

Dorota Richards

Subject: FW: Roadstone Ltd. - Licence for the Operation of an Asphalt Plant at Clasheen, Killarney, Co. Kerry (Air Licence Reg. AP20-01; EPA Reg. No. E0010-01): Responses to 3rd Party Appeals

Attachments: 210728 501.00180.00309 L. RL Killarney AP20-01 - Response to 3rd Party Objection by Group of Minish Residents_Final Issued.pdf; 210728 501.00180.00309 L. RL Killarney AP20-01 - Response to 3rd Party Objection by D & P Horan_Final Issued.pdf; 210728 501.00180.00309 L. RL Killarney AP20-01 - Response to 3rd Party Objection by C Wright J Wright & Buckley's_Final_Final Issued.pdf; 210728 501.00180.00309 L. RL Killarney AP20-01 - Response to 3rd Party Objection by M & K Gleeson_Final Issued.pdf

Importance: High

From: Tim Paul <tpaul@slrconsulting.com>
Sent: Thursday 29 July 2021 10:24
To: Licensing Staff <licensing@epa.ie>
Subject: Roadstone Ltd. - Licence for the Operation of an Asphalt Plant at Clasheen, Killarney, Co. Kerry (Air Licence Reg. AP20-01; EPA Reg. No. E0010-01): Responses to 3rd Party Appeals
Importance: High

We refer to your letter dated 30th June 2021 in relation to the above Air Licence Reg. AP20-01; EPA Reg. No. E0010-01.

Please find attached responses to each of the four 3rd party appeals, submitted on behalf of Roadstone Ltd.

- Group of Minish Residents
- D & P Horan
- C Wright J Wright & Buckley's
- M & K Gleeson

Please acknowledge receipt of these submissions by return e-mail.

Yours faithfully,

Tim Paul.

SLR's response to Coronavirus COVID-19 - In response to the ongoing global pandemic, we are actively following the advice provided by our national and state governments. As a flexible, full-service organisation we are open for business and will continue to operate and deliver advice and services to our clients wherever possible and in line with government guidance.



Tim Paul

Managing Director (SLR Consulting Ireland) - Mining & Minerals Sector Leader, Europe

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28th July 2021

By E-Mail
[\(licensing@epa.ie\)](mailto:licensing@epa.ie)

Environmental Protection Agency
Headquarters PO Box 3000
Johnstown Castle Estate
Co. Wexford
W35 W821

Our Ref: 501.00180.00309

Dear Sir/Madam,

RE: ROADSTONE LTD. – LICENCE FOR THE OPERATION OF AN ASPHALT PLANT AT CLASHEEN, KILLARNEY, CO. KERRY (AIR LICENCE REG. NO. AP20-01; EPA REG. NO. E0010-01)

RESPONSE TO 3RD PARTY APPEAL SUBMITTED BY CHRIS WRIGHT, JOAN WRIGHT & BUCKLEY'S

1 INTRODUCTION

We refer to your letter dated 30th June 2021 in relation to appeals submitted under the Air Pollution Act, 1987, in relation to the Air Licence Reg. No. AP20-01 issued by Kerry Co. Council for the operation of an asphalt plant at Clasheen, Killarney, Co. Kerry (refer to copy enclosed)

This response relates to the appeal dated 17th June 2021 submitted by Chris Wright, Joan Wright and the Buckley's.

The response has been prepared by Mr. Michael Bailey – Envirocon Ltd. and SLR Consulting on behalf of Roadstone Ltd. (hereafter referred to as “Roadstone”). Mr. Bailey has over 25 years’ experience in planning aspects and licencing of asphalt plants throughout Ireland. He is also an expert in toxicology regarding evaluating community health risk due to exposure to atmospheric emissions from industrial installations including asphalt plants. SLR Consulting act as environmental and planning advisors to Roadstone.

2 RESPONSES TO 3RD PARTY APPEAL BY CHRIS WRIGHT, JOAN WRIGHT & BUCKLEY'S

The responses to the issues raised by the appellants are provided below, in the same order as their submission.

2.1 Concern about pollutants emitted from the asphalt plant

SO₂ / NO_x / CO

The results of the air quality impact modelling study undertaken by Envirocon (October 2020)¹ submitted with the application documentation demonstrates that the predicted maximum concentrations for SO₂ and NO_x (including) NO₂ beyond the boundary are substantially below the National Air Quality Standards (NAQS). The modelling of the exhaust stack emissions was based on maximum worst-case emissions at the emission limits specified in Appendix A of the licence. Such emission rates are conservative and emission monitoring results from asphalt plants operating throughout Ireland in recent years demonstrate that 'actual' SO₂ and NO_x emissions are typically below 30% of the emission limit values used in the study. At the nearest houses predicted short-term concentrations are below 25% and 33% for SO₂ and NO₂, respectively.

Carbon monoxide (CO) has also been included in the Air Quality Impact assessment, refer to SLR Consulting (February 2021) – Response to Request for Further Information Item 4. Results of the modelling show predicted CO 8-hour maximum levels of 0.13 mg/m₃, equivalent to 1.3% of the hourly NAQS. Beyond a distance of 300-350m from the plant site, predicted CO concentrations are below 0.075 mg/m₃, or <0.75% of the 8-hour NAQS value.

Although it is accepted that residents have concerns of potential adverse community health effects, the results of the detailed modelling study for the asphalt plant do not support these claims, especially given the conservative approach relating to emission calculations used in the study.

Dust Deposition

As part of the environmental monitoring programme for the Clasheen quarry, Roadstone undertake monthly dust deposition surveys with a network of 3 sites near the boundary of the quarry site. The survey is undertaken by an independent company using the Bergerhoff sampling procedure. Results for the period January 2020-2021 given in Table 1 indicate that with the exception of one result obtained from Site D1 situated to the north of the quarry entrance all other results are below the

¹ Envirocon (October 2020). Air Quality Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

dust deposition limit value of 350 mg/m².day. Over the 10-month period 4 of the 30 samples obtained were deemed unsuitable for dust-fall determination due to excessive biological contamination from algae or damage to the collection jar. Of the 26 valid samples, 65% were below 50% of the dust-fall limit value and 85% under 75% of the limit value.

Table 1: Dust deposition survey results during 2020-2021 (mg/m².day)

Site Locations	14/1/2 1-11/6	12/8- 10/9	10/9- 9/10	9/10- 10/11	10/11- 11/12
Site D1 – W Boundary	77	325	441	84	277
Site D2 – N Boundary	329	261	203	184	163
Site D2 – E Boundary	136	NA	NA	121	163

Site Locations	11/12- 14/1/21	14/1- 15/2	15/2- 15/3	15/3- 12/4	12/4- 11/5
Site D1 – W Boundary	158	163	120	48	209
Site D2 – N Boundary	NA	158	150	162	133
Site D2 – E Boundary	257	100	NA	114	157

Particulates (PM₁₀)

PM₁₀ monitoring was undertaken at the sit in January 2021, refer to the Response to Further Information Request² (SLR Consulting, February 2021), Section 5.1 and Appendix 3 – Monitoring of Ambient PM₁₀ at Clasheen Quarry, Killarney, Co. Kerry.

Of relevance to potential community health impacts, the particulate material referred to as PM₁₀ (particulate material with a mean aerodynamic diameter of less than 10 μm) is recognised by the World Health Organisation as being associated with health concerns as they can enter the lower respiratory tract. The annual NAQS value for PM₁₀ is 40 μg/m³, with a daily limit value of 50 μg/m³ (no more than 35 exceedances per year). Ambient concentrations of PM₁₀ near the quarry boundary would be typically <10-15 μg/m³ that is within the range of concentrations measured in rural locations values and below 40% of the annual NAQS – refer to Appendix 3 for PM₁₀ monitoring results carried out in January 2021.

² SLR Consulting (February 2021) – Licensing of Industrial Plant AP-20-01, Response to Request for Further Information.

The Air Quality Impact assessment (Envirocon, October 2020), Section 6.0 has concluded that:

With the plant operating at maximum production and concentrations of NO₂, SO₂ and particulates in the stack exhaust gas also at maximum emission levels, the predicted ground level concentrations in the locality are substantially below the NAQS values. The impact of emissions from the exhaust stack combined with background ambient concentrations of NO₂, SO₂ and PM₁₀ for the locality will also result in cumulative impacts that are well below the NAQS.

2.2 Visual Impact

The visual impact of the proposed plant has been considered under the planning process. Planning permission has been granted for the asphalt plant on the site.

2.3 Smell of Asphalt Production

A detailed Odour Assessment has been undertaken for the proposed development (Envirocon, February 2021)³ and submitted in response to Item 2 of the Further Information Request. This assessment has been carried out in accordance with the EPA guidance for such assessments. Section 5.0 of the assessment concluded:

The air dispersion modelling study was carried out to evaluate the impact on local air quality of fugitive odour emissions from the proposed asphalt plant within the Roadstone sand pit at Clasheen, near Killarney, Co. Kerry. The predicted concentrations were compared with the EPA ambient odour limits recommended for houses and other sensitive receptor sites near the boundary of industrial activities where odorous emissions take place that have a potential to create a community odour nuisance. The air quality assessment assumed a 'worst-case' emission scenario with the asphalt plant operating continuously during the normal working hours at the sand pit with no seasonal variation in output. The actual emissions from the proposed asphalt plant, with efficient operation of the aggregate dryer burner, will result in observed fugitive odour emissions substantially below the emission calculations used in the modelling study.

The design and operation of the proposed asphalt plant at Clasheen minimises the potential for malodours to be detected beyond the site boundary. The asphalt plant is designed to operate and be managed to meet BAT in terms of processes, emission abatement and

³ Envirocon (February 2021) – Potential Odour Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

monitoring. The whole process from delivery and storage of bitumen, production of asphalt and discharge of asphalt to transport of the asphalt off-site by covered trucks will be carried out so that odours from the asphalt production will be controlled and reduced.

The results of this impact assessment indicates that the maximum predicted 98 percentile of hourly odour concentrations is 1 ouE/m₃ at the nearest houses to the sand pit boundary. This predicted hourly concentration is below the stringent odour exposure target value of 1.5 ouE/m₃ at the nearest housing that has been adopted by the EPA in Ireland and other Environmental Agencies in the UK and elsewhere.

Based on an assessment of locations at the asphalt plant site where potential fugitive odour emissions may occur from storage of bitumen and production of asphalt the results of this odour impact modelling study demonstrates that no odour nuisance will occur beyond the sand pit boundary at Clasheen.

2.4 Monitoring

Comprehensive monitoring requirements are set out in Condition 6 – Emission Monitoring and Condition 7 – Ambient Monitoring attached to Air Licence AP20-10 dated 18th May 2021 issued to Roadstone Ltd. by Kerry Co. Council.

Conditions 6.1.1 and 6.1.2 require the emissions monitoring to be undertaken by a competent independent company agreeable to the licensing authority. Roadstone Ltd. confirm their agreement to implementing the requirements set out under Conditions 6 and 7 of the Licence.

2.5 Asphalt Plant Operating Hours

Condition 4 attached to the current planning permission (P. Refs. 10/1163; 10/91163) sets out the permitted operating hours of the asphalt plant and states:

Hours of operation shall be restricted to between the hours of 04.00 and 19.00 Monday to Saturday.

On the basis of the above submission and the detailed assessments contained in the application / further information response documentation , the EPA is requested to uphold the decision of Kerry Co. Council and grant a licence for the operation of the asphalt plant at Clasheen, Killarney.

Yours faithfully,
SLR Consulting Ireland

A handwritten signature in black ink that reads 'Tim Paul'. The signature is written in a cursive style with a long horizontal stroke at the end.

Tim Paul
Director

Enc.

Cc. + Enc. Mr. P. Gibney (Roadstone Ltd.)

APPENDIX A

AIR LICENCE REG. REF. NO. AP20-01 ISSUED BY KERRY CO. COUNCIL



COMHAIRLE CONTAE CHIARRAÍ
KERRY COUNTY COUNCIL

Guthán | Tel 066 7162000 Facs | Fax 066 7120663 Rphost | Email environ@kerrycoco.ie | reportlitteroffences@kerrycoco.ie Suíomh | Web www.kerrycoco.ie

RECEIVED

21 MAY 2021

20th May 2021

Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24.

Ref: AP-20-01

**Re: Air Pollution Act, 1987 - Notification of Decision to Grant a Licence
(subject to conditions) under Section 32 of the Act.**

Dear Mr. Kinghan,

In pursuant of the powers conferred upon it by the above named Act, Kerry County Council has, by Order dated 18th May 2021, decided to grant a licence to you for atmospheric emissions from your macadam and asphalt production plant at Clasheen, Killarney, Co. Kerry subject to the Conditions set out in the Schedule attached thereto.

An appeal against a decision of the Licensing Authority under Section 34 of the Act to grant the licence and/or the conditions attached to the licence may be made by any person to the Environmental Protection Agency (EPA) within the period of one month beginning on the date of the decision to grant the licence which herein is the 18th May 2021. An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal, and, (c) state the grounds of appeal. An appeal to the Agency will be invalid unless accompanied by the appropriate fee which can be found on the EPA website. The Agency after consideration of an appeal lodged with it may direct the Local Authority to grant or revoke the licence or to amend or attach conditions relating to it. The appropriate address to which an appeal should be forwarded is :

The Environmental Licencing Programme, Office of Environmental Sustainability,
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

Additional information in relation to the appeals process, the appropriate fees applicable and the judicial review process are available via the EPA Website at <http://epa.ie/licensing/air/actappeals/>.

Yours sincerely,

Liam Brosnan, A.O.,
Environmental Services

**CC Mr. Peter Kinghan, Technical Director, SLR Consulting Ireland, 7 Dundrum
Business Park, Windy Arbour, Dublin D14 N2Y7**





Kerry County Council,
Environment Section,
Maine Street,
Tralee,
Co. Kerry.

Air Licence

Air Licence

Register Number:

AP20-01

Applicant:

**Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24**

Location of Facility:

**Clasheen,
Killarney,
Co. Kerry.**

Air Licence AP20-01
Roadstone Ltd.




