

INSPECTION REPORT -- CAPCO - Ragland Plant
May 21, 1975

PLAINTIFF'S
EXHIBIT

CAP-105

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HER 0008431

Ragland, Alabama
May 21, 1975

INSPECTION REPORT -- CAPCO-RAGLAND PLANT

Mr. Rex C. Beckstead
Salt Lake City, Utah

Dear Sir:

An inspection of the CAPCO-Ragland Plant was conducted. This report has been discussed with Messrs. J. Carpenter, Plant Manager, J. Wright, Plant Superintendent, and G. Fox, Industrial Hygienist.

A. GENERAL

1. This is the first in-depth safety inspection conducted at the plant since Asarco's assumption of ownership. This report will cover many detailed items to assist the Ragland Plant in upgrading its safety program to Asarco standards and reduce its accident experience.

2. The plant was not in operation during this inspection, although some maintenance and shipping activities were in progress.

3. An OSHA Inspection has not been conducted at this plant. However, on May 20, 1975 two OSHA inspectors were at the plant investigating a complaint by an employee. Results of that investigation will be forthcoming.

4. All OSHA forms are current and appropriate OSHA signs posted.

5. No first aid training was conducted in 1974 or to date in 1975. However 15 supervisors and hourly employees hold valid first aid certificates. It is recommended that additional first aid training be implemented in 1975 with the goal to have all employees so trained.

B. SAFETY PROGRAMS

1. During normal operations the supervisors have a semi-weekly meeting for purposes of discussing various production, maintenance and safety topics.

2. A bi-monthly meeting is held with union representatives to discuss matters of safety.

3. No crew-sized meetings are conducted.

4. No staff safety inspections are conducted.

5. Recommendations:

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- a. Immediately establish a monthly safety meeting to include all supervisory personnel for purposes of training, information and promoting an active safety program.
- b. Upon assumption of normal operations (or near normal) implement a crew-size safety meeting program.
- c. Start a staff safety inspection program within the plant.
- d. Continue the present union safety committee as it is established.

C. ACCIDENT REPORTS

1. A review of the 500 series Asarco reports and OSHA forms was conducted with selected Ragland staff.
2. There is no established "in plant" accident report form. A single form should be developed for personal injury, equipment damage and fire reporting. A form should be completed on each reported case. It should be established policy to require employees to report all such instances to their foremen immediately. (The foreman should be required to complete the accident report form. Such a form should cover who, what, where, when and how the accident occurred, results of the accident and recommendations for prevention of future similar accidents.)

D. MEDICAL AND EMERGENCY PROCEEDURES

1. The nearest hospital is 15 miles from the plant and the nearest ambulance is 20-25 miles from the plant. Immediate action must be taken to contact the nearest ambulance service to inform them of:
 - a. The type of business.
 - b. Potential possible accidents and types of injuries.
 - c. Location of the plant by map.
 - d. Determine the ambulance service policies and capabilities.
 - e. Establish an alternate service.
2. A suitable first aid facility is required. A room with a cot, and all necessary supplies, readily available, is needed at a minimum. In addition to recommendations by the plant's physician, first aid supplies should include:

- a. A suitable, portable first aid kit.
 - b. At least one stretcher with blankets.
 - c. Splints and trauma type dressings.
 - d. A resuscitator or pneuator with selected first aid and personnel trained in its use.
3. Emergency procedures for injury and fire must be published and posted at each plant phone. All necessary numbers should be listed. (e.g. fire, ambulance, police, doctor, staff)

E. PERSONAL PROTECTIVE EQUIPMENT

1. A 100% eye, head and foot protection program must be initiated. All personnel entering the plant must comply with this program and suitable warning and notice signs should be posted at appropriate locations. It is suggested that a target date be established for each type of protection to allow for establishing policy, ordering, stocking, establishing issue/order procedure, and above all, advertising among the employees for an easier transition to the mandatory program.
2. Observations on hearing and respiratory protection were not noted since the plant was not in operation.
3. Respirators, gloves, disposable coveralls and welding equipment are furnished to the employees as necessary.

F. FIRE PROTECTION

1. The plant does not have a trained fire brigade. The local community has a volunteer department whose equipment is compatible with the plant's.
2. As noted in prior correspondence, the warehouse and office are within the same building. These facilities must be sprinkled to provide adequate protection. Plans for segregation of supplies within the warehouse and sprinkler protection are in progress and should be expedited to completion.
3. The following items and recommendations are noted:
 - a. Provide at least one more approved flammable liquids cabinet for warehouse storage.
 - b. Train all personnel on procedures in case of fire and proper use of extinguishers.

c. Hang the fire extinguisher, near the gas pump, outside the fire house.

d. Appropriately mark all fire extinguisher locations and insure that extinguishers are less than 5' off the floor level per OSHA.

e. The diesel spillage at the fill pipe outside the west fence should be cleaned up, post no smoking signs inside and outside the fence and prohibit parking within 25' of the fill pipe.

f. The diesel tank containment wall should be recalculated to insure it will hold potential spillage from all tanks.

g. Fire protection should include a capability for potential large diesel fires (storage tanks).

