

APP5/1

**Town & Country Planning Act 1990
Section 78 Appeals**

Craig Yr Hesg Quarry

Evidence of:

**Katrina Early Hawkins
Smith Grant LLP**

DUST

On behalf of: Hanson UK

Planning Inspectorate Reference: APP/L6940/A/20/3265358 (Extension Appeal)

Planning Inspectorate Reference: APP/L6940/A/21/3282880 (S73 Appeal)

Local Authority Reference: 15/0666/10 (Extension Appeal)

Local Authority Reference: 21/0720/15 (S73 Appeal)

May 2022

CRAIG YR HESG QUARRY

PROOF OF EVIDENCE: DUST

For: Hanson UK

Contents

- 1 Introduction
- 2 Legislation, Planning Policy and Relevant Guidance
- 3 Extension Appeal: Procedural Matters
- 4 Extension Appeal: Current Site and Proposed Development
- 5 Extension Appeal: Dust Impact Assessment
- 6 Extension Appeal: Summary of Overall Significance and Policy Considerations
- 7 S73 Appeal: Procedural Matters
- 8 S73 Appeal: Current Site and Proposed Development
- 9 S73 Appeal: Dust Impact Assessment
- 10 S73 Appeal: Summary of Overall Significance and Policy Considerations
- 11 Summary and Conclusions

Appendices (APP5/2) (Bound Separately)

- | | |
|----------------|---|
| Appendix KEH1 | Extract of Planning Policy Wales (PPW), 2021 |
| Appendix KEH2 | Extract of MTAN1 |
| Appendix KEH3 | Extract of RCT Policy AW10 |
| Appendix KEH4: | Submitted Western Extension Supplementary Environmental Statement Dust Monitoring and Management Plan |
| Appendix KEH5: | Dust Monitoring Data March 2021-April 2022 |
| Appendix KEH6: | Submitted S73 Environmental Statement Dust Monitoring and Management Plan |
| Appendix KEH7: | Extract of Environmental Permit (PPC/009-3.5-HQPEL/0104D; dated 22 nd February 2022) |

1 Introduction

1.1 Experience and Qualifications

1.1.1 My name is Katrina Hawkins. I hold a First Class BSc (Hons) degree in Chemistry from the University of Nottingham and MSc degree in Environmental Pollution Control from the University of Leeds. I am a Chartered Environmentalist, a Member of the Institute of Air Quality Management, a Member of the Institute of Environmental Sciences and a Member of the Institute of Environmental Management and Auditing.

1.1.2 I have been in practice as an environmental consultant for over 25 years specialising in air, land and water pollution. I was employed as a Consultant, and later a Technical Director, by RPS Consultants Ltd for eleven years. I am currently Chairman of Smith Grant LLP (SGP), an environmental consultancy based in Wrexham, North Wales, having been a Partner of SGP since 2005.

1.1.3 SGP specialises in air quality and contaminated land investigation and remediation. I have undertaken an extensive number of dust and air quality assessments for a wide range of developments across the UK. Of particular relevance to this Appeal, I have carried out numerous assessments of potential dust and other aerial emissions from mineral extraction facilities, including quarries, roadstone coating plants, along with other waste management and industrial activities.

1.2 Instructions and Scope of Evidence

1.2.1 My evidence has been prepared in relation to the refusal of planning permission by Rhondda Cynon Taff County Borough Council (RCT) for the planning applications submitted by Hanson UK ('the Appellant') in 2015 for a Western Extension to the existing Craig yr Hesg Quarry ('the Site') and in 2021 for a Section 73 application to extend the time period for the completion of quarrying and related operations at the Site.

1.2.2 Hanson UK is appealing both the refusals and these are referred to as the Western Extension Appeal (ref: APP/L6940/A/20/3265358) and S73 Appeal (ref: APP/L6940/A/21/3282880).

1.2.3 Smith Grant LLP (SGP) has been involved with the Site since 2009 and was responsible for the Air Quality Assessment (AQA) undertaken as part of the EIA and Environmental Statement submitted to accompany the Environment Act ROMP Review application in 2010. SGP's involvement has continued including with the on-going process of review with respect to PM₁₀ monitoring carried out at the Site. My colleague, Dr Anthony Smith, subsequently prepared the Air Quality Chapter for the Western Extension 2015 ES (hereafter referred to as the 'WE ES').

1.2.4 I have been actively involved at the Site since 2017 carrying out the regular review and assessment of the PM₁₀ monitoring and prepared the Air Quality Chapter for the Section 73 ES

(hereafter referred to as the 'S73 ES'). In preparing the Chapter I considered the potential impacts of aerial emissions from the current and proposed on-going operations of the quarry on sensitive development and land uses in the locality. I have subsequently continued involvement up to, and including, this Planning Inquiry with respect to both Appeals, including preparation of the Western Extension Supplementary ES (hereafter referred to as the 'WE SES'). I am therefore familiar with dust related issues at Craig yr Hesg Quarry and associated with the two applications.

1.2.5 In preparing this evidence I have reviewed the relevant documentation and guidance as set out in the Core Documents and appendices to my Proof(s).

1.2.6 As part of this preparation I myself have undertaken 5 visits to the site and / or surrounding area in 2021/ 2022.

1.2.7 My evidence sets out the background information to the site and operations and addresses the dust related reasons for refusal for the Western Extension and S73 applications along with comments set out in the RCT Statement of Case (SoC) and Supplementary Statement of Case (SoC). This includes the provision of additional dust monitoring data, including at off-site locations.

1.2.8 My evidence is structured in the following sections:

- Section 2: outline of relevant legislation, planning policy and guidance (applicable to both Appeal A and Appeal B);
- Section 3: Western Extension Appeal: review of relevant submitted application information, consultee responses, reason for refusal, statement of case and third party objections;
- Section 4: Western Extension Appeal: summary description of the current site setting, nearby development and Proposed Development;
- Section 5: Western Extension Appeal: appraisal of potential dust impacts associated with the Proposed development;
- Section 6: Western Extension Appeal: Summary of Overall Significance and Policy Considerations
- Section 7: S73 Appeal: review of relevant submitted application information, consultee responses, reason for refusal, statement of case and third party objections;
- Section 8: S73 Appeal: description of the current site and Proposed Development;
- Section 9: S73 Appeal: appraisal of potential dust impacts associated with the Proposed Development;
- Section 10: S73 Appeal: Summary of Overall Significance and Policy Considerations
- Section 11: summary and conclusions.

1.2.9 My evidence should be read in conjunction with the other evidence provided as part of the Appeal, including the Statement of Case and in particular the evidence on planning issues prepared by Mr Graham Jenkins of SLR and my separate evidence on air quality matters.

1.2.10A topic-specific Statement of Common Ground (SoCG) has been agreed on dust-related matters that have been agreed. Common ground has been reached on factual circumstances of the site and existing regulatory controls, the dust monitoring methodology employed to inform the WE ES, WE SES and S73 ES and the submitted WE and S73 Dust and Particulate Management and Monitoring Plans.

1.3 Declaration

1.3.1 The evidence which I have prepared and provide for these Appeals is true to the best of my knowledge and I confirm that the opinions expressed are my true and professional opinions in the matters to which they refer.

2 Legislation, Planning Policy and Relevant Guidance

- 2.1 Mineral extraction, processing and handling operations may give rise to releases of airborne particulate matter (PM) or 'dust'. The nature and quantity of airborne PM released at any one time will depend on a wide variety of factors including, but not limited to, the nature and quantity of the material being handled, the handling processes incorporated and the weather conditions at the time of handling. Airborne PM is made up of condensed phase (solid or liquid) particles suspended in the atmosphere and comes from both man-made and natural sources. It ranges in size from a few nanometres to around 100µm and can give rise to both soiling effects through dust deposition and human health effects through suspended particles.
- 2.2 Dust soiling will arise from the deposition of particulate matter in all size fractions but will mostly be associated with particulate matter of diameter greater than 30µm. Particles below 10µm (referred to as PM₁₀) correspond to the inhalable fraction of particulate matter and, depending on the nature and concentrations of the particles, can be associated with health impacts. PM₁₀ includes both fine (those particles of diameter below 2.5µm; referred to as PM_{2.5}) and coarse (diameter between 2.5-10µm; PM_{2.5-10}) fractions of airborne particulate matter which normally arise from different sources.
- 2.3 This Proof is solely concerned with dust deposition and potential resulting 'disamenity'; other 'air quality' matters where this relates to established air quality standard are considered separately (APP6/1).
- 2.4 Details of the relevant legislation, planning policy and guidance were provided in the Air Quality and Dust Chapters to the WE ES, WE SES and S73 ES. For ease the key relevant policies and documents are detailed below:
- 2.5 Legislation
- 2.5.1 Dust deposition may give rise to annoyance, disamenity or an acknowledged nuisance, through the unacceptable effects of emissions. Deposited dust as such is not regulated under any specific legislative requirements and there are no UK statutory standards or recommended levels in relation to dust deposition. Public concerns relating to dust accumulation and soiling may be related to a range of factors including the nature of a site and locality and baseline levels.
- 2.5.2 Controls are typically achieved through conditions within planning permissions and / or Environmental Permits requiring the implementation of a dust management plan to prevent amenity impacts. Deposited dust may also give rise to a 'nuisance' as Statutory, private and public nuisance as defined in environmental law and in so far as nuisance relates to unacceptable effects of emissions.

2.6 Planning Policy

National Planning Policy and Guidance

- 2.6.1 **Planning Policy Wales** (extracts provided in Appendix KEH1) sets out the Welsh Government's planning policies for Wales and how these are expected to be applied. Section 5.14 of the PPW deals specifically with Minerals and provides some guidance to planning authorities on balancing the fundamental requirement to ensure the adequate supply of minerals with the protection of amenity and the environment.
- 2.6.2 Section 5.14.2 states that the key principles are to.....'*reduce the impact of mineral extraction and related operations during the period of working by ensuring that impacts on relevant environmental qualities caused by mineral extraction and transportation, for example air quality and soundscape, are within acceptable limits.*'
- 2.6.3 Section 5.14.42 further states: '*Mineral workings should not cause unacceptable adverse environmental or amenity impact. Where this is not possible working needs to be carefully controlled and monitored so that any adverse effects on local communities and the environment are mitigated to acceptable limits. Any effects on local communities and the environment must be minimised to an acceptable standard.*'
- 2.6.4 Section 5.14.44 establishes the principal of buffer zones to be used by planning authorities to provide protection around permitted and proposed mineral workings. Paragraph 5.14.45 further states: '*The maximum extent of the buffer zone would depend on a number of factors: the size, type and location of workings, the topography of the surrounding area, existing and anticipated levels of noise and dust, current and predicted vibration from blasting operations and availability of mitigation measures.*'
- 2.6.5 Section 6.7 of the PPW is titled Air Quality and Soundscape Framework and provides some guidance to planning authorities on taking air quality and pollution into account in planning policies and decisions. This section deals primarily with air quality but does also make reference to pollution and amenity.
- 2.6.6 Section 6.7.5 states that '*the key planning policy principle is to consider the effects which proposed developments may have on air or landscape quality and the effects which existing air or soundscape quality may have on proposed developments.*'
- 2.6.7 Section 6.7.6 states: '*In proposing new development, planning authorities and developers must, therefore:*

- *address any implication arising as a result of its association with, or location with, air quality management areas, noise action planning priority areas or areas where there are sensitive receptors;*
- *not create areas of poor air quality or inappropriate soundscape;*
- *seek to incorporate measures which reduce overall exposure to air and noise pollution and create appropriate soundscapes.*

2.6.8 Section 6.7.7 states: *'To assist decision making it will be important that the most appropriate level of information is provided and it may be necessary for a technical air quality and noise assessment to be undertaken by a suitably qualified and competent person on behalf of the developer.'*

2.6.9 Section 6.7.14 further states: *'Proposed development should be designed wherever possible to prevent adverse effects to amenity, health and the environment but as a minimum to limit or constrain any effects that do occur.'* It further states: *'In circumstances where impacts are unacceptable, for example where adequate mitigation is unlikely to be sufficient to safeguard local amenity in terms of air quality and the acoustic environment it will be appropriate to refuse permission'*.

