

CRAIG YR HESG QUARRY Western Extension



Supplementary Environmental
Statement: Non-Technical Summary

Volume 7

April 2021



**SUPPLEMENTARY ENVIRONMENTAL STATEMENT
NON-TECHNICAL SUMMARY
VOLUME 7**

CRAIG YR HESG QUARRY

Extension and Consolidation Application

Client: Hanson UK
Job no. 407.00088.00385
Document title: SES Non-Technical Summary Volume 7
Status: Final
Date: 27 04 21

Ref: NTS

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1.0 INTRODUCTION

1.1 Background

In May 2015 a planning application was submitted to Rhondda Cynon Taff County Borough Council (RCT) by Hanson UK (Hanson), which sought planning permission for a western extension to Craig yr Hesg Quarry (the Quarry), near Pontypridd, and the consolidation of the current planning permissions at the Quarry into a single permission regulating quarrying, restoration and ancillary operations at the overall quarry site.

In July 2020, RCT refused planning permission for the development and an appeal against that decision was lodged at the Planning Inspectorate in December 2020. The appeal will be determined by the Planning Inspectorate in due course following a public inquiry.

In accordance with standard procedure, the Planning Inspectorate has undertaken an assessment of the adequacy of the Environmental Statement (ES) and documents submitted in support of the May 2015 application. This assessment has found the ES to be satisfactory in terms of the topics considered and the environmental effects assessed, but it has noted that the ES was prepared in 2015 and that some of the survey information on which it is based is older. It has also highlighted changes in planning policy documents and guidance which has occurred since 2015. The Inspectorate have therefore requested that the survey results and policy and guidance changes highlighted should be considered and the ES reviewed as and where necessary.

A Supplementary Environmental Statement (SES) has been prepared to fulfil these requirements, which follows the sequence of the originally submitted documents in being numbered as Volume 5 of the submission.

The Appendices in support of the SES, as listed in the contents schedule of the SES, are produced as Volume 6.

This document comprises a Non-Technical Summary of the SES, which again follows the sequence of the originally submitted documents in being numbered Volume 7 of the submission.

The additional surveys and updated policy analysis have comprised:

- (i) Updated habitat surveys undertaken in September 2018 and January 2021, and an updated data search undertaken in December 2020.
- (ii) Updated noise surveys undertaken in December 2020 and March 2021 with an associated updated noise assessment study.
- (iii) An updated air quality assessment based upon analysis of air quality (PM₁₀) monitoring data gathered since 2015.
- (iv) An updated fugitive dust assessment, including results from the first month of a three-month fugitive dust monitoring exercise, sufficient to make comparison with the 2014 monitoring data.
- (v) An updated traffic impact assessment based upon the results of a traffic survey undertaken in December 2020 and an analysis of the most recent available accident data (2015 – 2019).
- (vi) An updated socio-economic, well-being and health issues assessment, which updates references contained in a 'Response to Well-Being and Environmental Health Issues' Report of June 2016.
- (vii) An updated Planning Policy analysis which reviews, in particular, the content of Planning Policy Wales Edition 11 (PPW11) issued in February 2021, and the legislation which underpins PPW11.
- (viii) An updated assessment of 'need' following the publication of a Second Review of a Regional Technical Statement (RTS2 published in October 2020); and

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- (ix) A number of supplementary issues associated with anomalous references in the 2015 ES or references which have now been superseded.

1.2 Document Availability

The SES Volume 5, SES Appendices Volume 6, and this NTS Volume 7 have been submitted direct to the Planning Inspectorate who in due course will make arrangements for publicising the documents and inviting comments. Copies have also been submitted to RCT at the Planning Department, Sardis House, Sardis Road, Pontypridd, CF37 1DU

Copies may be purchased from the Applicant's Agents SLR Consulting Ltd, Fulmar House, Beignon Close, Ocean Way, Cardiff CF24 5PB (Tel 20920 491010).

The cost of volumes (inclusive of VAT and postage) is:

- SES Volumes 5 and 6:

Printed version	£50.00
CD version	£5.00
- NTS Volume 7: Printed version £10.00
CD version £5.00
- All documents: CD version £5.00

2.0 ECOLOGY

2.1 Introduction

The updated ecology study provides details of the field surveys carried out in 2018 and 2021, and an updated data search undertaken in 2020.

This has informed a review of the 2015 Ecological Impact Assessment (EclA) and provides a basis to establish whether the conclusions and mitigation recommended in the ecology chapter of the 2015 ES remain appropriate.

2.2 Habitat Baseline

2014 Results Summary

The application site largely occurs within two fields partly enclosed by dry stone walls. The fields contain a sward of predominantly semi-improved grassland, which was relatively species poor in terms of herbaceous species.

The majority of the grassland area was found to be very closely grazed by horses, showing signs of more intensive agricultural improvement in places through the localised dominance of white clover. The south-western field was found to contain localised areas where the sward showed increased floristic diversity, although remained heavily grazed and dominated by grasses, with areas of bracken also present with scattered scrub species.

The field boundaries were marked by dry stone walls, which were generally intact, with bracken fringing the walls in places.

The wider surroundings comprise of the existing quarry void broadly to the south, semi-improved grassland and small woodland blocks to the north and east, with Craig-yr-Hesg / Lan Wood Site of Importance for Nature Conservation (SINC) to the west of the application site, with a small area within the boundary of the application site but not part of the extension area.

2018 Results Summary

The 2018 survey found the habitat baseline remained broadly comparable to that reported by the surveys undertaken in 2014. Subtle changes were evident as a result of less intensive management (grazing) being in place at the time of survey, and evidence of a fire across parts of the extension area. As a result, the grassland sward was found to be higher in locations unaffected by the fire than reported in 2015 although the sward composition remained comparable.

2021 Results Summary

The 2021 survey found the habitat baseline remains broadly comparable to that reported by previous surveys. It was noted that grassland management is now taking the form of annual topping, and that the habitat comprised of more extensive bramble.

