

08/08/2016

Michael Boland
Executive Scientist
Water and Environmental Services
Wicklow Country Council
County Buildings
Wicklow Town
Co. Wicklow

RE: Section 55 Monitoring Data, Ballinclare Quarry – Air Monitoring and Dust Monitoring Update

Dear Mr. Boland,

As required by the recent section 55 notice (dated 3rd June 2016), issued to Kilsaran International, I am writing to you to provide an update on the air and dust monitoring at Ballinclare Quarry.

1. Overview of air monitoring programme to date

In accordance with the previously outlined monitoring programme from the letter dated 20th June 2016, air sampling was undertaken again on Friday 29th of July 2016 by AWN Consulting at the six identified perimeter locations (SA1 – SA6) around the quarry (see *Figure 1 – Monitoring locations*).

The methodology for the monitoring of asbestos followed *The Health and Safety Executive (HSE) Guidance Asbestos: The Analysts Guide for Sampling, Analysis and Clearance Procedures*, which recommends that sampling and analysis of materials for the presence of asbestos is undertaken to comply with CAWR 2002 ACOPs L27 and L28 when sampling airborne fibres.

The HSE procedure recommends using a known flow rate (ranging from 1-16 L/min) through a filter for a set period of time until 480 litres of air have been sampled. To satisfy the requirement for comparison to the minimum detection limit of 0.01 f/ml, each measurement must be completed on a minimum sample of 480 litres in volume. The fibres can then be enumerated by a UKAS accredited laboratory, in this case, the Institute of Occupational Medicine (IOM).



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Table 1 provides a comprehensive overview of the sampling results from Friday 29th of July 2016 and also includes an assessment of the fibre concentrations in relation to the HSA Binding Occupational Exposure Limit. As with all previous sampling to date the results were again in compliance with the Health and Safety Authority (HSA) Code of Practice (COP) 2011 value of 0.1 f/ml.

2. Dust sampling status

In accordance with the programme outlined in the letter dated 20th June 2016, dust monitoring was again undertaken continuously from Tuesday 19th July 2016. Samples have been collected and results are anticipated to be available from 23rd August 2016.

Monitoring for PM₁₀ is undertaken at one location (SD1) (see *Figure 1 – Monitoring locations*) using a R&P Partisol®-Plus Sequential Air Sampler (Model 2025). The sampler is a manual air sampling platform which has been designed to meet US EPA Reference Designation (RFPS-1298-127). Approximately 24 m³ of air is sampled daily through a particle size separator, which is contained within the PM₁₀ sampling head. The impactor removes particles with a diameter >10 µg and the remaining particles are collected on pre-weighed 47mm diameter filters. The Partisol® sampler is programmed to automatically replace each sampled filter by a new pre-weighed filter at midnight. This ensures that each filter represents a sampling period of exactly 24 hours. Gravimetric determination is carried out pre- and post-sampling by a UKAS accredited laboratory using a calibrated scientific balance.

Yours sincerely,



Teri Hayes

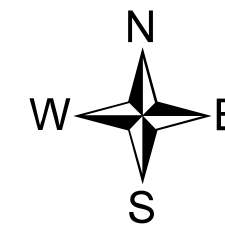
Director AWN Consulting

cc. *Michael Geaney, A/Director of Services, Water and Environmental Services, Wicklow Co. Council*
David McKeown, Director, Kilsaran International
Jim Fanning, Health and Safety Authority

encl. *Table 1 – Air Quality Monitoring Programme Results, Ballinclare Quarry, 29 July 2016*
Figure 1 - Monitoring Locations

Table 1: Air Quality Monitoring Programme Results, Ballinclare Quarry, 29 July 2016

Sample no.	Date	AWN Consultant	Location Description	Total Fibre Concentration (f/ml)	Total Asbestos Fibre Concentration (f/ml)	Analysed by:	HSA Limit Value	Compliant with HSA Binding Occupational Exposure Limit?
AB1	29/07/2016	SMcM	Section 55 Monitoring SA1 Location	0.00009	ND<0.00009	IOM	0.1 f/ml	Yes
AB2	29/07/2016	SMcM	Section 55 Monitoring SA2 Location	ND<0.00009	ND<0.00009	IOM	0.1 f/ml	Yes
AB3	29/07/2016	SMcM	Section 55 Monitoring SA3 Location	0.00009	ND<0.00009	IOM	0.1 f/ml	Yes
AB4	29/07/2016	SMcM	Section 55 Monitoring SA4 Location	<0.00009	ND<0.00009	IOM	0.1 f/ml	Yes
AB5	29/07/2016	SMcM	Section 55 Monitoring SA5 Location	0.00027	0.00014	IOM	0.1 f/ml	Yes
AB6	29/07/2016	SMcM	Section 55 Monitoring SA6 Location	0.00009	<0.00009	IOM	0.1 f/ml	Yes



Legend

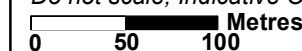
Sampling locations/ Type:

■ SA1 - SA6
- Asbestos Sampling Point

■ SD1
- Dust Sampling Point



Do not scale; Indicative Only (NTS)



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Note: Drawing is for illustrative purposes only
Source: Kilsaran, flown 28/05/2016

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CLIENT: Kilsaran Ballinclare, Co. Wicklow	PROJECT: Proposed Section 55 Air Monitoring	DRAWN:	CHECKED:	APPROVED:	DATE:	
		P.G.	T.H.	T.H.	05/07/2016	
DRAWING TITLE: Monitoring Locations	Project Ref: TH/16/9020SR01	Figure 1		1	A3	NTS
		REVISION DESCRIPTION Drawing 05-07-2016	SHEET 1	REV 0		