

Item 58

**Reports to New York State showing the types and quantities of radwaste
from Units 1 & 2 (2001, 2002, 2003)**

U1
2001

CODE (official use only)

RETURN BY MARCH 1, 2002

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
Radioactive Waste Policy and Nuclear Coordination Program

2001 LOW-LEVEL RADIOACTIVE WASTE
REPORT FORM

NOTE Please refer to the instructions before completing this form. Also, see Public Authorities Law, Section 1854-d(1) and Part 502 of Chapter XI of Title 21 NYCRR (Reporting Regulations) provided with this form.
FOR THE PERIOD: JANUARY 1 THROUGH DECEMBER 31, 2001

PLEASE TYPE OR PRINT LEGIBLY

SECTION I GENERATOR INFORMATION

A Updated Generator Information			
Licensing Agency/ies		License No(s).	
New York State Department of Labor			
New York State Department of Health			
New York City Department of Health			
U.S. Nuclear Regulatory Commission		DPR-63	
Your Facility Phone No.: (315) 349-2542		Email Address JENKSD@NIMO.COM	
Ext. N/A			
Contact DENNIS JENKS		Title SUPERVISOR - RADWASTE	
Facility Name NINE MILE POINT NUCLEAR STATION UNIT 1			
Street Address 34 B LAKE ROAD			
City LYCOMING	County OSWEGO	State NY	Zip Code 13093
B Name and principal office of facility where LLRW is generated if different from A (above)			
Street address			
City	County	State	Zip Code 34444
C Preparer's Name TIM CARROLL		Title TECHNICIAN	
		Telephone and Extension 315-349-4116	
D Identify, by issuing authority and number, permits that authorize transfer of your LLRW to a licensed LLRW disposal facility:			
Issuing Authority SOUTH CAROLINA DHEC	Disposal Site Location BARNWELL, SC	Disposal Site Use Permit Number 0004-31-01-X	
E FACILITY TYPE CODE A1		Refer to the instructions to determine the facility type code that best describes your facility. Use only one code	
F Briefly describe the activities, processes, or uses of radioactive material that result in LLRW generation at your facility. PROCESSING WASTE WATER FOR REUSE IN PLANT SYSTEMS. DRY ACTIVE WASTE IS GENERATED FROM OPERATION AND MAINTENANCE ACTIVITIES, AND PLANT MODIFICATIONS			
SIGNATURE OF PREPARER: Tim Carroll		DATE: 2-28-02	

SECTION II INFORMATION ON LLRW

SEE ALSO ATTACHED SECTION II A

A. LLRW AS GENERATED				B. ON-SITE WASTE TREATMENT			
Waste Description Code	Waste Management Method	Chemical Form Code	Other Hazard Code	Treatment Code	Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (m ³)
1	2	3	4	5	6	7	8
32	W1	C4	H8	T21			
32	W2	C4	H8	T19		NONE	11.0
32	W1	C4	H8	T21			
32	W1	C4	H8	T21			
32	W2	C4	H8	T19		NONE	6.8
38	W1	C4	H8	T21			
39	W2	C4	H8	T21			
39	W1	C4	H8	T21			
40	W1	C4	H8	T21			
40	W1	C4	H8	T21			
27	W1	C4	H8	T21			

CODES for SECTION II of the 2001 LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

- A. LLRW AS GENERATED**
- 1 WASTE DESCRIPTION CODE**
Choose the category that best describes the waste
- 20 Charcoal
 - 21 Incinerator Ash
 - 22 Soil
 - 23 Gas
 - 24 Oil
 - 25 Aqueous Liquid
 - 26 Filter Media
 - 27 Mechanical Filter
 - 29 Demolition Rubble
 - 30 Cation Ion-exchange Media
 - 31 Anion Ion-exchange Media
 - 32 Mixed Bed Ion-exchange Media
 - 33 Contaminated Equipment
 - 34 Organic Liquid (except oil)
 - 35 Glassware or Labware
 - 36 Sealed Source/Device
 - 37 Paint or Plating
 - 38 Evaporator Bottoms/ Sludges/Concentrates
 - 39 Dry or Compactible Trash (paper, plastic, glass, etc.)
 - 40 Noncompactible Trash (metal components, etc.)
 - 41 Animal Carcass
 - 42 Biological Material (except animal carcass)
 - 43 Activated Material
 - 44 Material that will be Incinerated
 - 55 Other (describe)
- 2 WASTE MANAGEMENT METHOD**
Transfer to Authorized Recipient
- W1 Transfer to Disposal Site via Broker
 - W2 Transfer to Disposal Site Directly
 - W3 Transfer - Other (describe)
- Interim Storage
- W4 Placed in Storage before 2000
 - W5 Placed in Storage during 2000
 - W6 Shipped for Treatment prior to Storage
- Storage for Decay
- W7 Storage for Decay (Only limited information required See instructions)
- 3 CHEMICAL FORM CODE**
- C1 Paper and Plastic
 - C2 Glass
 - C3 Metals
 - C4 Metal Oxides
 - C5 Inorganic Salts
 - C6 Organic Salts
 - C7 Nucleic Acids
 - C8 Amino Acids, Proteins, Enzymes
 - C9 Carbohydrates, Sugars
 - C10 Lipids, Fatty Acids
 - C11 Other (describe)
- 4 OTHER HAZARD CODE**
- H1 Ignitable
 - H2 Corrosive
 - H3 Toxic
 - H4 Reactive
 - H5 Pathogenic
 - H6 Carcinogenic
 - H7 Other (describe)
 - H8 None
- 5 TREATMENT CODE**
- T1 Compaction
 - T2 Supercompaction
 - T3 Evaporation/Crystallization
 - T4 Fluid Bed
 - T5 Drying/Calcination
 - T6 Membrane Separation (ultrafiltration, reverse osmosis)
 - T7 Incineration
 - T8 Solidification
 - T9 Adsorption
 - T10 Sorting/Segregation
 - T11 Macroencapsulation
 - T12 Absorption
 - T13 Decontamination
 - T14 Surface Removal (scabbing, abrasive cleaning)
 - T15 Dry Chemical Packing (lime)
 - T16 Size Reduction (sectioning, shredding, cutting)
 - T17 Steam Reform
 - T18 Catalytic Extraction Process
 - T19 Dewatered
 - T20 Other (describe)
- 6 SOLIDIFICATION OR SORPTION CODE**
- Sorption
- 60 Speed Dri
 - 61 Celelom
 - 62 Floor Dry/Superfine
 - 63 Hi Dri
 - 64 Safe T Sorb
 - 65 Safe N Dri
 - 66 Florco
 - 67 Florco X
 - 68 Solid A Sorb
 - 69 Chemsil 30
 - 70 Chemsil 50
 - 71 Chemsil 3030
 - 72 Dicapert HP200
 - 73 Dicapert HP500
 - 74 Petrosel
 - 75 Petrosel II
 - 76 Aquaset
 - 77 Aquaset II
 - 89 Other (describe)
- Solidification
- 90 Cement
 - 91 Concrete (encapsulation)
 - 92 Bitumen
 - 93 Vinyl Chloride
 - 94 Vinyl Ester Styrene
 - 99 Other (describe)
 - 100 None Required

