Application WSCC/011/21

Applicants' response to Arun DC EHO comments dated 19 October 2021

Note: numeric references against each EHO comment are to the paragraphs in TOR R25 response letter dated 26/07/21.

13. EHO comment :

Paragraph 5 states "for existing receptors further from site, the screening is expected to provide up to a1 dB noise reduction. Environmental Health would query whether an up to1dB noise reduction is worth commenting on, it will not be perceptible to the human ear, and as stated, may only be up to 1dB. The table in paragraph 13 gives reduction in dB from screening, however, in all but R5, the reduction would not be perceptible to the human ear (i.e. less than 3dB).

Response:

Noted, but the EHO asked for the information on what impact the screening would have so it has been provided. The locations where the dB reduction is lower are not immediately adjacent to the site. The screening has predominantly been provided to reduce noise exposure for existing residents that are closest to the site, and prospective future residential development immediately adjacent to the site.

14. EHO comment:

Whilst there may be no accepted methodology for criteria for the assessment of demolition/construction noise impacts to sports fields, this does not mean that such an impact would not exist. Environmental Health still request clarification of potential noise impacts, especially given how close the site will be to the existing sports field.

Response:

The noise and vibration assessment includes drawings showing the mapping of the > 55 dB $L_{Aeq,T}$ construction noise level for a range of construction scenarios (see pages 50 to 56). These give an idea of the potential noise impact. ES figure 14.8 also shows noise impact of demolishing the WTS on the immediately surrounding area.

36. EHO comment:

Suggests a condition to address management of bund phasing.

Response:

The applicants would accept a suitably worded condition.

38. EHO comment:

Environmental Health suggests that a condition be agreed to which agrees the times of day that the EDG would be tested to avoid unnecessary night-time disturbance to local residents.

Alternatively, would it be possible to design the EDG container so that noise escape is designed out as far as reasonably practicable?

Response:

The enclosure of the EDG is an example of designing out noise escape. With the enclosure operating, the resultant noise levels at receptors R1-R3 during testing have been shown to be negligible. It is likely that the equipment would be tested during daytime periods and not night-time periods. However, regardless of the test period, the resultant noise level increases would be negligible. Therefore, a condition for times of testing would not be necessary.

40. EHO comment:

I understand that the air quality assessment has used estimated proposed development traffic based on estimated trip generation and not the maximum permitted. However, I would like to see the air quality assessment based on worst case scenarios i.e. the maximum number of vehicles permitted rather than estimates.

Response:

The air quality assessment considered the impact of the following traffic scenarios derived from data in the transport assessment:

- Do-minimum – which was used to establish the impact without the additional traffic from the operation of the ERF
- Do-something – which was used to establish the impact including the additional traffic from the operation of the ERF.

The trip generation used in the transport assessment is based on standard traffic estimating techniques informed by the operator and activity at other similar sites.

The traffic data used in the air quality assessment therefore includes a trip generation rate of 218 HGV movements a day based on the data from the TA. This compares to the extant permission that allows up to 240 movements a day.

It is notable that WSCC Highways, in commenting on the transport assessment, have raised no concerns with the trip generation and indeed stated that “The predicted HGV flows would remain under the limit set by the existing condition and as such the impact of the flows on the local network has been accepted.”

In the air quality assessment, the change in impact between the do-minimum and do-something scenario was calculated. Where this is greater than 0.5% of the AQAL consideration of the total concentration is needed to determine the magnitude of change.

Whilst a change to the flows for the existing use (from 218 HGV movements to 240) would increase the predicted do-minimum concentration it would also increase the predicted do-something concentration. The change in impact would therefore be very similar to that presented in the air quality assessment. We note that the overall do-something concentration would be slightly higher. However, even with a much more significant increase, the magnitude of change would still be described as negligible owing to the low baseline concentrations.

Therefore, the use of traffic data to include for HGV movements up to the permitted cap of 240 per day (an additional 22 movements over the projected level of 218 used in the scenarios) would not change the conclusions of the air quality assessment.

41. EHO comment:

If there are changes to air quality objectives or new objectives are introduced without consequent changes to the environmental permitting regime this leaves Arun with the potential for breaches of air quality objectives that the ERF may be contributing to but without any formal means of reducing emissions or requiring cooperation from the ERF.

Response:

This is unlikely to happen in practice; it can reasonably be expected that the permitting regime will keep pace with any changed or new air quality objectives.

42. EHO comment:

Section 6.93 of the report states that "the point of maximum impact occurs to the north east of the ERF on a small section of Station Road (i.e. an area where the annual mean AQAL does not apply)." Clarify why the AQAL does not apply here as there are several residential properties here around the junction with Ford Lane that have not been identified as sensitive receptors.

It is still unclear why residential properties such as Lock Cottage and no's 5 and 6 Station Road, Ford have not been identified as residential receptors and subsequently why the AQAL does not apply here, particularly as the point of maximum impact is shown on Figure 6 as being very close to if not on these properties. I also disagree that receptors R1 and R2 are closest to these properties. According to Figure 6 R3 and R4 are closer.

Response:

The point of maximum impact is in the road and not at any residential property, although some are nearby. The AQAL for annual mean applies at building facades, not on roads or in gardens or at kerbsides (see table 5 in the ES Appendix C emissions modelling).

The receptors were pre-selected before modelling and the properties referred to by the EHO were not scoped as receptors at that time.

As stated in the ES chapter 6 at 6.75, this is not an exhaustive list of all sensitive receptor locations, but a series of points chosen to represent areas sensitive to impacts from the proposed development. Where necessary additional analysis of dispersion contour plots has been undertaken to understand the spatial distribution of impacts. This includes the area around the receptors referred to by the EHO.

The reference to receptors R1 and R2 in the final sentence of the EHO comment is clarified as follows. The context is in relation to the road traffic modelling so refers to R1 and R2 on Figure 10, showing the road emissions receptors, not R1 and R2 in other figures such as figure 6, that are identified in relation to the ERF process emissions receptors.

It is accepted that using the similar numbering for these different sets of receptors is potentially confusing, but it is clear from Figure 10 that R1 and R2 from the road modelling are closer to the point of maximum impact than R3 and R4 from the process modelling.

43. EHO comment:

Emissions Mitigation Statement: Clarify the basis for calculation of the mitigation costs and 79 mitigation measures.

Benefits to the environment such as diversion of waste from landfill and reducing greenhouse gas emissions are large scale, global benefits which will not be felt in a big way locally whilst changes to traffic flow and emissions from the site could be. As such emissions mitigation should be included to protect local air quality. The emissions mitigation calculation should be based on worst case scenario traffic figures as mentioned in the response to point 40 above and should be based on the maximum permitted trip generation rate of the proposed development, not the net change from the existing use as a waste transfer station. This should be recalculated if necessary. Environmental Health would therefore expect the full figure of £23,329 (or a recalculated figure if maximum trips are not included) to be put towards emissions mitigation and measures should be costed out to demonstrate that the required spend on mitigation measures has been reached. All EV chargers should be Mode 3, 7kw chargers as a minimum.

Response:

The cost of provision of rooftop solar photovoltaic cells, EV chargers at all parking spaces, plus provision of cycle parking, showers and lockers, will clearly exceed the figure of £23,329.