FORM 203 — LAKE CHARLES, LA.

BATH 10M (10) 70-5464

JUL 8 1971

CHEMICALS

INDUSTRIES

INTEROFFICE / LAKE CHARLES

TO See Distribution

DATE July 6, 1971

FROM D. L. Duncan

SUBJECT

With the passage of the Williams-Steiger Safety & Health Act of 1970, a new set of standards are being imposed on us which will require considerable work. Attached is pertinent correspondence along with Davis' and McVicker's first general survey of our plant for items in which we are not in compliance. Please study this list and pick out the items which apply to your area of responsibility and proceed forthwith to make a list of specific jobs or changes in procedure which may be necessary to bring us into compliance. In some cases it will be necessary to decide what approach to take to solve certain problems. In any event, we need to define as accurately as possible all of the work needed in order that we may estimate for Mr. Widing the impact expected on both maintenance and capital forecasts. Please discuss this with me if there are any questions.

Murry Davis has received a sufficient number of copies of the Federal Register in which the Act was published and will furnish each of you a copy for your reference.

DLD/mm

Encl.

D L Duncan

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cc: A. T. Raetzsch
O. L. Cromeans
J. M. Davis

CHEMICALS

INDUSTRIES

INTEROFFICE / LAKE CHARLES

TO R. E. Widing

DATE July 6, 1971

FROM D. L. Duncan

SUBJECT Occupational Health and Safety Act

REFERENCE Your memo of June 22, 1971

We expect to be able to advise you the information requested in J. E. Burrell's memo dated June 17 by September 1.

Murry Davis and Eudine McVicker have read the Act and also have a copy of an Inspector's Manual which will be used as a guide by any inspectors regarding the Act. With this information, they have completed an initial survey of the Lake Charles plant for compliance. A copy is attached for your general information. The list is surprisingly lengthy and some of the items are much more serious than others. In any event, you will understand that some time will be required to determine the corrective measures necessary and to plan and estimate their cost. We plan to assign Jim Peck to coordinate this effort upon his return from Central Engineering on July 19. Meanwhile, Operations people will be determining the specific jobs necessary to be estimated.

It is obvious that this new Act will have an impact both on the maintenance forecast and the capital forecast as well as some of our procedures.

DLD/mm

Encl.

D L Duncan

cc: J. A. Clapperton
A. T. Raetzsch
R. E. Baker
W. B. Graybill
J. M. Davis

AREAS IN WHICH THE PLANT DOES NOT COMPLY WITH

THE WILLIAMS-STEIGER SAFETY & HEALTH ACT OF 1970

I. Illumination

This category deals primarily with areas in the old section of the plant, i.e.:

1. Caustic - upstairs and downstairs - storage tank areas and around certain transfer pumps located in outlying locations.

2. Cell Rooms - upstairs and downstairs.

3. Liquefaction - brine treatment - secondary and primary condenser area - storage tank area, especially near the scales.

4. Shipping - tank car loading rack - cylinder building - truck loading areas. Dock area should be checked.

5. Powerhouse "A" and "B" - especially the pumphouse.

6. Maintenance Shop areas in Area "A" and "B".

II. Stairs and Stairways

1. Tri Still fixed ladder landings are 40-45 ft. apart - should be no more than 30 ft. The new Tri Still has been designed with the ladder landings the same as the old Still. Some ladders leading to roof landings are out of specification.

2. Stairway in caustic area, near the workshop, exceeds the pitch required in the Standards.

III. Handrails

1. The handrails in Area "A" do not comply with the Standards. This will be a major task.

IV. Floor Openings and Landings

1. Throughout the plant there are floor openings that are not protected by toe plates.

2. Floor landings, in some areas, are not protected by handrails or hinged covers.

V. Ventilation

This is an area that needs considerable study.

1. There are times when welders are required to burn and weld on material which gives off noxious fumes, such as copper, cadmium, lead, zinc, etc.

2. The bagging and shipping area in Pigments is a major problem in proper ventilation.

3. The fresh air intake to the organic control rooms need to be relocated.

4. No exhaust system over tin-plating pot in Cell Renewal.

5. No exhaust to carry off lead fumes while pouring lead from the pot into the new cell.

VI. Laboratory

1. Overcrowded - the furniture and fixtures are such that they would obstruct emergency evacuation in such cases as explosions, fires and excessive gas release.

2. There are no marked or designated aisles for quick egress.

3. The two exit doors - the east doors upstairs and downstairs swing inward.

4. There is no couch or bed provided for the female rest room which would accommodate an ill person.

5. Contaminated fumes are a problem when the air current is from the east. The location of the Lab almost prohibits fresh air intake which is not subject to contamination.