SECTION II. INFORMATION ON LLRW

A. LLRW AS GENERATED				B. ON-SITE WASTE TREATMENT			
Waste Description Code	Waste Management Method	Chemical Form Code	Other Hazard Code	Treatment Code	Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (m ³)
1	2	3	4	5	6	7	8
12 38	W1	C4	H8	T21			
13 38	W5	C4	H8	T21			
3							
4							
5							
6							
7							
8							
9							
10							
11							

CODES for SECTION II of the 2001 LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

- A. LLRW AS GENERATED**
- 1 WASTE DESCRIPTION CODE**
 Choose the category that best describes the waste.
- 20 Charcoal
 - 21 Incinerator Ash
 - 22 Soil
 - 23 Gas
 - 24 Oil
 - 25 Aqueous Liquid
 - 26 Filter Media
 - 27 Mechanical Filter
 - 29 Demolition Rubble
 - 30 Cation Ion-exchange Media
 - 31 Anion Ion-exchange Media
 - 32 Mixed Bed Ion-exchange Media
 - 33 Contaminated Equipment
 - 34 Organic Liquid (except oil)
 - 35 Glassware or Labware
 - 36 Sealed Source/Device
 - 37 Paint or Plating
 - 38 Evaporator Bottoms/ Sludges/Concentrates
 - 39 Dry or Compactible Trash (paper, plastic, glass, etc.)
 - 40 Noncompactible Trash (metal components, etc.)
 - 41 Animal Carcass
 - 42 Biological Material (except animal carcass)
 - 43 Activated Material
 - 44 Material that will be incinerated
 - 59 Other (describe)
- 2 WASTE MANAGEMENT METHOD**
- Transfer to Authorized Recipient
 - W1 Transfer to Disposal Site via Broker
 - W2 Transfer to Disposal Site Directly
 - W3 Transfer - Other (describe)
 - Interim Storage
 - W4 Placed in Storage before 2000
 - W5 Placed in Storage during 2000
 - W6 Shipped for Treatment prior to Storage
 - Storage for Decay
 - W7 Storage for Decay (Only limited information required See instructions.)
- 3 CHEMICAL FORM CODE**
- C1 Paper and Plastic
 - C2 Glass
 - C3 Metals
 - C4 Metal Oxides
 - C5 Inorganic Salts
 - C6 Organic Salts
 - C7 Nucleic Acids
 - C8 Amino Acids, Proteins, Enzymes
 - C9 Carbohydrates, Sugars
 - C10 Lipids, Fatty Acids
 - C11 Other (describe)
- 4 OTHER HAZARD CODE**
- H1 Ignitable
 - H2 Corrosive
 - H3 Toxic
 - H4 Reactive
 - H5 Pathogenic
 - H6 Carcinogenic
 - H7 Other (describe)
 - H8 None
- 5 TREATMENT CODE**
- T1 Compaction
 - T2 Supercompaction
 - T3 Evaporation/Crystallization
 - T4 Fluid Bed Drying/Calcination
 - T5 Wet Oxidation
 - T6 Membrane Separation (ultrafiltration, reverse osmosis)
 - T7 Incineration
 - T8 Solidification
 - T9 Adsorption
 - T10 Sorting/Segregation
 - T11 Macroencapsulation
 - T12 Absorption
 - T13 Decontamination
 - T14 Surface Removal (scabbing, abrasive cleaning)
 - T15 Dry Chemical Packing (lime)
 - T16 Size Reduction (sectioning, shredding, cutting)
 - T17 Steam Reform
 - T18 Catalytic Extraction Process
 - T19 Dewatered
 - T20 Other (describe)
- 6 SOLIDIFICATION OR SORPTION CODE**
- Sorption
 - 60 Speedi Dri
 - 61 Celatom
 - 62 Floor Dry/Superfine
 - 63 Hi Dri
 - 64 Safe T Sorb
 - 65 Safe N Dri
 - 66 Florco
 - 67 Florco X
 - 68 Solid A Sorb
 - 69 Chemsil 30
 - 70 Chemsil 50
 - 71 Chemsil 3030
 - 72 Dicapert HP200
 - 73 Dicapert HP500
 - 74 Petrosel
 - 75 Petrosel II
 - 76 Aquaset
 - 77 Aquaset II
 - 89 Other (describe)
 - Solidification
 - 90 Cement
 - 91 Concrete (encapsulation)
 - 92 Bitumen
 - 93 Vinyl Chloride
 - 94 Vinyl Ester Styrene
 - 99 Other (describe)
 - 100 None Required
- 8 SOLIDIFICATION OR SORPTION CODE**
- T21 None

SECTION II. INFORMATION ON LLRW (cont.)

