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Applicable OSHA Standards: 29 CFR 1926.24, .150-.155

# 1. Purpose & Scope

- 1.1. The purpose of this Cleveland Integrity Services Inc. policy is to outline prevention and protective measures which should be taken to ensure protection of personnel, property, and the environment from a fire incident.
- 1.2. This program applies to all company-controlled worksites where an employee or a subcontract worker may be occupationally exposed to fire hazards.

#### 2. Fire Prevention

- 2.1. Electrical wiring and equipment for light, heat or power purposes must be installed in accordance with the national electric code. The proper type and size of fuses will be used at all times. All equipment and portable tools are to be grounded. Explosion proof fixtures are required in hazardous classified locations.
- 2.2. Housekeeping -- Remove trash daily from the work areas and from the work site. Use trash drums to reduce extra handling. Put rags in closed containers. Rags used for solvent cleaning should be kept in a closed metal container until properly disposed of.
- 2.3. Paper and other combustible materials will not be allowed to accumulate. Weeds or other rank vegetation will be controlled in or around meter stations, pipe yard, buildings, storage tanks and other structures.
- 2.4. Compressed Gas Cylinder -- Separate the full cylinders from "empty" cylinders in storage. Keep oxygen cylinders separate from fuel cylinders by 20 feet, or by a fire resistant barrier. Tie cylinders in a vertical position. Keep oil and grease away from oxygen valves. Turn cylinders off when not in use. Protect cylinders from excess heat (sun, open flame, equipment exhausts, sparks slag, etc.) No cylinder storage inside buildings.
- 2.5. Gasoline and Diesel Pumps -- Service station type pumps require physical barriers to prevent damage to the pumps. "No Smoking or Open Flame" signs are also necessary. Dispensing nozzles will be of an approved type.
- 2.6. Internal Combustion Engines -- Turn off engine before refueling, and allow a minimum of fifteen (15) minutes for engine to cool off. Insulate exhaust stacks near combustible material. Keeps exhaust discharge away from flammable liquids (particularly truck exhausts).
- 2.7. Material Storage -- Storage areas containing combustible material (lumber, etc.), or non-combustible material in combustible containers (metal parts in wooden boxes) need to be separated from other material by at least 20 feet on all sides to help prevent the spread of fire and to allow fire equipment access. A single storage area

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- cannot be larger than 50 by 150 feet. All weeds, dead grass, and combustible trash need to be kept out of the storage areas and out of access ways.
- 2.8. Combustible material such as oil-soaked rags, and waste and shavings will be kept in approved metal containers with metal lids.
- 2.9. No Smoking or Open Flame Areas and Signs -- Areas where flammable liquids are stored or dispensed need to be clearly identified. "NO SMOKING OR OPEN FLAME" signs need to be posted no more than 25 feet away from the hazard. Areas containing large quantities of combustible materials should also be identified and marked with the same signs. Metal cigarette butt cans will be used to help prevent careless disposal of smoking materials.
- 2.10. Open Flames -- Welding torches, matches, heaters, and other open flames have caused many unnecessary fires. Check the area for possible hazards before lighting up.
- 2.11. Sparks and Slag -- To avoid a fire, move flammable or combustible materials before starting to weld or burn. If material cannot be moved, cover it with fire retardant material.
- 2.12. Tarps and Plastic Coverings -- Tarps must be fire retardant. Plastic sheets must be flame resistant if they are to be used with flame or high heat operations. Tie tarps and plastic securely so they cannot blow loose.
- 2.13. Temporary Heating Devices -- When temporary combustion type heating devices are used, adequate fresh air will be available. They will not be set directly on wood floors or other combustible materials, unless designed for that purpose and should be located at least 10 feet from the vicinity of combustible tarpaulins, canvas and other plastic coverings. They will be set horizontally and level, unless otherwise permitted by manufacturer's markings, and will be securely placed to prevent overturning and spillage of fuel. Propane heating units will have automatic fuel shut-off valves. Oil salamanders will be cool before being refilled or moved. All heaters will have good clearance or non-combustible insulation on all sides, top and bottom.
- 2.14. A temporary building will not be erected where it will adversely affect any means of exit.
- 2.15. There will be no open burning of trash allowed at a work location or Company premises.
- 2.16. No combustible material will be stored with 10 feet of a building or structure.
- 2.17. Roadways and access to storage areas must be maintained to accommodate the widest vehicle that may be used for fire fighting purposes.
- 2.18. Material will not be stored within 36 inches of a fire door opening.

