

APPENDIX D - PLANT SPECIFIC ASSESSMENT QUESTIONNAIRE

INDUSTRIAL HYGIENE ASSESSMENT CHECK LIST

This questionnaire should be distributed to the specific plants selected for participation as part of the site assessment of the Industrial Hygiene program. This questionnaire should be completed by the plant industrial hygiene contact and site hygienist for that plant and copies available the week before the site assessment.

The emphasis of the assessment is to review Industrial Hygiene programs but also to ensure that documentation is complete. Please have written programs, documentation of training meetings, etc. readily available for the assessment team. This will help to speed the assessment along.

SECTION I. EDUCATION AND TRAINING (Ref. OSHA HAZCOM 29CFR1910.1200)A. *Hazard Communication*

- ① Current date of written HAZCOM program _____.

Show assessment team written HAZCOM program.

- 2 a. *Examine* New and transferred employee orientation program. (format)
 b. ~~How effective~~ *Is training when employee transfers from one department to another?*
 b. Does orientation for transfers differ from that for new employees?
 - yes - no
 c. Are technical, supervisory, clerical, laboratory and maintenance personnel included? - yes - no
 Show assessors examples of records.

B. *Chemical and Physical Agent Inventory*

3. Current date of Chemical and Physical Agent Inventory _____.
 - Is inventory available? where?

C. *Health Hazard Information*

- ④ Are all the Data Sheets (MSDS and/or TIME) current? (Current dates are on the CPAI Index.)

- ✓ Has a list of chemicals without the most current date been prepared for the purpose of getting updates?

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Dow Employees

1. What is the orientation program for new or transferred employees? Are technical, supervisory, clerical, laboratory, and maintenance personnel included?

a. Yes
b. No

CPAI

2. Is there a Chemical and Physical Agent Inventory for each job assignment?

a. Yes
b. No

3. Does the Chemical and Physical Agent Inventory contain all significant chemical and physical stresses?

a. Yes
b. No

4. Is it updated annually?

a. Yes. By whom?
b. No

- What is review procedure for bringing a new chemical into the plant?
- IH involvement?

5. Is it permanently stored?

a. Yes. Where?
b. No

6. Who made the judgement required to establish degree of exposure and hazard rating?

7. How many chemicals on the inventory do not have IHGs? Is this important?

MSDS

8. Do you have ^{MSDS} health information for all your chemicals?

a. Yes
b. No

9. Are the Consequences of Exposure to Toxic Amount (CETA) or Industrial Hygiene Information sheets available for all chemicals?

a. Yes
b. No

10. Are Industrial Hygiene Data Sheets, Material Safety Data Sheets, and/or CETA guides available to employees at all times?

a. Yes
b. No

Where would this go?

11. Are written process descriptions, simplified flow sheets, floor plans, and job descriptions current?

a. Yes. If so, are adequate precautions taken to protect the confidentiality of this material?

b. No

How can New employees be orientated

ST0037815

New employee
Orientation

12. Are the floor plans adequate for identifying sources of exposure and location of industrial hygiene samples?
a. Yes
b. No
13. Are all process sampling points, sumps, and unloading/loading docks, and other known sources of exposure noted?
a. Yes
b. No

Has
Audiences

14. Are employees informed of the stresses to which they may be exposed, and the consequences of exposure to toxic or harmful amounts of these stresses, on an annual basis?
a. Yes
b. No

15. Are maintenance employees covered by your education and training program?
a. Yes
b. No

Keep this
in

16. How is the information communicated? What is the involvement of supervision?
17. How are health bulletins (bulletins transmitting recently discovered health effects) handled, and the information disseminated to employees?
18. How are results of exposure monitoring communicated to employees and at what frequency?
19. Is documentation of the above programs available?
a. Yes. How long is it retained?
b. No

Non-Dow Employees

1. What is the orientation program for "short term" contractors, "long term" contractors, and visitors?
2. How are long-term and short-term contractors informed of the hazards they may be exposed to and the evidence of control of these hazards?
3. Is documentation of the above programs available?
a. Yes. How long is it retained?
b. No
4. Is there a Chemical and Physical Agent Inventory for non-Dow employees?
a. Yes
b. No

