

From: Newton, Nicola [mailto:nnnewt@eastman.com]
Sent: 17 August 2015 16:34
To: Kemp, Andi <Andi.Kemp@cyfoethnaturiolcymru.gov.uk>
Subject: RE: [I] Bullet Points From: 4th August 2015

Andi, Please find below some further information related to TH3 and the planned monitoring and Boiler 16 as requested at your recent site visit:

1. TH3

Relieving Manway this is a true fugitive source and as per the agreed program of checking and reporting of many years standing, the same will be applied to TH3 sources.

Fugitive equipment is screened every year and reported to the NRW under condition 4.1.4 (an old reference to the original permit). The new TH3 facility is to be screened as part of its commissioning, to date that has only included the New Benzene storage as the plant commissioning is being phased. We hired in a Benzene monitor to do the screening which was shown to be at the low levels anticipated from such new equipment.

Conservation Vent:

1

The rationale here is that its emissions fall into two distinct parts:

- 1) The 'Working' or offloading loss as delivered road tankers displace the headspace vapours in the tank. Originally this was measured during offloading. This was changed with HMIP! in 1997/1998 once vapour return was installed as emission abatement equipment, also a few years later the requirement was dropped from biannual to annual. The new Benzene storage also has vapour return and a simple check of its performance during offloading confirms that the vapour is being returned back to the road tanker as designed.
- 2) The 'Breathing' losses are fugitive losses from around the seal of the conservation vent under all other tank states. Direct monitoring of such emissions is difficult, in this case though the tank characteristics, temperatures and operations are well known as we are dealing with a single pure substance, lends itself to being more accurately assessed by calculation. It was agreed and this has appeared in reporting since 1999 that would be the case going forward. The calculation used is based on the US EPA 'Tanks 3' calculation. The new Benzene storage is treated in the same way. It is likely that the emission will be smaller due to better engineering design of the tank in particular with respect to the balance of Nitrogen blanketing pressure and the conservation vent set up.