

#### CW004- Fire Prevention Plan Updates

A previously approved fire prevention plan is in place.

The following changes have been made to the previously approved fire prevention plan, following guidance on fire prevention plans: environmental permits (Environment Agency, 2021):

Unit 3 and 4 have five waste storage areas. Within these waste storage areas, bags of waste will be stacked no higher than the fire wall to ensure any fire does not spread. The fire walls and bays are designed to resist fire and a fire resistance period of at least 120 minutes to allow waste to be isolated to enable the fire to be extinguished within 4 hours. As stated in the previously approved fire prevention, a proven Computer system is implemented on site and currently used to record and manage the storage of all waste on site, ensuring 'first in, first out' principles are followed. As per the guidance, none of the waste is to be stored on site for more than six months unless there are extenuating circumstances. Staff training is provided, together with refreshers as necessary. The need to monitor and control the temperature is not anticipated for the waste streams, as it is highly unlikely that the wastes will generate heat due to the storage conditions. However, extra measures have been implemented to further prevent self-combustion. Ambient temperature is monitored at least three times per day Monday-Friday and twice per day Saturday-Sunday using a thermal imaging gun, enabling representative checks on the entire volume of the pile. This is recorded daily.

Units 1 and 2 currently stores new carbon product, however used activated carbon waste will also be stored in this unit. Units 1 and 2 will have the same layout as units 3 and 4 but one bay will be used as the designated area for the storage of new carbon product. As part of the permit variation, the fire prevention plan has been updated to reflect that unit 1 and 2 will also store used activated carbon waste. Fire walls and a digital linear heat detection cable will be implemented with procedures followed.

There is also an external waste storage area within the foul sewer drainage with a waterproof roof cover.

The gap between the rows of waste will be a minimum of 3cm (not allowing for settlement). Ambient temperature monitoring with thermal imaging guns will still be able to reach any waste stored at the back of the rows, ensuring temperature is monitored for all waste stored on site. As stated in the previously approved fire prevention plan, a digital linear heat detection cable is installed to detect any rise in temperature and is linked to the fire alarm system which will call the General Manager and if there is no answer, the system will call the Site Manager. This is operational 24 hours per day, including out of hours. If any bags are noted to be showing any signs of heating, they will be moved away from the others and the temperature taken from several points and noted. This will be carried out at regular intervals. Therefore it is considered that any increased risk associated with a reduced gap would be mitigated by the level and robustness of the temperature monitoring system in place allowing the unlikely rise in temperature to be dealt without increasing fire risk.