SEE ALSO ATTACHED SECTION II C

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
13	5.5	220	13	BC6	P1	T19
13	5.5	5	2	BC11		T21
13	5.5	5	1	BC-10	P10	T20
13	3.4	1000	2	BC10	P10	T20
13	3.4	500	2	BC11		T21
13	5.5	1	2	BC6	P1	T3
13	5.5	8	1	BC11		T21
2	36.2	1.2	12	BC10	P1	T7
2	36.2	0.005	1	BC10	P1	T13
2	36.2	0.012	2	BC10	P10	T13
4	0.2	20	28	BC10	P1	T2

7 EFFECT OF TREATMENT
Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³).

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 15 Other (describe)

10 CONTAINER VOLUME

Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL

Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS
This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

13 BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

14 PROCESSOR CODE

- P1 GTS Duratek
- P2 NSSI
- P3 DSSI
- P4 Chem Nuclear, IL
- P5 Alaron
- P6 Quadrex, TN
- P7 Permafrix, FL
- P8 ATG, TN
- P9 ATG, WA
- P10 Other (describe)

15 TREATMENT CODE

See codes B-5

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

Col 13, Line 3, 4 STUDEVIK
Col 13, Line 8, 9, 11 GTS DURATEK

Col 14, Line 3, 4 STUDEVIK
Col 14, Line 10 US Ecology

Col 15, Line 3, 4 STEAR REFINING

SECTION II. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION

D. BROKER/PROCESSOR INFORMATION

Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
12	27.2	0.001	1	BC11	P10	T21
13	5.5	400	1	BC11		T21
3						
4						
5						
6						
7						
8						
9						
10						
11						

EFFECT OF TREATMENT

Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

POST-TREATMENT VOLUME

Volume must be noted in cubic meters (m³)

ON-SITE CONTAINER INFORMATION

CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 19 Other (describe)

CONTAINER VOLUME

Volume must be noted in cubic meters (m³)

MAXIMUM SURFACE RADIATION LEVEL

Surface radiation must be noted in mSv/hr

NUMBER OF CONTAINERS

This information is required for each waste form.

BROKER/PROCESSOR INFORMATION

BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

PROCESSOR CODE

- P1 GTS Duratek
- P2 NSSI
- P3 DSSI
- P4 Chem Nuclear, IL
- P5 Alaron
- P6 Quadrex, TN
- P7 Permafix, FL
- P8 ATG, TN
- P9 ATG, WA
- P10 Other (describe)

TREATMENT CODE

See codes B 5

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

Col 14, Line 12 US Ecology

SECTION II INFORMATION ON LLRW (cont.)

E. POST-PROCESSOR TREATMENT		F. OTHER CHARACTERISTICS CHARACTERISTIC CHARACTERISTICS					
Effect of Treatment	Total Post-Treatment Volume (m ³)	Source Material		SNM			
		Source Material Code	Weight of Source Material (grams)	SNM Code	Total SNM (grams)	Maximum grams SNM in any shipment (grams)	
12	100% ↓ 0.0	NONE	NONE	NONE	NONE	NONE	
13	NONE 5.5	NONE	NONE	SNM-1	1.24(-3)	1.24(-3)	
3							
4							
5							
6							
7							
8							
9							
11							

E. POST-PROCESSOR TREATMENT INFORMATION

16 EFFECT OF TREATMENT
See instructions for B-7

17 TOTAL POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³)

F. OTHER CHARACTERISTICS

18 SOURCE MATERIAL CODE
Source Material — Enter one code per line. Use a separate line for each type of source material transferred.

- NU Natural Uranium
- DU Depleted Uranium
- UO Uranium Ores
- NT Natural Thorium
- TO Thorium Ores

19 WEIGHT OF SOURCE MATERIAL
Weight must be noted in grams (g)

20 SNM CODE
Special Nuclear Material means one of the following
SNM1 Plutonium
SNM2 Uranium-233

SNM3 Uranium enriched in the isotope 233 or in the isotope 235

SNM4 Any material artificially enriched by any of the foregoing

21 TOTAL SNM
Weight must be noted in grams (g)

22 MAXIMUM GRAMS SNM IN ANY SHIPMENT
Self-explanatory

23 CHELATE CODE
CA1 EDTA
CA2 DTPA
CA3 Carboic Acid
CA4 Hydroxy-carboic Acids
CA5 Citric Acid
CA6 Glucic Acid
CA7 Other (describe)

24 VOLUME OF LLRW
Volume of LLRW containing chelating agents (m³)

25 WEIGHT OF LLRW
Weight of LLRW containing chelating agents (kg)

26 WEIGHT % CHELATES
Weights less than 1% need not be reported

G. DISPOSAL AND STORAGE

27 LLRW CLASS
Class of radioactive waste as described in sections 61.55 and 61.56 of Title 10, Code of Federal Regulations, as in effect on January 26, 1983, attached following instructions

- AS Class A stable
- AU Class A unstable
- B Class B
- C Class C

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1) Use additional pages as necessary

LINE 12 SEWAGE
SLUDGE DISPOSED
IN SANITARY LANDFILL

LINE 13 STORED
ON SITE FOR
FUTURE SHIPMENT

SECTION II INFORMATION ON LLRW (cont.)

SEE ALSO ATTACHED SECTION II F

F. CHARACTERISTICS (cont.) (cont)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m ³)	Weight (kg)					
23	24	25	26	27	28	29	30
1				A-5	D2	DS1	NONE
2				A-5	D1	DS1	
3				A-5	D2	DS1	
4				A-5	D2	DS1	
5				A-5	D1	DS1	
6				A-5	D2	DS1	
7				A-5	D1	DS1	
8				A-U	D2	DS2	
9				A-U	D2	DS2	
10				A-U	D2	DS2	
11				A-U	D2	DS1	✓

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA				
LLRW Class	Hazard Code	Volume (m ³)	Activity (MBq)	Radionuclides
31	32	33	34	35

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

- 28 DISPOSITION CODE
- D1 Directly to disposal
 - D2 Treatment prior to disposal
 - D3 Treatment/returned for storage
 - D4 Treatment/no disposal (decontamination and reuse)
 - D5 Storage/no treatment
 - D6 Hold for decay on site and dispose as non-radioactive
 - D7 Hold for decay off site
- 29 DISPOSAL SITE
- DS1 Barnwell SC
 - DS2 Clive, UT
 - DS3 Richland, WA
 - DS4 Other (describe)
- and dispose as non-radioactive
- DB Treatment/off-site storage
 - D9 Other (describe)

- 30 STORAGE SITE
- S1 On site
 - S2 Radiac
 - S3 NDL
 - S4 Adco
 - S5 Other (describe)
- 31 LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA
- See codes G-27

- 32 HAZARD CODE
- See codes B-4
- 33 VOLUME
- Volume must be noted in cubic meters (m³)
- 34 ACTIVITY
- Activity must be reported in MegaBecquerels (MBq)
- 35 RADIONUCLIDES
- As applicable to H-3

SECTION II. INFORMATION ON LLRW (cont.)