VII. Heat Stress

1. Diaphragm Chlorine Cells - this has been a problem for some time and definitely needs correcting. The rest and dining area for the cell cut-out crew is almost in a deplorable state. At 10:50 a.m. on Thursday, July 1, the temperature inside the rest and dining area was 94° F.

2. The mercury cell room has a combination heat and ventilation problem.

3. Furnace Building in Pigments - the upstairs area is excessively hot.

4. Extreme heat near the lead and mastic pots in Cell Repair.

VIII. Spray Finishing, Sandblasting and Paint Storage

1. The paint shop is in total defiance of the Act. There are no spray painting booths; no explosion-proof lighting and insufficient ventilation.

2. Construction painters do not use Air Line hoods while sandblasting.

3. Paint storage area is not sprinklered.

IX. Noise

1. Powerhouse "A" - the operators on the turbine and boiler floors are exposed to noise levels that exceed acceptable limits. Soundproof control rooms are needed on both floors.

2. Silica Pigments - the drying area is by far the worst area. The blowers to the frit reactor exceed the maximum allowable.

Recommendation:
It is recommended that personal noise monitors be purchased to determine the amount of time operators and/or maintenance people spend near some of these pieces of equipment.

X. Mists, Dusts and Fumes

1. The Silica Pigments bagging and shipping area is a major problem in regard to dusts.

2. The organic waste dump area is a hazard to the general public and employees. On occasions, when the wind is from the east, the residents of the houses across Columbia-Southern road have been exposed to strong fumes from the dump area.

We have problems in the process areas, transportation and dumping of the wastes.

3. The acid dip tank in K-301 emits strong acid fumes during dipping operations. The fumes spread throughout K-301 and into K-302.

4. When dumping retention tanks and cell boxes in sodium chlorate, fumes are almost unbearable. Maintenance men are required to perform their work assignments under very adverse conditions at this time.

XI. Conveyors

1. Conveyors in the prill caustic area are inadequately guarded- no pedestrian crossovers - no deadman controls - no protection from overhead conveyors.

2. Conveyors in the dryer building in Silica Pigments do not meet the necessary guarding requirements.

XII. Material Storage and Handling

1. Stacking of silica bags in Pigments is in violation of the Act. The rule is that bags, containers, bundles, etc., stored in tiers shall be stacked, blocked and interlocked and limited in height so that they are stable and secure against sliding or collapse.

2. The loading line on the caustic docks are stored such that the entire dock decking is covered with hose which creates a tripping hazard.

XIII. Floors

1. The lower flooring in the caustic area is pitted in places to the extent that it creates a stumbling hazard and also retards the drainage of caustic spills and water.

2. The wooden decking on the cell room floor in the mercury cell area retains spilled mercury which gives off noxious fumes.

3. The grating in the Per-Tri operating unit is badly corroded and oftentimes presents a stumbling hazard. Also when spills occur on the upper decks, releasing acid, it creates a hazard to those working below.

4. The wooden decking over the river water line piping to the condensers in Powerhouse "A" presents a possible fire and stumbling hazard.

XIV. Breathing Air

1. Plant air is used in certain areas of the plant for breathing air. There is danger of contamination from other sources which could be harmful and even fatal to employees. This is in violation of the Act.

XV. Signs

1. The new Standards set forth specifications which are in opposition to the Corporate sign program. There are many signs that we are in desperate need of.

XVI. Housekeeping

1. There are many areas in the plant which violate the Standards:

   (a) Delivery Stations - These stations constantly present problems. Material is stacked in a disorderly manner which causes safety hazards.

   (b) Oil On Floor - The maintenance shop areas are the greatest offenders in this respect. The silica pigments and anhydrous caustic shipping areas are bothered with this item as a result of leaking towmotors.

(c) The silica pigments' entire area needs a major housekeeping program. This area has deteriorated to the extent that it appears everyone has lost all interest. Along the railroad track, in the boxcar loading area, it is in a deplorable state.

(d) The diaphragm cell area, and particularly K-301, is in a sad state.

It is felt that in order to maintain a clean and safe place of employment, manpower is a major necessity which calls for an expenditure of money.

XVII. Sanitation

1. Toilet facilities have been studied by maintenance and we are not in compliance in many areas of the plant.

It is recommended that the plant engineering specifications be reviewed and brought up to date to comply with this new Safety & Health Act.