



## CFN Operations and Safety Awareness (COSA) Checklist

Nanofabrication (Clean Room) Facility

Building 735

This COSA form must be completed for all experimenters working in the CFN and must be submitted to the CFN User Office for badge access.

**CFN Safety Awareness Policy:** Each user must be instructed in the safe procedures in CFN related activities. CFN Facility Laboratory personnel shall keep readily available all relevant instructions and safety literatures.

Employee/Guest Name

Life/Guest Number

Email Address

Wai-Lin Ng / x7153

Chang-Yong Nam

ES&amp;H Coordinator/Ext.

Facility Manager

COSA Trainer

☐ Staff☐ Guest☐ User**USER ADMINISTRATION:**☐ **Checked in** at User Administration and has valid **BNL ID badge**☐ **Safety Approval Form (SAF)** approved.

Added to ESR: \_\_\_\_\_

Proposal No: \_\_\_\_\_

☐ **Training** requirements completed (indicate additional training specified in SAF or ESR in lines provided below):

Selected ESRs	8	User Admin Only Training Complete	Notes
JTA No.	NC-11, NC-11a, NC-11b, NC-11c, NC-11d, NC-11e, NC-11f		
Room Numbers	42, 43, 44, 45, 46		
CFN Safety Module for Users NC-ESH-USERS	[ ]		
Cyber Security Training GE-CYBERSEC	X		
Laboratory Standard HP-IND-220	X		
Hazardous Waste Generator HP-RCRIGEN3	X		
Oxygen Deficiency Hazard TQ-ODH	X		
Working in the CFN Clean Room NC-CLEANRM	X		
Nanotechnology in the Workplace-Nano Workers TQ-NC-HS2	X		
Compressed Gas Safety TQ-COMPGAS-1	[ ]		
Cryogenic Safety TQ-CRYOGEN	[ ]		
Corrosive Etch Solutions TQ-CORETCH	[ ]		
HF Training for the Clean Room NC-HF-CLEAN ROOM	[ ]		
Hydrofluoric Acid: Personal Contamination TQ-HF-CONTAM	[ ]		

User Admin Signed: \_\_\_\_\_

Date: \_\_\_\_\_

**FACILITY SAFETY:**

- ☐ **Clean room Tour:** Escorted tour of clean room facilities
- ☐ Read and understood **clean room orientation/protocols**
- ☐ **Gowning procedure:** demonstrate proper clean room dress
- ☐ **Watched video**
- ☐ **Personal protection** equipment: location of all the necessary PPE; requirements posted on lab doors
- ☐ **Card Entry:** Use of card to enter clean room, proper room entry (no piggybacking) – *no entry to service chase by users*
- ☐ **After Hours Policy:** Normal working hours is 8-6, Mon. to Fri. Users and guest do not receive after-hours or weekend access to the building without authorization of Facility Leader and Operations Manager
- ☐ **Hazard Placard.** Review hazards and instructions.

**EMERGENCY PROCEDURES:**

- ☐ **Emergency phone numbers:** Fire/Medical: 631-344-2222, Security: 361-344-2238, Facility Complex Manager 631-344-5937, ES&H 631-344-7153
- ☐ **Site Alarms:**
  - ☐ **Continuous Siren** – Go to indoor main assembly area (1st floor, middle corridor)
  - ☐ **Intermittent Siren** – Evacuate site immediately (apartment residents proceed indoors, close windows and doors, await further instruction from the Laboratory emergency forces or housing personnel)
- ☐ **Test of Site Alarm** – every Monday at noon.
- ☐ **Building Alarms: LEAVE IMMEDIATELY; DO NOT DEGOWN.**
  - ☐ **Fire alarms: Evacuate** by nearest exit and meet at semi-circle recharge basin on the west side of the parking lot.
  - ☐ **In the event of a highly toxic gas release at the CFN**, 3-tone alarm will be generated by the building Emergency notification system, followed by a verbal message to evacuate out of the North exits only (front building). All must gather at the Outdoor Assembly Area near the West parking lot (curve stone wall).
- ☐ **ODH Alarm – oxygen deficiency hazard; evacuate the area.**
- ☐ **Fume hood alarm:** Do not use hood if beeping; contact Safety personnel
- ☐ **Loss of Exhaust:** Yellow strobe with audible Alarms: secure equipment, remove gown, exit the lab.
- ☐ **Nearest exists, route identification and walkdown**
- ☐ **Spill Containment**
- ☐ **Fire Extinguisher & Fire Alarm Pull Station** locations
- ☐ **Location** of nearest telephone

**LAB AND EXPERIMENTAL SAFETY:**

- ☐ **Safety** personnel: F. Camino 631-344-7606; M. Lu 631-344-4773, N. Tiwale 631-344-3782, G. Wright 631-344-4386
- ☐ **ESR** read and reviewed ☐ 8
- ☐ **Demonstrate electronic waste log**
- ☐ Only qualified for basic solvent use; anything else requires additional training.
- ☐ **Chemical** use, labeling, and storage
- ☐ **No acid use or corrosive etching solutions (HF, piranha, et al.)** without additional training/authorization
- ☐ **Satellite Accumulation Area** (Hazardous Waste SAA)
- ☐ **Electrical:** No work on exposed parts above 50V without Electrical Safety 1 Training and Dept. ES&H approval
- ☐ **Good Housekeeping:** Return samples/chemicals to home institution
- ☐ **Further training:** All equipment use is subject to additional training from authorized CFN Staff. ESR, SAF and COSA do not represent authorization for use of any equipment.

I understand the procedures, operations and safety instructions given to me for this facility and that I must promptly report equipment failures, spills, or off-normal event. I am aware that a willful violation of these procedures and requirements may result in the loss of my access to the facility.

Employee/Guest Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Trainer Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**DESIGNATED COSA TRAINERS:** ☐ F. Camino ☐ M. Lu ☐ N. Tiwale ☐ G. Wright