Noise Impact Assessment

Enviropower Energy from Waste, Lancing

XP3030XX-2013_July_Unrestricted Summary

1. The Enviropower Energy from Waste plant was permitted in 2006. During 2009 we were made aware of noise issues at the site. Subsequent investigations resulted in a number of infrastructure improvements being implemented, including the installation of Quiet Fan Technology (QFT) to the induced draft fans. In addition, we varied the permit to require the operator to develop and maintain a Noise and Vibration Management Plan (NVMP), and carried out a targeted noise-focussed compliance audit.
2. The Environment Agency has monitored the noise pollution using the BS4142:1997 'Method for rating industrial noise affecting mixed residential and industrial areas'.
3. The BS4142:1997 assessment shows that for most of the time no level of pollution that exceeded the residual noise levels by more than 3 dB was found. In order to apply BS4142:1997 it would be necessary to undertake further measurements at the noise source and use propagation calculations to determine noise levels at sensitive receptors. However, noise from regular and frequent trains is highly dominant in the acoustic environment and because of this, the impact of the site noise is considered minimal and further monitoring is not recommended at this time.
4. Detailed analysis of audit recordings made during monitoring has been undertaken. This shows that there are regular trains, around 11 per hour during the daytime with the last train just before 02.00hrs, re-starting 05.20hrs. This frequency suggests that trains should be considered as part of the usual acoustic environment. In addition, seagulls are also a regular feature of the usual acoustic environment during daytime and early morning; they tend to be heard from around 04.00 before the main dawn chorus and occasionally during earlier hours.
5. Using data collected during the night-time when trains are not running (02.00-05.00 hrs), it was possible to calculate the specific noise level from the site. Measurements taken once the site was operational and data collected during the corresponding time period when the site was shutdown were used. The results show a rating level over background of +7dB, which indicates the level of pollution is marginal. However, it should be noted this assessment represents a very limited period of time. Therefore, the results should be considered in the context of the existing acoustic environment. This has been taken into account when recommending further actions.
6. The site is regulated under an Environmental Permit XP3030XX which requires that:

   > *Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including but not limited to, those specified in any approved noise and vibration management plan to prevent of where that is not practicable to minimise the noise and vibration.*

7. Our monitoring found that a marginal level of pollution from site activities is measurable only for a limited time period (02.00 - 05.00). During the site audit, we concluded that the induced draft silencers were relatively small. Whilst a larger silencer could contribute to site noise reduction, the monitoring results indicate that the current measures are appropriate to the pollution risk. Therefore a larger silencer is not considered appropriate given the level of pollution measured.
8. We recommend that the NVMP is finalised to reflect our findings and recommendations. No further action is recommended at this time. However, we may reconsider this in the future should the situation change or if complaints are received.