

#### KNAUF IMMINGHAM DOCKSIDE ENVIRONMENTAL INCIDENT

## PERMIT REFERENCE EP/200600005

# VISIBLE EMISSIONS OF GYPSUM 14<sup>th</sup> & 16<sup>th</sup> APRIL 2013

#### **Background**

On 14<sup>th</sup> April 2013 Associated British Ports (ABP) placed a complaint in to the Local Authority regarding emissions of gypsum dust from the Knauf Dockside Compound. Emissions occurred over a number of days. The emissions were observed by Local Authority Enforcement Officer Vicky Wray.

Nathan Vear issued a formal warning on 23<sup>rd</sup> April to Knauf, regarding conditions 3, 7 and 9 of the Environmental Permit referenced above.

## **Investigation**

Knauf carried out an internal investigation into the incident which identified the following:-

- 1. Knauf were slow to respond to the unusually adverse weather conditions.
- 2. The 'Rainbird' dust suppression system, which is usually adequate to suppress airborne dust emissions, was ineffective due to lack of water.
- 3. The contingency arrangements to supplement the water supply were undermined by a broken supply pipe belonging to ABP.

The weather had been extremely dry for several days followed by very high winds.

Knauf staff working at the Dockside Compound had noticed that the Rainbird system was running out of water, but had neither recognised the significance nor escalated to initiate further action. The Dockside Compound is attended by Knauf staff when loading or unloading operations occur. This intermittent presence contributed to the failure to recognise the developing environmental problem.

The main method to ensure dust suppression at the Dockside Compound is to keep the surface of the gypsum pile damp. This is achieved by spraying the pile with water using a 'Rainbird' system. The water supply to the Rainbird system is from the local mains water supply, via a header tank which supplies the pump. The system usually operates on a timer system such that the continuous mains water supply is adequate to service the intermittent water spraying. In order to supplement the mains supply in abnormal circumstances, Knauf had a verbal agreement with ABP to use water from a hydrant.



At some point prior to this fugitive dust incident, a water pipe had burst somewhere on the Port. As a result, the water supply which fed the hydrant and Knauf's reserve supply for dust suppression was turned off. Knauf could find no evidence that it had been informed that the water supply to the fire hydrant had been turned off.

The incident occurred because the gypsum stockpile was allowed to dry out, in circumstances where high winds could carry material beyond the boundary. Knauf had controls in place to mitigate this, but the failings set out in 1-3 above impaired their effectiveness. Therefore Knauf's action plan is focussed on significantly reducing the risk of this happening in the future.

#### **Action Plan**

#### 1. Dust Suppression

The main priority is to ensure that adequate water is available for dust suppression of the gypsum pile. In order to achieve this, Knauf are working with ABP, to install an alternative water supply. The contractual arrangements for this are well advanced and a target date for completion of the works is Monday 20<sup>th</sup> May.

# 2. Training and Supervision

Knauf have increased attendance at the compound so that on those days when the compound is not operational a Knauf employee will visit the compound mid-morning and late afternoon to ensure the Rainbird system is working. Visits will be recorded in the site diary. This practice will be reviewed after the water supply and the Rainbird system is fully operational.

Provided the gypsum piles are wetted during daylight the chance of them drying out so that they emit dust during night time hours is thought to be very low as there is not the heat from the sun to dry them.

The risk assessment has been reviewed and amended. Work instructions regarding daily checks of equipment and reporting have been amended and will be finalised once the agreement for water supply is reached with ABP.

Re-training of staff on the Permit conditions, risk assessment and work instructions are on-going.

A time line diary has been created to track actions.

Regular audits of the control methods by the QSE Officer will take place to ensure controls remain effective.

A non-conformance report (NCR) has been created on Knauf's Integrated Management System to track and record all information including correspondence, investigation and corrective actions. The NCR number is 3400.



Paul Snowden. Pr Drowde	Knauf Immingham Plant Manager.
Date: >1/5/2013	