



George E. Meyer
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

101 South Webster Street
Box 7921
Madison, Wisconsin 53707
TELEPHONE 608-266-2621
DNR TELEFAX 608-267-3579
DNR TDD 608-267-6897

SOLID & HAZARDOUS WASTE MGMT 608-266-2111
SOLID & HAZARDOUS WASTE TELEFAX 608-267-2768

September 6, 1994

File Ref: FID 246004330
Ozaukee County
HW/CA

Mr. Craig Bostwick
Corporate Manager, Environmental & Safety
Cook Composites & Polymers -
919 E. 14th Avenue
North Kansas City, MO 64116

SUBJECT: Draft Modification to the Plan of Operation approval
to conditionally approve the RFI workplan for
Cook Composites & Polymers (CCP) Saukville WI Facility
WID 980615439

Dear Mr. Bostwick:

The Department has reviewed the document entitled "Crosswalk between draft RFI workplan and WDNR guidance document for hazardous waste facility investigations," as well as the associated documents referenced in the crosswalk which together comprise the RFI workplan for CCP. Our review has resulted in a conditional plan modification to the plan of operation approval which is issued in draft form to allow you the opportunity to provide comments. Please provide any comments you may have on this modification within two weeks of the date of this letter.

Our major comments are divided into two main areas:

1. Soil cleanup goals

As you may know, chs. NR 720 and 722, Wis. Adm. Code, have been proposed to guide development of soil clean-up standards and selection of remedial methods. Ch. NR 720, Wis. Adm. Code, has been undergoing revisions and hearings and is expected to be promulgated later this autumn or early next year. Once it is promulgated, the requirements of this chapter will be applicable at CCP. In the meantime, the Department has issued interim guidance regarding clean-up standards for soils in Wisconsin. The guidance states that the process in proposed s. NR 720.19, Wis. Adm. Code, should be used to determine clean-up standards until ch. NR 720, Wis. Adm. Code, is promulgated.

Because of this guidance and the upcoming promulgation of ch. NR 720, Wis. Adm. Code, the proposed risk assessment for the churchyard and Logemann properties should not be done. Condition 2 of the attached plan modification requires that the process described in s. NR 720.19, Wis. Adm. Code, be followed to develop soil clean-up standards for all soils at the facility, including the churchyard and Logemann properties.

2. Number and location of soil borings

Table 5-1 of the Draft Site Investigation and Continuing Interim Measures Workplan delineates the proposed number and location of borings. The number of borings for each area is somewhat sparse, particularly for areas 2 and 3. The proposed number of soil samples would be adequate to confirm if contamination exists at those locations. However, the May 11, 1994 letter lists "assessing the nature and extent of soil contamination associated with the site..." as an objective of the sampling event. We do not believe that the proposed number of soil borings is adequate to define the extent of contamination at those locations. In condition 3 of the attached plan modification, we have offered CCP a choice between two options: 1) Install the proposed number of borings at the specified locations. If contamination is discovered at those points, then CCP must perform additional borings to adequately determine the extent of contamination. 2) Place a minimum of three borings at each of areas 2 and 3. Additional borings may still be needed later if this does not adequately define the extent of contamination at those locations.

Please be aware that as of November 7, 1994, the Department will require that all soil samples submitted for VOC analyses be preserved in methanol immediately after collection, unless samples are stored in either a brass tube or an ENCORE sampler. Please refer to the July 1994 issue of "Release News," vol.4, no. 3, published by the Department's Emergency and Remedial Response section, or call Chris Klopp at (608)267-0860, if you have questions regarding this requirement.

Additional conditions in the plan modification should be self-explanatory.

Mr. Craig Bostwick

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Please review this draft modification and provide any comments you may have to the Department within two weeks of the date of this letter. Thank you in advance for your quick attention to this. If you have any questions, please call Jill Fermanich at (608) 266-5741.

