

Pollution Control - HCC 2022 0071 - The Development of a Material Recycling Facility and Associated Infrastructure at Land Off Chickenhall Lane, Eastleigh

We refer to:

- Planning Statement, dated January 2022
- Environmental Statement, Volume 1, Chapter 7 Noise, dated January 2022
- Environmental Statement, Volume 1, Chapter 8 Air Quality, dated January 2022

1) Noise Pollution (in use)

The site locates amongst municipal works and industry. Access is via the industrial estates to the north and east. The largest cluster of dwellings are some 300m to the southwest on Campbell Road, and the closest, a few dwellings on Chickenhall Lane locate closer at 170m to the site and 35m from its access. The setting is on the edge of greenfield and railway and industry and brownfield.

The polluting character of the application is in summary:

- Housed reception and mechanical sorting of non-putrescible waste material for recycling purpose and recovery.
- Use of site vehicle reception and site circulation areas, access to and from and existing roads for the import of mixed waste and export of sorted materials.

Outline information on the building envelope indicates internally generated noise will be attenuated by the sound insulation of the fabric. This is a reasonable assumption and subject to detailing for this to be a purpose-built building, designed to comply with the local planning authority's noise limits. This can be conditioned for demonstration prior to commencement of the development and coming into use, as can be for equipment such as for ventilation and intakes and exhausts, pumps and so forth.

Openings for import and export by lorries are relevant consideration for noise impact assessment currently because their effect is a function of the site design. But these are attenuated by roller shutter doors which will be closed except for access to lorries when offload or collecting. Other embedded mitigation is the use of non-tonal plant and machinery, including movement alarms which other easily attract attention even over distance. These can also be conditioned.

Vehicles movements outside and induced traffic on the local highway network are 64 heavy vehicles in and out (124 total per day) and 120 cars total per day over a 24-hour operating cycle. Likewise, these can also be conditioned if the impact is found not to be adverse, exceeding noise limits at this time.

Noise limits will be on the cumulative impact of all activities on the site operating premises and an operating environmental management plan would be required, which should be embedded in the operators certified ISO14001 Environmental Management System. By doing so, the live system would be self-monitoring and self-correcting according to the best practice of 'plan - do - check - act'. We advise conditions also include monitoring on coming into use, periodically and record of results kept along with information on any remedial actions taken and complaints about nuisance received and resolved.

Looking at the impact of the facility, for the purpose of the EIA report the applicant measured background sound levels at two locations closest to the facility. These are at a few dwellings off Chickenhall Lane and on Campbell Road to the southwest. Daytime and night-time levels are

approximately similar and significantly, dwellings off Chickenhall Lane are much closer to the facility and potentially therefore more likely to be adversely impacted.

We are currently informed the Chickenhall Lane dwellings are homes to operatives on nearby sites and facilities, possibly the sewage treatment works. We recommend planning colleagues follow up on this and consider whether the occupants are less or the same sensitivity as dwellings on Campbell Road. This is important as it concerns whether an adverse residual impact resulting from the planned development is acceptable.

The background sound level survey was carried in May 2021 over one weekend (Friday to Monday continuously) and are said to be "*indicative*". We agree they provide an indication and possibly err on the cautious side as in 2021 Covid restrictions affected activity in the community and of industry and commerce. Also, generally noise levels are lower over weekends as industry and commerce can be less active. Nevertheless, the applicant can also carry out more measurements over time and wind directions to help inform the noise limits we will condition.

How the information is used is more important for decision making on the planning application as simple averages or means for example can underrepresent the background sound levels experienced by dwelling holders. We have concern on this as explained in the following two paragraphs and ask for the applicant to change its report.

The concluded "*representative*" background sound levels for the purpose of the EIA are daytime L90 44 dB(A) at both locations and night-time L90 40 dB(A) and 38 dB(A) at Chickenhall Lane and Campbell Road dwellings respectively. Looking at the results, we find the daytime L90 at Chickenhall Lane dwellings is lower than has been summarised by the EIA. For example, daytime afternoon and evening levels are nine decibels lower at Chickenhall Lane. We are concerned about this because it is fair and reasonable to assess the impact to occupants during time of the day when this occurs. For example, over an hour of daytime operation, according to the clock, background sound level at that time is compared to the operating noise of the facility in that hour. Same at night but over 15-minute time clock periods.

