With the introduction of waste legislations, in the form of regulations and directives, in many parts of the world a significant move towards sustainable management of construction and demolition waste is becoming a legal requirement. In response, different sectors of the construction industry are undertaking various initiatives to minimise waste generation and improve its management to maximise economic and environmental benefits, generally by placing emphasis on increasing recycling for reuse.

In keeping with this approach, many sectors of the UK construction industry have actively sought to encourage the use of recycled concrete aggregate (RCA) as an alternative to primary aggregates in concrete production. Although, technical and application aspects of using recycled aggregates in concrete are now reasonably well understood. With better understanding of chemical-mineralogical characteristics of RCA and its influence on concrete performance, this material can be used confidently in different value-added concrete outlets.

Potential use of the following techniques has been identified and demonstrated how they can be used for quality control of RCA production

- X-Ray Fluorescence (Chemical composition)
- X-Ray Diffraction (Mineralogical composition)
- ICP-AES or ICP-MS (water & acid soluble)