

DRAFT

DOW U. S. A. Consolidated Audit Program

DRAFT

POLYETHYLENE A PLANT - LAD

Date of Report: 10/9/96
Superintendent: Tony Grant, Bldg. 807 - LAD

10/11/96

Tony, Allen,

cc: Buck Bailey, Bldg. 3301W, LAD Mike Young, Bldg. 807 LAD
Chris Messelt, Bldg. 3502W LAD Allen Chauffe, Bldg. 807, LAD

PLEASE REVIEW
AND COMMENT. So
RUNNING LATE w/rep.

Enclosed are the recommendations from the various audits for your response. According to the Dow U.S. Area Consolidated Audit Program Guidelines and the OSHA Process Safety Management (PSM) standard 1910.119, you must develop an implementation plan as a response to the recommendations. The plan must include the name(s) of the employee(s) assigned to each action item along with an expected and actual completion date for each item. I'll Pick LATE NEXT. (10/18/96)

Thank
Howard

Please note that efforts have been made by the Functional Audit Teams to help prioritize each recommendation. They will be identified as: M = Must Do, (based on compliance issues, government regulations, Dow policies or S&LP) and HR = Highly Recommended, (necessary to mitigate an anticipated or potential hazard).

It is the responsibility of the plant/department supervision to communicate the results of the consolidated audit to all employees. Communication must include the results of the Process Hazard Analysis. PHA's include the Reactive Chemicals, Chemical Exposure Index (CEI), Process Safety and Loss Prevention/Fire/Burner Management audit and the Employee Survey Results. This must be completed within 90 days after the audit report date and documented.

Please send your approved implementation plans to Connie Kalencki, Bldg. 3502W by December 8, 1996. We will forward a copy to members of the Core Audit Team and the appropriate section to the Functional Team Leaders.

Enclosed Audit Recommendations:

- | | |
|--|---------------------------------|
| 1. Process Hazard Analysis | 6. Occupational Health Audit |
| 2. Laboratory Audit | 7. Electrical Reliability Audit |
| 3. Reactive Chemical Audit | 8. Security Audit |
| 4. Loss Prevention/Fire Audit | 9. Safety Audit |
| 5. Hazardous Materials Transportation Review | |

Howard Wilkinson, Administrator
LAD Consolidated Audit Program

LAD PROCESS HAZARD ANALYSIS (PHA's)

Recommendations:

- M 1. Communicate results of the Consolidated Audit to plant personnel within 90 days after the audit report date and document

Guidelines For Communicating Process Hazard Analysis (PHA's) To Employees

The OSHA Process Safety Management (PSM) Standard (29CFR 1910.119) requires that facilities covered by this standard perform a formal process hazard analysis, communicate the results of this analysis to plant employees whose work assignments are in the process and who may be affected by the recommendations or actions.

Currently the LAD Consolidated Audit Process include PHA's (reactive chemical reviews, hazardous materials transportation reviews, chemical exposure index audits, fire & explosive index reviews).

The following guidelines can be used to communicate the Process Hazard Analysis (PHA's) to plant employees. Communication to employees may be done in a regular scheduled safety meeting or during a safety training day and documented.

REACTIVE CHEMICAL REVIEW:

- A. Review all worst case scenarios identified by the plant and LAD Reactive Chemicals Committee. Make sure that plant personnel have a thorough knowledge of the reactive chemicals potential. Discuss the safe operating limits and consequences of deviation. Discuss the reactive chemical control systems including hardware, software and procedures. Discuss all other safeguards or action plans that are aimed at avoiding and mitigating the consequences of each scenario.
- B. Review the recommendations from the LAD Reactive Chemicals Committee and the plant action plans to correct the recommendations.
- C. Review the results of the employee interviews which are done by the LAD Reactive Chemicals Committee during the Consolidated Audit and the plant follow-up actions to address any deficiencies.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

CHEMICAL EXPOSURE INDEX REVIEW:

The Chemical Exposure Index (CEI) provides a simple method of rating the relative acute health hazard potential to people in neighboring plants or communities from possible chemical release incidents. Absolute measures of risk are very difficult to determine, but the CEI system will provide a method of ranking one hazard relative to another.