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5. Are Industrial Hygiene Data Sheets, Material Safety Data Sheets and/or ~~CETA~~ guides made available to non-Dow employees?
- a. Yes. If so, are they returned eventually?
 - b. No
- 7 6. Are non-Dow employees informed of the stresses to which they may be exposed, and the consequences of exposure to toxic amounts of these stresses, on an annual basis?
- a. Yes
 - b. No
- 7 [7. Is Industrial Hygiene monitoring of non-Dow personnel done?
- a. Yes
 - b. No
8. Are non-Dow employees appraised of their monitoring data?
- a. Yes. By whom?
 - b. No
9. How are health bulletins handled and the information disseminated to non-Dow employees?
10. Do you have contractors off the premises doing formulating or other operations for you using products shipped to them by you?
- a. Yes. If so, are the workers involved properly informed of the materials involved and their potential hazards?
 - b. No

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⑤ Where is the location of chemical hazard data sheets?

~~6 Show assessors documentation records (sign-up sheets) of the employee annual hazard communication program.~~

~~Explain the techniques used to communicate this information to employees.~~

A. Hazard Communication

7. How are health bulletins (bulletins transmitting recently discovered health effects) handled, and the information disseminated to employees?

- Are MIOSHA signs posted?

8. Inspect work areas for proper labeling on containers.

- How are stationary containers labeled? How does employee deter.
hazards assoc. w/ needed contents?

D. Contractors *How are portable containers labeled?*

9. What is the orientation and education program for "short term" contractors and "long term" contractors?

- How are they informed of potential health hazards

- How documented?

- see other sheet

SECTION II. RESPIRATORS (Ref. Safety Std. and OSHA Std. 29CF 1910.134)

1. Attach copy of the written Respirator Program.

Where is it kept?

2. Explain how users are instructed and trained in the proper use of respirators and their limitations for the chemicals handled.

How often repeated? Show documentation records to assessors.

3. Is qualitative (or quantitative) fit testing provided? How often repeated?

Show documentation records to assessors.

ST0037818

Dow Employees

- ① Are respirators required, provided, and used for other than emergencies?
a. Yes. If so, what kind(s)?
b. No
- ② Is there a written respirator program?
a. Yes. Where is it kept? Please attach copy.
b. No
- ③ Is there an inspection, cleaning, and maintenance program?
a. Yes
b. No
- ④ Are the written records of inspection of respirators maintained as required by the OSHA Act (CFR 1910.134) or pertinent state act?
a. Yes
b. No
- Keep In*
~~⑤ Do you have a policy concerning beards and glasses or goggles with the use of respirators?~~
a. Yes. If so, what is it?
b. No
- ⑥ *How* Are respirators and cartridges or canisters ~~properly~~ selected and approved for intended use?
a. ~~Yes~~. By whom?
b. ~~No~~
- ⑦ Are users instructed and trained in the proper use of respirators and their limitations?
a. Yes. If so, how often and by whom?
b. No
- ⑧ *Documentation?* Is qualitative fit testing provided ~~for~~ dust masks?
a. Yes. If so, how often?
b. No
- obtain*
⑨ *How often* Is quantitative fit testing provided *obtained?*
a. ~~Yes. If so, how often?~~ - *How documented?*
b. ~~No~~
- ~~⑩ Are individually assigned respirators provided where practicable?~~
a. Yes. Are they marked to identify the owner?
b. No
- ⑪ Are respirators properly stored?
a. Yes
b. No

- Are fit testing / medical approvals up-to-date?

ST0037819

12. If air-supplied respirators are used, what is the source of air?
- Bottles
 - Compressor - plant air
 - Compressor - dedicated breathing air
13. Are unique fittings used for breathing air lines to ensure against connecting into other systems?
- Yes
 - No
14. Is the quality of breathing air ensured?
- Yes. If so, how is it documented?
 - No
15. Is the maintenance program for breathing air compressors written and adequate?
- Yes
 - No
16. Are backup persons with suitable rescue equipment provided for persons working in atmospheres which may have the potential of becoming immediately dangerous to life and health?
- Yes
 - No
17. Is there a regular inspection and evaluation to determine the continued effectiveness of the program?
- Yes
 - No
18. How is documentation of medical approval done for those who must wear respiratory protection?

