

# DRI FIRE PREVENTION PLAN

## A. Major Work Place Fire Hazards

1. Flammable compressed gases (hydrogen, acetylene, MAPP, etc.) in quantities greater than 200 cft are used or stored in the following areas:
  - Northern Nevada Science Center (NNSC), Reno
    - Maxey 235
    - Maxey 251
    - Maxey Addition 174
    - NNSC 138
    - NNSC 145
    - NNSC SW closet first floor
    - NNSC 241-Machine Shop (storage) and Designated Welding and Cutting Area in adjacent Courtyard
    - NNSC 265--Energy Lab and Hydrogen Generator in Courtyard (outside lab)
    - NNSC 308
    - NNSC 309
  - Nevada State Cloud Seeding Program(NSCSP), Stead
    - Designated Welding and Cutting Area
  - Southern Nevada Science Center (SNSC), Las Vegas
    - SNSC Physical Plant (storage) and Designated Welding and Cutting Area in adjacent courtyard
    - SNSC Phase I-142b
  - Boulder City Facility
    - High Bay (shop) Area
2. Flammable Liquids and Wastes (alcohols, acetone, hexane, ether, etc.)
  - NNSC
    - NNSC 312
    - Maxey Chemical Storage Room off the loading dock
  - NSCSP Facility
    - Flammable Storage Locker
  - SNSC
    - Room 132--Chemical Storage Room off garage
  - Boulder City Facility
    - Flammable Storage Cabinet in high bay (shop)
3. Combustible Materials (Occasionally large amounts of cardboard and other combustible materials)
  - Outside cardboard and paper recycle bins
  - NNSC Field Staging area
  - NNSC Sprung Building
4. Facilities Maintenance Areas
  - NNSC--Flammable storage cabinet in Facilities tool room: paints, thinners, oils, etc.
  - NSCSP-- Areas including portable welder and acetylene torch, paints, thinners and oils
  - SNSC--Flammable Storage Room: paints, thinners and oils, propane, gasoline, etc.

# DRI FIRE PREVENTION PLAN

B. Proper Handling and Storage Procedures (Refer to DRI [Best Management Practices for Chemical Storage, Handling and Use.](#))

C. Potential Ignition Sources

1. Class IV lasers and laser systems
2. Smoking materials (Note: All DRI buildings, leased or owned, are non-smoking, however, smokers are allowed to smoke anywhere on the grounds.)
3. Torches or welding equipment and metal grinders (These are covered by the DRI [Hot Work Permit Program](#))
4. Portable space heaters
5. Frayed/damaged electrical cords, overloaded circuits or misuse of flex (extension) cords

D. Fire Protection Equipment/Systems

1. Sprinklered building - GBERL, Maxey, Maxey Addition, NNSC A & B, CVRB, SNSC Phase I and Rogers
2. Smoke Detectors - These are strategically placed throughout DRI buildings as appropriate
3. Alarm Pull Stations – CRVB, Maxey, SNSC
4. Magnetic hold openers on fire doors linked to smoke detectors-NNSC A & B, including door from NNSC into Maxey; Roger's Building
5. Fire standpipes
6. Class ABC fire extinguishers are placed throughout all DRI buildings and in all DRI vehicles
7. Alarm Monitoring - Grinnell at the NNSC, Alarmco at the SNSC
8. Annunciator Panels - NNSC A & B, Building A lower level closet; MAXEY, behind receptionist's desk; CRVB, physical plant building at the east end of the main building; GBERL, basement; SNSC, across from lunchroom first floor; Rogers Building, north of the reading room entrance, behind the left door

E. Equipment and System Maintenance

The DRI maintains preventative maintenance procedures of all major fire prevention equipment at the Northern and Southern Nevada Science Centers and the Boulder City facility. Fire prevention equipment in DRI leased buildings is maintained by the lessor. Fire prevention systems such as extinguishers, sprinklers and smoke detectors are maintained according to all applicable codes. Maintenance and record keeping for the equipment maintained by DRI is the responsibility of the DRI Facilities Department.

# DRI FIRE PREVENTION PLAN

## F. Fuel Source Control

The back-up generators at the NNSC and SNSC run on diesel fuel. These systems are under the control of the DRI Facilities Supervisors or his/her designee.

The DRI buildings at the NNSC and SNSC are fueled by natural gas (provided by Sierra Pacific Power in the north and Southwest Gas in the south). These systems are under the control of Facilities Supervisors or their designees. The NSCSP in Stead has Sierra Pacific Power supplied natural gas and the use of the system is under control of the DRI occupants.

## G. Housekeeping

1. Quantities of combustible materials (e.g., paper, cardboard) stored in laboratories should be kept to a minimum.
2. Corridors, aisles and exits should be kept clear of equipment, cabinets, boxes and other material.
3. No flammable liquid storage is allowed along primary exit routes/doors.
4. A clearance of at least 18 inches (0.5m) vertically and 12 inches (0.3M) horizontally must be maintained between fire sprinkler heads and any material storage. (Note this could mean > than 18" from the ceiling for non-recessed sprinkler systems).
5. The areas around fire extinguishers, eyewash stations and emergency showers should be kept clear of equipment, cabinets, boxes and all other material so that immediate access is unrestricted.
6. Heavy objects should not be overhead or on shelves that are not adequately reinforced.
7. Chemical storage shall be consistent with the guidance found in DRI [Best Management Practices for Chemical Storage, Handling and Use](#).

## H. Training

The [DRI Quick Guide to Safety](#) provides basic emergency reporting and response procedures. This information is provided to all new DRI employees as part of the new employee packet distributed by Human Resources.

The DRI emergency procedures are posted throughout our buildings and on the web at <http://safety.dri.edu/EmergInfo/emerginfo.html>. Emergency preparedness information is also included in lab safety training provided by EH&S.

Fire extinguisher training is available to DRI employees. Facilities personnel may participate in more extensive sessions depending on hazard evaluations. Additional information on fire hazards is communicated to employees during laboratory safety and hazard communication training sessions, which are held for those whose job descriptions require these sessions.