2.6.10 Further advice specific to mineral extraction and dust and air quality is provided in the **Mineral Technical Advice Note (Wales) 1: Aggregates (MTAN1)** (CD6.2; extracts provided in Appendix KEH2) in paragraphs 70-77. Paragraphs 70-71 build on the principal of buffer zones that were established in the Mineral Planning Policy Wales (MPPW; now superseded by sections included within PPW) stating that a buffer zone of 200m should be provided to hard rock extraction and processing operations to protect sensitive land uses unless there are clear and justifiable reasons for reducing the distance. MTAN1 provides further advice on the sources and effects of dust from aggregate production and highlights the need to avoid duplication of controls under the planning and environmental permitting regimes.

2.6.11 The PPW and MTAN1 provide only limited guidance and do not go into detail on the mechanics of dust assessments for minerals planning applications. Reference is therefore also made to non-statutory guidance as discussed below.

Local Planning Policy

2.6.12 The Rhondda Cynon Taf (RCT) Local Development Plan (LDP) forms the currently adopted development plan and which was adopted in March 2011. **Policy AW10 – Environmental Protection and Public Health** (CD7.3; extract provided in Appendix KEH3) states: *'Development proposals will not be permitted where they would cause or result in a risk of unacceptable harm to health and / or local amenity because of:*

1. *Air pollution;...unless it can be demonstrated that measures can be taken to overcome any significant adverse risk to public health, the environment and / or impact upon local amenity.'*

2.6.13 RCT is currently progressing preparation of its' Replacement Local Development Plan for the period 2022 – 2037.

National Best Practice and Guidance

2.6.14 The **IAQM Guidance on the Assessment of Mineral Dust Impacts for Planning** document (CD5.1) provides specific non-statutory guidance in relation to dust and mineral sites. The guidance clarifies when a dust assessment is required and outlines a recommended methodology for carrying out impact assessments and determining the significance of impacts and effects. The guidance also sets out suggested approaches to mitigating emissions and impacts. Although the guidance is designed specifically for use in England, it is considered that it can be adapted appropriately for use in the devolved administrations such as Wales.

2.6.15 The **IAQM Guidance on the Assessment of Dust from Demolition and Construction** (CD5.2) provides supplementary planning guidance on the control of dust and emissions from construction and demolition. Parts of this guidance may also be applied to quarrying activities where these present similar risks of impacts.

2.7 Key Policy Considerations

2.7.1 The PPW provides some guidance to mineral planning authorities on taking air pollution and dust into account in planning policies and decisions.

2.7.2 Section 5.14.2 states that the key principles are to.....'*reduce the impact of mineral extraction and related operations during the period of working by ensuring that impacts on relevant environmental qualities caused by mineral extraction and transportation, for example air quality and soundscape, are within **acceptable** limits.*' Section 5.14.42 further states '*Mineral workings should not cause **unacceptable** adverse environmental or amenity impact. Where this is not possible working needs to be carefully controlled and monitored so that any adverse effects on local communities and the environment are mitigated to **acceptable** limits. Any effects on local communities and the environment must be minimised to an **acceptable** standard.*'

2.7.3 Similarly, the RCT LDP Policy AW10 includes the terms **significant adverse** and **unacceptable harm**.

2.7.4 These policies do not therefore specifically state that an adverse impact would result in refusal.

2.7.5 I have therefore in my evidence considered the risk of the Appeal proposals resulting in **unacceptable** impacts on amenity. In determining what defines an **unacceptable** level or **significant adverse** impact I have referred to the PPW and other relevant guidance as detailed above and discussed in the following sections. An adverse impact on its own does not necessarily result in an unacceptable impact or a significant adverse effect.

2.7.6 There is no specific planning guidance provided in relation to the assessment of dust in the context of the planning regime. In determining what forms a significant adverse effect or unacceptable impact reference is therefore primarily made to available non-statutory guidance.

2.7.7 It is also noted that the available planning policies refer to impacts on general amenity, the effect of an impact being to result in disamenity. The definition of disamenity as given in the IAQM guidance is:

- Disamenity – can be considered as negative element or elements that detract from the overall character or enjoyment of an area.

2.7.8 The term 'nuisance' or 'annoyance' dust has frequently been referred in relation to deposition dust. However, the term 'nuisance' is not referred to in the PPW, MTAN1 or RCT LDP or supporting guidance and it is the potential impact on general amenity, or disamenity, that is the relevant issue in the context of the planning regime. I have therefore used the term 'disamenity' dust instead throughout my Proof to refer to dust that may result in loss of amenity as advised in the IAQM guidance.

3 Extension Appeal: Procedural Matters

3.1 A full review of the planning application and history of the Site is provided by Mr Graham Jenkins in his evidence (APP/GJ/2) and I refer here only to those matters of relevance to dust and air quality impacts.

3.2 Planning Application Submitted Information

3.2.1 The WE planning application was supported by an Environmental Statement prepared by SLR (May 2015; CD1.2). The WE ES included a Chapter on Air Quality which included consideration of Dust. The Chapter included a dust assessment in relation to both the proposed westwards extension and continuation of operations within the existing quarry. The Chapter set out the management and mitigation measures that would continue to be implemented at the site with regards to the proposed continuation of existing operations and additional measures that would be implemented in relation to the extension activities. The Chapter concluded there would not be any significant adverse dust impacts as a result of the Proposed Development.

3.2.2 In response to objections received by RCT during the determination period as part of the consultation process the Appellant subsequently issued a written Response to Public Consultation: Wellbeing and Environmental Health Issues June 2016 (CD2.1). The issues to be addressed by the report had been informed by liaison between RCT, Public Health Wales, the Cwm Taf University Health Board, and representatives of Glyncoch (via Glyncoch Community Regeneration Ltd) and the scope was agreed between the Appellant and RCT. A further public consultation exercise was undertaken by the Council on the planning application following submission of the response on Well-Being and Environmental Health.

3.2.3 In response to on-going discussions between RCT and the Appellant, in August 2017 the Appellant subsequently issued a Dust and Particulate Management Plan and Dust Monitoring Plan (hereafter referred to as the 'WE DMMP'; CD2.4). This document sought to draw together the management and monitoring measures that were to be implemented specifically in relation to fugitive dust taking into account the existing planning permissions (ROMP Condition 30) and existing Environmental Permit controls.

3.3 Statutory Consultee Responses

Responses were received from several bodies, including RCT Public Health, Protection and Community Services, Cwm Taf University Health Board, Public Health Wales, and Pontypridd Town Council and Ynysybwl and Coed y Cwm Community Council following the planning application submission and which included commentary on dust and air quality. The response provided by the Applicant on Wellbeing and Environmental Health Issues sought to provide a response to these points.

3.4 Other Parties Responses

3.4.1 Other responses were received from neighbour notification, advertisement and/or other representations objecting with references to dust arising from the Site and impacts on local air quality.

3.5 Officer's Reports to Planning Committee

3.5.1 The February 2020 Officer's Report (CD4.1) notes that one of the key impacts of the proposal that needed to be assessed was in respect of the health, well-being and amenity of local residents and that in this regard the key issues to be considered include potential impacts on air quality due to fine and very fine particulate matter and "nuisance" dust.

3.5.2 The Report notes that *'following consultation and liaison with the Council's Public Health, Protection & Community Services and Public Health Wales it is now considered that sufficient information has been submitted to provide evidence that processes can be managed to ensure a limited impact upon the level of air quality and neighbour amenity in respect of particulate matter and therefore the application is considered to be acceptable in this respect. In particular Public Health Wales and Cwm Taf University Health Board have indicated that based on current levels of activity adverse air quality impacts and consequently human health impacts are unlikely.'*

3.5.3 The Report concludes that the impacts in respect of blasting, air quality, operational noise and visual impact have been assessed and it is considered that they can be mitigated and managed to a satisfactory level to grant planning permission for the extension, subject to conditions and a Section 106 Agreement (see 3.5.5 below).

3.5.4 The Officer's Report concluded that it was *'considered that the effects of the proposal can be mitigated and managed to a level where they have a minimal impact on sensitive developments surrounding the site. Therefore, it is considered that there are clear and justifiable reasons for not applying the 200m buffer zone rigidly and the application is acceptable, subject to the conditions set out below to ensure this takes place.'*

3.5.5 Accordingly, the Report recommended approval, subject to conditions and the Applicant first entering into a Section 106 Agreement. The Section 106 Agreement would include for the payment by the Applicant of a contribution to the setting up of and future air quality monitoring of particulate matter in the local community. The proposed conditions to any granted planning permission included for the implementation of the previously submitted Dust Management and Monitoring Plan (WE DMMP). It is of particular note that the condition (recommended Condition 15) included for the implementation of the DMMP as submitted, not for the submission and agreement of any alternative or revised scheme, the specific wording of the proposed condition being *'The controls set out in Dust Management and Monitoring Plan dated 16 August 2017 shall be implemented from the date of commencement of the development and shall be*

complied with at all times until the expiry of the permission. The first formal review set out in section 5.2 of the Plan will be due 2 years from the date of commencement of the development.'

3.5.6 Following deferment of the determination of the application the subsequent July 2020 Report (CD4.2) to Planning Committee highlighted the potential strengths and weaknesses of making a decision contrary to the Officer recommendation. This provided further comment on several aspects and noted: *In addition, Council's Public Health, Protection & Community Services consider that processes at the quarry can be managed to ensure a limited impact upon the level of air quality and neighbour amenity in respect of particulate matter and therefore the application is considered to be acceptable in this respect.* The planning officer again recommended approval subject to the conditions and Section 106 agreement set out in the earlier report (together with an additional condition limiting output to 400,000 tonnes per annum).

3.6 Reason for Refusal

3.6.1 The planning application was refused by the Council's Planning Committee. The formal notice of the decision to refuse planning permission (CD4.3) includes one Reason for Refusal:

Reason 1: Minerals Technical Advice Note (MTAN) 1: Aggregates (Paragraphs 70 and 71) identifies a suitable minimum distance between hard rock quarries and sensitive development is 200 metres, and states that any reduction from this distance should be evidenced by clear and justifiable reasons. The proposed quarry extension encroaches within 200m of sensitive development and the Council does not consider that the applicant has provided sufficient evidence of clear and justifiable reasons for reducing that minimum distance in this case.

