, 1977, in the Wyoming Interstate Region of the State of Wyoming implementation plan under the Federal Clean Air Act.

6. The granting of such an extension of time is reasonable under the circumstances; and the Notice of Violation dated May 12, 1976, shall be modified to provide that:

- a. With respect to the crusher system and GR-I housekeeping dust vent system, the Notice of Violation is amended to provide that the Cease and Desist Order shall be made effective March 14, 1977, and March 28, 1977, respectively.
- b. In all other respects, the Notice of Violation is affirmed, and the cease and desist shall take effect on December 1, 1976.

It is so ordered.

Dated this 15 day of October, 1976.

  
Donald P. White, Chairman  
Environmental Quality Council

CERTIFICATE OF SERVICE

I, Steve F. Freudenthal, Assistant Attorney General for the State of Wyoming, certify that a copy of the foregoing Findings of Facts; Conclusions of Law; and Order of the Environmental Quality Council was deposited in the United States mail, postage

prepaid, this 15 day of September, 1976, duly addressed to:

William Brown  
Suite 512, Petroleum Building  
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