

MEMO

Office of Environmental Sustainability

To: Board Date: 05 January 2017

From: Gavin Clabby

Subject: Appeal of Air Pollution Act licence granted to M11 Enniscorthy

JV, Scarawalsh Roundabout, Enniscorthy, County Wexford.

Appeal registration No: E0002-01

Cross Office Implications: No Approved for Board by: S. O'Donoghue

Recommendation: The Board are asked to APPROVE the decision recommended hereunder with respect to the appeal submitted to the Agency in relation to the Air Pollution Act licence granted to M11 Enniscorthy JV by Wexford County Council, and also to APPROVE the approach to be taken by the Agency for future appeals with regard to noise, as well as with regard to prior decisions relating to air pollution made by a planning authority.

Background

New legislative requirements for the Agency came into effect with the enactment of the Environment (Miscellaneous Provisions) Act 2015. As of the 31 August 2015, the Agency is the statutory authority for appeals in relation to Air Pollution Act (APA) licences. Prior to this date the statutory authority for these appeals was An Bord Pleanála.

Air Pollution Act licences are single media licences for certain industrial processes not included in the First Schedule of the EPA Act 1992 as amended, and are granted by local authorities under the Air Pollution Act 1987 as amended.

The following third party appeal was lodged with the Agency on 6th September 2016, by Ms Elayne Grant of Enniscorthy, County Wexford:

Appeal in relation to a decision by Wexford County Council to grant a licence under the Air pollution Act 1987 (WCC reference number ENV/APL/16/04), to M11 Enniscorthy JV for atmospheric emissions at a site located at Frankfort, Gorey, County Wexford.

The appeal was made on the grounds that, in the opinion of Ms Grant:

• The level of technical information supporting the licence application was inadequate to fully assess the potential environmental impacts of the operation in question. In particular Ms Grant contends that suitable air dispersion modelling was not carried out as part of the licence application.

 The conditions of the licence are insufficient for an operation of this nature. In particular Ms Grant refers to lack of limitation, or control, of operating hours or noise, as well as the inadequacy of the specified monitoring of stack emissions.

The licence relating to this appeal is for a proposed asphalt plant which is to be located at a rural site in County Wexford, 5 km southwest of Gorey and 4.5 km northeast of Camolin, and set in a hollow adjacent to an existing section of the motorway. A site visit was carried out by this inspector on the 22 November 2016.

Upon receipt of the appeal the Agency requested from Wexford County Council (WCC) a copy of the licence and the executive order, as well as all documents relating to the licence application. From a survey of the documentation received the following was noted:

- WCC issued a licence (ref. ENV/APL/16/04) on 12 August 2016, specifying ELVs for the main stack, as well as specifying dust deposition limits, monitoring requirements and fuel types.
- This licence does not specify conditions which limit or control noise or operating hours.
- The application documents forwarded by WCC did not include air quality impact assessment or a noise impact assessment.
- No submissions were received by WCC during its assessment of the licence application.
- No Appropriate Assessment screening was carried out by, or on behalf of, the consenting authority (WCC).

On 19 October 2016, the Applicant submitted to the Agency, an observation on the above appeal by Ms Grant (this observation document included an air quality impact assessment and a noise impact assessment).

On 10 November 2016, and in accordance with Agency procedure for APA appeals, this observation made by the Applicant was forwarded to the Appellant; the Appellant did not submit any comments on the Applicant's observation before the specified deadline of 5pm on 1st December 2016.

Consideration of the Appeal

As part of the assessment of the appeal, I have evaluated the above third party appeal (from Ms Elayne Grant), as well as the observation on that appeal submitted by the Applicant (M11 Enniscorthy JV) and all relevant appeal correspondence.

This inspector's report provides comment and recommendations following examination of the appeal.

This report considers the one valid third party appeal and the one valid first party observation on the appeal. The first party observation is not dealt with separately; rather it is, where appropriate, referred to in the assessment of the third part appeal. No other appeals or observations in relation to the licence in question were submitted.

The Appellant makes two points of objection to the licence decision made by WCC. The main issues raised in the objection are summarised below, however, the original appeal should be referred to at all times for greater detail and expansion of particular points.

1. Alleged inadequacy of the licence application:

It is submitted by the Appellant (Ms Grant) that the level of technical information supporting the licence application was inadequate to fully assess the potential environmental impacts of the operation in question. In particular Ms Grant contends that the licence application did not include suitable air dispersion modelling. Ms Grant notes that some desk based calculations were presented in the application, but these calculations did not take account of topography, weather conditions or ground level concentrations.

Furthermore, Ms Grant contends that that the existing baseline air quality in the area was not considered; she furthermore states that background concentrations of relevant parameters would be elevated due to the proximity of the traffic on the N11 roadway. Ms Grant concludes that without the required impact assessment it is impossible to demonstrate that emissions from the plant will not cause serious health and air quality issues, or a breach of air quality standards.