3.6.2 No further information is provided in the Reason for Refusal. There is no specific allegation in the Reason for Refusal of unacceptable dust or air quality impacts in either the short or long term. However, Paragraph 71 of MTAN 1 referred to in the reason for refusal refers to dust arising from mineral extraction and processing operations.

3.7 Supplementary ES

3.7.1 A Supplementary Environmental Statement (WE SES; CD2.9) was later issued by the Appellant in April 2021 in response to the assessment of the adequacy of the WE ES and supporting documents by PINS (now PEDW) in relation to the appeal of the decision submitted by the Appellant. The SES included an update to the Air Quality and Dust Chapter included within the WE ES. This included consideration of any changes in relevant policy, legislation and guidance in relation to dust and air quality, along with any changes to baseline conditions that had occurred since preparation of the WE ES. Any such identified changes were assessed to determine the potential implications on the original assessment findings and, where necessary, revised mitigation recommendations were presented.

3.7.2 The WSE SES concluded that with the on-going application of standard good practice measures, along with the additional site-specific enhanced measures, the residual risk of adverse effects due to disamenity dust remained *slight adverse* at most at all receptors. The resulting significance of disamenity resulting from fugitive dust was assessed as **not significant**.

3.7.3 The WE SES included a slightly revised Dust and Particulate Management Plan and Dust Monitoring Plan as Appendix 4-7 (referred to hereafter as the 'WE SES DMMP') to reflect the latest air quality data that was available. For ease this is provided as Appendix KEH6 to my Proof.

3.8 Statements of Case

RCT Statement of Case and RCT Supplementary Statement of Case)

3.8.1 Paragraph 3.49 of the RCT Statement of Case in relation to the Western Extension Appeal states that *the supporting evidence prepared on behalf of the appellant does not satisfactorily evidence that the extension of quarry operations at the site from 2022 to 2047 together with new operations within the proposed western extension area could be satisfactorily undertaken without giving rise to adverse impacts upon the amenity of occupiers/users of sensitive development in the immediate proximity of the site in respect of noise and dust or that suitable controls or compensatory measures could mitigate these amenity impacts to a satisfactory degree.*

3.8.2 Paragraph 3.51 in relation to the Western Extension Appeal and dust refers to earlier text provided in the SoC in relation to Appeal B (S73 Appeal) referring to *the shortcomings of ES-B which are not satisfactorily addressed by Chapter 4 of SES-A* (as provided in relation to Appeal A (Western Extension Appeal). This is taken to refer to paragraph 3.9 of the SoC which specifically refers to dust and asserts that *Chapter 11 of ES-B does not present comprehensive and up to date dust monitoring data. Reliance is placed on monitoring undertaken in 2014, supplemented by a "short term" monitoring exercise in 2021. In the absence of comprehensive and up to date monitoring data, there is no robust assessment of the impact of site operations on nearby sensitive properties and uses. Whilst it is noted that mitigation measures are proposed to be secured by a condition, the acceptability of those measures cannot be assessed without comprehensive and up to date monitoring data. Any alternative measures would suffer from the same shortcoming.*

3.8.3 Paragraph 3.50 further states *in addition, the LPA considers that the identified impacts on sensitive receptors is substantial rather than "slight" or "negligible".* This again is taken to refer to text in paragraph 3.9 which states *'Furthermore, the results presented in Chapter 11 of ES-B do identify that there will be a risk of "adverse effects" from dust on high*

sensitivity residential receptors. Whilst ES-B expresses the judgment that such effects will be "slight" or "negligible", this is a matter for planning judgment and the LPA considers there will be substantial adverse impacts on residential amenity by reason of dust.'

3.8.4 It is of note therefore that on-going dialogue with RCT following the planning application in 2015 resulted in the production of the WE DMMP, which was submitted in 2017. Inclusion of reference to this specific plan in the recommended conditions should planning permission be granted, as detailed in the February and July 2020 Officer's Reports, would indicate this proposed scheme was accepted by the relevant Environmental and Planning Officers. This would include agreement with not only the proposed monitoring scheme in relation to dust but also the included management and mitigation provisions.

3.9 Third Party Representations

3.9.1 In addition to the reason for refusal and the issues raised by RCT in its Statement of Case a large number of third-party representations have been received. These included references to 'health and well-being' and 'residential amenity', with sub-references to dust and air quality. These issues have therefore been dealt with in my Proofs on dust and air quality.

3.10 Summary of Procedural Matters

3.10.1 In summary, the planning application was supported by an Environmental Statement which considered Air Quality and Dust impacts. Following on-going dialogue with RCT this was supplemented by a written response to Public Consultation: Wellbeing and Environmental Health Issues, which presented further information in relation to dust and air quality. This was later further supplemented by a submitted WE DMMP. The Officer subsequently recommended that planning permission be granted, subject to the inclusion of a condition for the implementation of the submitted WE DMMP, along with agreement to a Section 106 in relation to contribution of on-going air quality monitoring. The WE SES did not identify any changes to the baseline conditions that would affect the Officer's recommendation.

3.10.2 Following deferment of the determination of the application and provision of a report highlighting the strengths and weaknesses of the committee making a decision contrary to officer recommendation, the planning officer again recommended approval subject to the conditions and Section 106 agreement set out in the earlier report (together with an additional condition limiting output to 400,000 tonnes per annum).

3.10.3 The Committee subsequently refused the permission, contrary to the Officer recommendation, the reason for refusal citing the quarry extension encroaching within 200m of sensitive development and absence of clear and justifiable reasons for reducing the minimum distance. The SoC however cites i) a lack of comprehensive and up to date dust monitoring data meaning that the acceptability of mitigation measures cannot be assessed and ii) that the LPA considers there would be a substantial impact on residential amenity by reason of dust rather than slight

or negligible as concluded in the WE ES and WE SES. My following evidence therefore presents the results of additional dust monitoring along with further discussion of the dust impact assessment.

4 Extension Appeal: Current Site Setting and Proposed Development

4.1 Full details of the site setting and the existing and proposed operations are provided in the evidence presented by Mr Graham Jenkins (APP/GJ/2), the WE ES, WE SES, the Western Extension Appeal Statement of Common Ground (SoCG) and S73 Appeal SoCG. Only key summary details of relevance to air quality and dust are provided below.

4.2 Site Location and Surroundings

4.2.1 The application boundary is provided in plans CYH/E1 and CYH/E2 included in the Planning Application Statement (CD1.1). The nearest properties to the existing quarry lie with the Glyncoch estate to the north and include a Spar supermarket and Housing Association accommodation at Daren Court (historically referred to as 'old people's flats'), located within 10m of the Site boundary. Residential properties on Glyncoch Avenue and Gardner Close extend to within 20m of the Site boundary. Two schools are located within the Glyncoch Estate, Glyn Coch Primary School and Cefn Primary School, both of which lie beyond 250m of the Site boundary.

4.2.2 Residential properties lie along stretches of the B4273, Ynysbwl Road, to the west with Rogart Terrace being located adjacent to the site entrance.

4.2.3 Planning permission (ref: 17/0788/10; CD10.4) was granted by RCT for demolition of a Gospel Hall on Garth Avenue and construction of 2 new dwellings in September 2020. Construction of these dwellings has been observed to be currently on-going; this is discussed further below in Section 5.6.

4.2.4 The proposed extension would follow the existing high ground to the northwest of the existing void, to within a minimum of 240m from housing off Cefn Lane, adjacent to Cefn Lee Farm to the north and northwest. Cefn Primary School buildings and grounds lie a minimum of 240m and 165m respectively north of the edge of the extraction area.

4.2.5 The closest residential properties to the proposed extraction area are 5 dwellings, nos. 28 – 36 Conway Close which lie within 200m to the north of the proposed new extraction area. No other settlements or individual dwellings lie within 200m of the proposed new extraction area.

4.3 Development Description

4.3.1 The proposals seek to i) continue existing activities at the Site through the consolidation of the current planning permissions into a single permission regulating quarrying, restoration and ancillary activities and ii) extend the existing quarry westwards (the Western Extension).

4.3.2 The existing site comprises four principal zones:

- the entry / exit road to / from the quarry; this lies outside the designated mining site planning boundary, but is included within the Environmental Permit boundary (discussed below in sub-section 4.4);
- the haul road between the quarry void and Primary Crusher feed hopper;
- the main quarry void;
- the yard area, including mineral processing plant (including crushing and screening plant), asphalt (roadstone coating plant (RCP)), mineral stockpiles, silt ponds and offices.

4.3.3 The site access and exit lie at the south-eastern extremity of the Site with the processing plant and stockpiling areas lying in the eastern area. The main quarry area lies to the west, with a series of quarry faces and benches that have been excavated in a general north-westerly direction.

4.3.4 Consented activities also include an asphalt plant (roadstone coating plant (RCP)) which was erected and commissioned in 2016. This replaced an earlier plant that was decommissioned in 2009.

4.3.5 The proposed Western Extension would extend westwards from the current north-westerly limit of extraction. Key elements of the proposed extension are:

- construction of a screening landform around the eastern and northern boundaries prior to the commencement of extraction;
- construction of a soil screen bund along the western boundary of the extension area, again prior to the commencement of extraction;
- phased extraction of Pennant Sandstone from the extension area;
- continued use of existing processing plant, ancillary plant and infrastructure to process the reserves from both the extension area and at the existing quarry; and,
- an overall restoration scheme for the existing quarry and extension area.

4.3.6 The area of the Site incorporating both the existing facility and the proposed extension is shown below in Figures 4.1 and 4.2.

4.3.7 There are no proposals for any changes to the current methods of working and proposals are for the continuation of existing operational hours at the site.

4.4 Regulatory Controls

4.4.1 Several conditions are included in the current planning permission (08/1380/10; CD10.1) covering the existing operations that relate directly or indirectly to the control of dust, as summarised below:

- Condition 28 requires the use of best practicable means to restrict the generation of dust on the haul roads and access road and within the remainder of the quarry as a result of storage and transportation of any material;
- Condition 29 requires the use of a water bowser or similar to be used to minimise the emissions of dust;
- Condition 30 details several specific requirements with respect to the quarrying operations and transportation to minimise the emissions of dust.

4.4.2 In addition, Condition 15 of planning permission 13/1039/10 for improvement to the quarry entrance / exit road (CD10.3) requires the provision of a wheel wash for exiting vehicles.

4.4.3 As noted above in paras 3.2.3 and 3.7.3 proposals included submission of a DMMP which sought to draw together these existing controls, along with additional measures in relation to the proposed extension activities, into a separate document that would be subject to agreement with RCT and regular review.

4.4.4 The existing quarry processing activities are additionally controlled under a Part B Environmental Permit (di-LAAPC) issued by RCT under the requirements of the Environmental Permitting (England and Wales) Regulations 2016. In June 2020 a permit was issued which consolidated the two previous separate permits for the processing and RCP activities (CD10.5). This permit has most recently been varied in February 2022 (ref: PPC/009-3.5-HQPEL/0104D; dated 22nd February 2022; CD10.5). The permit authorises the carrying out of the following permitted activities, and their directly associated activities:

- the mechanised crushing, grinding or other size reduction and the mechanised grading or screening of any designated mineral; and,
- coating road-stone with bitumen.