F. CHARACTERISTICS (cont.) (cont)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Waste Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m ³)	Weight (kg)					
23	24	25	26	27	28	29	30
2				A-U	D2	DS-4	NONE
3				B	D5	NONE	S1
4							
5							
6							
7							
8							
9							
11							

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA

LLRW Class	Hazard Code	Volume (m ³)	Activity (MBq)	Radionuclides
31	32	33	34	35

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

- 28 DISPOSITION CODE
- D1 Directly to disposal
 - D2 Treatment prior to disposal
 - D3 Treatment/returned for storage
 - D4 Treatment/no disposal (decontamination and reuse)
 - D5 Storage/no treatment
 - D6 Hold for decay on site and dispose as non-radioactive
 - D7 Hold for decay off site

- 29 DISPOSAL SITE
- DS1 Barnwell, SC
 - DS2 Clive, UT
 - DS3 Richland, WA
 - DS4 Other (describe)
- and dispose as non-radioactive
- D8 Treatment/off-site storage
 - D9 Other (describe)

- 30 STORAGE SITE
- S1 On site
 - S2 Radiac
 - S3 NDL
 - S4 Adco
 - S5 Other (describe)
- H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA
- 31 LLRW CLASS
See codes G-27

- 32 HAZARD CODE
See codes B-4
- 33 VOLUME
Volume must be noted in cubic meters (m³)
- 34 ACTIVITY
Activity must be reported in MegaBecquerels (MBq)
- 35 RADIONUCLIDES
As applicable to H-3

SECTION II. INFORMATION ON LLRW (cont.)

CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)

Class	Volume (m ³)	Activity by Radionuclide (MBq)

SECTION III. LLRW SUMMARY

A. 2001 DISPOSAL TOTALS

Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		SUBTOTALS BY CLASS	
Class A	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume - A	Activity - A
Via Broker/ Processor	0.3	2.10(5)						
Direct Transfer	94.8	1.28(7)					145.9	2.48(7)
Class B								
Via Broker/ Processor							Volume - B	Activity - B
Direct Transfer								
Class C								
Via Broker/ Processor							Volume - C	Activity - C
Direct Transfer								
TOTALS	118.7	2.46(7)	27.2	1.83(5)				
TOTAL ALL CLASSES							VOLUME	ACTIVITY
							145.9	2.48(7)

B. 2001 INTERIM STORAGE TOTALS

Classes	Placed in Interim Storage during 2001		Placed in Interim Storage before 2001		SUBTOTALS BY CLASS	
Class A	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume - A	Activity - A
On Site						
Off Site						
Class B						
On Site					Volume - B	Activity - B
Off Site						
Class C						
On Site					Volume - C	Activity - C
Off Site						
TOTALS						
TOTAL ALL CLASSES					VOLUME	ACTIVITY

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed of during 2001 (see response to Section III-A) Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	1.19(4)	Sr-90	1.18(3)	Cm-242	1.10(0)
C-14	7.02(4)	Nb-94	2.22(2)	Cm-243	1.48(0)
Ce-51	6.61(4)	Tc-99	2.20(4)		
Mn-54	1.02(7)	Ag-110m	6.65(4)		
Fe-55	3.51(6)	Cs-134	2.53(3)		
Fe-59	1.24(6)	Cs-137	1.80(5)		
Co-58	5.48(5)	Ce-144	9.29(4)		
Co-60	9.69(6)	Pu-238	3.06(1)		
Ni-59	3.06(3)	Pu-239	2.10(1)		
Ni-63	1.58(5)	Pu-241	2.76(3)		
N-65	9.83(3)	Am-241	1.40(1)		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW disposed of, as reported in Section III-A

TOTAL ACTIVITY 2.48(7)

A.2	If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste
	NONE

B.1 List the radionuclides contained in the LLRW being held in storage for decay on site as of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
NONE					

B.2 List the radionuclides contained in the LLRW being held in storage for decay off site as of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
NONE					

C.1 On site - List radionuclides contained in LLRW in interim storage on site as of December 31, 2001 Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	2.86(2)	Ni-63	2.28(4)	Pu-241	2.01(3)
Ca-51	2.93(0)	Sr-90	1.18(2)	Am-241	8.47(0)
Mn-54	2.78(5)	Ag-110m	2.96(3)	Cm-242	1.58(1)
Fe-55	1.31(6)	Sr-124	9.58(1)	Cm-243	2.19(0)
Fe-59	2.46(2)	Cs-137	3.08(5)		
Co-58	1.70(3)	Ce-144	3.00(3)		
Co-60	1.10(6)	Pu-238	2.36(0)		
Ni-59	8.92(2)	Pu-239	1.59(0)		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW stored on site, as reported.

TOTAL ACTIVITY 3.03(6) MBq

C.2 Off site - List radionuclides contained in LLRW in interim storage off site as of December 31, 2001 Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
NONE					

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW being stored off site, as reported

TOTAL ACTIVITY MBq

C.3 If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste	
NONE	

SECTION V. STORAGE FACILITY INFORMATION

NOTE: If your facility manages LLRW by storage for decay only, you only need to complete the Condensed Form for Decay in Section V. Only.

ON-SITE STORAGE FACILITIES	
A.1	Briefly describe your on-site LLRW storage facilities. Include facilities you have for storage of special LLRW forms such as freezers, shielded areas for high-radiation-level wastes, or bermed storage areas for liquid wastes, and estimate the storage capacity for each. <i>STORAGE FACILITY CONTAINS 2 CONCRETE PITS AT UNIT 1 AND 3 CONCRETE ROOMS AT UNIT 2, WITH SUFFICIENT STORAGE FOR UNIT 1 & 2 FOR 20 YEARS.</i>
A.2	Total Storage Capacity: <u>4360</u> m ³
A.3	Estimated maximum volume of LLRW held in storage for decay at any one time: <u>0</u> m ³
B	Do you have any plans for increasing your on-site storage capacity? <u>NO</u> <div style="float: right;"> <input type="checkbox"/> No. Skip to C. <input type="checkbox"/> Yes. Complete this section. </div>
Describe such plans and indicate your expected new storage capacity.	

OFF-SITE STORAGE FACILITIES	
Off-site storage facility information. Use additional pages if necessary. <u>N/A</u>	
Please indicate if off-site storage is for storage for decay or interim storage	<input type="checkbox"/> Storage for decay <input type="checkbox"/> Interim storage
Name of facility:	
Address:	
Contact and phone number:	

NOTE: Please answer the following question based on LLRW requiring disposal at licensed LLRW disposal facilities, not LLRW held in storage for decay. DO NOT USE DESCRIPTIVE TERMS SUCH AS UNLIMITED, CONTINUOUS, OR INDEFINITE.