Non-Dow Employees

1. Are respirators used by non-Dow employees?
- Yes
 - No
2. How does the respirator program for non-Dow employees differ from Dow employees?
3. Are non-Dow employees fit tested with respirators?
- Yes
 - No

4. Do you supply respirators for non-Dow employees?
- Yes
 - No

6/12 - Non-Dow employees fit tested / medically approved for respirator use? Documented?

- Add walk around inspection??

- ① Is local exhaust ventilation provided at any operation generating air contaminants?
a. Yes. If so, at what operations?
b. No
- ② Are there any needs for local exhaust ventilation that have not been met?
a. Yes. If so, where?
b. No
- ~~③~~ What criteria was used in determining optimum face velocities for local exhaust devices?
- ~~④~~ What transport velocities for particulates have been used? How often is it measured?
- ⑤ Are local exhaust ventilation devices inspected periodically for integrity and need for maintenance?
a. Yes
b. No
- ⑥ How frequently are local exhaust devices checked for face velocity and static suction?
- ⑦ Are local exhaust systems equipped with manometers or other devices to indicate air flow?
a. Yes
b. No
- ~~⑧~~ Are scrubbers or dust collection systems a part of any local exhaust or ventilation systems?
a. Yes. If so, are these systems on a periodic maintenance schedule?
(1) Yes. If so, how often are they cleaned.
(2) No
b. No
- ~~⑨~~ Are ventilation or exhaust systems interlocked with production processes?
a. Yes. If so, for what purpose?
b. No
- ⑩ What is the regular inspection and maintenance schedule for general ventilation systems?
- ⑪ Is there a probability that airborne contaminants removed from the workplace are being returned with makeup air in the same or other ventilation or air conditioning system?
a. Yes. If so, where?
b. No

- QA lab hood? Manometer? Inspection frequency?
Air flow & Face velocity evaluated?

ST0037821

- (12). Are control rooms operated under a positive pressure?
a. Yes. How is this verified?
b. No
- (13). What ventilation is provided for welding operations? Does it appear to be adequate or are improved methods of controlling exposure indicated?
- X 14. Are blast gates used in any ventilation system?
a. Yes. If so, are they locked in position?
(1) Yes
(2) No
b. No

ST0037822

4. How is documentation of medical approval done for those who must wear respiratory protection?
5. Inspect respirator storage area for compliance with cartridge change frequency, cleaning, storage, and monthly inspection records.
6. Are respirators used by non-Dow employees?
If yes, how does the Respirator Program for non-Dow employees differ from Dow employees?

SECTION III. VENTILATION

1. *What* What operations have local exhaust ventilation provided to capture air contaminants?
2. *feel* What is the regular inspection and maintenance schedule for ventilation systems?
3. *and* What ventilation is provided for welding operations? Does it appear to be adequate or are improved methods of controlling exposure indicated?

SECTION IV. HEARING CONSERVATION (Ref. Dow Safety Std., IHG and OSHA Std. 29CFR1910.95)

1. Attach copy of the written Hearing Conservation Program.

ST0037823

ST0037824

2 Are there any areas that exceed 90 dBA?

✓ If so, are they posted and demarcated as high noise areas?

✓ Is there an area floor plan or an area diagram with noise levels documented?

3. Are employees who are exposed to peak exposures above 90 dBA or to a TWA of 85 dBA or greater furnished properly fitted hearing protection, and trained in its proper use?

- a. Yes
- b. No

4. Are employees informed of the hazards of excessive exposure to noise annually?

- a. Show documentation records?
- b. No

5. What noisy areas should be evaluated for possible noise level reduction engineering controls?

6. Are employees exposed to a TWA of 85 dBA (or greater) given base line and subsequent annual audiograms?

- a. Yes
- b. No

X 7. Where and by whom are audiograms done?