Likewise, at Campbell Road dwellings, the average L90 noise levels mentioned above over report background sound levels by up to 11 decibels. This is of greater significance and a concern. The consequence of overestimating the background sound level is that the design of embedded mitigation measures such as sound insulation of the facility's building envelope, attenuation of plant and equipment noise etc has been carried out to an 'underestimated' target. That is, not enough to prevent adverse noise impact during the quieter periods of the day, such as in the afternoon for example. The same during the night.

Therefore, because the noise control or mitigation is underestimated, we cannot support the applicant as it currently stands. We advise amendment is sought to reduce the risk of adverse noise impact and to enable reasonable conditions for approval to be drafted.

Moving on to the assessment of noise emissions from the facility, we note no correction for tonal or intermittent character is necessary because there will be none. This is acceptable if all vehicles are fitted with an alternative broadband movement alarm, or vehicles will not reverse or manoeuvre with a tonal type of alarm outside of the building and the building envelope attenuates such sounds and other equipment with characterful emission inside. A captive fleet of lorries for example, can operate broadband movement alarms.

The EIA predicts impacts of five and seven decibels over the daytime and night respectively at Chickenhall Cottages. But these levels will exceed the Local Planning Authority's limits by nine to 13 decibels. The exceedance will be higher than this because as explained above, the background sound level has been overstated. Looking at Campbell Road dwellings, daytime and night-time impacts exceed the limits, and they need to be reduced considerably to make this application acceptable.

Offsite, once joining the main public highway in Eastleigh, heavy and light traffic induced by the development will naturally increase noise levels, but the change will be less significant than experienced by dwellings on Chickenhall Lane. The EIA predicts an average or mean change over a 12 hour of ambient noise of two decibels. But this belies the effect as experienced by a dweller in the hour say. We ask what the impact is to dwelling holders say at breakfast time and lunchtime for example and on a weekend? Being adversely impacted during more sensitive times and possible also by new peak or instantaneous noise affects the quality of living and therefore is material together with premises noise on whether the planned development is acceptable. We recommend the applicant looks more closely into the details of adverse impacts the development will bring.

According to the above, we disagree with the EIA prediction of "*negligible impact magnitude to all receptors*" and therefore object subject to additional mitigation being proposed. This is likely to be more than has been set out in Section 7.5.3 "*Additional Noise Mitigation*" and should be detailed and explained before planning consent is granted.

Regarding vibration from road traffic during construction and operation, the EIA does not inform on the condition of the road near Chickenhall Cottages and therefore the effect of heavy vehicles. If the road surface is suitable for heavy vehicles or strengthened appropriately, vibration impact may not be adverse. Maintenance of the road thereafter would sensibly be included in the operating environmental management plan and the operators certified ISO14001 Environmental Management System.

In summary, we object to the operating noise impact for the reasons given above and ask planning colleagues to seek amendment of the EIA and improvement in the performance of additional mitigation measures to protect all sensitive receivers. These in our opinion are within Best Available Techniques for an Environmental Permit as well. We also require more information on reducing vibration on access roads close to the premises, such as near Chickenhall Cottages.

2) Odour Pollution (in use)

The EIA predicts in a south southeast and south downwind effect to Chickenhall Cottages a risk of odour impact occurring from residual leachate or other organic material in the mixed pre recycled waste. We assume incoming loads will be sheeted or sealed and therefore the controls on odour within the facility building and the closing roller doors after a lorry has passed through will be sufficient to prevent odour experienced at Chickenhall Cottages, the closet dwellings. We ask planning colleagues to seek further information on this because if for practical sake the roller shutter doors are open sufficient for a puff of odour to escape, an impact will likely occur downwind.

Our experience is that this leachate and organic material have potent odours depending on moisture content of the waste materials and temperature. A single exposure would be adverse because of this and therefore, the EIA's assessment that a six per cent chance reduces the significance of the impact is disagreed.