- A. Review the list of plant hazardous chemicals that were evaluated by the plant.
- B. Review the worst case scenarios and calculated CEI value. This shall include dispersion data and charts that were developed from the plant CEI review.
- C. Review all actions required to prevent the worst case. It may be a simple case of reviewing employee job responsibilities from an existing plant emergency drill. Any preventive maintenance, thickness checks, Technology Center recommendations, visual inspections and recommendations from the consolidated audit team should be reviewed also.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

FIRE & EXPLOSION INDEX:

The Fire & Explosion Risk Analysis System is a step-by-step objective evaluation of the realistic fire, explosion and reactivity potential of process equipment and its contents. The purpose of the F&EI system is to: 1) Quantify the expected damage of potential fire, explosion and reactivity incidents in realistic terms. 2) Identify equipment that would be likely to contribute to the creation or escalation of an incident. and 3) Communicate the F&EI risk potential to management.

- A. Review the plant F&EI process units and classified hazard levels ("heavy", "moderate" etc.). See Table 6, pg. 38 - F&EI Guide, 7th edition.
- B. Review the list of process units in your plant that were reviewed.
- C. Review the evaluation of realistic fire, explosion and reactivity potential of the process unit and its contents. (Depending on the level of hazard, certain process equipment spacing, process equipment/piping standards and loss prevention principles are applied to the process to minimize the hazard level).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

DO A 061892
CONFIDENTIAL

OCCUPATIONAL HEALTH AUDIT

(Tuesday, August 27, 1996)

AUDIT TEAM: Darlene Creel, Nancy Randolph,

**PLANT/
CONTACT:** Geralyn Trabeaux

ATTENDING: Howard Wilkinson, Buck Bailey, Allen Chauffe, Michael Leopold,
Gerlyn Trabeaux, Clay Ainsworth, Tony Grant, Karen Williams,
Darlene Creel

WRITER: Darlene Creel

GENERAL INDUSTRIAL HYGIENE/MEDICAL

The I.H. Manual is complete and contains all the written programs (Hazard Communication, Hearing Conservation, Respiratory Protection, and Personal Protective Equipment). All necessary permanent postings (e.g., Employee Rights under VPP and OSHA, OSHA Noise Standard, Job Safety and Health Protection, etc.) are located on bulletin board in lunchroom adjacent to the control room. All of the programs will be updated and put in the Operating Discipline format by the end of 1996.

Recommendations:

No recommendations at this time.

HAZCOM PROGRAM

Poly A Facility employees received HAZCOM training in 1995. The labeling of plant equipment and process area's were good; the analyzer houses had good warning signs. The HAZCOM/MSDS notebook are readily available in the control room area with up to date components (written program, list of chemicals, vessel/ID cross reference table, and MSDSheets).

Recommendations:

- M 1. Label Heptane Bath in lab to comply with Hazard Communication labeling requirements (29CFR 1910.1200).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 2. There are chemicals in the old lab that has been removed from the CPAI (Chemical & Physical Agent Inventory) and MSDS book because they are no longer used. They need to be disposed of properly.
(29CFR 1910.1200).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

HEARING CONSERVATION

The facility's written Hearing Protection Program is current, and annual training was conducted during 1995. Hearing protectors are readily available in storage bins at several locations in the block. The OSHA Occupational Noise Standard, 29 CFR 1910.95 is posted on the bulletin board in the lunch room adjacent to the control room.

Recommendations:

- M 1. Install "Hearing Protection Required" sign near grinder in maintenance shop (S&LP Standard, S-103).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

RESPIRATORY PROTECTION

The facility's written Respiratory Protection Program is current and training was conducted during 1995. The mouthbit, escape only, equipment storage cabinet outside the control room area is well organized and maintained. The plant respirator cleaning station is posted and equipped with the necessary supplies.

Recommendations:

- M 1. Correct labeling of Control Room Board breathing air hook-ups. The information is misleading by stating "Open Valve Behind Board", when the valve is not exactly behind that particular board (S&LP Standard, S-102)

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

DO A 061894
CONFIDENTIAL

- M 2. Remove dust mask respirators from tool storage cabinets and store in the appropriate location in the warehouse (CFR 1910.134).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

- M 3. Add to the monthly checklist or remove Scott-Air Pak stored in closet by the Permit Office (CFR 1910.134).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

PERSONAL PROTECTIVE EQUIPMENT

The plant's written program is current for 1995.

Recommendations:

No recommendations at this time.

