Industrial Risk Insurers

LOSS PREVENTION SURVEY

Overview

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This report should be made available only to authorized persons.

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B.F. GOODRICH COMPANY
RIVER ROAD
PLAQUEMINE, IBERVILLE PARISH,
LA 70764

BY: O. Silarais **DATE:** May 22, 1990
LOC.ID: 800083/860220 **HRS:** 5
CONFERRED WITH: Messrs. J. Conklin, Saf. Engr.; F.T. Lanier, Mfg. Engr.

RECOMMENDATION **NEW*:** None (90-0)
UPDATE **COMPLETED:** None

RECOMMENDATIONS

88-3 **NEW CONSTRUCTION:** Take the following actions in relation to the construction of the second compounding line:

A. **GENERAL CONDITIONS:** Specify in all contracts that plans and final installations are subject to acceptance by IRI. Project specifications should also stipulate the following conditions:

1. Refer all proposed uses of plastic construction materials to IRI for review and appropriate recommendations. (To do)

2. Use noncombustible materials (listed by UL or other recognized testing laboratory) for suspended ceilings and supports, pipe and duct insulation (including adhesives). All filters should be UL Class 1. Keep all concealed spaces free of combustibles. (To do)

3. Install fire protection equipment in conformance with the standards of the National Fire Protection Association (NFPA). Use devices listed by Underwriters Laboratories Inc. (UL) or any other recognized testing laboratory. (To do)

4. Make all electrical installations in conformance with the National Electrical Code (NEC). (To do)

5. DO NOT MOVE COMBUSTIBLE STOCK AND PROCESSING EQUIPMENT INTO THE BUILDINGS UNTIL RECOMMENDED SPRINKLERS ARE PROPERLY INSTALLED, TESTED AND IN FULL SERVICE. (Not done)

6. Provide fire prevention and protection during the construction period, including: (Doing)

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a. Use of public fire department, facility fire brigade, and portable extinguishing equipment.

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b. Early contract awards and expediting of fire protection equipment.

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AC	PROT	RM	PEP	WS	SUPR	FD	HPS	PCB	%AS	%ASH	CNST1	CNST2	CNST3	CNST4	OCC	FSO	CPC
9	7	8	8	6G	2G	4G	00	5020	51	2	9	91	0	0		63	74

88-3 (Continued)

c. Proper supervision of open flames and temporary wiring.

d. Suitable access to the site with hydrants and water available in early stages of construction.

e. Supervision of welding or cutting operations, including use of flameproofed tarpaulins.

f. Continuous watchman service during idle periods.

g. Keeping combustible material, including crated equipment to a minimum and as far away as possible from buildings under construction.

h. Keeping the construction site clean and orderly.

i. Detaching contractor's sheds from buildings under construction.

j. Special precautions such as shoring of masonry walls and temporary tie-bracing of structural steelwork to prevent windstorm damage during construction.

7. Require outside contractors to produce certificates of insurance certifying the availability of liability insurance commensurate with the potential damages which the contractor could initiate.

B. **AUTOMATIC SPRINKLERS:** Extend existing sprinkler protection to cover both compounding lines and the warehouse extension. (Piping for warehouse extension installed, but not connected to underground; no plans to sprinkler compounding lines) RSVP*

C. **FIRE WALL:** Provide a freestanding fire wall of 3 hour fire resistance rating between the compounding area and the storage area. Protect all wall openings by single 3 hour rated automatic-closing fire door(s) having a maximum temperature rise of 250°F (121°C) in 30 minutes. (No plans to comply) PLANS**

SIGNIFICANT CHANGES

Construction is underway on the provision of a second compounding line to be located south of the existing compounding line. Foundation work is underway at this time. With this wor a one story Warehouse Addition, 80 ft x 107 ft (24 m x 33 m) of metal on steel walls and roof is under construction south of the existing Warehouse. Building has been completed ar boxed storage of PVC introduced into the building. Overhead sprinkler piping has been installed, but connection to fire underground has not been completed at this time. Currently plans call for relocating fire main from underneath this new building to ground the south side and this is to be done in July. Sprinkler connection to be relocated underground will then be made. Completion of compounding line is to be November, 1990.

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COMMENTS

RSVP*: The completion of this recommendation will involve an impairment of your fire protection. Please notify the IRI's Houston Office, 1225 North Loop West, Suite 927, Houston, TX 77008, (713) 868-5814 at least 48 hours before starting this work.

PLANS:** Completion of this recommendation requires the review and acceptance of detailed working drawings and necessary supporting calculations. All fire protection equipment should be listed by a recognized testing laboratory. All installations should be designed in accordance with applicable NFPA Standards unless modified by an IRI interpretation guide. Duplicate sets of drawings and specifications should be sent to IRI's Houston Office, 1225 North Loop West, Suite 927, Houston, TX 77008 for review. IRI's acceptance should be secured before construction or installation begins.