ESTIMATED STORAGE TIME FOR LLRW REQUIRING DISPOSAL	
D	Based on your anticipated LLRW generation rate and your anticipated capacity to store waste as of December 31, 2001, HOW MANY MONTHS could you continue to produce and store LLRW on site if access to licensed LLRW disposal facilities were no longer available? <div style="float: right;">NOTE: Answer <i>must</i> be in months. <u>240</u> months</div>

SECTION VI. FUTURE LLRW GENERATION

FUTURE LLRW GENERATION THAT WILL REQUIRE DISPOSAL				
Year	Class	Activity (MBq)	Volume (m ³)	Radionuclides
2002	A	1.85(6)	60	H-3, C-14, Cr-51, Mn-54, Fe-55, Fe-59
	B	5.55(6)	5	Pu-238, Co-60, Ni-59, Ni-63, Sn-90, Tc-99,
	C			Ag-110m, Cs-137, Ce-144, Pu-238,
	Total	7.40(6)	65	Pu-239, Pu-241, Am-241, Cm-242, Cm-243
2003	A	1.85(7)	60	SAME AS 2002
	B	5.55(6)	5	
	C			
	Total	2.41(7)	65	
2004	A	1.85(6)	60	SAME AS 2003
	B	5.55(6)	5	
	C	7.00(8)	5	
	Total	7.07(8)	70	
2005	A	1.85(7)	60	SAME AS 2004
	B	5.55(6)	5	
	C			
	Total	2.41(7)		
2006	A	1.85(6)		SAME AS 2005
	B	5.55(6)		
	C			
	Total	7.40(6)		

U1-01-002		U1-00-016		U1-01-010		U1-01-005		U1-01-008		U1-01-009		U1-00-020		U1-00-019		U1-01-011	
A		A		A		A		A		A		A		A		A	
5.5		5.5		5.5		5.5		5.5		5.5		5.5		5.5		5.5	
5112		5112		5112		5112		5112		5112		5112		5112		5112	
30		13		40		80		10		4.5		120		220		10	
CNCF		CNCF		CNCF		CNCF		CNCF		CNCF		CNCF		CNCF		CNCF	
mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq
4.49E+01	1.66E+03	4.76E+00	1.76E+02	4.31E+01	1.59E+03	4.30E+01	1.59E+03	1.30E+00	4.81E+01	6.72E-01	2.49E+01	0.00E+00	0.00E+00	2.07E+01	7.66E+02	2.43E+01	8.99E+02
1.31E+01	4.85E+02	1.51E+01	5.59E+02	1.56E+02	5.77E+03	5.87E+01	2.17E+03	4.29E+00	1.59E+02	3.72E+00	1.38E+02	2.33E+00	8.62E+01	7.36E+01	2.72E+03	4.81E+00	1.78E+02
0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E+03	5.88E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E+01	6.59E+02	0.00E+00	0.00E+00
7.24E+02	2.68E+04	8.04E+01	2.97E+03	8.95E+03	3.31E+05	3.23E+03	1.20E+05	1.97E+02	7.28E+03	1.99E+02	7.36E+03	6.77E+03	2.50E+05	3.68E+03	1.36E+05	2.82E+02	1.04E+04
1.27E+00	4.70E+01	1.26E+00	4.66E+01	1.53E+01	5.66E+02	5.73E+00	2.12E+02	4.16E-01	1.54E+01	3.61E-01	1.34E+01	1.59E+01	5.88E+02	6.41E+00	2.37E+02	4.79E-01	1.77E+01
3.14E+01	1.16E+03	0.00E+00	0.00E+00	1.79E+03	6.62E+04	3.61E+01	1.34E+03	1.55E+01	5.74E+02	0.00E+00	0.00E+00	2.08E+02	7.70E+03	6.97E+01	2.58E+03	4.44E+01	1.64E+03
3.50E+01	1.30E+03	2.04E+00	7.55E+01	1.12E+03	4.14E+04	1.53E+02	5.66E+03	1.98E+01	7.33E+02	2.00E+01	7.40E+02	3.58E+02	1.32E+04	1.18E+02	4.37E+03	2.47E+01	9.14E+02
1.21E+03	4.48E+04	1.29E+03	4.77E+04	1.45E+04	5.37E+05	5.45E+03	2.02E+05	3.97E+02	1.47E+04	3.44E+02	1.27E+04	1.22E+04	4.51E+05	6.44E+03	2.38E+05	4.50E+02	1.67E+04
5.60E-02	2.07E+00	6.47E-02	2.39E+00	6.66E-01	2.46E+01	2.51E-01	9.29E+00	1.83E-02	6.77E+01	1.59E-02	5.88E+01	9.16E+00	3.39E+02	3.15E-01	1.17E+01	2.06E-02	7.62E-01
1.45E+01	5.37E+02	1.67E+01	6.18E+02	1.73E+02	6.40E+03	6.52E+01	2.41E+03	4.76E+00	1.76E+02	4.13E+00	1.53E+02	3.10E+02	1.15E+04	8.15E+01	3.02E+03	5.34E+00	1.98E+02
0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+02	4.40E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E+02	5.18E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.38E+00	8.81E+01	2.57E-01	9.51E+00	2.28E+00	8.44E+01	2.28E+00	8.44E+01	6.88E-02	2.55E+00	3.56E-02	1.32E+00	1.75E+00	6.48E+01	1.11E+00	4.11E+01	1.28E+00	4.74E+01
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.07E+02	3.96E+03	1.17E+01	4.33E+02	1.02E+02	3.77E+03	1.02E+02	3.77E+03	3.08E+00	1.14E+02	1.60E+00	5.92E+01	0.00E+00	0.00E+00	5.05E+01	1.87E+03	5.75E+01	2.13E+03
1.07E+01	3.96E+02	0.00E+00	0.00E+00	1.75E+02	6.48E+03	2.49E+01	9.21E+02	2.53E+00	9.38E+01	1.13E+01	4.18E+02	1.18E+01	4.37E+02	8.52E+01	3.15E+03	1.47E+01	5.44E+02
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3.17E+02	1.17E+04	3.42E+01	1.27E+03	3.04E+02	1.12E+04	3.03E+02	1.12E+04	9.16E+00	3.39E+02	4.74E+00	1.75E+02	2.88E+02	1.07E+04	1.48E+02	5.48E+03	1.71E+02	8.33E+03
3.14E+02	1.16E+04	2.07E+01	7.66E+02	3.17E+02	1.17E+04	3.10E+02	1.15E+04	9.15E+00	3.39E+02	4.76E+00	1.78E+02	3.05E+01	1.13E+03	1.03E+02	3.81E+03	1.87E+02	6.92E+03
3.39E-02	1.25E+00	3.69E-03	1.37E-01	3.24E-02	1.20E+00	3.24E-02	1.20E+00	9.79E-04	3.62E-02	5.07E-04	1.88E-02	7.83E-02	2.90E+00	1.60E-02	5.92E-01	1.83E-02	6.77E-01
2.26E-02	8.36E-01	2.47E-03	9.14E-02	2.16E-02	7.99E-01	2.16E-02	7.99E-01	6.53E-04	2.42E-02	3.38E-04	1.25E-02	5.56E-02	2.06E+00	1.07E-02	3.96E-01	1.22E-02	4.51E-01
0.00E+00	0.00E+00	1.02E+00	3.77E+01	9.22E+00	3.41E+02	9.21E+00	3.41E+02	2.78E-01	1.03E+01	1.44E-01	5.33E+00	0.00E+00	0.00E+00	4.45E+00	1.65E+02	5.20E+00	1.92E+02
1.76E-02	6.51E-01	1.92E-03	7.10E-02	1.68E-02	6.22E-01	1.68E-02	6.22E-01	5.08E-04	1.88E-02	2.63E-04	9.73E+03	0.00E+00	0.00E+00	8.31E-03	3.07E-01	9.47E-03	3.50E-01
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.83E+03	1.05E+05	1.48E+03	5.47E+04	2.94E+04	1.09E+06	9.79E+03	3.62E+05	6.64E+02	2.46E+04	5.94E+02	2.20E+04	2.03E+04	7.53E+05	1.09E+04	4.03E+05	1.27E+03	4.71E+04

