

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

IN THE MATTER OF:)

Olin Chemical McIntosh)
Plant Site)
McIntosh, Washington County)
Alabama)

Olin Corporation)
120 Long Ridge Road)
Stamford, CT 06904-1355)
Respondent.)

) PROCEEDING UNDER SECTION
) 106(a) OF THE
) COMPREHENSIVE
) ENVIRONMENTAL RESPONSE,
) COMPENSATION, AND
) LIABILITY ACT OF 1980,
) U.S.C. § 9606(a).

) EPA Docket No.: 91-03-C
)
)

ADMINISTRATIVE ORDER

I. JURISDICTION

This Administrative Order on Consent (hereinafter Consent Order) is entered into by the United States Environmental Protection Agency (hereinafter EPA) with Olin Corporation (hereinafter Respondent), pursuant to the authority vested in the President of the United States by Sections 104, 106 and 122 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (hereinafter CERCLA), 42 U.S.C. §§ 9604, 9606 and 9622, as amended by the Superfund Amendments and Reauthorization Act of 1986 (hereinafter SARA), P.L. 99-499. This authority was delegated by the President to the Administrator of EPA by Exec. Order No. 12580, dated January 23, 1987, 52 Fed. Reg. 2923 (January 29, 1987), and was further delegated to the Regional Administrator of Region IV, EPA, and redelegated to the Director, Waste Management Division. Notice of the issuance of this Order has been given to the State of Alabama.

The parties stipulate that EPA has made the necessary determinations regarding the release or threat of release of hazardous substances, as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), from the following location:

Olin Chemical McIntosh Plant
Industrial Road
McIntosh, Washington County, Alabama



10458196

Respondent agrees that EPA has the right to enforce this Consent Order under CERCLA in a court of competent jurisdiction. In any action to enforce this Consent Order, Respondent agrees not to challenge the basis for the Consent Order or its applicability to the Respondent. The Findings of Fact and Conclusions of Law herein are effective only for the purposes of this Consent Order and are not binding in any other proceeding. Respondent agrees not to challenge these Findings, Conclusions or Determinations for purposes of enforcing this Consent Order.

II. PARTIES BOUND

This Consent Order shall apply to and be binding upon the following parties:

- A. Respondent, its agents, officers, directors, employees, successors and assigns, and upon all persons acting under or for Respondent, including but not limited to, firms, corporations, contractors and consultants; and
- B. EPA and its agents, employees and contractors acting under or for EPA.

III. FINDINGS OF FACT

For the purposes of this Consent Order, EPA finds that:

- A. Olin Chemicals/McIntosh Plant is located east-southeast of McIntosh, Washington County, Alabama. The Olin Chemicals/McIntosh Plant covers approximately 1,500 acres and is bounded by the Tombigbee River on the east, Ciba-Geigy plant on the north and US Highway 43 to the west and River Road to the South.

From 1952 until December 1982, Olin operated a mercury cell chlorine-caustic soda plant on a portion of the Site. In 1954, Olin Mathieson (predecessor corporation to Olin Chemicals) purchased an organics chemical plant from Calabama Chemical located on an adjacent portion of the Site and constructed a pentachloronitrobenzene (PCNB) plant in 1955 and 1956, with start up operations in 1956. The plant was later expanded to include the production of trichloroacetonitrile (TCAN) and

5-ethoxy-3-trichloromethyl-1,2,4-thiadiazole (Terrazole). In 1978, Olin constructed a diaphragm cell caustic soda/chlorine plant which is still in operation. The Olin Chemicals/McIntosh Plant continues to operate today producing chlorine, caustic soda, sodium hypochlorite, sodium chloride and blending hydrazine.

- B. The Site for purposes of this Consent Order for removal is identified on Figure 1 (attached) as an area south of the Temporary Ash Reclaim Pond. The Site is approximately 100 feet by 180 feet in area.
- C. Respondent is the Olin Corporation, 120 Long Ridge Road, P.O. Box 1355, Stamford, Connecticut, 06904-1355.
- D. Respondent is the owner and operator of the Site.
- E. The geology of the Site area consists of the East Gulf Coastal Plain Province underlain by sedimentary rocks dipping southwesterly at 30 to 50 feet per mile. The general dip of these rocks is locally interrupted by folds, faults and salt domes. The McIntosh area is underlain by alternating beds of unconsolidated to consolidated sedimentary units. The McIntosh salt dome is the most distinctive structural feature of the area.