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- 2.19. Persons working in and around compressor stations, regulator stations, vaults, battery rooms, excavations, and other enclosed areas where there is a possibility of gas or vapor leakage are required to leave matches, lighters and smoking material in the car, truck, or in some remote area in which they are working.
- 2.20. Natural gas or other flammable gases will not be used to operate paint sprayers, impact tools, drills or sandblasting equipment.
- 2.21. A safe atmosphere will be confirmed by monitoring prior to working in restricted or hazardous areas where equipment is capable of creating sufficient heat to cause the ignition of combustible materials or gases.

# 3. Flammable And Combustible Liquid Storage

- 3.1. Only approved containers and portable tanks will be used for storage and handling.
- 3.2. Flammable Liquids All Liquids with a flash point below 140 degrees F are referred to as "flammable liquids." Store in original containers until needed. All tanks, drums, containers, cans and cabinets are to be electrically grounded and labeled with the name of the material. Do not mix contents and labels. Handle small quantities (5 gallon maximum) in "safety cans." Two main features of a safety can are a springloaded cap and a flame arrester.
- 3.3. Flammable or Combustible Liquids will not be stored in areas used for exits, stairways, or normally used for the safe passage of personnel.

## 4. Indoor Storage Of Flammable And Combustible Liquids

- 4.1. Flammable liquids such as gasoline, naphtha, lacquer thinner, etc., will be limited to five gallons in approved properly labeled containers except in buildings approved for their storage, or in an approved flammable liquid storage cabinet that is labeled "Flammable Keep Fire Away."
- 4.2. No more than 60 gallons of flammable or 120 gallons of combustible liquids may be stored inside of a single storage cabinet inside a building. No more than 3 storage cabinets are allowed in a single building when containing the maximum amount allowed.
- 4.3. Quantities of flammable or combustible liquids stored inside a building which exceed the amount of three storage cabinets must be stored in an approved storage room which meets the applicable requirements of The National Fire Protection Association. An aisle space of three feet wide must be maintained at all times in inside storage rooms.
- 4.4. Materials which react with water will not be stored in the same location as flammable or combustible liquids. A separate storage area should be provided for water reactive materials and they should be conspicuously marked as such.

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4.5. Electrical wiring and equipment located in inside flammable and combustible liquid storage rooms will be approved for hazardous locations.

# 5. Storage Of Flammable And Combustible Liquids Outside Of Buildings

5.1. No more than 1,100 gallons of flammable or combustible liquids may be stored in any one outside storage area unless separated by a minimum aisle space of 5 feet. Groups of containers will not be nearer than 20 feet to a building. Each container or outside storage area must be accessible by a 12 foot wide access for a maximum distance of 200 feet. At least one portable fire extinguisher having a rating of not less than 20-B units will be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside.

## 6. Handling Flammable And Combustible Liquids

- 6.1. Dispensing of flammable or combustible liquids from one container to another will be separated from other operations by a distance of not less than 25 feet.
- 6.2. When pouring or pumping flammable liquids such as gasoline, methanol, etc., from one container to another, metallic contact will be maintained or an electrical bonding jumper connected between the containers.
- 6.3. Approved self-closing valves will be used for dispensing of flammable or combustible liquids.
- 6.4. Flammable or combustible liquids will be drawn or transferred by either gravity or pump only. Never transfer by means of air pressure on the container or portable tank.
- 6.5. Flammable liquids will be kept in closed containers when not actually in use.
- 6.6. Precautions will be taken to eliminate leakage or spillage of flammable and combustible liquids where necessary such as the use of funnels.
- 6.7. Leakage or spillage from flammable and combustible liquids must be promptly cleaned up and properly disposed of.
- 6.8. Flammable liquids may be used only where there are no open flames or other sources of ignition within 50 feet of the operation, unless conditions warrant greater clearance.

#### 7. Training

7.1. Where the company has provided portable fire extinguishers for employees use in the workplace, training will be provided to educate and familiarize employees with the general principles of fire extinguisher use, the hazards involved in incipient stage fire fighting, and general safe use of the extinguisher.

