

SECTOR 8-ID ORIENTATION CHECKLIST

Safety Policies & Resources

- Affirmation & Clarification of “Safety First Principle”
 - Nothing we do is so important that the safety of the employee/user should be jeopardized.
 - We do good science - but we do it safely!

- Orientation to Sector 8-ID / APS ES&H plan
 - http://www.aps.anl.gov/Safety_and_Training (APS User’s Office is in 401 B1154)
 - Use this site for ES&H manual; ISM; MSDS; Training; Policies & Procedures, etc.
 - Sector 8-ID ES&H info: <http://www.aps.anl.gov/Sectors/Sector8/Safety/plan.html>
 - APS User Portal: <https://www1.aps.anl.gov/Users-Information>

- Explanation of Sector 8-ID general policies pertaining to control of hazards
 - Review ESAF before signing! – Do samples, procedures, and users match what is listed?
 - Follow all SOP’s pertaining to the experiment, if any.
 - Use Chem Lab to prep samples.
 - Goggles must be worn **ANY TIME A POTENTIAL HAZARD EXISTS**. This can include pressurized gas cylinders, or liquid samples in capillaries or tubing, etc.
 - Hearing protection is required when large Kapton windows are in use under vacuum.

- Intro to Sector 8 Personnel
 - Safety Coordinator – Ray Ziegler (2-5527)
 - Sector Manager – Suresh Narayanan (0287); Group Leader – Alec Sandy (2-0281)
 - Scientists – Joe Strzalka (2-0283); Zhang Jiang (2-3118); Eric Dufresne (2-0274)
 - Local Floor Coordinator – Bruno Fieramosca (2-0201). Page the On-Call FC at 2-0101 (Enter your extension as 2-xxxx, followed by the # symbol) or via the APA Safety & Training website.
 - *Important – Bring all safety and environmental concerns to our attention ASAP.*

- Explanation of ANL “Stop Work Authority”
 - YOU have the authority to “Stop Work” being performed by anyone when it is observed or deemed to being done in an unsafe manner.

General Safety Information

- Emergency phone numbers
 - Dial **911** from any phone (or **630-252-1911** from any cell phone)
 - Explain situation to ERT
 - Call out for help from anyone nearby.

- Location of safety equipment
 - Fire extinguishers (see sign); Fire alarm pull switch; shower; eyewash station; etc.

- Response to alarms & other warnings
 - Fire alarm (steady siren) – (bldg 400 beamline area) – evacuate to LOM office area.
 - Evacuation alarm (pulsed siren?) – evacuate bldg. 500m clockwise to LOM 435 area.
 - Tornado warning – move to shelter in any bathroom; FC office; or LOM machine shop.
 - General – listen to PA announcement. Note difference between watches & warnings.

- Electrical Safety & Misc. Items
 - No “piggy-backs” of extension cords or power strips.
 - LN2 fill station located in bldg 432 loading dock – plan ahead if Dewar is needed.
 - Radioactive check source is available.

- Restrictions on working alone
 - Notify other personnel or FC (2-0101) if you will be working alone for more than one hour. NO significantly hazardous activity is allowed when you are alone. (HF acid or machining, etc.)

- Chem Lab / Shared work areas and egress
 - Location of safety equipment – eyewash, shower station.
 - Use proper PPE at all times – safety glasses/splash goggles; gloves; lab coats, etc.
 - Store chemicals in appropriate places – flammable cabinet, fume hood; bases; acids; etc. – and secure cylinders at all times.
 - Be mindful of other users – keep work areas tidy and aisles free of clutter and obstructions.
 - Mark any specific hazards clearly and post signs in the appropriate places – Chem Lab door, fume hood, hutch door, hot plate, etc. -- *Note other user’s postings as well!*
 - **Label ALL chemicals with full chemical name; your name; experiment ID#; and date.** Chemical formulas are also helpful. Labels and white tape are available by the fume hood.
 - **Keep a log for tiny samples/containers.**
 - **Please write legibly** and refrain from cryptic ID’s such as “sample A1, A2, B1, etc...”
 - ESH590 required if working with nanomaterials (≤ 100 nm or 0.1 microns).
 - **Satellite Waste Accumulation Area** – under fume hood & top shelf of flammable cabinet.
 - **CLEAN UP YOUR SAMPLES AND SUPPLIES BEFORE YOU DEPART!**
 - Normal **trash** in waste bin, **glass** in glass waste bin, use **sharps** containers,
 - **No chemicals down sink! Notify Ray Ziegler of any waste chemicals left behind.**
 - **Please minimize waste AND containers!**
 - Fill out **Chemical Waste Log** for EACH container and note nanomaterials if any.
 - Please do not leave tape stuck to the tables and countertops – very annoying!

Beamline Safety Information

- Sector 8 implementation of the APS Shielding Configuration Policy
 - All hutches are shielded and have interlocked doors to protect personnel from harmful x-rays when in operation.
 - Do not touch ‘Red Tags’ in and around the hutches – access to these areas are controlled and limited to qualified personnel only.
 - Plan ahead if there is a need to run cables thru the hutch labyrinths. (red tag area)

- General and beamline-specific operation of the Personnel Safety System
 - E-Stop prevents upstream shutter from opening - pull out to activate the search buttons.
 - E-Stop or door ‘open’ buttons will shut down the bldg 400 x-ray beam if activated after the hutch doors are closed. This should never be allowed to happen!
 - Hutch must be searched! - Three search buttons must be activated – in order – while searching the hutch for personnel, prior to opening the shutter.
 - Only one designated individual should perform a search.
 - After searching, press and hold the green ‘close’ button until the door is closed.
 - Activate the shutter from the computer or control panel. Make note of ‘No Access’ lamp.