Air Pollution Act 1987

Air Licence

AP20-01

Kerry County Council in exercise of the powers conferred on it by the Air Pollution Act 1987, hereby grants this licence reference number AP20-01 to Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 for atmospheric emissions from their Macadam and Asphalt production plant at Clasheen, Killarney, Co Kerry subject to conditions (9 No.) set out in the schedules attached hereto.

Signed on behalf of the said Council:


A/Senior Executive Officer,
Environment Section

Date:

18th May 2021

Note:

An appeal against a decision of a Licensing Authority may be made to the EPA (Environmental Protection Agency) within the period of one month beginning on the date of the decision to grant (or to refuse) the licence.

Appeals should be addressed to the "Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Wexford, Y35 W821"

An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal and (c) state the grounds of the appeal. The EPA after consideration of any appeal lodged with it, may direct the Licensing Authority to grant or revoke a licence or to amend or attach conditions relating to it.

An appeal will not be valid unless it is accompanied by the prescribed fee outlined in the EPA's website.

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CONDITION 1 SCOPE

- 1.1 This licence relates to the production of macadam and asphalt by the Licensee – Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 at Clasheen, Killarney, Co. Kerry.
- 1.2 For the purpose of this licence, the Licensing Authority refers to:
The Environment Section,
Kerry County Council,
Maine Street,
Tralee
Tel: 066 7162000
Fax: 066 7162001
Email: environ@kerrycoco.ie
- 1.3 The activities shall be controlled, operated and maintained and emissions shall take place as set out in this licence. All programmes and plans required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purpose of limitation of emissions, the period during which the licensed production facility shall conduct operations involving emissions to air shall be between 06.00 and 19.00 hours Monday to Friday inclusive and 06.00 and 14.00 Saturday.

The facility shall not operate on Sundays or Public Holidays.
- 1.5 The Licensing Authority may, on receipt of a written request from the Licensee, agree to hours of processing and operation of the plant for agreed temporary periods outside of those set out in condition no. 1.4.
- 1.6 The Licensing Authority reserves the right to limit the hours of operation which the licensed production facility shall conduct operations involving emissions to air should the Licensing Authority see fit.
- 1.7 This licence is for the purposes of licensing under the Air Pollution Act, 1987, for the manufacturing of macadam and asphalt and nothing in this licence shall be construed as negating the Licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.8 No alteration to, or reconstruction in respect of, the activity of any part thereof which would, or is likely to, result in a material change or increase in:
 - The nature or quantity of any emission,
 - The abatement/treatment of any emission,
 - The site management and control with adverse impact on emissions to air

shall be carried out or commenced without prior notice to, and without the prior written agreement of the Licensing Authority.

- 1.9 The Licensing Authority must be notified in writing of any change to company ownership and/or trading name of Licensee.

Reason: To clarify the scope of this permit.
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CONDITION 2 MANAGEMENT OF THE ACTIVITY

- 2.1 The Licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.
- 2.2 The Licensee shall ensure that all operations onsite shall be carried out in a manner such that air emissions or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- 2.3 Corrective and Preventative Action
- 2.3.1 The Licensee shall establish, maintain and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- 2.3.2 Where a breach of one or more of the conditions of this licence occurs, the Licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- 2.4 Water sprays shall be used onsite during dry weather to ensure dust emissions are kept to a minimum.
- 2.5 All fuel and bitumen tanks and drum storage areas shall be rendered impervious to the material stored therein. In addition, storage tank and drum storage areas shall, as a minimum be bunded, either locally or remotely, to a volume equal to 110% of the largest tank within each of the individual bunded areas. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the

largest five drums likely to be stored therein. The height of the bund for any drum storage area shall be not less than 300 millimetres.

- 2.6 An adequate stockpile of oil absorbent materials shall be maintained onsite at all times. This should at a minimum include oil absorbent mats, a selection of booms and some oil absorbent granules.

Reason: To make provision for management of the activity.

CONDITION 3 INTERPRETATION

- 3.1 The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of: Temperature - 273K, Pressure – 101.3kPa, dry gas (no correction for oxygen content).

Reason: To clarify the interpretation of emission limit values.

CONDITION 4 NOTIFICATION

- 4.1 The Licensee shall notify the Licensing Authority as soon as practical after the occurrence of any of the following:
- Any malfunction or breakdown of control equipment, which is likely to lead to loss of abatement systems onsite.
 - Any incident giving rise to an emission liable to cause nuisance to the surroundings lands.
 - Any emission which does not comply with the requirement of this licence.
- 4.2 The Licensee shall maintain a register of any such incident as set out in Condition 4.1 above. This register shall include date and time of the incident, details of the circumstances giving rise to the incident and all actions taken to minimise the emission and the effect in the surrounding environment. This register shall be made available to the Licensing Authority on request.
- 4.3 The Licensee shall notify the Licensing Authority immediately concerning any incident, which might require offsite emergency response.

Reason: To provide for reporting of incidents onsite and maintain incident log.

CONDITION 5 EMISSIONS TO ATMOSPHERE

- 5.1 A monitoring programme for the plant shall be agreed within one month of the date of issue of the licence with the Licensing Authority to demonstrate the achievement of the necessary operational parameters and the specified emission limit values of this licence. The results of this programme shall be forwarded to the Licensing Authority as soon as they are available.
- 5.2 Activities onsite shall not give rise to emissions to the atmosphere, which exceed the limits specified in Appendix A.1 of the Licence. There shall be no other emission to the atmosphere of environment significance.
- 5.3 Activities on the site shall not give rise to dust deposition values which exceed the limits specified in Appendix A.2 of this licence. There shall be no other emission to the atmosphere of environmental significance. The total dust deposition figure in Appendix A.2 is based upon using the Bergerhoff Gauge.
- 5.4 All abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the recommendations of the supplier, and in agreement with Licensing Authority, so that monitoring accurately reflects the emissions.
- 5.5 The introduction of dilution air to achieve emission concentration limits is not permitted. Exhaust flow rates shall be consistent with efficient capture of emission and good management practices.
- 5.6 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out monitoring on behalf of the Licensing Authority on the emission to atmosphere to determine compliance with the emission limit values outlined in Appendix A.1. The Licensee shall be liable for all costs associated with this monitoring.
- 5.7 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out other monitoring on behalf of the Licensing Authority related to this licence as the Licensing Authority sees fit. The Licensee shall be liable for all costs associated with this monitoring.
- 5.8 The licensee shall prepare a programme, to the satisfaction of the Licensing Authority, for the identification and reduction of fugitive emissions to air using appropriate combination of best available techniques. The scope of this programme shall be agreed in advance with the Licensing Authority and carried out within 12 months of the commencement of production at the facility. The findings of this programme shall be furnished to the Licensing Authority as soon as possible thereafter. This programme, as a minimum, shall address,

- All particulate generating areas, including aggregate piles, conveyors and elevators, loading locations, crushers, screens, bag house filter discharge, rotary drum drier/mixing tower emission point, vehicular traffic
- All volatile emission points including bitumen storage tanks, mixing tower emissions, asphalt treatment/storage emission points.

5.9 In terms of the fuel used at the facility, the following emission standards shall be adhered to:

- Marked Gas Oil shall have a <0.1% w/w sulphur.
- Reprocessed Fuel Oil (e.g.) 11LS or REL210 shall have a <1.0% w/w sulphur
- Light Fuel Oil shall have a <1.0% w/w sulphur

A certificate stating percentage sulphur content of the fuel shall be submitted within two months of the date of issue of this licence.

Reason: To provide for the protection of the environment
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CONDITION 6 EMISSION MONITORING

6.1 Emission to Atmosphere Monitoring

- 6.1.1 At the Licensee's own expense, monitoring and analysis of each emission shall be carried out as specified in Appendix A of this licence.
- 6.1.2 The Licensee shall nominate an independent company to carry out air emission monitoring at the site. This company shall be adequately equipped to carry out the required monitoring and be competent in this monitoring either by experience or by qualification.
- 6.1.3 Details of the chosen company and their level of experience/expertise along with proposed sampling and analytical methods shall be submitted for agreement with the Licensing Authority within one month of the grant of this licence. The agreed details shall become part of this licence. In the event of a change in this contractual arrangement, the Licensee shall notify this change to the Licensing Authority.
- 6.1.4 A report on this monitoring shall be submitted to the Licensing Authority in paper form as specified in Condition 8.1.
- 6.2 Monitoring of emissions to the atmosphere and dust deposition shall be carried out as specified in Appendix A of this licence, when maximum emissions to the atmosphere are occurring. The Licensing Authority may decide to reduce the frequency of monitoring following the examination of the trends shown by the monitoring data as submitted.

- 6.3 The frequency, methods and scope of monitoring as set out in this licence may be amended with the written agreement of the Licensing Authority following evaluation of test results.
- 6.4 Continuous Dust Monitoring**
- 6.4.1 The exhaust stack shall be fitted with a continuous dust monitor (with data logger) which records continuously the concentration of dust (in mg/Nm³) as discharged to the atmosphere. The monitor shall be functioning at all times (except during maintenance and calibration) when the activity is in operation, unless alternative sampling or monitoring has been approved in writing by the Licensing Authority for a limited time period. The dust monitor shall be fitted with an audible alarm system. The output of the dust monitor shall be recorded and show the average dust concentration in the exhaust gases for each hour and the maximum dust concentration within the hour. The continuous monitor shall be calibrated at monthly intervals initially and calibration periods may be revised following a satisfactory assessment period. The calibration assessment and the monitored results shall be submitted to the Licensing Authority on request.
- 6.4.2 In the event of malfunction of the continuous monitor, the Licensee shall contact the Licensing Authority as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Approval for the use of alternative equipment, other than in emergency situations, shall be obtained from the Licensing Authority in writing.
- 6.4.3 In the event of dust levels exceeding 50mg/m³ in the exhaust stack emissions, the operation of the bag filter shall be investigated. If it is found that the dust collection system has malfunctioned, plant operation shall cease until such time as dust collection system is repaired. The Licensee shall inform the Licensing Authority within 24 hours, of the exceedance by telephone and by email and shall provide information on the cause of the exceedance and on the measures to be taken to prevent a recurrence.
- 6.5 The Licensee shall provide safe and permanent access to any sampling/monitoring point on the emission stack and safe access to any other sampling/monitoring point required under this licence by the Licensing Authority.
- 6.6 In the event that the Licensing Authority receives a complaint in relation to alleged mal odour from the facility and upon investigation, the complaint appears to be justified, the Licensee will be notified. The Licensee shall put in place measures or carry out works to address this matter without delay. Alternatively, the Licensing Authority reserves the right to instruct the Licensee to cease production or part thereof at the facility until such time as the Licensing Authority is satisfied that the source of the odour has been identified and addressed.

Reason: To provide for adequate monitoring.

CONDITION 7 AMBIENT MONITORING

- 7.1 All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs offsite.
- 7.2 The Licensee shall, within three months of the date of grant of this licence, install and maintain in a prominent location on the site a wind sock which shall be visible from the public roadway.
- 7.3 Weather Monitoring Station**
If deemed necessary by the Licensing Authority, the Licensee shall install and operate a weather monitoring station on the site of an agreed type and at an agreed location, with the Licensing Authority.
- 7.4 Dust monitoring**
Within two months of the grant of this licence, the Licensee shall submit to the Licensing Authority for agreement, proposed locations for the monitoring of dust in the vicinity of the facility. The proposed locations shall take account of nearby sensitive receptors. On agreement of the said locations, dust levels shall be monitored every month at these locations. Dust levels shall not exceed 350mg/m³/day (30-day composite sample) as measured using the Bergerhoff Method. The results shall be submitted to the Licensing Authority within one month of the end of the period being reported on. On the basis of results submitted over time, the Licensing Authority may review the frequency of monitoring.
- 7.5 Odour Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient odour monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.
- 7.6 Ambient Air Quality Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient air quality monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.

Reason: To protect the amenities of the area and to protect human and animal health

CONDITION 8 RECORDING AND REPORTING

- 8.1 All results of quarterly monitoring required by this licence shall be submitted to the Licensing Authority within 10 days following the end of the quarterly period in a format to the agreement of the Licensing Authority.
- 8.2 The Licensee shall keep a record of all complaints relating to emissions from the activity in the form of a complaint log which should be maintained onsite for review by the Licensing Authority. Each record shall give details of the date and time of the complaint, the name of the complainant and the exact nature of the complaint in a complaint log maintained on the site. A record shall be kept of the response (if any) to each complaint.
- 8.3 The Licensee shall facilitate the Licensing Authority when it performs audits of the plant by making relevant staff and data available on request.
- 8.4 The Licensee shall keep records of all monitoring carried out and shall retain such records for a minimum period of seven years. These records shall be made available to the Licensing Authority on request.
- 8.5 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Licensing Authority, following evaluation of test results.
- 8.6 The Licensee shall submit to the Licensing Authority, a year from the date of grant of this licence, and each calendar year thereafter, an Annual Environmental Report. This report shall include as a minimum the following information:
- Emissions to the atmosphere monitoring summary
 - Ambient Air and Dust Deposition monitoring summary
 - Complaints Summary
 - Pollution emission and environmental incident report.
 - Evaluation of the operation of the bag filter.

Reason: To provide for the reporting of adequate information to the Licensing Authority

CONDITION 9 FINANCIAL PROVISIONS

- 9.1** The Licensee shall pay to the Licensing Authority a minimum annual contribution of €500 towards the cost of site inspections and the assessment of monitoring results. The Licensee shall, not later than January 31st of each year, pay to the Licensing Authority this amount, updated in accordance with the Consumer Price Index. The Licensing Authority however, reserves the right to alter the rate of contribution each year in order to take account of the actual cost of monitoring as incurred by it in the previous year and as estimated for the next year.
- 9.2** Should the Licensing Authority deem it necessary to carry out its own monitoring or retain the service of an independent company to carry out monitoring on its behalf in relation to any monitoring described in Condition 6 or Condition 7 of this licence, the Licensee shall contribute such sums as determined by the Licensing Authority to defraying the Licensing Authority's costs.

Reason: To provide for assessment of and monitoring of data arising from the activity and provided to the Licensing Authority.