*delete all
use all of next two sheet.*

- ①. Is there a written hearing conservation program?
a. Yes. Does it meet OSHA standard 1910.95?
(1) Yes
(2) No
b. No
- ②. *- Reviewed annually?*
Are noise surveys conducted to define the potential exposure of employees to noise levels in excess of 80 dBA?
a. Yes
b. No
3. Are there any areas that exceed 90 dBA?
a. Yes. If so, are they posted as high noise areas?
(1) Yes
(2) No
b. No
- ④. Are employee exposures measured to determine those encountering a TWA of 85 dBA or greater?
a. Yes
b. No
- ⑤. Is there a list of those employees exposed to a TWA of 85 dBA or greater?
a. Yes
b. No
6. Are employees exposed to a TWA of 85 dBA given base line and subsequent annual audiograms?
a. Yes
b. No
7. Where and by whom are audiograms done?
- ⑧. Have you reviewed the results of the audiograms of your employees with the physician or medical department who carries them out?
a. Yes
b. No
9. Are employees who are exposed to a TWA of 85 dBA or greater furnished ear protection, properly fitted, and trained in the proper use?
a. Yes
b. No
10. Have octave band analyses been made to determine the adequacy of the ear protection furnished to attenuate noise exposure?
a. Yes
b. No
11. Are before and after calibration records made for the noise measuring equipment?
a. Yes
b. No

~~delete~~ Is the calibration of the acoustic calibrator verified annually?
a. Yes
b. No

13. Are employees informed of the hazards of excessive exposure to noise annually?
a. Yes
b. No

~~delete~~ 14. Are engineering controls, work practices, and administrative controls sufficiently documented to demonstrate their effectiveness in controlling employee exposures to within acceptable limits?
a. Yes
b. No

7 15. Are sound enclosures and other noise reducing equipment regularly inspected for integrity and effectiveness?
a. Yes
b. No

16. Do purchase specifications for equipment include limits on noise levels when appropriate?
a. Yes
b. No

17. Are there any noisy areas that should be evaluated for possible noise level reduction engineering controls?
a. Yes
b. No

Medical

1. Are employee noise exposure data readily available to the medical department?
a. Yes
b. No

Why not keep in?
~~2. For employees experiencing a "significant threshold shift" in hearing acuity, are employees~~

A. retested to verify the change?
a. Yes
b. No

B. referred to a qualified physician for a medical evaluation of the change?
a. Yes
b. No

ST0037826

- C. retrained and required to wear hearing protection?
a. Yes
b. No
- D. identified to unit supervision?
a. Yes
b. No
3. Does the audiometric testing room meet acceptable background levels for testing hearing loss?
a. Yes
b. No
4. Is a functional test conducted for the audiometric equipment?
a. Yes. If so, how often?
b. No
5. Is an annual acoustic test conducted for the audiometric equipment?
a. Yes
b. No
6. Who reviews the audiograms?

ST0037827

8. How many employees have experienced a "standard threshold shift" in hearing acuity? Follow-up?

- a. Retested to verify the change?
 - 1) Yes
 - 2) No
- b. Referred to a qualified physician for a medical evaluation of the change?
 - 1) Yes
 - 2) No
- c. Retrained and required to wear hearing protection?
 - 1) Yes
 - 2) No
- d. Identified to unit supervision?
 - 1) Yes
 - 2) No

ST0037828

SECTION V. PROTECTIVE EQUIPMENT/WORK CLOTHING

1. Is there a written Protective Equipment Policy?

- a. Yes
- b. No

2. Is company-furnished work clothing provided?

- a. Yes
- b. No

3. Is company-furnished work clothing worn off site?

a. Yes. If so, are there potential contaminants that could be transported in the clothing?

1. Yes. If so, what is the contaminant?

2. No.

b. No

① Is there a written protective equipment policy?