These subtle changes are not significant enough that the Phase 1 habitat map (Figure 7.1 of the 2015 EclA) would need to be revised. As such, the habitat descriptions contained within the 2015 EclA also remain reflective of the habitat type and species composition present.

Species

The 2014 survey and consultation identified that the two fields within the extension area were relatively species poor across much of the study area and lack any vegetation structure.

The south-western field was found to contain localised areas where the sward showed increased floristic diversity, although remained heavily grazed and dominated by grasses, with more extensive areas of bracken also present with scattered scrub species.

As such, the potential for protected and notable fauna to occur, or be negatively impacted upon by the proposed extension, was considered to be low and no specific protected species surveys were undertaken to inform the 2015 EclA.

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The update Phase 1 Habitat surveys in 2018 and 2021, and data search in 2020, have not identified any significant changes to the habitat baseline, or known presence of protected species locally, such that the conclusion reached in the 2015 EclA would not remain valid for the purpose of this EclA review.

The presence of birds and reptiles within the application site has been confirmed during habitat surveys, and it has been concluded for the purposes of this EclA that these groups utilise the application site.

2.3 Legislation and Planning Policy

Planning Policy Wales (PPW) Edition 7 (July 2014) was in place at the time of the preparation of the 2015 ES, but the themes of 'caring for biodiversity' and the need for measures to conserve and enhance biodiversity were well established at that time and have not materially changed in the current Edition 11 of PPW (February 2021).

The Environment (Wales) Act 2016 was not in place at the time of preparation of the 2015 ES, but it replaces and enhances duties previously contained in the Natural Environment and Rural Communities Act 2006, as referred to in the 2015 ES. The obligations imposed by the Environment (Wales) Act 2016 are highlighted in the Planning Officer's report on the application presented to RCT's Planning Committee in February 2020.

The 2010 Conservation of Habitats and Species Regulations were in place at the time of the 2015 ES, but the updated 2017 'Habitats Regulations' introduce only a small number of minor amendments and do not change the consideration of the habitats and species referred to in the Regulations as undertaken in the 2015 ES.

The Wildlife and Countryside Act 1981 was in place at the time of the 2015 EclA.

2.4 Potential Impacts and Mitigation

The habitats present remain broadly comparable to when the initial habitat survey was completed in 2014, as confirmed by update habitat surveys in 2018 and 2021.

Therefore, it is considered that the baseline data presented in the 2015 ES, and decision made around specific protected species surveys not being required, remain accurate and fit for the purpose of EIA.

An assessment of potential impacts of the proposed development was undertaken as part of the 2015 EclA. As the ecological baseline remains broadly as set out at the time, it is considered that the potential impacts remain as reported in 2015. As such, the proposed mitigation measures also remain appropriate to address the identified effects upon ecological features that were identified, and no further recommendations for additional mitigation are considered necessary.

2.5 Ecology Summary and Conclusions

The updated ecology surveys undertaken in 2018 and 2021 have confirmed that there have been no material changes to the habitat present within the application site, and there are considered to be no changes which would affect the approach to protected species as set out in the 2015 ES.

The presence of reptiles was confirmed as part of the 2015 ES, and the implementation of a Reptile Mitigation Strategy was proposed to avoid significant impacts to reptiles and comply with the relevant legislation.

Breeding birds are also likely to occur, although impacts can be avoided through timing of works or advance survey if this is not possible.

No significant adverse ecological impacts were predicted by the 2015 EclA, and it was considered that the proposed nature conservation-based restoration would provide a net gain for biodiversity in the long term.

There have been no material changes to legislation or policy which affect the approach to the EclA or conclusions reached.

No substantive changes that could affect the conclusions reached in 2015 have been identified and it is therefore considered that the 2015 EclA findings remain valid and appropriate in 2021.

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3.0 NOISE

3.1 Introduction

The noise assessment set out in the 2015 ES follows a conventional approach of establishing current background noise levels via noise monitoring at representative properties in the vicinity of the extension area; determining the sound power levels of plant to be utilised; calculating site noise levels; and comparing the site noise levels with conventional noise limit criteria set out in MTAN1.

Reference was also made in the 2015 ES to a noise study undertaken as part of an ES submitted in 2010 as part of an update of the planning conditions regulating operations at the quarry. This 'review of old mining permissions' commonly referred to as a 'ROMP Review' resulted in new planning conditions being imposed by RCT Council which included noise limits at four named locations as part of an updated 'ROMP schedule of conditions'.

As part of the current study, noise monitoring has taken place in December 2020 and March 2021 as an update on baseline conditions.

There has been no change to the directly relevant policy or guidance on noise since 2015, specifically Minerals Technical Advice Note (Wales) 1: Aggregates (MTAN1) which remains extant. This confirms that noise limits should relate to the background noise levels and where background noise is less than 45 dB(A), noise limits should be defined as background noise levels plus 10 dB(A) (ref MTAN 1 para 88).

3.2 Update on Baseline Conditions

Routine noise monitoring was undertaken in April and November 2013, July and December 2014, June 2015, June 2016 and July 2017 at the four locations referred to in the ROMP schedule of conditions.

Baseline Noise Surveys were completed in July 2014 at three further locations, together with the installation of sound level meters for unattended measurements at locations in gardens at dwellings on Conway Close and Cefn Lane.

Noise monitoring has taken place in December 2020 and March 2021 as an update on baseline conditions.

In December 2020 measurements were undertaken at the four noise monitoring locations identified in the ROMP conditions for the existing quarry, at times when the quarry was operating.

In March 2021, sound level meters were installed for unattended measurements at two locations in gardens at the same dwellings (as in July 2014) on Conway Close and Cefn Lane. Seven attended sample measurements of 15-minute duration were also made at these two locations when the sound level meters were installed and collected so that observations could be made about the sources of noise contributing to the measured noise levels.

