

Re-use and Recycling of Crushed Concrete Aggregate Regulatory Perspective

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April 3rd 2012, Salford Quays, Manchester

Presentation Summary

- ⇒ Regulatory perspective and context;
- ⇒ Identification of the benefits of applying the waste management hierarchy to crushed concrete;
- ⇒ The need for regulatory control;
- ⇒ Can we remove unnecessary regulatory blockers?
- ⇒ Forthcoming Agency guidance

Regulatory Perspective and Context

- ⇒ Maintenance of both safety and environmental objectives;
- ⇒ A number of different regulatory regimes covering different aspects of the process;
- ⇒ Protection needed for all environmental media (air, water and land);
- ⇒ Radioactive and non radioactive hazards and;
- ⇒ Key regulatory tests such as demonstration of BAT

Identification of the Benefits of Re-use and Recycling

- ⇒ Assists in the clean up and decommissioning of legacy facilities;
- ⇒ Maintain the strategic LLWR near Drigg resource;
- ⇒ Allows the application of the proximity principle;
- ⇒ Carbon reduction objective;
- ⇒ Delivers the governments and corporate recycling objectives;
- ⇒ Reduced transport distances and impacts and;
- ⇒ Potential significant cost savings.

The Need for Regulation

- ➔ Because of environmental and reputation impacts of mistakes there is a clear need for comprehensive regulatory control;
- ➔ The need to consider the whole life of the waste;
- ➔ The use of secondary aggregates does carry reputation and financial risks which need to be minimised;
- ➔ Clear stakeholder concerns, especially at the point of use;
- ➔ The need to convert from waste to a product;
- ➔ Potential nuisance and environmental issues associated with demolition and waste processing and;
- ➔ The need to avoid the creation of future liabilities and deliver site clean up.

Removal of Unnecessary Regulatory Burdens

- ⇒ Current regulation is not necessarily designed to facilitate and make re-use and recycling the easy and cost effective, it is still too easy to use primary aggregates;
- ⇒ We already have a number of regulatory tools;
- ⇒ Potential inconsistent approaches
- ⇒ The need to address many different contexts and materials;
- ⇒ We must ensure users gain the necessary confidence to use and adopt the materials and;
- ⇒ Inherent conservatism in the industry the nuclear industry, especially with material specifiers and project managers.

Forthcoming Agency Evidence Work

Maximising Environmental Benefits from the Application of the Waste Management Hierarchy to Low Active Decommissioning Wastes.

- ➔ £60K allocated for this year;
- ➔ Collaborative working with industry and the NDA and;
- ➔ Two discrete parts.

Part 1: Guidance and Toolbox to Facilitate the Application of the Waste Management Hierarchy

The aim of part 1 of the project is too:

- ➔ Compliment the LLW Strategy Implementation;
- ➔ Provide guidance and tools which correspond with the industry and users requirements;
- ➔ Maintain and build stakeholder and material user confidence;
- ➔ Increase re-use and recycling in the nuclear industry;
- ➔ Brings together all relevant guidance in a useful and concise manner;
- ➔ Aims to be up to date and relevant;
- ➔ Be useful for waste producers, waste users, regulators and other stakeholders and;
- ➔ Build on the existing SD:SPUR work.

Part 2: Development and Testing of Life Cycle Analysis Tools Applied to Waste Management Decision Making

- ➔ Trials and examines existing lifecycle analysis tools for use on key lightly contaminated decommissioning wastes;
- ➔ Seeks to highlight the benefits of a lifecycle analysis reporting;
- ➔ Identifies potential uses and application for the tool in decision making, reporting and compliance systems;
- ➔ Focuses on the Agencies WRATE lifecycle tool, but will look at any appropriate existing tool and;
- ➔ If appropriate will encourage the industry and the NDA to develop and adopt and promote life cycle analysis.

Summary

We want to

- understand the industries areas of concern;
- actively encourage re-use and recycling of crushed concrete;
- provide a regulatory environment which allows the industry to do this and;
- Identify and communicate best practice;
- ⇒ There are clear environmental drivers for the application of the waste management hierarchy, these must be quantified and highlighted to decision makers;
- ⇒ The re-use and recycling of crushed concrete aggregate is an important part of the delivery of site restoration objectives.