4.4.5 The permit also covers the activities directly associated with the processes and as such the permitted facility includes the internal haulage routes to the primary crusher, the wheel wash and the site access / exit haul route from the B4273 (termed in the Permit as the Regulated Facility). The boundary and layout of the 'Regulated Facility' are defined in Appendices A and B to the Permit as reproduced in Appendix KEH7.

4.4.6 As a Part B permit, the permit is only concerned with emissions to air.

4.4.7 The Permit requires the management and operation of the permitted activities and plant using Best Available Techniques (BAT) to prevent, or where that is not practicable, reduce emissions from the plant. The Permit includes a large number of conditions (86 in total) which prescribe detailed emission limits and controls, together with requirements to monitor the facility and keep records.

4.4.8 Of particular note, Condition 3 of the Permit, states:

*'Condition 3: Excepting condensed water vapour, there shall not be any **visible emission of particulate matter**, mist or fume that is observed:*

- a) **crossing the Regulated Facility boundary**, as delineated in red on the Regulated Facility Location Plan within Appendix 1 of the Permit;*
- b) being emitted by the mineral crushing and screening plant stack exhaust (EP1);*
- c) being emitted by the road-stone coating plant stack exhaust (EP2); and*
- d) from any silo, its inlets, ductwork and silo particulate matter abatement plant during the charging of a silo with filler or fibres.'*

[bold added for emphasis]

4.4.9 The Regulated Facility is subject to routine inspections by RCT; these typically comprise one full inspection and two check inspections a year. The facility would continue to operate the processing and directly associated activities in accordance with the Environmental Permit, subject to variation as required, regulated by RCT. Activities not controlled under the Permit, and hence to be controlled under the proposed DMMP with regards to dust, would be the wider quarrying activities comprising soil stripping, overburden removal, blasting and extraction, and material handling and internal haulage not directly associated with processing carried out as part of the on-going and extension operations.

5 Extension Appeal: Dust Impact Assessment

5.1 Introduction

5.1.1 Chapter 4 of the WE SES reviewed the dust (and air quality) assessment carried out by SGP for the 2015 ES. The review considered any changes in relevant policy, legislation and guidance in relation to dust (and air quality), along with any changes to baseline conditions that had occurred since preparation of the 2015 ES. Irrespective of the updates and changes to the policy documents and guidance that were detailed in the WE SES it was noted that the broad recommended approach to the assessment and evaluation of significance methodologies remained as applied to the assessments presented in the WE ES.

5.1.2 The WE SES noted that there had not been any particular changes to the site setting, site activities or screening provided to the Site that would affect the original WE ES dust assessment. It was however noted that the original assessment was based on the limited on-site measured wind speed and direction data available at the time, and which had since been supplemented by further data. In addition, the IAQM guidance on mineral dust and planning (CD5.1) had since been published and which contains an illustrative example procedure for a dust assessment. The WE ES dust assessment followed a broadly similar methodology to that presented in the guidance and provided a valid approach. However, in the light of the updated wind direction data and newly published guidance specific to the mineral extraction activities, a revised assessment was presented in the WE SES.

5.2 This considered the possible principal sources of dust that may arise from the current and proposed operations at the Site and potential impacts on nearby receptors. Key salient points are summarised below but for detail reference should be made to Chapter 4 of the WE ES. Where additional information is now available to that presented in the WE ES, WE Health and Well Being Response and WE SES, such as with regards to dust deposition monitoring, this is highlighted.

5.3 Baseline Conditions

Primary Dust Sources

5.3.1 The assessment considered the existing potential sources of dust on Site associated with the quarrying and processing activities and current baseline conditions.

5.3.2 Particular key points noted in relation to the likely primary existing dust sources are:

- existing sources of dust are likely to be drilling and blasting; loading and tipping; internal haulage; crushing and screening; aggregates stocking; RCP; on-road transport and wind-blown dust across bare ground and stockpiles;

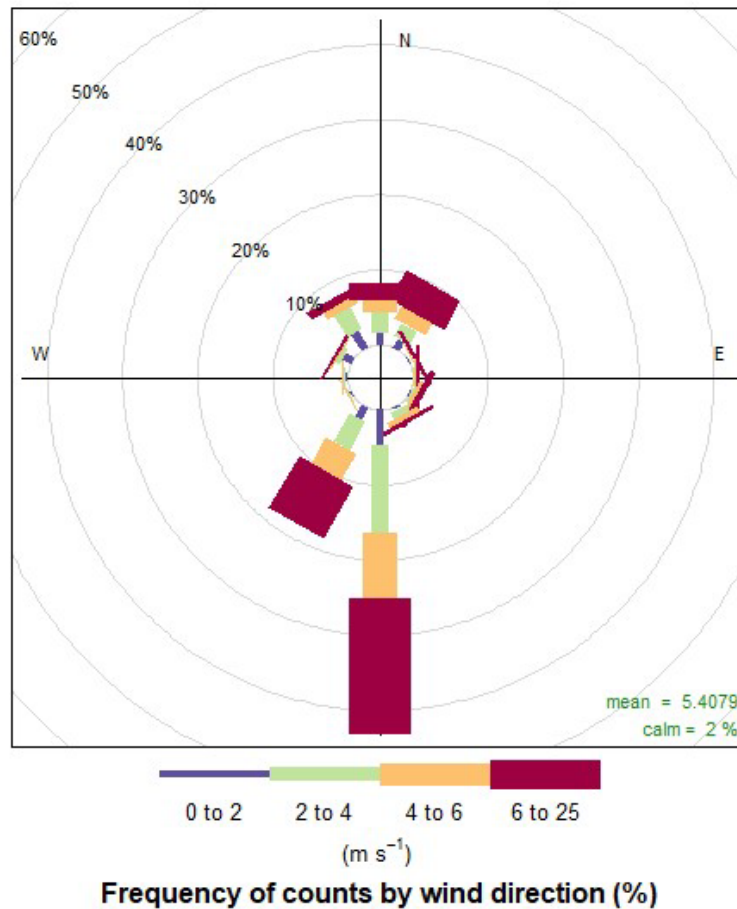
- the Primary Crusher feed hopper located at the northern end of the processing plant is regarded as the most likely source for fugitive dust leaving the Site;
- improvements have been ongoing in the dust suppression methods employed in this area and along the nearby haul road over the years, including since the WE ES; these have included the installation of additional water sprays at the feed hopper and haul road; includes provision of low volume water spray on continuous basis during use of the primary crusher and additional sensor triggered water sprays to primary crusher feed hopper and haulage road before, during and after material feeding;
- a new haul road had been constructed since the WE ES between the extraction and processing areas, and which serves to reduce the use of the haul road that runs from the lower level of the processing area to the Primary Crusher and on to the main quarry;
- processing activities at the Site, including crushing and screening of sandstone products and the RCP, and directly associated activities are controlled under a single Environmental Permit; this includes the internal haulage routes to the primary crusher, the wheel wash and the site access / exit haul route from the B4273;
- the Permit requires the management and operation of the permitted activities and plant using best available techniques to prevent, or where that is not practicable, reduce emissions from the activities and plant;
- the site is operated under the various requirements of the existing planning permissions in relation to the management and control of dust, and in particular those detailed in ROMP Condition 30;
- the site is subject to regular inspections by RCT under the Environmental Permit.

Meteorological Conditions

5.3.3 The prevailing wind direction has been determined through a review of on-site monitoring data, the weather station being located at the northern end of the quarry adjacent to the Primary Crusher. The prevailing wind direction is southerly / south-south westerly, slightly atypical of standard UK conditions.

5.3.4 A summary windrose generated from 3 years of on-site data (2019-2021) is shown below.

Figure 5.1: Summary Site Measured Windrose (combined years 2019-2021)



RCT Permit Inspection Data

5.3.5 The inspection reports for February 2020 and January 2021 were reviewed to inform the WE SES. These both covered full inspections covering the processing plant and associated stockpiles and yard areas, haulage roads, stack monitoring reports, complaints, maintenance, and EMS documentation. Both reports noted the facility was compliant with the majority of requirements although a number of non-compliance issues were raised. These had since been rectified, or were in the process of being rectified, at the time of preparation of the WE SES.

5.3.6 Two further inspections have been carried out in July (full inspection) and October (check inspection) 2021. Again, both reports noted the facility was compliant with the majority of requirements and previous non-compliances issued had been rectified, although a number of non-compliance issues were raised. These have since been rectified, or are in the process of being rectified, at the time of preparation of my Proof.

Complaints Data

- 5.3.7 The 2016 Health and Well Being Response Well-Being (CD2.1) identified that in the 4-year period April 2012-June 2016 there had been only 11 recorded dust complaints, summary details of which were presented in Table 8.1 of the response. Main issues noted in relation to these were the relatively limited number of complaints over the period and that the primary issue reported related to dust on the access road / public highway. The potential for a recurrence of such complaints had been significantly reduced via the construction of the new fully surfaced two-way entrance access road, with the use of a new wheel wash, and with water sprays on the surface of the access road and a regular programme of road sweeping.
- 5.3.8 At the time of preparation of the WE SES the RCT Pollution Control Officer advised SGP that there have been several specific complaints received by RCT regarding alleged particulate matter arising from the Site in the preceding 5 years. These have related to alleged deposition of particulate matter on property and within internal domestic spaces, visible emissions from plant buildings and blasting and deposition of mineral from haulage vehicles onto the highways. Details of the complaints, including actual numbers, were not provided.
- 5.3.9 These complaints have not necessarily been substantiated. Of these complaints it is understood two resulted in written warnings to the operator; one related to dust on the entrance road due to lack of water for use in the sprays during a prolonged period of dry weather and the second due to visible particulate matter from the RCP. Appropriate action was taken by the operator on both occasions and no further action was taken by the regulator.
- 5.3.10 Site management has advised 4 complaints were received in 2021 alleging dust emissions arising from the site. All 4 referred to dust emissions on / near the entrance road, one of which resulted in an Enforcement Notice which was subsequently withdrawn on implementation of an action plan. Only 1 of these also included reference to dust within the Glyncoch estate. The EHO is understood to have attended site on this occasion in response to the complaint, did not identify any issues and no further action was required.

Dust Deposition Monitoring

- 5.3.11 Dust deposition monitoring is not a requirement of the current planning permissions and has not been required as part of any earlier permissions. Nevertheless, a period of dust deposition monitoring was undertaken by the Appellant over the period October to December 2014 to inform the WE ES. An additional short-term three-month monitoring exercise was commenced in March 2021 to inform the update baseline conditions section for the WE SES. At the time of preparation of the WE SES the results for the period March to April 2021 were available and presented in that ES.

5.3.12 The dust deposition monitoring commenced in March 2021 has continued and the results for the period March 2021 to April 2022 are presented in Appendix KEH5. Where feasible the monitoring initially replicated the 2014 monitoring, both in the methodology employed and locations used, as required to update the WE ES baseline conditions section. The data now provides a full 13-month data set for these locations.

