

X-RAY SCIENCE DIVISION

401/L3128 Facility Hazard Analysis

The purpose of this form is to serve as a summary of facility characteristics, recognized hazards, implemented hazard controls, pertinent sources of information, and incident reporting contacts.

Scope of work conducted in this facility: Mossbauer spectroscopy of Mossbauer isotopes.

Hazardous materials/equipment associated with this facility:

Mossbauer spectrometer	Sealed radioactive sources	Lead bricks
Methane/helium compressed gases	Methane/argon compressed gases	High voltage commercial equipment
Cryogenic Liquids		

Hazards associated with this facility:

Radiological exposure	Potential lead exposure	Electrical shock hazard
Magnetic fields	Skin burns (cryogenic fluids)	Compressed Gases

Hazard controls implemented within this facility :

Engineered Controls

Lead shielding
Containment of radioactive sources
Backscatter radiation monitor

Procedural Controls

Leak-testing of radioactive sources
Access limited to authorized personnel
No hot electrical work permitted
High magnetic fields are posted

PPE

Safety Glasses
Gloves
TLD

Relevant ESH manual chapters that may be associated with this facility:

- 1) Ch. 5.20 – Accountability and Control of Sealed Radioactive Sources
- 2) Ch. 6.3 – Electric and Magnetic Fields
- 3) Ch. 9.1 – Electrical Safety
- 4) Ch. 13.2 – Compressed Gas Cylinders

Pertinent safety training courses that may be associated with this facility:

- 1) ESH371: Electrical Safety Training - General
- 2) ESH700: Radiation Worker Level I Training
- 3) ESH738: General Employee Radiation training (GERT)

Note: This is not intended to be an all-inclusive list of training that is required to work within this facility. The authoritative record of required training is depicted by the individual's JHQ.

Incident reporting contacts :

****Dial 911 in an emergency****

Lab Safety Captain:	E. Ercan Alp	Extension: 2-4775
Group Leader:	Thomas Gog	Extension: 2-0320
ES&H Coordinator:	Paul Rossi	Extension: 2-4192

Facility hazard analysis completed by: _____
Lab Safety Captain or designee Date

Reviewed and approved by: _____
ES&H Coordinator Date

Line Management Date

This hazard analysis must be reviewed and updated whenever conditions change. Once approved, this hazard analysis should be posted in a conspicuous space within the facility.