# **Toolbox Talk** Pollution



The Construction industry is responsible for 4% of particulate emissions into the atmosphere, more water pollution than any other industry and thousands of noise complaints every year. Its easy to see why but we must try and lower these at all costs. The 3 major forms of pollution are air, water and noise pollution.

#### **Noise Pollution:**

Construction sites produce a lot of noise, mainly from vehicles, heavy equipment and machinery, but also from people shouting and radios turned up too loud. Excessive noise is not only annoying and distracting, but can lead to hearing loss, high blood pressure, sleep disturbance and extreme stress. Research has shown that high noise levels disturb the natural cycles of animals and reduces their usable habitat.

## Water Pollution:

Sources of water pollution on building sites include: diesel, oil, paint, solvents, cleaners, other harmful chemicals, construction debris and dirt.

Construction sites create soil erosion which leads to silt bearing run-off clogging rivers, restricting sunlight filtration and destroying aquatic light as well as damaging water quality.

Surface water run-off also carries other pollutants from the site, such as diesel, oil, toxic chemicals and building materials like cement. When these substances get into waterways they poison water life and any animal that drinks from them. Pollutants on construction sites can also soak into the groundwater, a source of human drinking water.

## **Key Points:**

- Always try to keep pollution to a minimum.
- Always have a spill kit close by if refilling machines and use funnels.
- Make sure everyone is aware if there is a water course nearby that can be easily affected.
- Always be aware of members of the public and the effect you may have on them ie: noise and dust.
- When deemed necessary for a specific job wear correct PPE such as a dusk mask or overalls in order to protect your health.
- Control where wash water is disposed.

## **Air Pollution:**

Types of air pollution usually associated with construction sites include; land clearing, operation of diesel engines, demolition, burning and working with toxic materials. Construction sites can create a lot of dust which is not only bad for our environment but can also impact on a persons health.

Diesel and other fuels are responsible for air pollution and can be found throughout sites whether through spillages or the use of machinery. Noxious vapours from oils, glues, thinners, paints, treated woods, plastics, cleaners and other hazardous chemicals that are widely used on construction sites, also contribute to air pollution.

## Solutions:

Clear planning, management and monitoring of the situation on site can control the impacts. Specific measures can be implemented to mitigate problems:

- To prevent erosion try to minimise disturbance and retain as much vegetation cover as necessary.
- Use non-toxic paints, solvents and other non hazardous substances where possible.
- Cover and protect as many drains as possible (without causing flooding).
- No burning of materials on site.
- Keep noise to a minimum via the use of radios instead of shouting, silent pumps, modern noise restricting generators and machinery as well as, if needed, noise barriers around the site.
- Dispose of waste accordingly.
- Control dust through fine water spray.