



## What Happens to Waste at Mick George Waste Transfer Stations?

Mick George Ltd has various licensed Transfer Stations that can treat, segregate and sort mixed wastes into differing categories. The following wastes types are separated and recycled or reprocessed.

### **Hardcore/Concrete/Inerts**

We crush and screen inert waste to produce a recycled secondary aggregate. This process is a WRAP (Waste and Resources Action Program) formalised quality control procedure for the production of recycled aggregates from recovered inert waste and is endorsed by the Environment Agency.

### **Wood**

Mixed wood is sent to a company that puts the material through a process called Gasification. Gasification is an energy recovery process that converts carbonaceous materials, into carbon monoxide and hydrogen by reacting the raw material at high temperatures with a controlled amount of oxygen and/or steam. The resulting gas mixture is called synthesis gas or syngas and is itself a fuel. Gasification is a very efficient method for extracting energy from many different types of organic materials, and also has applications as a clean waste disposal technique.

### **Ferrous and non-ferrous metals**

These materials are bulked up and sent to licensed scrap metal reprocessors. Up until recently the majority of scrap metal was being exported to developing countries such as China and India.

### **Cardboard and Paper**

This material is separated, baled and sent to cardboard and paper reprocessors. The material is soaked in water and made into a pulp, cleaned, pressed into sheets and dried. Recycled card and paper is used to make boxes and packaging as well toilet roll, stationary and animal bedding.

### **Plasterboard**

Plasterboard/Calcium Sulphate waste is sent to a company that shreds and screens the material to be used as a soil improver on agricultural land.

### **Rigid Plastics**

Mixed rigid plastics are separated, baled and sent to plastic reprocessors. The waste is first put through a shredder, where large contaminants including metal will be removed. Material would then be washed in a two-stage process in which paper and other contaminants are removed.

The plastic granulate is then sold on to plastic production companies, particularly in the automotive sector for the production of bumpers and dashboards.

### **Soils**

Clean soils are either screened to produce top soils for reused or to restore old quarry workings back to agricultural or recreational after uses.

### **Green Waste**

Trees, bushes, grass cutting etc are segregated and sent to a licensed compost facility where the material is shredded and placed in Windrows. The natural process of composting is carried out by the thousands of micro-organisms which live naturally in waste. These organisms, like all living things, need food, air and water. They feed on the organic waste materials, converting it into compost. This process generates sufficient heat to keep the organisms going as well as killing off most harmful bacteria and weed seeds. As the organic matter is consumed, the available oxygen diminishes, and the temperature in the middle of the Windrow will begin to drop, slowing the process to a stop. Turning or stirring the pile frequently puts more oxygen into the pile and the heat will build again, speeding the process along.

### **Batteries**

Battery boxes are used to store a variety of batteries that are sent to recover the precious metals they contain such as lead, mercury, cadmium, zinc, manganese and lithium.

### **Un-recyclables**

Currently unrecyclable waste is sent to Landfill, but not all is lost as the Landfill gas produced from the biodegradation of the waste is collected and converted to electricity. Landfill gas, which consists mainly of methane and carbon dioxide, is produced when organic wastes in landfill sites decay. Although landfill gas is primarily a pollutant that needs control, the methane it contains makes it valuable as fuel to power an electric generator. This method of producing renewable energy is now regarded as one of the most mature and successful in the field of green power.

### **Asbestos**

Asbestos is a hazardous waste and is required under legislation to be disposed of in hazardous landfill sites.

### **Tyres**

Tyres are shredded to create a crumb product that is used in the horse menage industry for flexible equestrian usage.