Near surface strata consist of Quaternary alluvial terrace and flood plain sediments deposited by the Tombigbee River. The sediments range in thickness from 80 to 100 feet consisting of beds of sand, gravel, silt and clay which form the Alluvial Aquifer system. The underlying Miocene unit is also composed of alluvial sediments. A Miocene clay strata, which varies in thickness from 80 to 100 feet, is between the upper Alluvial Aquifer and the Miocene Aquifer.

The uppermost layer of soil in the vicinity of the Site generally consists of a low permeability clay ranging in depth from 1 to 15 feet. The soil layer is underlain by Quaternary age sands, gravels and discontinuous zones of fine sand, clay and silt interbedded with coarser sand and gravel. The soil layer and deposits have a combined average thickness of 90 to 100 feet under which there is a clay layer approximately 100 feet thick. Underlying the clay unit approximately 200 feet below surface is the Miocene Aquifer, consisting of alluvial sands and gravel.

The majority of surface runoff from the Site flows east and southeast to an unnamed tributary, which discharges into the Tombigbee River further to the southeast. The surface runoff of the western-most portion of the Site flows west and ultimately flows to the Tombigbee. Drainage from the main plant area is through a system of man-made culverts and ditches, which direct the runoff east and southeast toward the Tombigbee River. Two aquifers are of concern at the Site: The Alluvial Aquifer and the Miocene Aquifer are underground sources of drinking water. The Alluvial Aquifer is directly recharged by infiltration from the surface. The underlying Miocene Aquifer is a confined artesian aquifer, which is not subject to significant leakage from the overlying Alluvial Aquifer.

- F. Contamination was released or may potentially be released through on-site waste deposits, soil/sediment contamination, ground water contamination and surface water contamination.
- G. EPA/ADEM have issued a post closure and Corrective Action permit for RCRA site remediation, and is supervising a Corrective Action Program which includes groundwater remediation. This RCRA Corrective Action Program approved by EPA/ADEM includes five recovery wells and a groundwater pumping, collection and treatment system.
- H. On or about October 16, 1990, Olin discovered hexachlorobenzene wastes in an area adjacent to the Temporary Ash Pond. Olin immediately initiated an investigation of the area. Composite soil samples taken on or about October 17, 1990 contained 90,000 mg/kg (ppm) hexachlorobenzene.
- I. Hexachlorobenzene is a characteristic hazardous waste as defined in 40 C.F.R. Section 261.24 whenever concentrations are greater than 0.13 mg/l using the Toxicity Characteristic Leaching Procedure (TCLP).
- J. It is suspected that the hexachlorobenzene in the soil adjacent to the Temporary Ash Pond was generated as still bottoms from the production of chlorobenzenes and is a listed waste, K085, as defined in 40 C.F.R. Section 261.32.
- K. Hexachlorobenzene is a "hazardous substance" as defined in Section 101(14) of CERCLA, and is subject to the terms and provisions of that Act.

- L. On October 25, 1990, EPA's On-Scene Coordinator Fred Stroud inspected the area adjacent to the Temporary Ash Pond. The area was determined to be contaminated soil.
- M. Concentrations of hexachlorobenzene in the soil are greater than 1,000 mg/kg and the contaminated soil is subject to Land Ban provisions for "California List Wastes" as defined in 40 C.F.R. Part 268.

IV. CONCLUSIONS OF LAW

Based on the Findings of Fact set out above, EPA concludes that:

- A. The Site is a "facility," as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- B. Respondent is a "person," as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- C. Respondent is an "owner" as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20).
- D. Hexachlorobenzene is a "hazardous substances," as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- E. The past, present or potential migration of hazardous substances from the Site constitutes an actual or threatened release, as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

V. DETERMINATIONS

Based on the Findings of Fact and Conclusions of Law set out above, EPA has determined that:

- A. The release or threat of release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or the environment.
- B. In order to protect the public health and welfare and the environment, it is necessary that action be taken to abate the release or threat of release of hazardous substances from the facility into the environment.
- C. The actions required by this Consent Order are consistent with the National Contingency Plan, 40 C.F.R. Part 300, et seq.

