TRANSPORT - Fire in customers hot box whilst driver prepared vehicle to take delivery

WHAT HAPPENED

An asphalt collect customer arrived on site driving a hotbox vehicle, placed his order and proceeded to the dedicated hotbox loading area. He was preparing his vehicle for loading when he noticed that materials had been left in overnight from the previous shift; the burners had been left on overnight to try and keep the material in a usable state.

Whilst preparing his vehicle, the customer decided to use a release agent to try and soften the materials, making it easier for him to screw the materials out via the auger. On contact with the hot material, the release agent (suspected diesel) started to smoke heavily, and the release agent/ bitumen ignited. A fellow customer extinguished the flames with a fire extinguisher. The hotbox thermometer read 169 degrees.

KEY FINDINGS

Operator errors

- The release agent used in the vehicle preparation was believed to have been diesel, with a flashpoint of >60 degrees.
- Site procedures stipulate that diesel is prohibited for use as a release agent, this is advised in the induction process.

Operating Procedures

- The hotbox was partially loaded with materials from the previous day, the burner had been set at 160 degrees to try and keep it usable for the next day.

Site induction

- The customer had received a full site induction, however ignored the ruling of propane isolation.

Image below shows the vehicle smoking



LEARNING POINTS / ACTIONS TAKEN

HOW COULD THIS HAVE BEEN AVOIDED

- Ensure hotbox operatives isolate their gas supply before entering the site. Relevant information should be provided via induction / site signage / weighbridge checks.
- Enforce the use of non-flammable release agents for vehicle preparation
- Discourage the practice of storing materials in vehicles overnight at high temperatures

KEY REVIEW POINTS

- Are specific induction processes robust, ensuring effective enforcement of relevant site rules and policies?
- Ensure only authorised non-flammable release agents are used for hotbox preparation.
- Are operators aware of the potential hazards associated with Asphalt delivery vehicles (fire / explosion / explosive atmospheres)?
- Have collect customers received sufficient training and are they competent to operate their vehicles safely?
- Emergency procedure review…Are we equipped with the knowledge / equipment to deal with issues relating to specific vehicle types?

LOCATION:	**ASPHALT/COATING PLANT**	**ALERT STATUS:**	**High Potential**
ACTIVITY:	**LOADING AND UNLOADING**	**DATE ISSUED:**	**04/06/2024 20:02:51**
SUB ACTIVITY:	**NO SUB ACTIVITY AVAILABLE**	**INCIDENT No:**	**03715**