

SECTION I  
CLOSURE PLAN AND FINANCIAL REQUIREMENTS

I-1 CLOSURE PLAN

This section is submitted in accordance with the requirements of 40 CFR 270.14(b)(13) and §§264.111 through 115. This plan identifies all steps that will be necessary to close the Freeman Chemical Corporation incinerator unit and hazardous waste storage area at any point during their intended operating life. The plan also addresses the reasons why partial closure will not occur. A post-closure plan is not required because this is not a disposal facility and no hazardous wastes or residues will remain at closure.

Freeman Chemical will maintain on-site copies of the approved closure plan and all revisions to the plan until the certification of closure completeness has been submitted and accepted by the EPA Regional Administrator. Freeman Chemical will notify the Regional Administrator at least 180 days prior to the date expected to begin final closure. Upon completion of closure, Freeman Chemical will submit to the Regional Administrator a certification by a local independent registered professional engineer that the Freeman Chemical incinerator operation and hazardous waste storage area have been closed in accordance with the specifications in the approved closure plan.

I-1a Closure Performance Standard

This closure plan is designed to conform to the closure performance standard. In general, the plan requires that all hazardous wastes are removed from the site at closure. Since all hazardous wastes will be removed from the site, the plan insures that the Freeman Chemical incinerator and hazardous waste storage area will be closed so as to minimize threats to human health and the environment, and eliminate post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated runoff, or waste decomposition products to the ground or surface waters or to the atmosphere. The following discussion describes in detail efforts to be made by Freeman Chemical to satisfy the closure performance standard.

I-1b Partial Closure and Final Closure Activities

*why?*  
Partial closure is not planned for the Freeman Chemical incinerator or hazardous waste storage area. Final closure of the Freeman Chemical site is not planned until the year 2035.

I-1c Maximum Waste Inventory

The inventory of wastes stored at the Freeman Chemical incinerator and hazardous waste storage facility will be limited to a maximum of:

Solvent - four 6,500 gallon tanks - 26,000 gal.  
Misc. resins - 240 drums - 13,200 gal.  
Solids - 600 drums @170 lbs. -102,000 lbs.  
Ash - two 12 cubic yard lugger boxes  
(stored as wet ash  
just outside of incinerator 24 cu. yds.

I-1d Inventory Disposal; Removal or Decontamination of Equipment

Final closure will be initiated following the treatment of the final batch of hazardous wastes to be processed in the Freeman Chemical incinerator and/or the off-site shipment of the hazardous waste in the storage area. Closure will be completed within 180 days of this occurrence.

Clean-up and decontamination shall be performed under a shift supervisor, with the Plant Engineer present. Whenever the clean-up/decontamination personnel are handling materials containing toxics or irritants, self-contained breathing apparatus will be worn. This is true for collecting samples, disconnecting lines used to pipe material, and cleaning spills. There will be a minimum of two people performing any task that requires the use of self-contained breathing apparatus.

Neoprene gloves and impermeable protective clothing will be worn at all times during the clean-up decontamination process.

Prior to leaving the decontamination area, decontamination of personnel protective clothing will be conducted by removing all bulk materials from the boots and spraying, washing and scrubbing with detergent solution all outside protective clothing materials. Personnel undergoing decontamination will stand in drip pans to catch all rinsate and residues.

*Should this be specified*

~~The contents of all tanks (the four solvent plus the two acid water) will be pumped into tank wagons for off-site disposal at an approved treatment or disposal facility. All drums will be loaded onto vans for treatment or disposal at an approved hazardous waste management facility. The ash will be taken to a hazardous waste landfill. All hazardous wastes will be properly manifested.~~

I-1d, continued

Any unloading or transfer lines that precede the solvent tanks will be flushed with fuel oil. The oil will be pumped through these lines to the solvent tanks and fed directly through the waste feed lines which will be plumbed to discharge to a tank wagon.

Each solvent tank will be flushed three times with 500 gallons of fuel oil. The solvent tanks also will be sprayed with a portable spray system to rinse the vessel internals. The oil and water will be transported off site to an approved disposal or treatment facility.

The incinerator solvent charging systems primary and secondary combustion chambers and pollution control devices will be inspected for contamination by wipe tests. Cellulose pads will be used to collect surface samples for extraction followed by GC/MS scanning analyses. Comparison of these results to those from a scan of the fuel oil will be used to detect the presence of contaminants that could indicate incomplete decontamination. Incineration system equipment decontamination repeated if necessary.

