



**Hanson Cement, Padeswood Works**

**Application for variation to EPR permit BL1096**

**BFS Appendix 4 – Management of Change – adding BFS to the cooler**

MANAGEMENT OF CHANGE ASSESSMENT (OPERATIONAL CHANGE)		
Description of the Operational Change	Trial of adding BFS to the cooler	
Area to be considered	Applies Y/N	Action Required / By who / By when
<b>ENVIRONMENTAL</b>		
Update the Environmental Aspects and Impacts Assessment?	Y	Review aspects for clinker production. Using BFS will reduce CO2/tonne of clinker
Obtain new permit or variation to an existing permit or surrender of a permit?	N	Discuss with NRW. MPA WCoP will be used to assess the suitability of GBFS in the process
Alter bunds, drains & pits / Oil & Chemical Storage?	N	
Changes to ground and surface water impacts, water abstraction licence or discharge consents?	N	
Dust control of fugitive emissions?	Y	Dust control measures to be installed on feed system. Existing plant fugitive dust control equipment to be checked prior to trial.
Energy Use & Efficiency, Back-up power supplies, carbon and energy?	Y	Define/describe the efficiencies.
Environmental Permitting Regulations (EPR) Best Available Technology (BAT) justification?	Y	Apply BAT for dust Apply BAT for noise
Is the proposed change covered by the relevant EPR Process Guidance Notes?	Y	
European Union Emissions Trading Scheme (EU ETS) & Climate Change Agreement (CCA) compliance with current EU ETS Permit?	Y	Add line to production return to capture usage. Sample the material for ETS analysis. Update ETS monitoring plan. Confirm addition at the cooler adheres to the ETS permit.
Is new Instrumentation/Software for Environmental Monitoring required?	N	
Compliant with existing planning conditions?	Y	

## Guidance Checklist for Operational Change

New planning permission required?	N	
Control and Management of Incoming, Wastes, Fuels, Raw Materials and Alternative Fuels and Materials for Use in accordance with current PPC & EU ETS Permits?	Y	Define where the material will be stored and how it will be transported to the feed system Risk assessment for the storage of BFS
Are new technical competencies required such as Certificate of Technical Competence (COTC) required by EA RGN 5?	N	
Waste Management, waste risings, duty of care?	N	No waste created from the use of BFS
<b>QUALITY</b>	<b>Y/N</b>	<b>Action Required / By who / By when</b>
Assets Register / Plant inventory?	N	
Customer Requirements?	Y	Marshall's management of change may need to be completed – will not be required if confirmation can be given that the site is not supplying Marshall's
Customer service?	N	
Product Certification e.g. Kite-mark and CE Marking?	N	
Product design and development?	N	
Product Quality?	Y	Program for clinker testing to determine any impact to products BFS has a high Chromium content. Test cement for CrVI compliance. Ongoing monitoring of Auto control sample to meet the manufacturing specification and technical standard for cement for cement
Software Programming & Modification, copy and back up existing plant operational settings and mix, recipe programmes held within plant control systems?	Y	Create mimic to show run status of equipment to cooler
Technical Specifications?	N	
<b>HEALTH &amp; SAFETY</b>	<b>Y/N</b>	<b>Action Required / By who / By when</b>
Asbestos & Refractory Ceramic Fibre Hazard?	N	

Excavation / Digging?	N	
Burning, Cutting & Grinding?	N	
Confined Space?	N	
Construction & Design Management (CDM)?	N	
Control of Major Accident Hazards (COMAH) Regulations?	N	
Corrosion/Erosion?	N	
COSHH Assessments?	Y	Generate assessment for feeding BFS
Guarding, Isolations /Lock Off /Live Working?	Y	PUWER assessment to be carried out
Explosives (Quarry Operations)?	N	
Emissions – fume, dust, gases, etc.?	N	
Electricity at Work, Electricity at Work Regulations?	N	
Emergency Lighting?	N	
Explosive Atmospheres Directive (ATEX), Dangerous Substances& Explosive Atmospheres Regulations (DSEAR)?	N	
Fire Risk Assessment?	N	
Ionising Radiation?	N	
Instrumentation/Software for Plant Safety?	N	
Lifting Equipment/Operations Lifting Operations?	N	
Manual Handling/Ergonomics?	N	
Mobile Plant?	Y	Pre-start checks to be completed on mobile plant used for the trial
Noise & Vibration?	N	
Overhead Clearance, Overhead hazards?	N	

Personal Protective Equipment?	Y	Mandatory PPE plus what is required from specific risk assessment and COSHH assessment
Plant Design Limits/Life Cycle?	N	
Pneumatic or Hydraulic Systems?	N	
Isolation/Venting?	N	
Pressure Systems?	N	
Provision & Use of Work Equipment (PUWER) risk assessment?	Y	Review mobile feed system prior to operation
Radio Frequency Signals/Electromagnetic Interference?	N	
Repetitive Tasks?	N	
Risk Assessment, Safe Work Practices, Method Statement?	Y	Create risk assessment & SWP for maintenance of the equipment
Safety Interlocks e.g. Castell systems?	N	
Temperature extremes?	N	
Trip/Alarm/Control Schedule?	N	
Vehicle Access/Movements/Traffic/Pedestrians?	Y	Increase of vehicles in the area
Water Systems, legionella?	N	
Working at Height?	N	
Interaction with Other Areas of the Plant?	N	
Pipework Identification/Isolation?	N	
Connection of Electronic Systems to the Site Network?	N	
HAZOP Study?	N	
Legal compliance checks?	N	
Weather Conditions?	N	
<b>MISCELANEOUS</b>	<b>Y/N</b>	<b>Action Required / By who / By when</b>

## Guidance Checklist for Operational Change

Is a new or modified IMS Procedure required?	Y	Local procedure required for kiln operation and communicated to kiln burners before trial.
Control of Contractors?	Y	Mobile plant operator to be appointed for moving BFS
Commissioning Documentation?	Y	Document defining scope of trial, benefits, risk and success factors
Effect on other company departments?	Y	Risk to quality expected to be unchanged and will be addressed in the factors above CO2 emissions/tonne clinker to reduce – inform Energy Manager
Emergency Instructions & Emergency Response?	N	
Equipment Supplier contracts & specification?	N	
Instrumentation/Software for Plant Control?	N	
Maintenance Instructions?	N	
Plant/Product Labels/Re-labelling?	Y	Sign required to identify BFS stockpile
Preventative Maintenance plan (Including SHEQ critical items)?	N	
Process & Engineering Drawings/Diagrams?	N	
Project Management?	N	
Spares?	N	
Induction, Training, Competence, Awareness and Authorisation?	Y	Kiln controllers will need guidance on operating the feed system Mobile plant operators to be trained on use of the feed system
<b>Person(s) completing the Management of Change review</b>	S. Mitchell / N. Sharpe	
	<b>Date</b>	26/01/2022