Additional sample measurements were undertaken at two noise monitoring locations, namely Pen y Bryn and Garth Avenue, when the quarry was not operating.

3.3 Consideration of Site Noise Limits

The surveys undertaken in December 2020 at the four noise monitoring locations identified in the ROMP conditions demonstrated compliance with the current ROMP noise limits.

For No. 26 Conway Close the average daytime background noise level in March 2021 was 37 dB(A) obtained for the permitted (and proposed) hours of operation. In the 2015 ES for the proposed quarry extension, the Suggested Site Noise Limit for the nearby No 36 Conway Close was 46 dB LAeq. It is therefore considered appropriate to 'maintain' the 2015 ES Suggested Site Noise Limit for this location.

For Cefn Heulog, one of the nearest properties on Cefn Lane, the average daytime background noise level is 36 dB(A) obtained in March 2021 for the permitted (and proposed) hours of operation. In the 2015 ES for the proposed quarry extension, the Suggested Site Noise Limit for Cefn Heulog was 45 dB LAeq.

Based upon the average daytime background level (LA90, T) of 36 dB(A) measured during the update survey in March 2021, which would give a site noise limit of 46 dB LAeq, based on average dB LA90, T + 10 dB(A), it is appropriate to 'maintain' what has become a more conservative Site Noise Limit of 45 dB LAeq, for this location, as recommended in the 2015 ES.

For all of the receiver locations, the calculated site noise level complies with the suggested noise limit.

3.4 Recommendations

For the existing quarry, noise limits are in place at defined representative properties which have been imposed as planning conditions via a formal review of planning conditions completed by RCT in 2013 (ref Environment Act 1995 Review of Old Mining Permissions [ROMP]). It is recommended that the ROMP conditions noise limits for Pen y Bryn (Position B), Garth Avenue (Position C) and Rogart Terrace (Position D), at the measurement locations listed in Table 10-1 in the 2015 ES, remain in place.

It is recommended that consideration be given to a lower site noise limit for No 36 Conway Close than that imposed as part of the ROMP conditions (46 dB LAeq compared to the current ROMP limit of 49 dB LAeq) and that a revised measurement location (Position A) be agreed with the mineral planning authority. Should the mineral planning authority agree to the revised measurement location it is recommended that it should be on land owned by the authority at the rear garden boundary (west) of No 36 Conway Close.

For Cefn Heulog, it is recommended that a noise limit of 45 dB LAeq, should apply, as recommended in the 2015 ES and supported by the March 2021 survey average daytime background noise levels.

For Cefn Primary School a site noise limit at the school buildings, for routine quarrying operations, of 45 dB LAeq, is recommended which corresponds to the lowest value in the BB93 Table 3.2 "Guideline noise levels for external teaching areas". This is consistent with the recommendation made in the 2015 ES

It is recommended that the existing site noise monitoring scheme be amended, to include the two additional locations that are representative of the nearest noise sensitive properties to the proposed extension area (Cefn Heulog and Cefn Primary School), so that noise monitoring would be undertaken in the event of quarrying in that area.

3.5 Noise Summary and Conclusions

The noise assessment included as part of the 2015 ES has been reviewed in response to the Inspector's comments regarding the 2014 noise monitoring data and consideration of any policy and guidance changes since 2015. Noise monitoring has taken place in December 2020 and March 2021 as an update on baseline conditions.

It has been confirmed that there has been no change to the directly relevant policy or guidance on noise, specifically MTAN1.

The update on baseline conditions has been taken into account in the consideration of site noise limits, and it is recommended that the ROMP conditions for three out of four of the named locations remain in place. For the fourth named location (Conway Close) it is recommended that consideration be given to a lower site noise limit of 46 dB LAeq, 1 hour, as set out in Table 10-4 Suggested Site Noise Limits in the 2015 ES.

For the two other named locations assessed as part of the extension development (Cefn Heulog and Cefn Primary School), it is considered that the noise limits proposed in the 2015 ES should remain unchanged.

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4.0 AIR QUALITY

4.1 Introduction

The 2015 ES air quality assessment was based on a review of the new extension proposals and potential for dust impacts on local sensitive receptors and the identification of appropriate mitigation, together with an assessment of the continued operation at Craig yr Hesg Quarry. The assessment described the baseline air quality in relation to particulate matter and dust and considered the potential sources of dust emission associated with the operations undertaken on the site.

As requested by RCT, the assessment primarily considered potential changes in levels of local PM₁₀ (particulate matter of 10 µm (microns) or less), and whether the proposals could influence future compliance with relevant Air Quality Objectives (AQOs) that have been established in relation to the protection of human health. (A micron is a unit of measurement where 1 micron = one thousandth of a millimetre). The assessment also considered the potential for nuisance dust impacts (also termed dis-amenity impacts).

The 2015 ES assessment referred to on-site and off-site PM₁₀ monitoring that had been, and was continuing to be, undertaken by Hanson and RCT. The potential for the quarrying activities to contribute to a risk of breaching air quality objectives was assessed in detail as part of the 2015 ES air quality study.

On-going PM₁₀ monitoring has continued to be undertaken by both Hanson and RCT since the preparation of the 2015 ES and has been subject to regular review and assessment by Hanson's Air Quality Consultants. The results and conclusions are therefore presented in the updated air quality study.

Potential emissions to air from the exhaust emissions of mobile plant associated with extraction, loading and internal haulage were not considered to be significant and were not assessed with the ES 2015. Likewise, exhaust emissions from HGVs entering and leaving the site were

considered unlikely to be significant and were not assessed. However, for completeness, brief consideration is given in the updated study to HGV emissions, with particular reference to HGV flows through part of the Pontypridd Air Quality Management Area.

4.2 Legislation and Guidance

There have not been any substantial changes to the air quality legislation referred to in the 2015 ES in relation to air quality and dust, and the relevant objectives and standards referred to remain appropriate.

