

APPENDIX D

LABORATORY SAFETY AUDIT CHECKLIST

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|---------------------------|------------|
| ROOM AND BUILDING: | DATE: |
| RESPONSIBLE INVESTIGATOR: | |
| PHONE: | RI EMAIL: |
| LAB SAFETY OFFICER: | |
| PHONE: | LSO EMAIL: |
| EOHSS AUDITOR: | PHONE: |

1. Chemical Waste Disposal

| | | Comments |
|---|--------|----------|
| Chemical waste containers display UMDNJ hazardous waste label. | T F NA | |
| Chemical waste containers labeled with chemical contents, approximate percentage of each chemical, and the hazard class of each chemical. | T F NA | |
| The accumulation date or fill date (which is the date container became full) is listed on full containers. | T F NA | |
| No full waste containers stored more than three days beyond accumulation date. | T F NA | |
| Incompatible chemical waste streams are not mixed in the same container. | T F NA | |
| Containers have an appropriate lid/cap (not funnel) on at all times except when being filled. | T F NA | |
| Chemical waste stored in compatible containers. | T F NA | |
| Chemical waste stored away from ignition sources. | T F NA | |
| Personnel responsible for managing hazardous waste have undergone training. | T F NA | |
| Chemical waste area is properly maintained, with containers in good condition and free of precipitates/drips. | T F NA | |
| Chemical waste is not discarded in the trash or poured down the sink. | T F NA | |
| Less than one quart or 2.1 pounds of Acute Toxic waste is present. | T F NA | |
| No excess, old or expired chemicals are present. | T F NA | |

2. Documentation

| | | Comments |
|---|--------|----------|
| Etiologic agent registry forms have been submitted for research labs working with human materials, human cell lines, BL2 or higher pathogens. | T F NA | |
| An up-to-date hazardous chemical inventory is available. | T F NA | |

3. Electrical

| | | Comments |
|--|--------|----------|
| Procedures and warning signs for critical equipment are posted adequately. | T F NA | |
| Adequate clear space is maintained between equipment and flammable or combustible materials. | T F NA | |
| There are no frayed, cut wires, broken/defective plug or switch. | T F NA | |
| Extension cords are not used as a substitute for permanent wiring. | T F NA | |
| Extension cords do not extend through windows or doors or under carpeting. | T F NA | |
| All electrical wires are properly secured and do not pose a trip hazard. | T F NA | |
| Multiple outlet strips, other than for computer systems, are not used. | T F NA | |
| Power strips have built-in fuse or circuit breaker protection, have a minimum 12/3 gauge/wires label, maximum length of 6 feet, and are UL listed for the use. | T F NA | |
| Extension cords are not used in place of permanent outlets. | T F NA | |
| There are no cube taps for multiple connections from a single outlet. | T F NA | |
| All electrical wires are properly secured and do not pose a trip hazard. | T F NA | |
| Electric cords do not run through wet areas. | T F NA | |
| Portable electrical space heaters are not used. | T F NA | |
| Equipment is not draped with combustibles such as cloth or paper. | T F NA | |

4. Emergency Equipment

| | | Comments |
|---|--------|----------|
| Eyewash is unobstructed. | T F NA | |
| Eyewash has up-to-date monthly inspection log. | T F NA | |
| Appropriate disinfectant/biological spill clean-up materials are available. | T F NA | |
| Appropriate chemical spill clean-up materials are available. | T F NA | |
| Nearest safety shower has up-to-date semi-annual inspection. | T F NA | |

5. Fire Hazards

| | | Comments |
|---|--------|----------|
| No flammable or combustible liquids are stored in a standard refrigerator, freezer, or cold room. | T F NA | |
| No flammable or combustible liquids are stored near electrical equipment or bunsen burner. | T F NA | |
| Solvents, acids, and bases stored separately. Acids and bases in plastic trays. | T F NA | |
| Less than 10 gallons of flammables are present in the laboratory area. | T F NA | |
| Less than 30 gallons of combustible liquids are present in lab. | T F NA | |
| Flammable liquids not in active use are stored in UL or FM approved fire safety cabinet. | T F NA | |
| Maximum size of flammable liquid container is one gallon. | T F NA | |
| Ethers or other peroxide-forming material is dated upon receipt. | T F NA | |
| Ethers and other peroxide-forming chemicals disposed of three months prior to expiration date. | T F NA | |
| No excess paper, foam or other combustibles. | T F NA | |
| No bottles or chemicals stored on the floor or in the hallway. | T F NA | |
| Exit paths are unblocked in lab and in corridor. | T F NA | |
| The fire extinguisher is mounted near door and tag indicates up-to-date inspection. | T F NA | |