APPENDIX A

A.1 Emission to Atmosphere

Emissions Point: Single Exhaust Stack
Volume to be emitted: 76,520m³ per hour maximum (56,000Nm³/hr)

Parameter	Emission Limit Value (mg/Nm ³)	Monitoring Frequency
NOx (as NO ₂)	<450	Quarterly
Sulphur Dioxide	<350	Quarterly
CO	<500	Quarterly
Particulates	<50	Continuous

A.2 Dust Monitoring

Location: As required under Condition 7.4

Parameter	Emission Limit Value	Monitoring Frequency
Total Dust Deposition	350 mg/m ² /day (Monthly mean)	Continuous for each month.

A3 Ambient Air Quality and Odour Monitoring

As described in Conditions 7.5 and 7.6

28th July 2021

By E-Mail
licensing@epa.ie

Environmental Protection Agency
Headquarters PO Box 3000
Johnstown Castle Estate
Co. Wexford
W35 W821

Our Ref: 501.00180.00309

Dear Sir/Madam,

RE: ROADSTONE LTD. – LICENCE FOR THE OPERATION OF AN ASPHALT PLANT AT CLASHEEN, KILLARNEY, CO. KERRY (AIR LICENCE REG. NO. AP20-01; EPA REG. NO. E0010-01)

RESPONSE TO 3RD PARTY APPEAL SUBMITTED BY DOREEN & PHIL HORAN

1 INTRODUCTION

We refer to your letter dated 30th June 2021 in relation to appeals submitted under the Air Pollution Act, 1987, in relation to the Air Licence Reg. No. AP20-01 issued by Kerry Co. Council for the operation of an asphalt plant at Clasheen, Killarney, Co. Kerry (refer to copy enclosed)

This response relates to the appeal dated 11th June 2021 submitted by Doreen & Phil Horan.

The response has been prepared by Mr. Michael Bailey – Envirocon Ltd. and SLR Consulting on behalf of Roadstone Ltd. (hereafter referred to as “Roadstone”). Mr. Bailey has over 25 years’ experience in planning aspects and licencing of asphalt plants throughout Ireland. He is also an expert in toxicology regarding evaluating community health risk due to exposure to atmospheric emissions from industrial installations including asphalt plants. SLR Consulting act as environmental and planning advisors to Roadstone.

2 RESPONSES TO 3RD PARTY APPEAL BY DOREEN & PHIL HORAN

The responses to the issues raised by the appellants are provided below, in the same order as their submission.

2.1 Concern about Pollutants emitted from asphalt plant

A detailed air quality impact assessment has been undertaken for the asphalt plant.

SO₂ / NO_x/ CO

The results of the air quality impact modelling study undertaken by Envirocon (October 2020)¹ submitted with the application documentation demonstrates that the predicted maximum concentrations for SO₂ and NO_x (including) NO₂ beyond the boundary are substantially below the National Air Quality Standards (NAQS). The modelling of the exhaust stack emissions was based on maximum worst-case emissions at the emission limits specified in Appendix A of the licence. Such emission rates are conservative and emission monitoring results from asphalt plants operating throughout Ireland in recent years demonstrate that 'actual' SO₂ and NO_x emissions are typically below 30% of the emission limit values used in the study. At the nearest houses predicted short-term concentrations are below 25% and 33% for SO₂ and NO₂, respectively.

Carbon monoxide (CO) has also been included in the Air Quality Impact assessment, refer to SLR Consulting (February 2021) – Response to Request for Further Information Item 4. Results of the modelling show predicted CO 8-hour maximum levels of 0.13 mg/m₃, equivalent to 1.3% of the hourly NAQS. Beyond a distance of 300-350m from the plant site, predicted CO concentrations are below 0.075 mg/m₃, or <0.75% of the 8-hour NAQS value.

Although it is accepted that residents have concerns of potential adverse community health effects, the results of the detailed modelling study for the asphalt plant do not support these claims, especially given the conservative approach relating to emission calculations used in the study.

Dust Deposition

As part of the environmental monitoring programme for the Clasheen quarry, Roadstone undertake monthly dust deposition surveys with a network of 3 sites near the boundary of the quarry site. The survey is undertaken by an independent company using the Bergerhoff sampling procedure. Results for the period January 2020-2021 given in Table 1 indicate that with the exception of one result obtained from Site D1 situated to the north of the quarry entrance all other results are below the dust deposition limit value of 350 mg/m².day. Over the 10-month period 4 of the 30 samples obtained were deemed unsuitable for dust-fall determination due to excessive biological contamination from algae or damage to the collection jar. Of the 26 valid samples, 65% were below 50% of the dust-fall limit value and 85% under 75% of the limit value.

¹ Envirocon (October 2020). Air Quality Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

Table 1: Dust deposition survey results during 2020-2021 (mg/m².day)

Site Locations	14/1/2 1-11/6	12/8- 10/9	10/9- 9/10	9/10- 10/11	10/11- 11/12
Site D1 – W Boundary	77	325	441	84	277
Site D2 – N Boundary	329	261	203	184	163
Site D2 – E Boundary	136	NA	NA	121	163

Site Locations	11/12- 14/1/21	14/1- 15/2	15/2- 15/3	15/3- 12/4	12/4- 11/5
Site D1 – W Boundary	158	163	120	48	209
Site D2 – N Boundary	NA	158	150	162	133
Site D2 – E Boundary	257	100	NA	114	157

Particulates (PM₁₀)

PM₁₀ monitoring was undertaken at the sit in January 2021, refer to the Response to Further Information Request² (SLR Consulting, February 2021), Section 5.1 and Appendix 3 – Monitoring of Ambient PM₁₀ at Clasheen Quarry, Killarney, Co. Kerry.

Of relevance to potential community health impacts, the particulate material referred to as PM₁₀ (particulate material with a mean aerodynamic diameter of less than 10 μm) is recognised by the World Health Organisation as being associated with health concerns as they can enter the lower respiratory tract. The annual NAQS value for PM₁₀ is 40 μg/m³, with a daily limit value of 50 μg/m³ (no more than 35 exceedances per year). Ambient concentrations of PM₁₀ near the quarry boundary would be typically <10-15 μg/m³ that is within the range of concentrations measured in rural locations values and below 40% of the annual NAQS – refer to Appendix 3 for PM₁₀ monitoring results carried out in January 2021.

² SLR Consulting (February 2021) – Licensing of Industrial Plant AP-20-01, Response to Request for Further Information.

The Air Quality Impact assessment (Envirocon, October 2020), Section 6.0 has concluded that:

With the plant operating at maximum production and concentrations of NO₂, SO₂ and particulates in the stack exhaust gas also at maximum emission levels, the predicted ground level concentrations in the locality are substantially below the NAQS values. The impact of emissions from the exhaust stack combined with background ambient concentrations of NO₂, SO₂ and PM₁₀ for the locality will also result in cumulative impacts that are well below the NAQS.

2.2 Use of Cork Airport climatological data in emission impact studies

In selecting a data-source for climatological data used in air quality impact modelling, it is necessary to evaluate a number of factors. The nearest meteorological station may be exposed to a substantially different wind field pattern either due to coastal or significant terrain factors compared to the location where the study is taking place. The input parameters in air quality models are wind direction, wind speed, air temperature and cloud cover. These are the principal parameters used world-wide irrespective of whether the model used is the ADMS5 or US EPA dispersion models.

The nearest synoptic meteorological stations to the Clasheen site are Cork Airport and Valentia (Cahirciveen). A comparison of hourly data over a number of years was carried out and it is shown that the Cahirciveen Met Eireann site exhibits substantial coast influences that given the separation distance from Clasheen and the presence of the Kerry mountain range do not reflect the wind field experienced in the Killarney area. In addition, a comparison of predicted results based on each station showed that the higher concentrations tended to result from using the Cork Airport data.

From this assessment it was considered that the use climatological data from Cork Airport was appropriate for overall wind-field conditions within the Killarney area and so was the location selected for the modelling studies.

Even though Killarney has higher rainfall rates compared to rainfall data from Cork Airport, the wind direction and wind speed are the primary climatological factors that affect atmospheric stability and hence dispersion patterns from an exhaust stack.

2.3 Smell of Bitumen

A detailed Odour Assessment has been undertaken for the proposed development (Envirocon, February 2021)³ and submitted in response to Item 2 of the Further Information Request. This

³ Envirocon (February 2021) – Potential Odour Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

assessment has been carried out in accordance with the EPA guidance for such assessments. Section 5.0 of the assessment concluded:

The air dispersion modelling study was carried out to evaluate the impact on local air quality of fugitive odour emissions from the proposed asphalt plant within the Roadstone sand pit at Clasheen, near Killarney, Co. Kerry. The predicted concentrations were compared with the EPA ambient odour limits recommended for houses and other sensitive receptor sites near the boundary of industrial activities where odorous emissions take place that have a potential to create a community odour nuisance. The air quality assessment assumed a 'worst-case' emission scenario with the asphalt plant operating continuously during the normal working hours at the sand pit with no seasonal variation in output. The actual emissions from the proposed asphalt plant, with efficient operation of the aggregate dryer burner, will result in observed fugitive odour emissions substantially below the emission calculations used in the modelling study.

The design and operation of the proposed asphalt plant at Clasheen minimises the potential for malodours to be detected beyond the site boundary. The asphalt plant is designed to operate and be managed to meet BAT in terms of processes, emission abatement and monitoring. The whole process from delivery and storage of bitumen, production of asphalt and discharge of asphalt to transport of the asphalt off-site by covered trucks will be carried out so that odours from the asphalt production will be controlled and reduced.

The results of this impact assessment indicates that the maximum predicted 98 percentile of hourly odour concentrations is 1 ou_E/m³ at the nearest houses to the sand pit boundary. This predicted hourly concentration is below the stringent odour exposure target value of 1.5 ou_E/m³ at the nearest housing that has been adopted by the EPA in Ireland and other Environmental Agencies in the UK and elsewhere.

Based on an assessment of locations at the asphalt plant site where potential fugitive odour emissions may occur from storage of bitumen and production of asphalt the results of this odour impact modelling study demonstrates that no odour nuisance will occur beyond the sand pit boundary at Clasheen.

2.4 Water Management

The appellants refer to monitoring of groundwater and discharge of water from the site. These are matters that do not fall within the remit of the Air Emissions Licence.

Furthermore, Roadstone Ltd. can confirm that there are environmental management measures in place at the site to protect groundwater and manage surface water run-off within the site. It is noted that Conditions 2.5 and 2.6 attached to Air Licence AP20-10 dated 18th May 2021 issued to Roadstone Ltd. by Kerry Co. Council requires bunding of fuel and bitumen storage tanks, and maintenance of oil absorbent materials on site at all times.

On the basis of the above submission and the detailed assessments contained in the application / further information response documentation, the EPA is requested to uphold the decision of Kerry Co. Council and grant a licence for the operation of the asphalt plant at Clasheen, Killarney.

Yours faithfully,
SLR Consulting Ireland

A handwritten signature in black ink that reads 'Tim Paul'. The signature is written in a cursive style with a long horizontal stroke at the end.

Tim Paul
Director

Enc.

Cc. + Enc. Mr. P. Gibney (Roadstone Ltd.)

APPENDIX A

AIR LICENCE REG. REF. NO. AP20-01 ISSUED BY KERRY CO. COUNCIL



COMHAIRLE CONTAE CHIARRAÍ
KERRY COUNTY COUNCIL

Guthán | Tel 066 7162000 Facs | Fax 066 7120663 Rphost | Email environ@kerrycoco.ie | reportlitteroffences@kerrycoco.ie Suíomh | Web www.kerrycoco.ie

RECEIVED

21 MAY 2021

20th May 2021

Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24.

Ref: AP-20-01

**Re: Air Pollution Act, 1987 - Notification of Decision to Grant a Licence
(subject to conditions) under Section 32 of the Act.**

Dear Mr. Kinghan,

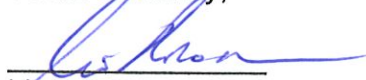
In pursuant of the powers conferred upon it by the above named Act, Kerry County Council has, by Order dated 18th May 2021, decided to grant a licence to you for atmospheric emissions from your macadam and asphalt production plant at Clasheen, Killarney, Co. Kerry subject to the Conditions set out in the Schedule attached thereto.

An appeal against a decision of the Licensing Authority under Section 34 of the Act to grant the licence and/or the conditions attached to the licence may be made by any person to the Environmental Protection Agency (EPA) within the period of one month beginning on the date of the decision to grant the licence which herein is the 18th May 2021. An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal, and, (c) state the grounds of appeal. An appeal to the Agency will be invalid unless accompanied by the appropriate fee which can be found on the EPA website. The Agency after consideration of an appeal lodged with it may direct the Local Authority to grant or revoke the licence or to amend or attach conditions relating to it. The appropriate address to which an appeal should be forwarded is :

The Environmental Licencing Programme, Office of Environmental Sustainability,
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

Additional information in relation to the appeals process, the appropriate fees applicable and the judicial review process are available via the EPA Website at <http://epa.ie/licensing/air/actappeals/>.

Yours sincerely,


Liam Brosnan, A.O.,
Environmental Services

**CC Mr. Peter Kinghan, Technical Director, SLR Consulting Ireland, 7 Dundrum
Business Park, Windy Arbour, Dublin D14 N2Y7**





Kerry County Council,
Environment Section,
Maine Street,
Tralee,
Co. Kerry.

Air Licence

Air Licence

Register Number:

AP20-01

Applicant:

**Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24**

Location of Facility:

**Clasheen,
Killarney,
Co. Kerry.**

Air Licence AP20-01
Roadstone Ltd.




Air Pollution Act 1987

Air Licence

AP20-01

Kerry County Council in exercise of the powers conferred on it by the Air Pollution Act 1987, hereby grants this licence reference number AP20-01 to Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 for atmospheric emissions from their Macadam and Asphalt production plant at Clasheen, Killarney, Co Kerry subject to conditions (9 No.) set out in the schedules attached hereto.

Signed on behalf of the said Council:


A/Senior Executive Officer,
Environment Section

Date:

18th May 2021

Note:

An appeal against a decision of a Licensing Authority may be made to the EPA (Environmental Protection Agency) within the period of one month beginning on the date of the decision to grant (or to refuse) the licence.

