

Safety Alert 25-79 Revised Process Safety Procedures and Additional Procedures for Temporary Treatment and PLC Replacement

Summary:

The existing Process Safety Procedures for Construction - Delivery have been updated to clarify responsibilities and actions. The overall Process Safety Flowchart DEPD08-02 which covers both Design and Construction-Delivery resides in the Design Section of The MWHT Way has also been revised.

Additional Guidance Notes and Forms have been created for Functional Safety, Temporary Treatment and PLC Replacement.

What has changed:

The Process Safety Flowchart DEPD08-02 has been revised. The documentation requirement for the Hazard Studies 4,5 & 6 have been revised so they better align with the site activities. Furthermore, the responsibilities regarding who initiates the various Hazard Studies has been clarified.

Hazard Study	Title	Responsibility for Initiation	Who leads the meeting	Purpose of the meeting
Hazard Study 4	Construction-Design Verification	Site Manager or Project Manager	Commissioning Manager	Have we built what was designed and have all the changes been properly managed and evaluated.
Hazard Study 5	Pre-Commissioning Safety Review	Project Manager	Commissioning Manager	Is the plant safe to commission?
Hazard Study 6	Early operations	Project Manager	Project Manager	What have we learnt? Is the operation in accordance with the design intents?

Hazard Study 7 (DEGD08-13) has been expanded to include de-Commissioning as well as Demolition activities.

What is new:

a) Temporary Treatment

Hazard Study	Document Number	Description
Flowchart	DEPD08-03	Overview of Process Safety activities for Temporary Treatment. It is a slimmed down version of the main Process Safety Flowchart (DEPD08-02)
Hazard Study 1: Guidance Notes	DEGD08-17	A description of the activities involved in Hazard Study 1.
Hazard Study 1 including Safety Risk Assessment	DEFR08-07	To ensure an understanding of the project, the process and the materials involved. The study will incorporate a simple risk assessment so there is no requirement to complete a Hazard Study 2: SWIFT.
Hazard Study 4&5: Guidance Notes	DEGD08-20	As Temporary Treatment is usually small and the Construction-Design verification stage will be completed at the same time as the Pre-Commissioning Review those activities will be combined.
Hazard Study 4&5: Report	DEFR08-10	The Hazard Study 4 & 5 Reports are combined into one report.

b) PLC Replacement Projects

Hazard Study	Document Number	Purpose
Flowchart	DEPD08-04	Overview of Process Safety activities for PLC Replacement Project.
Hazard Study 1: Guidance Notes	DEGD08-19	A description of the activities involved in Hazard Study 1.
Hazard Study 1 including Safety Risk Assessment	DEFR08-09	To ensure an understanding of the project and the process involved. The study will incorporate a simple risk assessment so there is no requirement to complete a Hazard Study 2: SWIFT.
Hazard Study 4&5: Guidance Notes	DEGD08-09	The PLC Replacement Construction-Design verification stage will be combined with the Pre-Commissioning Review.
Hazard Study 4&5: Report	DEFR08-10	The Hazard Study 4 & 5 Reports are combined into one report.

c) Functional Safety

Functional Safety Design Guidance (DEGD08-15) has been prepared. This guidance note provides an overview on the functional safety lifecycle, identifies individual roles and responsibilities and provides guidance on the implementation of the various phases involved in developing, installing, commissioning, operating, maintaining and decommissioning functional safety systems.

Reminder: Process Safety Inspections

All activities at any stage in the project life cycle can be subject to Process Safety Inspections.

Full list of Process Safety Procedures, Guidance and Forms

Type	Document Reference	
Flowchart	DEPD08-02 Process Safety	
	HSPD19-01 dangerous Substances and Explosive Atmospheres	
	DEPD04-01 Design Change Control	
	CDPD08-01 Site Drawing Control	
	CDPD35-01 Permits to Work	
	CDPD14-01 Control of Construction	
	CDPD23-01 Commissioning	
Guidance	DEGD08-06 Process Safety	
	DEGD08-07 Hazard Study 1	
	DEGD08-08 Hazard Study 2	
	DEGD08-09 Hazard Study 3: HAZOP	
	DEGD08-10 Layer of Protection Analysis Study	
	CDGD14-21 Hazard Study 4	
	CDGD23-03 Hazard Study 5	
	DEGD08-12 Hazard Study 6	
	DEGD08-13 Hazard Study 7	
	DEGD08-11 Safety, Health & Environment Dossier	
	DEGD08-14 How to apply data attributes in ProjectWise	
	DEGD08-15 Functional Safety	
	Forms	DEFR08-04 Hazard Study 1 Report
		CDFR22-07 Hazard Study 4 Report
		CDFR23-21 Hazard Study 5 Report
CDFR08-05 Hazard Study 6 Report		

Type	Document Reference – Temporary Treatment
Flowchart	DEPD08-03 Process Safety – Temporary Treatment
Guidance	DEGD08-17 Hazard Study 1 – Temporary Treatment
	DEGD08-18 Hazard Study 4&5 – Temporary Treatment
Forms	DEFR08-07 Hazard Study 1 – Temporary Treatment
	DEFR08-08 Hazard Study 4&5 – Temporary Treatment

Type	Document Reference – PLC Replacement
Flowchart	DEPD08-04 Process Safety – PLC Replacement
Guidance	DEGD08-19 Hazard Study 1 – PLC Replacement
	DEGD08-20 Hazard Study 4&5 – PLC Replacement
Forms	DEFR08-09 Hazard Study 1 – PLC Replacement
	DEFR08-10 Hazard Study 4&5 – PLC Replacement

