

Policy Statement

Sustainable Concrete and Life Cycle Thinking

Mick George Ltd is committed to being socially responsible in all aspects of its business and ensures that its activities are undertaken in such a way as to reduce the use of primary materials where possible and minimise the production of waste from our operations.

'Concrete is a local material and its use leads to social, economic and environmental benefits; including local skills development, local employment and local accountability for environmental impacts.'

(www.sustainableconcrete.org.uk)

Life Cycle Thinking

Resource

Every tonne of alternative cementitious materials used in concrete mixes saves approximately 1.4 tonnes of raw materials. We use Pulverised Fuel Ash (PFA), a product of burning pulverised coal in coal-fired electricity power stations, as a replacement for Ordinary Portland Cement (OPC) in our concrete mixes. The PFA replaces between 20% and 40% of the cement in the concrete which can reduce embodied CO₂ in the concrete by over 20%.

In accordance with the Waste Hierarchy we have adopted working practices to reduce the waste that we produce from our concrete operations.

The waste produced from concrete production can comprise of contaminated water used to clean the drum of the barrel mixers to prevent fresh concrete setting inside, contaminated water from washing down the yard and waste concrete from returned materials.

Mick George use the 'stoning out' method for cleaning the mixer drums which entails inserting 'dry' aggregate into the rotating drum to pick up the residual concrete before the resultant material is discharged back into the aggregate stockpile for reuse, eliminating the waste from this process altogether.

Water that is used to wash down the yard is captured, reused and added to the aggregate stockpile.

Concrete which is returned to the yard is poured into moulds to prepare blocks which are used for delineation of yard areas, storage bays and traffic management. Where these moulds are not available the concrete is unloaded and left to hardened before being crushed and incorporated into recycled aggregates.

Production

We take concrete cubes from our concrete mixes on a regular basis which are sent for independent testing. The results of these tests are reviewed on a weekly basis so that we can continually adjust the PFA / OPC mix to account for material variations while maintaining the minimum cement content required to provide the specified concrete strength.

In cold weather concrete can be at risk of damage caused by early age freezing if the concrete doesn't maintain a sufficient temperature to promote setting and strength development. Heating the mixing water is a simple way to raise the temperature of fresh concrete at the batching plant.

We will install a biomass boiler at our Cowley Road site in Cambridge to heat 30,000 litres of water using pelletized waste wood as a locally sourced 'low carbon' fuel as a replacement for fossil fuel derived energy.

Distribution

We typically supply within a 7 mile radius of our concrete plants and expand our geographical coverage by opening new plants at our existing facilities.

Our vehicle fleet is maintained and replaced to ensure the most efficient transport solutions and our vehicles and meet Euro 6 emissions standards.

Our drivers are trained in safe and fuel efficient driving techniques to further lessen our environmental impact.

Use

We maintain the BSi Kitemark for our ready mix concrete and the associated checks and protocols act as a guarantee of quality in use.

We supply concrete to the design requirements of the customer which can include the provision of additives for resistance to aggressive ground conditions, trafficking and frost.

End of Life

The end of life criteria is not readily applied to a ready mix product which will last for many decades when the controls in the use section are applied. Unlike a precast product we are not able to operate a 'return / re-use' scheme.

While Mick George are not able to contribute directly to the end of life aspect of the ready mix materials that we supply as a company we do recover concrete materials from construction and demolition works and crush them for reuse as construction materials.

In addition to the above we maintain an Aspects and Impacts register as part of our ISO14001 certification which highlights the potential impact of our quarrying, transport and concrete operations and details the controls that are in place to mitigate or reduce our impact.

This policy will be made available to our employees, those working for or on behalf of MGL and provided on request to any other interested parties. The policy will be reviewed annually, subject to changes in company procedure or legislation.

Signed:

Managing Director



Date: January 2018