ERGONOMICS

Ergonomics training was done in 1995.

Recommendations:

No recommendations at this time.

THERMAL STRESS

Heat Stress training was done in 1996. Postings are on the bulletin boards reminding employees of the necessary precautions relating to heat stress.

Recommendations:

No recommendations at this time.

VENTILATION

The last comprehensive hood survey was performed by D& D Laboratories in July 1995.

Recommendations:

- M 1. Before Lapping table is put back into service, contact Industrial Hygiene Department on possible relocation of table (29CFR 1910.94).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 2. Install static pressure indicator on Laboratory fume hood exhaust duct (29CFR 1910.94).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 3. Remove PPE, i.e. lab aprons, from restricting airflow to the fume hood. (29CFR 1910.94).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 4. The lab fume hood sash is restricted to a 12" sash opening. Relocate the stopping block to the 12" mark to keep the sash from opening to greater than 12". (29CFR 1910.94).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

WELDING

Sources of ventilation for the welding area include wall fans and large doorways.

Recommendations:

No recommendations at this time.

ASBESTOS

Poly A facility's asbestos communication program includes block entrance signs, an ACM inventory, and periodic Hazcom type training.

Recommendations:

No recommendations at this time.

RADIATION

Radioactive devices are located in several areas of the plant. The Certificate of Responsibility is signed. The State Nuclear Energy Division Notice is posted in the lunch room.

Recommendations:

No recommendations at this time.

LABORATORY AUDIT

(September 17, 1996)

AUDIT TEAM: Al Ribes, Howard Wilkinson, Mark Ryland

PLANT CONTACT: Mark Ryland

WRITER: Howard Wilkinson, Al Ribes

All action items from the first audit have been completed.

Recommendations:

HR 1. Remove Argon And Oxygen cylinders outside of B-807.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

HR 2. Demolish Nitrogen line to outside B-807 lab.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

HR 3. Discard all old reagents, old oil samples and old bottles/chemicals under hood in B-807.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

M	4.	B-804 Lab - Label food refrigerator in break room with a "No Chemical" sign.
---	----	--

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

HR	5.	Replace all mercury thermometers with digital thermometers. If not, develop and communicate mercury clean-up procedure.
----	----	---

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

HR	6.	Clean out chemical storage cabinet outside B-807.
----	----	---

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

ELECTRICAL RELIABILITY AUDIT SUMMARY

AUDIT TEAM: Billy Stears, Larry Oubre, Phil Bruder

WRITER: Billy Stears

The electrical reliability audit for **Polyethylene A Plant** was conducted in July, 1996 as per the Five Point Electrical Reliability Program. The overall condition of the electrical assets of Polyethylene A plant are good.

Those items identified with an index of 4 or higher in the Electrical Reliability report need some attention and require a response. Please refer to the report.

Recommendations:

- M 1. Proper labeling of transformers and motors per S&LP S-214.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 2. All Items rated 4.0 or above or marked with an * require a response. (see report)

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 3. Electrical room doors: Install exit signs or lights per OSHA 1910.38(Q).

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- HR 4. Remove PCB's signs on L-62 structure.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

REACTIVE CHEMICALS AUDIT

(Tuesday, September 16, 1996)

AUDIT TEAM: Buck Bailey, Gerald Wagener, Joe Schell

ATTENDING: Howard Wilkinson, Joe Schell, Gerald Wagener, Buck Bailey,
Tony Grant, Karen Williams, Allen Chauffe, Michael Leopold, Clay
Ainsworth

PLANT

CONTACT: Tony Grant, Karen Williams

WRITER: Gerald Wagener

Recommendations:

- HR 1. Concerning the Polyethylene "A" 10 Process Commandments: Degress C or F should be added to all temperature references.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- HR 2. Concerning the risk of a dust explosion during addition of Zinc Stearate to the mineral oil tank:--Measure the oxygen concentration in the head space of the tank just prior to addition of the Zinc Stearate. If less than 10%, the potential for a dust explosion is practically non-existent.--If over 10%, data on the minimum ignition energy should be obtained to determine if static discharge could initiate a dust explosion.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

SECURITY AUDIT SUMMARY

(Tuesday, June 25, 1996)

AUDIT TEAM: Joe Goodwin

PLANT

CONTACT: Allen Chauffe

WRITER: Joe Goodwin, Howard Wilkinson

Employees challenge strangers in their work areas. A sign-in/out log is available for visitors to the plant in the control room area. Employees wear their ID badges in the work areas. Emergency communications and alert systems are in place and working well.

