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Our Ref: 7625

17th December, 2020

EPA
Environmental Licensing Programme
Office of Environmental Sustainability
Johnstown Castle Estate
Co Wexford

ATTN: Ms. Dorota Richards

RE: Air Pollution Act, 1987 Licensing of Industrial Plant - Air Emissions Licence

Galway County Council Ref No: AP13/20

EPA Reg Ref No : E0007-01

Response on behalf of John Madden & Sons to appeal submitted on Air Emissions Licence

Dear Inspector,

I refer to the appeal to the EPA in November 2020. Two submissions were made to the EPA.

In terms of the first appeal, the submission makes a number of points in terms of general planning which are not relevant to the air emissions application. In dealing with the air emissions issues raised, the proposed plant will be in compliance with the highest standards and will not give rise to breaches of the national air quality standards. The dust, noise and odour will all be within the national standards/limits. There is ongoing environmental monitoring at the site to ensure same. In relation to health and safety and environmental items as mentioned these matters will be further addressed in the detailed response below and will be covered by the applicant in all operations through continuous monitoring, management and sampling.

The second submission was made to the EPA by TMS on behalf of Lagan Asphalt, who are a business competitor of the applicant.

Directors: Michael Shelly (Chairman) C. McGovern (Managing Director) E. Connaughton (Company Secretary)
B.J. Downes D. Grehan M. McDonnell R.F Tobin

Associate Directors B. Carroll M. Casey P. Cloonan P. Cunningham B. Gallagher
B. Heaney A. Mulligan S. Tinnelly C. Kelly T. Mackey

The appeal raises the following points:

1. Air Model Assessment Report – Alleged Error in the Input parameters

There is no error in the input parameter or assessment. The proposed plant will operate (as confirmed by the supplier Parker in Attachment A) safely within the air emission output levels studied in the AWN air model, which are safely within EPA guidelines.

2. Emissions in relation to Air Quality Standards

All emissions will be fully controlled *i.e.* the emissions will be monitored as per conditions of the licence and the planning and the applicant is fully aware of the limits and will be operating within the limits requested in the application which are well within the limits granted. These emissions will not be uncontrolled as stated. The proposed limits are in accordance with the EU Air quality directives and national legislation.

3. Appropriate Assessment Screening.

A Natura Impact Statement (NIS) was submitted with the planning permission and application and is included for reference (Attachment B). The site was fully assessed and granted planning permission by An Bord Pleanála accordingly after appeals. The emissions at the nearest sensitive receptor are within the national standards and therefore do not require further assessment/modelling. The NIS was submitted with the application.

The Lagan Asphalt Appeal makes the three main points which are answered as summarised above and these are further addressed in detail point by point below.

1. Response

ITEM 1

'A significant error was made in the Screening Air Model Assessment Report which resulted in Galway County Council making a decision based on incorrect information'

The proposed development was assessed at 70,000 Nm³/hr in the air model. This is above the maximum rate proposed in the application of 63,665 Nm³/hr. It is incorrect to state that the proposed maximum hourly rate is 78,285 Nm³/hr. The proposed emission volume is 63,665 Nm³/hr as per the application. The modelled figure therefore is greater than the proposed maximum air discharge rate.

The Lagan appeal states that the air emissions limits proposed cannot be achieved. The appellant puts forward a theoretical worst-case scenario which will not arise. The emissions outlined by the appellant are neither proposed / requested in the application or intended for use in the operation of the plant. The emissions are as submitted and as modelled.

The proposed limit values are as per the 2020 application and will be achieved based on the experience of the plant manufacturer as stated in Attachment A (Letter of confirmation from Parker). The SO₂ emissions are primarily influenced by two factors: the sulphur content of the fuel and the rate of absorption in the alkaline dust layer formed on the filter. By using fuel with



lower sulphur content or achieving a higher degree of absorption a reduction of SO₂-the emissions proposed can be accomplished so SO₂ can be controlled to within the limit proposed in the application.

The results of the dispersion model for the plant operation indicate no breaches of the relevant air quality standards for the protection of human health and vegetation. The applicant considers that emissions from the exhaust stack should be restricted to those modelled. The applicant is fully aware that failure to comply with the limits of the air pollution licence would result in enforcement.

ITEM 2

'The operation of this asphalt plant will result in uncontrolled emissions that will breach the Air Quality Standards';

Point No. 2 by TMS on behalf of Lagan Asphalt appears to make further assumptions on what is applied for and a repetition of point 1 for a case which is not proposed. The proposed emissions standards and volume are clearly stated in the application. The requirement for increase limits based on air quality standards from 2006 (14 years ago) does not arise. The proposed emission limits in the application will be complied with.

The application has set out the proposed emissions limits. The Air Licence Application sets out the parameters and requirements of the Air Quality Standard Regulations, which define acceptable levels of named substances in ambient air in accordance with EU Directives are met. In particular, levels of sulphur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) with potential to adversely impact upon the nearest sensitive receptors, are met.

