NEATH PORT TALBOT
(RECYCLING) LTD

Material Recovery & Energy Centre
Crymlyn Burrows, Swansea SA1 8PZ
Telephone 01792 641901
Fax: 01792 465188

Mrs Karen Dunn
PPC Compliance Officer
Natural Resources Wales
Maes Newydd
Llandarcy
Neath Port Talbot
SA10 6JQ

13th February 2014

Permit Number: EPR/BJ5775IF
Re: CAR5301

In reply to CAR5301 and the eleven actions the actions taken are as follow:

Action 1: Operator to replace the carbon filters installed in the ventilation louvers in the waste reception hall unless it can be demonstrated that they had been changed in the last 12 to 18 months. The need for the maintenance of these filters needs to be incorporated into the sites EMS to ensure they are replaced when necessary in order to remain effective in the prevention of off-site odours.

All the carbon filters installed in the ventilation louvers in the waste reception hall were replaced on 2nd December 2013 and have been added to the maintenance checks and will be changed annually and recorded.

Point of note the carbon filters installed in the ventilation louvers are actually drawing air into the building and not pulling air out of the building.

Action 2: Operator to review the odour management plan and identify where an update is required. The operator may wish to undertake this review prior to the proposed changes to the new de-duster system as this will need to be included in an updated report.

A draft Odour Management Review has been sent to Natural Resources Wales and on the 3rd February 2014, Odournet started a three months of testing and review, which will include rechecking the sealing between the walls and the roof of the building, the dedusters and bio-filter, damaged panels in the building etc.

This review will be completed as show below:

Stage 1: Odour abatement efficiency testing

Stage 2: Smoke testing and review of local exhaust extraction system

Stage 3: Quantification of fugitive emissions and assessment of potential significance

Stage 4: Assessment of odour impact risk

Deduster Replacement

Additionally a BAT assessment of the proposed two Venturi scrubbers will run parallel with the testing.

Biofilter

The biofilter media is due to be replaced in 2015/16; the decision on what media to use when the media is to be replaced will be decided in 2015.

The current biofilter media was tested in October 2013 and the report shows that despite the irrigation problems (which has been rectified in February 2014), the wood-chip media is in relatively good physical and microbiological condition given its age (approximately 3 years). Although excessive amounts of fungal species were noted in the media, the required microbial balance should be restored once correct irrigation is achieved.

It was estimate that the remaining media life is up to 3 years and that the bio-filter can reliably achieve industry standard performance for wood-chip media bio-filter odour control units in such applications.

Action 3: Operator to review the maintenance and repair of the louvers on the waste reception hall to prevent the escape of odour.

The maintenance of the louvers in the waste reception hall has been reviewed and all missing louvers replaced. Spares have been sorted and any damaged louvers will be replaced.

Action 4: Operator to investigate the root cause of the open doors on the fuel preparation sections of the building and to provide the findings to the NRW.

On investigation into the root cause of the open doors on the fuel preparation sections of the building, it was found that they had been opened to increase air flow into the building, as the teamleader was under the misconception that by opening the doors, it would help with the air flow into the biofilter and help with cooling it, as the temperature had risen just above 40°C. He has been given instructions that this must not happen again.

Action 5: Operator to also provide an update on the timeline for the proposed improvements on the air extraction in the processing /fuel preparation area of the plant.

The first part of the proposed improvements on the air extraction in the processing /fuel preparation area of the plant has been to look at the biofilter. After extensive talks with WTT and OSIL it has been decided not to go with the OSIL recommendation of changing the current spraying system, but to increase the pressure of the incoming water supply by installing a booster water pump.

When first installed the water pressure at the biofilter sprays was 3.5 to 4 bars, when checked in November 2013 the water pressure had dropped to 2.5 bars. By fitting the booster pump it has increased the water pressure back to the 3.5 to 4 bar, is was designed to use. This was completed in February 2014.