- a. Yes
b. No

② - *Reviewed Annually?*
Please check the protective equipment provided and required:

☐ Slicker suit
☐ Shoes
☐ Boots
☐ Gloves

☐ Safety glasses
☐ Safety glasses/side shields
☐ Chemical worker's goggles
☐ Other

3. Company-furnished Clothing

① A. Is work clothing furnished? *from skin out?*
a. Yes.
b. No

② B. Is work clothing furnished for maintenance employees?
a. Yes
b. No

③ C. Is work clothing furnished for non-Dow employees?
a. Yes
b. No

4. Clean Clothing

① A. Is clean clothing required each day?
a. Yes
b. No

② B. Is clean clothing required each day for maintenance employees?
a. Yes
b. No

③ C. Is clean clothing required each day for non-Dow employees?
a. Yes
b. No

5. Is company furnished work clothing worn off site?

- a. Yes. If so, are there potential contaminants that could be transported in the clothing?
(1) Yes. If so, what is the contaminant?
(2) No

b. No

ST0037829

6. Laundering Company-furnished Clothing

A. Where is company furnished clothing laundered?

- a. On site
- b. Off site - commercial laundry
- c. Off site - employee's home

☒ B. If at a commercial laundry, has the laundry been informed of potential hazards?

- a. Yes
- b. No

Leave in
☒ What fabric is used for company furnished work clothing?

- a. Nomex
- b. Cotton
- c. Other. If so, what?

☒ 8. A. Are there proper storage areas or cabinets for clean gloves, "rubber" suits, etc.?

a. Yes. Are they used?

- (1) Yes
- (2) No

b. No

What does this mean?
☒ B. Are there areas or cabinets for used equipment that is not yet ready for cleaning?

a. Yes. Are they used?

- (1) Yes
- (2) No

b. No

☒ 9. Are exposure data available to support the protective equipment practices?

- a. Yes
- b. No

☒ 10. Are data available to support the selection of the particular type of protective equipment furnished?

- a. Yes
- b. No

☒ 11. Who makes the decisions concerning the type of protective equipment supplied?☒ 12. How are industrial hygiene, medical, safety, and production (health team) involved in making protective clothing decisions?☒ 13. Are there chemicals with low vapor pressures which may present a contamination problem on protective clothing?

- a. Yes. If so, what measures are taken to prevent skin contact?
- b. No

14. How does the Protective Equipment Program for contractors differ from that for Dow employees?

15. Is protective equipment inspected to determine its usefulness?

- a. Yes
- b. No

16. Has the protective equipment, including boots, been tested to determine whether it may increase exposure potential by acting as a sink for contaminants?

- a. Yes
- b. No

-
- Are contractors required to wear PPE?
 - Who provides?
 - Who launders?

ST0037831

4. Where is company furnished clothing laundered?
- On site
 - Off site - commercial laundry
 - Off site - employee's home
5. Are there proper storage areas or cabinets for clean gloves, "rubber" suites, etc.?
- Yes. Are they used?
 - Yes
 - No
 - No
6. Who makes the decisions concerning the type of protective equipment supplied? Is Industrial Hygiene involved with these decisions?
7. Are exposure data available to support the protective equipment practices?
- Yes
 - No

SECTION VI. DATA GENERATION AND MONITORING

- Monitoring done by whom?*
1. Is monitoring done according to a protocol?
- Yes
 - No
- Annual review of plant IH program w/documentation of need*
2. How often are standards, field spikes, blanks, and knowns prepared and used? Where are they prepared? By whom?
3. If the out analytical work is done at this location (plant): (If not, go to question 4.)
- What analytical methods are used?

: ST0037832

- b. Are sampling efficiency and recovery data recorded?
 - c. Have results been corrected for sampling recovery and efficiency?
 - d. Does the laboratory participate in round robins?
 - e. What is the frequency of calibration of analytical equipment?
 - f. What is the concentration range over which the method is validated?
 - g. What is done with analytical reports?
4. ^{Are} ~~Show assessors monitoring survey report, documentation (original data) (before/after instrument calibrations, sample description, etc.). maintained?~~
- ✓ What is done with original data? How and where is it stored?
- 6 a. ^{CLD} Is a ^{leak detector} CAM (continuous area monitor) in use?
For what chemical? *CLD active station*
- b. Is the maintenance and calibration (Quality Assurance Program) of the ^{CLD} CAM done according to a written procedure?
Show documentation to assessors.
- c. What is being done with data generated by the ^{CLD} CAM?