Keep up the good work.

Recommendations:

None at this time

DO A 061900
CONFIDENTIAL

LOSS PREVENTION/FIRE/BURNER MGMT./CEI REVIEW
(Tuesday, September 15, 1996)

AUDIT TEAM: Buck Bailey, Karen Williams, Tony Grant, Bob Armstrong,
Bill Franklin

**PLANT
CONTACT:** Karen Williams

ATTENDING: Don Jones, Howard Wilkinson, Buck Bailey, Tony Grant, Karen
Williams, Allen Chauffe, Clay Ainsworth

WRITER: Buck Bailey

Following is a list of recommendations from the recent Consolidated Audit conducted at the Poly A plant. These were developed from a standard Loss Prevention questionnaire, plant inspection, and discussions with the plant staff and Technology Center.

- HR 1. Poly A experiences a significant number of "false alarms" from the MCC smoke detectors located in the switchgear cabinets. Correction usually requires cleaning dust from the detectors. Develop and implement a plan to reduce the dust level in the MCC's.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- M 2. Following the Corporate "Process Risk Management Guideline - 1994, a F&EI greater than 128 requires a further risk review. For Poly A, two areas, the reactor and the peroxide storage, meet this criteria. The generally recommended method of analysis is the HAZOP study for the area in question. Contact Loss Prevention to further consider the benefit and plan of action for this risk analysis.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

- HR 3. Continue working with the Tech Center to decide whether to install video cameras in the reactor bays.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
-----------------------	---------------------------------	-------------------------------

DO A 061901
CONFIDENTIAL

- HR 4. Conduct an audit of the product warehouse using the Corporate "Guideline for Warehouse Rating and Risk Analysis" checklist. Pass this on to the Material Handling group to contact Loss Prevention.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

- HR 5. Recent industry feedback indicates that OSHA is becoming particularly interested in building and control room siting issues. Describe in the "Equipment/Building Location" section the features that exist to minimize the risk due to a fire / explosion in the area. Ex. HAD activated sprinkler system, minimal occupancy in B-801. Consider the possibility and benefit of tripping the adjacent sprinkler systems with the combustible gas monitor system.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

- HR 6. Contact LHC to determine who "owns" the Poly Recycle lines and who should perform the periodic inspections.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

- M 7. Follow up with Loss Prevention to complete the insurance package of information for the Corporate Insurance Department.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

- HR 8. Have Engineering drafting create a permanent F&EI plot plan drawing to show the calculated scenario circles.

Action Taken/To Be Taken:

<i>Responsibility</i>	<i>Expected Completion Date</i>	<i>Actual Completion Date</i>
------------------------------	--	--------------------------------------

SAFETY AUDIT
(Tuesday, June 25, 1996)

AUDIT TEAM: Don Jones, Howard Wilkinson, Julie Broome, Eddie Supple, Brian Pope, Ma Mitchell and Pam Usie, Mike Young

**PLANT
CONTACT:** Allen Chauffe

ATTENDING: Buck Bailey, Howard Wilkinson, Allen Chauffe, Tony Grant, Karen Williams Clay Ainsworth, Geralyn Trabeaux, Mike Leopold

WRITERS: Don Jones, Howard Wilkinson, Eddie Supple

SAFETY QUESTIONNAIRE

A. Program Structure and Planning

No Recommendation

B. Employee Participation

No Recommendation

C. Contractor Safety

No Recommendation

D. Accident/Incident Investigation and Reporting

No Recommendation

E. Audits

No Recommendation

F. Safe Work Practices

No Recommendation

G. Emergency Planning and Means of Egress

No Recommendation

H. Employee Training

I.

No Recommendation

DO A 061903
CONFIDENTIAL

I. Safe Operation of Motor Vehicles and Motorized Handling Equipment

No Recommendation

J. Off-The-Job Safety

No Recommendation

EMPLOYEE SURVEY

Recommendations:

HR 1. Review Pre-Audit Safety Survey results and take appropriate action.

