# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

and the

## MINNESOTA POLLUTION CONTROL AGENCY

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The Minnesota Mining and Manufacturing Company St. Paul, Minnesota

PROCEEDING UNDER SECTION 106(a)
OF THE COMPREHENSIVE ENVIRONMENTAL
RESPONSE, COMPENSATION, AND LIABILITY
ACT, 42 U.S.C. §9606(a)(1980)

AND

SECTIONS 17 AND 18 OF THE ENVIRONMENTAL RESPONSE AND LIABILITY ACT OF 1983, 1983 MINN. LAWS CH. 121.

U.S. EPA Docket No.

ADMINISTRATIVE ORDER BY CONSENT

AND

RESPONSE ORDER BY CONSENT

### PREAMBLE

IT IS HEREBY AGREED BY AND AMONG THE PARTIES HERETO AS FOLLOWS:

Α.

#### Jurisdiction

This ADMINISTRATIVE ORDER BY CONSENT and RESPONSE ORDER BY CONSENT (Consent Order) is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9606(a), and delegated to the Administrator of the United States Environmental Protection Agency on October 9, 1981, by Executive Order 12316, who duly redelegated the authority to the Regional Administrator on April 1, 1983. This Consent Order is also issued pursuant to the authority vested in the Minnesota Pollution Control Agency by the Environmental Response and Liability Act of 1983 (ERLA), 1983 Minn. Laws Ch. 121 (to be codified as Minn. Stat. Ch. 115B), Minn. Stat. Chs. 115 and 116 and Minnesota Rule WPC 22.

Exhibit 1290

State of Minnesota v. 3M Co., Court File No. 27-CV-10-28862

On the basis of the results of the testing and analysis described in the Findings of Fact, infra, the United States Environmental Protection Agency and the Minnesota Pollution Control Agency have determined that the previous disposal of hazardous substances at the Oakdale disposal sites has given rise to a release of hazardous substances, and that the release will continue to cause contamination of groundwater and surface water unless the release is abated. The United States Environmental Protection Agency has also determined that the release may present an imminent and substantial endangerment to the public health or welfare or the environment within the meaning of Section 106(a) of CERCLA. In addition, the United States Environmental Protection Agency and the Minnesota Pollution Control Agency have determined that: (1) the Oakdale disposal sites are facilities as defined in Section 101(9) of CERCLA and Section 2, Subd. 5 of ERLA; (2) 3M is a person as that term is defined in Section 101(21) of CERCLA and Section 2, Subd. 12 of ERLA; (3) the migration of hazardous substances into the groundwater beneath the Oakdale disposal sites constitutes a release or threat of release as that term is defined in Section 101(22) of CERCLA and Section 2, Subd. 15 of ERLA; (4) 3M is one of several responsible persons within the meaning of Section 107(a)(3) of CERCLA and Section 3 of ERLA; (5) the actions to be taken pursuant to this Consent Order are reasonable and necessary to protect the public health or welfare or environment: (6) a reasonable time for beginning and completing the actions required by this Consent Order has been provided for; and (7) 3M Corporation has agreed to undertake the actions requested by the Minnesota Pollution Control Agency and the United States Environmental Protection Agency in this Consent Order.

В.

#### Parties Bound

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

- 1. The Minnesota Mining and Manufacturing Company; its officers, employees, agents, and contractors in their capacity as Company representatives; successors; assigns, and domestic subsidiaries (3M);
  - 2. The United States Environmental Protection Agency (U.S. EPA); and,
  - 3. The Minnesota Pollution Control Agency (MPCA).

С.

# Notice To The State

The notice requirement of Section 106(a) of CERCLA has been satisfied.

D.