Appeals should be addressed to the "Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Wexford, Y35 W821"

An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal and (c) state the grounds of the appeal. The EPA after consideration of any appeal lodged with it, may direct the Licensing Authority to grant or revoke a licence or to amend or attach conditions relating to it.

An appeal will not be valid unless it is accompanied by the prescribed fee outlined in the EPA's website.

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CONDITION 1 SCOPE

- 1.1 This licence relates to the production of macadam and asphalt by the Licensee – Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 at Clasheen, Killarney, Co. Kerry.
- 1.2 For the purpose of this licence, the Licensing Authority refers to:
The Environment Section,
Kerry County Council,
Maine Street,
Tralee
Tel: 066 7162000
Fax: 066 7162001
Email: environ@kerrycoco.ie
- 1.3 The activities shall be controlled, operated and maintained and emissions shall take place as set out in this licence. All programmes and plans required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purpose of limitation of emissions, the period during which the licensed production facility shall conduct operations involving emissions to air shall be between 06.00 and 19.00 hours Monday to Friday inclusive and 06.00 and 14.00 Saturday.

The facility shall not operate on Sundays or Public Holidays.
- 1.5 The Licensing Authority may, on receipt of a written request from the Licensee, agree to hours of processing and operation of the plant for agreed temporary periods outside of those set out in condition no. 1.4.
- 1.6 The Licensing Authority reserves the right to limit the hours of operation which the licensed production facility shall conduct operations involving emissions to air should the Licensing Authority see fit.
- 1.7 This licence is for the purposes of licensing under the Air Pollution Act, 1987, for the manufacturing of macadam and asphalt and nothing in this licence shall be construed as negating the Licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.8 No alteration to, or reconstruction in respect of, the activity of any part thereof which would, or is likely to, result in a material change or increase in:
 - The nature or quantity of any emission,
 - The abatement/treatment of any emission,
 - The site management and control with adverse impact on emissions to air

shall be carried out or commenced without prior notice to, and without the prior written agreement of the Licensing Authority.

- 1.9 The Licensing Authority must be notified in writing of any change to company ownership and/or trading name of Licensee.

Reason: To clarify the scope of this permit.
--

CONDITION 2 MANAGEMENT OF THE ACTIVITY

- 2.1 The Licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.
- 2.2 The Licensee shall ensure that all operations onsite shall be carried out in a manner such that air emissions or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- 2.3 Corrective and Preventative Action
- 2.3.1 The Licensee shall establish, maintain and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- 2.3.2 Where a breach of one or more of the conditions of this licence occurs, the Licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- 2.4 Water sprays shall be used onsite during dry weather to ensure dust emissions are kept to a minimum.
- 2.5 All fuel and bitumen tanks and drum storage areas shall be rendered impervious to the material stored therein. In addition, storage tank and drum storage areas shall, as a minimum be bunded, either locally or remotely, to a volume equal to 110% of the largest tank within each of the individual bunded areas. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the

largest five drums likely to be stored therein. The height of the bund for any drum storage area shall be not less than 300 millimetres.

- 2.6 An adequate stockpile of oil absorbent materials shall be maintained onsite at all times. This should at a minimum include oil absorbent mats, a selection of booms and some oil absorbent granules.

Reason: To make provision for management of the activity.

CONDITION 3 INTERPRETATION

- 3.1 The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of: Temperature - 273K, Pressure – 101.3kPa, dry gas (no correction for oxygen content).

Reason: To clarify the interpretation of emission limit values.

CONDITION 4 NOTIFICATION

- 4.1 The Licensee shall notify the Licensing Authority as soon as practical after the occurrence of any of the following:
- Any malfunction or breakdown of control equipment, which is likely to lead to loss of abatement systems onsite.
 - Any incident giving rise to an emission liable to cause nuisance to the surroundings lands.
 - Any emission which does not comply with the requirement of this licence.
- 4.2 The Licensee shall maintain a register of any such incident as set out in Condition 4.1 above. This register shall include date and time of the incident, details of the circumstances giving rise to the incident and all actions taken to minimise the emission and the effect in the surrounding environment. This register shall be made available to the Licensing Authority on request.
- 4.3 The Licensee shall notify the Licensing Authority immediately concerning any incident, which might require offsite emergency response.

Reason: To provide for reporting of incidents onsite and maintain incident log.

CONDITION 5 EMISSIONS TO ATMOSPHERE

- 5.1 A monitoring programme for the plant shall be agreed within one month of the date of issue of the licence with the Licensing Authority to demonstrate the achievement of the necessary operational parameters and the specified emission limit values of this licence. The results of this programme shall be forwarded to the Licensing Authority as soon as they are available.
- 5.2 Activities onsite shall not give rise to emissions to the atmosphere, which exceed the limits specified in Appendix A.1 of the Licence. There shall be no other emission to the atmosphere of environment significance.
- 5.3 Activities on the site shall not give rise to dust deposition values which exceed the limits specified in Appendix A.2 of this licence. There shall be no other emission to the atmosphere of environmental significance. The total dust deposition figure in Appendix A.2 is based upon using the Bergerhoff Gauge.
- 5.4 All abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the recommendations of the supplier, and in agreement with Licensing Authority, so that monitoring accurately reflects the emissions.
- 5.5 The introduction of dilution air to achieve emission concentration limits is not permitted. Exhaust flow rates shall be consistent with efficient capture of emission and good management practices.
- 5.6 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out monitoring on behalf of the Licensing Authority on the emission to atmosphere to determine compliance with the emission limit values outlined in Appendix A.1. The Licensee shall be liable for all costs associated with this monitoring.
- 5.7 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out other monitoring on behalf of the Licensing Authority related to this licence as the Licensing Authority sees fit. The Licensee shall be liable for all costs associated with this monitoring.
- 5.8 The licensee shall prepare a programme, to the satisfaction of the Licensing Authority, for the identification and reduction of fugitive emissions to air using appropriate combination of best available techniques. The scope of this programme shall be agreed in advance with the Licensing Authority and carried out within 12 months of the commencement of production at the facility. The findings of this programme shall be furnished to the Licensing Authority as soon as possible thereafter. This programme, as a minimum, shall address,

- All particulate generating areas, including aggregate piles, conveyors and elevators, loading locations, crushers, screens, bag house filter discharge, rotary drum drier/mixing tower emission point, vehicular traffic
- All volatile emission points including bitumen storage tanks, mixing tower emissions, asphalt treatment/storage emission points.

5.9 In terms of the fuel used at the facility, the following emission standards shall be adhered to:

- Marked Gas Oil shall have a <0.1% w/w sulphur.
- Reprocessed Fuel Oil (e.g.) 11LS or REL210 shall have a <1.0% w/w sulphur
- Light Fuel Oil shall have a <1.0% w/w sulphur

A certificate stating percentage sulphur content of the fuel shall be submitted within two months of the date of issue of this licence.

Reason: To provide for the protection of the environment
--

CONDITION 6 EMISSION MONITORING

6.1 Emission to Atmosphere Monitoring

- 6.1.1 At the Licensee's own expense, monitoring and analysis of each emission shall be carried out as specified in Appendix A of this licence.
- 6.1.2 The Licensee shall nominate an independent company to carry out air emission monitoring at the site. This company shall be adequately equipped to carry out the required monitoring and be competent in this monitoring either by experience or by qualification.
- 6.1.3 Details of the chosen company and their level of experience/expertise along with proposed sampling and analytical methods shall be submitted for agreement with the Licensing Authority within one month of the grant of this licence. The agreed details shall become part of this licence. In the event of a change in this contractual arrangement, the Licensee shall notify this change to the Licensing Authority.
- 6.1.4 A report on this monitoring shall be submitted to the Licensing Authority in paper form as specified in Condition 8.1.
- 6.2 Monitoring of emissions to the atmosphere and dust deposition shall be carried out as specified in Appendix A of this licence, when maximum emissions to the atmosphere are occurring. The Licensing Authority may decide to reduce the frequency of monitoring following the examination of the trends shown by the monitoring data as submitted.

- 6.3 The frequency, methods and scope of monitoring as set out in this licence may be amended with the written agreement of the Licensing Authority following evaluation of test results.
- 6.4 Continuous Dust Monitoring**
- 6.4.1 The exhaust stack shall be fitted with a continuous dust monitor (with data logger) which records continuously the concentration of dust (in mg/Nm³) as discharged to the atmosphere. The monitor shall be functioning at all times (except during maintenance and calibration) when the activity is in operation, unless alternative sampling or monitoring has been approved in writing by the Licensing Authority for a limited time period. The dust monitor shall be fitted with an audible alarm system. The output of the dust monitor shall be recorded and show the average dust concentration in the exhaust gases for each hour and the maximum dust concentration within the hour. The continuous monitor shall be calibrated at monthly intervals initially and calibration periods may be revised following a satisfactory assessment period. The calibration assessment and the monitored results shall be submitted to the Licensing Authority on request.
- 6.4.2 In the event of malfunction of the continuous monitor, the Licensee shall contact the Licensing Authority as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Approval for the use of alternative equipment, other than in emergency situations, shall be obtained from the Licensing Authority in writing.
- 6.4.3 In the event of dust levels exceeding 50mg/m³ in the exhaust stack emissions, the operation of the bag filter shall be investigated. If it is found that the dust collection system has malfunctioned, plant operation shall cease until such time as dust collection system is repaired. The Licensee shall inform the Licensing Authority within 24 hours, of the exceedance by telephone and by email and shall provide information on the cause of the exceedance and on the measures to be taken to prevent a recurrence.
- 6.5 The Licensee shall provide safe and permanent access to any sampling/monitoring point on the emission stack and safe access to any other sampling/monitoring point required under this licence by the Licensing Authority.
- 6.6 In the event that the Licensing Authority receives a complaint in relation to alleged mal odour from the facility and upon investigation, the complaint appears to be justified, the Licensee will be notified. The Licensee shall put in place measures or carry out works to address this matter without delay. Alternatively, the Licensing Authority reserves the right to instruct the Licensee to cease production or part thereof at the facility until such time as the Licensing Authority is satisfied that the source of the odour has been identified and addressed.

Reason: To provide for adequate monitoring.

CONDITION 7 AMBIENT MONITORING

- 7.1 All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs offsite.
- 7.2 The Licensee shall, within three months of the date of grant of this licence, install and maintain in a prominent location on the site a wind sock which shall be visible from the public roadway.
- 7.3 Weather Monitoring Station**
If deemed necessary by the Licensing Authority, the Licensee shall install and operate a weather monitoring station on the site of an agreed type and at an agreed location, with the Licensing Authority.
- 7.4 Dust monitoring**
Within two months of the grant of this licence, the Licensee shall submit to the Licensing Authority for agreement, proposed locations for the monitoring of dust in the vicinity of the facility. The proposed locations shall take account of nearby sensitive receptors. On agreement of the said locations, dust levels shall be monitored every month at these locations. Dust levels shall not exceed 350mg/m³/day (30-day composite sample) as measured using the Bergerhoff Method. The results shall be submitted to the Licensing Authority within one month of the end of the period being reported on. On the basis of results submitted over time, the Licensing Authority may review the frequency of monitoring.
- 7.5 Odour Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient odour monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.
- 7.6 Ambient Air Quality Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient air quality monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.

Reason: To protect the amenities of the area and to protect human and animal health

CONDITION 8 RECORDING AND REPORTING

- 8.1 All results of quarterly monitoring required by this licence shall be submitted to the Licensing Authority within 10 days following the end of the quarterly period in a format to the agreement of the Licensing Authority.
- 8.2 The Licensee shall keep a record of all complaints relating to emissions from the activity in the form of a complaint log which should be maintained onsite for review by the Licensing Authority. Each record shall give details of the date and time of the complaint, the name of the complainant and the exact nature of the complaint in a complaint log maintained on the site. A record shall be kept of the response (if any) to each complaint.
- 8.3 The Licensee shall facilitate the Licensing Authority when it performs audits of the plant by making relevant staff and data available on request.
- 8.4 The Licensee shall keep records of all monitoring carried out and shall retain such records for a minimum period of seven years. These records shall be made available to the Licensing Authority on request.
- 8.5 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Licensing Authority, following evaluation of test results.
- 8.6 The Licensee shall submit to the Licensing Authority, a year from the date of grant of this licence, and each calendar year thereafter, an Annual Environmental Report. This report shall include as a minimum the following information:
- Emissions to the atmosphere monitoring summary
 - Ambient Air and Dust Deposition monitoring summary
 - Complaints Summary
 - Pollution emission and environmental incident report.
 - Evaluation of the operation of the bag filter.

Reason: To provide for the reporting of adequate information to the Licensing Authority

CONDITION 9 FINANCIAL PROVISIONS

- 9.1** The Licensee shall pay to the Licensing Authority a minimum annual contribution of €500 towards the cost of site inspections and the assessment of monitoring results. The Licensee shall, not later than January 31st of each year, pay to the Licensing Authority this amount, updated in accordance with the Consumer Price Index. The Licensing Authority however, reserves the right to alter the rate of contribution each year in order to take account of the actual cost of monitoring as incurred by it in the previous year and as estimated for the next year.
- 9.2** Should the Licensing Authority deem it necessary to carry out its own monitoring or retain the service of an independent company to carry out monitoring on its behalf in relation to any monitoring described in Condition 6 or Condition 7 of this licence, the Licensee shall contribute such sums as determined by the Licensing Authority to defraying the Licensing Authority's costs.

Reason: To provide for assessment of and monitoring of data arising from the activity and provided to the Licensing Authority.

APPENDIX A

A.1 Emission to Atmosphere

Emissions Point: Single Exhaust Stack
Volume to be emitted: 76,520m³ per hour maximum (56,000Nm³/hr)

Parameter	Emission Limit Value (mg/Nm ³)	Monitoring Frequency
NOx (as NO ₂)	<450	Quarterly
Sulphur Dioxide	<350	Quarterly
CO	<500	Quarterly
Particulates	<50	Continuous

A.2 Dust Monitoring

Location: As required under Condition 7.4

Parameter	Emission Limit Value	Monitoring Frequency
Total Dust Deposition	350 mg/m ² /day (Monthly mean)	Continuous for each month.

