## Diesel Vs Pavertrend™

There are regulatory considerations at work when using diesel fuel, kerosene and petroleum based asphalt solvents. Environmental Protection Authority (EPA) has been implementing it with their usual hard hitting approach. Violations can result in fines upto $25000.00 per day per violation. The resulting fines could easily put a contractor out of business altogether.

- ✓ **Australian Environmental Legislation - Clean Waters Act 1970**
- ✓ **Protection of the Environment Operations Act, 1997 (POEO Act)**
- ✓ **What the Act requires under s 96(3A) of the POEO Act?**
- ✓ **Pollution of waters under s120 of the POEO Act?**

The above Public Law prohibit discharge of diesel or related substances on the ground. These Public Law relate to paving industry, and are the reasons why it is no longer permissible to use diesel fuel to clean equipment with or as a release agent.

These Public Law language has been placed in several other laws, including state laws, and has been subject to a wide variety of interpretations. Literature by the major petrochemical producers indicates that petroleum distillate fractions, even with some modification of the chemical structure, are still considered “oils” under these Acts. Therefore, diesel fuel being a fuel oil, is considered an oil under these Acts.

As anyone working with asphalt knows, asphalt sticks to tools & equipment when cooled. It must be removed by dissolving it in a solvent. Anyone with field experience also knows, it is impossible to prevent spillage of the solvent while doing paving operations. This has significant regulatory implications.

For those in paving industry, the bottom line is that any unused chemicals are waste. There are five ways that a waste can be said to be hazardous. If a waste is**:**

***Flammable*** ***: Flash point <52°C***
***Corrosive*** ***: Corrodes steel or pH outside 2 – 12.5 range.***
***Reactive*** ***: React when mixed with water or chemical instability; generate heat or explode.***
***Toxic*** ***: contains toxic materials above specified limits.***

***Listed : under hazardous waste.***

**Regulatory Implications for the Paving Industry:**

Below given issues are reporting requirements. This would be required for every facility that generates hazardous waste:

- Proper training of paving crews to handle diesel fuel.
- Type of containers it is stored.
- Length of time diesel can be stored.
- Paperwork documenting all facets of the handling process.
- Spill prevention control and countermeasure handling process.
- Contingency plan, waste minimisation plan, hazardous waste job analysis.
- There are also strict requirements on transportation of diesel.

**How Does Diesel Fuel Affect the Paving Industry ?**

**Under SARA Act** (Superfund Amendments Reauthorization Act) has a regulatory implications under "joint and several" liability associated with landfills that become Superfund Cleanup sites. All parties that put hazardous wastes into the landfill become proportionately liable for the cleanup costs if it becomes a Superfund cleanup site.

Since diesel fuel and petroleum solvents has flashpoint below 53$^{0}$C becomes hazardous wastes when discarded. Therefore, even if the wastes are collected and disposed of to a landfill, there is a risk of liability to the user down the road. This is another reason for pavers not to use diesel fuel or petroleum solvents.

**Under CERCLA Act** (Comprehensive Environmental Responses Compensation and Liability Act of 1980) is another regulatory issue.
It primarily deals with emergency spills or releases, ordering the EPA (Environmental Protection Authority) to designate hazardous substances and reportable quantities for spills of the designated hazardous substances.

Materials that are hazardous by reason of Flashpoint are listed as CERCLA hazardous substances.

The most likely way a chemical used by the paving industry could be defined as hazardous waste is if it is ignitable. For this reason, the

flashpoint of chemicals bought for various applications such as lubrication, cleaning etc. becomes important.

**What is the solution ?**

**Environmentally safe solvent**
All natural (Bio-Green) and 100% biodegradable.

**Non-Flammable**
Pavertrend™ is a high flashpoint solvent – safe for paving crews and less expensive to ship.

**Slow evaporation rate**
Stays on shovels, rakes and truck beds longer so you may re-apply less often.

**Powerful solvent**
Proven more efficient and effective than diesel fuel for dissolving asphalt.

**EPA compliant**
Meets Environmental Protection Authority (EPA) regulations as a non-hazardous waste.

**Emulsifiable**
Once the asphalt is dissolved, it is easily rinsed away with water allowing easy clean-up.

Pavertrend™ is a unique bio-green solvent to replace diesel fuel. It is currently being used by Department of Roads & Transportation, paving contractors and Councils.

Pavertrend™ has changed the way the paving industry cleans their equipment – setting a new industry standard.

The Environmental Protection Authority (EPA) is now starting to enforce environmental laws much more aggressively. Using diesel fuel on truck beds is a thing of the past. Paving contractors – state & councils are now forced to look for alternative methods.

You can avoid EPA fines by using Pavertrend™ - which meets all environmental regulations as a non-hazardous waste.