# Findings of Fact

1. An investigation conducted by MPCA staff in the spring of 1980 produced information indicating that in the 1950's private contractors utilized three sites in the city of Oakdale for the disposal of industrial wastes. The sites are located in Section 18, T29N, R21W, west of Hadley Avenue and north and south of Old Highway 212. The sites are referred to as the Brockman, Abresch, and Eberle sites, named after the property owners at the time the sites were used (collectively referred to hereinafter as the Oakdale disposal sites). See Figure 1. The aerial photos obtained pursuant to the

investigation revealed that the greatest activity occurred at the Abresch site in the mid-to-late 1950's when large trenches were dug with heavy equipment and drums containing industrial wastes, which include a variety of hazardous substances, as defined by Section 101(14) of CERCLA and Section 2, Subd. 8 of ERLA (e.g. isopropyl ether and acetone), were disposed of in the trenches. Disposal methods used at the Brockman site were comparable to those utilized at the Abresch site in the early years. The Eberle site was an abandoned gravel pit which was used as an open-burning site for mostly solid waste and some solvents, which include hazardous substances.

- 2. Based upon the findings of the investigation, the MPCA, in conjunction with Minnesota Department of Health (MDH), sampled 45 nearby residential wells to ascertain whether the Oakdale disposal sites were affecting potable water supplies. Included in the sampling were municipal wells in the City of Oakdale and surrounding communities including Oakdale municipal wells #3 and #4 which are located on or in close proximity to the Oakdale disposal sites.
- 3. The results from the analyses of residential wells indicated that nine relatively shallow wells were contaminated with hazardous substances, as defined by Section 101(14) of CERCLA and Section 2, Subd. 8 of ERLA, which had been released from the Oakdale disposal sites. Concentrations

of isopropyl ether (in the 1,000 ppb range) and benzene (in the 2.0 ppb range) were found in two private wells near the disposal sites. The two private well owners were informed by MDH of these results and were advised to discontinue use of their drinking water wells.

4. On November 14, 1980, the MPCA sent letters to all parties potentially liable under State law for the conditions at the Oakdale disposal sites. Letters were sent to all present and former property owners, transporters and waste generators requesting them to indicate their willingness to conduct a hydrogeologic study of the subject sites. One such letter was sent to 3M since it was known to be one of the generators of waste disposed at the Oakdale disposal sites. 3M responded that it would be interested in discussing such a study with the MPCA. Through additional correspondence and discussions, 3M voluntarily proposed to finance and carry out the initial and latter phases of a hydrogeologic study of the Oakdale disposal sites.

Moreover, by May 6, 1982, U.S. EPA had sent letters to all parties then known to be potentially responsible under CERCLA for the conditions at the Oakdale disposal sites. 3M was a recipient of one such letter.

3M responded it was cooperating with MPCA by conducting a hydrogeologic study.

5. The final Reports of the Barr Engineering Phase I and II and III hydrogeologic study of the Oakdale disposal sites, dated March 1982 and April 1983, respectively, concluded that the highest concentrations of organic contaminants were found beneath the Abresch site and confined to the glacial drift and Platteville aquifer (a shallow fractured limestone formation beneath the glacial drift). There remains a potential for the vertical movement of ground water from the Platteville Limestone to the underlying St. Peter Sandstone, however, the Report concludes that the Glenwood Shale layer, which is approximately three to six-feet thick and underlies the Abresch, Brockman and Eberle sites, is acting to retard such movement.

The Phase I, II and III study also concluded that the multi-aquifer wells in the area of the Oakdale disposal sites provided a limited pathway for the movement of ground water from the Platteville Limestone to the St. Peter Sandstone. Analyses of several private wells open in both the Platteville Limestone and St. Peter Sandstone formations showed detectable concentrations of isopropyl ether. The majority of these wells are located in a narrow band running southwest and northeast from the sites. The April 1983 Report concluded that the migration of contaminants is limited to a narrow northeast-southwest trending solution channel or fracture system in the limestone. This conclusion was based on the evidence that all wells sampled in the St. Peter, Prairie du Chien and Jordan formation, that were cased through the Platteville Limestone, showed no detectable concentrations of volatile organic compounds.

- 6. Based upon the results of the first, second and third phases of the hydrogeologic investigation, the April 1983 final Report recommended that a plan be developed for the selective removal of wastes from the Abresch and Brockman sites, that multi-aquifer wells be plugged, and that a network of wells be identified for a continuing ground-water monitoring program.
- 7. A test excavation of waste disposal trenches in the northern portion of the Abresch site conducted by 3M's contractor in January 1982, showed that the buried wastes in the trenches consisted of 55-gallon drums, 5-gallon pails, dry scrap, and several plastic liner bags containing wastes. The majority of the containers were intact and the wastes did not appear to be migrating vertically or laterally beyond the disposal trenches. Several intact drums containing liquids were removed.

