

MAP CODE  
**WWASH**

# WHEEL WASHER

**USE**

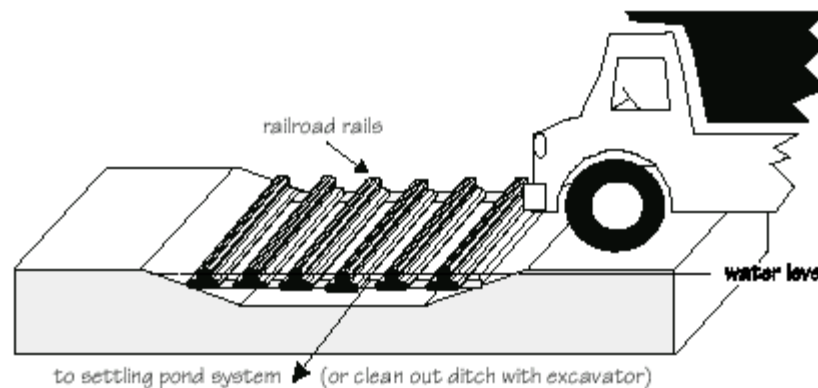
Dust  
Public Relations  
Sediment

## What

➔ A washing pit or trough that removes rocks and dirt from vehicle wheels and wheel wells as they drive through.

## Purpose

- ➔ To reduce the amount of dirt and rock carried by aggregate vehicles onto public roads, thus lessening the need for street sweeping and preventing windshield damage.
- ➔ To create a cleaner, less dusty site by collecting the material in one place.



## Where

**YES:** Between the scale and the property exit.

## Materials, Equipment & Costs

- ➔ Railroad rails, steel bars or grid, gravel, water.
- ⚡ Back hoe and labourer.
- \$ Medium to high.

## Plans & Specs

- Wheel washers can range from simple troughs to concrete foundations with embedded rails.
- The basic wheel washer is a shallow pit filled with water.
- A rumble strip on the bottom of the pit, such as a cattle guard, railroad rails or steel bars spaced 5 to 20 centimeters apart, can agitate/shake mud and dirt off the vehicle.
- High volume wheel washers may need a concrete foundation.
- Mechanized spray washers are also available through commercial suppliers.
- Allow at least 20 metres between the wheel washer and the exit for wetted material to spin off tires as the vehicle comes up to speed, and for other material to drop off the chassis.

- A paved exit will also help reduce the amount of dirt and rocks deposited on public roads by vehicles leaving the site.
- Dry options use only mechanical agitation to remove dirt and mud.
- On more remote sites, 30 metres of loose clean gravel will remove a good portion of mud from the tires.
- Cattle guards by themselves will also remove a significant amount of mud and dirt.

## Maintenance

- Dirty water can be directed to a settling pond, or the wheel wash can be cleaned out frequently with an excavator. Make sure that the water used in the wheel washer is treated to remove solids and turbidity before being discharged off the site.

## Sources

Norman, D.K., Wampler, P.J., Throop, A.H., Schnitzer, E.F. and Roloff, J.M. (1997): **Best Management Practices for Reclaiming Surface Mines in Washington and Oregon**; *Washington State Department of Natural Resources Open File Report 96-2* and *Oregon Department of Geology and Mineral Industries Open File Report O-96-2*, 128 pages, URL <<http://www.wa.gov/dnr/htdocs/ger/pdf/bmp.pdf>>, June 2001.