

Introduction to the Addenda to NVF/DG001

Containment: Nuclear material and processes are contained within multiple barriers to give “defence in depth” against the release of radioactive material. The ‘containment integrity’ of each barrier is related to the hazard, or risk of hazard, it contains. Therefore, the innermost barrier is of the highest [containment] integrity and outer barriers may be of successively lesser integrity.

Nuclear ventilation provides several **key functions:**

- Protection of workforce and public by supporting effective containment
- Atmosphere conditioning within the containment (temperature, pressure, humidity, gases etc.)
- Air cleaning
- Supporting effective sampling and monitoring
- Monitoring of airborne discharges

The following addenda to NVF/DG001 give further guidance to specific clauses on good practice, and additional information, related to the ventilation of nuclear containments:

- A.1 Containment integrity and ventilation (clause 2.6)
- A.2 Design and management of engineered openings (clauses 3.6 & 3.8)
- A.3 Minimising air-flow and air changes (clause 3.9) – in development
- A.4 Ventilation for monitoring (additional guidance) – planned
- A.5 Filtration (clauses 5.22 & 5.53) – in development
- A.6 Support for Caves, Cells, and processes (clauses 4.3 & 4.6) – planned
- A.7 Temporary containment ventilation (additional guidance) – planned
- A.8 Decommissioning (additional guidance) – planned
- A.9 Design information and Monitoring of ventilation systems (additional guidance)

These are intended to promote understanding and provide guidance for clauses within the main standard. They are aimed at the “layman” but trained Engineer. Specific **further advice** should be sought from a recognised ventilation specialist (authorised designer).