

TEXACO

New York, New York 10017

November 10, 1975

INDUSTRIAL HYGIENE SURVEY
PUGET SOUND PLANT
ANACORTES, WASHINGTON
OCTOBER 28-29, 1975

MEMORANDUM

Mr. W. C. Patterson
Houston, Texas

Attached is an original and one copy of a report covering my industrial hygiene survey at the subject Plant. It is assumed that you will distribute one copy of this report to Puget Sound Plant management.

If either you or Plant management have any questions regarding this report, please let me know.

R. T. Richards

R. T. Richards

RTR:dg
Attachment
BCC: DMM
HLH-JPL
WD

WA-TEX 000073

INDUSTRIAL HYGIENE SURVEY
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By: R. T. Richards
Manager Industrial Hygiene & Toxicology
Health Division
New York, New York

SUMMARY

Supervisory personnel review is required in the proper disposal of asbestos insulation wastes. Such review and standardization of gas mask inspection is also required to insure that canisters are not used beyond expiration dates. Future surveys will be scheduled during the next routine industrial hygiene visit to ascertain that exhaust ventilation hoods at Cooling Water Towers #1 and #2, chemical mixing area, and the laboratory sink where samples are dumped prior to bottle washing are sufficient.

RECOMMENDATIONS

1. Review and standardize procedures for issuing and inspecting gas masks. Differences in procedures between the Tool Room and the Fire Equipment Inspector resulted in the discovery of two chlorine gas masks at the Effluent Plant having canisters several months beyond their apparent expiration date. One organic vapor gas mask (#19) issued by the tool room and stored in a "Safety Equipment" cabinet next to the Alkylation Unit Operator's Shack, was found to have not been inspected for perhaps several years. The canister had an expiration date of 1969. The present two card systems (one for monthly inspections and the other for canister renewal) should be integrated to ease possible confusion.
2. Face shields, stored in the equipment cabinet noted in Recommendation #1 and hung adjacent to this cabinet should be maintained in a clean and proper manner. Such equipment should not be "hung" on a outside hook but stored in a clean, dust-free condition.

3. Replace the acid-saturated (as indicated by pH paper) deteriorated plywood bench top where batteries are charged and maintained in the garage. Battery acid containers should be properly stored and containers in use should be mounted on a shelf instead of being placed on a cable spool. Repair and extend the lead-sheet covered area on this bench to accommodate the maximum number of batteries that might be on "charge" at any one time.
4. Increase the visibility of eye-wash safety shower units so that they may be readily recognized from a 360° area. Green and white striping and/or additional signing should be considered. Examples of areas where visibility of such units was not good include:
 - a. Battery-charging area of the garage
 - b. Chemical mixing, Cooling water Tower #1 (better visibility on the unit and signs on the building are indicated since irritating chemicals are handled outside as well as inside the building; also, only one side of this eye wash unit operated)
 - c. FCCW, east side near where caustic and other irritating chemicals are handled
5. Again, as found during the two previous Health Division surveys (1972 and 1974), significant mercury contamination was noted behind the instrument panel in the Electrical-Instrument shop. This area should be inspected and cleaned periodically to prevent mercury accumulation.
6. Review proper disposal of asbestos insulation waste. Three or four scrap tote bins passed during the survey contained various insulation wastes. It is possible, but not probable, that none of this insulation contained asbestos; in any event, none was in properly labeled plastic bags.
7. Several containers with precautionary labeling were being recycled for either less hazardous substances or substances with a different hazard. No attempt was made to block out the original but now improper precautionary labeling or indicate the true contents. Two specific areas where this was noted:
 - a. Handling of trisodium phosphate in the Effluent Plant
 - b. Use of a toluene container for kerosine at the CRU #2

8. Housekeeping in Warehouse #3 (west end) was not up to Plant standards. Pallets of insulation were stacked too high since one had shifted, partially collapsing a carton of insulation underneath.
9. Review use of two ranges of MSA hydrogen sulfide detector tubes. Both green tip (high range 0-4%) and red tip (low range 1-50 ppm) are stored in the store house yet all units noted during the survey had the proper calibration scale to utilize red tip tubes. If green tip tubes are used only in one place, or for one operation, this stock should be so designated so they will not be used with the wrong instrument scale. Several boxes of expired tubes were noted in the store house and should be discarded.
10. Verify in writing, if such information is not already on file, from MSA that Calibration Kit Part #454380 will properly calibrate your Combustible Gas Indicators, Models 21 and 250. All persons calibrating this equipment should have this information on file in their calibration log books.

DISCUSSION

Local management is requested to review pertinent OSHA regulations in regard to the need for a railing and/or chains at the following locations:

- a. Cooling Water Tower #1, wooden platform on east side of chemical mixing building
- b. Effluent Plant, open space next to stairs for platform used to mix flake caustic.

Also, there is a set of wooden stairs in the Boiler House chemical mixing area used to observe tank levels. These portable stairs are so positioned that an employee may use them for a "short cut" to-and-from ground level and the mixing platform. The last step is too high for this purpose and presents a possible slipping hazard. The stairs should be either repositioned or guarded to prevent "short cuts".

Information on proper handling precautions for the Exxon and Phillips additive used for exchange gasoline at the truck loading rack will be investigated and any pertinent data relayed directly to the Plant.

The exhaust ventilation hood over the chemical mixing tank, Cooling Water Tower #1 appears adequate; the effectiveness of a similar hood at Cooling Water Tower #2 is questionable. We also question the adequacy of the hood at the laboratory sink where samples are dumped prior to bottle washing. During our next visit, or if industrial hygiene personnel from HORD visit before, these areas should be surveyed in more detail. Gasoline vapor is one of the potential hazards at the dumping operation.

The above recommendations were reviewed with Messers. E. Peyton, J. H. Long and J. C. Feist immediately following the survey. The cooperation of Assistant Plant Manager D. R. Woods and the rest of the staff is sincerely appreciated.

R. T. Richards

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RTR:dg