In the consideration of this appeal it was noted that no supporting technical data was submitted with the application.

The Applicant (M11 Enniscorthy JV) subsequently included, in its observation on the appeal, a screening air modelling assessment.

The screening model used by the Applicant was AERSCREEN. This model was developed by the USEPA in 2011, and is one of the screening models referenced and approved in the Agency's guidance¹ on air dispersion modelling.

This inspector is satisfied that the screening model selection was appropriate and in accordance with the Agency's guidance, and furthermore, is satisfied that advanced modelling was not required. (Screening models, by design, are conservative in comparison to advanced models.)

The screening model software was used to predict the ambient pollutant concentrations of NO2, SO2, particulates (PM10/PM2.5), Benzene, Arsenic and Cadmium resulting from the main emission stack. Complex terrain data and worst case climatic conditions have also been incorporated into the screening model assessment. I consider that these data and conditions adequately reflect the nature of the site.

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¹ Air Dispersion Modelling from Industrial Installations Guidance Note (AG4), EPA 2010.

The screening model is based on the conservative scenario where the plant is operating at full load (licence limits) for 24 hours a day, 365 days for one year².

As part of this assessment regard was had to the Agency's guidance which requires that the process contribution (PC) from plant is added to the background concentration (BC) to obtain the predicted environmental concentration (PEC). In order to assess the impact, each PEC is compared with an appropriate environmental assessment level (EAL).

In this case the background concentrations are taken from available 2014 monitoring data for urban monitoring locations in Enniscorthy, Rathmines and Balbriggan; this is considered an appropriate method for conservatively estimating the cumulative impact of road traffic and asphalt plant emissions. It is not considered there is anything in the topography of the site that could lead to emissions from the existing roadway exceeding those of the urban monitoring locations chosen.

The appropriate EALs are taken to be the relevant air quality standards taken from the Air Quality Standards Regulations, 2011 and Council Directive 2004/107/EC³.

The table below details the results of the screening model.

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² Plant is proposed to operate 05:00 to 19:00 Monday to Friday, and 06:00 to 16:30 on Saturdays.

³ Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air. (Air Quality 4th daughter Directive; not yet replaced by CAFÉ Directive.)

Parameter	Averaging Period	Process Contribution (µg/m³)	Ambient conc. (µg/m³)	Max PEC (µg/m3) Predicted Environmental Conc. = Process contribution (PC) + Ambient Conc. (AC)	EAL (μg/m³)	PEC as % of EAL
Nitrogen Oxides	99.8%ile hourly	19.6	122	141.6	200	70.8
(as NO ₂)	Annual	1.96	13.0	15.0	30	50.0
SO ₂	1 hour (99.73%ile)	51.2	21.5	72.7	350	20.8
	Annual	5.12	4.0	9.1	20	45.5
PM ₁₀	Daily (90.4%ile)	2.56	22.0	24.6	50	49.2
	Annual	0.26	22.0	22.3	40	55.8
PM _{2.5}	Daily (90.4%ile)	1.79	13.2	15.0	50	30.0
	Annual	0.18	13.2	13.4	25	53.6

Results of the screening model above for the plant operation indicate no breaches of the relevant EALs.

As the screening model rationale is based on a conservative scenario it is clear from the table that the emissions to air from the plant operating in accordance with the licence limits, and in conjunction with emissions from road traffic, would be unlikely to result in the breach of the relevant air quality standards for the protection of human health and vegetation, beyond the site boundary for the proposed asphalt plant.

Recommendation: Having considered the above relevant points of the appeal from Ms Grant, with respect to the alleged inadequacy of the licence application, as well as the data in the observation on the appeal from the Applicant, I consider that the grounds of appeal are valid. However, the Applicant has addressed the deficiency and the Appellant has been given the opportunity to comment on the improved data. I consider that the improved data is appropriate and gives a conservative estimate of the impacts of the emissions from the activity. Based on that estimate, it is concluded that the activity will not cause air pollution, with respect to air quality standards. Accordingly, no change to the licence is required to achieve compliance with the requirements of Air Pollution Act 1987 as amended, with respect to air quality standards.

2. Alleged insufficiency of the licence conditions:

Noise/operating hours: The Appellant (Ms Grant) states that she is concerned that the plant could be a cause of noise nuisance in the area, and in particular that the licence issued by WCC does not impose any noise conditions, nor does it control operating hours.

<u>Stack emissions monitoring:</u> Ms Grant also states that the monitoring conditions for plant stack emissions are inadequate. She contends that rather than the long term biannual monitoring currently specified, the licence should require monthly monitoring for the first year of operation and reviewed thereafter on the basis of the first year's monitoring results.