A3 Ambient Air Quality and Odour Monitoring

As described in Conditions 7.5 and 7.6

28th July 2021

By E-Mail
licensing@epa.ie

Environmental Protection Agency
Headquarters PO Box 3000
Johnstown Castle Estate
Co. Wexford
W35 W821

Our Ref: 501.00180.00309

Dear Sir/Madam,

RE: ROADSTONE LTD. – LICENCE FOR THE OPERATION OF AN ASPHALT PLANT AT CLASHEEN, KILLARNEY, CO. KERRY (AIR LICENCE REG. NO. AP20-01; EPA REG. NO. E0010-01)

RESPONSE TO 3RD PARTY APPEAL SUBMITTED BY GROUP OF MINISH RESIDENTS (C/O MR. DAVE MURPHY, MINISH, KILLARNEY, CO. KERRY)

1 INTRODUCTION

We refer to your letter dated 30th June 2021 in relation to appeals submitted under the Air Pollution Act, 1987, in relation to the Air Licence Reg. No. AP20-01 issued by Kerry Co. Council for the operation of an asphalt plant at Clasheen, Killarney, Co. Kerry (refer to copy enclosed)

This response relates to the appeal dated 11th June 2021 submitted by a group of Minish residents (c/o Mr. Dave Murphy, Minish, Killarney, Co. Kerry).

The response has been prepared by Mr. Michael Bailey – Envirocon Ltd. and SLR Consulting on behalf of Roadstone Ltd. (hereafter referred to as “Roadstone”). Mr. Bailey has over 25 years’ experience in planning aspects and licencing of asphalt plants throughout Ireland. He is also an expert in toxicology regarding evaluating community health risk due to exposure to atmospheric emissions from industrial installations including asphalt plants. SLR Consulting act as environmental and planning advisors to Roadstone.

2 RESPONSES TO 3RD PARTY APPEAL BY GROUP OF MINISH RESIDENTS

The responses to the issues raised by the appellants are provided below, in the same order as their submission.

2.1 Concern about large quantities of SO₂, NO_x and other pollutants emitted from asphalt plant

A detailed air quality impact assessment has been undertaken for the asphalt plant.

SO₂ / NO_x / CO

The results of the air quality impact modelling study undertaken by Envirocon (October 2020)¹ submitted with the application documentation demonstrates that the predicted maximum concentrations for SO₂ and NO_x (including) NO₂ beyond the boundary are substantially below the National Air Quality Standards (NAQS). The modelling of the exhaust stack emissions was based on maximum worst-case emissions at the emission limits specified in Appendix A of the licence. Such emission rates are conservative and emission monitoring results from asphalt plants operating throughout Ireland in recent years demonstrate that 'actual' SO₂ and NO_x emissions are typically below 30% of the emission limit values used in the study. At the nearest houses predicted short-term concentrations are below 25% and 33% for SO₂ and NO₂, respectively.

Carbon monoxide (CO) has also been included in the Air Quality Impact assessment, refer to SLR Consulting (February 2021) – Response to Request for Further Information Item 4. Results of the modelling show predicted CO 8-hour maximum levels of 0.13 mg/m₃, equivalent to 1.3% of the hourly NAQS. Beyond a distance of 300-350m from the plant site, predicted CO concentrations are below 0.075 mg/m₃, or <0.75% of the 8-hour NAQS value.

Although it is accepted that residents have concerns of potential adverse community health effects, the results of the detailed modelling study for the asphalt plant do not support these claims, especially given the conservative approach relating to emission calculations used in the study.

Dust Deposition

As part of the environmental monitoring programme for the Clasheen quarry, Roadstone undertake monthly dust deposition surveys with a network of 3 sites near the boundary of the quarry site. The survey is undertaken by an independent company using the Bergerhoff sampling procedure. Results for the period January 2020-2021 given in Table 1 indicate that with the exception of one result obtained from Site D1 situated to the north of the quarry entrance all other results are below the dust deposition limit value of 350 mg/m².day. Over the 10-month period 4 of the 30 samples

¹ Envirocon (October 2020). Air Quality Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

obtained were deemed unsuitable for dust-fall determination due to excessive biological contamination from algae or damage to the collection jar. Of the 26 valid samples, 65% were below 50% of the dust-fall limit value and 85% under 75% of the limit value.

Table 1: Dust deposition survey results during 2020-2021 (mg/m².day)

Site Locations	14/1/2 1-11/6	12/8- 10/9	10/9- 9/10	9/10- 10/11	10/11- 11/12
Site D1 – W Boundary	77	325	441	84	277
Site D2 – N Boundary	329	261	203	184	163
Site D2 – E Boundary	136	NA	NA	121	163

Site Locations	11/12- 14/1/21	14/1- 15/2	15/2- 15/3	15/3- 12/4	12/4- 11/5
Site D1 – W Boundary	158	163	120	48	209
Site D2 – N Boundary	NA	158	150	162	133
Site D2 – E Boundary	257	100	NA	114	157

Particulates (PM₁₀)

PM₁₀ monitoring was undertaken at the sit in January 2021, refer to the Response to Further Information Request² (SLR Consulting, February 2021), Section 5.1 and Appendix 3 – Monitoring of Ambient PM₁₀ at Clasheen Quarry, Killarney, Co. Kerry.

Of relevance to potential community health impacts, the particulate material referred to as PM₁₀ (particulate material with a mean aerodynamic diameter of less than 10 μm) is recognised by the World Health Organisation as being associated with health concerns as they can enter the lower respiratory tract. The annual NAQS value for PM₁₀ is 40 μg/m³, with a daily limit value of 50 μg/m³ (no more than 35 exceedances per year). Ambient concentrations of PM₁₀ near the quarry boundary would be typically <10-15 μg/m³ that is within the range of concentrations measured in rural locations values and below 40% of the annual NAQS – refer to Appendix 3 for PM₁₀ monitoring results carried out in January 2021.

² SLR Consulting (February 2021) – Licensing of Industrial Plant AP-20-01, Response to Request for Further Information.

The Air Quality Impact assessment (Envirocon, October 2020), Section 6.0 has concluded that:

With the plant operating at maximum production and concentrations of NO₂, SO₂ and particulates in the stack exhaust gas also at maximum emission levels, the predicted ground level concentrations in the locality are substantially below the NAQS values. The impact of emissions from the exhaust stack combined with background ambient concentrations of NO₂, SO₂ and PM₁₀ for the locality will also result in cumulative impacts that are well below the NAQS.

2.2 Killarney Area and Air Pollution Act (Marketing, Sale, Distribution and Burning of Specified Fuels) Regulations

The designation of Killarney as a specified area under regulations for the prohibition of marketing, selling, distribution and burning of specified fuels within the specified area is aimed at the domestic burning of smoky coal. The domestic sector burning solid fuel is the principal source of emissions affecting air quality in towns during the winter period. It is not legislation that introduces a clean air act for the area and does not extend to industrial activities. Atmospheric emission regulation for industrial activities within the Killarney area is provided by licensing by the EPA or, as in the case for asphalt plants, by Kerry County Council. The management and operation of the asphalt plant at Clasheen will be in accordance with the licence conditions. Therefore, the granting of a licence for the plant is unaffected by these regulations for prohibiting smoky coal.

2.3 Potential Health Effects at Lissivigeen N. S.

Lissivigeen National School is 1.9km to the NW of the asphalt plant exhaust stack and predicted concentrations at this distance downwind of the quarry demonstrate that the effect of stack emissions on current background air quality at Lissivigeen will be minor or insignificant.

2.4 Loss of Amenity on local road north of Roadstone site

Results from the air quality modelling study submitted as part of the licence application (Envirocon, October 2020), and responses made in relation to the request for further information (SLR Consulting, February 2021) conclude that plume dispersion from the exhaust stack is unlikely to result in significant air quality impact likely to cause effect to the amenity near the northern boundary of the quarry.

2.5 Asphalt Plant Stack

A detailed modelling study was undertaken to evaluate the potential impact of the emission plume grounding on the slope at the northern side of the quarry opening. This study incorporated terrain data, based on a topographical survey to provide data on the slope gradient from the quarry floor at the site of the asphalt plant to the road at the northern boundary. The results from the study (refer to SLR Consulting (February 2021) Response to Request for Further Information - Item 6) indicated that impact of the emission plume was unlikely to occur that would result in a significant deterioration in air quality within this area.

2.6 Potential effects of stack emissions at Sheheree Bog SAC

This assertion by the appellants is not supported by the detailed evaluation of likely effects at the Sheheree Bog SAC. The Envirocon (March 2021)³ report, Section 3.5 concluded the following:-

It has been demonstrated in this response that the predicted long-term impact of emissions from the asphalt plant will have a negligible impact at this SAC.

Within the locality of Sheheree Bog SAC, NH₃ emissions are estimated to be the primary source of total annual N deposition rates at the SAC. The predicted annual concentration level and deposition load at Sheheree Bog SAC due to emissions from the proposed asphalt plant is less than 1% of the annual NO_x NAQS and the critical load conservation target of 5 kg N/ha/yr specified for raised bog ecological areas. As such, oxidised N concentration or deposition rates due to emissions from the proposed development will have no perceptible effect within the Sheheree SAC. Emissions of NH₃ are negligible from the operation of the asphalt plant.

In relation to the suggestion that high rainfall in the Killarney area will result in acid rain due to the operation of the asphalt plant and will have serious implications for ecologically sensitive areas nearby, there is no credible support for this assertion by the appellants.

³ Envirocon (March 2021). Application for an Air Emissions Licence – (AP-20-01: Request for Clarification of Further Information, Proposed Asphalt Plant, Roadstone Ltd., Clasheen, Killarney, Co. Kerry)

2.7 Need for asphalt plant

The need for an asphalt plant at this location has been considered and addressed under the planning process. Planning permission has been granted for the asphalt plant at this location.

2.8 Use of Cork Airport climatological data in emission impact studies

In selecting a data-source for climatological data used in air quality impact modelling, it is necessary to evaluate a number of factors. The nearest meteorological station may be exposed to a substantially different wind field pattern either due to coastal or significant terrain factors compared to the location where the study is taking place. The input parameters in air quality models are wind direction, wind speed, air temperature and cloud cover. These are the principal parameters used world-wide irrespective of whether the model used is the ADMS5 or US EPA dispersion models.

The nearest synoptic meteorological stations to the Clasheen site are Cork Airport and Valentia (Cahirciveen). A comparison of hourly data over a number of years was carried out and it is shown that the Cahirciveen Met Eireann site exhibits substantial coast influences that given the separation distance from Clasheen and the presence of the Kerry mountain range do not reflect the wind field experienced in the Killarney area. In addition, a comparison of predicted results based on each station showed that the higher concentrations tended to result from using the Cork Airport data.

From this assessment it was considered that the use climatological data from Cork Airport was appropriate for overall wind-field conditions within the Killarney area and so was the location selected for the modelling studies.

Even though Killarney has higher rainfall rates compared to rainfall data from Cork Airport, the wind direction and wind speed are the primary climatological factors that affect atmospheric stability and hence dispersion patterns from an exhaust stack.

2.9 Traffic associated with the requirement for importation of raw material for use at asphalt plant

The appellants refer to future traffic generation associated with importation of raw materials for use at the asphalt plant. Traffic generation and traffic matters in relation to the operation of the asphalt plant have been addressed through the planning process. Planning permission has been granted for the operation of an asphalt plant at the site.

On the basis of the above submission and the detailed assessments contained in the application / further information response documentation, the EPA is requested to uphold the decision of Kerry Co. Council and grant a licence for the operation of the asphalt plant at Clasheen, Killarney.

Yours faithfully,
SLR Consulting Ireland

A handwritten signature in black ink that reads 'Tim Paul' with a stylized flourish at the end.

Tim Paul

Director

Enc.

Cc. + Enc. Mr. P. Gibney (Roadstone Ltd.)

APPENDIX A

AIR LICENCE REG. REF. NO. AP20-01 ISSUED BY KERRY CO. COUNCIL



COMHAIRLE CONTAE CHIARRAÍ
KERRY COUNTY COUNCIL

Guthán | Tel 066 7162000 Facs | Fax 066 7120663 Rphost | Email environ@kerrycoco.ie | reportlitteroffences@kerrycoco.ie Suíomh | Web www.kerrycoco.ie

RECEIVED

21 MAY 2021

20th May 2021

Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24.

Ref: AP-20-01

**Re: Air Pollution Act, 1987 - Notification of Decision to Grant a Licence
(subject to conditions) under Section 32 of the Act.**

Dear Mr. Kinghan,

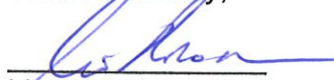
In pursuant of the powers conferred upon it by the above named Act, Kerry County Council has, by Order dated 18th May 2021, decided to grant a licence to you for atmospheric emissions from your macadam and asphalt production plant at Clasheen, Killarney, Co. Kerry subject to the Conditions set out in the Schedule attached thereto.

An appeal against a decision of the Licensing Authority under Section 34 of the Act to grant the licence and/or the conditions attached to the licence may be made by any person to the Environmental Protection Agency (EPA) within the period of one month beginning on the date of the decision to grant the licence which herein is the 18th May 2021. An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal, and, (c) state the grounds of appeal. An appeal to the Agency will be invalid unless accompanied by the appropriate fee which can be found on the EPA website. The Agency after consideration of an appeal lodged with it may direct the Local Authority to grant or revoke the licence or to amend or attach conditions relating to it. The appropriate address to which an appeal should be forwarded is :

The Environmental Licencing Programme, Office of Environmental Sustainability,
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

Additional information in relation to the appeals process, the appropriate fees applicable and the judicial review process are available via the EPA Website at <http://epa.ie/licensing/air/actappeals/>.

Yours sincerely,


Liam Brosnan, A.O.,
Environmental Services

**CC Mr. Peter Kinghan, Technical Director, SLR Consulting Ireland, 7 Dundrum
Business Park, Windy Arbour, Dublin D14 N2Y7**





Kerry County Council,
Environment Section,
Maine Street,
Tralee,
Co. Kerry.

Air Licence

Air Licence

Register Number:

AP20-01

Applicant:

**Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24**

Location of Facility:

**Clasheen,
Killarney,
Co. Kerry.**

Air Licence AP20-01
Roadstone Ltd.