Additional test excavations in September 1982, to verify the results of a magnetometer survey of the trench disposal areas, showed that areas adjacent to the disposal trenches contained a significant amount of dry scrap. The few metal drums and 5-gallon pails encountered during this excavation were badly damaged and empty.

- 8. During the winter and spring of 1982, 3M commissioned a surface cleanup of deteriorating 55-gallon and 5-gallon pails containing residual material from the Abresch site. The wastes removed from the site were hauled to and disposed of at the 3M Chemolite incinerator in Cottage Grove. Minnesota in accordance with MPCA authorization.
- 9. Pursuant to Section 105(8)(B) of CERCLA, the Oakdale disposal sites are included on the Proposed National Priorities List published by the Administrator of U.S. EPA in the Federal Register on December 30, 1982.

  47 Fed. Reg. 58476-58485 (1982).

10. Based on the results of the Barr Engineering Phase I, II and III hydrogeologic study, the test excavations, and the geophysical survey of the north half of the Abresch site, a plan was developed by 3M that proposed: reconstruction or proper abandonment of the known multi-aquifer wells that penetrate into the St. Peter aquifer; removal of all containers and barrels of hazardous waste that were identified through the geophysical survey; removal and/or treatment of heavily contaminated soils in the Abresch and Brockman sites; the construction and operation of a shallow groundwater pump out system; and, establishment of a long-term monitoring well network that will detect changes in the quality of the ground water in the Platteville, St. Peter, Praire du Chien-Jordan aquifers and in the areas of heavy contamination. 3M's proposed plan has been the subject of numerous meetings among representatives of MPCA, U.S. EPA, 3M, and others which meetings have culminated in an agreed Remedial Action Plan set forth herein as Exhibit A.

Ε.

#### Site Access

To the extent that the Oakdale disposal sites are presently owned by parties other than those bound by this Consent Order, the parties hereto have obtained or will obtain voluntary site access agreements from the present owners. These agreements are attached or will be attached hereto as Exhibit B.

# ORDER AND AGREEMENT

Based on the information available to the parties on the effective date of this Consent Order and without trial or adjudication of any issues of fact or law and without 3M's admission of liability or responsibility,

IT IS HEREBY ORDERED AND AGREED AS FOLLOWS:

Ι.

## Remedial Action Plan

3M, by and through its contractors, shall implement the program designed to protect the public health, welfare and the environment from the threatened or actual release of hazardous substances associated with the Oakdale disposal sites, which program is set forth in Exhibit A to this Consent Order and is entitled Remedial Action Plan (RAP). Exhibit A is appended hereto and made an integral and enforceable part hereof.

II.

## Resolution of Disputes

In the event that there is a dispute between either U.S. EPA or MPCA and 3M regarding implementation of the RAP, the provisions of this Section shall apply.

A. U.S. EPA and the MPCA Director shall review all submittals made by 3M as required by the RAP within thirty (30) calendar days of receipt and notify 3M, by the thirtieth day, or the first working day thereafter, of their approval or disapproval of the submittal. In the event that the submittal is approved, it shall be considered a part of the RAP which is integral to this Consent Order. In the event that the submittal is disapproved in whole or in part, U.S. EPA and the MPCA Director shall notify 3M of the specific inadequecies in writing, and shall indicate the necessary amendments or revisions.