U 2002

CODE (official use only)

RETURN BY MARCH 1, 2003

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
Radioactive Waste Policy and Nuclear Coordination Program

2002 LOW-LEVEL RADIOACTIVE WASTE
REPORT FORM

NOTE Please refer to the Instructions before completing this form. Also, see Public Authorities Law, Section 1854-d(1) and Part 502 of Chapter XI of Title 21 NYCRR (Reporting Regulations) provided with this form.

FOR THE PERIOD: JANUARY 1 THROUGH DECEMBER 31, 2002

Please Type or Print Legibly

- Place mailing label from front in the space to the right.
- Mark any corrections in the table below.

Place Mailing Label Here

SECTION I. GENERATOR INFORMATION

A Updated Generator Information			
Licensing Agency/ies		License No(s)	
New York State Department of Labor			
New York State Department of Health			
New York City Department of Health			
U.S. Nuclear Regulatory Commission		DPR-63	
Your Facility Phone No.: (315) 349-4982		Email Address Skip.Taylor@nmp.cn.com	
Contact Skip Taylor		Title Supervisor-Radwaste Unit 1	
Facility Name Nine Mile Point Nucler Station Unit 1			
Street Address 348 Lake Road			
City Oswego		County Oswego	State NY
Zip Code 13126			
B Name and principal office of facility where LLRW is generated If different from A (above)			
Street address			
City		County	State
Zip Code			
C Preparer's Name Tim Carroll		Title Technician C	315-359-4116 Telephone and Extension
D Identify, by issuing authority and number, permits that authorize transfer of your LLRW to a licensed LLRW disposal facility:			
Issuing Authority		Disposal Site Location	Disposal Site Use Permit Number
South Carolina DHEC		Barnwell, SC	0004-31-02-X
E FACILITY TYPE CODE <u>A1</u>		Refer to the instructions to determine the facility type code that best describes your facility. Use only one code	
F Briefly describe the activities, processes, or uses of radioactive material that result in LLRW generation at your facility. Processing waste water for re-use in plant systems. Dry active waste from operation and maintenance activities and plant modifications.			
SIGNATURE OF PREPARER: <i>Tim Carroll</i>			DATE: 20 FEBRUARY 2003

SECTION II. INFORMATION ON LLRW

A. LLRW AS GENERATED				B. ON-SITE WASTE TREATMENT			
Waste Description Code	Waste Management Method	Chemical Form Code	Other Hazard Code	Treatment Code	Sorption or Solidification Code	Effect of Treatment	Waste Volume (m ³)
1	2	3	4	5	6	7	8
32	W1	C4	H8	T19		None	38.5
39	W2	C4	H8	T21			
39	W1	C4	H8	T21			
40	W1	C4	H8	T21			
32	W1	C4	H8	T21			
24	W1	C4	H8	T21			
38	W1	C4	H8	T21			
32	W5	C4	H8	T19		None	11.0
32	W5	C4	H8	T19		None	5.5

CODES for SECTION II of the 2002 LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

