# Proposed Sand and Gravel Quarry, Lea Castle Farm

## Planning Inspectorate ref: APP/E1855/W/22/3310099

### Response on Rule 6 Party 'Air Quality Review' Report

#### Introduction

The proof of evidence provided by Adrian Carloss for Stop the Quarry Campaign (STQC) (Rule 6 Party) makes reference to an Air Quality Review report prepared by Air Pollution Services (APS), dated 2 March 2020 (ref: S1003\_A\_1) that had been commissioned by the STQG (hereafter referred to as the 'APS Report').

This APS Report has not been located on the WCC planning portal or in any of the previous provided Core Document lists. It had not therefore been available for review prior to preparation of evidence for the Appellant for submission to the inquiry.

The APS Report was provided to the Appellant's team by Mike Lord, STQG on 8th February 2023.

The APS Report has now therefore been reviewed and brief notes are provided below.

#### Context of the APS Report

- Comprises a review of the dust and transport / air quality assessments undertaken by Vibrock and EnviroCentre and provided within the original Lea Castle Farm Quarry Environmental Statement (CD1.03, CD1.08);
- Provides commentary on issues identified by APS with the assessments, such as assessment methodologies, presentation of air quality information and uncertainty of the overall assessment;
- Does not provide an alternative assessment or conclusions of overall impacts and effects in relation to dust and / or air quality that may arise from the proposed development.

#### Response to Key Comments

The key comments raised in the APS report are summarised below along with a response, where deemed applicable.

	APS Comments	Response
Local Air Quality		
3.1 Importance of Air Quality	ES downplays potential health impacts from air pollution; refers to medical studies from over 2 decades ago	Applicable air quality standards and information were presented in the dust and air quality assessment reports; further commentary on air pollution concerns provided in my Proof

	APS Comments	Response	
3.2 Local Air Quality Conditions	Little consideration is given to local air quality conditions; data only provided for single monitoring site.	highlighting the importance of air quality and current planning and legal context and standards. The Site is distant from any existing air quality monitoring locations.	
		The EnviroCentre report reported data for one air quality monitoring site for the purposes of enabling verification of the vehicle emissions model. Additional monitoring sites near this site were established in Kidderminster in 2019; EC report was dated August 2019 at which point the new 2019 monitoring data would not have been available for verification purposes. This new data is fully presented in my Proof.	
	Little consideration give to the Air Quality Management Area (AQMA) in Kidderminster.	Kidderminster Ring Road AQMA was briefly discussed in the EnviroCentre report; additional information on the current status of the AQMA provided in my Proof.	
Dust Risk Assessi	ment		
4.1 Receptors	Additional low and medium sensitivity receptors should have been included such as neighbouring agricultural land	Additional receptor locations such as neighbouring fields used for paddocks and residential garden areas are discussed in my Proof	
Potential Emission Magnitude	The assessment may have under- estimated the source emission magnitude from on-site transportation and stockpiles when comparison is made to the example provided in the IAQM guidance on mineral dust	The text in the IAQM guidance is an example of on-site transport and stockpile scenarios. The assessment of potential source emissions magnitude is ultimately based on professional judgement taking into account several factors. I have provided further detail of the assessment of source emission magnitude in my Proof and ultimately concur with Vibrock's magnitude. Of note, alternative source emission magnitudes not provided by APS	
Pathway Effectiveness	Assessment has assumed that dust effects can only occur when wind speed is greater than 5 m/s, when they can	The Vibrock dust assessment follows the approach provided as an example in the IAQM guidance. I have also considered lower wind	

	APS Comments	Response	
	occur at lower thresholds.	speeds and ultimately reach the same conclusions.	
Risk Assessment Conclusions	ES concludes there would be adverse effects at several properties with mitigation; ES understates the number of affected properties	WRS required additional mitigation to that outlined in the Vibrock assessment including provision and agreement of a Dust Management Plan (DMP); WRS additionally required that the DMP includes for a programme of dust monitoring. In my Proof I have provided further commentary on the risks at different properties as activities progress. I have provided further information on the 'enhanced' mitigation given the predicted effects taking into account in-built design and 'standard' mitigation. The proposals include for provision and agreement of a written DMP, to include physical deposition dust monitoring. The DMP would be subject to regular review and update as necessary in agreement with the MPA.	
Road Traffic Asse	ssment		
Assessment Methodology	Issue raised with the assessment methodology, including the road network assessment, chemistry, met data used and model verification	In my Proof I have primarily considered the predicted development related HGV movements providing further detail of the predicted routing. These movements have been considered in comparison to the screening criteria provided by the IAQM. These criteria are referred to in order to indicate the need for some form of an air quality assessment – not necessarily to indicate that there would be significant adverse impacts. These predicted movements are based on the information provided by the transport consultants and assessment, and differ to those presented in the EnviroCentre and APS Report. Predicted HGV movements, including within the Kidderminster AQMA, are all below the relevant screening criteria other than on the stretch of Wolverley Road between the proposed Site entrance and the A449. Further consideration of	

APS Comments	Response	
	this is provided in my Proof.	
	It is also of note, as highlighted in my proof, that air quality within the Kidderminster AQMA is expected to improve following the establishment of a new road layout.	
	It is also of note that vehicle emissions modelling undertaken for the wider Lea Castle Village development on behalf of that application included the predicted Site development traffic and did not identify any local air quality concerns	

### Overall Summary

Several comments are raised in the APS Report in relation to the methodologies of the dust and air quality assessments provided in the Environmental Statement. As noted above many of these have been superseded by information provided in my Proof.

Of note the APS Report did not present an alternative assessment or conclusions to those presented in the ES.

The comments raised by APS do not alter my overall conclusions that the proposed development would not result in significant or unacceptable adverse impacts.

Name:	Signature:	Date:
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