In the Matter of: The Minnesota Mining and Manufacturing Company Chemolite Site, Cottage Grove, Minnesota

Proceedings Under Sections 17 and 18 of the Minnesota Environmental Response and Liability Act, Minn. Stat. Ch. 115B

Based on the information available to the parties on the effective date of this Response Order By Consent and without trial or adjudication of any issues of fact or law, the parties hereto agree and it is hereby ordered as follows:

A. Jurisdiction

This RESPONSE ORDER BY CONSENT (Order) is issued pursuant to the authority vested in the Minnesota Pollution Control Agency (MPCA) by the Environmental Response and Liability Act of 1983 (ERLA), Minn. Stat. Ch. 115B, and by Minn. Stat. Chs. 115 and 116.

On the basis of the results of the testing and analysis described in the Statement of Facts, infra, and the MPCA files and records, the MPCA has determined that the previous disposal of hazardous substances at the Minnesota Mining and Manufacturing Company (3M) Chemolite Facility in Cottage Grove, Minnesota (3M Chemolite Site) has given rise to a release of hazardous substances, that the release is causing ground water contamination, and that the release will continue to cause contamination of ground water unless the release is abated. In addition the MPCA has determined that (1) the 3M Chemolite Site is a facility within the meaning of Minn. Stat. § 115B.02, subd. 5; (2) 3M is a
responsible person within the meaning of Minn. Stat. § 115B.03, subd. 1(a) and (b); (3) the actions to be taken pursuant to this Order are reasonable and necessary to protect the public health or welfare or the environment; (4) a reasonable time for beginning and completing the actions required by this Order has been provided for; and (5) 3M has agreed to undertake the actions specified in this Order.

B.

Parties

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

1. The Minnesota Mining and Manufacturing Company; and
2. The Minnesota Pollution Control Agency.

C.

Statement of Facts

For purposes of this Order, the following constitutes a summary of the facts upon which this Order is based. None of the facts related herein shall be considered admissions by either party with respect to any claims unrelated to or persons not a party to this Order.

1. The 3M Chemolite Site is owned by 3M and is located in the northern half of Section 34 and the southern half of Section 27, T27N, R21W, in the city of Cottage Grove. A map of the 3M Chemolite Site is attached as Attachment 1.

2. Since 1947, 3M has owned and operated the 3M Chemolite Plant. A variety of chemicals have been utilized during the plant history, including various alcohols, ethers, ketones, toluene, xylenes, and other organic solvents.

3. In February, 1981, the MPCA received an anonymous "hotline" complaint reporting waste disposal at the 3M Chemolite Site during the period 1950-1955.
Following a review of aerial photos, the MPCA requested 3M to compile information files and employee interviews on the types, amounts, and locations of waste disposal on the 3M Chemolite Site.

4. A 3M report dated July 28, 1981, identified six areas on the 3M Chemolite Site which were used for disposal during the time period 1947-1973. The disposal areas included disposal pits for burial of neutralized hydrofluoric tars, boiler ash, and phenolic wastes and a burn pit for incineration of scrap, off-specification products, construction debris, and waste solvents.

5. A Phase I Investigation Report, completed in March 1982, by 3M's consultant Roy F. Weston, Inc., confirmed the locations and nature of the six waste disposal areas that were indicated in the July 28, 1981 3M report. The investigation indicated that the six production wells on the 3M Chemolite Site generate a cone of depression that prevents ground water from leaving the 3M Chemolite Site. Water quality monitoring indicated the presence of acetone and various chlorinated solvents in the 3M Chemolite production well #1.

6. In late 1982, three monitoring wells were installed on the 3M Chemolite Site and sampled by 3M. Analytical results indicated the release of low levels of several hazardous substances, pollutants or contaminants including the following: 1,1,1-trichloroethane, methylene chloride, chloroform, 1,1-dichloroethane, 1,2-dichloroethane, 1,1,2-trichloroethane, acetone, benzene, toluene and methyl ethyl ketone.

7. In the Spring of 1983, 3M reported an additional waste disposal area, situated in a heavily-vegetated ravine on the western side of the 3M Chemolite Site. This disposal area contains approximately 100 barrels, which appear to contain resins, adhesives, and granular pigments.

8. The 3M Chemolite Site is included on the October, 1984 MPCA Permanent List of Priorities (PLOP) under the Class D (RI/FS) category with a Hazard Ranking Score of 33.
9. On January 22, 1985, the MPCA Board issued a Request for Response Action to 3M requesting 3M to abate the release of hazardous substances at the 3M Chemolite Site.

