APPENDIX B

EASTMAN CHEMICAL CO. AGREED ORDER 2000-0033-AIR

REGIONAL STRATEGY

APRIL 2000 REVISION
AGREED ORDER
DOCKET NO. 2000-0033-SIP

The Texas Natural Resource Conservation Commission (the Commission or TNRCC) hereby orders Eastman Chemical Company, Texas Operations (the Company) to comply with the requirements herein regarding control of emissions of nitrogen oxide ($\text{NO}_x$) and volatile organic compounds (VOC) from the facilities referenced below, pursuant to § 382.023(a) of the Texas Clean Air Act (the Act), Texas Health & Safety Code, Chapter 382, and § 110 of the Federal Clean Air Act, 42 U.S.C. § 7401 et seq., for the purpose of revising the Texas State Implementation Plan (SIP) for Ozone Control. The parties also enter into this Agreed Order for the purpose of achieving reductions in ozone precursors for the purpose of implementing (a) the required contingency measures in Part B, Items 1(a)(b) and (d) (pages 18 and 19) and (b) General Provision 3 of the Northeast Texas Flexible Attainment Region Memorandum of Agreement dated September 16, 1999. The Executive Director of the Commission and the Company have agreed on these control requirements, subject to the approval of the Commission.
I. STIPULATIONS

For the purpose of this Agreed Order, the parties have agreed and stipulated as follows:

1. Section 110 of the Federal Clean Air Act, 42 U.S.C. 7401 et seq., requires Texas to submit to the United States Environmental Protection Agency (EPA) for approval SIP revisions and to demonstrate that such SIP revisions provide protection of the National Ambient Air Quality Standards (NAAQS) and the Prevention of Significant Deterioration increments for NO\textsubscript{x} and VOC.

2. The Company owns and operates a chemicals and plastics manufacturing plant, located at Hwy. 149, Kodak Boulevard, Longview, Harrison County, Texas (the plant).

3. The plant consists of one or more sources as defined in §382.003(12) of the Act.

4. The Commission and the Company agree that the Commission has jurisdiction to enter this Agreed Order, and the Company is subject to the Commission’s jurisdiction.

5. On or before April 30, 2000, the Company will install clean burn technology on Building 11 Engine C7, emission point number (EPN) 062C7 at the plant to reduce emissions by an estimated 102 tpy from the Company’s 1997 Emissions Inventory to a maximum allowable emission limit (MAEL) of 30 tpy. The existing actual NO\textsubscript{x} emissions of 132 tpy are based on actual 1997 fuel usage calculations. The new emission limit of 30 tpy is based on vendor guarantee of 2 grams per horsepower hour.

6. On or before April 30, 2000, the Company will shut down grandfathered Cooling Tower No. 3 Engine, EPN 063PE3 at the plant, resulting in an estimated total reduction of 115.6 tpy of
NO\textsubscript{x} emissions based on engine horsepower rating and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

7. On or before July 31, 2002, the Company will shut down grandfathered Building 26 Gas Fired Boiler No. 1, EPN 009B1 at the plant, resulting in an estimated total reduction of 19.5 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

8. On or before July 31, 2002, the Company will shut down grandfathered Building 26 Gas Fired Boiler No. 2, EPN 009B2 at the plant, resulting in an estimated total reduction of 21.6 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

9. On or before July 31, 2002, the Company will shut down grandfathered Building 26 Gas Fired Boilers No. 3, EPN 009B3 at the plant, resulting in an estimated total reduction of 20.9 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

10. On or before July 31, 2002, the Company will shut down grandfathered Olefins Hydration natural gas fired Engine C1A, EPN 009C1A at the plant, resulting in an estimated total reduction of 31.4 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

11. On or before July 31, 2002, the Company will shut down grandfathered Olefins Hydration natural gas fired Engine C1B, EPN 009C1B at the plant, resulting in an estimated total
reduction of 31.4 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

12. On or before July 31, 2002, the Company will shut down grandfathered Olefins Hydration natural gas fired Engine C1C, EPN 009C1C at the plant, resulting in an estimated total reduction of 31.4 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

13. On or before July 31, 2002, the Company will shut down grandfathered Olefins Hydration natural gas fired Engine C4A, EPN 009C4A at the plant, resulting in an estimated total reduction of 29.3 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