Air Pollution Act 1987

Air Licence

AP20-01

Kerry County Council in exercise of the powers conferred on it by the Air Pollution Act 1987, hereby grants this licence reference number AP20-01 to Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 for atmospheric emissions from their Macadam and Asphalt production plant at Clasheen, Killarney, Co Kerry subject to conditions (9 No.) set out in the schedules attached hereto.

Signed on behalf of the said Council:


A/Senior Executive Officer,
Environment Section

Date: 18th May 2021

Note:

An appeal against a decision of a Licensing Authority may be made to the EPA (Environmental Protection Agency) within the period of one month beginning on the date of the decision to grant (or to refuse) the licence.

Appeals should be addressed to the "Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Wexford, Y35 W821"

An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal and (c) state the grounds of the appeal. The EPA after consideration of any appeal lodged with it, may direct the Licensing Authority to grant or revoke a licence or to amend or attach conditions relating to it.

An appeal will not be valid unless it is accompanied by the prescribed fee outlined in the EPA's website.

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CONDITION 1 SCOPE

- 1.1 This licence relates to the production of macadam and asphalt by the Licensee – Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 at Clasheen, Killarney, Co. Kerry.
- 1.2 For the purpose of this licence, the Licensing Authority refers to:
The Environment Section,
Kerry County Council,
Maine Street,
Tralee
Tel: 066 7162000
Fax: 066 7162001
Email: environ@kerrycoco.ie
- 1.3 The activities shall be controlled, operated and maintained and emissions shall take place as set out in this licence. All programmes and plans required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purpose of limitation of emissions, the period during which the licensed production facility shall conduct operations involving emissions to air shall be between 06.00 and 19.00 hours Monday to Friday inclusive and 06.00 and 14.00 Saturday.

The facility shall not operate on Sundays or Public Holidays.
- 1.5 The Licensing Authority may, on receipt of a written request from the Licensee, agree to hours of processing and operation of the plant for agreed temporary periods outside of those set out in condition no. 1.4.
- 1.6 The Licensing Authority reserves the right to limit the hours of operation which the licensed production facility shall conduct operations involving emissions to air should the Licensing Authority see fit.
- 1.7 This licence is for the purposes of licensing under the Air Pollution Act, 1987, for the manufacturing of macadam and asphalt and nothing in this licence shall be construed as negating the Licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.8 No alteration to, or reconstruction in respect of, the activity of any part thereof which would, or is likely to, result in a material change or increase in:
 - The nature or quantity of any emission,
 - The abatement/treatment of any emission,
 - The site management and control with adverse impact on emissions to air

shall be carried out or commenced without prior notice to, and without the prior written agreement of the Licensing Authority.

- 1.9 The Licensing Authority must be notified in writing of any change to company ownership and/or trading name of Licensee.

Reason: To clarify the scope of this permit.
--

CONDITION 2 MANAGEMENT OF THE ACTIVITY

- 2.1 The Licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.
- 2.2 The Licensee shall ensure that all operations onsite shall be carried out in a manner such that air emissions or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- 2.3 Corrective and Preventative Action
- 2.3.1 The Licensee shall establish, maintain and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- 2.3.2 Where a breach of one or more of the conditions of this licence occurs, the Licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- 2.4 Water sprays shall be used onsite during dry weather to ensure dust emissions are kept to a minimum.
- 2.5 All fuel and bitumen tanks and drum storage areas shall be rendered impervious to the material stored therein. In addition, storage tank and drum storage areas shall, as a minimum be bunded, either locally or remotely, to a volume equal to 110% of the largest tank within each of the individual bunded areas. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the

largest five drums likely to be stored therein. The height of the bund for any drum storage area shall be not less than 300 millimetres.

- 2.6 An adequate stockpile of oil absorbent materials shall be maintained onsite at all times. This should at a minimum include oil absorbent mats, a selection of booms and some oil absorbent granules.

Reason: To make provision for management of the activity.

CONDITION 3 INTERPRETATION

- 3.1 The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of: Temperature - 273K, Pressure – 101.3kPa, dry gas (no correction for oxygen content).

Reason: To clarify the interpretation of emission limit values.

CONDITION 4 NOTIFICATION

- 4.1 The Licensee shall notify the Licensing Authority as soon as practical after the occurrence of any of the following:
- Any malfunction or breakdown of control equipment, which is likely to lead to loss of abatement systems onsite.
 - Any incident giving rise to an emission liable to cause nuisance to the surroundings lands.
 - Any emission which does not comply with the requirement of this licence.
- 4.2 The Licensee shall maintain a register of any such incident as set out in Condition 4.1 above. This register shall include date and time of the incident, details of the circumstances giving rise to the incident and all actions taken to minimise the emission and the effect in the surrounding environment. This register shall be made available to the Licensing Authority on request.
- 4.3 The Licensee shall notify the Licensing Authority immediately concerning any incident, which might require offsite emergency response.

Reason: To provide for reporting of incidents onsite and maintain incident log.

CONDITION 5 EMISSIONS TO ATMOSPHERE

- 5.1 A monitoring programme for the plant shall be agreed within one month of the date of issue of the licence with the Licensing Authority to demonstrate the achievement of the necessary operational parameters and the specified emission limit values of this licence. The results of this programme shall be forwarded to the Licensing Authority as soon as they are available.
- 5.2 Activities onsite shall not give rise to emissions to the atmosphere, which exceed the limits specified in Appendix A.1 of the Licence. There shall be no other emission to the atmosphere of environment significance.
- 5.3 Activities on the site shall not give rise to dust deposition values which exceed the limits specified in Appendix A.2 of this licence. There shall be no other emission to the atmosphere of environmental significance. The total dust deposition figure in Appendix A.2 is based upon using the Bergerhoff Gauge.
- 5.4 All abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the recommendations of the supplier, and in agreement with Licensing Authority, so that monitoring accurately reflects the emissions.
- 5.5 The introduction of dilution air to achieve emission concentration limits is not permitted. Exhaust flow rates shall be consistent with efficient capture of emission and good management practices.
- 5.6 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out monitoring on behalf of the Licensing Authority on the emission to atmosphere to determine compliance with the emission limit values outlined in Appendix A.1. The Licensee shall be liable for all costs associated with this monitoring.
- 5.7 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out other monitoring on behalf of the Licensing Authority related to this licence as the Licensing Authority sees fit. The Licensee shall be liable for all costs associated with this monitoring.
- 5.8 The licensee shall prepare a programme, to the satisfaction of the Licensing Authority, for the identification and reduction of fugitive emissions to air using appropriate combination of best available techniques. The scope of this programme shall be agreed in advance with the Licensing Authority and carried out within 12 months of the commencement of production at the facility. The findings of this programme shall be furnished to the Licensing Authority as soon as possible thereafter. This programme, as a minimum, shall address,

- All particulate generating areas, including aggregate piles, conveyors and elevators, loading locations, crushers, screens, bag house filter discharge, rotary drum drier/mixing tower emission point, vehicular traffic
- All volatile emission points including bitumen storage tanks, mixing tower emissions, asphalt treatment/storage emission points.

5.9 In terms of the fuel used at the facility, the following emission standards shall be adhered to:

- Marked Gas Oil shall have a <0.1% w/w sulphur.
- Reprocessed Fuel Oil (e.g.) 11LS or REL210 shall have a <1.0% w/w sulphur
- Light Fuel Oil shall have a <1.0% w/w sulphur

A certificate stating percentage sulphur content of the fuel shall be submitted within two months of the date of issue of this licence.

Reason: To provide for the protection of the environment
--

CONDITION 6 EMISSION MONITORING

6.1 Emission to Atmosphere Monitoring

- 6.1.1 At the Licensee's own expense, monitoring and analysis of each emission shall be carried out as specified in Appendix A of this licence.
- 6.1.2 The Licensee shall nominate an independent company to carry out air emission monitoring at the site. This company shall be adequately equipped to carry out the required monitoring and be competent in this monitoring either by experience or by qualification.
- 6.1.3 Details of the chosen company and their level of experience/expertise along with proposed sampling and analytical methods shall be submitted for agreement with the Licensing Authority within one month of the grant of this licence. The agreed details shall become part of this licence. In the event of a change in this contractual arrangement, the Licensee shall notify this change to the Licensing Authority.
- 6.1.4 A report on this monitoring shall be submitted to the Licensing Authority in paper form as specified in Condition 8.1.
- 6.2 Monitoring of emissions to the atmosphere and dust deposition shall be carried out as specified in Appendix A of this licence, when maximum emissions to the atmosphere are occurring. The Licensing Authority may decide to reduce the frequency of monitoring following the examination of the trends shown by the monitoring data as submitted.

- 6.3 The frequency, methods and scope of monitoring as set out in this licence may be amended with the written agreement of the Licensing Authority following evaluation of test results.
- 6.4 Continuous Dust Monitoring**
- 6.4.1 The exhaust stack shall be fitted with a continuous dust monitor (with data logger) which records continuously the concentration of dust (in mg/Nm³) as discharged to the atmosphere. The monitor shall be functioning at all times (except during maintenance and calibration) when the activity is in operation, unless alternative sampling or monitoring has been approved in writing by the Licensing Authority for a limited time period. The dust monitor shall be fitted with an audible alarm system. The output of the dust monitor shall be recorded and show the average dust concentration in the exhaust gases for each hour and the maximum dust concentration within the hour. The continuous monitor shall be calibrated at monthly intervals initially and calibration periods may be revised following a satisfactory assessment period. The calibration assessment and the monitored results shall be submitted to the Licensing Authority on request.
- 6.4.2 In the event of malfunction of the continuous monitor, the Licensee shall contact the Licensing Authority as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Approval for the use of alternative equipment, other than in emergency situations, shall be obtained from the Licensing Authority in writing.
- 6.4.3 In the event of dust levels exceeding 50mg/m³ in the exhaust stack emissions, the operation of the bag filter shall be investigated. If it is found that the dust collection system has malfunctioned, plant operation shall cease until such time as dust collection system is repaired. The Licensee shall inform the Licensing Authority within 24 hours, of the exceedance by telephone and by email and shall provide information on the cause of the exceedance and on the measures to be taken to prevent a recurrence.
- 6.5 The Licensee shall provide safe and permanent access to any sampling/monitoring point on the emission stack and safe access to any other sampling/monitoring point required under this licence by the Licensing Authority.
- 6.6 In the event that the Licensing Authority receives a complaint in relation to alleged mal odour from the facility and upon investigation, the complaint appears to be justified, the Licensee will be notified. The Licensee shall put in place measures or carry out works to address this matter without delay. Alternatively, the Licensing Authority reserves the right to instruct the Licensee to cease production or part thereof at the facility until such time as the Licensing Authority is satisfied that the source of the odour has been identified and addressed.

Reason: To provide for adequate monitoring.

CONDITION 7 AMBIENT MONITORING

- 7.1 All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs offsite.
- 7.2 The Licensee shall, within three months of the date of grant of this licence, install and maintain in a prominent location on the site a wind sock which shall be visible from the public roadway.
- 7.3 Weather Monitoring Station**
If deemed necessary by the Licensing Authority, the Licensee shall install and operate a weather monitoring station on the site of an agreed type and at an agreed location, with the Licensing Authority.
- 7.4 Dust monitoring**
Within two months of the grant of this licence, the Licensee shall submit to the Licensing Authority for agreement, proposed locations for the monitoring of dust in the vicinity of the facility. The proposed locations shall take account of nearby sensitive receptors. On agreement of the said locations, dust levels shall be monitored every month at these locations. Dust levels shall not exceed 350mg/m³/day (30-day composite sample) as measured using the Bergerhoff Method. The results shall be submitted to the Licensing Authority within one month of the end of the period being reported on. On the basis of results submitted over time, the Licensing Authority may review the frequency of monitoring.
- 7.5 Odour Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient odour monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.
- 7.6 Ambient Air Quality Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient air quality monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.

Reason: To protect the amenities of the area and to protect human and animal health

CONDITION 8 RECORDING AND REPORTING

- 8.1 All results of quarterly monitoring required by this licence shall be submitted to the Licensing Authority within 10 days following the end of the quarterly period in a format to the agreement of the Licensing Authority.
- 8.2 The Licensee shall keep a record of all complaints relating to emissions from the activity in the form of a complaint log which should be maintained onsite for review by the Licensing Authority. Each record shall give details of the date and time of the complaint, the name of the complainant and the exact nature of the complaint in a complaint log maintained on the site. A record shall be kept of the response (if any) to each complaint.
- 8.3 The Licensee shall facilitate the Licensing Authority when it performs audits of the plant by making relevant staff and data available on request.
- 8.4 The Licensee shall keep records of all monitoring carried out and shall retain such records for a minimum period of seven years. These records shall be made available to the Licensing Authority on request.
- 8.5 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Licensing Authority, following evaluation of test results.
- 8.6 The Licensee shall submit to the Licensing Authority, a year from the date of grant of this licence, and each calendar year thereafter, an Annual Environmental Report. This report shall include as a minimum the following information:
- Emissions to the atmosphere monitoring summary
 - Ambient Air and Dust Deposition monitoring summary
 - Complaints Summary
 - Pollution emission and environmental incident report.
 - Evaluation of the operation of the bag filter.

Reason: To provide for the reporting of adequate information to the Licensing Authority

CONDITION 9 FINANCIAL PROVISIONS

- 9.1** The Licensee shall pay to the Licensing Authority a minimum annual contribution of €500 towards the cost of site inspections and the assessment of monitoring results. The Licensee shall, not later than January 31st of each year, pay to the Licensing Authority this amount, updated in accordance with the Consumer Price Index. The Licensing Authority however, reserves the right to alter the rate of contribution each year in order to take account of the actual cost of monitoring as incurred by it in the previous year and as estimated for the next year.
- 9.2** Should the Licensing Authority deem it necessary to carry out its own monitoring or retain the service of an independent company to carry out monitoring on its behalf in relation to any monitoring described in Condition 6 or Condition 7 of this licence, the Licensee shall contribute such sums as determined by the Licensing Authority to defraying the Licensing Authority's costs.

Reason: To provide for assessment of and monitoring of data arising from the activity and provided to the Licensing Authority.