ST0037834

- ① Monitoring is done by whom?
- ② Is monitoring done according to a protocol?
- a. Yes
 - b. No
- ~~X~~ What monitoring methods are used?
4. Have the sampling and analytical methods been validated?
- a. Yes. Are these documented?
 - b. No
5. Is additional validation of sampling and analytical procedures indicated?
- a. Yes
 - b. No
6. What is the sampling strategy?
7. Are statistical methods used?
- a. Yes
 - b. No
8. Have seasonal variations been considered in the monitoring plan?
- a. Yes
 - b. No
9. How often are standards, field spikes, blanks, and knowns prepared and used
Where are they prepared? By whom?
10. What is the frequency of pump calibration?
- a. Daily
 - b. Weekly
 - c. Monthly
 - d. Annually
 - e. Every survey
 - f. Other. What?
11. Where is the analysis done?
- a. Industrial Hygiene Analytical Laboratory
 - b. Plant Laboratory
 - c. Central Analytical Laboratory
 - d. Other. What?
12. If the analytical work is done at this location,
- a. What analytical methods are used?
 - b. Are sampling efficiency and recovery data recorded?
 - c. Have results been corrected for sampling recovery and efficiency?
 - d. Does the laboratory participate in round robins?
 - e. What is the frequency of calibration of analytical equipment?
 - f. What is the concentration range over which the method is validated?
 - g. What is done with analytical reports?

13. Is the monitoring properly documented both during and after the survey?
a. Yes
b. No
14. What is done with original data? How and where is it stored?
15. Summarize personal sampling data by completing the form below with data collected during the past two years. See example.

Material Monitored	Total Number and Type of Samples	Number of Samples			
		Less than 10% of IHG	Between 10% & 50% of IHG	Between 50% & 100% of IHG	Greater than 100% of IHG
Silica	125-TWA	75	25	22	3

16. How many long term (four hours or more) area samples were taken? Do any areas routinely exceed STEL or ceiling exposure guidelines?
17. How many task oriented excursion samples were taken? Were any STEL or ceiling exposure guidelines exceeded?

18. Are TWA data obtained during the same workdays as excursion samples?
a. Yes
b. No
19. Were there an adequate number of samples collected?
a. Yes
b. No
20. Are the use of protective equipment and the occurrence of unusual events documented in the reports of exposure results?
a. Yes
b. No
21. Have all plant activities, sampling, etc., been documented in reports?
a. Yes
b. No
22. Are these reports available and maintained according to the records retention policy?
a. Yes
b. No
- NA 23. How many employees are in job classifications with hazard ratings of:
a. 1 _____
b. 2 _____
c. 3 _____
24. Do exposure data support the hazard ratings?
a. Yes
b. No
25. Has the need for a continuous area monitor (CAM) been considered?
a. Yes. Has a need been identified?
b. No
26. Is a CAM in use?
a. Yes
b. No
27. What contaminant(s) does it monitor?
28. Is the maintenance and calibration of the CAM done according to a written procedure?
a. Yes
b. No
29. Are CAM sample point locations documented?
a. Yes
b. No

ST0037836

30. If a CAM data point is nondetectable, is the detection limit printed or documented?
- a. Yes
 - b. No
31. What is being done with data generated by the CAM? Are TWA exposures calculated?
32. What is the Quality Assurance Program used to assess the validity of data obtained?
- a. For Industrial Hygiene survey data?
 - b. For CAM data?
33. If analytical proficiency has not been adequate, what steps were taken to rectify the situation?

NA

ST0037837

SECTION VII. ASBESTOS (Ref. OSHA 29CFR1926.58)

1. Is asbestos (insulation, etc.) present in this operation?
- a. Yes
b. No (Go to next Section)
2. Do you have a "map" of the location of asbestos containing materials?
Show assessor the documentation,
3. Is there asbestos "Danger" sign(s) posted in areas to alert employees of hazards?
- ~~4.~~ Is the site "Competent Person" involved with all asbestos removal jobs?
5. Do Dow employees remove asbestos containing materials?
If so, show assessor written operating procedures.
- All maintenance personnel have 2 hr. asp. aware.?