The principal guidance referred to in the 2015 ES was the Minerals Technical Advice Note (Wales) 1: Aggregates, March 2004 (MTAN 1) which provided guidance on the means to reduce the air quality impacts of aggregate production. Although Planning Policy Wales (PPW) has since been updated (PPW11 February 2011), MTAN 1 itself remains unchanged.

Since the 2015 ES however, the Institute of Air Quality Management (IAQM) has issued its' **Guidance on the Assessment of Mineral Dust Impacts for Planning**. This document, issued in 2016, 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.

This document now forms the primary reference document for determining assessment methodologies in relation to mineral sites and dust.

Irrespective of the updates and changes to the policy documents and guidance as detailed above, the broad recommended approach to the assessment and evaluation of significance methodologies remain as applied to the air quality and dust assessment presented in the 2015 ES.

4.3 Update of Baseline Conditions

There are no known changes to the site setting and surrounds with no new development in the locality that would present either additional sensitive receptors or sources of aerial pollutants and dust that require consideration.

The updated study has drawn upon:

- DEFRA background air quality maps, with predicted background data based on 2018 ambient monitoring and meteorological data and updated information on predicted air quality in 2021 and 2025.
- RCT air quality monitoring data for PM10 for monitoring points within the Glyncoch Estate, notably the primary monitoring station no 130 at Garth Avenue from which data is available for 2015 to 2020.
- Annual Air Quality Reports produced by RCT since 2015, including the most recently published 2020 Air Quality Progress Reports.
- Hanson onsite DustScan PM₁₀ monitoring data for a location between the Primary Crusher Feed Hopper and quarry northern boundary, with annual PM₁₀ monitoring reports prepared on behalf of Hanson, including the most recent November 2020 report.
- A short-term three-month dust monitoring exercise is being undertaken comprising deposition and directional dust at several downwind locations, including results from the first month deemed to be sufficient to make comparison with the original 2014 monitoring data.
- Monitoring for wind speed and direction has continued on site at a weather station located at the northern end of the quarry adjacent to the Primary Crusher. The data show the prevailing wind direction to be southerly / south-south westerly. This is slightly atypical of standard UK conditions, which are predominantly south westerly,

with a predominant south westerly orientation reported in the 2015 ES based upon weather station data in 2013.

4.4 Update of Effects and Significance

4.4.1 Methodology

The IAQM guidance on mineral dust and planning has been published since the preparations of the 2015 ES, which contains an illustrative example procedure for a dust assessment. The guidance is however clear that other assessment methodologies are valid provided they follow the underlying IAQM procedures, are based on sound scientific principals and are appropriate for the application. The 2015 ES dust assessment followed a broadly similar methodology to that presented in the guidance, meeting the requirements above and providing a valid approach. However, in the light of the updated wind direction data and newly published guidance specific to the mineral extraction activities, the assessment has been revised to reflect this.

In accordance with the IAQM guidance the revised assessment of impacts and their effects considers the *residual emissions* from a development taking into account the controls that are to be incorporated into the design of a scheme. This enables assessment of whether the controls are sufficient or whether additional mitigation may be required. The assessment therefore takes into account both the in-built design measures, as well as the existing management and control measures that would continue to be applied, together with those that would be implemented within the extension area.

4.4.2 Dust Effects

A period of dust deposition monitoring was undertaken over the period October to December 2014 to inform the 2015 ES. Routine deposition dust monitoring is not a requirement of the existing planning permission at the site and given the absence of any particular changes of note in the locality there is no reason to suspect that background dust deposition rates would have changed substantially.

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Nevertheless, for completeness, a short-term three-month dust monitoring exercise is being undertaken comprising deposition and directional dust at several downwind locations, which, where feasible, replicated the original 2014 monitoring locations.

Measured dust deposition rates across the March to April 2021 period are all within the ranges previously measured and reported in 2014. This is consistent with expectations that there are no particular changes of note in the locality that would change the background dust deposition rates since the previously monitoring. It is concluded, therefore, that the 2014 data as presented remains appropriate to inform existing deposition dust conditions at the site.

In summary, taking account of the designed-in mitigation measures, there is a risk of *slight adverse* effects, at most, arising from 'nuisance' dust from the proposed quarry extension at the nearby residential receptors. There is thus no change to the assessed effects in the 2015 ES.

The overall significance with regards to 'nuisance' dust is considered **not significant**.

The IAQM guidance also includes a methodology for assessing ecological receptors. There have equally been no changes to nearby ecological receptors since the 2015 ES, with the nearest statutory designated nature conservation site being Nant Gelliwion Woodland SSSI about 3km to the southwest of the site and outside any possible influence. Two local designated sites do lie within 400m of the site, Craig yr Hesg / Lan Wood LNR / SINC which adjoins the site to the southwest, south and east and Taff and Rhondda Rivers SINC which lies to the east.

The resulting predicted effects due to dust remains *negligible* at these sites and the overall significance with regards to dust deposition and ecological receptors remains **not significant**.

4.4.3 Fine Particulates (PM₁₀)

The IAQM guidance advises that where existing background ambient PM₁₀ concentrations are less than 17 µg/m³ there is little risk that additional contributions from mineral operations would lead to an exceedance of the long-term AIR Quality Objectives (AQO). Defra predicted background annual mean PM₁₀ concentrations for the general locality are in the range of 11.53 - 12.05 µg/m³ for 2020, well below 17 µg/m³.

Extensive RCT PM₁₀ monitoring data is also now available for Garth Avenue and measured annual mean PM₁₀ concentrations have been consistently well below the AQO for 2015-2020 being in the range 13.45 - 25.1 µg/m³.

The IAQM guidance also notes that there may be a number of days per year with particularly intense operations which increase the number of days with a concentration greater than 50 µg/m³, but do not have a significant impact on annual mean concentrations.