No changes to the application or assessment is required, as the plant will operate within the limit value as per the 2020 application and as confirmed above at Item 1 (Parker Letter).

ITEM 3

'Failure to complete an Appropriate Assessment Screening which would have demonstrated that a full Appropriate Assessment was required for the proposed development'.

The site is not located in an area designated for natural conservation. An AA and NIS was completed for the development with significant consultation with the NPWS. The planning application was granted in 2018 by An Bord Pleanála – Ref No. ABP-301871-18. Given the proposed limits and Air emission modelling, the proposed plant will operate within the statutory air and environmental limits as set out by national and EU regulations.



Air quality significance criteria are assessed on the basis of compliance with the appropriate standards or limit values. The applicable standards in Ireland include the Air Quality Standards Regulations 2011, which incorporate European Commission Directive 2008/50/EC which has set limit values for the pollutants NO₂, SO₂, particulates (PM₁₀ / PM_{2.5}) and CO (see Table 1 of the AWN Screening Air Modelling of emissions). Council Directive 2008/50/EC combines the previous Air Quality Framework Directive (96/62/EC) and its subsequent daughter directives (including 1999/30/EC and 2000/69/EC).

Air emissions from the facility were modelled using the USEPA approved AERSCREEN air dispersion model (1). AERSCREEN is an approved regulatory screening model which uses a full set of meteorological conditions including all stability classes and wind speeds to find the maximum short-term impact. Screening models are usually applied before a refined air quality model to determine if more detailed modelling is needed. Thus, AERSCREEN is designed to be conservative in its prediction of ambient pollutant concentrations. As the screening model is based on a conservative scenario the emissions to air from the plant operating in accordance with the licence limits, would not result in the breach of the relevant air quality standards for the protection of human health and vegetation.

Maximum annual mean concentrations of NO₂ and SO₂ were predicted within the nearest designated sites of the Castletaylor Complex SAC & pNHA and Ardrahan Grassland SAC. Concentrations were well within their respective limit values for the protection of ecosystems and will not pose an issue to the designated ecological receptors.

The above is confirmed on the basis of objective scientific information, that the activity, individually or in combination with other plans or projects, will not have a significant effect on any European sites. This is based on the scale and nature of emissions to air from the asphalt plant, and their distance to terrestrial habitats. Air dispersion modelling demonstrates that, at the boundary of the asphalt plant site, emissions from the activity will not result in ground level concentrations which exceed the relevant air quality standards for the protection of vegetation and the environment; thereby indicating that the impact from the resultant ground level concentrations at the European sites would be negligible.

2. Conclusion

The assessment was carried out to ensure that the air emissions from the Asphalt Batching Plant, based on the proposed licence limit values, would not lead to levels of pollutants which would exceed the air quality guideline values. The assessment determined the ambient impact at the boundary of the site and beyond to ensure that ambient air quality standards are not exceeded. Under this scenario, all pollutants were found to be well below the environmental assessment levels, peaking at 70% of the limit values when worst case background values are



included, and thus will pose no health risk to the nearby community.

Maximum annual mean concentrations of NO₂ and SO₂ were also predicted within the nearby designated sites of the Castletaylor Complex SAC & pNHA and Ardrahan Grassland SAC. Concentrations were well within their respective limit values for the protection of ecosystems and will not pose an issue to the designated ecological receptors.

The proposed development will be completed as designed and we confirm the following accordingly:

- (i) The plant will not be injurious to public health.
- (ii) The plant will not have a deleterious effect on flora and fauna or damage property.
- (iii) The plant will not impair or interfere with amenities or with the environment as set out in section 4 of the Air Pollution Act.

To repeat the proposed air limits as detailed in table 3 of the AWN assessment are as follows:

Parameter	Worst-Case Emission Concentration (mg/Nm ³)	Emission Rate (g/s)
NO ₂	200	3.89
CO	850	16.53
TSP (PM10) Note 1	20	0.39
SO ₂	100	1.94

Note 1 For the purposes of this modelling assessment it has been assumed that 100% of TSP emissions are of the size fraction PM10

The proposed limits are in accordance with the EU Air quality directives and national legislation.

The above are the emissions proposed under this application and the emissions as required for use of an asphalt plant as granted planning permission by An Bord Pleanála and for operation by a reputable local contractor to allow competitive tendering with locally and sustainably sourced materials for local construction and roads projects.



Please do not hesitate to contact us if you have any queries or if you would like to discuss any aspect of our submission in more detail.

Yours faithfully,



John Dillon
Senior Environmental Engineer
For and on behalf of TOBIN Consulting Engineers

Attachments:

- A. Letter of confirmation from Parker Plant dated 17th December 2020
- B. Natura Impact Statement