5.3.13 In January 2022 monitoring was commenced at two further on-site locations close to the site boundary in the area of the Primary Crusher feed hopper. It should be noted however that due to lack of available space along this stretch of the site boundary monitor D5 is located adjacent to the haul road about 12m from the site boundary and D6b within 5m of the boundary close to, or under, overhanging vegetation. Results for D5 will therefore be strongly influenced by the proximity of the haul road and those for D6b potentially by falling debris.

5.3.14 Following receipt of the RCT SoC citing the lack of comprehensive and up to date monitoring data as a shortcoming, additional monitoring was established in March 2022 at accessible off-site locations in the Glyncoch estate near the Site boundary. The locations of these two additional monitors were agreed with the RCT Planning Officer. At the time of preparation of my proof, 1 round of data for the period March-April 2022 is available for the two off-site locations.

5.3.15 There are no UK or European statutory standards that define the point when deposited dust causes annoyance or disamenity. Instead, a number of “custom and practice” thresholds are typically referred to in conjunction with other criteria such as the frequency of occurrence. Where possible, site-specific thresholds are derived taking into account baseline values. In the absence of any existing agreed site-specific thresholds the dust results have initially been considered in the context of the available indicative thresholds. It should be noted that these thresholds are applicable to locations where the dust deposition may give rise to annoyance or disamenity. As such they are not specifically applicable to the on-site monitoring locations that do not represent sensitive receptors. These locations instead provide information on dust deposition levels close to the site sources where deposition would be expected to be greatest. Full details are provided in Appendix KEH5.

5.3.16 Key observations of the results are:

- dust deposition rates at Conway Close are consistently low at rural background levels (other than on one single round) with no evidence of significant dust deposition from the quarry or other sources;
- dust deposition rates on the north-western perimeter of the current extraction and working areas have been variable with the rates over the 13-month period broadly as recorded for ‘residential areas and the outskirts of towns’ in the UK; there have been occasional exceedances of the indicative ‘custom and practice’ screening thresholds referred to on this perimeter but it is of note that these monitoring locations are not representative of

sensitive receptors in relation to either existing or proposed extension activities and do not reflect conditions at receptors closest to the existing extraction areas;

- dust deposition rates on the haul road close to the Primary Crusher feed hopper have also been variable and are typically above the screening thresholds referred to; again these measurements do not reflect conditions outside the site boundary due to separation distance and the intervening tree belt but provide information on conditions within the site;
- data is now available for a similar period in 2021 to that of the original 2014 data; variations between the data sets are observed but these are within expectations given variable weather conditions and locations of site activities and the data do not indicate any substantial changes in baseline conditions since 2014;
- 1 round of data is available for the two off-site monitoring locations. Dust deposition rates here are well below the indicative threshold referred to, and substantially lower than those reported on the site boundary over the same period. Deposition rates recorded at the two off-site locations were at level reported in the UK for 'residential areas and the outskirts of towns' and 'commercial centres of towns'.

5.3.17 The distance to the receptors and intervening tree belt would be expected to reduce the dust deposition rates experienced at the nearest receptors to the processing plant when compared to those recorded close to the site boundary as discussed further below in Section 5.4. This is consistent with the observations of the latest monitoring round where measured dust deposition rates at the off-site locations were substantially lower than those on, or close to, the site boundary (at 101 mg/m²/day and 66 mg/m²/day compared to 327 and 301 mg/m²/day).

5.3.18 It is considered that this one round of data for the off-site locations is appropriate to further inform the assessment, along with other lines of evidence as presented in the original WE ES and WE SES, as discussed in Appendix KEH5.

5.3.19 Although, dust generation rates, and hence deposition, would be expected to be higher in the drier summer months, this would be compensated by the increased vegetation cover over this period.

PM₁₀ Monitoring

5.3.20 As discussed in my proof on air quality, monitoring for PM₁₀, which forms a proportion of total aerial particulate matter, has been undertaken on the site boundary and on Garth Avenue since 2009 by RCT and the Appellant. It is not possible to directly correlate dust deposition rates and ambient PM₁₀ concentrations. However, it is of note that the PM₁₀ monitoring continues to demonstrate that ambient PM₁₀ concentrations are well below both long-term and short-term air quality assessment levels established for the protection of human health.

Empirical Observations

5.3.211 have undertaken 5 site visits since 2020 in preparation for this Inquiry and to establish the dust monitoring, as well as previously in relation to reviewing the PM₁₀ monitoring. During these visits I have observed little dust being generated on the site and on no occasions have I observed any fugitive dust emissions approaching, or crossing, the site boundary.

5.4 Dust Impact Assessment

5.4.1 The assessment considered the potential dust impacts associated with both the proposed continuation of the existing activities and the proposed Western Extension. The assessment presented in the WE SES considered the potential *residual emissions* taking into account the controls that are to be incorporated into the design of the Proposed Development, as recommended in the IAQM guidance (CD5.1). The assessment therefore takes into account both the in-built design measures, such as provision of soil bunds to the proposed extension areas, as well as the existing management and control measures that would continue to be applied, and be subject to continual improvements as deemed necessary, as well those that would be implemented within the extension area.

5.4.2 The assessment considers all primary sources associated with both the proposed extension and the continuation of existing activities where this includes, where applicable, soil stripping, storage and restoration; drilling and blasting; loading and tipping; internal haulage; crushing and screening; aggregates stocking; asphalt plant; on-road transport; and wind-blow across bare ground and stockpiles.

5.4.3 The assessment considers the potential strength of the identified dust sources, based on the background review and site observations, and the potential pathway to nearby identified receptors. As detailed in the IAQM guidance large dust particles, will largely deposit within 100m of the source whereas intermediate sized particles (10-30 µm) may travel up to 400m. It is commonly accepted that the greatest impacts will be within 100m of a source and this can include both large (>30 µm) and small dust particles (Box 2 page 12 IAQM guidance on mineral dust, CD5.1).

5.4.4 The consideration of the pathway therefore takes into account the distance from a source to a receptor, local topography and any screening that may be present to impede that pathway along with the prevailing wind direction to determine the likelihood of dust being propagated towards that receptor.

5.4.5 The assessment methodology is consistent with that advised in the IAQM guidance (Appendix 3 CD5.1).

5.4.6 The assessment described in the WE SES is however conservative in that reference has been made to the frequency of winds of >5m/s from the direction of the dust sources across **all** days

of the year. However, rainfall acts as a natural suppressant and will suppress wind-blown dust emissions for some time and it is widely accepted that rainfall less than 0.2mm per day may present high-risk conditions. The assessment methodology outlined in the IAQM guidance for determining the frequency of potential dusty winds takes this into account by only considering dry days (<0.2mm rainfall per day) (CD5.1, section 6.2.3, page 20 and Appendix A3). Reference to generic UK mapping shows the Pontypridd area to experience 165-185 'dry' days ('dry day' being those days when <0.2 mm of rainfall are recorded over a 24 hour period) per year (i.e. 45-55% of the time). Site-specific data indicates that over the three-year period 2019-2021 there were 537 'dry days' i.e. about 48% of the time. The frequency of winds blowing in the direction of receptors to the north of the site at >5m/s on 'dry days' would therefore be substantially less than that used in the assessment.

5.4.7 Receptors considered include those near the existing Site boundaries, including on Garth Avenue to the north of the Site, and those closest to the proposed extension area.

5.4.8 The nearest properties to the proposed extraction area (those on Conway Close) extend to within 105m from the 5m high landscape screening bund that is to be initially created. This would be a relatively short-term operation (expected up to an 8-week period). The potential for dust generation from this activity would be as associated with typical construction earthworks activities and can be readily mitigated using standard industry techniques. The screening landform is to be seeded and planted with trees and thereafter would provide screening to the subsequent mineral extraction activities.

5.4.9 The gardens of the properties on Conway Close extend to within 170m from the soil stripping and subsequent extraction area, and the buildings and grounds of Cefn Primary School to within 243m and 164m respectively. The landscape screening bund would however provide effective screening to these properties, particularly on establishment of the woodland planting. The greatest risk of dust deposition at these properties would be during the initial soil stripping and other near-surface activities. The risk of dust escape from the void during blasting and extraction activities would diminish as works deepen within the quarry.

5.4.10 The assessment concludes, taking account of the designed-in mitigation measures, there is a risk of *slight adverse* effects, at most, arising from fugitive dust at these nearest receptors to the proposed extension during the phases closest to those properties and when activities are at, or near to, the original ground surface. As the screening bund establishes and quarrying activities move into other phases and deepen within the quarry potential impacts would fall to *negligible* at those closest properties. Potential impacts and resulting effects are predicted to be *negligible* throughout the works at those properties further away.

5.4.11 The closest properties to the existing operations extend to within 45m of the primary crusher feed hopper. As discussed above, enhanced mitigation has been implemented at the feed

hopper and associated haul road over the years to minimise the likelihood of fugitive dust generation and off-site mitigation. The assessment similarly concludes, taking account of the designed-in mitigation measures, there is a risk of *slight adverse* effects, at most, arising from fugitive dust at these due to the continuation of existing activities. Potential risk of adverse effects is *negligible* at other properties on Gardner Close and further away due to the orientation relative to the prevailing wind direction and distance. This is consistent with the complaints records and observations of the latest dust monitoring data which demonstrates a substantial reduction in dust deposition rates between the site boundary and the off-site monitoring locations.

5.5 Mitigation Measures

5.5.1 As noted above the processing, and directly associated activities, would continue to be regulated under the Environmental Permit and hence operated in accordance with BAT for the control of particulate matter. The Permit currently includes a total of 86 Conditions, providing a comprehensive control and management in relation to aerial emissions of the regulated facility. As noted above, as an overriding observation the Permit specifies that there should not be any visible emission of particulate matter crossing the Regulated Facility boundary.

5.5.2 In addition, proposals include for operation of the Site in accordance with a DMMP that would be imposed through a Condition within any granted planning permission. This DMMP is to be considered in conjunction with the Permit, and thus focuses on activities which have the potential to give rise to fugitive disamenity dust associated with activities within the proposed extension area (and existing quarry area), and related transportation. The DMMP draws together the management and monitoring measures that would be implemented specifically in relation to fugitive dust taking into account the existing planning permission (Condition 30) and additional controls with respect to the Western Extension. This DMMP was submitted to RCT during the WE determination period and recommended Condition 15 provided in the February and July 2020 Committee Reports implies that the relevant Officers were in agreement with the DMMP as submitted. A slightly revised version was provided with the WE SES.

5.5.3 Such mitigation measures include, but are not limited to, the following:

- daily visual assessment of measures
- daily and weekly site inspections
- soil handling to be carried out in appropriate weather conditions and, particularly in the extension area closest to Conway Close, to be suspended when wind conditions are likely to result in dust being carried off site;
- minimisation of drop heights during loading of dump trucks;
- damping down of dry surfaces at highest point of quarry as necessary;

- use of water bowser of stripped surfaces or other areas of bare ground to minimise effects of wind blow;
- drilling of shot holes to be undertaken by drilling rigs fitted with a dust collection system;
- maintenance of internal haul roads;
- maintenance of effective wheel wash (as required under existing planning permission ref 13/1039/10 for the Site access, condition 15).