SECTION VIII. GENERAL**Dow Employees**

1. Where do employees store their lunch?
2. Where do employees eat or drink?
3. Is food tobacco carried into process areas, laboratories, or other areas where chemicals are present?
- a. Yes
b. No
- out*

ST0037838

Dow Employees

1. Where do employees store their lunch?
2. Where do employees eat or drink?
3. Is food or tobacco carried into process areas, laboratories, or other areas where chemicals are present?
 - a. Yes
 - b. No
- ④. Is there a mandatory shower policy?
 - a. Yes
 - b. No
- ~~5.~~ Is there a written policy concerning the washing of face and hands before eating?
 - a. Yes
 - b. No
- ⑥. Are toilet, showers, and change rooms adequate and clean?
 - a. Yes. For women employed also?
 - b. No
- ⑦. Are there adequate numbers of lockers?
- ⑧. Are there any improvements which should be made in the change rooms and lunchrooms?
 - a. Yes. If so, are they (1) double lockers?
(2) street side and plant side?
 - b. No
- ⑨. Is there evidence of "tracking" of chemicals from one area to another?
 - a. Yes. If so, explain.
 - b. No
- Keep
with* ~~10.~~ How often are safety showers and eyewash stations inspected?
11. Do job procedures require the testing of eyewash and safety showers prior to commencing the job when the potential for their use exists?
 - a. Yes
 - b. No
- ⑫. Do job procedures adequately define the hazards of the job and the protective equipment required?
 - a. Yes
 - b. No
- ⑬. Are job procedures reviewed periodically with the involvement of industrial hygiene?
 - a. Yes
 - b. No

ST0037839

14. What shift schedules are worked?
15. Are entry permits required for entry into enclosed spaces?
a. Yes. If so, are measurements made to determine oxygen content and the concentration of hazardous materials before issuing the permit?
(1) Yes
(2) No
b. No
16. Is welding, cutting or grinding being done on galvanized or zinc primed equipment?
a. Yes. If so, has the potential personal exposure to zinc and lead been measured?
(1) Yes
(2) No
b. No
17. How is the housekeeping? Are there specific recommendations for improvement?
18. Are there any specific problems which could be eliminated by additional engineering control?
a. Yes. If so, what are they? Is there an action plan to control them?
b. No
19. Which work practices or procedures should be changed in order to reduce or eliminate exposures to stresses?
a. Yes. If so, what are they? Is there an action plan to control them?
b. No
20. Are any chemical stresses controlled by specific OSHA or state health standards (acrylonitrile, vinyl chloride, etc.)?
a. Yes. If so, which ones?
b. No
21. Is there any asbestos in the plant?
a. Yes. If so, is it identified?
(1) Yes
(2) No
b. No
22. Is any sandblasting done on site?
a. Yes
b. No
23. What emergency plans have been written for use in case of spills or major releases? Do they include the possible exposure to persons outside the fence line?

ST0037840

24. Does the ^{plant} facility have an industrial hygiene contact?
a. Yes
b. No
25. What input does industrial hygiene contribute prior to process changes, plant modifications, and new construction?
26. What is being done to prevent skin contact with chemicals?
27. Is dermatitis a problem at this location?
a. Yes
b. No
28. Are solvents used for degreasing and cleaning being used with proper precaution?
a. Yes
b. No
29. Are the differences between chemicals which are absorbed through the skin and those which are irritants to the skin identified and the differences appreciated?
a. Yes. If so, is there appropriate control?
(1) Yes
(2) No
b. No

Non-Dow Employees

1. Where do non-Dow employees eat or drink?
2. Where do non-Dow employees store their lunch?
3. Is there a mandatory shower policy for non-Dow employees?
a. Yes
b. No
4. Are change/shower rooms supplied for non-Dow employees?
a. Yes. Are they adequate?
b. No

ST0037841

Facility

1. Is there a Medical Surveillance Program?

- a. Yes
- b. No

N/A
2. What percentage of employees participate in the Medical Surveillance Program?

Medical Department

Survey
1. Are there appropriate medical opinions for respirator users?

