

**INSPECTOR DETAILS** 

# **Chemical Laboratory Safety Checklist**

**INSPECTOR CONTACT** 

| Basic Space Information |                 |  |
|-------------------------|-----------------|--|
| SPACE                   | BUILDING        |  |
| AREAS                   | PRIMARY MEMBERS |  |
|                         |                 |  |

**INSPECTION DETAILS** 

#### **Space - Custom Fields**

**Basic Inspection Information** 

DEPARTMENT

#### **Inspection Responses**

#### General Safety – "Chemical-Free Area"

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical Requirements that must be met to ensure regulatory compliance.

# Evidence of eating, drinking

Evidence of eating, drinking, handling contact lenses, applying cosmetics, storing food for human consumption, food preparation, and/or dish washing was not found in the "Hazardous Area".

#### "Chemical-Free Area" signs

"Chemical-Free Area" signs and "Hazardous Area" signs are posted to clearly identify these areas of the laboratory.

No Response

No Response

| "Chemical-Free Area" borders marked<br>Borders for the Designated "Chemical-Free Area" are<br>clearly marked with tape or other appropriate means.  | No Response   |
|---|---|
| Evidence of chemical use<br>Evidence of chemical use/storage in the "Chemical-<br>Free Area" is not found.  | No Response   |
| Marked waste receptacle<br>Waste receptacle marked for "non-laboratory trash<br>only" is present in the "Chemical-Free Area".   | No Response   |
| Small appliances permission<br>If any small appliances (microwaves, coffee makers,<br>etc.) are present in the "Chemical-Free Area", written<br>permission in accordance with Handbook of<br>Operating Procedure 5-310 is available.  | No Response   |
| Comments/Notes<br>Enter any additional comments or notes  | No Response   |
| <b>Chemicals</b><br>C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical   |   |
| Requirements that must be met to ensure regulatory compliance.  |   |
| Requirements that must be met to ensure regulatory compliance. No eating, drinking There is no evidence of lab personnel eating, drinking or applying cosmetics in the lab.   | No Response   |
| Requirements that must be met to ensure regulatory compliance.         No eating, drinking         There is no evidence of lab personnel eating,         drinking or applying cosmetics in the lab.         Annual chemical inventory         Principal Investigator has completed annual chemical         inventory - chemical list is maintained/current.   | No Response   |
| Requirements that must be met to ensure regulatory compliance.         No eating, drinking         There is no evidence of lab personnel eating,         drinking or applying cosmetics in the lab.         Annual chemical inventory         Principal Investigator has completed annual chemical         inventory - chemical list is maintained/current.         Containers and cylinders barcoded         All chemicals containers and gas cylinders barcoded   | No Response No Response No Response                         |
| Requirements that must be met to ensure regulatory compliance.         No eating, drinking<br>There is no evidence of lab personnel eating,<br>drinking or applying cosmetics in the lab.         Annual chemical inventory<br>Principal Investigator has completed annual chemical<br>inventory - chemical list is maintained/current.         Containers and cylinders barcoded<br>All chemicals containers and gas cylinders barcoded         Peroxide forming chemicals dated<br>Peroxide forming chemicals are dated when received<br>and opened, and not stored beyond their expiration<br>date.  | No Response No Response No Response No Response             |
| Requirements that must be met to ensure regulatory compliance.         No eating, drinking         There is no evidence of lab personnel eating,         drinking or applying cosmetics in the lab.         Annual chemical inventory         Principal Investigator has completed annual chemical         inventory - chemical list is maintained/current.         Containers and cylinders barcoded         All chemicals containers and gas cylinders barcoded         Peroxide forming chemicals dated         Peroxide forming chemicals are dated when received and opened, and not stored beyond their expiration date.         Controlled substance security adequate         Controlled substance security is adequate to prevent unauthorized use, access or diversion. | No Response No Response No Response No Response No Response |

| Secondary containers labeled<br>Secondary containers, other than ones for immediate<br>use, are labeled with the identity of their contents<br>and the hazards associated with their contents. | No Response |
|--|-------------|
| Breakable containers stored properly<br>Breakable chemical containers should not be stored<br>on the floor outside of a secondary container.   | No Response |
| Chemical containers kept closed<br>Chemical containers are kept closed if not in use.  | No Response |
| Original container labels not removed<br>Original container labels on chemical containers are<br>not removed or defaced.   | No Response |
| Flammable storage cabinets approved<br>Flammable storage cabinets being used in the<br>laboratory are approved and labeled properly.   | No Response |
| Flammable solvents stored properly<br>Flammable solvents requiring refrigeration are<br>properly stored in flammable storage or explosion<br>proof refrigerators.                              | No Response |
| Minimized flammables outside storage cabinets<br>The amount of flammables outside of approved<br>flammable storage cabinets/refrigerators is<br>minimized.                                     | No Response |
| Chemicals stored by hazard class<br>Chemicals are stored by hazard class, based on<br>compatibility, and in accordance with SDS.   | No Response |
| Liquid Corrosives stored below eye level<br>Liquid Corrosives are stored below eye level (5ft.)  | No Response |
| Glassware taped or shielded<br>Glassware used at pressures other than ambient are<br>taped or shielded.  | No Response |
| Compressed gas cylinders secured<br>Compressed gas cylinders are secured with the<br>safety cap in place when cylinders are not in use.  | No Response |
| Comments/Notes   | No Response |

## **Chemical Waste**

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical

Requirements that must be met to ensure regulatory compliance.