5.5.4 In the event of adverse conditions developing to cause or risk causing visible dust escaping the site then additional measures would be implemented immediately. These could include the modification, reduction or suspension of any activities causing the dust until such time as the situation has been resolved. This may require for example moving site activities to a suitable location until suitable weather conditions return or additional use of water suppression. This is implicit within the daily inspection checklists included within the DMMP appendices but it is advised it is also stated within the DMMP itself.

5.5.5 The DMMP additionally included for the monitoring of fugitive dust associated with operations within the extension area and any wider operations in the quarry that are not covered by the Environmental Permit, particularly during certain defined certain periods of the proposed extension activities.

5.5.6 The DMMP includes for a formal review of the Plan every 2 years from the date of planning permission. This enables the updating and / or amended on the Plan in agreement between the operator and LPA in response to any changes in circumstances potentially requiring additional air quality / dust mitigation measures.

5.5.7 This is consistent with the essence of guidance in relation to mineral dust is that dust emissions can be controlled by effective site management. The measures outlined in the DMMP comprise both standard good practice measures and additional site-specific mitigation measures and accord with the measures outlined in Section 7 of the IAQM guidance. As stated in Section 7.1 of the IAQM guidance dust mitigation is a dynamic process involving the review and regulation of the mitigation applied as per the conditions on site.

5.5.8 In addition to this, the Appellant has proposed a scheme of additional planting along the site boundary north of the primary crusher designed to further control fugitive dust. The scheme was provided as Appendix 4-6 to the SES (CD2.10).

5.6 Other Matters

5.6.1 As noted above construction is currently on-going of 2 new dwellings on Garth Avenue. These are sited on the location of a former Gospel Hall adjoining Daren Court and extending to within 20m of the Site boundary and 85m of the primary crusher. The application was supported by an

Air Quality Assessment as requested by the RCT EHO due to concerns *about particulate matter concentrations arising from the Craig yr Hesg Quarry*. The objectives of the reports are stated as including assessing the suitability of the site for the introduction of new residential human health receptors. The assessment considered the impacts of construction dust and vehicle exhaust emissions on neighbouring properties and the suitability of the site with regards to air quality standards, and concluded the site is suitable for the proposed development. Reference is made to the nearby quarry but no concerns are raised in the assessment regarding potential impacts arising from fugitive dust and loss of amenity. Permission was approved (CD10.4), in accordance with the Officer's recommendations, which included noting the AQ Assessment report was sufficient and no objections in relation to Public Health were raised.

6 Extension Appeal: Summary of Overall Significance and Policy Considerations

6.1 Assessment Summary

- 6.1.1 The assessment has been undertaken through consideration of several aspects of information comprising both empirical observations and a qualitative assessment.
- 6.1.2 As noted above RCT has not, to date, deemed it necessary or appropriate to require fugitive dust monitoring either on or off the Site for existing permissions, including during the ROMP determination in 2013. This would have presented an opportunity for such a requirement if RCT deemed fugitive dust to be of concern, particularly as an extensive period of PM₁₀ monitoring has been undertaken by the Appellant since 2009.
- 6.1.3 A period of dust monitoring was however undertaken in 2014 to inform the WE ES. This original monitoring has since been supplemented by further monitoring undertaken to inform the updated baseline conditions for the WE SES, and which has since been continued to provide further information to this Inquiry.
- 6.1.4 Fugitive dust monitoring data is now available for a 13-month period from March 2021 to April 2022. It is of note that the majority of the monitoring locations are not representative of receptors, particularly in relation to existing activities, being located within the site boundary. The available data sets does however provide information on dust deposition levels within the Site. Additionally, in light of the RCT SoC, additional locations were installed in March 2022 at 2 off-site locations.
- 6.1.5 The distance to the receptors and intervening tree belt would be expected to reduce the dust deposition rates experienced at the nearest receptors to the processing plant when compared to those recorded within the site boundary. This reduction would be further enhanced by the proposed additional landscaping proposed at the Primary Crusher feed hopper. Although, dust generation rates, and hence deposition, would be expected to be higher in the summer months, this would be compensated by the increased vegetation cover over this period.
- 6.1.6 The available data for the off-site monitors is consistent with these expectations, with measured dust deposition rates at these monitors being substantially lower (by at least 2/3^{rds}) than on the site boundary.
- 6.1.7 It is considered, that although variations exist between the 2014 and 2021 data obtained across similar time periods, these variations are within expectations for year to year differing weather and other conditions, and the data no not indicate any substantial changes in baseline conditions since 2014.

6.1.8 The dust assessment concluded that potential impacts associated with both the continuation of existing activities and the proposed extension would be *slight adverse* at most. For the extension this is predicted at those properties closest to the northern Site boundary and when activities are at, or near to, the original ground surface. As the screening bund establishes and quarrying activities move into other phases and deepen within the quarry potential impacts would fall to *negligible* at those closest properties. Potential impacts and resulting effects are predicted to be *negligible* throughout the works at those properties further away. For the continuation of existing activities up to *slight adverse* impacts are predicted for those properties on Garth Avenue located closest to the processing plant, with impacts falling to *negligible* for properties away from the boundary.

6.1.9 I conclude that the findings of the assessment are consistent with the findings of the empirical monitoring data.

6.2 Overall Significance

6.2.1 RCT asserts that in *the absence of comprehensive and up to date dust monitoring data there is no robust assessment of the site operations on nearby sensitive properties and uses*. RCT further asserts that the *acceptability of proposed mitigation measures cannot be assessed without comprehensive and up to date monitoring data*. However, the facility is operated under both a planning permission and Environmental Permit, the permit specifying requirements such as the absence of any visible particulate matter crossing the site boundary. The permitted operations are subject to regular inspection and review enabling the regulatory authority to issue warnings or Enforcement Notices, potentially requiring the cessation of operations, in the event of a breach of condition.

6.2.2 It is therefore clearly possible to enable an assessment of the existing operations and acceptability of existing mitigation measures through a review of any enforcement notices and complaints relating to potential off-site impacts. I am unaware of any such notices in relation to dust impacts other than two enforcement notices, both actioned upon by the Appellant and hence subsequently withdrawn, due to dust at the site entrance.

6.2.3 A review of complaints received by the site due to fugitive dust also provides an assessment of existing conditions and impacts. Again, records indicate a total of 11 complaints received in over the 2012-2016 period and 4 in 2021, the majority of which have not been substantiated.

6.2.4 Monitoring data is also now available for 2 off-site monitoring locations. This data demonstrates a substantial reduction between dust deposition rates on the site boundary to those off-site, as expected given the separation distance and screening. Resulting measured dust deposition rates are well below the indicative threshold referred to as indicating rates that potentially result in disamenity.

6.2.5 RCT goes on to assert that whereas the dust assessment presented in the WE ES and SES identifies there will be a risk of *slight* or *negligible* adverse effects from dust, RCT concludes there would be *substantial* effects. However, no further information is provided supporting this assertion or basis for the conclusion. Having reviewed the information and latest dust monitoring data, I remain of the conclusion that the risks are *negligible* to *slight* at most at individual receptors. This is in relation to both the proposed extension area and the continuation of existing activities and processing, when considered from a scenario of 'no quarry' activities. This is on the basis of:

- extension area extends to within 105m of properties at the closest point; potential dust generating source would be creation of the landscape screening bund which would be a short-term operation; dust can be readily managed and mitigated and activity no different to typical construction earthworks; potential *slight adverse* impacts at most at these properties;
- soil stripping and extraction activities would be at least 170m from nearest property gardens; soil stripping would be short-term operation and similar dust generating potential to standard agricultural activities; potential *slight adverse* impacts at most;
- potential for dust impacts on these properties would reduce as operations move deeper within the void and landscape screening bund becomes established; potential impacts reducing to *negligible*;
- all quarrying activities not covered by the Environmental Permit would be undertaken in accordance with an agreed DMMP, which includes the existing conditions contained within the planning permission and periodic off-site dust deposition monitoring ;
- enhanced mitigation is provided at the primary crusher feed hopper and haul road which form the closest operational areas to residential properties; all processing operations undertaken in accordance with the Environmental Permit; specific condition of the permit requires there should not be any visible dust crossing the site boundary; potential *slight adverse* impacts at most;
- complaints data and environmental permit inspection records do not indicate significant off-site concerns in relation to dust deposition;
- extensive PM₁₀ monitoring data shows concentrations of airborne fine particulate matter to continuously be well below both long- and short-term assessment levels;
- RCT has recently granted permission for construction of new nearby residential properties and did not object or refuse on dust grounds;
- dust deposits rapidly from source and dust monitoring data has demonstrated a significant reduction in dust deposition between on-site and off-site locations.

6.2.6 The proposals do not however include for any changes or increase in quantum in processing activities. Hence, there would not actually be any changes to existing conditions for those receptors close to the existing processing area. In the context of comparison with the existing

scenario there would therefore be no adverse impacts with the proposals for those receptors close to the processing area.

6.2.7 The overall significance of the proposals has been assessed in reference to the IAQM guidance as summarised in Appendix KEH1. This is consistent with the advice in PPW and Development Plan policies that refers to the need to avoid '*unacceptable levels of pollution*' and '*significant adverse impacts on amenity*'.

6.2.8 As detailed in the IAQM guidance on mineral dust there are no statutory UK standards that define the point when deposited dust causes annoyance or disamenity. Similarly, there is no firm guidance on significance criteria for frequency of disamenity dust episodes. Whilst the proposals may result in deposition dust on occasion at some nearby sensitive receptors, I do not consider the likely frequency or magnitude to be such that would result in significant adverse impacts on amenity on nearby sensitive land uses.

6.2.9 Consideration of the overall effect from dust deposition of the proposals takes into account the different magnitude of predicted effects at different receptors, and the number of receptors that experience these different effects. Taking into account the full range of available evidence I conclude unacceptable levels of dust are not predicted to be experienced at the nearby sensitive land uses and the overall significance of effects is not significant. This includes at those receptors within 200m of both the proposed extension and existing activities.

6.2.10 This position was agreed by the relevant Officers in recommending approval subject to the imposition of several conditions. This is consistent with the IAQM guidance that it is accepted that dust emissions from mineral activities can be controlled and dust impacts can be adequately mitigated (CD5.1, section 2.4, page 10).

6.2.11 MTAN1 states that planning decisions should assume that where processes are controlled under separate pollution control regimes, as is the case with the majority of dust generating processes at the Site, planning decisions should assume that these regimes will operate effectively. In this case, on-going mitigation will be provided through the on-going operation of the processing and directly associated activities in accordance with an Environment Permit and BAT to ensure the application of appropriate control and mitigation measures in relation to these activities.

6.2.12 The quarry has been in operation since at least the 1890s with the housing development at Garth Avenue being sited near the Primary Crusher feed hopper for at least 30 years. To date RCT has not required any fugitive dust monitoring at the Site, including as part of the ROMP determination granted in 2013 or alongside the PM₁₀ monitoring that has been carried out since 2009.

6.2.13 Policy AW10 of the RCT LDP refers to '*unacceptable harm to local amenity*'. As outlined above the assessment has demonstrated that significant adverse impacts from dust on amenity are not predicted.