14. On or before July 31, 2002, the Company will shut down grandfathered Olefins Hydration natural gas fired Engine C4B, EPN 009C4B at the plant, resulting in an estimated total reduction of 29.3 tpy of NO\textsubscript{x} emissions at the plant based on actual fuel usage and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

15. On or before July 31, 2002, the Company will shut down grandfathered natural gas fired Cooling Tower No. 1 Engine, EPN 009PE2 at the plant, resulting in an estimated total reduction of 38.5 tpy of NO\textsubscript{x} emissions at the plant based on engine horsepower rating and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

16. On or before July 31, 2002, the Company will shut down grandfathered natural gas fired Cooling Tower No. 1 Engine, EPN 009PE1 at the plant, resulting in an estimated total reduction
of 38.5 tpy of NO\textsubscript{x} emissions at the plant based on engine horsepower rating and AP-42 emission factors as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

17. On or before July 31, 2002, the Company will shut down Building 75 Coal Fired Boiler No. 13, EPN 047B13, at the plant operating under TNRCC Air Quality Permit No. 3504A, resulting in an estimated total reduction of 746.7 tpy of NO\textsubscript{x} emissions based on in-line stack monitoring as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

18. On or before July 31, 2002, the Company will shut down Building 75 Coal Fired Boiler No. 14, EPN 047B14, at the plant operating under TNRCC Air Quality Permit No. 3504A, resulting in an estimated total reduction of 415.4 tpy of NO\textsubscript{x} emissions at the plant based on in-line stack monitoring as extracted from the Company’s 1997 Emissions Inventory submitted to the TNRCC.

19. As authorized by 30 TAC § 106.492 (formerly known as Standard Exemption 80), the Company has routed and will continue to route (a) fugitive VOC emissions from 79 pressure safety valves and 145 open-ended lines, and (b) ethylene emissions from vessel purging into the flare header which is routed to the Building 25 Flare (EPN 116FL2H) with a 98% removal efficiency. The resulting total 321 tpy reduction in VOC emissions is combination of both (a) 84 tpy of fugitive sources (based on SOCMI factors) being collected and controlled, and (b) ethylene emissions of an annual average of 243 tpy for the years 1998 and 1999, based on production records and daily reports.

20. The Company installed a cover on the B-107 equalization basins (EPN 239TK2), permitted under Air Quality Permit No. 17833, resulting in an estimated emission reduction in VOC
emissions of 1 tpy, based on EPA approved wastewater emission model. This installation is authorized by 30 TAC § 116.116(e). The Company has provided a Notification of Changes to a Qualified Facility by form PI-E dated December 26, 1996 which was acknowledged accepted by the TNRCC on February 4, 1997.

21. The Company will implement improvements in the operation of the Acetaldehyde Plant 1 Off-Air Scrubber to reduce the concentration of acetaldehyde in the effluent stream from 200 parts per million (ppm) to 50 ppm, resulting in an estimated reduction in VOC emissions of 27.2 tpy. The 27.2 tpy reduction is based on measured concentrations of acetaldehyde, and actual flow rate and days in service in 1998.

22. The Company will provide equipment to implement improvements in the operation of the Acetaldehyde Plant 2 Off-Gas Stream to either the Hydrochloric Acid Plant for recovery of chlorine as HCl, as authorized by Air Quality Permit No. 681, or to the B70 Plant Incinerator for fuel value as authorized by Air Quality Permit No. 9167, resulting in an estimated reduction in VOC emissions of 199.3 tpy. The 199.3 tpy reduction is based on actual days in service and average flow rates for each of the years 1997 and 1998, and a destruction removal efficiency of 99.9%. The Company agrees to make 36.7 tpy of the 199.3 tpy reduction in VOC emissions enforceable under this Order.

23. This Order does not authorize or prohibit any modification of the facilities at the plant listed above, nor does it authorize or prohibit the construction of any abatement equipment that may be necessary to achieve the maximum allowable emissions limit (MAEL) set in paragraph 5 above.
The Company is ordered to submit the appropriate application or registration documentation to the TNRCC’s Office of Permitting for any authorization necessary to implement the requirements of this Order. This Order prohibits the start up of any facility that will be shut down as agreed to in this Order after the date of the shut down, unless offsetting emission reduction can be provided pursuant to paragraph 29 below.

