

Department	Environmental, Health and Safety	Document no	EHS-115
Title	Process Safety		

5.1 PROCESS SAFETY INFORMATION (PSI) PSI will be developed and maintained to include:

5.1.1 Process and equipment design information.

5.1.2 Safety information concerning the hazards of processes.

5.1.3 Information on material hazards including thermal stability, explosion potential etc.

Group EHS will be consulted where necessary to obtain any other process hazard information required for Process Hazard Analysis (PHA).

5.2 PROCESS HAZARD ANALYSIS (PHA)

A Process [Hazard Analysis](#) (PHA) will be performed as recommended by the Process Safety Guideline for all new processes and follow-up action will be implemented where necessary to reduce the risk of a process safety incident.

The type of methodology used to assess risks shall depend on the operation. For operations covered by the Process [Safety Guideline](#) only because of their use of Explosible Compounds in excess of the threshold, the PHA need only be a review of the substance hazards and the ignition risks.

A more rigorous methodology such as a [HAZOP \(Hazard and Operability Study\)](#) may be required if the group has limited experience, is unfamiliar with the chemistry or technology, or if the process operation is complex. The HAZOP team should comprise of relevant personnel who are suitably trained, are knowledgeable of the process and equipment and are capable of interpreting Hazard data. HAZOP action items shall be tracked to completion using the site PHA Action Tracking Log and the status of these items shall be reviewed on a quarterly basis.

Quantitative risk assessment of a process shall be carried out where the qualitative analysis does not provided sufficient information to make risk management decisions. Dispersion modelling of accidental chemical releases shall be completed to model worst-case credible releases scenarios to determine whether they could result in harm to colleagues or the community.

External assistance may be sought where on-site expertise is not available in specialised PHA techniques.