During the cleaning and decontamination process, any evidence of possible contamination in the changing area and the concrete floors will be treated. The cleanup crew will use caustic on the surface and rinse with hot soapy water. This procedure is repeated until all visible residues are gone. GC/MS analysis will be performed on the rinsings to insure that the decontamination process has been successful.

Freeman Chemical will provide the Regional Administrator with certification that the incinerator has been closed in accordance with the specifications contained in the approved closure plan. An independent professional engineer will also certify that closure activities were performed in accordance with the approved closure plan. The independent P.E. will be present during the decontamination process.

#### I-1e Schedule for Closure

The EPA Regional Administrator will be notified by Freeman Chemical at least 180 days before beginning closure. The proposed schedule for closure follows.

11-e, Schedule for Closure, continued

Closure Scheduled for Freeman Chemical Incinerator Unit

<u>Scheduled Event</u>	<u>Days After Closure Initiation</u>
Offsite disposal of all accumulated hazardous wastes	0-15
Flushing and decontamination of piping, containment systems, unloading and transfer lines and waste feed tanks	15-25
Collection and sampling of sump liquids, incinerator wastewater, and surface "swabs"	25
Receipt of analytical verification of decontamination of incinerator system	60
Review laboratory analysis results and treat (if necessary) wastewater and discharge. Dispose of solid wastes	60-90
Certify closure complete	180

I-4 CLOSURE COST ESTIMATE

The latest cost estimate for conducting closure of the Freeman Chemical hazardous waste incinerator is \$112,200. This figure assures that the incinerator will be operational until closure. By virtue of it being a permitted TSD facility and having passed a trial burn, minimum or no decontamination of the internal components is necessary. By year 2,005 or whenever the incinerator operations becomes unreliable, the above costs will be increased to cover disposal of all or parts of the incinerator. The closure costs are summarized by activity in Table I-1.

The closure cost estimate will be kept at the Freeman Chemical Plant manager's Office. It will be revised whenever a change in the incineration unit affects the cost of closure. The closure cost estimate will be adjusted by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment. This "latest adjusted cost estimate" will be retained at the Plant Manager's office together with the "latest cost estimate" throughout the life of the incinerator and final closure of the facility.

I-5 FINANCIAL ASSURANCE MECHANISM FOR CLOSURE

Freeman will assure closure of the new incinerator by the "financial test and corporate guarantee for closure" [264.143(f)]. This will be submitted to EPA upon authorization to build the incinerator. Closure of the existing incinerator is assured by a surety bond approved by the state of Wisconsin for TSD facilities. A copy of the existing bond is shown in Appendix I-B.

I-6 POST-CLOSURE COST ESTIMATES

Does not apply.

I-7 FINANCIAL ASSURANCE MECHANISM FOR POST CLOSURE

Does not apply.

I-8 LIABILITY REQUIREMENTS

A copy of the certificate of insurance is attached (Appendix I-C) for sudden accidental occurrences. Non-sudden accidental occurrences insurance is not required for Freeman's facility.

TABLE I-1. ESTIMATED CLOSURE COSTS<sup>a</sup>

Item	Cost
1. Equipment decontamination and disposal of oily rinsates residues.	\$10,250.00
2. Disposal of Maximum Inventory	88,100.00
3. Disposal of process residues	900.00
4. Professional Certification	750.00
5. Administrative Costs	<u>2,000.00</u>
6. TOTAL	\$102,000.00
7. CONTINGENCIES (10% of line 6)	<u>10,200.00</u>
8. TOTAL COST	\$112,200.00

<sup>a</sup> See Appendix I-A for details.

APPENDIX I-A

Detailed Calculations of Closure Costs

APPENDIX I-A

EQUIPMENT DECONTAMINATION AND  
INCINERATION OF RINSATES; RESIDUES

The volume of fuel oil required for rinsing all lines three times with fuel oil is estimated to be 6,000 gallons. The cost would be:

6,000 gal x \$1.05/gal =	\$6,030
Plus disposal @ .10 =	<u>600</u>
	\$6,630

Incinerator piping decontamination is expected to require an additional 16 hours of laborers' time, resulting in a cost of:

16 hrs x \$20.00/hr = \$320

Analysis of 10 wipe-test pads and one fuel oil sample is estimated to cost:

11 samples x \$300/sample = \$3,300

Total incinerator system decontamination costs are estimated to be:

\$6,630 + 320 + 3,300 = \$10,250.00

DISPOSAL OF MAXIMUM INVENTORY

26,000 gallons of solvent	@ \$	.10	\$2,600
240 drums of resin	@	100.00	24,000
600 drums of solids	@	75.00	45,000
24 cubic yards ash	@	75.00	1,800
21,000 gallons acid water	@	.70	<u>14,700</u>
			\$88,100



### DISPOSAL OF PROCESS RESIDUES

Clean-up water will be transported to an off site designated facility. Assuming on tankwagon (4500 gallons) the most recent cost is \$900.00, including transportation.