Recommendation 85-1 is removed from this report as it is no longer applicable. The captioned area is location for the under construction compounding line.

A copy of IRI's OVERVIEW is available at this facility in J. Conklin, Sr. Safety Engineer's Office.

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RISK: B.F. GOODRICH COMPANY LOC ID: 800083/86022

WATER SUPPLIES & TEST RESULTS

SUPPLY DESCRIPTIONS	GPM	FLOW LOC	STAT	RESD	RESD LOC	DATE
Combined process & fire - water from Dow Chemical of 54,000 gpm. Also fire pumping via nine (9) 6,000 gpm at 168 psi Diesel deep wells						
5,000 gpm at 60 psi booster pump taking suction from deep well system		Flowed by Arm Risk				4/16/86
Special Test No. 1: Train III area using Dow system including Deep Well No. 1	5420	TR III	90	53	TR III Deluge	7/10/84 BFG
Special Test No. 2: Train III area using Dow system including Deep Well No. 1 and BFG Booster Pump	6085	TR III	90	67	TR III Deluge	7/10/84 BFG
Special Test No. 3: TR I/TR II/REC using Dow system	5080	TR II	75	36	TR II	7/10/84

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RISK: B.F. GOODRICH COMPANY LOCATION: PLAQUEMINE, LA LOC. ID: 800083/86022

PROTECTION DEFICIENCIES
(Not on Current Reinspection Report)

DATE: May 22, 1990
BY: O. Silarais

1. Fireproof major steel at recovery area. AWF, 7/28/80, G
2. Provide separate lead-ins to deluge valves of Train III Reactor. AWF, 7/28/80, G
3. Provide test header off fire water/booster pump. AWF, 7/28/80, G
4. Provide vapor detectors to alarm and WS actuation for: AWF, 11/11/81, G
   a. Train I/II Reactor.
   b. Train III Reactor.
   c. Recovery structures.
5. Sprinkler offices in the Shop Building. AWF, 8/25/83, G, J
6. In the Warehouse/Compounding Building extend sprinklers to Office Area. (85-1)

* * * * * * * * * * *

Unsprinklered Area (requiring sprinklers) having largest $ loss potential.

#6 above P.D. $100,000
B.I. 0%

COMPLETE REPOR	
Section	DATE
A	05/22
B	01/14
C	
D	
E	
F	0
I	0
II	0
III	0
IV	0
V	0
VI	0
VII	0
VIII	0

REASONS FOR N-20B ITEMS: A - Accommodation, B - Part of Next Expansion, C - Irritation to Insured, D - Rev. Annually, E - Inappropriate Timing, F - Below Ded., G - Acct. Handling Agreement, H - Minor Value, I - L/L, J - Excessive Cost

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RISK SUMMARY

1. RISK: B. F. GOODRICH COMPANY LOC ID: 800083/860220

RIVER ROAD
PLAQUEMINE, IBERVILLE PARISH, LA 70764 DATE: May 22, 1990

MAIL ADDRESS: P.O. Box 578 INSP. BY: O. Silarais
Plaquemine, LA 70764

TAX ADDRESS: Iberville Parish, LA

2. OCCUPANCY: Chemicals - Heavy MAJ. PROD. Polyvinyl chloride OCCY CODE 65-3-f
Hazard Chemicals

3. BLDG. OWNER & OCCUPANT, TENANT: Bldg. owned by:
TENANTS:

4. BUSINESS ACTIVITY: OPERATING 7 days per week. Seasonal Changes: None

SHIFT	HOURS	% ACT.	MAJOR AREAS NOT OCCUPIED
1ST	6-6	100	None
2ND	6-6	100	None
3RD			

5. MANAGEMENT LOSS PREVENTION PROGRAMS: Responsibility of D. Marks, Plt. Engr.

	SPECIFIC PROGRAM	RESPONSIBLE PERSON AND TITLE	WRITTEN YES	WRITTEN NO	GRADING
1.	IMPAIRMENTS	J. Conklin, Safety Engineer	O	_	G
2.	SMOKING REGULATIONS	"	O	_	G
3.	MAINTENANCE	D. Marks, Plt. Engr.	O	_	G
4.	EMPLOYEE TRAINING	R. Davis, Prod. Mgr.	O	_	G
5.	NEW CONSTRUCTION	D. Marks, Plt. Engr.	O	_	G
6.	INSURANCE RECOMMENDATIONS	"	O	_	G
7.	PRE-EMERGENCY PLANNING	J. Conklin, Safety Engineer	O	_	G
	a. PRIVATE FIRE BRIGADE	"	O	_	G
8.	HAZARDOUS MATERIALS	"	O	_	G
9.	HOT WORK	"	O	_	G
10.	LOSS PREVENTION INSPECTION	"	O	_	G
11.	SURVEILLANCE	"	O	_	G
12.	FIRE EQUIPMENT INSPECTION	"	O	_	G
13.	HAZARD EVALUATION	"	O	_	G
14.	HOUSEKEEPING	"	O	_	G

