Description
Proper design of outdoor work areas for materials reduces opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the stormwater conveyance system.

Approach
Outdoor work areas require a drainage approach different from the typical infiltration/detention strategy. In outdoor work areas, infiltration is discouraged; collection and conveyance are encouraged. In outdoor work areas, infiltration is discouraged and runoff is often routed directly to the sanitary sewer, not the storm drain. Because this runoff is being added to the loads normally received by the wastewater treatment plants, municipal stormwater programs and/or private developers must work with the local plant to develop solutions that minimize effects on the treatment facility. These concerns are best addressed in the planning and design stage of the outdoor work area.

Suitable Applications
Appropriate applications include residential, commercial, and industrial areas planned for development or redevelopment.

Design Considerations
Design requirements for outdoor work areas are governed by Building and Fire Codes, and by current local agency ordinances, and zoning requirements.

Designing New Installations
Outdoor work areas can be designed in particular ways to reduce impacts on both stormwater quality and sewage treatment plants.

- Create an impermeable surface such as concrete or asphalt, or a prefabricated metal drip pan, depending on the use.

Design Objectives

<table>
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<th>Maximize Infiltration</th>
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<tr>
<td>Provide Retention</td>
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<tr>
<td>Slow Runoff</td>
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<tr>
<td>Minimize Impervious Land Coverage</td>
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<tr>
<td>Prohibit Dumping of Improper Materials</td>
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<td>✓ Contain Pollutant</td>
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<td>✓ Collect and Convey</td>
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</table>
- Cover the area with a roof. This prevents rain from falling on the work area and becoming polluted runoff.

- Berm or perform mounding around the perimeter of the area to prevent water from adjacent areas from flowing onto the surface of the work area.

- Directly connect runoff. Unlike other areas, runoff from work areas is directly connected to the sanitary sewer or other specialized containment system(s). This allows the more highly concentrated pollutants from these areas to receive special treatment that removes particular constituents. Approval for this connection must be obtained from the appropriate sanitary sewer agency.

- Locate the work area away from storm drains or catch basins.

**Redeveloping Existing Installations**

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

**Other Resources**


- Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.
