

Storing materials and wastes temporarily by the roadside is often necessary for highway maintenance activities. From the sand and salt needed for snow and ice control, to the asphalt cold mix used for road surfacing, to the trash and debris from highway cleaning and vegetation management, roadside storage makes it possible to get the work done when it's needed. On the flip side, roadside storage—if done carelessly—creates the potential for exposing wastes and materials to storm water, with the possibility of introducing pollutants into streams, lakes and water systems.

This bulletin reviews the Best Management Practices (BMPs) from the *Caltrans Storm Water Quality Handbooks, Maintenance Staff Guide (Staff Guide)* that should be considered in wet weather to prevent storm water pollution from roadside storage.

Know Your Storm Water Enemies

Be aware of the potential pollutants that may leach or wash off the material that you are storing on the roadside, and implement appropriate BMPs. For instance:

- Asphalt cold mix contains hydrocarbons. Treated posts can contain metals and other potentially harmful chemicals. These chemicals could leach into storm water runoff. Consider covering, if feasible, or using absorbent booms secured by sandbags to contain runoff during wet weather.
- Stockpiles are sources of sediment or fine-grained particles that are easily entrained in storm water runoff. Consider sediment control options and ensure that these controls are functioning properly during wet weather.
- Additional handling and disposal requirements for factor (vacuum truck) waste may apply. Check with your hazardous waste manager prior to discharging factor waste.

Prevent "Sedimental" Journeys

If rain is expected, protect roadside storage areas from run-on and runoff so that wastes and materials are not introduced into the storm water drainage system.

If possible, cover roadside storage areas.

- If covering roadside stockpiles is not feasible, temporary sediment controls should be installed.

Many temporary sediment control methods are affordable and straightforward to install such as:

- Silt fences (CD36)
- Straw bale barriers (CD37)
- Sandbag barriers (CD38)

The *Caltrans Storm Water Quality Handbooks, Construction Contractors Guide and Specifications*

provide the construction details (CDs) for these controls. Caltrans staff can request a copy of the storm water handbook by calling the Caltrans Publications Distribution Unit (916) 445-3520.

Remember: Your role in preventing storm water pollution does not end with the installation of temporary sediment controls. As temporary controls, they are subject to regular inspection and maintenance.



Example stockpile with straw bale sediment controls in place to prevent runoff. Remember to tightly abut adjacent bales and fill gaps with straw.

Location, Location, Location

Carefully evaluate and select roadside stockpile and waste locations to avoid storm water run-on and direct runoff to the storm water drainage system or natural water courses. Consider the following:

- Place stockpiles as far away as practical from storm drain inlets and watercourses.
- Identify drain inlets and watercourses both upstream and downstream of the storage area.
- Determine where runoff will flow and be prepared to protect the storm drainage system during wet weather.
- Make use of natural features, such as grass or other vegetation barriers, if available, to prevent runoff.

An ounce of prevention—in this case, planning—is far better than a pound of cure in the form of expensive cleanup efforts and fines.

Just Good Practice

- Minimize roadside storage, especially during wet weather.
- Transport materials and waste back to the maintenance facility or approved storage area as soon as feasible.
- Use stored material as soon as possible, and avoid long-term storage at the roadside.
- Minimize roadside storage of excess materials through purchasing controls (see *Staff Guide* BMP T4b). Buy only what you need and rotate your stock. Evaluate product and raw material inventory records. If previous inventories were not used in a timely manner, consider ordering smaller quantities.

This bulletin is published monthly by the Storm Water Compliance Review Task Force to support the Caltrans maintenance staff in its efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements.

Storm Water Management for Roadside Storage of Materials and Waste

Additional information is available in the Caltrans Maintenance Manual, Chapter C-6, or from your District Maintenance Storm Water Coordinator. Questions or comments may be directed to Jack Broadbent, Maintenance Storm Water Coordinator, (916) 653-0361