6.2.14 As such it is considered the development will accord with this policy.

7 S73 Appeal: Procedural Matters

7.1 Planning Application Submitted Information

7.1.1 The planning application was supported by an Environmental Statement prepared by SLR (May 2021; CD3.1). The Environmental Statement (hereafter referred to as the 'Section 73 ES') included a Chapter on Air Quality and Dust. The Chapter included a dust assessment in relation to the proposed continuation of existing operations and set out the management and mitigation measures that would continue to be implemented at the site. The Chapter concluded there would not be any significant adverse dust impacts as a result of the Proposed Development.

7.1.2 The ES included a draft Dust and Particulate Management Plan (DPMP; as Appendix 11-7; CD3.2 and for ease reproduced as Appendix KEH6) that had been prepared specifically in relation to the proposed continuation of existing activities at the Site. This followed the format of that provided for the Western Extension and drew together the management and monitoring measures that would be implemented in relation to fugitive dust taking into account the existing planning permissions (ROMP Condition 30) and existing Environmental Permit controls.

7.2 Officer's Reports to Planning Committee

7.2.1 The August 2021 Officer's Report (CD4.4) notes that *'the continuing impacts of the operation of the existing area are the main consideration in this case and consideration of whether the existing environmental and amenity controls imposed as planning conditions via the ROMP Review remain appropriate for the extended duration of the operation, or whether additional or amended controls are required.'* The report goes on to state that the economic need for the mineral needs to be balanced against the potential environmental and amenity impacts raised by objectors. The report states: *'In considering those potential impacts it must be noted that the impacts can be controlled to nationally set standards by planning conditions attached to any planning permission.'*

7.2.2 The Report recommended approval, subject to conditions and the Applicant first entering into a Section 106 Agreement. The Section 106 Agreement would include for the payment by the Applicant of a contributions towards the cost of setting up and maintaining future air quality monitoring of particulate matter in the local community. The proposed conditions to any grant of planning permission included for the implementation of a Dust Management and Monitoring Plan in recommended Condition 12. It is noted that the proposed conditions refer to the incorrect DMMP, referring to the August 2017 DMP submitted in relation to the Western Extension application and not that submitted in relation to the Section 73 application.

7.2.3 Following deferment of the determination of the application the subsequent October 2021 Report (CD4.5) highlighted the potential strengths and weaknesses of making a decision

contrary to the officer recommendation. This provided further comment on several aspects and noted: *It has been acknowledged that, due to its nature, location and scale the winning and processing of mineral at Craig Yr Hesg Quarry will inevitably have an influence, to some degree, on environmental noise and the risk of annoyance dust. Local engagement, undertaken as part of the application, suggest that the perception of the above environmental factors may support increased anxiety and concern within the local community. This may be further exacerbated about certain inherent uncertainties often associated with the evaluation of well-being impacts. It is possible these additional wellbeing impacts can, if not successfully mitigated by robust control mechanisms, monitoring and oversight, result in a reduction of local community amenity compounded by a lack of community confidence hindering possible mitigation. However, these robust control mechanisms can be imposed within suitable planning conditions and within any Environmental Permit issued for the plant.*

7.2.4 The October 2021 Committee Report again recommended approval.

7.3 Reason for Refusal

7.3.1 The planning application was refused by the Council's Planning Committee. The formal notice of the decision to refuse planning permission (CD4.6) includes one Reason for Refusal:

Reason 1: *The additional period of 6 years proposed for the working of the quarry unacceptably extends the period of mineral operations within 200m of sensitive development within Glyncoch. Glyncoch is a deprived community, and such communities are acknowledged as being disproportionately affected by health problems. The continuation of quarrying within 200m of that community extends the impacts of quarrying (especially in terms of noise, dust and air quality) to the detriment of the amenity and well-being of residents contrary to the well-being goal of a healthier Wales as set out in the Well-being of Future Generations (Wales) Act 2015. The need for the mineral does not outweigh the amenity and well-being impacts.*

7.3.2 No further information is provided in the Reason for Refusal.

7.4 Statement of Case

RCT Statement of Case

7.4.1 Paragraph 3.7 of the RCT Statement of Case states that *the supporting information prepared on behalf of the appellant does not satisfactorily demonstrate that quarry operations at the site could be extended from 2022 to 2028 without giving rise to an adverse impact upon the amenity of occupiers/users of sensitive development in the immediate proximity of the site or that suitable controls or compensatory measures could mitigate these amenity impacts to a satisfactory degree.*

7.4.2 Paragraph 3.9 asserts that *Chapter 11 of ES-B does not present comprehensive and up to date dust monitoring data. Reliance is placed on monitoring undertaken in 2014, supplemented by a "short term" monitoring exercise in 2021. In the absence of comprehensive and up to date monitoring data, there is no robust assessment of the impact of site operations on nearby sensitive properties and uses. Whilst it is noted that mitigation measures are proposed to be secured by a condition, the acceptability of those measures cannot be assessed without comprehensive and up to date monitoring data. Any alternative measures would suffer from the same shortcoming.*

7.4.3 Paragraph 3.9 further states *'Furthermore, the results presented in Chapter 11 of ES-B do identify that there will be a risk of "adverse effects" from dust on high sensitivity residential receptors. Whilst ES-B expresses the judgment that such effects will be "slight" or "negligible", this is a matter for planning judgment and the LPA considers there will be substantial adverse impacts on residential amenity by reason of dust.'*

7.4.4 It is of note that at no stage during the determination period did RCT request further dust monitoring to inform the 'baseline' conditions. Equally, at no stage during the determination period did RCT raise any concerns with the dust assessment as presented in the S73 ES.

7.5 Third Party Representations

7.5.1 In addition to the reason for refusal and the issues raised by RCT in its Statement of Case a large number of third-party representations have been received. These include references to 'health and well-being' and 'residential amenity', with sub-references to dust and air quality. These issues have therefore been dealt within my Proof.

7.6 Summary of Procedural Matters

7.6.1 In summary, the planning application was supported by an Environmental Statement which considered Air Quality and Dust impacts. This was supplemented by a submitted S73 DMMP. The Officer subsequently recommended that planning permission be granted, subject to the inclusion of a condition in any granted planning permission for the implementation of the submitted DMMP (*note: recommended conditions referred incorrectly to the submitted WE DMMP and not the S73 DMMP*), along with agreement to a Section 106 in relation to financial contribution to of on-going air quality monitoring.

8 S73 Appeal: Current Site Setting and Proposed Development

- 8.1 The site location and surrounds of the existing quarry are summarised above in paras 4.2.1-4.2.5 and provided in plans CYH2 and CYH3 provided in the application plans (CD3.4).
- 8.2 The proposals seek to continue existing activities at the Site. Existing activities at the site are described above in paras 4.3.2-4.3.4. There are no proposals for any changes to the current methods of working and proposals are for the continuation of existing operational hours at the site.
- 8.3 The site would continue to be operated under the existing planning permissions for an extended six-year period and, with regards to the processing and directly associated activities, the existing Environmental Permit (as provided in CD10.5). The regulated facility with regards to the Environmental Permit would continue to be subject to regular inspections by RCT.
- 8.4 As noted above in para 6.1.2 proposals included submission of a DMMP which seeks to draw together these existing controls contained within the existing planning permission into a separate document that would be subject to agreement with RCT. A new condition of the planning permissions would require operations at the Site to be carried out in accordance with the DMMP, which would be subject to regular review.

9 S73 Appeal: Dust Impact Assessment

9.1 Introduction

9.1.1 Chapter 11 of the S73 ES included a dust assessment which followed the approach of that presented in the WE SES as described above in Section 5.4. This considered the possible principal sources of dust that may arise from the continuation of existing operations at the Site and potential impacts on nearby receptors. Key salient points are summarised below but for detail reference should be made to Chapter 11 of the S73 ES. Where additional information is now available to that presented in the S73 ES, such as with regards to dust deposition monitoring, this is highlighted.

9.2 Baseline Conditions

9.2.1 Details on the baseline conditions are described above in paras 5.3.10-5.3.15.

9.3 Dust Impact Assessment

9.3.1 The assessment considered the potential dust impacts associated with the proposed continuation of the existing activities. The assessment presented considered the potential *residual emissions* taking into account the controls that are to be incorporated into the design of the Proposed Development, as recommended in the IAQM guidance (CD5.1). The assessment therefore takes into account both the in-built design measures, such as the heights and locations of the mineral extraction and processing plant, as well as the existing management and control measures that would continue to be applied.

9.3.2 The assessment considers all primary sources associated with the proposed continuation of existing activities where this includes, where applicable, drilling and blasting; storage and restoration; loading and tipping; internal haulage; crushing and screening; aggregates stocking; asphalt plant; on-road transport; and wind-blow across bare ground and stockpiles.

9.3.3 The assessment considers the potential strength of the identified dust sources, based on the background review and site observations, and the potential pathway to nearby identified receptors taking into account the distances from various activities and orientation through consideration of the local meteorological conditions. The assessment methodology is consistent with that advised in the IAQM guidance.

9.3.4 The assessment is however conservative in that reference has been made to the frequency of winds of >5m/s from the direction of the dust sources across all days of the year. However, it is widely accepted that rainfall equal to or more than 0.2mm per day is sufficient to suppress wind-blown dust emissions for some time (CD5.1). Reference to generic UK mapping shows the Pontypridd area to experience 165-185 'dry' days ('dry day' being those days when <0.2 mm of rainfall are recorded over a 24 hour period) per year (i.e. 45-55% of the time). Site-specific data

indicates that over the three-year period 2019-2021 there were 537 'dry days' i.e. about 48% of the time. The frequency of winds blowing in the direction of receptors at >5m/s on 'dry days' would therefore be substantially less than that used in the assessment.

9.3.5 Receptors considered include those near the existing Site boundaries, including on Garth Avenue to the north of the processing plant.

9.3.6 The assessment concludes, taking account of the designed-in mitigation measures, there is a risk of *slight adverse* effects, at most, arising from fugitive dust at the nearby residential receptors due to the continuation of existing activities. This is predicted at properties on Garth Avenue that are closest to the Primary Crusher feed hopper.

9.4 Mitigation Measures

9.4.1 As noted above, the processing, and directly associated activities, would continue to be regulated under the Environmental Permit and hence operated in accordance with BAT for the control of particulate matter. The Permit currently includes a total of 86 Conditions, providing comprehensive control and management in relation to aerial emissions from the regulated facility. As noted above, as an overriding observation the Permit specifies that there should not be any visible emission of particulate matter crossing the Regulated Facility boundary.

9.4.2 In addition, proposals include for operation of the Site in accordance with a DMMP that would be imposed through a Condition within any planning permission to be granted. This DMMP is to be considered in conjunction with the Permit, and thus focuses on activities which have the potential to give rise to fugitive disamenity dust associated with activities within the existing quarry area, and related transportation. The DMMP draws together the management and monitoring measures that would be implemented specifically in relation to fugitive dust taking into account the existing planning permissions (ROMP Condition 30). This DMMP was submitted with the planning application and recommended Condition 12 provided in the August 2021 Committee Report implies that the relevant Officers were in agreement with the DMMP as submitted (*although note the Condition refers to the incorrect DMMP*).