APPENDIX A

A.1 Emission to Atmosphere

Emissions Point: Single Exhaust Stack
Volume to be emitted: 76,520m³ per hour maximum (56,000Nm³/hr)

Parameter	Emission Limit Value (mg/Nm ³)	Monitoring Frequency
NOx (as NO ₂)	<450	Quarterly
Sulphur Dioxide	<350	Quarterly
CO	<500	Quarterly
Particulates	<50	Continuous

A.2 Dust Monitoring

Location: As required under Condition 7.4

Parameter	Emission Limit Value	Monitoring Frequency
Total Dust Deposition	350 mg/m ² /day (Monthly mean)	Continuous for each month.

A3 Ambient Air Quality and Odour Monitoring

As described in Conditions 7.5 and 7.6

28th July 2021

By E-Mail
licensing@epa.ie

Environmental Protection Agency
Headquarters PO Box 3000
Johnstown Castle Estate
Co. Wexford
W35 W821

Our Ref: 501.00180.00309

Dear Sir/Madam,

RE: ROADSTONE LTD. – LICENCE FOR THE OPERATION OF AN ASPHALT PLANT AT CLASHEEN, KILLARNEY, CO. KERRY (AIR LICENCE REG. NO. AP20-01; EPA REG. NO. E0010-01)

RESPONSE TO 3RD PARTY APPEAL SUBMITTED BY MICHAEL & KATHLEEN GLEESON

1 INTRODUCTION

We refer to your letter dated 30th June 2021 in relation to appeals submitted under the Air Pollution Act, 1987, in relation to the Air Licence Reg. No. AP20-01 issued by Kerry Co. Council for the operation of an asphalt plant at Clasheen, Killarney, Co. Kerry (refer to copy enclosed)

This response relates to the appeal dated 14th June 2021 submitted by Michael & Kathleen Gleeson.

The response has been prepared by Mr. Michael Bailey – Envirocon Ltd. and SLR Consulting on behalf of Roadstone Ltd. (hereafter referred to as “Roadstone”). Mr. Bailey has over 25 years’ experience in planning aspects and licencing of asphalt plants throughout Ireland. He is also an expert in toxicology regarding evaluating community health risk due to exposure to atmospheric emissions from industrial installations including asphalt plants. SLR Consulting act as environmental and planning advisors to Roadstone.

2 RESPONSES TO 3RD PARTY APPEAL BY MICHAEL & KATHLEEN GLEESON

The responses to the issues raised by the appellants are provided below, in the same order as their submission.

2.1 Concern about Pollutants emitted from asphalt plant

A detailed air quality impact assessment has been undertaken for the asphalt plant.

SO₂ / NO_x/ CO

The results of the air quality impact modelling study undertaken by Envirocon (October 2020)¹ submitted with the application documentation demonstrates that the predicted maximum concentrations for SO₂ and NO_x (including) NO₂ beyond the boundary are substantially below the National Air Quality Standards (NAQS). The modelling of the exhaust stack emissions was based on maximum worst-case emissions at the emission limits specified in Appendix A of the licence. Such emission rates are conservative and emission monitoring results from asphalt plants operating throughout Ireland in recent years demonstrate that 'actual' SO₂ and NO_x emissions are typically below 30% of the emission limit values used in the study. At the nearest houses predicted short-term concentrations are below 25% and 33% for SO₂ and NO₂, respectively.

Carbon monoxide (CO) has also been included in the Air Quality Impact assessment, refer to SLR Consulting (February 2021) – Response to Request for Further Information Item 4. Results of the modelling show predicted CO 8-hour maximum levels of 0.13 mg/m₃, equivalent to 1.3% of the hourly NAQS. Beyond a distance of 300-350m from the plant site, predicted CO concentrations are below 0.075 mg/m₃, or <0.75% of the 8-hour NAQS value.

Although it is accepted that residents have concerns of potential adverse community health effects, the results of the detailed modelling study for the asphalt plant do not support these claims, especially given the conservative approach relating to emission calculations used in the study.

Dust Deposition

As part of the environmental monitoring programme for the Clasheen quarry, Roadstone undertake monthly dust deposition surveys with a network of 3 sites near the boundary of the quarry site. The survey is undertaken by an independent company using the Bergerhoff sampling procedure. Results for the period January 2020-2021 given in Table 1 indicate that with the exception of one result obtained from Site D1 situated to the north of the quarry entrance all other results are below the dust deposition limit value of 350 mg/m².day. Over the 10-month period 4 of the 30 samples obtained were deemed unsuitable for dust-fall determination due to excessive biological

¹ Envirocon (October 2020). Air Quality Impact of Asphalt Plant at Clasheen, Killarney, Co. Kerry.

contamination from algae or damage to the collection jar. Of the 26 valid samples, 65% were below 50% of the dust-fall limit value and 85% under 75% of the limit value.

Table 1: Dust deposition survey results during 2020-2021 (mg/m².day)

Site Locations	14/1/2 1-11/6	12/8- 10/9	10/9- 9/10	9/10- 10/11	10/11- 11/12
Site D1 – W Boundary	77	325	441	84	277
Site D2 – N Boundary	329	261	203	184	163
Site D2 – E Boundary	136	NA	NA	121	163

Site Locations	11/12- 14/1/21	14/1- 15/2	15/2- 15/3	15/3- 12/4	12/4- 11/5
Site D1 – W Boundary	158	163	120	48	209
Site D2 – N Boundary	NA	158	150	162	133
Site D2 – E Boundary	257	100	NA	114	157

Particulates (PM₁₀)

PM₁₀ monitoring was undertaken at the sit in January 2021, refer to the Response to Further Information Request² (SLR Consulting, February 2021), Section 5.1 and Appendix 3 – Monitoring of Ambient PM₁₀ at Clasheen Quarry, Killarney, Co. Kerry.

Of relevance to potential community health impacts, the particulate material referred to as PM₁₀ (particulate material with a mean aerodynamic diameter of less than 10 μm) is recognised by the World Health Organisation as being associated with health concerns as they can enter the lower respiratory tract. The annual NAQS value for PM₁₀ is 40 μg/m³, with a daily limit value of 50 μg/m³ (no more than 35 exceedances per year). Ambient concentrations of PM₁₀ near the quarry boundary would be typically <10-15 μg/m³ that is within the range of concentrations measured in rural locations values and below 40% of the annual NAQS – refer to Appendix 3 for PM₁₀ monitoring results carried out in January 2021.

² SLR Consulting (February 2021) – Licensing of Industrial Plant AP-20-01, Response to Request for Further Information.

The Air Quality Impact assessment (Envirocon, October 2020), Section 6.0 has concluded that:

With the plant operating at maximum production and concentrations of NO₂, SO₂ and particulates in the stack exhaust gas also at maximum emission levels, the predicted ground level concentrations in the locality are substantially below the NAQS values. The impact of emissions from the exhaust stack combined with background ambient concentrations of NO₂, SO₂ and PM₁₀ for the locality will also result in cumulative impacts that are well below the NAQS.

2.2 Use of Cork Airport climatological data in emission impact studies

In selecting a data-source for climatological data used in air quality impact modelling, it is necessary to evaluate a number of factors. The nearest meteorological station may be exposed to a substantially different wind field pattern either due to coastal or significant terrain factors compared to the location where the study is taking place. The input parameters in air quality models are wind direction, wind speed, air temperature and cloud cover. These are the principal parameters used world-wide irrespective of whether the model used is the ADMS5 or US EPA dispersion models.

The nearest synoptic meteorological stations to the Clasheen site are Cork Airport and Valentia (Cahirciveen). A comparison of hourly data over a number of years was carried out and it is shown that the Cahirciveen Met Eireann site exhibits substantial coast influences that given the separation distance from Clasheen and the presence of the Kerry mountain range do not reflect the wind field experienced in the Killarney area. In addition, a comparison of predicted results based on each station showed that the higher concentrations tended to result from using the Cork Airport data.

From this assessment it was considered that the use climatological data from Cork Airport was appropriate for overall wind-field conditions within the Killarney area and so was the location selected for the modelling studies.

Even though Killarney has higher rainfall rates compared to rainfall data from Cork Airport, the wind direction and wind speed are the primary climatological factors that affect atmospheric stability and hence dispersion patterns from an exhaust stack.

2.3 Spring Well (Minish Well)

The appellants refer to the Spring Well (known as the Minish Well) and raise concerns over potential pollution and its use for drinking water. This matter related to groundwater resources does not fall within the remit of the Air Emissions Licence. Notwithstanding this, there are environmental management measures in place at the site to protect groundwater and manage surface water run-off within the site. It is also noted that Conditions 2.5 and 2.6 attached to Air Licence AP20-10 dated 18th May 2021 issued to Roadstone Ltd. by Kerry Co. Council requires bunding of fuel and bitumen storage tanks, and maintenance of oil absorbent materials on site at all times.

2.4 River Flesk

The appellants refer to surface water quality in the River Flesk. The results of the air quality impact modelling study by Envirocon (March 2021)³ relating to the potential effect of the emissions from the exhaust stack on deposition/acidity in the vicinity of Sheheree SAC demonstrate that even based on maximum 'worst-case' emissions the predicted rates are insignificant within the area near the SAC. The predicted annual deposition rate of nitrogen and sulphur over the River Flesk was also shown to be negligible compared to critical load values.

There are environmental management measures in place at the site to protect groundwater and manage surface water run-off within the site. It is also noted that Conditions 2.5 and 2.6 attached to Air Licence AP20-10 dated 18th May 2021 issued to Roadstone Ltd. by Kerry Co. Council requires bunding of fuel and bitumen storage tanks, and maintenance of oil absorbent materials on site at all times.

The appellants' make reference to water abstraction from the River Flesk. While this is not a matter that falls under the remit of the Air Emissions licencing process, it is noted that this water abstraction has been registered by Roadstone Ltd. with both Kerry Co. Council and the EPA.

On the basis of the above submission and the detailed assessments contained in the application / further information response documentation, the EPA is requested to uphold the decision of Kerry Co. Council and grant a licence for the operation of the asphalt plant at Clasheen, Killarney.

Yours faithfully,
SLR Consulting Ireland

A handwritten signature in black ink, appearing to read 'Tim Paul', with a horizontal line underneath.

Tim Paul
Director

Enc.

Cc. + Enc. Mr. P. Gibney (Roadstone Ltd.)

³ Envirocon (March 2021). Application for an Air Emissions Licence – (AP-20-01: Request for Clarification of Further Information, Proposed Asphalt Plant, Roadstone Ltd., Clasheen, Killarney, Co. Kerry)

APPENDIX A

AIR LICENCE REG. REF. NO. AP20-01 ISSUED BY KERRY CO. COUNCIL



COMHAIRLE CONTAE CHIARRAÍ
KERRY COUNTY COUNCIL

Guthán | Tel 066 7162000 Facs | Fax 066 7120663 Rphost | Email environ@kerrycoco.ie | reportlitteroffences@kerrycoco.ie Suíomh | Web www.kerrycoco.ie

RECEIVED

21 MAY 2021

20th May 2021

Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24.

Ref: AP-20-01

**Re: Air Pollution Act, 1987 - Notification of Decision to Grant a Licence
(subject to conditions) under Section 32 of the Act.**

Dear Mr. Kinghan,

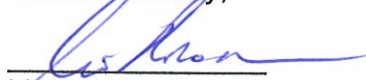
In pursuant of the powers conferred upon it by the above named Act, Kerry County Council has, by Order dated 18th May 2021, decided to grant a licence to you for atmospheric emissions from your macadam and asphalt production plant at Clasheen, Killarney, Co. Kerry subject to the Conditions set out in the Schedule attached thereto.

An appeal against a decision of the Licensing Authority under Section 34 of the Act to grant the licence and/or the conditions attached to the licence may be made by any person to the Environmental Protection Agency (EPA) within the period of one month beginning on the date of the decision to grant the licence which herein is the 18th May 2021. An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal, and, (c) state the grounds of appeal. An appeal to the Agency will be invalid unless accompanied by the appropriate fee which can be found on the EPA website. The Agency after consideration of an appeal lodged with it may direct the Local Authority to grant or revoke the licence or to amend or attach conditions relating to it. The appropriate address to which an appeal should be forwarded is :

The Environmental Licencing Programme, Office of Environmental Sustainability,
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

Additional information in relation to the appeals process, the appropriate fees applicable and the judicial review process are available via the EPA Website at <http://epa.ie/licensing/air/actappeals/>.

Yours sincerely,


Liam Brosnan, A.O.,
Environmental Services

**CC Mr. Peter Kinghan, Technical Director, SLR Consulting Ireland, 7 Dundrum
Business Park, Windy Arbour, Dublin D14 N2Y7**





Kerry County Council,
Environment Section,
Maine Street,
Tralee,
Co. Kerry.

Air Licence

Air Licence

Register Number:

AP20-01

Applicant:

**Roadstone Ltd.,
Fortunestown,
Tallaght,
Dublin 24**

Location of Facility:

**Clasheen,
Killarney,
Co. Kerry.**

Air Licence AP20-01
Roadstone Ltd.




Air Pollution Act 1987

Air Licence

AP20-01

Kerry County Council in exercise of the powers conferred on it by the Air Pollution Act 1987, hereby grants this licence reference number AP20-01 to Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 for atmospheric emissions from their Macadam and Asphalt production plant at Clasheen, Killarney, Co Kerry subject to conditions (9 No.) set out in the schedules attached hereto.

Signed on behalf of the said Council:


A/Senior Executive Officer,
Environment Section

Date:

18th May 2021

Note:

An appeal against a decision of a Licensing Authority may be made to the EPA (Environmental Protection Agency) within the period of one month beginning on the date of the decision to grant (or to refuse) the licence.

Appeals should be addressed to the "Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Wexford, Y35 W821"

An appeal shall: (a) be made in writing, (b) state the subject matter of the appeal and (c) state the grounds of the appeal. The EPA after consideration of any appeal lodged with it, may direct the Licensing Authority to grant or revoke a licence or to amend or attach conditions relating to it.

An appeal will not be valid unless it is accompanied by the prescribed fee outlined in the EPA's website.