- B. Within fifteen (15) calendar days of receipt of any notice of disapproval, or on the first working day thereafter, 3M shall submit revisions to correct the inadequacies or 3M shall state in writing the reasons why the proposal, as originally submitted, should be approved.
- C. If, within fifteen (15) calendar days from the date of 3M's submission of revisions pursuant to Paragraph B above, or on the first working day thereafter, the parties have not reconciled all issues in disagreement, U.S. EPA and the MPCA Director shall present to 3M such changes to the submittal as they deem necessary. If 3M believes that U.S. EPA's and MPCA's changes are inconsistent with the stated purposes of the RAP, 3M shall notify U.S. EPA and the MPCA Director within fifteen (15) calendar days of receipt of such changes, or on the first working day thereafter. If 3M does not so notify U.S. EPA and the MPCA Director, 3M shall be deemed to have assented to the changes made by U.S. EPA and the MPCA Director and said changes shall become part of the Remedial Action Plan as specified in Paragraph A, above.
- D. If 3M notifies U.S. EPA and the MPCA Director of its objections to the changes, the parties shall have an additional fifteen (15) calendar days from receipt of 3M's notification to reconcile their differences. Changes agreed to among the parties during this fifteen (15) calendar day period shall become part of the RAP as specified in Paragraph A, above. Any issue not reconciled by agreement of all the parties to this Consent Order within this fifteen (15) calendar day period shall be deemed resolved in favor of U.S. EPA and the MPCA Director and the Agencies' changes shall become part of the RAP as specified in Paragraph A, above. Such resolution shall be deemed a "final Agency action" regarding this Consent Order.

E. Nothing herein shall waive U.S. EPA's or MPCA's right to enforce this Consent Order under Section 106(b) of CERCLA and Sections 17 and 18 of ERLA; or, U.S. EPA's right to take any action authorized by Section 104 and 107 of CERCLA or any other law; or, the MPCA's right to take any action authorized by 1983 Minn. Laws Ch. 121 or any other law should 3M fail to maintain compliance with this Consent Order. 3M preserves its right to assert the defenses afforded to it by Section 107 of CERCLA; Section 4 of ERLA; or, other applicable statutory or common law provisions should the U.S. EPA or the MPCA initiate one of the above indicated actions after having determined that 3M has failed to comply with this Consent Order.

III.

## Creation of Endangerment

In the event that the Regional Administrator of Region V, U.S. EPA or the MPCA Director determines that activities implementing or in noncompliance with this Consent Order or any other circumstances or activities are creating an imminent and substantial endangerment to the health and welfare of the people on the Oakdale disposal sites or in the surrounding area or to the environment, the Regional Administrator of Region V, U.S. EPA or the MPCA Director may order 3M to stop further implementation of this Consent Order for such period of time as needed to abate the endangerment or may petition a court of competent jurisdiction for such an order. During this period of time, 3M's obligations pursuant to this Consent Order shall be suspended and the time schedule for implementation shall be extended by the time period of the delay consistent with the excavation seasons.

IV.

#### Reporting

3M shall submit written progress reports which describe the actions which have been taken toward achieving compliance with this Consent Order during the previous month, as well as activities which are scheduled for the next month, to U.S. EPA and the MPCA Director by the tenth day of every month following the effective date of this Consent Order, unless otherwise designated in the RAP.

Such progress reports and any other documents submitted pursuant to this Consent Order shall be sent by certified mail return receipt requested and addressed as follows:

Director, Waste Management Division U.S. EPA, Region V Attn: Remedial Response Branch 230 S. Dearborn Street Chicago, Illinois 60604

Director, Solid & Hazardous Waste Division Minnesota Pollution Control Agency Attn: Site Response Section 1935 West County Road, B-2 Roseville, Minnesota 55113

U.S. EPA or the MPCA Director may, in their discretion, direct that reports or plans or proposals made pursuant to the RAP be submitted at extended intervals or that no further reports need be submitted.

# Sampling, Access and Data/Document Availability

U.S. EPA, the MPCA Director and 3M shall make available to each other the results of sampling, tests or other data generated by any of them, or on their behalf, with respect to the implementation of this Consent Order.

At the request of U.S. EPA or the MPCA Director, 3M shall allow split or duplicate samples to be taken by the Agencies of samples collected by 3M during the implementation of the RAP. 3M shall notify the U.S. EPA and the MPCA Project Coordinators not less than 48 hours in advance of any sample collection for which the U.S. EPA or MPCA Project Coordinators have indicated that they may wish to obtain split or duplicate samples.