24. The Company will maintain records for a period of two years after the final deadline for change in operations or the shut down or control of facilities as required by this Order sufficient to demonstrate compliance with paragraphs 5-22 above, and shall make these records available upon request by the TNRCC or any other air pollution control agency with jurisdiction.

25. In order to better safeguard the air resources of this state, the Company agrees to comply with the terms of this Order.

26. The Commission and the Company acknowledge that the Company has entered into this Order voluntarily. Nothing in this Order shall be interpreted as evidence that the Company is causing or contributing to a violation of the NAAQS or is in any respect non-compliant with any federal, state or local law. Additionally, this Order shall not constitute a “compliance event” as defined in 30 TAC § 116.11 or any similar designation under federal, state or local law.

27. Nothing in this Order shall preclude the Company from including the estimated reduction in NO\textsubscript{x} emissions of 1671.5 tpy and VOC emissions of 386 tpy from the change in operation or shut down of the facilities listed in paragraphs 6-18 above and the changes in operation or addition of controls to the facilities in paragraphs 5 and 19-22 above at the plant in the Company’s application
for any voluntary emissions reduction permit (VERP), as authorized by 30 TAC Chapter 116, Subchapter H.

28. Notwithstanding any other provision of this Order, any delays in or failure of performance by the Company under this Order as to the shut down of the facilities in paragraphs 7, 8, 9, 17 and 18 above shall not constitute a violation of this Order, if any delay or failure is caused by an occurrence beyond the reasonable control of the Company (Force Majeure), including not limited to: Acts of God or the public enemy; expropriation or confiscation of facilities; compliance with any order of any governmental authority; acts of war, rebellion, insurrection or sabotage, or damage resulting therefrom; fires, floods, explosions, washouts, tornadoes; rules and regulations relating to transportation by common carriers; accidents, epidemics, riots, strikes or other concerted acts of workmen; lockouts or other industrial disturbances; or any similar cause not within the reasonable control of the affected party. In the event the Company’s performance under this Order is prevented by the Force Majeure condition, the Company shall promptly notify the TNRCC of the particulars and estimated duration of such condition and shall keep TNRCC advised of the progress in eliminating such condition.

29. In lieu of the Company's completion of one or more of the projects described in paragraphs 5-18 above, Company may propose one or more alternative projects provided the emissions reductions or the effect on the environment from such alternative projects are at least equivalent to those of the project(s) in paragraphs 5-18 that will be replaced. If the Company elects to propose an alternative project, it will submit to TNRCC all information reasonable necessary for
the commission to evaluate and approve the alternative project. TNRCC will not unreasonably withhold such approval. Until TNRCC approves an alternative project or otherwise grants permission to the Company to cease performance of a project required under this Order, Company shall remain obligated to perform the original project that the alternative project would otherwise replace.

II. ORDER

It is therefore ordered by the Texas Natural Resource Conservation Commission that Eastman Chemical Company, Texas Operations shall, from and after the date of this Agreed Order, limit its emissions of VOC and NO\textsubscript{x} as specified in paragraphs 5-22 above, and maintain compliance with paragraphs 5-29 above.

The provisions of this Agreed Order shall apply to and be binding upon Eastman Chemical Company, Texas Operations, its successors, assigns and upon those persons in active concert or participation with them who receive actual notice of this Agreed Order by personal service or otherwise. Eastman Chemical Company, Texas Operations is hereby ordered to give notice of this Agreed Order to any successor in interest prior to transfer of ownership of all or any part of its plant, located at Hwy. 149, Kodak Boulevard, Longview, Harrison County, Texas and within ten days of any such transfer, provide the Texas Natural Resource Conservation Commission with written certification that such notice has been given.

The Chief Clerk shall provide a copy of this Order to each of the parties.
PASSED AND APPROVED at the regular meeting of the Texas Natural Resource Conservation Commission on ____________________.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

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For the Commission
I am authorized to agree to the attached Agreed Order on behalf of the entity indicated below my signature, and do hereby agree to the terms and conditions specified therein.

Jim Phillips
Deputy Director, Office of Legal Services
Texas Natural Resource Conservation Commission

Authorized representative of
Eastman Chemical Company, Texas Operations

______________________________________________ __________________
Jim Phillips Date

______________________________________________ __________________
Date

Authorized representative of
Eastman Chemical Company, Texas Operations