

S432 BMPs for Wood Treatment Areas

Description of Pollutant Sources: Wood treatment includes both anti-staining and wood preserving using pressure processes or by dipping or spraying. Wood preservatives are registered with the U.S. EPA and include oil-borne and water-borne preservatives. Some examples include creosote, creosote/coal tar, pentachlorophenol, copper naphthenate, arsenic trioxide, malathion, or inorganic arsenicals such as chromated copper arsenate, acid copper chromate, chromate zinc chloride, and fluor-chrome-arsenate-phenol. Anti-staining chemical additives include iodo-propenyl-butyl carbamate, dimethyl sulfoxide, didecyl dimethyl ammonium chloride, sodium azide, 8 quinolinol; copper (II) chelate, sodium ortho-phenylphenate, 2 (thiocyanomethylthio)-benzothiazole (TCMTB) and methylene bis- (thiocyanate), and zinc naphthenate.

Pollutant sources include drips of condensate or preservative after pressurized treatment; product washwater (in the treatment or storage areas), spills and leaks from process equipment and preservative tanks, fugitive emissions from vapors in the process, blowouts and emergency pressure releases, and kick-back from lumber (phenomenon where preservative leaks as it returns to normal pressure). Potential pollutants typically include the wood treating chemicals, BOD, suspended solids, oil and grease, benzene, toluene, ethylbenzene, phenol, chlorophenols, nitrophenols, heavy metals, and PAH depending on the chemical additive used.

Pollutant Control Approach: When feasible, cover wood treating drip pads and prevent stormwater contamination from wood treating chemicals. Wood treating facilities may be covered by the Industrial Stormwater General Permit or by an individual permit. Individual permits covering wood treatment facilities include applicable source control BMPs or require the development of BMPs or a SWPPP. Facilities covered under the Industrial Stormwater General Permit must prepare and implement a SWPPP. When developing a SWPPP or BMPs, wood treating facilities should include the applicable operational and structural source control BMPs listed below.

Applicable Operational BMPs:

- Use dedicated equipment for treatment activities to prevent the tracking of treatment chemicals to other areas on the site.
- Minimize non-process traffic on the drip pad. Clean non-dedicated lift trucks on the drip pad.
- Immediately remove, contain, and properly dispose of soils with visible surface contamination (green soil) to prevent the spread of chemicals to groundwater and/or surface water via stormwater runoff.
- If wood is discovered to be actively dripping in the storage yard, relocate the wood to the drip pad until it ceases dripping.

Recommended Operational BMP:

Consider using preservative chemicals that do not adversely affect receiving surface water and groundwater.

Applicable Structural Source Control BMPs:

- Cover and/or enclose, and contain with impervious surfaces, all wood treatment equipment and drip pads. Slope and drain areas around dip tanks, spray booths, retorts, and any other process equipment in a manner that allows return of treatment chemicals to the wood treatment process.
- Freshly treated wood is defined as wood that has not been removed from the drip pad immediately following treatment.
- When feasible, cover drip pads for freshly treated wood that has not ceased dripping to prevent contact of treated wood products with stormwater.
- Segregate clean stormwater from process water. Convey all process water to an approved treatment system.
- Seal any holes or cracks in the asphalt areas that are subject to wood treatment chemical contamination.
- Elevate stored and/or treated wood products to minimize contact with stormwater run-on and runoff.
- Place dipped lumber over the dip tank, or on an inclined ramp for a minimum of 30 minutes to allow excess chemical to drip back to the dip tank.
- Freshly treated lumber from dip tanks or retorts must be placed on a containment area until drippage has ceased prior to placement in outside storage areas.

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