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CONDITION 1 SCOPE

- 1.1 This licence relates to the production of macadam and asphalt by the Licensee – Roadstone Ltd., Fortunestown, Tallaght, Dublin 24 at Clasheen, Killarney, Co. Kerry.
- 1.2 For the purpose of this licence, the Licensing Authority refers to:
The Environment Section,
Kerry County Council,
Maine Street,
Tralee
Tel: 066 7162000
Fax: 066 7162001
Email: environ@kerrycoco.ie
- 1.3 The activities shall be controlled, operated and maintained and emissions shall take place as set out in this licence. All programmes and plans required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purpose of limitation of emissions, the period during which the licensed production facility shall conduct operations involving emissions to air shall be between 06.00 and 19.00 hours Monday to Friday inclusive and 06.00 and 14.00 Saturday.

The facility shall not operate on Sundays or Public Holidays.
- 1.5 The Licensing Authority may, on receipt of a written request from the Licensee, agree to hours of processing and operation of the plant for agreed temporary periods outside of those set out in condition no. 1.4.
- 1.6 The Licensing Authority reserves the right to limit the hours of operation which the licensed production facility shall conduct operations involving emissions to air should the Licensing Authority see fit.
- 1.7 This licence is for the purposes of licensing under the Air Pollution Act, 1987, for the manufacturing of macadam and asphalt and nothing in this licence shall be construed as negating the Licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.8 No alteration to, or reconstruction in respect of, the activity of any part thereof which would, or is likely to, result in a material change or increase in:
 - The nature or quantity of any emission,
 - The abatement/treatment of any emission,
 - The site management and control with adverse impact on emissions to air

shall be carried out or commenced without prior notice to, and without the prior written agreement of the Licensing Authority.

- 1.9 The Licensing Authority must be notified in writing of any change to company ownership and/or trading name of Licensee.

Reason: To clarify the scope of this permit.
--

CONDITION 2 MANAGEMENT OF THE ACTIVITY

- 2.1 The Licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.
- 2.2 The Licensee shall ensure that all operations onsite shall be carried out in a manner such that air emissions or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- 2.3 Corrective and Preventative Action
- 2.3.1 The Licensee shall establish, maintain and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- 2.3.2 Where a breach of one or more of the conditions of this licence occurs, the Licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- 2.4 Water sprays shall be used onsite during dry weather to ensure dust emissions are kept to a minimum.
- 2.5 All fuel and bitumen tanks and drum storage areas shall be rendered impervious to the material stored therein. In addition, storage tank and drum storage areas shall, as a minimum be bunded, either locally or remotely, to a volume equal to 110% of the largest tank within each of the individual bunded areas. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the

largest five drums likely to be stored therein. The height of the bund for any drum storage area shall be not less than 300 millimetres.

- 2.6 An adequate stockpile of oil absorbent materials shall be maintained onsite at all times. This should at a minimum include oil absorbent mats, a selection of booms and some oil absorbent granules.

Reason: To make provision for management of the activity.

CONDITION 3 INTERPRETATION

- 3.1 The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of: Temperature - 273K, Pressure – 101.3kPa, dry gas (no correction for oxygen content).

Reason: To clarify the interpretation of emission limit values.

CONDITION 4 NOTIFICATION

- 4.1 The Licensee shall notify the Licensing Authority as soon as practical after the occurrence of any of the following:
- Any malfunction or breakdown of control equipment, which is likely to lead to loss of abatement systems onsite.
 - Any incident giving rise to an emission liable to cause nuisance to the surroundings lands.
 - Any emission which does not comply with the requirement of this licence.
- 4.2 The Licensee shall maintain a register of any such incident as set out in Condition 4.1 above. This register shall include date and time of the incident, details of the circumstances giving rise to the incident and all actions taken to minimise the emission and the effect in the surrounding environment. This register shall be made available to the Licensing Authority on request.
- 4.3 The Licensee shall notify the Licensing Authority immediately concerning any incident, which might require offsite emergency response.

Reason: To provide for reporting of incidents onsite and maintain incident log.

CONDITION 5 EMISSIONS TO ATMOSPHERE

- 5.1 A monitoring programme for the plant shall be agreed within one month of the date of issue of the licence with the Licensing Authority to demonstrate the achievement of the necessary operational parameters and the specified emission limit values of this licence. The results of this programme shall be forwarded to the Licensing Authority as soon as they are available.
- 5.2 Activities onsite shall not give rise to emissions to the atmosphere, which exceed the limits specified in Appendix A.1 of the Licence. There shall be no other emission to the atmosphere of environment significance.
- 5.3 Activities on the site shall not give rise to dust deposition values which exceed the limits specified in Appendix A.2 of this licence. There shall be no other emission to the atmosphere of environmental significance. The total dust deposition figure in Appendix A.2 is based upon using the Bergerhoff Gauge.
- 5.4 All abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the recommendations of the supplier, and in agreement with Licensing Authority, so that monitoring accurately reflects the emissions.
- 5.5 The introduction of dilution air to achieve emission concentration limits is not permitted. Exhaust flow rates shall be consistent with efficient capture of emission and good management practices.
- 5.6 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out monitoring on behalf of the Licensing Authority on the emission to atmosphere to determine compliance with the emission limit values outlined in Appendix A.1. The Licensee shall be liable for all costs associated with this monitoring.
- 5.7 The Licensing Authority reserves the right to retain the services of a competent person(s) to carry out other monitoring on behalf of the Licensing Authority related to this licence as the Licensing Authority sees fit. The Licensee shall be liable for all costs associated with this monitoring.
- 5.8 The licensee shall prepare a programme, to the satisfaction of the Licensing Authority, for the identification and reduction of fugitive emissions to air using appropriate combination of best available techniques. The scope of this programme shall be agreed in advance with the Licensing Authority and carried out within 12 months of the commencement of production at the facility. The findings of this programme shall be furnished to the Licensing Authority as soon as possible thereafter. This programme, as a minimum, shall address,

- All particulate generating areas, including aggregate piles, conveyors and elevators, loading locations, crushers, screens, bag house filter discharge, rotary drum drier/mixing tower emission point, vehicular traffic
- All volatile emission points including bitumen storage tanks, mixing tower emissions, asphalt treatment/storage emission points.

5.9 In terms of the fuel used at the facility, the following emission standards shall be adhered to:

- Marked Gas Oil shall have a <0.1% w/w sulphur.
- Reprocessed Fuel Oil (e.g.) 11LS or REL210 shall have a <1.0% w/w sulphur
- Light Fuel Oil shall have a <1.0% w/w sulphur

A certificate stating percentage sulphur content of the fuel shall be submitted within two months of the date of issue of this licence.

Reason: To provide for the protection of the environment
--

CONDITION 6 EMISSION MONITORING

6.1 Emission to Atmosphere Monitoring

- 6.1.1 At the Licensee's own expense, monitoring and analysis of each emission shall be carried out as specified in Appendix A of this licence.
- 6.1.2 The Licensee shall nominate an independent company to carry out air emission monitoring at the site. This company shall be adequately equipped to carry out the required monitoring and be competent in this monitoring either by experience or by qualification.
- 6.1.3 Details of the chosen company and their level of experience/expertise along with proposed sampling and analytical methods shall be submitted for agreement with the Licensing Authority within one month of the grant of this licence. The agreed details shall become part of this licence. In the event of a change in this contractual arrangement, the Licensee shall notify this change to the Licensing Authority.
- 6.1.4 A report on this monitoring shall be submitted to the Licensing Authority in paper form as specified in Condition 8.1.
- 6.2 Monitoring of emissions to the atmosphere and dust deposition shall be carried out as specified in Appendix A of this licence, when maximum emissions to the atmosphere are occurring. The Licensing Authority may decide to reduce the frequency of monitoring following the examination of the trends shown by the monitoring data as submitted.

- 6.3 The frequency, methods and scope of monitoring as set out in this licence may be amended with the written agreement of the Licensing Authority following evaluation of test results.
- 6.4 Continuous Dust Monitoring**
- 6.4.1 The exhaust stack shall be fitted with a continuous dust monitor (with data logger) which records continuously the concentration of dust (in mg/Nm³) as discharged to the atmosphere. The monitor shall be functioning at all times (except during maintenance and calibration) when the activity is in operation, unless alternative sampling or monitoring has been approved in writing by the Licensing Authority for a limited time period. The dust monitor shall be fitted with an audible alarm system. The output of the dust monitor shall be recorded and show the average dust concentration in the exhaust gases for each hour and the maximum dust concentration within the hour. The continuous monitor shall be calibrated at monthly intervals initially and calibration periods may be revised following a satisfactory assessment period. The calibration assessment and the monitored results shall be submitted to the Licensing Authority on request.
- 6.4.2 In the event of malfunction of the continuous monitor, the Licensee shall contact the Licensing Authority as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Approval for the use of alternative equipment, other than in emergency situations, shall be obtained from the Licensing Authority in writing.
- 6.4.3 In the event of dust levels exceeding 50mg/m³ in the exhaust stack emissions, the operation of the bag filter shall be investigated. If it is found that the dust collection system has malfunctioned, plant operation shall cease until such time as dust collection system is repaired. The Licensee shall inform the Licensing Authority within 24 hours, of the exceedance by telephone and by email and shall provide information on the cause of the exceedance and on the measures to be taken to prevent a recurrence.
- 6.5 The Licensee shall provide safe and permanent access to any sampling/monitoring point on the emission stack and safe access to any other sampling/monitoring point required under this licence by the Licensing Authority.
- 6.6 In the event that the Licensing Authority receives a complaint in relation to alleged mal odour from the facility and upon investigation, the complaint appears to be justified, the Licensee will be notified. The Licensee shall put in place measures or carry out works to address this matter without delay. Alternatively, the Licensing Authority reserves the right to instruct the Licensee to cease production or part thereof at the facility until such time as the Licensing Authority is satisfied that the source of the odour has been identified and addressed.

Reason: To provide for adequate monitoring.

CONDITION 7 AMBIENT MONITORING

- 7.1 All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs offsite.
- 7.2 The Licensee shall, within three months of the date of grant of this licence, install and maintain in a prominent location on the site a wind sock which shall be visible from the public roadway.
- 7.3 Weather Monitoring Station**
If deemed necessary by the Licensing Authority, the Licensee shall install and operate a weather monitoring station on the site of an agreed type and at an agreed location, with the Licensing Authority.
- 7.4 Dust monitoring**
Within two months of the grant of this licence, the Licensee shall submit to the Licensing Authority for agreement, proposed locations for the monitoring of dust in the vicinity of the facility. The proposed locations shall take account of nearby sensitive receptors. On agreement of the said locations, dust levels shall be monitored every month at these locations. Dust levels shall not exceed 350mg/m³/day (30-day composite sample) as measured using the Bergerhoff Method. The results shall be submitted to the Licensing Authority within one month of the end of the period being reported on. On the basis of results submitted over time, the Licensing Authority may review the frequency of monitoring.
- 7.5 Odour Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient odour monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.
- 7.6 Ambient Air Quality Monitoring**
If deemed necessary by the Licensing Authority, the Licensee shall carry out ambient air quality monitoring at locations adjacent to the site. The scope of the monitoring shall be agreed in advance with the Licensing Authority.

Reason: To protect the amenities of the area and to protect human and animal health

CONDITION 8 RECORDING AND REPORTING

- 8.1 All results of quarterly monitoring required by this licence shall be submitted to the Licensing Authority within 10 days following the end of the quarterly period in a format to the agreement of the Licensing Authority.
- 8.2 The Licensee shall keep a record of all complaints relating to emissions from the activity in the form of a complaint log which should be maintained onsite for review by the Licensing Authority. Each record shall give details of the date and time of the complaint, the name of the complainant and the exact nature of the complaint in a complaint log maintained on the site. A record shall be kept of the response (if any) to each complaint.
- 8.3 The Licensee shall facilitate the Licensing Authority when it performs audits of the plant by making relevant staff and data available on request.
- 8.4 The Licensee shall keep records of all monitoring carried out and shall retain such records for a minimum period of seven years. These records shall be made available to the Licensing Authority on request.
- 8.5 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Licensing Authority, following evaluation of test results.
- 8.6 The Licensee shall submit to the Licensing Authority, a year from the date of grant of this licence, and each calendar year thereafter, an Annual Environmental Report. This report shall include as a minimum the following information:
- Emissions to the atmosphere monitoring summary
 - Ambient Air and Dust Deposition monitoring summary
 - Complaints Summary
 - Pollution emission and environmental incident report.
 - Evaluation of the operation of the bag filter.

Reason: To provide for the reporting of adequate information to the Licensing Authority

CONDITION 9 FINANCIAL PROVISIONS

- 9.1** The Licensee shall pay to the Licensing Authority a minimum annual contribution of €500 towards the cost of site inspections and the assessment of monitoring results. The Licensee shall, not later than January 31st of each year, pay to the Licensing Authority this amount, updated in accordance with the Consumer Price Index. The Licensing Authority however, reserves the right to alter the rate of contribution each year in order to take account of the actual cost of monitoring as incurred by it in the previous year and as estimated for the next year.
- 9.2** Should the Licensing Authority deem it necessary to carry out its own monitoring or retain the service of an independent company to carry out monitoring on its behalf in relation to any monitoring described in Condition 6 or Condition 7 of this licence, the Licensee shall contribute such sums as determined by the Licensing Authority to defraying the Licensing Authority's costs.

Reason: To provide for assessment of and monitoring of data arising from the activity and provided to the Licensing Authority.

APPENDIX A

A.1 Emission to Atmosphere

Emissions Point: Single Exhaust Stack
Volume to be emitted: 76,520m³ per hour maximum (56,000Nm³/hr)

Parameter	Emission Limit Value (mg/Nm ³)	Monitoring Frequency
NOx (as NO ₂)	<450	Quarterly
Sulphur Dioxide	<350	Quarterly
CO	<500	Quarterly
Particulates	<50	Continuous

A.2 Dust Monitoring

Location: As required under Condition 7.4

Parameter	Emission Limit Value	Monitoring Frequency
Total Dust Deposition	350 mg/m ² /day (Monthly mean)	Continuous for each month.

A3 Ambient Air Quality and Odour Monitoring

As described in Conditions 7.5 and 7.6