Sincerely,



Barbara J. Zellmer, Chief
Hazardous Waste Management Section
Bureau of Solid & Hazardous Waste Management

BJZ:jjf

enclosures

cc: Mark Gordon - SW/3
Tim Mulholland/Jill Fermanich - SW/3
Walt Ebersohl/Pat Brady - SED
Laura Lodisio/Robert Smith - U.S. EPA Region 5, HRE/8J
Jean Gromnicki - U.S. EPA Region 5, HRM/7J
Chuck Slaustas - U.S. EPA Region 5, HRP/8J
Jim Rickun/Stacy McAnulty - RMT, Inc., Madison
Jeffery Knight - Village of Saukville, WI president

DRAFT

BEFORE THE
STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

MODIFICATION
TO THE
PLAN OF OPERATION APPROVAL

COOK COMPOSITES AND POLYMERS COMPANY
HAZARDOUS WASTE INCINERATOR
FID 246004430
U.S. EPA I.D. NO.: WID980615439

FINDINGS OF FACT

General Information

Owner/Operator: Cook Composites and Polymers Company
919 E. 14th Avenue
North Kansas City, MO 64116
(816) 391-6000

Contact: Mr. Craig Bostwick
(816) 391-6025

Location: The former incinerator, storage area and existing incinerator are at Cook Composites and Polymers' Saukville, Wisconsin facility. Church Street bounds the site to the north, South Main Street to the east, West Linden Street to the south, and the Chicago Milwaukee St. Paul Pacific Railroad to the west.

Consultant: RMT, Inc.
744 Heartland Trail
Madison, WI 53708-8923
(608)831-4444
James S. Rickun, Project Manager

The Department finds that:

1. Cook Composites and Polymers Company purchased Freeman Chemical Corporation on April 2, 1990 from its former parent company, Georgia Gulf Corporation. On December 31, 1990, Freeman Chemical Corporation and Cook Composites and Polymers merged and Freeman Chemical Corporation was liquidated. All references to Cook Composites and Polymers in this document refer to the same facility, either under the present or former names.
2. Cook Composites and Polymers Company (CCP) owns and operates a synthetic resin manufacturing facility at 340 Railroad Street, Saukville, Ozaukee

County, Wisconsin. The four waste streams that may be generated at the facility consist of the following:

- a. Reaction water a.k.a. Acid Water (D001): Reaction water may include toluene, ethylbenzene, phenol and other organics.
- b. Solvents (F003 and D001): Rinse solvent consisting of xylene and other hydrocarbons, and process solvents, including xylene and toluene.
- c. Clean Up Wastes (U-listed wastes).
- d. Waste Resins (D001): Test samples and rejected resins.

These waste streams are collected and properly disposed of by CCP.

3. Since the facility began operations in 1948, releases of hazardous wastes or hazardous constituents, including raw materials, resins and by-products, have occurred. The potential major contributing sources of volatile organic compounds (VOCs) to groundwater consist of the following five areas of concern.

* Area 1 - Former Urethane Laboratory/Hazardous Waste Incinerator

Reaction water burned at former incinerator from 1968 to 1989. As a result of laboratory disposal of spent solvents (beginning in the 1950's), incinerator operations and spills, elevated levels of benzene, toluene, ethylbenzene and xylene (BTEX) are present in soils in this area.

* Area 2 - Former Dry Well

Used from approximately 1952 through 1968 to dispose of reaction water as approved by the Wisconsin Division of Water Pollution Control (WDWPC, 1952). The well consisted of a pit with sand and gravel base. The well was remediated in 1986 by removing the lid and concrete blocks that comprised the well and pumping the remaining fluid and excavating the remaining sludge in the well. The excavation was then filled with clean road bond size gravel.

* Area 3 - Former Tank Storage Area

Originally supported on a stone base bermed with earth. Although the tanks did not leak, spills may have occurred during tank filling. Currently, this area is occupied both by new tank and storage containment structures, and by the hazardous waste incinerator/small storage facility.

* Area 4 - Logeman Property (off-site)

An air curtain incinerator, consisting of an 8 to 10 foot deep concrete pit, was formerly operated in this area. This pit is

presently covered by a wooden platform. The incinerator was used in the past primarily to burn diatomaceous earth. Reaction water was used occasionally to quench the fires, and cracks in the concrete pit may have allowed releases to the ground. An ash pile, covered with 60 ft³ of soil in 1972, is also located on the property. The ash was produced during operation of the air curtain incinerator.