- a. Yes
- b. No

2. Is there a biological monitoring program?

- a. Yes. If so, for what chemicals?
- b. No

3. How is medical surveillance of contractors administered?

4. How are results of medical exams communicated to employees?

5. What percentage of employees participate in the Medical Surveillance Program?

*We should
have something
for medical.*

ST0037842

4. Are toilet, showers, and change rooms adequate and clean?
- a. Yes. For women employed also?
- b. No
5. How is the housekeeping?
6. Are there any specific problems which could be eliminated by additional engineering control?
- If so, what are they?
7. Which work practices or procedures should be changed in order to reduce or eliminate exposures to stresses?
8. Is dermatitis a problem at this location?
9. Are solvents used for degreasing and cleaning being used with proper precaution?
- a. Yes
- b. No
- quit*

SECTION IX. MEDICAL

1. What percentage of employees participate in the Medical Surveillance Program?

ST0037843

Facility

This applies to a site. Sealed Source questions reviewed twice/yr. with wipes.

1. Are sealed sources, X-ray producing material or loose isotopes of radioactive material present?
 - a. Yes
 - b. No. IF SO, OMIT REMAINDER OF THIS SECTION.
2. Is Form NRC-3 "Notice to Employees" or agreement state equivalent posted in an area accessible to employees?
 - a. Yes
 - b. No
3. Is there a similarly posted reference to where 10CFR 19, 20, 21, the NRC license or agreement state equivalent and notices of violation are available?
 - a. Yes
 - b. No
4. Are radiation levels in areas that are not controlled for purposes of radiation protection at levels below 2 mrem/hr or 100 mrem/7 days or equivalent State limits?
 - a. Yes
 - b. No
5. Are radiation areas (~~>5 mrem/hr or >100 mrem/5 days~~) conspicuously posted with the radiation caution symbol and the words "Caution - Radiation Area"?
 - a. Yes
 - b. No
6. Are areas containing >10 times 10CFR20, Appendix C, quantities or equivalent state limits of radioactive material posted with a sign bearing the radiation caution symbol and the words "Caution-Radioactive Materials"?
 - a. Yes
 - b. No
7. Does each ~~container or~~ sealed source holder of radioactive material containing greater than 10CFR20, Appendix C, quantities (or equivalent state limits) bear a label identifying the contents and a label stating "Caution - Radioactive Materials"?
 - a. Yes
 - b. No
8. Are licensed radioactive materials ^(sealed sources) secured against unauthorized removal?
 - a. Yes
 - b. No

*Can we answer these questions?
NCR-3 ?
10 CFR 20 ? Appendix C ?*

ST0037844

LABS covered
Standard to be
by Lab

APPENDIX E - ANALYTICAL LABORATORY ASSESSMENT QUESTIONNAIRE

QUESTIONS FOR THE ASSESSMENT OF INDUSTRIAL HYGIENE ANALYTICAL LABORATORY OPERATIONS WITHIN THE DOW CHEMICAL COMPANY

• This appendix questionnaire is not meant to be all inclusive but rather as a "trigger mechanism" to stimulate the assessor to ask the proper questions. Additional topics or areas of interest appropriate to the site being evaluated may be reviewed.

1. Is there access to a set of Dow's Industrial Hygiene (Reference) Procedures? Is there access to all relevant Dow Industrial Hygiene monitoring methods?
2. Which compounds are you analyzing at least once a year?
3. What monitoring method are used for each compound being analyzed? Are these Dow-validated methods? Indicate the method number, if it has one. If not, is the method written down and kept in a methods manual?
4. If an alternative analytical method is used when a Dow-validated method exists, do you have documentation confirming the effectiveness of the alternative method in doing what it is intended to do?
5. How are the samples received at the analytical laboratory?
6. Are any samples sent outside The Dow Chemical Company for analysis? If so, what evaluation has been done of the outside laboratory to determine its ability to analyze the samples?
7. Are the samples logged in when received by the laboratory?
8. Does the laboratory assign the samples a number different from the one assigned by the industrial hygienist?
9. Are known (spiked) samples submitted with the unknowns for analysis by the laboratory? If so, how frequently?
10. If known samples are submitted with the unknowns, who prepares the known (spiked) samples?

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