COMMENTS:
Last Fire Dept. visit: M.A. 5,

6. CONSTRUCTION: Mostly 1&2 stor., Approx. 117,000 sq.ft. area; (1) 9%.F.R. ___% H.N
(2) 91% LNC, ___% St.Dk.(NC), ___% St.Dk.(C), ___% Other
(3) ___% Mas., Pl. on T.or St., ___% H.Fr., ___% Fr., Pl. on T,(4) ___% Fr., ___% Mas.Js
___% Other

MAJOR	a. Train III Reactor/Finishing	by _ hr. fire walls, DETACHMENT est.	45 % va
HORZ.	b. Train I/II Reactor	by _ hr. fire walls, DETACHMENT est.	30 % va
FIRE	c. Recovery Structures	by _ hr. fire walls, DETACHMENT est.	10 % va
DIVNS.	d. Office/Control Room	by _ hr. fire walls, DETACHMENT est.	5 % va

N23A Rev. 6/82 pp/2004E

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RISK: B. F. GOODRICH COMPANY LOC ID: 800083/860220

7. SPECIAL HAZARDS: GOOD FAIR POOR NONE Bulk polymerization of vinyl chloride

8. WAREHOUSING: Location Bagging & Shipping Building Size of Area 50' x 100'
Pile height 8 ft Nature of stock PVC Powder in bags & empty bags

9. UTILITY HAZARDS: _____
PCB: Inside? __ Yes, X No; Outside? __ Yes, X No; Location _____

10. PRIVATE PROTECTION:
a. 57 % AS, 2 % ASN, Sprinkler grading 9.
b. Water Supplies: GOOD FAIR POOR NONE. NO NEGLIGIBLE CONSIDERABLE service use.
c. Watchman/Alarm Service: GOOD FAIR POOR NONE. Watchman Training: GOOD FAIR POOR NO
NO SUB-STD. watchman serv. CENTRAL STATION SUPV. consisting of NON-RECORDED roun
___-HOURLY idle nights ___-HOURLY idle days, ____ stations covering all sections
risk except watchman for gate control days; gate TV monitored other shifts
LOCAL WATERFLOW ALARM SERVICE WITH ANNUNCIATOR in _____. CENTRAL STATIO
PROPRIETARY, REMOTE STATION, AUXILIARY STATION using UN-APPROVED equip. connected
_____ covering WATERFLOW, GATE VALVES, PUBLIC PRESSUR
GRAVITY PRESSURE SUCTION TANK LEVEL & TEMP., BLDG. TEMP., AIR PRESS.(DPV), _____
_____ on all sprinkler systems except in _____
Pump POWER RUNNING alarm connected to _____
Other supervisory service BURGLARY, _____
AFA system in _____ connected to _____
Private man. fire alarm system in _____
consisting of _____

11. PUBLIC PROTECTION: Response from Mutual Aid . GOOD FAIR POOR NO FULL TIME PA
VOL. fire dept. Fire station IS NOT constantly staffed. Fire alarms received at FI
POLICE hdq. (Other) _____ UNLIMITED _____ gallons. water fr
_____accessible for pumper suction NOT SUBJECT FREEZING DROUGH
GOOD FAIR POOR accessibility to risk due to M.A. within 1 mile

12. MANUAL FIRE SUPPRESSION APPLIANCES: Portable first aid appliances GOOD FAIR POOR NC
Adequacy of fire dept. conn. GOOD FAIR POOR NONE. Hydrant distribution GOOD FAIR PC
NONE. Automotive fire apparatus GOOD FAIR POOR NONE.

13. EXPOSURES: NONE LIGHT MODERATE SEVERE from Dow Chemical Polyethylene Plants
with protection by detachment

14. REPAIR & REPLACEMENT: Mostly OLD MODERN NEW bldgs. in GOOD FAIR POOR condition. Mos
MODERN OBSOLETE machinery & equipment in GOOD FAIR POOR condition. Unsatisfact
conditions Plant built 1970 and 1974

15. PERILS OTHER THAN FIRE: Explosion - Plant handles flammable gas & organic peroxides
Windstorm - Hurricane zone Others - No unusual features

16. PROBABLE MAXIMUM LOSS: 35% PD, 100% TE; Area: Train III

17. OTHER IMPORTANT COMMENTS: _____
18. OVERALL RATING AS AN IRI RISK: EXCELLENT, GOOD, FAIR, POOR

N23A rev. 6/82 pp/2004E