## SCHEDULE

Regulation 11 (4)

## MEASURES TO BE TAKEN IN RESPECT OF DANGEROUS SUBSTANCES

1. In applying measures to control risks the person with duties under Article 25 or 26 shall, in order of priority—

- (a) reduce the quantity of dangerous substances to a minimum;
- (b) avoid or minimise the release of a dangerous substance;
- (c) control the release of a dangerous substance at source;
- (d) prevent the formation of an explosive atmosphere, including the application of appropriate ventilation;
- (e) ensure that any release of a dangerous substance which may give rise to risk is suitably collected, safely contained, removed to a safe place, or otherwise rendered safe, as appropriate;
- (f) avoid-
  - (i) ignition sources including electrostatic discharges; and
  - (ii) such other adverse conditions as could result in harmful physical effects from a dangerous substance; and
- (g) segregate incompatible dangerous substances.

2. The person with duties under Article 25 or 26 shall ensure that mitigation measures applied in accordance with regulation 11(3)(b) include—

- (a) reducing to a minimum the number of persons exposed;
- (b) measures to avoid the propagation of fires or explosions;
- (c) providing explosion pressure relief arrangements;
- (d) providing explosion suppression equipment;
- (e) providing plant which is constructed so as to withstand the pressure likely to be produced by an explosion; and
- (f) providing suitable personal protective equipment.
- 3. The person with duties under Article 25 or 26 shall—
  - (a) ensure that the relevant premises are designed, constructed, and maintained so as to reduce risk;
  - (b) ensure that suitable special, technical and organisational measures are designed, constructed, assembled, installed, provided and used so as to reduce risk
  - (c) ensure that special, technical and organisational measures are maintained in an efficient state, in efficient working order and in good repair;
  - (d) ensure that equipment and protective systems meet the following requirements-
    - (i) where power failure can give rise to the spread of additional risk, equipment and protective systems shall be able to be maintained in a safe state of operation independently of the rest of the plant in the event of power failure;
    - (ii) means for manual override shall be possible, operated by employees competent to do so, for shutting down equipment and protective systems incorporated within automatic processes which deviate from the intended operating conditions, provided that the provision or use of such means does not compromise safety;

- (iii) on operation of emergency shutdown, accumulated energy shall be dissipated as quickly and as safely as possible or isolated so that it no longer constitutes a hazard; and
- (iv) necessary measures shall be taken to prevent confusion between connecting devices;
- (e) where the work is carried out in hazardous places or involves hazardous activities, ensure that appropriate systems of work are applied including—
  - (i) the issuing of written instructions for the carrying out of work; and
  - (ii) a system of permits to work, with such permits being issued by a person with responsibility for this function prior to the commencement of the work concerned.