Occasional exceedances of the short-term limit value of 50 µg/m³ have been recorded at Upper Garth Avenue, to which it is possible the quarry is a contributory source. However, the number of days per year the exceedances have been recorded are well below the AQO of 35 days per annum, in the range 2 to 13 between 2015 and 2020.

To further update the assessment the extensive additional Garth Avenue PM₁₀ monitoring data has also been reviewed to estimate the potential contributions to total concentrations from the quarry. Based on these results it remains reasonable to assume a maximum possible average increase in PM₁₀ concentrations attributable to the quarry of 2 µg/m³ for receptors near to the extension area but distant from the processing plant.

The predicted impacts on receptors from PM₁₀ from the proposed extension and existing quarry operations remain as negligible to slight adverse as presented in the 2015 ES.

4.5 Dust and Air Quality Summary and Conclusions

The 2015 ES described the air quality assessment that had been undertaken in considering the impacts of the existing quarry and the proposed westward extension of the quarry on potential receptors in the vicinity. These included the occupants of houses and a school to the northwest and north of Glyncoch.

The assessment primarily considered potential impacts that may arise due to fugitive dust, which can result in soiling of property and surface, and PM₁₀, a component of airborne particulate matter, which has human health effects.

The review has presented the latest available information on the existing conditions at the site, where relevant to the assessment, and air quality monitoring data. There have not been any particular changes to the site itself or the local site setting that would significantly alter the original assessment, with no new sensitive receptors or new sources identified.

However, both onsite and offsite PM₁₀ monitoring has been continued by Hanson and RCT since the preparation of the 2015 ES. The latest data has therefore been reviewed, and the PM₁₀ assessment revised accordingly.

The on-going PM₁₀ monitoring has confirmed that there are no actual or likely breaches of either the long-term annual mean or short-term 24-hour AQOs for PM₁₀ at Garth Avenue. This therefore supports the original 2015 ES conclusions, following the review of the data that was available at that time, that the overall effect of an extension to the life of the quarry operations and the proposed extension is deemed acceptable in terms of human health, as air quality objectives outside the site will continue to be met.

Nevertheless, it remains acknowledged that the quarry forms a potential source of particulate emissions that will require continued management and monitoring. As such a Dust Management and Particulate Monitoring

Plan has been submitted to RCT in relation to the proposals and this is deemed to remain appropriate subject to minor updating.

It will additionally remain a requirement of the existing Environmental Permit covering the quarry processes and asphalt production that best practicable means are used to control emissions, and the Permit will continue to be audited and enforced by RCT.

The dust assessment has also been reviewed, taking into account latest information. Nuisance dust continues not to be considered a significant issue outside the existing quarry. In addition, in relation to the extension area, due to the separation distances between the potential receptors and the quarry extension area and the local presence of screening woodland, it remains the conclusion that with adherence to the existing and additional recommended mitigation measures the potential impacts from wind-blown dust associated with the quarry extension will generally be negligible.

Overall, 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 nuisance dust is *slight adverse* at most at all receptors. Daily inspections and observations, along with rapid rectification of any identified equipment malfunctions, would be continued to minimise these risks. The resulting significance of nuisance dust is assessed as **not significant**.

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5.0 TRAFFIC

5.1 Introduction

The 2015 ES provided a traffic impact assessment which considered the capacity of the road network and its ability to safely accommodate the proposed development.

The 2015 assessment drew upon traffic surveys of the local highway network undertaken in 2012 and 2013.

The assessment has been updated in response to issues raised by the Inspector regarding the age of the surveys and takes into account the findings of a site visit undertaken in January 2021 and more recent traffic survey data recorded between Friday 27 November and Thursday 03 December 2020 using an Automatic Traffic Counter positioned in the same location as that for the historic surveys referred to in the 2015 ES. This period fell between the Covid 19 lockdowns imposed in Wales, when travel was not restricted.

As with the 2015 ES, the study area for the assessment of traffic effects includes the site access, the B4273 to the south down to the signal-controlled junction with the A4223, and the A4223 link to the A470 dual carriageway.

It was noted during the January 2021 site visit that there have been some changes to the local road network since the 2015 ES was prepared in terms of parking restrictions, signage and speed enforcement. At present, there is also a diversion in place following damage to White Bridge during the floods of 2020, which has resulted in its closure to all traffic.

The improvements to the Quarry access, which were scheduled to be undertaken when the 2015 ES was prepared, have now been completed in accordance with planning permission reference 13/1039/10, which was issued in March 2014. As a result, all Quarry traffic now uses the southern access, which is subject to a 10 mph speed limit, although the northern access remains in place for emergency use only.

Weighbridge information analysed by the operator in 2020 has revealed that the average payload of vehicles servicing the Quarry is higher than had been considered in the 2015 ES. As discussed below, this has the effect of reducing the number of vehicles required to transport the given output.

As a result, the findings of the 2015 ES remain robust in terms of the impact assessment of the proposed development. Using the lower traffic flows observed in 2020 (discussed below) and assessing a reduced level of Quarry traffic would simply reveal that the network retains more spare capacity than was previously established and deemed acceptable by the Highway Authority, which raised no objection to the findings of the 2015 ES.

5.2 Traffic Conditions

5.2.1 Traffic Surveys

2012 Survey

A 7-day survey undertaken from 09/03/2012 and a 5-day survey undertaken from 01/03/2013 provided by the Highway Authority formed the basis of the 2015 ES.

The 7-day survey confirmed Monday to Friday average flow during the quarry operating hours (07:00 – 19:00) of 9,222 vehicles, of which 742 (8%) were HGVs.

The AM peak hour flow between Monday and Friday was found to occur between 08:00 – 09:00 with an average of 946 vehicles (246 northbound / 700 southbound), of which 71 (7.5%) were HGVs.