To make sure that the biofilter in working efficiently and to give NPT Recycling Ltd a base value of the site, on February 3rd 2014, Odournet will start three months of testing, which will include the following:

Stage 1: Odour abatement efficiency testing

Stage 2: Smoke testing and review of local exhaust extraction system

Stage 3: Quantification of fugitive emissions and assessment of potential significance

Stage 4: Assessment of odour impact risk

Additionally in the first stage will be a BAT assessment of the proposed two Venturi scrubbers, once this has been completed the two Venturi scrubbers will be ordered. From the order date it will take approximately 14 weeks to build.

The start date will be available once the board have accessed the Odournet BAT assessment which will look at all available technologies. Once this is complete, it would take approximately 4 to 5 weeks to dismantle to existing dedusters and a further 4 to 5 to install.

With that in mind, once dates have been firm up, NPT Recycling Ltd would require Natural Resources Wales to give permission to carry on running site while the dismantling of the old equipment and installation of the new equipment is ongoing.

NPT Recycling Ltd is currently running very lean on waste, with the reception hall clear of both blackbag and shredded waste with 24 hours.

Action 6: Operator to undertake a review of the recovered recyclables activities on site against the agreed permit activities and to provide a copy of it to NRW.

With the total storage capacity of the building being approximately 1000 tonne, plus the 500 tonnes of storage capacity in Areas 3.2A, 3.2B, 3.2C, 3.2D, 3.2E, 3.2F & 3.4F, the permit needs to be amended to show 1500 tonnes of recovered recyclables would be held on site at any one time. (Appendix A)

Action 7: Operator to review improvement condition 9.48 response against the current OMP and update it to reflect the correct critical parameters for the operation of the bio-filter.

As per improvement condition 9.48, the following monitoring protocols will be implemented from January 2014:

a) ***Daily*** visual check of the media to look for areas that have shrunk or are dry in addition to ammonia checks. The recommendation for spraying is due to ammonia in the air stream; if present at high enough concentrations it will be deposited on the media at levels that can be toxic to the micro-organisms. Increasing spraying frequency should wash this ammonia off the surface of the media in principle. The surface spraying is daily activity and its frequency will be monitored in accordance with ammonia levels

b) Pressure drop – as the media ages, it degrades and compacts, leading to a higher pressure drop across the bio-filter. The SCADA system will be checked on a ***daily*** basis for pressure levels prior to the bio-filter.

c) Trace nutrients / pH – a relatively constant pH and level of trace nutrients (N as Nitrate or ammoniacal, S as Sulphate and Phosphorous). This analysis will be conducted on the leachate ***quarterly***.

d) Retention time - The depth of media will be measured on a ***monthly*** basis to determine if the level has reduced leading to a reduction in retention time.

e) Continued stack testing in accordance with Permit requirements for ammonia levels in the stack. ***Bi-annually***

f) Additionally we will ***annually*** monitor the ammonia levels post humidification and prior to the bio-filter.

g) On a ***daily*** basis humidity levels and temperature levels in the bio-filter will be monitored to ensure they are within the specified operating requirements.

h) ***Quarterly*** inspection report on the humidification system with cleaning requirements implemented.

i) Laboratory analysis of wood-chip media samples will be undertaken ***annually.***

Action 8: Operator to trend the critical parameters for the operation of the bio-filter in order for action to take place prior to an exceedence of the operating requirements.

Section a, b & g of the monitoring protocols will be monitored daily trended.

Action 9: Operator to include the monitoring protocol for the bio-filter in the EMS for the site to prevent non-compliance.

The monitoring protocols shown in Action 7 have been added to the EMS of the site.

Action 10: Operator to explain why the fans and airflow shows 0% on the WTT system.

Six of the Tunnels fans and Bio-Filter fans are not linked up to the WTT system as their inverts cannot speak to the computer system as they are a different type than the originals and are manually operated .This means they run full speed through the entire drying program.

NPT are currently getting quotes together to link the new inverters to the WTT system.

Action 11: Operator to confirm if the emissions from the new-duster have been routed into the airflow system linked to the bio-filter.

I was decided after talking to both OSIL & Carters engineering staff that it would not be beneficial to undertake the routing of the dust extractor airflow into the Bio-filter as it would not be a constant flow and might disrupt the biofilter performance.

Yours sincerely

Kevin Stewart
Health & Safety Manager