| | | |
|---|--------|--|
| Fire extinguisher is not obscured/location is clearly visible. | T F NA | |
| Bunsen burner hoses are in good condition; no latex hoses; hoses are less than 2 feet long. | T F NA | |
| Gas cylinders are secured, properly marked and grouped. | T F NA | |
| No storage within 2 feet of the ceiling or light fixtures. | T F NA | |
| General housekeeping is good, clutter is at a minimum. | T F NA | |

6. Employee Health

| | | Comments |
|--|--------|----------|
| Appropriate gloves are available and worn when necessary. | T F NA | |
| Appropriate protective eyewear is available and worn when necessary. | T F NA | |
| Lab coats are available and worn when necessary. | T F NA | |
| No food or drink stored or consumed in lab. | T F NA | |

7. Hazard Control Measures

| | | Comments |
|---|--------|----------|
| Completed Laboratory Safety Plan is available and information is up-to-date. | T F NA | |
| Completed BBP Exposure Control Plan is available and information is up-to-date. | T F NA | |
| Chemical Hood face velocity certified within the last 12 months. | T F NA | |
| Chemical Hood is not overcrowded with chemicals or other storage. No storage on top of hood. | T F NA | |
| Chemical Hood is used at or below indicated operating height. | T F NA | |
| All volatile, toxic chemicals are used in the chemical hood. | T F NA | |
| Biological Safety Cabinet has been certified within the last 12 months. | T F NA | |
| No hazardous or flammable chemicals used in the BSC. (Exception: alcohol for decontamination is OK) | T F NA | |

Appendix D - Laboratory Safety Checklist

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| No cryogenic liquids, gas cylinders, or hazardous chemicals in cold or warm rooms. | T F NA | |
| Corrosive and other hazardous chemicals stored below eye level. | T F NA | |
| All chemical containers labeled in accordance with New Jersey Right-to-Know regulations. | T F NA | |
| Sealed rotors or safety cups available for centrifuging blood and/or infectious agents. | T F NA | |

8. Medical Waste

| | | Comments |
|--|--------|-----------------|
| Sharps containers are available and are being used. | T F NA | |
| Materials used in BL2 or higher labs are disinfected by chemical or heat methods before being placed in regulated medical waste container. | T F NA | |
| Medical waste containers are not overfull. | T F NA | |
| No chemical waste or chemical bottles in the medical waste containers. | T F NA | |

9. Signage

| | | Comments |
|--|--------|-----------------|
| Up-to-date "Caution" sign on door, with emergency contact persons listed. | T F NA | |
| Biohazard symbol and biosafety level is on door of labs working with human cells or other human-derived materials, and/or BL2 or higher pathogens. | T F NA | |
| Designated areas are labeled for the use of carcinogens, reproductive toxins, and acutely toxic materials. | T F NA | |
| Refrigerators and Freezers bear a "No Food/No Flammables" sticker. | T F NA | |
| Up-to-date "Emergency Response Guide" (flipchart) is posted prominently. | T F NA | |

10. Compressed and Liquified Gas Safety

| | | Comments |
|--|--------|-----------------|
| Maximum number of compressed gas cylinders (CGC) is limited to a two-month supply. | T F NA | |
| Flammable CGC are limited to only those in current use. | T F NA | |
| Excess CGC are stored in a separate ventilated room approved for that use. | T F NA | |
| Empty CGC are stored separate from the full cylinders. | T F NA | |
| All CGC are adequately secured with chains or by proper nesting. | T F NA | |
| All CGC are grouped according to their properties (e.g., flammables separated from oxidizing). | T F NA | |
| All CGC are kept away from fire- and spark-producing operations | T F NA | |
| Cryogenic liquid tanks (CLT) have not lost vacuum or insulation (look for a cold outside jacket) | T F NA | |
| CLT are free of any ice accumulation at the neck of the tank opening | T F NA | |