


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

 <p>Accredited to ISO/IEC 17025:2005</p>	NIRAS, part of AMEC Nuclear UK Limited	
	Issue No: 017 Issue date: 14 August 2008	
	Birchwood Park Birchwood Warrington Cheshire WA3 6GN	Contact: Greg Willetts Tel: +44 (0)1925 675654 Fax: +44 (0)1925 850830 E-Mail: greg.willetts@amec.com Website: www.niras.co.uk
Testing performed at the above address only		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS MILK, SEWAGE SLUDGE, PLASTICS, SOFT WASTE, GRAPHITE, AQUEOUS SOLUTIONS, WATER: Natural, process, waste and potable	<u>Radiochemical Analysis</u> Tritium (^3H)	Documented In-House Method OM Pyrolysis, tritium analysis by pyrolysis and liquid scintillation
WATER: Natural, process, waste, potable and sea water	Tritium (^3H)	Documented In-House Method OM 3H based on ISO 9698:1989E by liquid scintillation
SEDIMENT, SOIL, CONCRETE, WATER: Potable, waste, natural and process	Gross alpha and beta radioactivity (thick source method) relative to: Alpha - ^{239}Pu , ^{241}Am Beta - ^{137}Cs , ^{40}K	Documented In-House Method OM ABTS based on BS 6068: Sections 3.1 and 3.2 1993, by proportional counting or ZnS and Geiger Muller
SEDIMENT, SOIL, CONCRETE, BUILDING MATERIALS, GEOLOGICAL MATERIALS, WATER: Potable, waste, natural and process	Strontium - ^{90}Sr	Documented In-House Method OM Sr90 by liquid scintillation and ICP-MS
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS, STEEL, SWABS, WATERS: Potable, waste, natural and process	Iron- ^{55}Fe	Documented In-House Method OM Fe-55 by liquid scintillation



1011
Accredited to
ISO/IEC 17025:2005

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

NIRAS, part of AMEC Nuclear UK Limited
Issue No: 017 Issue date: 14 August 2008

Testing performed at main address only

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS, SEAFOOD WATERS: Potable, waste, natural and process	<u>Radiochemical Analysis</u> (cont'd) Technetium - ⁹⁹ Tc	Documented In-House Methods OM Tc-99 Solids OM Tc-99 Waters OM ICPMS Tc99 by ICP-MS
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS, WATER: Potable, waste, natural and process	<u>Determination of alpha emitting radionuclides</u> Natural Uranium isotopes ²³⁸ U, ²³⁵ U, ²³⁴ U	Documented In-House Method OM U-NAT and OM AS by alpha spectrometry
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS, WATER: Potable, waste, natural and process	Recycled Uranium isotopes ²³⁸ U, ²³⁶ U, ²³⁵ U, ²³⁴ U, ²³³ U, ²³² U	Documented In-House Method OM URECYC, OM AS and OM ICPMS-URECYC by alpha spectrometry and ICP-MS
SEDIMENT, SOIL, CONCRETE, GEOLOGICAL MATERIALS, WATER: Potable, waste, natural and process	<u>Non-Uranic Actinides</u> Americium - ²⁴¹ Am Curium - ²⁴² Cm, ²⁴³⁺²⁴⁴ Cm Plutonium - ²³⁹⁺²⁴⁰ Pu, ²³⁸ Pu, ²⁴² Pu Thorium - ²³² Th, ²³⁰ Th, ²²⁸ Th	Documented In-House Method OM ACT and OM AS by alpha spectrometry
ENVIRONMENTAL SAMPLES (Water, aqueous solutions, leachates, biota, air filters, soils/sediment and geological materials)	Gamma Spectrometry (Energy Range: 60 kev to 2 Mev)	Documented In-House Methods OM GSSP, OM SOPGS and OM GS
FOODSTUFFS	Gamma Spectrometry (Energy Range: 60 kev to 2 Mev)	Documented In-House Methods OM GSSP, OM SOPGS and OM GS
NON-ENVIRONMENTAL SOLIDS AND LIQUIDS	Gamma Spectrometry (Energy Range: 60 kev to 2 Mev) (up to density: 2.5 g cm ⁻³)	Documented In-House Methods OM GSSP, OM SOPGS and OM GS
	END	