Bitumen Dangers
Precautions for your job

Used in paving, roofing, waterproofing and some glue products, bitumen is a sticky substance derived from crude oil. The material is mixed with solvents to change it into liquid form and make it easier to work with. Unfortunately, these substances can be hazardous, flammable and increase the risk of occupational injuries. In fact, road workers, roofers, hot-mix facility employees and general construction employees are at risk of bitumen-related health problems.

Dangers to Your Health
When workers heat bitumen, the fumes produced can cause coughing, a scratchy throat, headaches, skin rashes, fatigue, eye irritation and lung problems. In the long-term, bitumen exposure can cause lung and stomach cancer, pigment changes in the skin, bronchitis and emphysema. In addition, bitumen additives may cause damage to the liver, kidneys and nervous system. When hot bitumen releases hydrogen sulphide gas into the air, suffocation and even death may occur.

Safety Measures
To prevent unnecessary exposure and illness, consider these safety recommendations when working with bitumen:

- Keep sparks, flames and cigarettes away from bitumen, as it is extremely flammable.
- Transfer bitumen automatically by way of a pump to minimise exposure, and enclose the mixing and stirring operations, when possible.
- Always wear the appropriate personal protective equipment (PPE): thermally insulated gloves, long-sleeved shirts, long trousers, vented goggles (when working with liquids) and face shields (when working with corrosive liquids that are toxic). If you wear a face shield, also put on a pair of goggles underneath for added protection.
- Never eat, drink, smoke or apply cosmetics near bitumen handling areas.
- After working with bitumen, always thoroughly wash your hands before eating, drinking, smoking or using the toilet.
- If you start to feel ill, let your supervisor know immediately and remove yourself from the working area.
- Stay upwind of application areas and enclose kettles and mixing operations to prevent unnecessary exposure.
- To prevent burns and overexposure to bitumen fumes, do not stick your head over an open tank.
- Do not place any water near bitumen, as it can cause a bubbling explosion.

Be Fire-Conscious
There is always a potential for fires when working with bitumen. Have the appropriate extinguisher ready for use on the job. Remember, though – you must be fully trained on how to properly use one to avoid any unnecessary injuries.