D. Definitions

Unless otherwise explicitly stated, the definitions provided in Minn. Stat. Ch. 115B shall control the meaning of the terms used in this Order.

ORDER AND AGREEMENT

Based on the information available to the parties on the effective date of this 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:

I. Scope of Order

This Order shall govern the following matters:

1. A Remedial Investigation as described in Part II. and Exhibit A to this Order;

2. A Feasibility Study as described in Part III. and Exhibit A to this Order;

3. A Response Action Plan and Response Action Implementation as described in Part IV. and Exhibit B to this Order; and

4. Reimbursement of the MPCA's costs as described in Part XV. of this Order.

Matters other than those described above are not within the scope of this Order.
II.

Remedial Investigation

3M shall design, propose, initiate, complete and report upon a Remedial Investigation (RI) of the 3M Chemolite Site in accordance with Exhibit A to this Order. Exhibit A is appended to and made an integral and enforceable part of this Order. The purposes of the RI are to:

1. define the extent and magnitude of soil and ground water contamination resulting from the past disposal of hazardous substances, pollutants or contaminants at the 3M Chemolite Site; and,
2. define the hydrology and geology of the areas of contamination; and,
3. provide information and data needed for the selection and implementation of response actions at the 3M Chemolite Site.

III.

Feasibility Study

3M shall design, propose, initiate, complete and report upon a Feasibility Study (FS) for the 3M Chemolite Site in accordance with Exhibit A to this Order. The purpose of the FS is to identify and assess response action alternatives available to abate or minimize the release or threatened release of hazardous substances, pollutants or contaminants as identified through the RI conducted pursuant to Part II. of this Order.

IV.

Response Action Plan and Response Action Implementation

3M shall design and propose a Response Action Plan (RAP) and implement Response Action(s) (RA) for the 3M Chemolite Site in accordance with Exhibit B to this Order. Exhibit B is appended to and made an integral and enforceable part of this Order. The purpose of the RAP and RA are to establish procedures
and implement selected response action alternative(s) necessary to abate or minimize the release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site.

V. Resolution of Disputes

A. If a dispute arises as to the meaning of any part of this Order or concerning the implementation of the RI, FS, RAP, or RA other than with respect to the approval of submittals, 3M shall provide the MPCA Director with a written statement supporting its position. The MPCA Director shall issue an order with respect to the issue(s) in dispute. The order shall be considered a final administrative action of the MPCA regarding the issue(s) in dispute and may be appealed to a court of appropriate jurisdiction. Unappealed orders shall govern the interpretation and implementation of this Order with respect to the issue(s) in dispute.

B. In the event there is a dispute between the MPCA and 3M regarding any submittal, document, report, or schedule (collectively referred to hereafter in this Order as "submittal"), for which approval is required by this Order, or the Exhibits hereto, the dispute shall be resolved in the following manner:

1. The MPCA Director shall review each submittal made by 3M as required by this Order within twenty-one (21) calendar days of receipt and notify 3M in writing by the twenty-first calendar day, or the first working day thereafter, of his approval, disapproval, or modification of the submittal. In the event the submittal is approved, it shall become an integral and enforceable part of this Order. In the event that the submittal is disapproved in whole or part, the MPCA Director shall notify 3M in writing of the specific inadequacies and shall state the necessary amendments or revisions and the reasons therefor.
In the event that the submittal is modified, the MPCA Director shall notify 3M of the specific modification(s) made to the submittal and the reason(s) therefor.

2. Within fourteen (14) calendar days of receipt of any notice of disapproval or modification, or on the first working day thereafter, 3M shall (1) submit revisions to correct the inadequacies, (2) respond to the modification, or (3) state in writing the reasons why the submittal, as originally submitted, should be approved.

3. If, within fourteen (14) calendar days from the date of 3M's submission under subparagraph B.2., above, or the first working day thereafter, the parties have not reconciled all issue(s) in dispute with respect to said submission, the MPCA Director shall propose modifications in the submittal as he deems necessary. The modifications shall be considered a final administrative action of the MPCA regarding the issue(s) in dispute and may be appealed to a court of appropriate jurisdiction. Unappealed modifications shall become integral and enforceable parts of this Order.

5. All submittals or modifications thereto shall be technologically feasible and in accordance with sound engineering practices.

C. The MPCA and 3M shall provide the opportunity to consult with each other during the review of submittals of modifications and the resolution of any dispute pursuant to this Part.

