

**13/06/2016**

Mr Michael Geaney  
A/Director of Services  
Water and Environmental Services  
Wicklow Co Co  
County Buildings  
Wicklow Town  
Co Wicklow

**RE : Section 55 Notice for Balliclare Quarry and Measures required**

Dear Mr Geaney,

As required within the section 55 notice, on behalf of Kilsaran International, I am providing a description of the temporary covering of the returned asbestos bearing rock, the air monitoring to date and the planned air monitoring programme.

**(i) Temporary measure for containment of returned asbestos bearing material and asbestos bearing rock from within the quarry.**

We propose two adjacent zones (Phase 1 & 2 on Quarry Map attached) for storage of containment of this material.

- Phase1 : Storage area for returned material.
  - Estimated tonnage: 5-6,000 tonnes in doubled sealed bags
  - Based on 6,000 bags @ 0.972 m3 per bag, we will excavate and prepare an area of 6,000+ m3
  - Note bags will be 2/3 full which is 1 tonne approx.
  - We will stack bags 2-3 high similar to a retaining wall structure
  - Once bags are in place we propose to cover bags in a dust grit material, this is to create an even surface for access of spreading geo-textile
  - Cover dust with a geo-textile layer, spec to be confirmed
  - Cover geo-textile with 100m of stone material ( 803 or similar)
  - Cover Stone with 500mm of topsoil
  - Tape off area with signs

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T Donnelly, T Hayes, D Kelly, E Porter

- Phase 2: Additional area for storage of asbestos bearing material from within the quarry.
  - Nominated for all other contaminated stock piles internallyAs geological assessment is on-going to determine the extent of the asbestos bearing zone within this area, detail of the recovery and containment of the material currently within the quarry will be provided further to review of the geological report and agreement of management with the HSA.

(ii) Current and proposed air monitoring programme

Four samples (P1-P4) have been taken at the quarry on 11/06/2016 by AWN Consulting. These samples were chosen to be representative of the temporary waste containment area and receptors at the quarry perimeter. Each sample was carried out over a 240-minute period using an SKC Universal Sampling Pump at 2 L/min onto a gridded membrane filter, providing a total volume of air sampled of 480 L. These samples are currently being analysed for asbestos content by Absolute Safety Limited.

Results are expected June 14<sup>th</sup> and a full report including air quality results to date shall be submitted. Additional samples are being collected on June 14<sup>th</sup> and analysis will be carried out by IOM Laboratories in Edinburgh. The analytical method is based on Asbestos International Association, Recommended Technical Method No. 2 (RTM2, AIA 1984) and International Standards Organisation (2002), International Standard 14966. The method involves Fibre Counting using Scanning Electron Microscopy (SEM) with fibre identification by Energy Dispersive X-ray Spectroscopy (EDXS).

Results from the samples to date at the quarry perimeter have show no asbestos fibres were detected at the site boundary.

As required by the Section 55, weekly dust and asbestos sampling will be undertaken and a report submitted to WCC. It should also be noted that Kilsaran has ensured that reassurance monitoring is being undertaken for all works being undertaken within the unloading area or blast area. This ensures that adequate mitigation is in place to minimise release of fibres within the quarry during works.

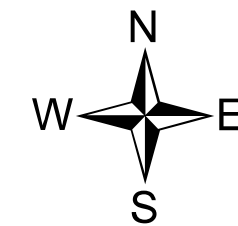
In conclusion we would like to confirm that method statements for all material being excavated from sites (listed in Appendix 1 of the Section 55) are being approved by the HSA as required.