* Area 5 - Churchyard (off-site)

This area may have been affected by the past disposal practices at Area 1. Past overland flow of spent solvents may have migrated onto a small section of the churchyard. Freeman (now CCP) addressed past tanker spills (two occurrences in the 1970's) that resulted in overland flow from the facility to the adjacent churchyard by removing sod and excavating soil.

4. In 1979, trace organic chemicals and an "acid water" odor were identified in the municipal water supply in Saukville. City well #2, located approximately 600 feet northwest of the facility, was found to be contaminated and was removed from municipal use. Groundwater samples from this well contained detectable levels of benzene, toluene, trichloroethylene and xylene. CCP has continued to use city well #2 as a source of noncontact cooling water. This water is eventually discharged to the Milwaukee River under a WPDES permit.
5. Several groundwater monitoring wells were installed at CCP during 1983 to 1986. Groundwater samples taken from these wells document that Preventive Action Limits (PALs) and Enforcement Standards (ESs) for substances of health and welfare concern have been attained or exceeded at the point of standards application in both the glacial deposits and bedrock below the facility.
6. Certain corrective measures have been undertaken as interim measures at CCP. The interim measures began in May, 1986 under WDNr approval and include: three Ranney collection systems and seven dewatering wells in the glacial deposits; four six-inch diameter withdrawal wells installed in the shallow dolomite; and one deep dolomite withdrawal well. In addition, the majority of the site was paved with concrete, and a surface runoff collection system was installed.
7. On October 21, 1987, a three party Administrative Order on Consent was signed by representatives of Freeman, the WDNr and U.S. EPA Region 5. This order required continuing corrective measures to prevent or reduce the release or migration of hazardous waste or hazardous constituents to the groundwater, surface water, and soil in and around Freeman's facility.
8. The Scope of Work for investigations at CCP contained six Tasks: Task 1 (Description of Past and Current Conditions); Task 2 (Schedules); Task 3 (Support Plans); Task 4 (Work to be Performed); Task 5 (Evaluation of Groundwater Collection System); and Task 6 (Reports). Task 1 was approved in 1986, and Task 3 is currently under review by the EPA and

WDNR. Task 5 is on-going with submittal to the USEPA and WDNR of quarterly groundwater monitoring results and the annual groundwater evaluation report.

9. The Department issued a conditional Feasibility and Plan of Operation approval for CCP on February 9, 1988. On August 22, 1994, the Department modified this plan of operation approval to incorporate provisions for corrective action.
10. Glacial till, glaciolacustrine, and glaciofluvial deposits overlie dolomite bedrock at Saukville. Unconsolidated deposits range from approximately 10 to 25 feet in thickness. In general, sand, silt, and clay are present near the land surface and overlie a laterally continuous layer of lake sediments (varved silts and clays). Dense glacial till exists beneath the lacustrine deposits in the north and east portions of the property. Beneath the till and lacustrine deposits is a thin layer of glacial outwash over the bedrock surface.
11. Soil borings and seismic refraction surveys show the bedrock surface at the site to be pinnacled with occasional deep, narrow, closed depressions (possibly sink holes). A deep depression in the bedrock, filled with more than 150 feet of clay, silt and sand, is in the northeast corner of CCP's facility. At four locations the bedrock (Niagara dolomite) was cored to a depth of 65 to 85 feet. The cores show that the dolomite is severely solutioned and highly fractured.
12. Available information concerning the site indicates a complex natural hydrogeologic setting that is also influenced by pumping activities conducted at the site as interim corrective measures and surrounding municipal water supply wells.
13. This modification to the Plan of Operation constitutes a minor modification according to s. NR 680.07(3), Wis. Adm. Code.

CONCLUSIONS OF LAW

1. The Department has authority pursuant to 144.735 Wis. Stats. and s. NR 635.17, Wis. Adm. Code, to require corrective action to address releases from solid waste management units.
2. The Department has authority under s. 144.44(3), Stats. to modify a plan of operation approval with special conditions if the conditions are needed to ensure compliance with chs. NR 600 through 685, Wis. Adm. Code.
3. The Department has the authority to require a response under s. 160.23, Wis. Stats., and s. NR 140.24, Wis. Adm. Code, if a preventive action limit for a substance of health and welfare concern has been attained or exceeded at a point of standards application.