VI. ORDER

The parties having reached a resolution of the issues involved in this proceeding, it is hereby AGREED and ORDERED that Respondent shall undertake the following activities, pursuant to Sections 104, 106(a), and 122 of CERCLA, 42 U.S.C. §§ 9604, 9606(a) and 9622:

- A. Respondent shall initiate no later than ten (10) days after receipt of this Order, and shall complete within one hundred and twenty (120) days after receipt of this Order, the following measures, which shall be undertaken at the direction of EPA through its On-Scene Coordinator (OSC):
1. Respondents shall submit a work plan to address removal of hexachlorobenzene contaminated soil in the area south of the Temporary Ash Reclaim Pond. The work plan shall address the removal and incineration of blocks of hexachlorobenzene that are encountered during removal of contaminated soil. "Blocks" for the purposes of this order are defined at molten blocks of 4' x 4' x 4' or greater.
 2. The cleanup standard for this removal action is:

| | |
|-------------------|-----------|
| hexachlorobenzene | < 200 ppm |
|-------------------|-----------|
 3. Arrange for the transportation and disposal of soil contaminated and blocks of hexachlorobenzene. Disposal must be at an approved hazardous waste treatment, storage, or disposal facility in compliance with EPA's Off Site Policy. Written notice shall be given to EPA concerning all phases of this disposal, including the name and address of the facility or facilities to which the hazardous substances are transported.
 4. Respondent shall provide adequate verification and documentation, including copies of manifests, that all contaminated soil and blocks of hexachlorobenzene are taken to a hazardous waste disposal facility in compliance with RCRA Subtitle C.
 5. Respondent shall submit to EPA a site safety plan in compliance with OSHA subject to EPA approval.

- B. All activities undertaken by Respondent pursuant to this Consent Order shall be performed in accordance with all applicable, relevant and appropriate federal, state and local laws.
- C. All activities performed pursuant to this Consent Order shall be under the direction and supervision of a qualified professional engineer or other qualified professional with expertise and experience in hazardous waste site cleanup. Respondent shall notify EPA in writing of the identity of each such engineer or other professional and of any contractors or subcontractors to be used in carrying out the terms of this Consent Order, in advance of their work at the Site. EPA reserves the right of disapproval of any engineer or other professional selected by Respondent.
- D. Respondent will use quality assurance, quality control, and chain of custody procedures in accordance with EPA Region IV Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual (U.S. EPA Region IV, Environmental Services Division, April 1, 1986), throughout any confirmatory sample collection and analysis activities. Respondent will consult with EPA in planning for all sampling and analysis. Respondent will use approved field screening methods initially to establish cleaned areas and thereafter, will perform confirmatory sampling. Respondent shall provide a quality control report to EPA certifying that all activities have been performed as approved.
- E. Upon request by EPA, Respondent shall provide EPA with split samples of any samples collected in accordance with the requirements of this Consent Order.
- F. Respondent shall appoint a Project Coordinator who shall be responsible for implementation of this Consent Order and the activities required herein. All reports, comments and other correspondence directed to Respondent will be made available to the Project Coordinator. Respondent reserves the right to change the Project Coordinator upon written notice to EPA.
- G. EPA shall appoint an On-Scene Coordinator (OSC) who shall have the authority vested by the National Contingency Plan at 40 C.F.R. Part 300.

The OSC will be EPA's designated representative at the Site and will have the right to move freely about the Site at all times when work is being carried out pursuant to this Consent Order. The OSC will advise Respondent as soon as he/she becomes aware that any action taken pursuant to the work plan is not consistent with the National Contingency Plan.

- H. Documents, including reports, approvals, disapprovals, and other correspondence, to be submitted pursuant to this Consent Order, will be sent by certified mail to the following addressees or to such other addressees as Respondent or EPA hereafter may designate in writing:

1. Documents or correspondence to EPA should be sent in triplicate to:

Rita Ford
On-Scene Coordinator
U.S. EPA-Region IV
345 Courtland St. N.E
Atlanta, GA 30365
FAX # 404-347-4464

2. Documents or correspondence to Respondent should be sent to:

W. J. Derocher
Plant Manager
Olin Chemicals
McIntosh Plant
P.O. Box 28
McIntosh, AL 36553

Either EPA or Respondent has the right to change their respective Project Coordinator. Such a change will be accomplished by notifying the other party in writing at least five (5) calendar days prior to the change.

- I. Respondent may assert a confidentiality claim, if appropriate, covering part or all of the information provided under this Consent Order, pursuant to 40 C.F.R. §2.203(b). Such an assertion shall be adequately substantiated when the assertion is made. Analytical data may not be claimed as confidential by Respondent. Information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no such claim

accompanies the information when it is submitted or made available to EPA, it may be made available to the public by EPA without further notice to Respondent.

