ISO 16647:2018 (E)

Nuclear facilities — Criteria for design and operation of confinement systems for nuclear worksite and for nuclear installations under decommissioning

Contents

	Fore	eword	
1	Sco	Scope	
•	•		
2	Nor	Normative references	
3	Terr	ns and definitions	
1	Fun	ctions ensured by the confinement	
5	Prin	ciples for radioactive substances confinement	
	5.1	General principles	
	5.2	Risk assessment procedure	
	5.3	General requirements	
	5.4	Confinement system	
	5.4.1	General	
	5.4.2	Case of a worksite containment located in an existing "confinement system"	
	5.4.3	Case of a worksite containment located beyond any "confinement system"	
	5.4.4	Summary of different natures and levels of confinement	
	5.5	Static containment	
	5.6	Dynamic confinement	
	5.7	Air clean-up modalities before release	
3	Methodology and recommendation for confinement design		
	6.1	Classification of the installation into working areas	
	6.1.1	General	
	6.1.2	Confinement area classification	
	6.1.3	Other classifications for areas	
	6.2	Static containment design	
	6.3	Dynamic confinement design	
	6.4	Integrated confinement design (static-dynamic confinement)	
	6.5	Airtight bag and ventilated airtight bag	
	6.6	Protection against weather: sun, rain, wind, snow and extreme temperatures	
	6.7	Air-change rate	
	6.8	Air inlet filtration and air-transfer between confinement system	
	6.9	Air clean-up system design	
	6.9.1	Areas not classified under radiological dispersal	
	6.9.2	Areas classified under the radiological release	
	6.10	Connection to any existing ventilation networks	
	6.10.1	General	
	6.10.2	Worksite containment located in a building, room or enclosure equipped with a nuclear ventilation	
	6.10.3	Worksite containment beyond any nuclear ventilation	
	6.10.4	Additional recommendations	
	6.11	Recommended ventilation configuration as function of confinement class	
	6.12	Worksite containment usually used	
7	Rec	ommendations concerning commissioning, monitoring and operation of containment	
	7.1	General	
	7.2	Pre-commissioning inspection	
	7.3	Monitoring of the confinement	
	7.3.1	General	
	7.3.2	Monitoring of static containment	
		_	

7.3.4		Monitoring of purification systems	
	7.3.5	Other monitoring	
	7.4	Containment operation	
	7.5	Containment disassembly	
8		Considerations about other risks than radiological risks related to confinement	
Annex A		(informative) Example of confinements classification and recommendations on associated equipment $\boldsymbol{\theta}$	
	A.1	Classification of confinements	
	A.2	Recommended equipment associated with confinement classes	
Annex	В	(informative) Examples for the selection of materials constituting worksite containment	
Annex	С	(informative) Practical guidance on worksite containment arrangements	
	C.1	General	
	C.2	Recommended equipment associated with confinement classes	
	C.3	Admission and exhaust air	

Monitoring of dynamic confinement

7.3.3

Page count: 35