D. In reviewing all submittals, making any modification or issuing any order, the MPCA Director shall comply with the requirements of Minn. Stat. § 116.07, subd. 6 (1984).

E. During the resolution of any dispute under this Part and during any subsequent judicial proceedings, 3M shall continue to implement those portions
of the RI, FS, RAP and RA(s) which the MPCA Director determines can be reasonably implemented pending final resolution of the issues in dispute.

VI.

Creation of Danger

In the event the MPCA Director determines that activities implementing or in non-compliance with this Order, or any other circumstances or activities, are creating an imminent and substantial danger to the health or welfare of the people on the 3M Chemolite Site or in the surrounding area or to the environment, the MPCA Director may order 3M to stop further implementation of this Order for such period of time as needed to abate the danger or may petition a court of competent jurisdiction for such an Order.

VII.

Reporting

3M shall submit to the MPCA Director written progress reports which describe the actions which it has taken during the previous three months (quarter) to implement the requirements of this Order. Such written progress reports shall also describe the activities scheduled to be taken during the upcoming quarter including the schedule for sampling. The progress reports shall be submitted by the first day of every third month following the effective date of this Order. The progress reports shall include a detailed statement of the manner and extent to which the procedures and dates set out in the RI, FS and RAP are being met. Unless otherwise specified, progress reports and any other documents submitted pursuant to this Order shall be sent by certified mail, return receipt requested, or shall be hand delivered, to:

David Richfield, Project Leader
Division of Solid and Hazardous Waste
Minnesota Pollution Control Agency
1935 West County Road B-2
Roseville, Minnesota 55113
The MPCA Director may direct in writing that reports be submitted at different intervals or that no further reports need be submitted.

VIII. Project Leaders

The MPCA and 3M shall each designate a Project Leader and alternate(s) for the purposes of overseeing the implementation of this Order. Within ten (10) days of the effective date of this Order, 3M shall notify the MPCA Director of the name and address of its Project Leader and alternate. The MPCA Project Leader is David Richfield; the MPCA alternate is Beth Gawrys. Either party may change its designated Project Leader or alternate(s) by notifying the other party, in writing, of the change. To the maximum extent possible, communications between 3M and the MPCA concerning the terms and conditions of this Order shall be directed through the Project Leaders. Each Project Leader shall be responsible for assuring that all communications from the other Project Leader are appropriately disseminated and processed.

The Project Leaders shall have at least the authority to (1) agree to the extent of soils to be removed, if any; (2) take samples or direct that samples be taken; (3) direct that work stop for a period not to exceed 72 hours whenever a Project Leader determines that activities at the 3M Chemolite Site may create an actual 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 Project Leader deems appropriate; (5) review records, files and documents relevant to the Order; and (6) make or authorize minor field modifications in the RI, FS, RAP or RA or in techniques, procedures or design utilized in carrying out this Order which are necessary to the completion of the project. Any field modifications shall be approved orally by both Project Leaders.
Within forty-eight (48) hours following the modification, the Project Leader who requested the modification shall prepare a memorandum detailing the modification and shall provide or mail a copy of the memorandum to the other Project Leader. The MPCA Project Leader or alternates shall either be on-site or available on call during all hours of work. The absence of any Project Leader from the 3M Chemolite Site shall not be cause for stoppage of work.

IX.

Sampling and Data/Document Availability

The MPCA Director and 3M shall make available to each other the results of sampling, tests or other data generated by either party, or on their behalf, with respect to the implementation of this Order. At the request of the MPCA Project Leader, 3M shall allow split or duplicate samples to be taken by the MPCA during sample collection conducted during the implementation of this Order. The 3M Project Leader shall endeavor to notify the MPCA Project Leader or Alternate not less than five (5) days in advance of any sample collection. If it is not possible to provide five (5) days prior notification, 3M shall notify the MPCA Project Leader or Alternate as soon as possible after becoming aware that samples will be collected.

X.

Retention of Records

3M shall preserve for a minimum of three (3) years after termination of this Order all records and documents in its possession or in the possession of its divisions, employees, agents, accountants, contractors or attorneys which relate in any way to the presence of hazardous substances, pollutants or contaminants at the 3M Chemolite Site or to the implementation of this Order despite any document retention policy to the contrary.
XI. Access

The MPCA and its authorized representatives shall have authority to enter the 3M Chemolite Site at all reasonable times for the purposes of inspecting records, operating logs, contracts and other documents related to the 3M Chemolite Site and the implementation of this Order; reviewing the progress of 3M in carrying out this Order; conducting such tests as the MPCA Director or the MPCA Project Leader deems necessary; and verifying the data submitted to the MPCA by 3M. 3M shall honor all reasonable requests for access conditioned only upon presentation of proper credentials.

