

# BeamLine Operations and Safety Awareness (BLOSA) Checklist ~ Beamline X21

Form for facility users only. Visitors use Visitor/Escort forms. All users must be instructed in operating the beamline safely. Training valid for 2 years.

## Access

- ID Badge User has a current BNL ID Badge or appointment (check SAF for appointment date)
- Unbadged Users User is not permitted to open experimental floor doors for users who do not have valid ID badges
- Training - User User has current GERT and NSLS Safety Training (check SAF for user and training status)
- Training - Laser If a Class 3 or 4 laser is required for experiment, verify user's laser training and eye exam at [www.bnl.gov/training](http://www.bnl.gov/training)
- Training - in SAF All additional training requirements identified in the SAF have been completed
- Training - Hazards Lead handling, electrical work, Class III or IV lasers, hazardous wastes, requires additional training and/or work planning
- TLD - Assigned Verify trainee has a TLD if user is (A) Beamline Staff or regularly works on experimental floor (B) Working w/radioactive materials (C) Minor under 18 (D) Declaring pregnancy or (E) Following other ESH requirements
- TLD - Wearing If a TLD is required, (A) User is never permitted to wear another person's TLD (B) Temporary TLDs are exchanged monthly (C) TLDs can be obtained at User Admin or Control Room

## User Equipment

- Electrical Any electrical equipment brought by user has NRTL certification
- Laser Any laser equipment brought by user has been reviewed by Laser Safety Officer

## Contacts

- Emergencies Fire/Medical (x2222) | Security (x2238) | Control Room (x2550) | Bldg Manager (x3476) | See stickers on phones
- Beamline Refer to Green Board
- OPCO OPCO: Refer to instructions posted on the beamline phone for Operations Coordinator (OPCO) Assistance

## Emergencies

- Fire Alarms Evacuate building through nearest safe exit and meet on grass outside main entrance to Bldg 725
- Continuous Sirens Continuous Siren - Assemble at Bldg 725 inside main lobby or seminar room
- Intermittent Sirens Intermittent Siren - Evacuate site immediately - Apartment residents go to Berkner Hall
- Exits Locate routes to nearest exits
- Fire Extinguishers Locate fire extinguisher
- Alarm Pulls Locate fire alarm pull
- Eye Wash - Shower Locate eye wash/shower station [For labs that do not have eye wash stations, prop open door when using corrosives]
- Spill Station Spill control station (show location)
- Green & Yellow Boards Locate/discuss Green Board (beamline emergency contacts and info) and Yellow Board (safety info)
- TV Monitoring Locate/discuss TV monitoring channels
- First Aid Go to clinic (Bldg 490) during working hours - Go to Fire House (Bldg 599) after hours - or call x2222
- Injury Reporting Report all injuries and near misses to Control Room

## Beamline Operations

- Interlock Ops Review interlock operations
- Interlock Violations It is prohibited to bypass door switches, defeat Kirk locks, or deliberately leave someone in an interlocked hutch
- User Interlocks Review procedure for user interlocks
- Enabling Beamline Review procedures to enable beamline
- Pink Cards Beamline may be unattended up to 24 hours unless SAF states "no unattended operations" (review Pink Card procedure)
- Red & Yellow Tags Provide information about any beamline equipment or systems that are yellow or red tagged
- Safety Checklist Beamline Safety Checklists must be completed by Beamline Staff before beam can be enabled
- Beamline Config Configuration changes to beamline are to be completed by Beamline Staff or OPCO only.
- Monochromator Review monochromator set-up
- Power Failure Users may reset circuit breakers 1X (need PPE, training) - Review location, procedures - For unknown causes, call OPCO
- Water Valves Only beamline staff or OPCOs are permitted to adjust water shut-off valves
- Air Valves Only beamline staff or OPCOs are permitted to adjust air shut-off valves
- Gas Valves Only beamline staff or OPCOs are permitted to adjust gas shut-off valves
- Machine Vacuum Contact an OPCO for vacuum work and bleed ups -- user is not permitted to perform vacuum work

## End Station

- Computer Ops Review computer operations - Beamline computers are for work related activities only
- End Station Config Configuration changes to end station equipment may be completed by User (review procedures and change limits)
- Valve Control Review procedures for end station valve control
- Water Valves User may adjust water shut-off valves (review location and procedure)
- Air Valves User may adjust air shut-off valves (review location and procedure)
- Gas Valves User may adjust gas shut-off valves (review location and procedure)
- Equipment Vacuum User is permitted to perform vacuum work and bleed ups on end station equipment
- Emergency Stop Locate emergency stop buttons, review purpose and operation

## Documentation

- SAF is Valid All experiments require a complete, accurate, and approved Safety Approval Form

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- SAF Users All experimenters must be listed on the SAF (Contact an OpCo to add experimenters)
- SAF Content All experimenters must know the content of the SAF
- SAF Materials New Materials (or significant increases in quantity) and new equipment must be added to the SAF - Contact an OpCo
- Beamline Manuals Review location of manuals and beamline documentation (instructions and safety literature must be readily available)
- Safety System Permit Safety System Permit: Modifications to radiological systems are not permitted (e.g., remove shielding, modify/drill holes in hutch, interlock modifications/repairs)

## Experimental Hazards

- Radiation Hazards Review radiation hazards, postings, and locations, and actions to take when chipmunks sound off
- Radiation UV Move away from UV ring, mezzanine, platform, transfer lines, and front end during injection
- Electrical Work No work on exposed electrical components >50V
- Chemicals Review use, labeling, storage, spills, labs, disposal, and transportation of chemicals
- Cryogenics Review filling, demonstrate use, wear PPE (safety glasses, cryogenic gloves)
- Cryogen Fills Review cryogen fill procedures for magnet
- Compressed Gas Review use, filling, storage
- Magnetic Fields Magnetic fields present - review precautions - Users with medical devices/implants must notify NSLS ESH Staff
- Beryllium Review location(s), handling, damage, cleanup
- Ladders If ladder to be used, discuss ladder set up, safety and 3-point rule

## Environmental Wastes

- Recycle Recycle glass, paper, metal, non-alkaline batteries
- Disposal - Sharps Place cover slips, tips, needles in sharps container
- Disposal - Haz Waste Review hazardous waste removal requirements. Ensure user is assigned and trained for disposal (if SAF requires)
- Storage - 90 Day Review location and procedures for 90-Day Storage Area
- Storage - SAA Review procedure location and procedures for Satellite Accumulation Area, provide SAA manager's name

## Close Out

- Disabling Beam Secure the beamline and disable shutter/beam before you leave
- Notifications Notify the Control Room to close out the experiment and SAF
- Housekeeping Ensure beamline area is neat, clean, free of hazards
- Storage Review storage procedures for samples
- Form - End of Run Complete NSLS End of Run Form

I understand the instructions given to me on beamline operations and safety awareness.

PRINT User Name	Guest #	User Signature

Trainer: CIRCLE YOUR NAME BELOW and sign this form. The trainers listed below are permitted to provide BLOSA training for this beamline:

Beamline Trainers: C.Nelson, L.Yang, L.Berman, S.LaMarra

Contributing User Trainers: N.Bouet

\_\_\_\_\_

Trainer's Signature  
Date Trained:

Use a separate form for each training date.

After completion of experiment, OPCO collects form for delivery to NSLS User Administration.

Training was entered into BTMS by NSLS User Administration on: \_\_\_\_\_ Send original forms to NSLS Training Coordinator.