

Managing truck and other vehicle movement



Environment
Protection
Authority Victoria



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Guidance sheet

How to eliminate or reduce the risk of harm from erosion, sediment and dust

Description

Moving vehicles on unsealed surfaces and roads can result in the making and transport of sediment and dust.

Trucks and trailers that haul soil and other materials without a cover can lose materials in transport and generate sediment and dust.



The steps in this guidance sheet follow the risk management process described on our website (see [How to manage environmental risk](#)).

Step one: identify hazards

Uncontrolled release of dust and sediment into the environment from vehicle movement.

Step two: assess risks

To help assess the risk of sediment and dust from moving trucks and vehicles, you can:

- Identify how vehicles can release sediment and dust into the environment.
- Identify the frequency and number of vehicles moving in and out of the site.
- Identify nearby sensitive receivers that may be impacted such as neighbours, waterways, and local flora and fauna.

Step three: implement controls

Consider implementing the following controls to limit the sediment and dust at your site:

Manage site access

- Identify the planned movement and traffic routes of vehicles on your site and develop a [traffic management plan](#).
- Minimise site access to limit the impact from vehicles on roads.
- Identify entry and exit points, and high traffic areas on your site.
- Stabilise site entry and exit points with a sealed road, aggregate or road base.
- Divert surface water run-off away from site access points so it does not wash or track sediment offsite.

More information

See our website: epa.vic.gov.au/for-business/find-a-topic/erosion-and-sediment/advice-for-businesses

Contact us:
1300 372 842 (1300 EPA VIC) or
contact@epa.vic.gov.au

The actions you take and the controls you decide to implement will support you to comply with your [general environmental duty](#) and other duties under the *Environment Protection Act 2017*.



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Manage road use

- Minimise the number of access roads vehicles use.
- Seal roads with asphalt or a spray seal, or stabilise with aggregate, gravel or road base. You may need to replace aggregate or gravel periodically.
- Maintain, clean and grade haul routes on a regular basis.
- Locate unsealed roads to avoid erodible areas of the site, such as sloping terrain or unstable soils.
- If roads are not stabilised or sealed, minimise dust using water or chemical dust suppressants.
- Provide sealed or stabilised car parks for site workers to park their vehicles to prevent track-out of soil and mud onto public roads.
- Minimise haul route distances and locate haul routes away from sensitive receivers.
- Restrict vehicles to defined roads and site entry and exit points. Fence the site to prevent vehicles bypassing designated site access points.
- Set appropriate and site-specific speed limits to minimise generating dust. Ensure you signpost roads and that site workers are aware of designated speed limits.



Figure 1. Water truck used on a dirt road to suppress dust.

Machinery hygiene

- Avoid and minimise mud, soil and dust entering on site from incoming trucks and vehicles.
- Identify and assess invasive plants that may be present and control the spread so far as reasonably practicable.
- Avoid driving in areas that may contain invasive plants and maintain clean machinery on site.

Manage dirt and mud on access roads/routes

- Cover trucks transporting loose materials with fitted canopies. Ensure you cover all loads before trucks leave site.
- Limit load size to avoid spillages.
- Remove soil from the rim of trucks before they leave site. Place scraped material in a location where it won't be washed offsite. This control may only be suitable where there is a small number of vehicles leaving site.
- Install rumble grids at site exit points to shake soil off trucks. Take care not to position them in or over a drainage line. Ensure the road between rumble grids and the site exit is stabilised and with adequate distance and wheel rotations (recommended minimum three-wheel rotation).
- Submerge rumble grids in water so tyres are washed as the truck crosses the rumble grid. Prefabricated rumble grid/wheel baths are available for purchase or hire. Drain and replace the water in the wheel bath periodically. Water from wheel baths should be treated as 'waste' and managed in line with the waste hierarchy.
- Minimise use of a wheel wash or hand-held hose to wash vehicle tyres due to the large volume of wastewater generated. If a wheel wash or hand-held hose is used, treat the water as 'waste' and manage in line with the waste hierarchy, preferably capturing and reusing this wastewater for wetting exposed areas.
- Clean sediment off roads as soon as possible. Do this by using a broom and shovel, water or street sweeper. Treat the water as 'waste' and manage in line with the waste hierarchy, preferably capturing and treating the water.
- Use a water-assisted dust sweeper on access and local roads to remove material tracked off site.
- Avoid dry sweeping of large areas.
- Install hard surfaced haul routes, and regularly damp down with fixed or mobile sprinkler systems or mobile bowsers. Regularly clean the haul routes and if necessary clean local roads.

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Figure 2. Road dust sweeper.



Figure 3. Truck with a canopy.

Step four: check controls

Monitor controls you put in place to prevent or mitigate risks and ensure they operate effectively and as planned. For managing truck and vehicle movement, this could include monitoring:

- site entry, exit points and haul routes and performing maintenance as required
- driver compliance of speed limits and canopy use on trailers
- the condition and effectiveness of rumble grids and periodically removing built-up sediment and soil from under the rumble grids.
- conduct regular inspections for any road-sourced dust emissions.
- inspect local roads for tracked soil and dust regularly.



These are *examples or options only* of what you could put in place to eliminate or reduce the risk of harm to human health and the environment. You can implement other controls, so long as you can demonstrate you have eliminated or reduced the risk of harm as far as [reasonably practicable](#) (EPA website).

Disclaimer

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