<p>A. LLRW AS GENERATED</p> <p>1 WASTE DESCRIPTION CODE Choose the category that best describes the waste</p> <p>20 Charcoal 21 Incinerator Ash 22 Soil 23 Gas 24 Oil 25 Aqueous Liquid 26 Filter Media 27 Mechanical Filter 29 Demolition Rubble 30 Cation Ion-exchange Media 31 Anion Ion-exchange Media 32 Mixed Bed Ion-exchange Media 33 Contaminated Equipment 34 Organic Liquid (except oil) 35 Glassware or Labware 36 Sealed Source/Device 37 Paint or Plating 38 Evaporator Bottoms/ Sludges/Concentrates 39 Dry or Compactible Trash (paper, plastic, glass, etc.) 40 Noncompactible Trash (metal components, etc.) 41 Animal Carcass 42 Biological Material (except animal carcass) 43 Activated Material 44 Material that will be Incinerated 59 Other (describe)</p>	<p>2 WASTE MANAGEMENT METHOD <u>Transfer to Authorized Recipient</u> W1 Transfer to Disposal Site via Broker W2 Transfer to Disposal Site Directly W3 Transfer - Other (describe) <u>Interim Storage</u> W4 Placed in Storage before 2002 W5 Placed in Storage during 2002 W6 Shipped for Treatment prior to Storage <u>Storage for Decay</u> W7 Storage for Decay (Skip to item G30)</p> <p>3 CHEMICAL FORM CODE C1 Paper and Plastic C2 Glass C3 Metals C4 Metal Oxides C5 Inorganic Salts C6 Organic Salts C7 Nucleic Acids C8 Amino Acids, Proteins, Enzymes C9 Carbohydrates, Sugars C10 Lipids, Fatty Acids C11 Other (describe)</p> <p>4 OTHER HAZARD CODE H1 Ignitable H2 Corrosive H3 Toxic</p>	<p>H4 Reactive H5 Pathogenic H6 Carcinogenic H7 Other (describe) H8 None</p> <p>5 TREATMENT CODE T1 Compaction T2 Supercompaction T3 Evaporation/Crystallization T4 Fluid Bed Drying/Calcination T5 Wet Oxidation T6 Membrane Separation: (ultrafiltration, reverse osmosis) T7 Incineration T8 Solidification T9 Adsorption T10 Sorting/Segregation T11 Macroencapsulation T12 Absorption T13 Decontamination T14 Surface Removal (scabbing, abrasive cleaning) T15 Dry Chemical Packing (lime) T16 Size Reduction (sectioning, shredding, cutting) T17 Steam Reform T18 Catalytic Extraction Process T19 Dewatered T20 Other (describe)</p>	<p>T21 None</p> <p>6 SOLIDIFICATION OR SORPTION CODE <u>Sorption</u> 60 Speedi Dri 61 Celetom 62 Floor Dry/Supertine 63 Hi Dri 64 Safe T Sorb 65 Safe N Dri 66 Florco 67 Florco X 68 Solid A Sorb 69 Chemsil 30 70 Chemsil 50 71 Chemsil 3030 72 Dicapert HP200 73 Dicapert HP500 74 Petrosel 75 Petrosel II 76 Aquaset 77 Aquaset II 89 Other (describe)</p> <p><u>Solidification</u> 90 Cement 91 Concrete (encapsulation) 92 Bitumen 93 Vinyl Chloride 94 Vinyl Ester Styrene 99 Other (describe) 100 None Required</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION II. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION			
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code	
9	10	11	12	13	14	15	
1	13	5.5	80	7	BC10	P10	T17
2	13	5.5	20	1	BC11		T21
3	2	36.2	1.5	4	BC10	P1	T7
4	2	36.2	3.0	3	BC-10	P1	T13
5	13	5.5	400	1	BC10	P10	T17
6	2	2.7	0.001	6	BC10	P1	T7
7	4	0.2	25	14	BC-10	P1	T2
8	13	5.5	700	2	BC11		T21
9	13	5.5	20	1	BC11		T21
10							
11							

7 EFFECT OF TREATMENT
Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³).

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 19 Other (describe)

10 CONTAINER VOLUME
Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL
Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS
This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

13 BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

14 PROCESSOR CODE

- P1 GTS Duratek
- P2 NSSI
- P3 DSSI
- P4 Chem Nuclear, IL
- P5 Alaron
- P6 Quadrex, TN
- P7 Permafex, FL
- P8 ATG, TN
- P9 ATG, WA
- P10 Other (describe)

15 TREATMENT CODE

See codes B-5.

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

Col 13 Line 1,5 Studsvik

Col 13 Line 3,4,6,7 GTS Duratek

Col 14 Line 1,5 Studsvik

SECTION II. INFORMATION ON LLRW (cont.)

E. POST-PROCESSOR TREATMENT			F. OTHER CHARACTERISTICS			
Effect of Treatment	Total Post-Treatment Volume (m ³)	Source Material		SNM		
		Source Material Code	Weight of Source Material (grams)	SNM Code	Total SNM (grams)	Maximum grams SNM in any shipment (grams)
16	17	18	19	20	21	22
1	6:1 ↓ 6.5	None	0	None	0	0
2	* 5.5	None	0	SNM1	1.73E-3	1.73E-3
3	**	None	0	SNM1	8.74E-5	6.64E-5
4	**	None	0	SNM1	4.50E-6	1.62E-6
5	7:1 ↓ 0.8	None	0	SNM1	1.22E-3	1.22E-3
6	100:1 ↓ 0.16	None	0	None	0	0
7	**	None	0	SNM1	8.52E-5	8.52E-5
8	* 11.0	None	0	SNM1	5.04E-3	2.96E-3
9	* 5.5	None	0	None	0	0
10						
11						

- E. POST-PROCESSOR TREATMENT INFORMATION**
- 16 EFFECT OF TREATMENT**
See instructions for B-7.
- 17 TOTAL POST-TREATMENT VOLUME**
Volume must be noted in cubic meters (m³).
- F. OTHER CHARACTERISTICS**
- 18 SOURCE MATERIAL CODE**
Source Material — Enter one code per line. Use a separate line for each type of source material transferred.
- NU Natural Uranium
 - DU Depleted Uranium
 - UO Uranium Ores
 - NT Natural Thorium
 - TO Thorium Ores
- 19 WEIGHT OF SOURCE MATERIAL**
Weight must be noted in grams (g).
- 20 SNM CODE**
Special Nuclear Material means one of the following:
SNM1 Plutonium
SNM2 Uranium-233

- SNM3** Uranium enriched in the isotope 233 or in the isotope 235
- SNM4** Any material artificially enriched by any of the foregoing
- 21 TOTAL SNM**
Weight must be noted in grams (g).
- 22 MAXIMUM GRAMS SNM IN ANY SHIPMENT**
Self-explanatory.
- 23 CHELATE CODE**
- CA1 EDTA
 - CA2 DTPA
 - CA3 Carboic Acid
 - CA4 Hydroxy-carboic Acids
 - CA5 Citric Acid
 - CA6 Glucinic Acid
 - CA7 Other (describe)
- 24 VOLUME OF LLRW**
Volume of LLRW containing chelating agents (m³).
- 25 WEIGHT OF LLRW**
Weight of LLRW containing chelating agents (kg).
- 26 WEIGHT % CHELATES**
Weights less than 1% need not be reported.

- G. DISPOSAL AND STORAGE**
- 27 LLRW CLASS**
Class of radioactive waste as described in sections 61.55 and 61.56 of Title 10, Code of Federal Regulations, as in effect on January 26, 1983, attached following instructions.
- AS Class A stable
 - AU Class A unstable
 - B Class B
 - C Class C

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

SECTION II E

* NO TREATMENT

** STILL IN PROCESSING

SECTION II. INFORMATION ON LLRW (cont.)