Noise/operating hours

In the consideration of this appeal it was noted that the WCC did not impose conditions in the licence relating to noise or operating hours. It also apparent that noise impact is not, as a matter of practice, assessed or controlled by WCC in its licences issued under the Air Pollution Act.

Section 4 of the Air Pollution Act 1987 as amended, defines air pollution as:

"Air pollution" in this Act means a condition of the atmosphere in which a pollutant is present in such a quantity as to be liable to—

- (i) be injurious to public health, or
- (ii) have a deleterious effect on flora or fauna or damage property, or
- (iii) impair or interfere with amenities or with the environment.

Where pollutant is defined (in the same Act) as:

any substance specified in the First Schedule [of the Act] or any other substance or <u>energy</u> [emphasis added] which, when emitted into the atmosphere, either by itself or in combination with any other substance, may cause air pollution;

Looking at the above definitions it is clear that noise, under the Act, is regarded as pollution and, therefore, noise limitation and control should be considered for licences issued under the Air Pollution Act 1987 as amended. Noise can cause a nuisance and loss of amenity, and different levels of noise are appropriate at different times of day and in different locations. Accordingly, I agreed with the Appellant's submission that conditions relating to noise and operating hours should be imposed on the operation of this licence.

In its observation on the appeal, the Applicant included a noise emissions report which concluded that the operation of the plant will comply with the strictest (night time) noise emission limit at the noise sensitive locations (45dB) as set out in its contract with Transport Infrastructure Ireland for the construction of Enniscorthy

bypass. The nearest receptor to the proposed industrial plant is a dwelling 380 metres to the northwest, and on the opposite side of the motorway. The noise emission report furthermore states that the existing roadway traffic will render any noise from the industrial plant inaudible. The assessment, and conclusions, in the noise emissions report were considered acceptable.

The Applicant also proposes to carry out noise monitoring at the two nearest noise sensitive locations following the commissioning of the proposed plant. It is proposed that this monitoring will be weekly for the first four weeks and quarterly thereafter.

The Applicant furthermore states that it proposes to operate the plant for the hours specified in the licence application form⁴.

I am of the opinion that the industrial plant would comply with the Agency's criteria for noise emissions, and furthermore, it would be appropriate to apply these criteria as conditions in this licence in order to ensure that the Applicant meets the standards it has itself proposed for the asphalt plan.

Stack emissions monitoring

In its observation on the appeal, the Applicant proposes to monitor stack emissions monthly for the first year of operation of the plant and to review thereafter, based on the monitoring results for the previous year (this being the monitoring frequency mooted by Ms Grant in her appeal).

Accordingly, I recommend that the Agency should adopt a decision in the following terms:

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 $^{^4}$ Plant is proposed to operate 05:00 to 19:00 Monday to Friday, and 06:00 to 16:30 on Saturdays.

Recommendation: Having considered the above relevant points of the appeal from Ms Grant, with respect to the alleged insufficiency of the licence conditions, as well as the data in the observation on the appeal from the Applicant, the Agency is of the view that the particular grounds of Ms Grant's appeal are valid, and that the decision of Wexford County Council not to impose conditions relating to noise emissions was not in accordance with the requirements of the Air Pollution Act 1987 as amended.

In light of the above conclusions, the following changes should be made to the licence, in accordance with the definition of air pollution specified in the Air Pollution Act 1987 as amended.

Insert the following terms, conditions and schedules:

Glossary of Terms

Daytime: 0700 hours to 1900 hours Evening Time: 1900 hours to 2300 hours

Night-time: 2300 hours to 0700 hours

Noise-sensitive location (NSL): Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.

Emissions to Atmosphere

- 14. Noise from the plant shall not give rise to sound pressure levels measured at noise sensitive locations in the vicinity of the plant which exceed the limit value(s) set out in Schedule 1.1(a).
- 15. The industrial plant shall only be operated 05:00 to 19:00 Monday to Friday, and 06:00 to 16:30 on Saturdays.
- 16. The licensee shall carry out noise monitoring at the two nearest noise sensitive locations. This monitoring shall be undertaken weekly for the first four weeks of operation of the plant, and quarterly thereafter, and shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.

Schedule 1.1(a): Emissions to Atmosphere, Emission Limit Values (Noise)

Daytime dB L _{Ar,T}	Evening time dB L _{Ar,T}	Night-time dB L _{Aeq,T}	
(30 minutes)	(30 minutes)	(15-30 minutes)	
55	50	45 ^{Note 1}	

Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise-sensitive location.

Schedule 1.2(a): Emissions to Atmosphere, Monitoring Schedule (Noise)

Period	Minimum Survey Duration Note 2	
Daytime	A minimum of 3 sampling periods at each noise monitoring location	
Evening-time	A minimum of 1 sampling period at each noise monitoring location.	
Night-time Note 1	A minimum of 2 sampling periods at each noise monitoring location.	