h. Inspections of all fire equipment should include as a minimum:

1. Monthly inspection of portable extinguishers.
2. Monthly inspection (visual) of all hoses, hose houses, stand pipes and hydrants.
3. Monthly flush of fire lines.
4. Semiannual pressure test of fire lines for static pressure.
5. Semiannual pressure test of all hoses.
6. Maintenance of records of the above inspections.

i. Post "No Smoking" sign at solvent cleaning tank, vehicle maintenance area.

j. All flammable liquids should be stored away from combustible material in an approved metal cabinet, if they are in less than 5-gallon containers.

k. Install explosion proof switches and outlets in the oil storage room near the warehouse.

l. Post and prohibit smoking around the hydraulic pumps along the north building wall. These pumps and associated facilities should be cleaned up.

m. Fire house #2 should be repainted and the interior hose should be joined and "bedded" for quick extraction rather than rolled. Insure there is enough hose to reach the building.

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n. Consider a fire equipment trailer with extra hose, extinguisher, and appropriate hardware (e.g. Y's, T's, nozzels, foam or dry chemical).

o. Additional fire hydrants should be located within the plant.

p. Full oxygen and acetylene tanks in storage must be separated by 25' or a fire proof wall and protected from sun and rain and separated from lubricant storage.

q. Trash containers must be of a non-combustible material (plastic in the lab) and be provided with self-closing lids.

r. Establish and train a plant fire brigade on each crew to provide protection during all working shifts. Fire drills should be conducted monthly.

G. ELECTRICAL

1. A thorough inspection of the electrical system within the plant should be conducted by a qualified contractor and a plan developed to correct the deficiencies on a schedule.

2. The need for closer supervision of the electricians is apparent.

3. Contact should be made with the local power supplier (Alabama Power Company) to adequately post their substation with danger signs.

4. All electrical switch gear must be marked as to its function. Few within the plant are marked.

5. All electrical junction boxes and conduit covers must be in place unless they are actively being worked on. Many boxes were open (e.g. at the front and side of the boiler, crane at #1 finishing area, at the pipe lathe, #1 finishing area, in the mixing area, on the crane at the unloading table).

6. Many pieces of conduit were in poor condition and inadequately mounted (e.g. near the autoclave pit, along the north side of the secondary oven).

7. Other items noted were:

a. No ground line on light under water filter.

b. Hand light near #3 autoclave had a broken handle and switch.

c. Welding cable strung across aisle, being driven over by fork lifts and has too many splices and patches.

d. Some two prong outlets observed.

e. Electrical connection on the large pump in the pit of the mixing area was poor.

f. All electric pumps, outlets and installations in the mixing area must be water proof.

g. An effective lock-out program must be developed, initiated and enforced.

h. Bad connection on jib-hoist near new bag house and improperly labeled control.

H. SECURITY

1. The plant has a contract with Security Engineers for a full time gate guard. The guards duties include a four station hourly walk during nonoperating times.

2. The plant has a complete 8' chain link fence with proper top wire. There are four access gates.

3. Pilferage and loss does not appear to present a problem. The dump is outside the plant fence and is accessible to the public, as is the settling pond.

4. The following additional items were noted regarding security.

a. No liability warning signs were posted. Each gate entrance, the road to the north gate and the dump should be posted per the text outlined in the Asarco accounting instructions.

b. Grass along the fence should be cut inside and outside.

c. No check of adequate security lighting was made during this inspection. This should be accomplished.

I. MISCELLANEOUS

1. Guarding of moving equipment, shafts, v-belts, open pits, etc. was inadequate throughout the plant. Action concerning this problem has been improving. However, continuous emphasis must be placed in this area as this shortcoming will surely result in citations and can contribute to serious injuries. Some specific items noted were:

a. All belt drives must be fully enclosed (e.g. boiler drive motor, hydrotest length adjust drive belt, water pumps south wall, bag house blower drive).

b. All drive shafts must be properly guarded (e.g. compressor near boiler, pipe lathe at #1 finishing area, hydraulic pumps south wall #1 finishing area, bag house blower shaft hydraulic oil pump north wall).

c. All open pits and elevated platforms shall be provided with approved guards, rails, toe boards or substantial floor gratings. This includes but is not limited to:

1. The open drainage ditch along the south wall of the building.

2. The pit at the end of the #1 finishing area.

3. The pits under the pipe finishing lathes.

4. The open pits in the mixing area.

5. Toe boards along walk ways north side primary oven.

6. Midrail on plant office roof storage.

7. All handrails, toe boards should comply with construction specifications.

d. Provide cover guards for foot activated devices e.g. pipe retainers on finishing line.

e. Provide a screen guard to cover chain drive at mandrel stripper.

2. Housekeeping throughout the plant was fair to poor. Some steps were being taken to improve the situation such as refurbishing the latrines. Good housekeeping practices must be continued while operations are down and maintenance continues. Specific attention must be given to the following areas:

a. Along the railroad track.

b. Pallet storage area.

c. Storage yard for broken pipe, broken bundles, etc.

d. Steam cleaning area and steel scrap outside maintenance area door. Provide additional steel racks.

