

**Title of Meeting:** Inspection at Haverfordwest Creamery effluent treatment plant

**Date of Meeting:** 18 August 2015      **Time:** 10.00      **Venue:** First Milk Cheese, Merlins Bridge, Haverfordwest

**Present:** Doug Cowie (Natural Resources Wales [NRW])  
Diana Turbervill, David Walters (Pembrokeshire County Council [PCC])  
Gareth Jones (Severn Trent Services [STS])

## NRW comments

On 18 August 2015 NRW inspected the First Milk Cheese effluent treatment plant at Haverfordwest Creamery, Merlin's Bridge, Haverfordwest, following odour complaints about the facility.

Operation of the effluent treatment plant is subject to the requirements of environmental permit EPR/XP3830UR issued to First Milk Cheese. NRW is the main regulating authority for the site.

The following matters were covered during our inspection:

- NRW's Compliance Assessment Report (CAR) 5965, issued following a previous compliance inspection on 4 August 2015, was discussed.
- PCC's findings from its own inspection on 11 August 2015 were discussed.
- STS provided an overview of plant operations/current status. At the time of inspection the treatment systems appeared to be running well with no operational issues noted.
- NRW and PCC believe a number of areas require attention to effectively control/mitigate odour emissions from the plant:

### 1. Dissolved Air Flotation (DAF) unit

- A temporary tarpaulin cover has now been fitted to control odours from the DAF but this has caused operational issues with the unit's moving blades. NRW does not view this tarpaulin cover as a viable long-term solution. The operator must consider a more permanent structure enclosing the DAF unit with an odour control system. This is also required by the planning permission for the site (see below).
- The DAF unit is currently cleaned twice a week. The operator needs to consider weather conditions and wind direction when cleaning the DAF to minimise off-site odours. The operator's Odour Management Plan (OMP) should reflect this.

### 2. Odour control filters on sludge transfer points

- Passive carbon filter drums are available for tankers to use when removing sludge from the site. However the fittings connecting the drum filters to the

tankers are not yet in place. These are due to be delivered and fitted w/c 24/8/15. It is critical that this system is put in place ASAP as NRW and PCC consider sludge transfer points to be likely source of odour.

- Use of the filters by tanker drivers is also being reviewed. CCTV footage can be examined if necessary.
- STS are requesting feedback from delivery and tanker drivers regarding their perception of any odours.
- The operator is considering upgrading to new mobile charcoal filters and is taking advice from its filter supplier.
- The use of two passive filters in series could be an effective way of controlling odours from sludge transfer activities.
- PCC pointed out that the planning permission for the site (see below) requires active odour abatement for sludge transfer points. However both NRW and PCC are willing to wait for the results of the operator's independent odour survey before pursuing this matter further. The independent odour survey should be carried out as soon as practicable. It may be prudent to obtain a cost estimate for fitting active odour abatement in the meantime.

### **3. Odour control filters on fixed sludge tanks and final divert tank**

- Passive carbon filters are fitted to the three fixed sludge tanks (in series), the sludge thickening unit and the DAF sludge tank.
- PCC pointed out that the planning permission for the site (see below) requires active odour abatement fitted to the sludge tanks and the final divert tank. NRW and PCC are willing to wait for the results of the operator's independent odour survey, which will assess the performance of the present filters, before pursuing this matter further. It may be prudent to obtain a cost estimate for fitting active odour abatement in the meantime.

### **4. Use of portable drain covers**

- A number of drains were inspected during the visit and each one had portable covers fitted.
- The operator should regularly check the use of drain covers to minimise odours and ensure the OMP covers this.

### **5. Cleaning and maintenance of final divert tank**

- Cleaning in Place (CIP) has been undertaken for the final divert tank. This was previously identified as a possible source of odour. The divert tank should be checked, maintained and cleaned regularly and the operator's OMP should reflect this.
- PCC highlighted certain planning requirements applying to the final divert tank (see 3. above).