Total residue disposal is estimated to cost = \$900.00

### EQUIPMENT DISPOSAL

As all incinerator related equipment will be decontaminated during closure, no disposal will be required. It is expected that the incineration system will be abandoned in place pending use as a non hazardous waste incinerator or salvage.

### PROFESSIONAL CERTIFICATION

An independent registered professional engineer will be retained to certify closure. His time requirements are expected to be 15 hours, calculated as follows:

Familiarization with closure plans	-	2 hours
Inspection during decontamination	-	8 hours
Review of analytical results	-	4 hours
Preparation of certification	-	<u>1 hour</u>

Total Time 15 hours

Total independent certification, at \$50/hr, is estimated to cost:

15 hrs x \$50/hr = \$750.00

### FACILITY SECURITY

Facility security will be maintained throughout the closure period until closure is completed by means of the plant's fences and gates. No cost is associated with maintaining security during closure.

### ADMINISTRATIVE COSTS

Approximately 80 hours of Freeman Chemical administrative time will be involved in managing and certifying closure at a rate of \$25.00 per hour (including firing benefits and overhead) resulting in costs of:

$$80 \text{ hrs} \times \$25.00/\text{hr} = \underline{\$2,000}$$

APPENDIX I-B

Existing Closure Cost Bond

11/4/82 Call to Lisa Larvin  
MAR ext 39  
to renew for 1983  
\$10,000

LEAVE BLANK - DNR USE ONLY	
Regulatory Code	
EPA Identification Number	
License Number	
Name of Licensee	
Closure Cost Estimate	

Bond No. 8089-83-91

KNOW ALL MEN BY THESE PRESENTS, that Freeman Chemical Corporation  
(Owner)  
of 222 East Main Street, Port Washington, Wisconsin 53074  
(Address), as Principal, and  
Federal Insurance Company  
(Name of Surety Company), a surety company organized

and existing under the laws of the State of New Jersey and duly authorized to do surety business in  
the State of Wisconsin, as Surety, are held and firmly bound unto the State of Wisconsin Department of Natural Resources, as

Obligee, in the penal sum of Ten Thousand and no/100 dollars (\$ 10,000.00), for payment of which  
he Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, the Principal owns a solid waste land disposal site or hazardous waste facility named Freeman Chemical  
Corporation located in Lot 6, Block 4, Assessors Plat Town/City/Village of  
(Section, Township and Range)

Saukville, Ozaukee County, Wisconsin, and that site or facility

is subject to either the closure requirements of the plan of operation approval issued by the Obligee, dated this 12th day  
of November, 19 81, and any amendments thereto or the closure requirements of sections NR 181.42(8)  
and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable to the site or facility.

WHEREAS, section 144.44(3)(c), Wisconsin Statutes, requires that the Principal provide the Obligee with proof of financial  
responsibility ensuring that the closure requirements of the plan of operation approval, if any, will be complied with by the  
Principal and any successor in interest.

WHEREAS, this bond is written to provide proof of financial responsibility pursuant to section 144.44(3)(c), Wisconsin  
Statutes, and section NR 180.15 or NR 181.42(10), Wisconsin Administrative Code, to ensure compliance with the closure  
requirements of the plan of operation approval and any amendments thereto or the closure requirements in sections NR  
181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, and shall inure to the benefit of the  
Obligee.

NOW, THEREFORE, the condition of this obligation is such that if the Principal or any successor in interest complies with  
the closure requirements of the plan of operation approval and any amendments thereto or the closure requirement in sections  
NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, and closes the facility identified above  
in accordance with these closure requirements then and only then, this obligation shall be void; otherwise, it shall remain in  
full force and effect.

The Surety shall become liable on this bond obligation only upon a determination by the Obligee, subject to judicial review,  
that the Principal has failed to fulfill the above condition. Following such a determination, the Surety must either complete  
closure of the facility in accordance with the plan of operation approval and any amendments thereto or the closure  
requirements in sections NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, or pay the  
amount of this bond as directed by the Secretary of the Obligee.

The liability of the Surety shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the full penal sum of this bond, but in no event shall the obligation of the Surety thereunder exceed the full penal sum of this bond. Release or discharge of the Surety shall not release the Principal or any successor in interest from the obligation to fully and completely comply with all closure requirements of the plan of operation approval and any amendments thereto or all closure requirements in sections NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable. The insolvency or bankruptcy of the Principal shall not constitute a defense to the Surety with regard to any claim of liability on the obligation of this bond. No amendment to the plan of operation approval will release the Surety from its obligation under this bond.

