Uncontrolled spill of hot bitumen

WHAT HAPPENED

After completing the BDP the delivery driver started the delivery. Part way through the delivery the high-level beacon activated. The driver stopped the delivery but was assured by customer staff that there was sufficient ullage.

The driver recommenced the delivery. After about 10 minutes bitumen came out of the overflow pipe resulting in approximately 50 litres being spilt. The high high level alarm failed to activate.

Root causes of the incident

- The contents gauge on the storage tank and the contents gauge in the control cabin had widely differing readings.
- As the contents gauge in the control cabin indicated that there was sufficient ullage it was assumed that the activation of the high-level beacon was an electrical fault. This was not the case.

LEARNING POINTS / ACTIONS TAKEN

Actions taken

- As the tank was an old horizontal storage tank the customer decided to replace the old tank with a new tank and new ancillary equipment.

Learning points

- It is critical that an alarm activation is fully investigated and the reason for the activation is found and resolved, before resuming the delivery.
- Regularly cross check contents gauge readings at the storage tank and in the control cabin to confirm the readings match.
- A manual stock reconciliation system, cross checking the calculated bitumen consumption with the bitumen consumption from the contents gauge, would have identified there was an issue with the contents gauge readings.

LOCATION:	**ASPHALT/COATING PLANT**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**TRANSPORT & LOGISTICS / DELIVERY**	**DATE ISSUED:**	**18/10/2020 19:20:06**
SUB ACTIVITY:	**PRODUCT DELIVERY**	**INCIDENT No:**	**03572**