
Extract from Investigation Report - Clinical Waste Incinerator
Sunday 28th January 2007

Synopsis:

A fire broke out in the charge box area of the incinerator at Colnbrook – no injuries were sustained but the incinerator sustained mainly superficial damage.

Circumstances:

At approximately 11.22am on Sunday 28th January 2007, a fire broke out in the charge box area of the incinerator. The 'charge box' is a chamber outside the incinerator into which waste is loaded before being pushed into the incinerator by a large hydraulic ram. There is a carefully controlled sequence of operations to ensure the inter-related opening of doors / ram movements and airflow are safely managed.

A 205 litre metal drum of sludge waste had been loaded into the charge box. The correct procedures had been followed for this type of waste and the drum was loaded into the primary hearth of the incinerator. In this instance, it would appear that as the hydraulic ram retracted it pulled burning liquid back with it into the charge box area. We estimate about 20 litres of liquid escaped from the incinerator.

The fire was tackled by the Shift Supervisor (the most senior person on site) and one of the operational staff, using a mixture of dry power and carbon dioxide extinguishers. Again, the correct procedure was followed and the water hoses were not used, as this risked spreading the fire. No member of staff called the emergency services, however a passer-by saw the smoke and called the Fire Brigade. The fire was extinguished by the time the Fire Brigade arrived, but after consulting with the Shift Supervisor the fire crews deployed into the facility to ensure there was no latent risk. The Fire Brigade left site at approximately 13.15 pm.

Damage to the incinerator was largely cosmetic, but some electrical wiring was damaged. The damage did not compromise the safe operation of the incinerator, which was switched to 'shut down' mode i.e. loading of further waste ceased and the burning waste inside the incinerator is managed so as to control temperatures and gas flows as the plant cools down. Other than the smoke from the fire itself, there were no adverse emissions from the plant. The accident has been reported to the Environment Agency as required by the PPC Permit.

Grundon electricians attended site on Sunday afternoon to commence repair works. The plant resumed operations late on Monday night, although some repair / clean up work will need to be completed at the next scheduled shut down. The remaining drums of sludge have been removed from site.

Recommendations:

The incinerator has extensive CCTV coverage and this has allowed a detailed examination of the incident. The Fire Brigade have subsequently made recommendations regarding some aspects of the fire procedures / preparedness, although the safety of staff was not compromised during the fire itself.

The following summarises the recommendations arising from both the Grundon investigation and those of the Fire Brigade:

- The management of sludge waste needs to be reviewed, both prior to delivery to the incinerator and also when handled at the site, to ensure the incident is not repeated.
- Notwithstanding the above, a more robust fire suppression system is required for the charge box (designs have already been commissioned by Grundon).
- Fire procedures should be reviewed, in particular in relation to fire call points, emergency exits and external emergency lighting.