

# Safety Alert

## Wax Melting Vessel Fire Risk



### Incident Overview

On 9<sup>th</sup> July 2020 on one of the Lower Thames Crossing works packages the Perfect Circle Night Shift Site Manager heard a smoke alarm sounding from the office cabins at 3:40am. On investigation, smoke was seen in the office unit accompanied by the smell of molten wax and it was determined that the source of the smoke was the wax melting pot which had been left on inadvertently at the end of the shift. Multiple people were using the wax melting vessel but no one had been made responsible for turning the unit off at the end of the shift and the location of the vessel was in an office area and not within the designated works area where people were working at the end of the shift.

The wax melting vessel being used relied on heating water within the pot which then warms and melts the wax. However, because the unit had been left on at the end of the shift the water had all evaporated resulting in the unit running dry. This had not been considered at the time of purchase of the equipment or when setting up the procedures for its use. In addition, the vessel did not have a safety cut off linked to low water volume and, although purchased as a wax melting vessel this was not the originally intended purpose of the equipment as it was initially designed for heating and keeping food and drinks warm.

The incident had significant potential for harm due to the risk of fire. However, the presence of an overnight work crew meant that quick intervention was possible, and no injuries or significant damage were experienced.

### Mitigation Measures

As of 1st August 2020, Perfect Circle are stipulating the use of wax melting vessels which do not rely on water to melt the wax. Additionally, all units must have automatic safety cut offs.

Perfect Circle are not dictating which wax melting vessel is to be used but all proposed units must comply with these two requirements. As an example, the Seba DPS melting pot is an acceptable unit. The units must always be used in accordance with manufacturer's instructions to ensure safety.

As an additional safety measure, each sub-contractor must nominate the responsible person who will turn off the wax melting vessels at the end of each shift. This person must be named on the permit for the wax melting vessel use and be signed off daily as conformation.



## Safe Behaviour = Safe Performance