Action Taken/To Be Taken:

Responsibility Expected Completion Date Actual Completion Date

DOCUMENTATION & FIELD AUDIT

AUDIT TEAM: Julie Broome, Roddey Peebles, Pam Usie, Mark Mitchell, Brain Pope, Howard Wilkinson, Don Jones, Bob Gibson - Contract

M 1. Review CEI & FEI. Show plot plan with circles of influence.

K. Williams

Complete

Follow-up: After the ^{PLAN} date has been reviewed and up-dated the plan will be communicated to employees. 6/1/96. Read and sign communication posted 5/2/96.

HR 2. Frequency of mechanical integrity inspections need to be reviewed with operators.

B. LeBlanc

M 3. Hansen quick connect air fittings on plant air (several places) in B-812.

B. LeBlanc

M 4. Emergency light in Millwrights shop doesn't work B-812.

B. LeBlanc Complete 9/2/96

DO A 061904
CONFIDENTIAL

*Follow-up: Work order put into system to have light repaired.
M. Darensbourg, 8/14/96. W.O. # 76445050.*

Actual Completion Date

- M 5. Lean-to shop south west of B-812, fire extinguisher last inspection date was June '92.
A. Chauffe **Complete 5/96**

Follow-up: Annual fire extinguisher inspections are due in May. Will include this area in inspection process.

Actual Completion Date

- M 6. Deluge trip valve north of D-250, wire terminal box is in bad condition and cover for trip linkage is not in place.
A. Chauffe

Follow-up: Called fire protection 4/10/96. They will check out this box on their next quarterly audit.

Inspected by M. Darensbourg 8/14/96. Box still in bad shape. Put work order in to make repairs. W.O. # 76449950

- M 7. Need toe boards around openings in grating decks, north of HM-106B, HM-103B, above BAC- 7A/B, and above BAC-7C.
K. Williams

Follow-up: Expected completion date = 10/1/96.

- HR 8. Large step-up to first rung of ladder to HMB-107.
K. Williams

Follow-up: Expected Completion date = 10/1/96.

- M 9. Utility stations not labeled. Air, water, steam, etc.
K. Martin

Follow-up: Labels were ordered 6/28/96 by M. Darensbourg. 8/14/96 labels still not in.

- M 10. Drum of oil next to C-202 not grounded.
K. Martin / B. LeBlanc

Follow-up: Work order in system for grounding by M. Darensbourg 8/14/96. W.O.# 76445200.

- M 11. Seold in MCC-5 says sheet #2 of 2; where is sheet #1? Last date on sheet 1/93.
B. LeBlanc Complete
Follow-up: Sheet updated 4/15/96. W.O. # 76450000
- M 12. Seold in MCC-7 says sheet #2 of 2 ; where is sheet #1?Door partially blocked in MCC-7.
B. LeBlanc Complete
Follow-up: Sheet updated 4/15/96. W.O. # 76450000
- M 13. Exit signs not lighted in B-804. Emergency lighting?
A. Chauffe
Follow-up: Work request has been put into the system for lights to be installed. Work Order # 76228750. (Project)
- M 14. No load rating posted top of B-804 by elevator. Area needs housekeeping.
K. Martin
Follow-up: Tried to make contact with elevator company again for capacity rating with no luck, 8/14/96. M. Darensbourg.
- M 15. Fire extinguisher last inspection date '93 in storage area in B-804.
A. Chauffe Complete
Follow-up: Annual fire extinguisher inspections are due in May. Will include this area in inspection process.
- M 15. Oil drum located at Aru #1 area not grounded.
K. Martin / B. LeBlanc
Follow-up: Work order in system for grounding by M. Darensbourg 8/14/96. W.O.# 76445200.
- M 16. Some compressor guards not connected at bottom. Some have larger holes than others.
B. LeBlanc
- M 17. Ungrounded oil drums by C-109.
K. Martin / B. LeBlanc Complete
Follow-up: Work order written to install ground by M. Darensbourg, 8/14/96. W.O. # 76445200.

