LOWER LIMITS OF DETECTION FOR EFFLUENT SAMPLE ANALYSIS
(01/02 - 12/02)

Gaseous Effluents:

Radioisotope	Required L.L.D. (µCi/ml)	Typical L.L.D. (µCi/ml)
Krypton - 87	1.00E-4	1.00E-8 - 3.50E-8
Krypton - 88	1.00E-4	1.50E-8 - 4.00E-8
Xenon - 133	1.00E-4	1.50E-8 - 3.50E-8
Xenon - 133m	1.00E-4	5.00E-8 - 2.20E-7
Xenon - 135	1.00E-4	9.00E-9 - 3.30E-8
Xenon - 135m	1.00E-4	9.00E-9 - 3.00E-8
Xenon - 138	1.00E-4	1.00E-8 - 4.00E-8
Iodine - 131	1.00E-12	5.00E-14 - 2.00E-13
Iodine - 133	1.00E-10	1.00E-12 - 2.00E-12
Manganese - 54	1.00E-11	1.50E-14 - 3.50E-14
Cobalt - 58	1.00E-11	2.50E-14 - 6.00E-14
Iron - 59	1.00E-11	7.50E-14 - 1.00E-13
Cobalt - 60	1.00E-11	4.50E-14 - 9.00E-14
Zinc - 65	1.00E-11	3.00E-14 - 9.00E-14
Strontium - 89	1.00E-11	2.00E-14 - 1.00E-13
Strontium - 90	1.00E-11	7.50E-15 - 3.00E-14
Molybdenum - 99	1.00E-11	8.00E-13 - 1.00E-12
Cesium - 134	1.00E-11	4.00E-14 - 8.00E-14
Cesium - 137	1.00E-11	5.00E-14 - 9.00E-14
Cerium - 141	1.00E-11	3.00E-14 - 1.25E-13
Cerium - 144	1.00E-11	1.00E-13 - 2.50E-13
Gross Alpha	1.00E-11	6.00E-15 - 9.00E-15
Tritium	1.00E-6	6.00E-08 - 1.50E-07

LOWER LIMITS OF DETECTION FOR EFFLUENT SAMPLE ANALYSIS
(01/02 - 12/02)

Liquid Effluents:

Radioisotope	Required L.L.D. (µCi/ml)	Typical L.L.D. (µCi/ml		
Krypton - 87	1.00E-5	1.00E-8	-	3.00E-8
Krypton - 88	1.00E-5	1.00E-8	-	2.50E-8
Xenon - 133	1.00E-5	1.00E-8	-	2.50E-8
Xenon - 133m	1.00E-5	3.00E-8	-	9.00E-8
Xenon - 135	1.00E-5	6.00E-9	-	1.00E-8
Xenon - 135m	1.00E-5	7.50E-9	-	1.50E-8
Xenon - 138	1.00E-5	1.00E-8	-	2.50E-8
Iodine - 131	1.00E-6	9.00E-9	-	2.00E-8
Manganese - 54	5.00E-7	4.00E-9	-	2.00E-8
Iron - 55	1.00E-6	4.00E-7	-	1.00E-6
Cobalt - 58	5.00E-7	5.00E-9	-	1.00E-8
Iron - 59	5.00E-7	1.50E-8	-	3.00E-8
Cobalt - 60	5.00E-7	9.00E-9	-	1.50E-8
Zinc - 65	5.00E-7	1.00E-8	-	3.00E-8
Strontium - 89	5.00E-8	3.50E-8	-	5.00E-8
Strontium - 90	5.00E-8	1.50E-8	-	3.00E-8
Molybdenum - 99	5.00E-7	3.00E-8	-	9.00E-8
Cesium - 134	5.00E-7	1.00E-8	-	3.00E-8
Cesium - 137	5.00E-7	1.00E-8	-	2.50E-8
Cerium - 141	5.00E-7	1.00E-8	-	4.00E-8
Cerium - 144	5.00E-7	5.00E-8	-	1.00E-7
Gross Alpha	1.00E-7	2.00E-8	-	4.00E-8
Tritium	1.00E-5	3.00E-6	-	4.00E-6