

# APS SAFETY NOTICE

## SAFE HANDLING OF LEAD

Health effects from lead exposure are a concern both at the workplace and in the home.. ANL follows the Occupational Safety and Health, Administration regulations as guidelines to minimize the occupational exposure to lead

Adult's exposure to lead is usually through occupational sources. Children are exposed primarily through surface dust, floors, and chewable surfaces contaminated with lead. Lead has no beneficial effect on humans. Once it has been ingested into the body, lead is distributed in the bloodstream to red blood cells, soft tissues and bone. Lead in the body is eliminated very slowly, mainly by the kidneys and digestive tract.

The largest source of lead at APS is in bulk shielding materials in the form of lead bricks, shot and sheets. Those employees and resident users who routinely handle significant amounts of lead are identified via their JHQ and appropriate training, monitoring, procedures and controls are enacted to minimize their exposure to lead.

Lead is most easily transferred to the human body through inhalation. The presence of lead in the workplace in itself seldom indicates harmful levels of airborne lead. In fact today's modern lead smelting and fabrication facilities generally have very low airborne lead concentrations. Dozens of air monitoring samples taken by ANL Industrial Hygienists during APS lead handling operations have shown no significant airborne lead hazards.

Ingestion of lead dust can come through many exposures. Between 5 and 10 percent of the ingested lead passes from the intestinal tract into the bloodstream. Lead is not readily absorbed through the skin. But lead dust on the hands, skin and clothing can easily be transferred to the mouth by eating and drinking and be brought into the home where family members can be exposed to lead.

All of the controls and barriers that can be put in place to minimize exposure to lead can be put to naught by workers following improper hygiene practices such as eating or drinking in lead handling or storage areas, or by improper use of PPE.

### REMEMBER

- No eating, drinking, smoking, gum chewing etc is allowed in lead storage or handling areas.
- Always wear gloves when handling more than a few pieces of lead sheet or bricks.
- Always wear non-porous gloves when handling any lead shot.
- Always wash your hands after handling lead.

### For more information on lead hazards and controls at APS:

[ANL ESH MANUAL SECTION 4.12 SAFE HANDLING OF LEAD](#)

[APS LEAD HANDLING PROCEDURE P1110-00120](#)