2013 Survey

The 5-day survey commencing on 01/03/2013 recorded data from Friday 1st March to Tuesday 5th March inclusive. It confirmed that during the working hours of the Quarry (07:00 – 19:00) the weekday flows varied

between 8,759 (Monday) and 9,655 (Friday), giving a range of 896 vehicles. The 3-day average flow during the operating hours was 9,301 vehicles, of which 739 (7.9%) were HGVs.

The AM peak hour flow on the three weekdays surveyed was found to occur between 08:00 – 09:00 with an average of 939 vehicles (247 northbound / 692 southbound), of which 75 (8%) were HGVs

The total traffic volumes between the 2012 and 2013 surveys are thus broadly similar.

Updated December 2020 Survey

The more recent results from the 2020 Automatic Traffic Count revealed that during the weekday working hours of the Quarry (07:00 – 19:00) the traffic flows varied between 7,446 (Monday) and 8,221 (Friday), giving a range of 775 vehicles. The 5 day average flow during the operating hours was 7,777 vehicles, of which 288 (3.7%) were HGVs.

The AM peak hour flows during the period varied between 488 and 859 movements throughout the working week of the Quarry, giving an hourly variation of 371 vehicles.

By comparing the 2020 survey data with that recorded during 2012 and 2013, it is apparent that the daily and peak hourly flows from the more recent survey are lower, as are the number of HGV movements. It is likely that these reductions are a result of seasonal variations, suppressed travel arising from the Covid 19 outbreak and potentially the closure of White Bridge as vehicles divert to other routes when leaving the residential estate it connects to.

5.2.2 HGV Quarry Traffic

In terms of the traffic attracted to Craig yr Hesg Quarry, based on 5.75 working days per week, when excluding public holidays and planned shut-downs for extended breaks (such as at Christmas), it is established that there is a total of 287.5 working days per annum.

Based on the average output of 400,000 tonnes material being transported in 20 tonne average payloads (as was assumed in the 2015 ES), this equates to 70 loads per full working day, which results in 140 total HGV movements per day on the local highway network. If it is assumed notionally that the movements are distributed throughout the operating hours, then this would result in an average of 6 loads / 12 movements per hour when taking into account the normal operating hours at the site of 07:00 – 19:00 during the week. In practice, loading tends to be concentrated in the period 07.00 – 17.00 which would give an average of 7 loads / 14 movements per hour.

However, analysis of weighbridge information by Hanson has revealed that due to a significant proportion of material being transported in large bulk loads within articulated HGVs, the average payload was found to be 24 tonnes. Based on the increased payload, the average daily traffic flow is calculated to be 58 loads / 116 HGV movements per day. This equates to an average of 5 loads / 10 movements per hour over a 12 hour working day and 6 loads / 12 movements per hour when averaged over the 10 hour period 07:00 – 17:00 during which the majority of transport activity occurs.

5.2.3 B4273 Capacity

The 2015 ES calculated that the current peak hour flows represent approximately 67% of the design capacity of the B4273, leaving a reserve capacity of approximately 33%, which suggests road capacity is not a material concern to the ongoing development at the Quarry.

The updated study also uses traffic growth predictions to consider the position at the anticipated completion of quarrying operations in 2048 and concludes that if such traffic growth occurs, the B4273 would still retain a reserve capacity of at least 174 vehicles (11.6%) in the 2048 peak hour.

If assessed based on the more recent 2020 flows, the level of spare capacity available currently and in the 2048 design year is increased.

As a result, highway link capacity is not considered to be a constraint to the ongoing development activities at Craig yr Hesg Quarry.

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5.2.4 Highway Safety Effects

In order to establish whether the activities at Craig yr Hesg Quarry may have resulted in compromised highway safety, the Crashmap database was reviewed for the most recent 5 year period available (2015 to 2019 inclusive – 2020 data has not yet been validated and released). This updates the personal injury collision data for April 2008 to March 2013 included within the traffic assessment which formed part of the 2015 ES.

The area of search included the length of the B4273 from south of the Abercynon Road junction, approximately 0.6km north of the Quarry HGV egress, to the A4223 south of the quarry; along the A4223 to the A470 and along the parallel access roads to the southern junction between the A470 and A4058.

Within this area a total of 17 personal injury collisions had been recorded, of which 15 were classified as slight and 2 as serious.

A review of the collision data revealed that none of the recorded collisions had any HGV involvement and none occurred at the access to Craig yr Hesg Quarry.

In the event there is a particular feature of the highway network that results in compromised safety, it is common to find a number of collisions in the same location that share similar characteristics.

In the absence of any recorded collisions involving HGVs on the local roads within the last five years, on a network that routinely accommodates HGV traffic, applying the evidence-based approach advocated in current highway design guidance indicates the existing road network can safely accommodate the HGV traffic associated with the existing activities at Craig yr Hesg Quarry and other businesses which attract such vehicles.

5.3 Traffic Summary and Conclusions

Following completion of the review and update of the highway and transport implications of the proposed development it is concluded that:

- The recently improved site access is acceptable to serve the proposed development.
- The quantum of proposed development traffic is already accommodated on the local road network, which has been demonstrated to retain substantial spare capacity.
- There are no recent records of accidents involving HGV's in the vicinity of the quarry or on the identified access route to/from the A470.

Accordingly, it is concluded that the proposed development is acceptable in terms of highway and transport considerations.

This conclusion was supported by the Council when considering the 2015 ES which accompanied the planning application, as it raised no objection on highway grounds having assessed the application in the context of current national planning policy as recently as July 2020 when the decision was taken to refuse permission, albeit for matters unrelated to highway impact.

6.0 OTHER ENVIRONMENTAL ISSUES

6.1 Introduction

In the Inspector's assessment of the 2015 ES, a number of additional issues are raised with regard to policy and technical references.

These have been clarified in the SES, as summarised below.

