

North Dakota State University

Painting Operations

I. Introduction

NDSU employees are continually exposed to construction projects in various stages. Each project brings unique challenges and duties to staff. By outlining and following the recommended safe operating procedures, we learn to prevent injury and safeguard ourselves and coworkers against a job related injury or death.

II. Purpose

To reduce the risk of work related injury or death by maximizing personal safety during painting operations.

III. Goals

To ensure all employees know and understand the safe operating procedures involved with painting operations.

IV. Procedures

A. General Safety – Safe Operations

1. Smoking, open flames or sources of ignition are not allowed in any area which has toxic fumes, flammable gases, vapors or combustibles.
2. Be sure to have good ventilation and air flow while performing job related duties that result in poor air or decreased oxygen.
3. Employees who are required to use respirators to protect themselves from harmful dust, fogs, fumes, mists, gases, smoke, sprays or vapors, in order to perform their job, shall follow the recommendation outlined in the *NDSU Safe Operating Procedure - Respiratory Protection Program and Hazard Communications Program*. Copies of these programs can be found on the University Police & Safety Office webpage.
4. Personal protective equipment shall be used with air/airless spray equipment. Since these sprayers generate high fluid pressure, spray from the gun, leaks or ruptured parts can inject fluid through the skin, into the body and can cause serious injury which may result in amputation or death.
5. Wear goggles, safety glasses or face shields (over standard glasses) as necessary, while using spray equipment - fluid injected or splashed into the eyes can cause permanent eye damage.
6. Keep the spray gun pointed away from yourself or others at all times.
7. Never put your hand or fingers over the spray tip, or try to stop or deflect leaks with your hand or body.
8. Always relieve the pressure in the sprayers before cleaning or removing the spray tip or servicing any system equipment.
9. Be sure the equipment's safety devices are in place and operating properly before each use.

10. Check ALL equipment before use and during regular use. Repair or replace worn or damaged parts or tools immediately.
11. Do not modify or remove any part of the spray equipment - this can result in malfunction and serious injury.
12. Static electricity may be created by the high velocity flow of fluid through the pump and hose. Proper grounding of the spray equipment is necessary to prevent sparking and a possible explosion or fire.
13. Electrical wiring and equipment shall conform to NFPA 70: National Electrical Code.
14. Do not plug in or unplug any power supply cords in the spray area when there is any chance of igniting fumes still in the air.
15. Check all electrical cords and plugs on the equipment prior to use. Make sure all cords are in good repair.
16. Keep only necessary amounts of paint, thinners, solvents, and flammables in your immediate work area to prevent fire hazards.
17. All containers will be labeled.
18. Clean up spills or drips immediately.
19. Do not store or consume food in the work area.
20. Use and application of Ladder Safety will be followed as outlined in *NDSU's Safe Operating Procedure – Ladder Safety*. A copy of this program may be obtained at the University Police & Safety Office webpage.
21. Use and application of Fall Protection will be followed as outlined in *NDSU's Safe Operating Procedure – Fall Protection*. A copy of this program may be obtained at the University Police & Safety Office webpage.
22. Fall Protection must be used in the following situations:
 - a. Roofing - Commercial - six feet or higher
- Residential - 25 feet or higher
 - b. General Industry - four feet or higher
 - c. Scaffolds - 10 feet or higher
 - d. Portable Ladders - no fall protection required

V. Training

The department supervisor is responsible for providing training to their employees, on a regular basis, to enable them to recognize and prevent hazards associated with high pressure equipment, hazardous chemicals, and general painting duties.