- e. Excess and cluttered storage within the warehouse.
 - f. Debris and hoses on floor in #1 finishing area.
 - g. Tap coupling area very cluttered.
 - h. Storage shed in vehicle maintenance area.
 - i. Used bag socks near new bag house.
 - j. Many oil spots on the floors from lift trucks.
 - k. Lunch room requires a thorough cleaning.
 - l. All shops (elect, maintenance, foreman's storage) very cluttered.
 - m. Lab very cluttered and is too small.
 - n. Roof storage excessive and cluttered on plant office.
3. Other items noted and requiring attention:
- a. Additional lighting needed in autoclave pit.
 - b. The cranes at the finishing areas must have their steel frames bolted to the floor.
 - c. The floor grates in the final finish area present a serious tripping hazard. These should be painted with a stripe warning or preferable have a piece of angled iron or wood protecting the edges.
 - d. Improved maintenance needed on one fork lift (Hyster) (e.g. no horn, jerry rigged spring, poor lights, no posted capacity rating).
 - e. Relocate wood cutoff saw on/off switch so operator does not have to reach over cutting table.
 - f. Replace bent railroad car dock plates.
 - g. Check with railroad about proper and required warning and lighting of restricted clearances.
 - h. Scaffolds at new bag house should be lagged properly to provide suitable work surface.
 - i. All air hoses supplying over 30 psi must have reducing nozzles.

j. The following items were noted within the lab.

1. Safety shower is inadequate for drenching. Install new shower and eye wash.
2. The kitchen hood for removing fumes is inadequate.
3. Atomic absorption machine must be vented.
4. Acetylene and air bottle should be adequately stored outside the lab.
5. Lab is overcrowded and cramped.
6. Replace broken window.

k. Adjust tool rests on pedestal grinder.

1. Chain for retaining oxygen and acetylene tanks is too lightweight.

m. Come-along in foremans storeroom has a sprung hook.

n. The household fans located throughout the area are inadequate and unapproved. None are grounded and most are inadequately protected. Such light weight devices will not sustain rugged service.

4. Excellent progress is being made on the dust collecting system. The conscientious efforts of the staff on this project are commendable.

5. While not observed during this inspection, it was pointed out that the plant roof leaks excessively, to a point that men must wear rain gear or work under covered stations during rain. This roof deterioration is the result of age and internal condensation which has caused portions of the roof to rust away. This leakage thusly contributes to very poor work conditions, unsafe conditions and rapid deterioration of equipment. If the problem is as serious as indicated, the entire roof should be replaced and properly insulated.

6. Upon resumption of normal operations, or before, CAPCO management must consider the possibility of employing a full-time safety and personnel supervisor for Ragland. The present and future pressure and legislation concerning these two fields will justify this position. The geographic separation of the Ragland and Van Buren plants will make it infeasible for Mr. Fox to cover both units. A full-time safety engineer would contribute greatly to the Ragland program by assuming these staff functions for the management.

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I would like to thank the staff of the Ragland Plant for their assistance and cooperation. Their positive attitudes and interest in employee safety will contribute to a successful accident prevention program.



BOBBY J. JACKSON
General Safety Engineer

BJJ:jp

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ACCIDENT RECORD

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
Average Number of Men Per Day	95	94	103	110
Number of Non-Disabling Accidents	80	77	98	18
Temporary Disabling Accidents	4	11	15	4
Fatal Accidents	-	-	-	-
Permanent Partial Accidents	1	-	-	-
Operating Hours			255,570	59,317
Days Lost	169	106	292	70
Frequency Rate			58.69	30.34
Severity Rate			1,142.54	1,180.10
Percent of Men Injured			109.71	20.00
Days Lost Account of Sickness	275	328	408	81
Days Lost P/M Employed (Sickness)			3.96	1.36
Days Lost Account All Other Causes		28	188	190
Days Lost P/M Employed (AOC)			1.83	1.73

LABOR TURNOVER

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
Number Men Hired	17	11	29	4
Percent of Labor Turnover	17.89	11.70	28.15	36.36
Number Men Separated	14	9	16	2
Percent of Labor Turnover	14.73	9.57	15.53	18.18

EQUIPMENT FURNISHED BY COMPANY

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
Equipment Cost			\$13,723.73	\$3,235.17
Average Cost/Man/Year			\$ 133.24	\$ 29.41

SAFETY AND WELFARE COSTS

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
Cost			\$ 1,088.35	\$ 185.95
Average Cost/Man/Year			\$ 1.06	\$ 1.69

MEDICAL AND SURGICAL COSTS

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
First Aid			\$ 341.57	\$ 12.00
Outside and Other Medical Expense			3,184.50	1,725.50
Total			\$ 3,526.07	\$1,737.50

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INDEMNITY AND MISCELLANEOUS EXPENSE

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>3 Mos. 1975</u>
State Industrial Commission Premium			\$29,906.00	\$12,466.02
Payments, Industrial Accidents				
Legal Expense				
Grand Total			\$48,244.15	\$17,624.64
Average Cost/Man/Year			\$ 468.39	\$ 160.22

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