- J. Respondent shall provide access to the Site to EPA and its employees, contractors, and consultants for the purposes of overseeing the implementation of this Order.
- K. Respondent shall preserve all records developed pursuant to the implementation of this Order for a period of at least six (6) years following completion of all work conducted by Respondent pursuant to this Order.
- L. Upon agreement of the Parties, this Consent Order shall be amended as necessary to address such additional removal work necessary to adequately decontaminate the Site in order to protect public health and the environment or for such other reasons as the Parties may find mutually desirable.
- M. Any amendments pertaining to the work to be accomplished or any activities required hereunder must be reduced to writing by a duly authorized representative of the Respondent and the OSC within 48 hours after agreement is reached, so that there will be no delay in proceeding to accomplish the work requirements.
- N. Notwithstanding compliance with the terms of this Order, Respondent may be required to take further actions as necessary to abate the endangerment posed by conditions at the Site.
- O. In the event that the OSC determines that activities implemented by Respondent are not in compliance with this Order or that any other circumstances or activities are creating an imminent and substantial endangerment to the public health or welfare or the environment, the OSC may order Respondent to halt further implementation of this Order for such period of time as is necessary to abate the endangerment. In addition EPA may carry out all activities pursuant to this Order and such other activities as it deems necessary and consistent with the NCP.

- P. Neither the United States nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondent, its officers, directors, employees, agents, servants, receivers, trustees, successors, or corporations, subsidiaries, contractors or consultants, in carrying out activities pursuant to this Consent Order.
- Q. Respondent acknowledges that EPA will incur costs at the Site after the effective date of this Order for oversight of Respondent's activities at the Site. Respondent shall fully reimburse EPA for such costs within forty-five (45) days after receipt of EPA's written demand for payment. Payment shall be made by certified or cashier's check to "EPA Hazardous Substances Superfund" and sent to:

United States Environmental Protection Agency
Region IV
ATTENTION: Superfund Accounting
P. O. Box 100142
Atlanta, Georgia 30384

with a copy to:

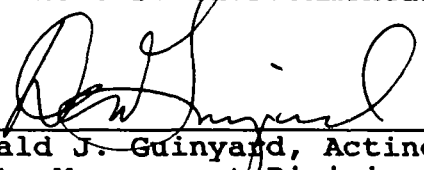
Joyce Catrett
Assistant Regional Counsel
U.S. EPA - Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

The check should reference the Site name and the EPA Docket number 91-03-C assigned under this Consent Order.

- R. Respondent is advised that pursuant to Section 106(b) of CERCLA, willful violation of, or failure to comply with, this Consent Order, or any portion thereof, may subject Respondent to a civil penalty of not more than \$25,000 for each day in which such violations occur or in which such failure to comply continues. Failure to comply with this Consent Order, or any portion thereof, without sufficient cause, may also subject Respondent to liability pursuant to Section 107(c)(3) of CERCLA for damages in the amount of three (3) times the total of all costs incurred by the government as a result of Respondent's failure to take proper action.

- S. Nothing herein is intended to release any claims, causes of action or demands in law or equity against any person, firm, partnership, or corporation not a signatory to this Consent Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site. This Consent Order does not constitute preauthorization of funds under Section 111(a)(2) of CERCLA. Further, Respondent waives any rights it may have to seek reimbursement from the Superfund under Sections 106(b)(2), 111 and 112 of CERCLA for any costs incurred or to be incurred by Respondents in performing the removal action at the Site and complying with the terms of this Consent Order.
- T. No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules or any other writing submitted by the Respondent shall be construed as relieving the Respondent of his obligation to obtain such formal approvals as may be required herein.
- U. The effective date of this Consent Order shall be the date it is signed by the Director, Waste Management Division.

For the U.S. Environmental Protection Agency




Donald J. Guinyard, Acting Director
Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

10-26-90
Date

CONSENT

Olin Corporation, the Respondent in the Olin Chemicals McIntosh Plant Site Administrative Consent Order, EPA Docket NO. 91-03-C, has had an opportunity to confer with EPA and hereby consents to the issuance and terms of the foregoing Administrative Consent Order for the performance of the Removal Action at the Olin Chemicals McIntosh Plant, McIntosh, Alabama.

OK
ADR



Respondent

October 26, 1990

Date

Frank A. Eakin

Vice President

(Type in Name and Title)