The Surety hereby waives notification of any failure on the part of the Principal or any successor in interest to faithfully comply with the terms of the plan of operation approval or any amendments thereof or the closure requirements in sections NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, and lack of notice from the Obligee will not bar or limit recovery against the Surety.

This bond is effective on the 28th day of November, 19 81, and shall continue in force until terminated as hereinafter provided. As long as any obligation of the owner or any successor in interest for closure in accordance with the plan of operation approval and any amendments thereto or the closure requirements in sections NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, exists, this bond shall not be cancelled by the Surety unless a replacement bond or other proof of financial responsibility acceptable to the Obligee is provided to the Obligee. If the Surety proposes to cancel this bond, notice shall be provided to the Obligee and the Principal in writing by registered or certified mail not less than 90 days prior to the proposed cancellation date. Not less than 30 days prior to the expiration of the 90 day notice period, the Principal shall deliver to the Obligee a replacement bond or other proof of financial responsibility acceptable to the Obligee. In the absence of the delivery of a replacement bond or other acceptable proof of financial responsibility, all site or facility operations shall immediately cease and this bond shall remain in full force and effect as long as any obligation of the Principal or any successor in interest for closure in accordance with the plan of operation approval and any amendments thereto or the closure requirements in sections NR 181.42(8) and NR 181.44(12) and (13), Wisconsin Administrative Code, if applicable, remains unsatisfied.

Signed, sealed and dated this 28th day of November, 19 81.

*Chemical Corporation*  
*Earl R. Gugenberger - Sec & Treas.*

Principal  
Federal Insurance Company

Surety  
*Sharon A. Woytko*

Attorney in Fact, Sharon A. Woytko

Bond Number 8089-83-91

APPENDIX I-C

Certificate of Insurance

*Copies to I.W. Schaper  
G. Schw...*

DUPLICATE COPY

HAZARDOUS WASTE FACILITY CERTIFICATE  
OF POLLUTION LIABILITY INSURANCE

1. Liberty Mutual Insurance Company, 175 Berkeley Street, Boston, Massachusetts, hereby certifies that it has issued pollution liability insurance covering bodily injury and property damage to:

(Name of Insured) H.H. Robertson Company (the "insured"),

(Address) #2 Gateway Center, Pittsburgh, PA 15222

in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at:

(Name and Address of Each Facility)

(EPA Identification Number)

Freeman Chemical Corp.  
Railroad Street  
Saukville, WI 53080

WID 980615439

for  sudden accidental occurrences,  
 sudden and nonsudden accidental occurrences.

The limits of liability are: \$ 2,000,000 annual aggregate

\$ 1,000,000 each pollution incident  
exclusive of legal defense costs.

The coverage is provided under policy number LG1-181-010656-352,

issued on (date) 7-21-82.

The effective date of said policy is (date) 1-1-82.

The effective date of said pollution coverage is (date) 7-1-82.

2. The Insurer further certifies the following with respect to the insurance described in paragraph 1:

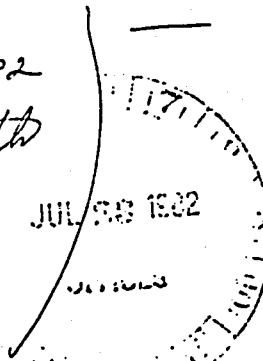
(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

*original not located 7/22/82  
T. Rittenhouse will check with  
Mut. to try and locate.*

*Original sent directly to EPA  
Tom will try to find out which  
EPA office & who in particular  
received this.*

GPO 2991

*ETG*



Page 1 of 2

*ETG  
7/22/82*

- Y211)
- (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147 (f) or 265.147 (f)
  - (c) Whenever requested by a Regional Administrator of the U. S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.
  - (d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility (ies) is (are) located.
  - (e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the Facility (ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

F. R. Wilson

(Signature of authorized representative of Insurer)

F.R. Wilson B.P.P. Manager  
(Type Name and Title)

2501 Wilmington Road, New Castle, PA 16105  
(Address of Representative)



# POWER OF ATTORNEY

Know all Men by these Presents, That the FEDERAL INSURANCE COMPANY, 100 William Street, New York, New York, a New Jersey Corporation, has constituted and appointed, and does hereby constitute and appoint James E. McBride, Thomas L. Vehar, R. George Voinchet and Sharon A. Woytko of Pittsburgh, Pennsylvania

each its true and lawful Attorney-in-Fact to execute under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as surety thereon or otherwise, bonds of any of the following classes, to-wit:

1. Bonds and Undertakings (other than Fiduciary Bonds) filed in any suit, matter or proceeding in any Court, or filed with any Sheriff or Magistrate, for the doing or not doing of anything specified in such Bond or Undertaking, in which the penalty of the bond or undertaking does not exceed the sum of Two Hundred Fifty Thousand Dollars (\$250,000.00).
2. Surety Bonds to the United States of America or any agency thereof, including those required or permitted under the laws or regulations relating to Customs or Internal Revenue; License and Permit Bonds or other indemnity bonds under the laws, ordinances or regulations of any State, City, Town, Village, Board or other body or organization, public or private; bonds to Transportation Companies, Lost Instrument bonds, Lease bonds, Workmen's Compensation bonds, Miscellaneous Surety bonds and bonds on behalf of Notaries Public, Sheriffs, Deputy Sheriffs and similar public officials.
3. Bonds on behalf of contractors in connection with bids, proposals or contracts.

In Witness Whereof, the said FEDERAL INSURANCE COMPANY has, pursuant to its By-Laws, caused these presents to be signed by its Assistant Vice-President and Assistant Secretary and its corporate seal to be hereto affixed this 1st day of January 19 80

FEDERAL INSURANCE COMPANY  
By

George McClellan  
Assistant Vice-President

Richard D. O'Connor  
Assistant Secretary



STATE OF NEW JERSEY

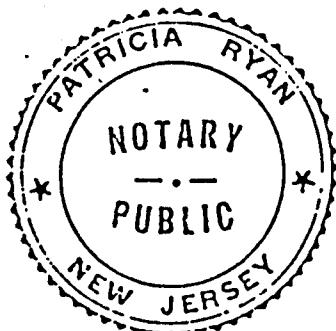
County of Essex

ss:

On this 1st day of January 19 80, before me personally came Richard D. O'Connor, to me known and by me known to be Assistant Secretary of the FEDERAL INSURANCE COMPANY, the Corporation described in and which executed the foregoing Power of Attorney and the said Richard D. O'Connor being by me duly sworn, did depose and say that he is Assistant Secretary of the FEDERAL INSURANCE COMPANY and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereto affixed by authority of the By-Laws of said Company and that he signed said Power of Attorney as Assistant Secretary of said Company by like authority; that he is acquainted with George McClellan and knows him to be Assistant Vice-President of said Company, and that the signature of said George McClellan subscribed to said Power of Attorney is in the genuine handwriting of said George McClellan and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Acknowledged and Sworn to before me  
on the date above written.

Notary Public



I C-3

PATRICIA RYAN  
NOTARY PUBLIC OF NEW JERSEY

My Commission Expires December 11, 19

83

SHORT HILLS, N.J.

County of Essex

} ss.

I, the undersigned, Assistant Secretary of the FEDERAL INSURANCE COMPANY, do hereby certify that the following is a true excerpt from the By-Laws of the said Company as adopted by its Board of Directors on March 11, 1953 and amended May 27, 1971 and that this By-Law is in full force and effect.

"ARTICLE XVIII.

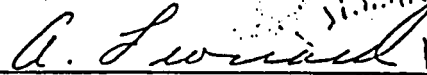
Section 2. All bonds, undertakings, contracts and other instruments other than as above for and on behalf of the Company which it is authorized by law or its charter to execute, may and shall be executed in the name and on behalf of the Company either by the Chairman or the Vice-Chairman or the President or a Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations, except that any one or more officers or attorneys-in-fact designated in any resolution of the Board of Directors or the Executive Committee, or in any power of attorney executed as provided for in Section 3 below, may execute any such bond, undertaking or other obligation as provided in such resolution or power of attorney.

Section 3. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the Vice-Chairman or the President or a Vice-President or an Assistant Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations."

And I further certify that I have compared the foregoing copy of the POWER OF ATTORNEY with the original thereof and the same is a correct and true copy of the whole of said original Power of Attorney and that said Power of Attorney has not been revoked.

And I further certify that said FEDERAL INSURANCE COMPANY is duly licensed to transact fidelity and surety business in each of the States of the United States of America, District of Columbia, Puerto Rico, and each of the Provinces of Canada with the exception of Prince Edward Island; and is also duly licensed to become sole surety on bonds, undertakings, etc., permitted or required by law.

Given under my hand and the seal of said Company at Short Hills, N.J., this 28th day of November, 19 81.



Assistant Secretary