

APPENDIX TO MEMORANDUM

Instructions and Regulations for Workmen in the Foundry and Melting Room of The American Crucible Products Company of Lorain, Ohio

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Lead compounds are poisonous when absorbed into the body in sufficient quantity. Dangerous quantities may be absorbed in a short time under conditions of severe exposure. More commonly, quantities sufficient to cause poisoning are absorbed over a period of months or years. It is important, therefore, to avoid day to day exposure so far as possible.

Lead absorption occurs most rapidly when lead fumes and dusts are taken in with the breath. Every effort should be made to avoid breathing the fumes from molten metal, as well as dust that contains lead. For this reason every workman should protect himself and others by being careful not to stir up unnecessary dust while working. Also he should wear a respirator when there is dust in the air around him.

Lead absorption also occurs after swallowing lead. For this reason every workman should avoid handling anything he eats or puts into his mouth until he has washed his hands thoroughly. No food or drink should ever be brought into the foundry or melting room, nor should milk or sandwiches or other things, eaten between meals, be brought into these areas. Workmen should be extremely careful to keep their food clean.

Children and other persons may absorb lead which is brought into the home in the form of dust on clothing and shoes. The home should be kept free of such dusts from an industrial plant. Therefore,

workmen should not wear their dusty work-clothing home, but should change and bathe before going home.

The following instructions have been prepared for the purpose of reminding workmen how to avoid unnecessary lead exposure. They should be read and followed carefully. It is possible to work with lead compounds without becoming sick. Attention to these rules is your share of the responsibility for keeping your health.

Cleanliness

1. No workman whose clothing is made dusty with lead-containing materials should work in his own clothes. Clothing is to be changed, from the skin out, on arriving at the plant. Work clothes, including safety shoes, are to be worn at all times when working.
2. Your own clothing is to be hung up in another locker provided for that purpose on the opposite side of the locker-room.
3. At lunch-time, the dust is to be removed as completely as possible from clothing and shoes. The hands including the nails are to be scrubbed clean, and the mouth and nostrils are to be rinsed out with water so as to remove dust that may have been caught there.
4. Lunch is to be eaten in the lunch-room. No food or milk or other beverages are to be brought into the foundry or melting room at any time, and no articles of food or drink are ever to be eaten there between meals or at any other time. Otherwise lead will be swallowed with the food.
5. Chewing-tobacco, cigarettes, or pipes must be kept free of lead before being put into the mouth. It is better not to carry tobacco into the foundry and melting room, and it is best not to chew and smoke while at work. The tobacco becomes contaminated with dust, and some of

this is likely to be swallowed or inhaled. If you must chew or smoke, take care not to put lead into your tobacco.

6. When you quit work, hang your work clothing in the lockers provided for them. Bathe thoroughly, scrubbing the skin, nails, and hair, (unless the hair has been kept completely covered and free of dust). Change into your own clothing and shoes, and then do not enter the foundry before going home.

Use of Respirator

1. When you work in an area in which dust and fumes are seen, keep away from them as much as possible. The dust and fumes follow air currents. Keep to the windward side of such currents if possible. Keep to one side of a moving crucible and not behind it, in the stream of fume.

2. Stir up as little dust as possible. Handle your tools and molds carefully and with as little stir as possible.

3. If you must work in a dusty or fume-laden area, put on a respirator. See that it fits snugly and comfortably. If it does not, return it for repair or exchange. A good respirator will protect you against dust and fume. Wear it until the dust or fume is gone or until you leave the area in which it is present.

4. The use of a respirator is specified in certain types of work that are known to be potentially dangerous. Do not violate this rule. It is made to remind you that unnecessary lead exposure day by day may finally cause illness.

General Health

1. Good food and regular habits of eating are important to your health. Do not eat snacks between meals. Always eat breakfast

before going to work. Eat a well mixed diet containing fruit, green vegetables, milk, eggs and meat. Never keep food in the foundry, and never eat or drink in the foundry. Keep milk with your lunch outside the area in which you work. It is better to go without the milk than to keep and drink it in a place where dust gets into it.

2. Drink plenty of water.

3. It is not necessary to avoid alcoholic drinks altogether, but excessive drinking of whiskey, gin, and wine is dangerous for men who work with lead. Week-end drinking parties are especially dangerous.

4. Keep the bowels open and regular at all times. If any indigestion or constipation bothers you, report this to the plant doctor for advice.

5. Have regular hours for sleeping, and get not less than eight hours of sleep at night. If disturbed by inability to rest, report to the plant doctor.

6. When you are sick in any way, whether from a cold or any other thing, report to the plant doctor.

Notes and Comments on the above rules

(a) Provision will have to be made for proper lockers, a properly designed locker room, a place for keeping lunches, milk and/or other drinks.

(b) Bathing will have to be mandatory. Supervision will have to be provided for this purpose.

(c) Some arrangement should be made about safety shoes. Men should not work without such shoes (with reinforced tips) in a place in which heavy objects can fall or be set down on their toes. These may

or may not be obtainable at present.

(d) Some arrangement will have to be made about work clothing and laundry. I believe the present restrictions of the wages and hour statutes make it mandatory that there be supplied at the expense of the employer. The same probably applies to safety shoes.

(e) Provision will have to be made to care for and supervise the use of respirators. The condition of these should never be left to the employees.

(f) What provision if any, is made for the administration of salt in hot weather? Something should be done about this, since heat collapse is otherwise likely to occur from time to time.

(g) The men have been advised to consult the plant physician. Therefore some arrangement must be made to facilitate this. The doctor should visit the plant daily if possible and should have some private consultation room. Treatment need not be given there, but one feels that eventually this would come about and that a dispensary of some kind would be set up.

(h) The entire set of instructions must be gone over with the idea of suiting the situation at this plant. If they are not in simple enough language, they must be simplified. However, it is urged that that portion which explains the hazards be left in in some form resembling that suggested. It does not hurt to explain the dangers. On the contrary it often helps greatly to clear the air and to point out the need for compliance with the rules.

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