A maintenance inspection of bitumen tank uncovers severe corrosion at base of tank

WHAT HAPPENED

During routine maintenance of a bitumen storage tank, the metal cladding and insulation were removed from the base of the tank.

Significant corrosion was discovered at on the steel at the base of the tank walls and further inspection revealed that the thickness of the tank wall had deceased by 75%.

This was due to moisture ingress into the insulation of the tank, with the combination of heat, water and oxygen causing significant corrosion. The images below show the corrosion at the base of the tank.

LEARNING POINTS / ACTIONS TAKEN

There are two possible actions to mitigate the effects of moisture on the tank walls:

- Removal of insulation from the base of the tank (100-150mm)
- Incorporation of stainless steel, rather than mild steel for the bottom 1.5m of the tank walls.

LOCATION:	**ASPHALT/COATING PLANT**	**ALERT STATUS:**	**High Potential**
ACTIVITY:	**MAINTENANCE & HOUSEKEEPING**	**DATE ISSUED:**	**19/08/2024 15:45:04**
SUB ACTIVITY:	**ASPHALT & COATED STONE**	**INCIDENT No:**	**03729**