



SHESOP 5.0

Environmental Management

Originated by E. M. Clements (Head of EHS)	24 Feb 2020
Approved by P. Found (Chief Operating Officer)	16 Mar 2020
Authorised by E. M. Clements (Head of EHS)	02 Apr 2020

1. PURPOSE

To ensure that Fujifilm Diosynth Biotechnologies Billingham (FDBK) has an effective environmental management system.

2. SCOPE

This document applies to all facets of FDBK operations at Billingham.

3. REFERENCES

The following documents support this SHESOP

- Fujifilm Diosynth EHS Policy
- SHESOP 1 - Emergency Planning and Response
- SHESOP 2 - Performance and Reporting
- SHESOP 3.1 - Risk Management
- SHESOP 5.1 - Waste and Effluent Management
- SHESOP 5.1.1 - Emissions Monitoring for EPR
- SHESOP 5.1.3 - Waste Recycling and Disposal
- SHESOP 5.2 - EPR Permit Management
- SHESOP 5.2.1 - Action on C.F. Fertilisers TOC Alarm
- SHESOP 5.2.2 - Inspection and Maintenance of Underground Drains
- SHESOP 5.2.3 – Integrity Checks of Bunds and Sumps
- SHESOP 5.2.4 - Drainage and Inspection of Bunds and Sumps
- SHESOP 5.2.10 - Spill Management
- SHESOP 5.3 - Environmental Aspect Assessment
- SHESOP 5.3.1 – F-Gas Management
- SHESOP 5.4 - Materials Management
- SHESOP 5.4.1 - Management & Use of IBCs
- SHESOP 6.6 - Control and Maintenance of EHS Documentation
- The Environmental Permitting (England and Wales) Regulations 2016

4. DEFINITIONS

EPR: Environmental Permitting Regulations

FFDB: Fujifilm Diosynth Biotechnologies

SHESOP: Safety Health and Environmental Standard Operating Procedure

TOC: Total Organic Carbon

5. PROCEDURE

5.1 Principles

5.1.1 All waste and effluent shall be as far a possible minimised. They shall be identified, characterised, contained, labelled and managed in a manner which assures compliance with appropriate legislation. SHESOP 5.1.

5.1.2 The consented emissions from Billingham sites shall be monitored in such a way as to ensure the results are representative of the emission characteristics and to

provide accurate data in support of the consent limits under EPR and appropriate actions shall be taken in case of deviations. SHESOP 5.1.1

- 5.1.3 Where it is reasonably practicable wastes generated from operations on Billingham sites will be directed for recovery or recycling. Transfer and treatment will be by approved waste contractors and waste disposal will be coordinated across site to minimise environmental impact. SHESOP 5.1.3
- 5.1.4 The EPR permit details, release points, monitoring and reporting required are contained within SHESOP 5.2. To enable the site to operate under a multi-product protocol permit each project transferring into a manufacturing facility shall complete and submit to the Head of EHS the assessment form contained in Appendix 1 of SHESOP 5.2.
- 5.1.5 To ensure compliance with the discharge agreement with C.F. Fertilisers & management of EPR excursions a site event monitoring protocol for sampling /testing operates on Billingham sites. SHESOP 5.2.1.
- 5.1.6 A standard has been set for the inspection and maintenance of underground drains with the aim of ensuring the risk of contamination of soil and or groundwater is minimised. SHESOP 5.2.2
- 5.1.7 A standard has been set for the design, registration, integrity & inspection of bunds in use on Billingham sites. Release of bund & sump contents is subject to pre-release testing. SHESOP 5.2.3, SHESOP 5.2.4
- 5.1.8 Materials shall not be brought onto site, transported around site, stored used or exported unless appropriate risk based arrangements have been put in place. Materials may not be exported from site unless classified, packed and labelled according to the relevant regulations and accompanied by appropriate paperwork SHESOP 5.4
- 5.1.9 Guidance has been provided for the safe use and integrity management of IBCs to avoid environmental impact from spills from or failures of IBCs. SHESOP 5.4.1
- 5.1.10 All environmental aspects of the FDBK operations (routine, intermittent and abnormal) shall be identified and their impact on the receiving environment assessed. (SHESOP 5.3 & 5.3.1)
- 5.1.11 Environmental aspects shall also be taken into account as part of the design of plant or process modifications and in the development of maintenance schedules.
- 5.1.12 Where impacts are shown to be unacceptable improvement plans shall be prepared. Environmental improvement plans shall be developed and monitored as described in Appendices 2 and 4 of the FFDB EHS Policy.
- 5.1.13 Objectives and targets shall be established for relevant functions and these shall be reviewed at appropriate intervals. Actual performance, which shall include environmental incidents and near misses and emissions, shall be monitored and included in the review process.

- 5.1.14 Compliance and system audits shall be carried out at defined intervals. Non-conformances may again lead to improvement actions.
- 5.1.15 Training and information on environmental legislation and impact shall be provided where such training has been identified in training needs analysis to assure competency. Contractor induction shall include reference to environmental issues.
- 5.1.16 Emergency preparedness and response is detailed in SHESOP 1. Guidance on Spill Management is documented in SHESOP 5.10.
- 5.1.17 Methods for and records of communications (internal and external) are detailed in SHESOP 2.
- 5.1.18 EHS procedures are controlled by the EHS Dept. and subject to a routine three yearly review and reissue as detailed in SHESOP 6.6. They may be updated following legislation changes or major business change before the three year review period.

5.2 ROLES AND RESPONSIBILITIES – A; Accountable, R; Responsible; C; Consulted, I; Informed

APPENDIX 1

ACTIVITIES	KEY PARTICIPANTS						ADDITIONAL ROLES	
	Head of EHS	Senior Functional Manager(s)	Env Technologist	First Line Manager	Process Engineers	All employees	Training	Specialist consultants
Environmental aspects								
Aspect identification	A & R	C	R	R	R			
Quantification of Impact of aspect	A	C	R		R		I	C
Assessment of impact	A	C	R				I	
Engineering								
Design of modifications	A	R	C	C	C	C		
Development of mtc schedules	A	R	I	C		I	I	
Improvement plans								
Identification of aspects requiring improvement	A	C	R	C	C	I	I	
Development of improvement plans	A	C	C	R	R	I	I	C
Management of improvement plans	A	R	C	R	C	I	I	C
Legislation and best practice								
Monitoring and briefing	A & R	I	R	I	I	I	I	C
Objectives, targets & performance								
Aspects identified	A	C	R	I	I	I	I	
Objectives and targets set	A	R	C	C	C	I	I	
Monitoring methods set	A	R	C	C	C	I	I	C
Performance reviewed	A	R	R	C	C	I	I	C
Audit								
Audit programme defined	A	C	R	C		I		
Audits Carried out	A&R	R	R	R		I	I	

6. DOCUMENTATION

None

7. REVISION & TRAINING STATUS

REVISION	DATE	REVISION BASIS	BY	LEVEL OF TRAINING REQUIRED
1	Dec 2005	New Document	WALC	Read and understand
Mod 2	Apr 2010	Summaries of supporting Documentation added.	EMC	Ref training needs
Mod 3	May 2013	Periodic review including company name change	EMC	Ref training needs
Mod 4	Oct 2016	Periodic review, update to environmental technologist role	EMC	Ref training needs
Mod 5	Feb 2020	Periodic review, included references to SHESOP 5.3.1 & 5.10	EMC	Ref training needs