Note 1: Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.

Note 2: Sampling period is to be the time period T stated as per *Schedule 1.1 Emission Limit Values (Noise)*, of this licence. This applies to day, evening and night time periods.

Amend the existing schedule 1.2 (stack emissions) as follows:

Frequency

Samples shall be taken monthly for the first year of operation of the plant with frequency to be reviewed thereafter, based on the monitoring results for the previous year.

Appropriate Assessment

The industrial plant to which the present appeal relates comprises a mobile asphalt batching plant and is to be located at a rural site in County Wexford, 5 km southwest of Gorey and 4.5 km northeast of Camolin.

The proposed emissions from the plant include the following:

- Fugitive dust emissions from aggregate storage and transportation.
- Bitumen fumes through the vent pipes on the bitumen storage tanks.
- Process emissions of NOX, NO₂, CO₂, CO, VOC's and dust from the chimney stack.

There are two European sites located in the vicinity (within 15 km) of the proposed industrial plant: Slaney River Valley SAC (Site codes: 000781) and Cahore Polders and Dunes SAC (Site code: 000700). However, it is considered that only the European site on the Slaney River is within the zone of influence of the plant's emissions (2.5 km from site of proposed asphalt plant). This zone of influence was determined on the basis of the pathway distance for the proposed air emissions to the European site at the Cahore Polders (13.5 km). Whilst not strictly relevant in the context of an air pollution licence, it is noted that there are no process discharges to water/groundwater form the industrial plant. (A discharge to water would require a

licence under the Local Government (Water Pollution) Acts, and any impacts would be dealt with under that legislation.)

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European site on the Slaney River (see appendix).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective scientific information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination was made in light of the scale and nature of emissions to air from the industrial plant, and their distance to terrestrial habitats. Air dispersion modelling demonstrates that, at the boundary of the asphalt plant site, emissions from the proposed 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 site (2.5 km from site of asphalt plant) would be negligible.

Recommendations and notes

It is recommended that the Agency, in accordance with section 34 of the Air Pollution Act 1987 as amended, direct Wexford County Council to grant the licence (reference number ENV/APL/16/04) under the Air pollution Act 1987 to M11 Enniscorthy JV for atmospheric emissions at a site located at Frankfort, Gorey, County Wexford, subject to the amendments detailed in this report.

In making the above recommendations the inspector considered, *inter alia*, the impact of noise from the proposed industrial plant on the surrounding environment, and specified amendments to the licence accordingly (noise impact was not considered by Wexford County Council at the licence application stage, nor were noise related conditions specified in the licence). It is recommended that the Agency communicate with all local authorities to the effect that future appeal directions to grant a licence will not be made without the consideration of noise as air pollution; with air pollution being defined in section 4 of the Air Pollution Act 1987 as amended.

Also, during the assessment of this appeal it was observed that the possibility may arise where any planning permissions for the industrial plant or associated works may specify conditions for the industrial plant that relate to air pollution. This observation raised the question as to which permitting regime takes precedence in this regard.

Section 56 of the Air Pollution Act 1987 as amended (Application of Local Government (Planning and Development) Act 1963) provides clarity:

- (1) Where a licence under this Act is granted in relation to industrial plant and permission under Part IV of the Local Government (Planning and Development) Act, 1963, has been granted in respect of the same plant, any conditions attached to that permission shall, in so far as they relate in any way to air pollution, cease to have effect.
- (2) The grant of a permission under Part IV of the Local Government (Planning and Development) Act, 1963, in relation to any premises shall not prejudice, affect or restrict in any way the application of any provision of this Act to such premises.

It is interpreted from the above extract that conditions specified in a relevant planning permission that relate in any way to air pollution (including operating hours relevant to emissions) will cease to have effect once an Air Pollution Act licence has been granted.

Gavin Clabby Inspector ELP

Appendix

European Site (site code)	Distance/ Direction from site of proposed industrial plant	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives
Slaney River Valley (SAC 000781)	Approximately 2.5 km west	Annex I habitat: * Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) Annex II species: Freshwater Pearl Mussel Margaritifera margaritifera Sea Lamprey Petromyzon marinus Brook Lamprey Lampetra fluviatilis Twaite Shad Alosa fallax Atlantic Salmon Salmo salar (only in fresh water) Estuaries Mudflats and sandflats not covered by seawater at low tide Otter Lutra lutra Harbour Seal Phoca vitulina Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0	As per NPWS (2011) Conservation Objectives for Slaney River Valley SAC [000781] Version 1.0. Department of Arts, Heritage and the Gaeltacht (dated 21/10/11)