XII. Hold Harmless Agreement

3M agrees to indemnify and save and hold the MPCA, its agents and employees harmless from any and all claims or causes of action arising from or on account of acts or omissions of 3M, its officers, employees, agents, or contractors in carrying out the response activities pursuant to this Order, except for claims by state employees arising out of and in the course of their employment. The MPCA Director shall notify 3M of any such claim or action within ten (10) working days of receipt by the MPCA of such claim or action. The MPCA Director agrees not to act with respect to any such claim or action without first providing 3M with an opportunity to participate. The MPCA further agrees to cooperate with 3M in the defense of any such claim or action.

XIII. 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 Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling,
transportation, disposal or release of any pollutant, contaminant or hazardous substances at, to, or from the 3M Chemolite Site.

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

XIV.

Other Applicable Laws

All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, State and Federal laws and regulations, including laws and regulations related to occupational safety and health. 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.

XV.

Recovery of Expenses

Within thirty (30) days of the effective date of this Order, 3M shall pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota the sum of $5,582.16 as reimbursement of the MPCA's expenses incurred in connection with the investigation of the 3M Chemolite Site. Payment of this sum shall be in full and complete satisfaction of all monetary claims of the MPCA for expenditures made prior to the effective date of this Order in connection with the investigation of the release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site.

3M also agrees to reimburse the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota for expenses
associated with MPCA activities related to the implementation of this Order.
The amount of reimbursement shall not exceed twenty thousand ($20,000) dollars
excluding laboratory costs for any calendar year or partial calendar year until
the RA Final Report required by Part VIII. of Exhibit B to this Order is
approved and five thousand ($5,000) dollars excluding laboratory costs for each
calendar year thereafter. Within thirty (30) days of the end of each calendar
year, the MPCA will submit to 3M a statement of MPCA expenses for the previous
year. Within sixty (60) days, following receipt of this statement, 3M shall pay
the required sum into the Environmental Response, Compensation and Compliance
Fund of the Treasury of the State of Minnesota.

XVI.

Amendment Of Order

This Order may only be amended by written agreement between 3M and the MPCA.

XVII.

Confidential Information

3M may assert a business confidentiality claim covering part or all of the
information requested by this Order pursuant to Minn. Stat. §§ 13.03, 13.37
and 116.075. Analytical data shall not be claimed as confidential by 3M.
Information determined to be confidential by the MPCA Director shall be afforded
protection as provided in Minn. Stat. Ch. 13 and § 116.075. If no such claim
accompanies the information when it is submitted to the MPCA Director, it may be
made available to the public by the MPCA without further notice to 3M.

XVIII.

Extensions of Schedules

Extensions shall be granted if requests for extensions are submitted in a
timely fashion and good cause exists for granting the extension. All extensions
must be requested by 3M in writing. The request shall specify the reason(s) why the extension is needed. Extensions shall only be granted for such period of time as the MPCA Director or MPCA Board determines is reasonable under the circumstances. A requested extension shall not be effective until approved by the MPCA Director or MPCA Board.

The MPCA Director may extend the time schedules contained in this Order for a period not to exceed ninety (90) days except that if an extension is needed as a result of (1) delays in the issuance of a necessary permit which was timely applied for; (2) judicial review of the issuance, non-issuance or re-issuance of a necessary permit; or, (3) judicial review under Part V. of this Order, the MPCA Director shall have the authority to extend the time schedules for a longer period. Extensions of greater than ninety (90) days requested for reasons other than the three specified above may be granted under this Order, but only if authorized by the MPCA Board under Part XVI. of this Order.

The burden shall be on 3M to demonstrate to the satisfaction of the MPCA Director or MPCA Board that the request for the extension has been submitted in a timely fashion and that good cause exists for granting the extension. Extensions shall be granted where 3M demonstrates that the reason the extension is needed is due to:

1. Circumstances beyond the reasonable control of 3M, including delays caused by the MPCA;
2. Stoppage of work under Part VI. of this Order which work stoppage was not the result of any noncompliance by 3M with this Order or the Exhibits hereto;
3. Review resulting from the good faith invocation by 3M of the resolution of disputes provisions of Part V., of this Order, which review
results in delays in implementation of this Order making it impossible for 3M to meet the required schedules; and,

4. Delays which are directly attributable to any changes in permit terms or conditions or refusal to grant a permit needed to implement the requirements of this Order, if 3M filed a timely application for the necessary permit.

