



ERA 19. Metal Forming

Environmental Protection Act 1994

DEFINITION>>

Metal forming includes forming of more than a total of 10,000 tonnes of metal per year.

Forming includes:

- pressing, forging, extending, extruding, rolling metal;
- forming metal into plate, wire or rods; and
- fabricating metal into sheets.

CLEANING AND PREPARATION>>

Prevent dust nuisance and metal contamination

- Conduct dry sanding of coatings or metals so as not to cause environmental nuisance to neighbours. Metals must not cause contamination to land or stormwater.
- Use tools that are connected to an efficient dust extraction system when dry sanding and grinding.
- Do not let dust from rubbing down accumulate in areas where it may cause dust nuisance to neighbours or be washed by rainfall into stormwater drains.

Minimise trade waste and airborne dust / Reduce waste disposal and labour costs

- Use physical cleaning methods such as scraping, scrubbing or blasting techniques where ever possible.
- Avoid wet sanding, instead use a dry sanding system with dust extraction to completely prepare surfaces.
- Use a wet sponge and a bucket to wet sand and clean prepared surfaces. Then use a wet/dry vacuum cleaner with bag filter to collect the sludge and dust instead of sweeping and hosing down with water.

Bag the dust or dried sludge before placing it in the industrial bin for appropriate disposal.

- To clean oily or greasy parts, use 'quick-break' degreasing compounds and detergents to reduce the emulsification of oils and other hydrocarbons. Check with you supplier on the availability of these products.
- When using chemical cleaning baths extend the life of cleaning solutions. Use filtration systems to remove sludge and rejuvenate the solution by topping up with fresh solutions and emulsifiers. Use cleanable filters and reusable filter medium where possible.

Prevent contamination of stormwater and damage to the sewerage system

- Always conduct surface cleaning and preparation on an impervious area, such as concrete, which is covered and banded to contain spills and exclude stormwater.
- Drain wastewater to sewer via an approved trade waste treatment device and under the conditions of a **Trade Waste Permit**.
- If not serviced by Council sewerage system collect wastewater in a sump for either:
 - > disposal via a licensed liquid waste removalist
 - > treatment and reuse
- Never allow liquid wastes to spill, flow or drain on to the ground or to stormwater.
- Dispose of accumulated sludge from waste paints, sanding or rubbing down by a licensed waste removalist.

Minimise solvent emissions

- Always collect solvents that are unsuitable for reuse in sealed containers for recycling or disposal by a reputable solvent recycler.

- Reuse or recycle solvent wherever possible.

CUTTING OPERATION>>

Prevent fire hazards and the emissions of fumes and smoke

- Always use oxy-acetylene torches away from possible ignition sources such as oils, grease and rubber. This will avoid accidental combustion and the generation of dangerous fumes and smoke.

Avoid fire hazards and smoke emissions

- Where feasible, use the appropriate saws for your cutting operations, as these will not ignite rubber and other materials.

Minimise airborne dusts

- Conduct all cutting operations on a paved, covered surface so that metal scraps and filings can be vacuumed or swept up.