U.S. EPA, MPCA or their authorized representatives shall have authority to enter all property at the Oakdale disposal sites at all reasonable times for the purposes of, <u>inter alia</u>: inspecting records, operating logs and contracts related to the Oakdale disposal sites; reviewing the progress of 3M in carrying out the terms of this Consent Order; conducting such tests as U.S. EPA, the MPCA Director or their Project Coordinators deem necessary; and, verifying the data submitted to U.S. EPA or the MPCA by 3M.

The parties also agree that they shall preserve, during the pendency of this Consent Order and for a minimum of three (3) years after its termination, all records and documents in their possession or in the possession of their divisions, employees, agents, accountants, contractors or attorneys which relate in any way to the Oakdale disposal sites, despite any document retention policy to the contrary.

#### VI.

## Project Coordinators

3M, U.S. EPA and the MPCA shall each designate a Project Coordinator and an alternate for the purposes of overseeing the implementation of this Consent Order. To the maximum extent possible, except as specifically provided in this Consent Order, communications between 3M, U.S. EPA and the MPCA concerning the terms and conditions of this Consent Order shall be made between the Coordinators. Each Coordinator shall be responsible for assuring that all communications from the other are appropriately disseminated and processed.

The Project Coordinators shall have at least the authority to: (1) agree to the extent of soils to be removed; (2) take samples or direct that samples be taken; (3) direct that work stop for a period not to exceed 24 hours whenever a Project Coordinator determines that activities at the site may create a present danger to public health or welfare or the environment; (4) observe, take photographs and make such other reports on the progress of the work as the coordinator deems appropriate; (5) review records, files and documents relevant to the RAP, and to make or authorize minor field modifications in the RAP or in techniques, procedures or design utilized in carrying out this Order which are necessary to the completion of the project.

The MPCA Project Coordinator or alternate shall either be on-site or available on call during all hours of work. The absence of the MPCA, U.S. EPA or 3M Project Coordinator from the site shall not be cause for stoppage of work.

The U.S. EPA Project Coordinator is an On-Scene Coordinator and shall have the authority vested by 40 CFR  $\S 300$  et seq., published at 47 Fed. Reg. 31180 (July 16, 1982).

#### VII.

#### Confidential Information

3M may assert a business confidentiality claim covering part or all of the information requested by this Consent Order pursuant to 40 CFR §2.203(b) and Minnesota Statutes Sections 116.075, 15.1621 and 15.1673. Analytical data shall not be claimed as confidential by 3M. Information determined to be confidential by U.S. EPA will be afforded the protection specified in 40 CFR Part 2, Subpart B, and if determined confidential by the MPCA Director, afforded protection under Minnesota Statutes Sections 116.075, 15.1621 and 15.1673. If no such claim accompanies the information when it is submitted to U.S. EPA or the MPCA Director, it may be made available to the public by the Agencies without further notice to 3M.

#### VIII.

### Covenant Not to Sue

To avoid adjudication between the parties hereto and the expense that would be incurred in connection with such adjudication, and to set to rest the differences existing among them based on information known to the parties when settling this matter, U.S. EPA and MPCA have determined that full performance of the commitments made in this Consent Order constitutes full satisfaction of any and all civil claims (except those which arise with respect to the City of Oakdale's municipal wells) U.S. EPA and MPCA may have against 3M with respect to the Oakdale disposal sites pursuant to the common law (State and Federal) and the following statutes: Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §9601, et seq.;

the Environmental Response and Liability Act of 1983, 1983 Minn. Laws Ch. 121 and Minnesota Statutes Chs. 115 and 116. Subject to fulfillment of these commitments, U.S. EPA and MPCA release 3M from liability under the aforementioned laws and covenant not to sue, execute judgment or take any civil judicial or other administrative action against 3M arising out of or related to the storage, treatment, handling, disposal, transportation or presence or actual or threatened release or discharge of any materials at the Oakdale disposal sites (hereinafter referred to as Covered Matters).

The MPCA and the U.S. EPA agree to make all reasonable efforts to secure the cooperation of all known responsible parties, other than 3M, in undertaking any future remedial or removal action which may become necessary at some future date based on information not now known to the parties before requesting 3M to undertake such remedial or removal action.

IX.