**Teri Hayes**  
Director AWN Consulting

cc. *Michael Boland, Executive Scientist WCC*

encl. *Two Figures attached*



# Legend

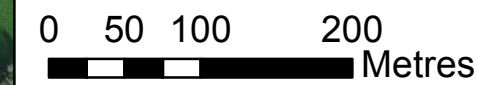
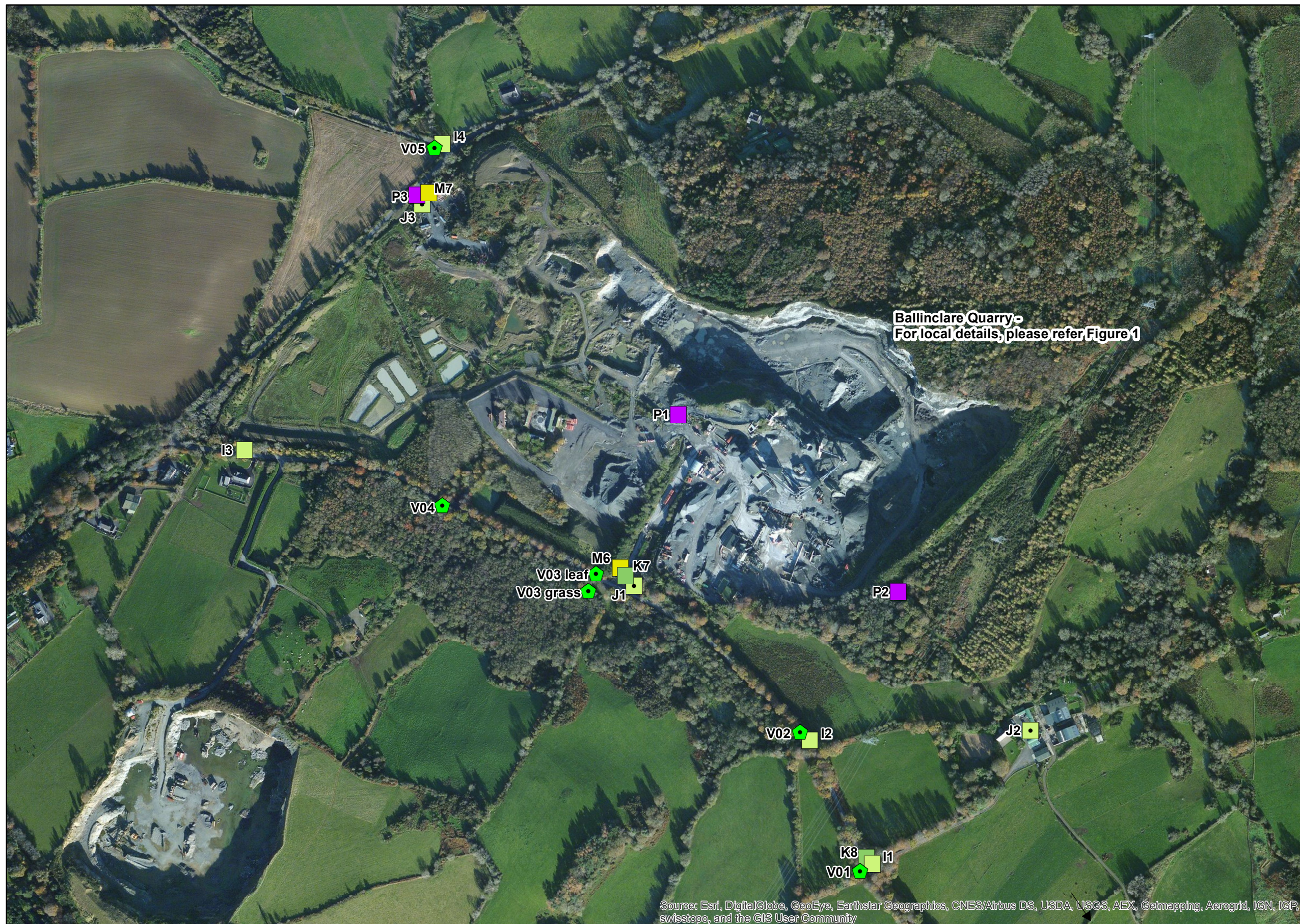
## Sampling locations/ Type:

### Air sampling - Long test

- I1 ■ - Sampled on 02/06/2016
- J1 ● - Sampled on 03/06/2016
- K7 ■ - Sampled on 04/06/2016
- M6 ■ - Sampled on 06/06/2016
- P1 ■ - Sampled on 11/06/2016 (for reference)

### Vegetation sampling

- V01 ◆ - Sampled on 02/06/2016 (Grass and Leaf unless indicated)



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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<b>CLIENT:</b> Kilsaran Ballinclare, Co. Wicklow	<b>PROJECT:</b> Asbestos Sampling	<b>DRAWN:</b> P.G.	<b>CHECKED:</b> T.H.	<b>APPROVED:</b> T.H.	<b>DATE:</b> 12/06/2016
<b>DRAWING TITLE:</b> Preliminary Sampling Locations (June 2016)	Project Ref: TH/16/9020SR01	<b>Figure 1a</b>		1	A3
<b>REVISION DESCRIPTION</b> Drawing 12-06-2016				<b>SHEET</b> 1	<b>REV</b> 0



Two-Way Internal Haulage System

Site Offices

Toilets

Weighbridge

Car Park

Wheelwash  
(Closed Circuit)

Blasted  
Muck Pile

PHASE 2

PHASE 1