

Table 5.7-2 Suggested Instruments to be used for Monitoring

Instrument Use ¹	Make and Model	Type of Radiation Detected	Range of Measurements	Detection Limit ²	Comments (Section Reference)
Personal scan – alarming meter	Ludlum Model 43-5 detector: Model 177 meter	Alpha	Bkg less than 3 cpm	Nominal LLD to be determined	Scanning stations (5.7.6.1)
Gamma exposure rates	Ludlum Model 19	Gamma	0 to 5 mrem/hr	0.005 mrem/hr	General purpose gamma exposure rate monitoring (5.7.2.2)
Beta/gamma measurements	Ludlum Model 44-9 pancake probe with Model 3 meter	Beta and gamma with limited alpha	0 to 2 mR/hr or 0 to 500,000 c/m	Nominal LLD to be determined	General purpose surveys for beta gamma contamination and beta exposure rate (5.7.6.2)
Air filter counting Total alpha contamination surveys	Ludlum Model 43-1 or 43-92 detector with Model 2224 meter	Alpha (43-92 detects alpha and beta)	0 to less than 100,000 c/m	Nominal LLD to be determined	Used for counting BZ and general air samplers (5.7.3.1, 5.7.3.2, 5.7.6.2)
BZ sampling pump	MSA Escort ELF	N/A	1 to 3 l/m	N/A	Used for lapel sampling and Kuznetz sampling (5.7.3.2)
General air particulate sampling	F&J Specialty Products Model LV-1	N/A	10 to 100 l/m	N/A	Comparable to Eberline RAS 1 (5.7.3.1)

¹ Equivalent instruments may be substituted at the discretion of the RSO.

² The nominal LLD will be calculated based on assumed counting times and efficiencies.