

5.1.3 Treatment of Gaseous Waste

This NE Series document will integrate safety and technical information on technologies for treatment of gaseous waste with either delay-decay, filtration, adsorption, absorption, etc and it will include: a) Off-gas from high-temp processes, e.g., vitrification, incineration/pyrolysis, etc and b) Gaseous waste from reactors and fuel cycle facilities. The new publication will supersede 15 IAEA technical documents, namely TRS-358, TRS-302, TECDOC-521, TRS-292, TRS-291, TRS-276, TRS-274, TECDOC-355, TRS-43, TRS-220, TRS-203, TRS-201, TRS-199, TRS-148 and TRS-122 published in period from 1980 to 2007 into one consistent handbook on the subject matter for designers, operators and regulators. The objective of this document is to provide state of the art guidance to MS, to align technical information with safety assessment needs, to provide operating experience and lessons learned and to have adequate basis for development of training material required for technology transfer to less developed Member States.

The new publication should be prepared in period from 2010-12 and implemented to Member States as training material for technology transfer in 2013/14. Responsible officer is Mr. Susanta Kumar Samanta (S.K.Samanta@iaea.org).

The following documents (titles and numbers in the table below) are proposed to be consolidated, updated and organized as a NE Series document:

Sl. no.	Report No.	Yr	Report Title
1	TRS-358	1993	Off-gas and air cleaning for accident conditions in nuclear power plants
2	TRS-302	1989	Treatment of off-gas from radioactive waste incinerators
3	TECDOC-521	1989	Retention of iodine and other airborne radionuclides in nuclear facilities during abnormal and accident conditions
4	TRS-292	1988	Design and operation of off-gas cleaning and ventilation systems in facilities handling low and intermediate level radioactive material
5	TRS-291	1988	Design and operation of off-gas cleaning systems at high level liquid waste conditioning facilities
6	TRS-276	1987	Treatment, conditioning and disposal of iodine-129
7	TRS-274	1987	Design of off-gas and air cleaning systems at nuclear power plants
8	TECDOC-355	1985	Comparison of high efficiency particulate filter testing methods
9	TRS-243	1984	Testing and monitoring of off-gas cleanup systems at nuclear facilities
10	TRS-220	1982	Control of semivolatile radionuclides in gaseous effluents at nuclear facilities
11	TRS-203	1981	Handling of tritium-bearing wastes
12	TRS-201	1980	Radioiodine removal in nuclear facilities: methods and techniques for normal and emergency situations
13	TRS-199	1980	Separation, storage and disposal krypton-85
14	TRS-148	1973	Control of iodine in the nuclear industry
15	TRS-122	1970	Air filters for use at nuclear facilities