6.2 Ground and Surface Water

The assessment of these issues in the 2015 ES makes a number of references to guidance set out in the National Planning Policy Framework (NPPF). The NPPF applied to England only, but the same references are included in the Welsh Government Technical Advice Note 15: Development and Flood Risk (TAN15).

Thus, whilst there is an incorrect reference in the 2015 ES to NPPF (and its accompanying Technical Guidance), the assessment was undertaken in accordance with guidance set out in TAN15 in terms of climate change allowance: it is simply that the guidance cross reference is incorrect. Importantly, the calculations undertaken are consistent with the guidance set out in TAN15, and the conclusions reached are appropriate.

6.3 Cultural Heritage

There have been a number of changes to legislation and guidance relating to the protection of cultural heritage assets issued since the preparation of the Cultural Heritage Chapter of the 2015 ES.

However, these changes do not alter the conclusions of the Chapter that the proposed development would not result in a significant adverse effect on the cultural heritage resource.

The conclusions reached in the 2015 ES thus remain valid that that the site is not affected by any designated cultural heritage assets, it would not affect

the settings of assets in the environs, and any below ground archaeology can be addressed by a conventional programme of archaeological monitoring (ref ES Chapter section 14.7).

6.4 EIA Scoping Report

The 2015 ES includes as an Appendix a copy of a formal EIA 'Scoping Opinion' issued by RCT which confirmed the issues which should be addressed as part of an environmental impact assessment and which should be reported in an ES.

A 'Scoping Report' prepared by the Applicants which informed the Scoping Opinion is now included as an appendix to the SES for completeness.

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7.0 SOCIO-ECONOMIC, WELL-BEING AND HEALTH ISSUES

7.1 Introduction

A dedicated socio-economic, well-being and health issues chapter was not included as part of the 2015 ES, and such a study was not requested by RCT in the EIA Scoping Opinion which preceded the preparation of the 2015 EIA and ES.

However, a Report setting out a 'Response to Health and Wellbeing Issues Raised During Public Consultation' on the application was provided in June 2016. This considered a range of issues raised in response to the application by consultees and other interested parties which had been summarised by RCT in a memorandum setting out a schedule of issues and themes to which the Applicants were invited to respond.

There have been a number of legislative changes and planning policy updates relevant to the topic, together with some minor changes to the previously quoted economic benefits. These issues are thus briefly referred to in the SES for completeness, together with a summary of issues raised by consultees in response to the application and the 2016 Report.

However, the key focus of the update relates to the socio-economic benefits of the scheme, as summarised below.

7.2 Economic Benefits

The economic benefits of the development were highlighted in the 2016 Report, including the contribution made by the quarry to employment and the local economy.

The figures quoted have slightly changed in the intervening period, but with the quarry continuing to directly employ 19 personnel with a further 10 indirect personnel associated with haulage, maintenance and servicing etc

and between 50 and 60 external hauliers collecting material from the quarry.

As of 2020, the annual wage bill at the quarry is some £1,155,000 (£700,000 referred to in the 2016 Report), with expenditure on contractors of around £160,000 per annum (£345,000 referred to in the 2016 Report). Expenditure on spares and repairs/maintenance etc. continues to amount to an average of £800,000, predominantly spent on businesses with Offices in South Wales. Expenditure on plant hire amounts to an average of over £150,000 per annum (£130,000 referred to in the 2016 Report), again predominantly spent with businesses with Offices in South Wales. Business rates payable to RCT continue at an average of £88,000 per annum.

As was the case in 2016, the quarry thus directly and indirectly injects over £2 million per annum into the local economy (£2.3m).

The 2016 Report also made reference to the importance of the supply of high specification aggregate from the quarry, which is acknowledged to be a resource of UK importance. However, in this respect, the continued availability of supply of aggregate from the quarry for construction will be particularly beneficial as the country emerges from the Covid 19 pandemic, with a need to grow the economy, and where construction and capital projects are anticipated to be a key feature of such growth.

This is similarly the case with employment, where the retention of employment is important at a time of growing rates of unemployment arising from the Covid 19 pandemic.

8.0 PLANNING POLICY

8.1 Planning Policy Changes

The May 2015 application was accompanied by a Planning Application Statement (PAS), within which chapter 8.0 included a detailed assessment of planning policy relevant to the consideration of the planning application and proposed development.

However, as noted in the PINS assessment of the ES accompanying the May 2015 application, there have been changes to national planning policy in the intervening period.

At the time of submission of the application, national planning policy was contained within Edition 7 of Planning Policy Wales (July 2014) [PPW7]. Minerals planning policy was separately contained within Minerals Planning Policy Wales (December 2000) [MPPW], supported by Minerals Technical Advice Note (Wales) 1: Aggregates (March 2004) [MTAN1].

The key elements of minerals planning policy set out in MPPW were incorporated as a separate chapter 14.0 into an updated edition 8 of PPW issued in January 2016 [PPW8]. Upon the issuing of PPW8, MPPW was cancelled. However, MTAN1 remains extant.

There have been a series of subsequent iterations of PPW culminating in PPW Edition 11 issued in February 2021 (PPW11). However, mineral planning policy has not materially changed over this period, and the current PPW11 continues the key themes of well-established and long-standing advice.

The consideration of the main themes of mineral planning policy, as set out in the 2015 PAS, thus remains applicable in terms of the general analysis undertaken and the conclusions drawn. In these terms, the key planning policy changes relate to the planning policy framework provided by PPW11 and supporting legislation.

PPW11 issued in February 2021 represents a minor redrafting of PPW10 which itself was redrafted from the previous PPW9 to ensure that it was fully aligned with the sustainable development requirements of the Planning (Wales) Act 2015 and the well-being goals defined in the Well Being and Future Generations (Wales) Act 2015. The goals, principles and ways of working advocated are briefly discussed in the Planning Policy section of the SES.