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- 7.2. Work environments, classified as hot work, sometimes require the use of a trained fire watch. Whenever personnel are assigned as fire watch they will be properly trained. Fire watches are to be at the site prior to beginning hot work and thirty minutes after hot work is complete.
- 7.3. Fire extinguisher training will be conducted when the employee is initially assigned and at least annually thereafter.

# 8. Fire Extinguishers -- Mounting And Access

- 8.1. Fire protection equipment will be properly located at all times and not obstructed or obscured from view. In large rooms and in some locations, signs will be conspicuously posted to show the location of such equipment. Also, proper fire extinguishers will be located on company trucks, vans, and on other specific types of equipment if necessary.
- 8.2. Extinguishers are not to be left on the floor, or a scaffold, or on the ground. They are to be mounted on a wall, handrail, barricade, etc.
- 8.3. Extinguishers that have a total weight of more than 40 pounds are to be mounted with the top of the extinguisher no more than 42 inches above the floor. Extinguishers weighing 40 pounds or less may be mounted with the top as high as 5 feet above the floor. (Mounting all extinguishers at the 42 inch height is a good habit.)
- 8.4. Extinguishers should be located where they can be easily seen. In cases where this is not practical, signs or red paint marking, need to be added to identify the location of the extinguisher.
- 8.5. Keep trash and stored material away from extinguishers to prevent blockage of the access to the extinguisher.

## 9. Fire Extinguishers -- Inspection And Testing

- 9.1. The company will ensure that portable fire extinguishers are visually inspected at least monthly and inspected annually as part of a thorough maintenance check of the integrity of the device.
- 9.2. Portable fire extinguishers will be given an annual maintenance check to ensure integrity of the device. Stored pressure extinguishers do not require an internal examination. A written record will be made of the annual maintenance date. This record will be retained for one year after the last entry or the life of the shell, whichever is less. The record will be available to the Assistant Secretary upon request.

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# 9.3. Monthly Inspections

- 9.3.1. Every fire extinguisher is to be visually inspected at least once a month. The inspection is to include:
  - 9.3.1.1. Proper location
  - 9.3.1.2. Fully charged
  - 9.3.1.3. Seal wire not broken
  - 9.3.1.4. Free of any obvious defects or damage
  - 9.3.1.5. Inspection tag is current
- 9.3.2. Annual inspections:
  - 9.3.2.1. A through examination of each extinguisher will be conducted annually by an individual trained to examine, repair, and recharge extinguishers. An inspection tag is to be attached to each extinguisher showing the date of the annual examination, the date of the recharge, and the initials of the individual making the examination.

## 9.4. Hydrostatic Tests:

9.4.1. Hydrostatic testing of fire extinguishers used in the Company workplace will be performed by qualified service personnel in accordance with Table L-1 in 1910.157(f)(2), as shown below.

Soda acid (stainless steel shell)	5
Cartridge operated water and/or antifreeze	5
Stored pressure water and/or antifreeze	5
Wetting agent	5
Foam (stainless steel shell)	5
Aqueous Film Forming foam (AFFF)	5
Loaded stream	5
Dry chemical with stainless steel	5
Carbon Dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Dry chemical, cartridge or cylinder operated, with mild steel shells	12
Halon 1211	12
Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

- 9.4.2. Stored pressure dry chemical fire extinguishers that require a 12-year hydrostatic test will be emptied and subjected to applicable maintenance procedures every 6 years. Dry chemical extinguishers that have non-refillable disposable containers are exempt from this requirement.
- 9.4.3. When recharging or hydrostatic testing is performed, the 6-year requirement begins from that date.

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#### 10. EMERGENCY ACTION PLAN

- 10.1. Company locations will have written emergency action plans to cover employees to ensure safety from fire and other emergencies. These plans will include the following:
  - 10.1.1. Emergency escape procedures and emergency route assignments.
  - 10.1.2. Procedures to be followed by employees who remain to operate critical operations before they evacuate.
  - 10.1.3. Procedures to account for all employees after emergency evacuation has been completed.
  - 10.1.4. Rescue and medical duties for those employees who are to perform them.
  - 10.1.5. The preferred means of reporting fires and other emergencies.
  - 10.1.6. Names or regular job titles of persons who can be contacted for further information or explanation of duties.
- 10.2. Employees will be trained initially in the fire prevention and emergency plans.
- 10.3. As required, the plans will be incorporated with the Company's or host employer's DOT Pipeline Emergency Plan and the Annual Review.