### **6. Cleaning and maintenance of membrane bio-reactors (MBRs) A, B, C & D**

- MBRs A & B have now been unblocked, cleaned and put back into operation. During our inspection all four MBRs appeared to be working well.
- Each MBR is cleaned once every week.
- Mains power surges have been identified as affecting the operation of the plant control systems and MBRs. STS are looking at this in more detail to mitigate the impact of these power surges.

### **7. Review of Odour Management Plan (OMP) required by operator's EPR permit XP3830UR**

- CAR 5965 confirms that NRW requires the existing OMP to be reviewed by 30 September 2015. STS confirmed a review was underway and no problems meeting the deadline were anticipated.

- An independent odour survey will be commissioned shortly to assess the performance of the current odour control measures and characterise any odours detected on and off-site. This may help distinguish between any off-site odours from the nearby Merlin's Bridge Waste Water Treatment Works operated by Dwr Cymru Welsh Water. The survey will also inform the review of the OMP.
  - STS and First Milk should confirm the timing of the independent odour survey with NRW and PCC.
- PCC highlighted three applicable planning conditions requiring attention – Conditions 7, 8 and 9. PCC's Planning Enforcement Team will contact First Milk Cheese and STS regarding these conditions.
  - NRW and PCC carried out an off-site odour check with STS at approximately 11.30hrs. No off-site odours from the plant were detected.
  - NRW will produce a CAR report for First Milk and STS confirming the above. NRW will share its report with PCC's Pollution Control Team.
  - It is understood that NRW and PCC's comments may inform an operator meeting scheduled for 26 August 2015 during which odour control measures and improvements are due to be discussed. The operator hopes that the independent odour survey will be complete by the time this meeting takes place. First Milk and STS should contact NRW and PCC following the meeting to agree the next steps.

### **PCC comments (supplied to NRW by D Turbervill)**

Following the Site Visit to the [Effluent Treatment Plant , First Milk Ltd Haverfordwest on 18<sup>th</sup> August 2015](#) I can confirm the following

1. David Walters and I attended the meeting arranged by yourself to discuss issues arising from recent odour complaints
2. Mr Gareth Jones (STW) outlined the remedial works that had been carried out since the previous site inspection on 4<sup>th</sup> and 11<sup>th</sup> August. These were : Temporary cover on DAF plant , covers on all drains and a mobile odour control system on order for sludge removal operations
3. Mr Gareth Jones outlined the day to day plant operation and monitoring systems in place.
4. Mr Gareth Jones also informed us of the proposed meeting on 26<sup>th</sup> August with all relevant parties to discuss the remedial measures and their implementation.
5. The EPR Compliance Assessment Report was discussed with Mr Gareth Jones to including the remedial works that would be required.
6. A site visit and a walk outside the boundary of the site was undertaken . At the time of the site visit there were no operational or odour issues.
7. PCC pointed that at present the site is operating in breach of their Planning Conditions 7 ,8 and 9 on Planning Application number 12/1073/PA granted on 8<sup>th</sup> July 2013 . The enforcement section of the planning department have been informed and will be contacting the company on these matters. This includes :

Condition 7) *Waste gases to be force ventilated from the DAF Plant Building.*

At present there is no building housing the DAF unit and therefore no odour control system is in operation. It is thought from the location and description of the complaints that this area is the main source of the present complaints . Therefore, the Pollution Control Team consider it imperative that a scheme is undertaken to remedy the situation.

*Condition 8) All sludge tanks and area involved in the storage and pumping of sludge shall be covered and all waste gases should be actively vented through an effective odour control system. Sludge tankers should not be able to remove sludge from the holding tanks without linking their waste gases to the odour control system .*

At present there is no active ventilation on site only passive ventilation via charcoal filters. The sludge tankers have not been able to link up to any odour control system , however it is understood that a mobile unit with passive ventilation will soon be in operation .

This area particularly sludge removal, is a source of odours and remedial measures should be taken as soon as possible

*Condition 9) Divert tank to be covered and waste gases actively vented via an odour control system*

Again there is only passive ventilation via charcoal filters on site.

It is understood that Severn Trent are to commission an odour survey at the site to establish the effectiveness of the odour control at the site. This should be carried out as soon as practicable and subsequent recommendations followed.

[ENDS]