#### Other Claims

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 materials or hazardous substances at, to or from the Oakdale disposal sites.

3M agrees to indemnify and save and hold harmless the U.S. EPA and the MPCA from any and all claims or causes of action arising from acts or omissions of 3M in carrying out the activities pursuant to this Consent Order, except for worker compensation claims by Federal and State employees. The U.S. EPA and the MPCA Director shall notify 3M of any such claim or action within ten (10) working days of receipt by the U.S. EPA or the MPCA Director of such a claim or action. U.S. EPA and the MPCA Director agree not to act with respect to any such claim or action without first providing 3M an opportunity to participate. U.S. EPA and the MPCA further agree to cooperate with 3M in the defense of any such claim or action.

The U.S. EPA and the MPCA shall not be held as a party to any contract entered into by 3M in carrying out the activities pursuant to this Consent Order.

Χ.

# Deed Notice, Land Use and Conveyance of Title

3M shall comply with the recording requirements of ERLA, Section 16, Subd.2, if such provisions have not already been satisfied by the previous landowners' conveyance of title to 3M of any property composing the Oakdale disposal sites.

3M agrees not to use any portion of the Oakdale disposal sites in any manner which would adversely affect the integrity of any containment system, treatment system or monitoring system installed pursuant to this Consent Order.

No conveyance of title, easement or other interest in any portion of the Oakdale disposal sites owned by 3M shall be consummated by 3M without provision for continued maintenance of any containment system, treatment system and monitoring system installed pursuant to this Consent Order. 3M shall notify U.S. EPA and MPCA by registered mail at least ninety (90) days prior to any conveyance of 3M's intent to convey any interest in land which comprises the Oakdale disposal sites and of the provision made for continued maintenance of the systems.

XI.

## Other Applicable Laws

All actions required to be taken pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable local, State and Federal laws and regulations unless an exemption from such requirements is specifically provided herein. In the event there is a conflict in the application of Federal or State laws or regulations, the more stringent of the conflicting provisions shall apply.

NIIX.

#### Reimbursement of Costs

Within 30 days of the effective date of this Consent Order, 3M shall pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota the sum of \$20,000 as reimbursement of the MPCA's expenditures for laboratory costs and \$40,000 for administrative expenses in connection with the investigation of the Oakdale disposal sites. 3M shall pay into the Treasury of the United States the sum of \$10,000 as reimbursement of U.S. EPA's expenditures (payment to be forwarded to the U.S. EPA, Region V Regional Hearing Clerk). Payment of these sums

shall be in full and complete satisfaction of all past monetary claims of the MPCA and U.S. EPA for expenditures made prior to the execution of this Consent Order. 3M shall also reimburse the MPCA for all costs associated with any Agency activities in connection with the RAP. Within thirty (30) days of the end of each calendar year, the MPCA will submit to 3M an itemized statement of the Agency's expenses for the previous year. Following receipt of the itemized statement, 3M shall pay, within sixty (60) days, into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota, the required sum not to exceed a total of \$20,000 per calendar year plus documented laboratory costs. In no event shall the future reimbursement exceed a total of \$100,000.

#### XIII.

# Termination and Satisfaction

The provisions of this Consent Order shall be deemed satisfied upon 3M's receipt of written notice from U.S. EPA and the MPCA Director that 3M has demonstrated, to the satisfaction of the Agencies, that all of the terms of the RAP have been completed. However, following completion of any subpart of the RAP, 3M may request a determination by the MPCA Director and the U.S. EPA that 3M has completed the subpart to the satisfaction of the Agencies.

Upon 3M's receipt of notice from the MPCA Director and U.S. EPA that all of the terms of the RAP have been completed to the satisfaction of the Agencies, the access agreements referenced in this Consent Order will thereby be terminated.

IT IS SO AGREED:
By:  Minnesota Mining and Manufacturing Company  Robert M. Adams  Senior Vice President  Technology Services  IT IS SO ORDERED:
Chairman, Minnesota Pollution Control Agency
Director, Minnesota Pollution Control Agency
Valdas V. Adamkus Regional Administrator U.S. Environmental Protection Agency, Region V
Effective Date: July 26, 1983