
Spill Response and Containment for Industrial Oils and Lubricants

1.0 Objective & Intent

The objective of this SOP is to establish a standardized, safe, and effective procedure for responding to and containing spills of industrial oils and lubricants within the cabinet and millwork manufacturing facility. This procedure is designed to protect personnel from slip, fall, and chemical exposure hazards, prevent environmental contamination, and ensure full compliance with WorkSafeBC regulations (OHS Regulation Part 5: Chemical and Biological Substances) and the Environmental Management Act. The specific risk mitigated includes uncontrolled release of hazardous substances leading to workplace injuries, fires, and regulatory penalties.

2.0 Operational Scope

This procedure applies to all maintenance personnel, machine operators, and any employee designated as a spill responder within the facility. It covers all areas where industrial oils and lubricants are stored, handled, or used, including but not limited to: CNC machine centers, edgebanders, panel saws, sanding stations, hydraulic press areas, and the main lubricant storage room. This SOP is activated for any spill of oil or lubricant, regardless of volume, that occurs on impermeable surfaces (concrete floors) or near floor drains.

3.0 Hazard Identification & Mandatory PPE

- Slip/Trip Hazard: Spilled oil creates extremely slippery surfaces; immediate containment required.
- Chemical Exposure: Skin contact with oils/lubricants can cause dermatitis; prolonged exposure may lead to absorption.
- Inhalation Hazard: Aerosolized mists or vapors from heated lubricants can irritate respiratory tract.
- Fire Hazard: Oil-soaked rags and absorbents are flammable; spontaneous combustion risk if improperly disposed.
- Environmental Hazard: Spills entering floor drains or soil can result in severe fines and cleanup costs.
- CSA-Approved Steel Toed Boots with oil-resistant soles
- Chemical-Resistant Gloves (Nitrile or Neoprene, minimum 18 mil thickness)
- Safety Glasses with side shields (or full-face shield if splash risk is high)
- Coveralls or chemical-resistant apron to protect clothing and skin
- Respiratory Protection: N95 mask if misting is present; half-face respirator with organic vapor cartridge if confined space or large spill

4.0 Required Safety Equipment & Tools

- Spill Kit (50-gallon capacity minimum) containing: oil-only absorbent pads, absorbent socks, loose absorbent (e.g., diatomaceous earth or clay), disposal bags, and ties
- Portable containment berm or drain cover (to block floor drains)
- Non-sparking tools (shovel, broom, dustpan) for cleanup
- Red hazardous waste disposal bags and labels
- Emergency eyewash station or portable eyewash bottle (if splash risk)
- Fire extinguisher (Class B rated) within 10 meters of spill area
- Communication device (two-way radio or phone) to call for assistance

5.0 Step-by-Step Safety Procedure

1. **Assess and Communicate:** Immediately notify all personnel in the immediate area to evacuate the spill zone. Use a loud voice or air horn to alert others. Do not walk through the spill.
2. **Isolate the Source:** If safe to do so, stop the flow of oil/lubricant by closing valves, shutting down equipment, or uprighting the container. Do not touch any electrical switches if the spill is near water or wet surfaces.
3. **Don Required PPE:** Put on all mandatory PPE listed in Section 3.0 before approaching the spill. Verify gloves are intact and respirator is properly sealed.
4. **Contain the Spill:** Deploy absorbent socks around the perimeter of the spill to prevent spreading. Place a drain cover or containment berm over any nearby floor drains. Work from the outer edge inward.
5. **Apply Absorbent Material:** Place oil-only absorbent pads directly onto the liquid surface to soak up the oil. For larger spills, apply loose absorbent evenly over the area and allow it to sit for 2-3 minutes to fully absorb.
6. **Collect and Bag Waste:** Using non-sparking tools, carefully scoop up all saturated absorbent material and place it into red hazardous waste disposal bags. Double-bag if necessary. Seal and label each bag with the contents and date.
7. **Decontaminate the Area:** After bulk removal, scrub the affected surface with a degreasing cleaner and absorbent pads. Rinse with water only if the area is not near a floor drain; otherwise, use dry absorbent only. Collect all rinse materials as hazardous waste.
8. **Dispose of Waste Properly:** Transfer all sealed waste bags to the designated hazardous waste accumulation area. Complete a hazardous waste manifest if the total volume exceeds 20 litres. Notify the Environmental Health and Safety (EHS) coordinator.
9. **Restock Spill Kit:** Immediately replace all used items in the spill kit to ensure readiness for the next incident. Report any missing or damaged equipment to the safety officer.
10. **Document the Incident:** Complete a Spill Incident Report form detailing the date, time, location, volume, material spilled, root cause, and corrective actions taken. Submit to the Plant Safety Officer within 24 hours.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.