XIX.

Remedies of the Parties

The terms of this Order shall be legally enforceable by either party in a court of appropriate jurisdiction.

Nothing in this Order shall waive the MPCA's right to enforce the Order, or to take any action authorized by Minn. Stat. Ch. 115B or by any other law should 3M fail to maintain compliance with this Order.

XX.

Failure to Make Timely Submittals

A. For each week that 3M fails to make a submittal to the MPCA Director in accordance with the time schedules contained in the Exhibits to this Order or any other time schedule approved or modified by the MPCA Director, 3M shall be obligated to pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota the sum of One Thousand dollars ($1,000).

B. 3M shall not be liable for payment under this Part if it has submitted to the MPCA Director a timely request for an extension of schedules under Part XVIII. of this Order and such request has been granted.

C. Upon determination by the MPCA Director that 3M has failed to make a submittal referenced herein, written notice of the failure specifying the provision of the Order which has not been complied with shall be given to 3M.
3M shall pay the required sum within thirty (30) days of submission of the submittal which was the subject of the notice. 3M retains the right to dispute under Part V. the factual basis for the MPCA Director's determination that a submittal has not been made in a timely fashion. However, 3M waives any rights it may have to challenge, on legal grounds, the requirement that it make payments under this Part.

D. Payments required by this Part shall accrue from the date on which the submittal was to have been made. Payments required by this Part shall cease to accrue when 3M delivers the required submittal to the MPCA Director.

E. Nothing in this Part shall be construed as prohibiting or in any way limiting the ability of the MPCA to seek civil penalties available under Minn. Stat. Ch. 115B or any other law for any noncompliance with this Order except for noncompliance with the schedules for making submittals.

XXI.

Conveyance of Title

No conveyance of title, easement, or other interest in the 3M Chemolite Site shall be consummated by 3M without provision for continued maintenance of any containment system, treatment system or monitoring system installed pursuant to this Order. 3M shall notify the MPCA by registered mail at least sixty (60) days prior to any conveyance of 3M's intent to convey any interest in land which comprises the 3M Chemolite Site and of the provision made for continued maintenance of any facility or system installed pursuant to this Order.

XXII.

Covenant Not to Sue

In consideration for 3M's performance of the terms and conditions of this Order, and based on the information known to the parties on the effective date
of this Order, the MPCA agrees that compliance with this Order shall stand in lieu of any administrative, legal and equitable remedies available to the MPCA regarding (1) the performance of a RI and FS concerning the release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site; (2) the development of a RAP and implementation of RA to abate or minimize the release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site; (3) the reimbursement of the MPCA's administrative expenses incurred with respect to its investigation of the release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site and in overseeing the implementation of this Order; except that nothing in this Order shall preclude the MPCA from exercising any administrative, legal, and equitable remedies available to it to require additional actions by 3M in the event that:

A. The MPCA discovers conditions at the 3M Chemolite Site that were unknown or receives information relating to the releases sought to be remedied by this Order that was not available on the effective date of the Order; or

B. Despite the implementation of the requirements of this Order, there continues to be a release or threatened release of hazardous substances, pollutants or contaminants at the 3M Chemolite Site which presents a substantial danger to the public health, welfare, or the environment.

XXIII.

Successors

This Order shall be binding upon 3M, its successors and assigns, and upon the MPCA, its successors and assigns.

XXIV.

Termination and Satisfaction

The provisions of this Order shall be deemed satisfied and terminated upon 3M's receipt of written notice from the MPCA Director that 3M has demonstrated
to the satisfaction of the MPCA, that all the terms of the Order have been completed.

XXV.

Effective Date

This Order is effective upon the date the last required signature is affixed hereeto.

BY THEIR SIGNATURES HERETIN, THE UNDERSIGNED REPRESENT THAT THEY HAVE AUTHORITY TO BIND THE PARTIES THEY REPRESENT, THEIR AGENTS, CONTRACTORS AND SUBSIDIARIES IT IS SO AGREED:

By:  
Minnesota Mining and Manufacturing Company
Robert M. Adams, Senior Vice President
Technology Services

Roger P. Smith, Assistant Secretary

May 30, 1985

Effective Date

Chairperson, Minnesota Pollution Control Agency

Director, Minnesota Pollution Control Agency

May 30, 1985

Effective Date