



Guidance Note

May 2007

Lead Sink Traps

HWG-029

This information is for your use and as a way of providing consistent information. There is no response required.

Lead Sink Traps (explosive hazard)

It is possible that some sink traps in older buildings may be made out of lead. It is important to know that under the proper conditions, potentially explosive mixture may develop in these traps over time.

Lead sink traps may be potentially explosive if aqueous solutions of Sodium Azide have been sink disposed improperly by laboratory personnel in the past. Sodium azide is an extremely toxic chemical that is commonly added to water heating baths and biological solutions by laboratory personnel (0.1 - 0.05%) to prevent algae and bacteria from growing. If concentrated sodium azide solutions remain in the lead sink trap for an extended period of time, the shock sensitive explosive lead azide may form. Lead sink traps have been disturbed by plumbers at other institutions and they have been killed by the resulting explosion.

Lead sink traps were not commonly used at this campus, however plumbers need to be aware of the potential explosive hazard that may exist whenever one is discovered. Lead traps will be treated by Environmental Health and Safety (EH&S) personnel with a solvent to dissolve any lead azide that may have formed inside the trap. If the lead azide crystals are dissolved and flushed down the drain the lead trap will be safe to handle.

Lead sinks usually do not present an explosive hazard because the sodium azide does not remain in them long enough to form the explosive lead azide salt. Lead sinks can be handled and removed as normal sinks (only lead traps are hazardous).

If you discover a lead sink trap do not disturb it because it could be potentially explosive. Notify EH&S (4-0345 or 911 after hours) whenever you discover a lead sink trap that must be removed or otherwise disturbed.

Lead has been classified by the EPA as a regulated hazardous waste and it is illegal to discard lead into the normal trash. Lead traps or lead sinks must be properly recycled through EH&S. Call EH&S properly recycle lead containing materials.