BOURNEMOUTH, DORSET & POOLE MINERAL SITES PLAN EXAMINATION

Representations on behalf of M B Wilkes Ltd

John Cowley, Director, Mineral & Resource Planning Associates Ltd

Inspectors Matters, Issues and Questions

Issue C

Matter 1

(iii) Silica Sand

Q81 & 82

1 All the Palaeogene sands are primarily formed of silica clasts with minor associated minerals in the matrix, or on the surface of the clasts or entrained within the clasts themselves. The 'in-situ' or 'as-dug' purity of these sands (as in percentage silica SiO2) varies significantly and randomly, but is generally above 90% and can exceed 99%. After processing the sand may then consistently exceed 99% SiO2 or the grade required. To that extent these sands could be described as 'silica sand'.

2 However, the term 'industrial sand' is perhaps a better description because the properties sought may not just rely on the high silica content but include the durability, shape or roundness, size, grading of the deposit and also the valuable presence of what might otherwise be described as 'impurities' in a sand, if it were used for example in clear glass manufacture.

3 Provision of industrial sand is not just limited to the Poole Formation as some sands in the London Clay, which are unsuitable for use as aggregate, have valuable industrial sand properties because of their chemistry, roundness and 'single-size'.

4 Recently, of those sites identified in MS-1:1 only Binnegar, Warmwell and Henbury have produced industrial/silica sand. Most of the sites identified in MS-1:2 and 3, with two exceptions, are to work the terrace sand and gravel and do not involve extraction into the Palaeogene bedrock sand. They are therefore unlikely to produce industrial/silica sand. It would also seem that even where bedrock sand underlies the terrace deposits, extraction of such sand is not proposed or not possible due to restoration or other requirements.

5 The possible exceptions are Great Plantation and Tatchells extension where it would appear that some excavation into the Poole Formation is proposed. It is however, unclear, with current knowledge and no commercial market, if a commercial industrial/silica sand product is capable of being produced at those two sites that would contribute to a stock of reserves. The MSP therefore cannot assess their contribution potential.