A further change which has occurred in the intervening period relates to the consideration of the need for the development in the context of the Regional Technical Statement (RTS) which was in place at the time, and which informed the preparation of the RCT Local Development Plan (LDP). Since the submission of the 2015 application, a Second Review of the RTS has been undertaken (RTS2), the content of which is summarised below.

8.2 Regional Technical Statement / 'Need'

MTAN 1 requires the South Wales and North Wales Regional Aggregate Working Parties (RAWPS) to produce a Regional Technical Statement (RTS) to ensure that adequate aggregate supply can be maintained. This is undertaken via a review of existing permitted reserves, an assessment of future demand, and a subdivision of that demand between the Local Authority areas in terms of the contribution towards regional supply which each Authority should make provision for.

An initial RTS for the area covered by the South Wales RAWP was produced in October 2008, with a first Review (RTS1) produced in 2014. RTS1 identified a need for RCT to make a minimum provision of 17.25m tonnes of rock as at December 2010, calculated over the 25-year time horizon. When compared with a landbank of 13m tonnes as at December 2010, this gave a residual requirement for a minimum allocation in the RCT LDP of 4.25m tonnes. In seeking to meet that requirement, it noted that the adopted RCT LDP (2011) identified a preferred area for future extraction as a western extension to Craig yr Hesg Quarry, and it thus concluded that the crushed rock shortfall is already covered by this allocation and that no further allocations are required.

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A second review of the RTS was published in October 2020 (RTS2). For RCT this requires a minimum provision of 18.816m tonnes, and with permitted reserves of 9.83m tonnes as at 31st December 2016, this equates to a residual requirement for the release of 8.986m tonnes of new crushed rock reserves in RCT.

The 'preferred area' at Craig yr Hesg Quarry identified in the adopted LDP is currently the only means by which this identified requirement could be met.

9.0 CONCLUSIONS

This document comprises a Non-Technical Summary of a Supplementary Environmental Statement (SES) which has been prepared in response to a request from the Planning Inspectorate to update the 2015 ES submitted in support of the Craig yr Hesg western extension and consolidation application with particular reference to:

- The ecology survey, noise monitoring and air quality data which date from 2014;
- The traffic surveys which were undertaken in 2012 and 2013; and
- The planning policy analysis, noting that Planning Policy Wales Edition 7 which was in place in 2015 has been replaced, as has other guidance relating to cultural heritage.

The SES has been prepared to fulfill these requirements, and includes:

- The results of updated ecology surveys undertaken in September 2018 and January 2021, and an updated data search undertaken in December 2020.
- The results of updated noise surveys undertaken in December 2020 and March 2021.
- The results from ongoing air quality (PM₁₀) surveys undertaken since 2015 and set out in annual monitoring reports, supplemented by results from air quality monitoring undertaken by RCT and Hanson.
- The results from fugitive dust monitoring undertaken in March/April 2021.
- The results from an updated traffic survey undertaken in December 2020, and updated collision data from the most recently available period 2015 – 2019); and

- An updated planning policy analysis which considers planning policy and legislative changes since 2015, with particular regard to Planning Policy Wales Edition 11: February 2011 (PPW11).

A number of other more minor issues in the 2015 ES are referred to by the Planning Inspectorate and which are addressed in the SES.

In summary, the SES concludes that:

- Following updated site surveys in 2018 and 2021, no substantive ecological changes that could affect the conclusions reached in the 2015 ES have been identified. It is therefore considered that the findings of the 2015 Ecological Impact Assessment (EclA) remain valid and appropriate in 2021.
- The updated noise monitoring undertaken in December 2020 and March 2021 has not identified any reason to revise the recommended noise limits as set out in the 2015 ES for the defined representative noise sensitive locations.
- There have been no material changes to the site itself or the local site setting that would significantly alter the original air quality assessment, with no new sensitive receptors or new sources identified.
- The on-going PM₁₀ monitoring has confirmed that there are no actual or likely breaches of either the long-term annual mean or short-term 24-hour AQOs for PM₁₀ at Garth Avenue. This therefore supports the original 2015 ES conclusions, following the review of the data that was available at that time, that the overall effect of an extension to the life of the quarry operations and the proposed extension is deemed acceptable in terms of human health, as air quality objectives outside the site will continue to be met.
- The dust assessment has also been reviewed, taking into account latest information. Nuisance dust continues not to be considered

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a significant issue outside the existing quarry. In addition, in relation to the extension area, due to the separation distances between the potential receptors and the quarry extension area and the local presence of screening woodland, it remains the conclusion that with adherence to the existing and additional recommended mitigation measures the potential impacts from wind-blown dust associated with the quarry extension will generally be negligible.

- Updated traffic flow information on the B4273 (2020) confirms current flows are lower than those previously recorded in 2013. Based on the highest flows, it was established that the B4273 currently operates at 67% of its design capacity and therefore retains a reserve or spare capacity of approximately 500 vehicles, or 33% of its design flow, under peak hour conditions. If assessed based on the more recent 2020 flows, the level of spare capacity available currently and in the 2048 design year is increased. As a result, as concluded in the 2015 ES, highway link capacity is not considered to be a constraint to the ongoing development at Craig yr Hesg Quarry.
- PPW11 makes no material change to mineral planning policy as set out in previous versions of PPW, but the document follows the substantial restructuring as included in PPW10 to ensure that it is fully aligned with the sustainable development requirements of the Planning (Wales) Act 2015 and the well-being goals defined in the Well Being and Future Generations (Wales) Act 2015. However, whilst the Planning Application Statement which accompanied the 2015 western extension application assessed the scheme in the context of planning policy set out in the then extant PPW7 and Minerals Planning Policy Wales (both now cancelled and superseded), mineral planning policy has not materially changed via subsequent iterations of PPW, and the current PPW11 continues the key themes of this long-standing mineral planning policy advice.

Overall, the SES concludes that there have been no material changes in environmental circumstances or planning policy which alter the conclusions

reached by the 2015 ES regarding the acceptability of the proposed development.