4. The Department has the authority to require a response under s. 160.25, Wis. Stats., and s. NR 140.26, Wis. Adm. Code, if an enforcement standard for a substance of health or welfare concern has been attained or exceeded at a point of standards application.
5. The Department has authority to approve or modify a feasibility and plan of operation pursuant to ss. NR 680.06 and NR 680.07, Wis. Adm. Code.

DETERMINATION

Based on the Findings of Fact and Conclusions of Law, the Department determines that CCP's Plan of Operation Approval is hereby modified, subject to compliance with chs. 600 through 685, Wis. Adm. Code and the following conditions. The Department retains jurisdiction either to require the submittal of additional information or to further modify this determination at any time.

CONDITIONS

1. Within 120 days from the date of completing the investigation, CCP shall submit the results, including all outstanding information identified in the February 15, 1994 crosswalk document, along with a corrective measures study to the Department according to the format(s) included in the attached "Hazardous Waste Facility Investigations Results and Corrective Measures Study - Task II."
2. During the CMS phase, CCP shall develop clean-up standards for soil at the facility in accordance with proposed s. NR 720.19, Wis. Adm. Code, and restore soil quality at the site to the extent practicable and that is protective of public health, safety, welfare and the environment. The soil investigation should be completed and then s. NR 720.19, Wis. Adm. Code, followed to develop soil cleanup standards. Although a risk assessment similar to the one proposed in the RFI workplan might be acceptable under the proposed s. NR 720.19, Wis. Adm. Code, it is premature at this point and should not be done until s. NR 720.19, Wis. Adm. Code, has been reviewed.
3. CCP shall choose one of the following two options regarding the number of soil borings to be advanced: 1) Install the proposed number of borings at the specified locations. If contamination is discovered at those points, then CCP must perform additional borings to adequately determine the extent of contamination. 2) Place a minimum of three borings at each of areas 2 and 3. Additional borings may still be needed later if this does not adequately define the extent of contamination at those locations.
4. All investigative wastes, including drill cuttings, excavated soil, decontamination water, surge and wash waters, etc. from all borehole and groundwater monitoring well construction and development, sampling

activities and remedial actions, etc. shall be collected, containerized and properly managed as either a solid waste or hazardous waste. CCP is responsible for making a hazardous waste determination on the above material in accordance with ss. NR 610.05 or NR 615.06, Wis. Adm. Code.

5. As of November 7, 1994, all soil samples submitted to a laboratory for VOC analyses shall be preserved in methanol immediately after collection, unless samples are stored in either a brass tube or an ENCORE sampler.
6. CCP shall notify the Department at least two weeks in advance of the anticipated date the aquifer testing is to begin. At that time, a proposed schedule for the testing shall be provided to the Department.
7. Well W-8A (replacement for W-8) and any future monitoring wells that may be installed at the facility shall be installed in accordance with ch. NR 141, Wis. Adm. Code. In addition, the following forms are required to be used where appropriate and submitted to the Department:
 - Monitoring well construction form 4400-113A
 - Monitoring well development form 4400-113B
 - Well/drilling/borehole abandonment form 3300-5b
 - Soil boring log form 4400-122
8. Any Appendix IX detects that are detected during the one round of sampling proposed at wells W-06A, W-44, W-47, W-21A, W-24A, W-28, W-29 and W-30 shall be added to the routine monitoring plan for that group of wells in which they were detected.
9. A hydrogeologist or other qualified person, as defined in s.NR 600.03(98), Wis. Adm. Code, shall observe and direct the drilling and construction of all monitoring wells and soil borings and shall supervise the operation of the aquifer tests. In addition, all reports shall be certified by a registered professional engineer and a hydrogeologist.

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NOTIFICATION OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to section 227.48(2), Stats.

Dated: _____

DEPARTMENT OF NATURAL RESOURCES
For the Secretary

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Barbara J. Zellmer, Chief
Hazardous Waste Management Section
Bureau of Solid & Hazardous Waste Management

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Jill Fermanich, Hydrogeologist