| Chemical waste location and supervision<br>Chemical waste is located in the immediate vicinity of<br>generation and under supervision of the person who<br>generated it. | No Response |
|--|-------------|
| Waste containers properly tagged<br>Each waste container has a properly filled out EH&S<br>waste tag attached.   | No Response |
| Containers are clearly labeled<br>Containers are clearly labeled with the contents of<br>the container and the words "Hazardous Waste".                                  | No Response |
| Waste containers labels defaced<br>Original labels on containers used for waste are<br>defaced.  | No Response |
| Waste Containers compatible with contents<br>Waste Containers are compatible with their contents.  | No Response |
| Waste Containers are closed<br>Waste Containers are closed unless actively<br>receiving waste.   | No Response |
| Waste Containers are leak proof<br>Waste Containers are leak proof (no signs of leaks).  | No Response |
| Liquid waste containers properly stored<br>Liquid waste containers are properly stored in<br>secondary containment.  | No Response |
| Waste secondary containment appropriate<br>Waste secondary containment is appropriate and in<br>good condition.  | No Response |
| Waste is properly managed<br>Waste is properly managed (no evidence of drain<br>disposal, waste found in regular trash, etc.)  | No Response |
| Pickup not needed for waste containers<br>Waste containers are not in need of pickup.  | No Response |
| Incompatible waste stored properly<br>Incompatible waste stored in separate secondary<br>containers—if leaking, the wastes could not react.                              | No Response |
| Broken glassware is deposited properly<br>Broken glassware is deposited into puncture<br>resistant containers and only broken glass is present.                          | No Response |

#### Sharps

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical Requirements that must be met to ensure regulatory compliance.

| Sharp containers labeled properly<br>Biological and non-biological sharp containers<br>labeled properly. | No Response |
|--|-------------|
| No evidence of bent needles<br>There is no evidence of bent, re-capped, or clipped<br>needles.           | No Response |
| Containers not more than ¾ full<br>Sharps containers are not more than ¾ full.                           | No Response |
| Requests for removal submitted<br>Requests for sharps removal are submitted to EH&S<br>via CEMS          | No Response |
| Comments/Notes   | No Response |
|  |             |

#### **Personal Protective Equipment**

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical Requirements that must be met to ensure regulatory compliance.

| PPE available<br>The appropriate personal protective equipment (PPE)<br>is available in the laboratory.  | No Response |
|--|-------------|
| Appropriate PPE being worn<br>Appropriate PPE is being worn by occupants (lab<br>coat, safety glasses, gloves. No open-toed shoes,<br>sandals, flip-flops, etc.) | No Response |
| PPE in good condition<br>The appropriate personal protective equipment in<br>good condition and being stored properly.   | No Response |
| Comments/Notes   | No Response |

#### **Engineering Controls**

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical Requirements that must be met to ensure regulatory compliance.

| Emergency showers are unobstructed<br>Emergency showers are unobstructed and easily<br>accessible.   | No Response |
|--|-------------|
| Eyewashes are unobstructed<br>Eyewashes are unobstructed and easily accessible.  | No Response |
| Items in the fume hood do not impact the<br>performance of the fume hood.<br>Excessive items in the fume hood will result in<br>diminished fume exhaust performance.   | No Response |
| A fume hood is being used at a proper sash height.<br>To ensure the safety of all the lab users, the sash<br>must be closed when there is not a lab user<br>physically working in the fume hood. When there is a<br>lab user physically working in the fume hood the<br>sash level must be at or below the indicated sash<br>height. | No Response |
| Comments/Notes   | No Response |
| <b>Physical Hazards</b><br>C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical<br>Requirements that must be met to ensure regulatory compliance.   |             |
| Belt driven vacuum pumps are protected   | No Response |

Belt driven vacuum pumps are protected with belt guards, properly maintained, and stored away from flammable chemicals and combustible material.

#### Comments/Notes

# Fire/Life Safety

C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical Requirements that must be met to ensure regulatory compliance.

| Good housekeeping practices are followed<br>Good housekeeping practices are followed in the<br>laboratory, storage of combustibles such as<br>cardboard boxes and paper are kept to a minimum. | No Response |
|--|-------------|
| Lab doors kept closed<br>Lab doors are kept closed to provide a fire and<br>smoke barrier.   | No Response |

No Response

| Exits and walkways clear<br>Exits and walkways must be kept clear to ensure<br>means<br>of egress. There needs to be a clear path of 36<br>inches.   | No Response |
|--|-------------|
| Ceiling tiles in place<br>Ceiling tiles are in place and undamaged   | No Response |
| Combustibles stored properly<br>Combustibles are not stored within 24" of the ceiling<br>in non-sprinklered buildings or within 18" of the<br>sprinkler head drop distance from the ceiling. | No Response |
| Fire extinguisher not obstructed.<br>Fire extinguisher is not obstructed.  | No Response |
| Comments/Notes   | No Response |
| Electrical Safety<br>C = Compliant NC = Non-Compliant NCC = Non-Compliant Critical<br>Requirements that must be met to ensure regulatory compliance.   |             |
| Permanent use extension cords eliminated<br>Permanent use of extension cords has been<br>eliminated. No multi-plug adapters are used or power<br>strips plugged into other power strips.     | No Response |

#### Electrical cords appropriately used

Electrical cords are appropriately used (i.e. none are routed above the ceiling tiles or across the floor where they could be a tripping hazard).

# Electrical cords in good condition

Electrical cords are in good condition. (i.e. none have exposed wiring or cracked, brittle, or frayed insulation).

#### Clear access to breaker panel

There is clear access to the electrical breaker panel.

Comments/Notes

No Response

No Response

No Response

No Response