We also ask if the reference meteorological conditions used by the EIA are sufficiently representative of the local wind rose, air flow over ground at near ground level to Chickenhall Cottages and Campbell Road dwelling and other relevant atmospheric conditions such as temperature and inversions? It seems likely the odour potential from leachate and organic matter is greater in summer and hot days and may also depend on other factors such time and the way the incoming recycled materials have been handled at source, at source. It will be relevant to know more about the control or acceptance criteria the facility will operate to prevent odour emissions.

We ask for clarification on whether an odour will be emitted from lorries and from the facility and if there will be despite the above controls and after allowing for local conditions, what additional mitigation will be provided to prevent a residual impact occurring in generally and on 'high emission / more impacting days' what will be done to prevent odour?

We also recommend odour control is included in the operating environmental management plan and the operators certified ISO14001 Environmental Management System.

3) Air Pollution (in use)

Air quality deteriorates in the presence of vehicular emissions of nitrogen dioxides, other oxides of nitrogen and fine or respirable particulate matter. When exceeding a proportion of the Air Quality Objectives, vehicular emissions harm. The upper limit is not an absolute litmus on health impact unfortunately. In recognition of this, Eastleigh Borough Council designates Air Quality Management Areas (AQMA) according to national policy. For example, the A335 and M3 which will inevitably be used by vehicles destined for the facility are AQMA monitored by us. The significance of these is the cumulative impact current and future planned development have upon dwellings and other sensitive locations.

Regrettably, there are no controls available to reduce impacts of concern to dwellings now and into the near future other than reducing development and in time seeing a reduction due to more use of electric vehicles and cleaner combustion / exhaust control.

Currently we see redevelopment of existing residential site for new dwellings alongside the A335 for example at ordinary or established set back building lines being required to consider alternative locations on the building at further distance for intake of fresh air. For existing dwellings, there is no choice and therefore they are more impacted than we would prefer. The level of pollutants in the AQMA increases the risk of harm to dwelling holders.

The EIA scopes in human health risk assessment from vehicular emissions and predicts impacts for scenarios that include other committed developments. We are not traffic engineers and so ask planning colleagues to ask for comment on the traffic model proposed by the applicant for this application.

Vehicles induced traffic on the local highway network are as mentioned 64 heavy vehicles in and out (124 total per day) and 120 cars total per day over a 24-hour operating cycle. The EIA predicts the impact of these across the local highway network and within the AQMA is small and would not exceed the Air Quality Objectives when taking account of background and other development related emissions. Nitrogen dioxide (NO₂) will be up one per cent against the Objectives (+0.15 ug/m³) and particulates (PM₁₀ size of 10 micrometres or less) less than one percent (+0.18 ug/m³). In these terms, the EIA predicts negligible impact from vehicular emissions and not significant health effect.

As the traffic induced by the facility can be conditioned for the operating character applied for, the risk of more traffic appears none. And we note electric vehicle charging facilities will be provided at the facility to assist staff having and adapting to use these.

Operating the AQMAs is a recurring annual cost to Eastleigh Borough Council, and we ask for contribution to this from the applicant.

Regarding dust from the facility, the EIA is not clear on whether operations of will generate dust or not. We therefore anticipate tipping, handling, sorting and batching inside the building only will contain all dust emission from loose particulates and abrasion during processing. Presumably, there will some filtration in the ventilation and exhaust systems and outdoor areas will not be used for yard purpose. And again, if roller shutter doors are practically open, dust will escape. Please ask for more information on this to address concerns to dwellings on Chickenhall Lane and Campbell Road.

4) Construction Pollution

The EIA predicts no significant effects from construction noise, vibration and dust after implementation of good practice and mitigation measures. A Construction and Environmental Management Plan will be implemented, and this should be a condition for the planning approval. The outline of these described by the EIA is appropriate and details should be worked out when constructions works are programmed, and the methods and plant and machinery are known. We agree monitoring and audit is necessary and while making best plans and carefully scheduling work stages and control and mitigation measures, the CEMP should be responsive to complaints and seek to resolve and abate the problem within 24 hours.

15 March 2022