DO A 061906
 CONFIDENTIAL

- M 18. Monogoggle areas unclear, some painted on grating, others just signs.
B. LeBlanc
- M 19. Pipe stand without slip ring under crane south end of B-803.
B. LeBlanc
- M 20. Old style red tag on fan switch on south end of B-803. Unreadable.
K. Martin
- HR 21. Insulation broken off and hanging from valve between Er-107/ 113.
B. LeBlanc
- M 22. Not all slings have tags on them.
B. LeBlanc
- M 23. Harness not inspected, lanyard expired in B-820.
B. LeBlanc
- M 24. Ground wire for T-2 is spliced.
K. Martin

*Follow-up: Work Order # 75898550 put into system by
M. Darensbourg 6/28/96 to have wire replaced.*

- M 25. Rope braces holding conduit near skimmer under deck of B-809.
B. LeBlanc
- M 26. Many lights are out in compressor building B-809.
B. LeBlanc

*Follow-up: Many lights were repaired 6/24/96. Lights are being
addressed by electricians. (Project)*

- HR 27. Poison corn in both compressor buildings. Is program complete?
K. Williams

*Follow-up: This task is still in progress. When complete
housekeeping will address this issue.*

- M 28. Can't read crane capacity on north end B-819.
B. LeBlanc
- HR 29. Catalyst pump yellow lines on floor need to be repainted.
B. LeBlanc
- M 30. Loose grating on cable tray walkway 30 feet north of K-650 and
another 50 feet south of K-650. Many clips loose or gone.
B. LeBlanc

DO A 06190
CONFIDENTIAL

- M 31. High voltage line? Hanging low to walkway crossing return canal.
B. LeBlanc
- HR 32. B-810 freon storage lights not working. Water kegs stored inside
with chemicals.
B. LeBlanc / K. Martin
- M 33. AC-5 roof has no guard rails or ladder guard.
K. Williams

Follow-up: Expected completion date = 6/1/97. (Project)

**HAZARDOUS MATERIALS TRANSPORTATION REVIEW (HMTR) AND
DISTRIBUTION FACILITIES ASSESSMENT (DFA)**
(Monday, July 1, 1996)

AUDIT TEAM: Dean Smith

PLANT CONTACT:

WRITER: Dean Smith

HAZARDOUS MATERIALS TRANSPORTATION REVIEW

Areas Reviewed: Cargo Tank Unloading
Drum Off-loading
D.O.T. Compliance

Chemicals Reviewed:	DRI #	Transportation mode(s): Highway	(All incoming)
DTBP -Di tertbutyl peroxide in Isopar C	4	* Bulk truck	
Isopar C	3	* Bulk truck	
Isobutane	4	* Bulk truck	
Methanol	4	55 gal drum	
PIV - tert-butylperoxypropionate in Isopar C & Mineral Spirits	4	* Bulk truck	
TPA-tert-butylperoxyacetate in Isopar C & Mineral Spirits	4	* Bulk truck	
TPO-tert-butylperoxoate t-b-peroxy-2-ethylhexanoate+naphtha+224-trimethylpentane	4	* Bulk truck	

DO A 061908
CONFIDENTIAL

HAZARDOUS MATERIALS TRANSPORTATION REVIEW - HMTR

Inbound Bulk Material / Drum Off-Loading:

- M 1. No procedures found for off-loading drum receipts of methanol; procedures need to be in place for off-loading a DOT regulated commodity. This may be in the form of a check list and/or written procedures outlining DOT requirements as well as block safety requirements. Also, if contract/laborer is used to off-load truck, this person needs have DOT HazMat Employee training. If this person is only used to move pallets of hazardous materials to another location, they will need to have HazCom and PPE training as required by OSHA

DISTRIBUTION FACILITY ASSESSMENT - DFA

- M 1. Check lists are part of the process of assigning responsibility; these checklists must be legibly signed - not initialed. Compliance related items:

Tank Truck Area - Safety:

- HR 1. Some warning signs are present, but others are needed to insure driver awareness of safety requirements and hazards.
- HR 2. Some lines and valves with contents are identified - but there is a need to replace some and add others.
- HR 3. Isopar, Isobutane and initiators are unloaded on a concrete slab with some containment provided, however, an entire truck load cannot be contained.

Additional comments:

The HazCom manual is in bad shape - copies of MSDS's are out of date, torn and worn as well as being out of any kind of order. The I.H. dept. and/or the supplier can be contacted to replace MSDS copies as needed.

Thanks to Garland Maxwell for his time and efforts in assisting with the completion of this review and assessment. Thanks to George Moore for a very smooth and cooperative review. Overall, the Poly B Plant is in excellent shape.

DO A 061909
CONFIDENTIAL