9.4.3 Such mitigation measures include, but are not limited to, the following:

- daily visual assessment of measures
- daily and weekly site inspections
- minimisation of drop heights during loading of dump trucks;
- use of water bowser of stripped surfaces or other areas of bare ground to minimise effects of wind blow;
- drilling of shot holes to be undertaken by drilling rigs fitted with a dust collection system;
- maintenance of internal haul roads;

- maintenance of effective wheel wash (as required under separate planning permission Ref. 13/1039/10 for the Site access, condition 15).

9.4.4 The DMMP additionally noted that monitoring of fugitive dust was being undertaken in relation to the update of baseline conditions for the WE SES. At the time of preparation of the S73 ES results were available for March to April 2021 and monitoring was to be continued to complete a 3-month programme. The DMMP noted that *'Subject to this preliminary conclusion being verified by results over the 3-month monitoring period, further dust deposition monitoring will not be considered to be necessary for the requested extended period of operations.'*

9.4.5 The DMMP includes for a formal review of the Plan every 2 years from the date of planning permission. This enables the updating and / or amended of the Plan by agreement between the operator and LPA in response to any changes in circumstances requiring additional air quality / dust mitigation measures.

9.4.6 In addition to this, the Appellant has proposed a scheme of additional planting along the site boundary north of the primary crusher designed to further control fugitive dust. The scheme was provided as Appendix 11.6 to the S73 ES (CD3.2).

9.5 Other Matters

9.5.1 As noted in para 5.6.1 above construction is currently on-going of 2 new dwellings on Garth Avenue at a distance of 20m from the Site boundary and 85m from the primary crusher feed hopper, for which planning permission was granted as recently as September 2020 (CD10.4).

10 S73 Appeal: Summary of Overall Significance and Policy Considerations

10.1 Assessment Summary

10.1.1 The assessment has been undertaken through consideration of several aspects of information comprising both empirical observations and a qualitative assessment.

10.1.2 As noted above RCT has not to date deemed it necessary or appropriate to require fugitive dust monitoring either on or off the Site for existing permissions, including during the ROMP determination in 2013. This would have presented an opportunity for such a requirement if RCT deemed fugitive dust to be of concern, particularly as an extensive period of PM₁₀ monitoring has been undertaken by the Appellant since 2009.

10.1.3 A period of dust monitoring was however undertaken in 2014 to inform the WE ES. This original monitoring has since been supplemented by further monitoring undertaken to inform the updated baseline conditions for the WE SES, and which has since been continued to provide further information to this Inquiry.

10.1.4 Fugitive dust monitoring data is now available for a 13-month period from March 2021 to April 2022. It is of note that the majority of the monitoring locations are not representative of receptors, particularly in relation to existing activities, being located within the site boundary. The available data sets does however provide information on dust deposition levels within the Site. Additionally, in light of the RCT SoC, additional locations were installed in March 2022 at 2 off-site locations.

10.1.5 The distance to the receptors and intervening tree belt would be expected to reduce the dust deposition rates experienced at the nearest receptors to the processing plant when compared to those recorded within the site boundary. This reduction would be further enhanced by the proposed additional landscaping proposed at the Primary Crusher feed hopper. Although, dust generation rates, and hence deposition, would be expected to be higher in the summer months, this would be compensated by the increased vegetation cover over this period.

10.1.6 The available data for the off-site monitors is consistent with these expectations, with measured dust deposition rates at these monitors being substantially lower (by at least 2/3rds) than on the site boundary.

10.1.7 It is considered, that although variations exist between the 2014 and 2021 data obtained across similar time periods, these variations are within expectations for year to year differing weather and other conditions, and the data do not indicate any substantial changes in baseline conditions since 2014.

10.1.8 The dust assessment concluded that potential impacts associated with the continuation of existing activities would be *slight adverse* at most for those properties on Garth Avenue located closest to the processing plant, with impacts falling to *negligible* for properties away from the boundary.

10.1.9 I conclude that the findings of the assessment are consistent with the findings of the empirical monitoring data.

10.2 Overall Significance

10.2.1 RCT asserts that in *the absence of comprehensive and up to date dust monitoring data there is no robust assessment of the site operations on nearby sensitive properties and uses*. RCT further asserts that the *acceptability of proposed mitigation measures cannot be assessed without comprehensive and up to date monitoring data*. However, the facility is operated under both a planning permission and Environmental Permit, the permit specifying requirements such as the absence of any visible particulate matter crossing the site boundary. The permitted operations are subject to regular inspection and review enabling the regulatory authority to issue warnings or Enforcement Notices, potentially requiring the cessation of operations, in the event of a breach of condition.

10.2.2 It is therefore clearly possible to enable an assessment of the existing operations and acceptability of existing mitigation measures through a review of any enforcement notices and complaints relating to potential off-site impacts. I am unaware of any such notices in relation to dust impacts other than two enforcement notices, both actioned upon by the Appellant and hence subsequently withdrawn, due to dust at the site entrance.

10.2.3 A review of complaints received by the site due to fugitive dust also provides an assessment of existing conditions and impacts. Again, records indicate a total of 11 complaints received in over the 2012-2016 period and 4 in 2021, the majority of which have not been substantiated.

10.2.4 Monitoring data is also now available for 2 off-site monitoring locations. This data demonstrates a substantial reduction between dust deposition rates on the site boundary to those off-site, as expected given the separation distance and screening. Resulting measured dust deposition rates are well below the indicative threshold referred to as indicating rates that potentially result in disamenity.

10.2.5 RCT goes on to assert that whereas the dust assessment presented in the S73 ES identifies there will be a risk of *slight* or *negligible* adverse effects from dust, RCT concludes there would be *substantial* effects. However, no further information is provided supporting this assertion or basis for the conclusion. As discussed above in paras 6.2.5-6.2.6 having reviewed the information and latest dust monitoring data I remain of the conclusion that the risks are *negligible* to *slight* at most at individual receptors. This is when considered in relation to the

continuation of existing activities compared to a scenario of 'no quarry'. The proposals do not however include for any changes or increase in quantum in processing activities. Hence there would not actually be any changes to existing conditions for those receptors close to the existing processing area. Therefore, there would be no adverse effects compared to the existing scenario.

10.2.6 The overall significance of the proposals has been assessed in reference to the IAQM guidance. This is consistent with the advice in PPW and Development Plan policies that refers to the need to avoid '*unacceptable levels of pollution*' and '*significant adverse impacts on amenity*'.

10.2.7 Taking into account the full range of available evidence I conclude unacceptable levels of dust are not predicted to be experienced at the nearby sensitive land uses and significant adverse impacts are not predicted.

10.2.8 This position was agreed by the relevant Officers in recommending approval subject to the imposition of several conditions.

10.2.9 MTAN1 states that planning decisions should assume that where processes are controlled under separate pollution control regimes, as is the case with the majority of dust generating processes at the Site, planning decisions should assume that these regimes will operate effectively. In this case, on-going mitigation will be provided through the on-going operation of the processing and directly associated activities in accordance with an Environment Permit and BAT to ensure the application of appropriate control and mitigation measures in relation to these activities.

10.2.10 The quarry has been in operation since at least the 1890s with the housing development at Garth Avenue being sited near the Primary Crusher feed hopper for at least 30 years. To date RCT has not required any fugitive dust monitoring at the Site, including as part of the ROMP determination granted in 2013 or alongside the PM₁₀ monitoring that has been carried out since 2009.

10.2.11 Policy AW10 of the RCT LDP refers to '*unacceptable harm to local amenity*'. As outlined above the assessment has demonstrated that significant adverse impacts from dust on amenity are not predicted.

10.2.12 As such it is considered the development will accord with this policy.

11 Overall Conclusions

11.1 Western Extension Appeal

11.1.1 Dust is not cited as a reason for refusal of the planning permission in the decision notice, but it is stated as forming part of the Council's case.

11.1.2 In preparing this Proof I have therefore reviewed the original dust impact assessment that was included within the ES submitted with the planning application; the subsequent correspondence between RCT and the Appellant, including the written Response to Public Consultation: Wellbeing and Environmental Health Issues; and the revised dust impact assessment included within the Supplementary ES.

11.1.3 The dust impact assessments considered the potential dust impacts associated with both the proposed continuation of the existing activities and the proposed Western Extension. The assessments consider the potential sources of fugitive dust, taking into account the controls that are currently, and would be, incorporated within the development. The assessments take into account the distances and orientation of dust sources to the nearby sensitive receptors and consideration of local meteorological conditions.

11.1.4 In addition, additional deposition dust monitoring has been undertaken since preparation of the SES and the results have been reviewed to further inform my assessment. This data includes 2 off-site monitoring locations.

11.1.5 I conclude that whilst the Appeal proposal may result in deposition dust on occasion at nearby sensitive receptors, I do not consider the likely frequency or magnitude to be such that would result in significant adverse impacts on amenity on nearby sensitive land uses. I therefore concur with the conclusions of the RCT Officer's Report that the effects of the proposal can be mitigated and managed and would not result in unacceptable impacts.

11.1.6 The facility would continue to be operated in accordance with conditions relating to dust contained within both the planning permission and the Environmental Permit. These controls would continue to require the appropriate management and mitigation of fugitive dust through a range of procedures. Included within the recommended conditions is the requirement to operate the facility in accordance with an agreed Dust Management and Monitoring Plan (DMMP).

11.1.7 Overall, from my review of the information and results of the assessment, I conclude that, with the incorporation of appropriate mitigation as already employed at the site, the proposed development complies with the relevant national and local planning policies in relation to dust.

11.2 S73 Appeal

11.2.1 Dust is cited as a reason for refusal of the planning permission in the decision notice.

11.3 In preparing this Proof I have therefore reviewed the dust impact assessment that was included within the ES submitted with the planning application. As for the WE and WE SES the dust impact assessment considered the potential dust impacts associated with the proposed continuation of the existing activities. The assessments considered the potential sources of fugitive dust, taking into account the controls that are currently incorporated within the development. The assessment takes into account the distances and orientation of dust sources to the nearby sensitive receptors and consideration of local meteorological conditions.

11.4 In addition, additional deposition dust monitoring has been undertaken since preparation of the S7 ES and the results have been reviewed to further inform my assessment.

11.5 I conclude that whilst the Appeal proposal may result in deposition dust on occasion at nearby sensitive receptors I do not consider the likely frequency or magnitude to be such that would result in significant adverse impacts on amenity on nearby sensitive land uses. I therefore concur with the conclusions of the RCT Officer's Report that the effects of the proposal can be mitigated and managed and would not result in unacceptable impacts.

11.6 The facility would continue to be operated in accordance with conditions relating to dust contained within both the planning permission and the Environmental Permit. These controls would continue to require the appropriate management and mitigation of fugitive dust through a range of procedures. Included within the recommended conditions is the requirement to operate the facility in accordance with an agreed Dust Management and Monitoring Plan (DMMP).

11.7 Overall, from my review of the information and results of the assessment, I conclude that, with the incorporation of appropriate mitigation, as already employed at the site, the proposed development complies with the relevant national and local planning policies in relation to dust.