F. OTHER CHARACTERISTICS (cont.)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m ³)	Weight (kg)					
23	24	25	26	27	28	29	30
1				C	D2	DS1	
2				B	D1	DS1	
3				A	D2	DS2	
4				A	D2	DS2	
5				B	D2	DS1	
6				A	D2	DS2	
7				A	D2	DS1	
8				B	D5		S1
9				A	D5		S1
10							
11							

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA				
LLRW Class	Hazard Code	Volume (m ³)	Activity (MBq)	Radionuclides
31	32	33	34	35

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

- 28 DISPOSITION CODE
- D1 Directly to disposal
 - D2 Treatment prior to disposal
 - D3 Treatment/returned for storage
 - D4 Treatment/no disposal (decontamination and reuse)
 - D5 Storage/no treatment
 - D6 Hold for decay on site and dispose as non-radioactive
 - D7 Hold for decay off site

- 29 DISPOSAL SITE
- DS1 Barnwell, SC
 - DS2 Clive, UT
 - DS3 Richland, WA
 - DS4 Other (describe)
- and dispose as non-radioactive Treatment/off-site storage
- D8 Treatment/off-site storage
 - D9 Other (describe)

- 30 STORAGE SITE
- S1 On site
 - S2 Radiac
 - S3 NDL
 - S4 Adco
 - S5 Other (describe)
- H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA
- 31 LLRW CLASS
- See codes G-27.

- 32 HAZARD CODE
- See codes B-4.
- 33 VOLUME
- Volume must be noted in cubic meters (m³).
- 34 ACTIVITY
- Activity must be reported in MegaBecquerels (MBq).
- 35 RADIONUCLIDES
- As applicable to H-3.

SECTION II. INFORMATION ON LLRW (cont.)

I. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)		
LLRW Class	Volume (m ³)	Activity by Radionuclide (MBq)
See	Attached	Spreadsheet

SECTION III. LLRW SUMMARY

A. 2002 DISPOSAL TOTALS								
Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		SUBTOTALS BY CLASS	
Class A	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume - A	Activity - A
Via Broker/ Processor	1.44	5.17E4	5.48	4.99E3				
Direct Transfer								
Class B								
Via Broker/ Processor	0.483	1.39E6					Volume - B	Activity - B
Direct Transfer	5.5	8.98E5						
Class C								
Via Broker/ Processor	2.20	3.48E6					Volume - C	Activity - C
Direct Transfer								
TOTALS	9.62	5.82E6						
TOTAL ALL CLASSES							VOLUME	ACTIVITY

B. 2002 INTERIM STORAGE TOTALS						
Classes	Placed in Interim Storage during 2002		Placed in Interim Storage before 2002		SUBTOTALS BY CLASS	
Class A	Volume (m)	Activity (MBq)	Volume (m)	Activity (MBq)	Volume - A	Activity - A
On Site	5.5	2.72E5			5.5	2.72E5
Off Site	84.1	2.51E5			84.1	2.51E5
Class B					Volume - B	Activity - B
On Site	11.0	2.50E7			11.0	2.50E7
Off Site						
Class C					Volume - C	Activity - C
On Site						
Off Site						
TOTALS					VOLUME	ACTIVITY
TOTAL ALL CLASSES					100.6	2.55E7

SECTION II. INFORMATION ON LLRW (cont.)

I. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)		
LLRW Class	Volume (m ³)	Activity by Radionuclide (MBq)
See	Attached	Spreadsheet

SECTION III. LLRW SUMMARY

A. 2002 DISPOSAL TOTALS								
Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		SUBTOTALS BY CLASS	
Class A	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume - A	Activity - A
Via Broker/ Processor			3.39	7.96E5				
Direct Transfer							10.31	8.53E5
Class B								
Via Broker/ Processor							Volume - B	Activity - B
Direct Transfer							5.98	2.29E6
Class C								
Via Broker/ Processor							Volume - C	Activity - C
Direct Transfer							2.20	3.48E6
TOTALS			8.87	8.01E5				
TOTAL ALL CLASSES							VOLUME	ACTIVITY
							18.49	6.62E6

B. 2002 INTERIM STORAGE TOTALS						
Classes	Placed in Interim Storage during 2002		Placed in Interim Storage before 2002		SUBTOTALS BY CLASS	
Class A	Volume (m ³)	Activity (MBq)	Volume (m ³)	Activity (MBq)	Volume - A	Activity - A
On Site						
Off Site						
Class B					Volume - B	Activity - B
On Site						
Off Site						
Class C					Volume - C	Activity - C
On Site						
Off Site						
TOTALS					VOLUME	ACTIVITY
TOTAL ALL CLASSES						

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed of during 2002 (see response to Section III-A). Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	4.01E2	Cs-137	3.65E5		
C-14	3.76E4	Ce-144	9.72E3		
Mn-54	7.53E5	Pu-238	6.91E0		
Fe-55	2.71E6	Pu-239	4.77E0		
Fe-59	4.03E3	Pu-241	2.16E3		
Co-58	3.04E3	Am-241	2.60E1		
Co-60	1.80E6	Cm-242	9.03E0		
Ni-59	8.92E2	Cm-243	5.00E0		
Ni-63	4.22E4				
Sr-90	3.40E2				
Ag-110m	5.14E3				

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW disposed of, as reported in Section III-A.

TOTAL ACTIVITY 6.62E6

A.2	If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.
	None

B.1 List the radionuclides contained in the LLRW being held in storage for decay on site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
None					

B.2 List the radionuclides contained in the LLRW being held in storage for decay off site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
None					

C.1 On site - List radionuclides contained in LLRW in interim storage on site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
C-14	9.36E3	Zn-65	4.22E3	Pu-241	7.12E2
Cr-51	6.44E4	Sr-90	1.06E3	Am-241	8.99E1
Mn-54	1.73E6	Ag-110m	2.07E4	Cm-242	2.80E2
Fe-55	1.89E7	Sb-124	3.96E3	Cm-243	1.40E1
Fe-59	1.02E5	Cs-137	5.18E5		
Co-58	1.25E5	Ce-144	9.41E4		
Co-60	3.58E6	Pu-238	2.55E1		
Ni-63	1.63E5	Pu-239	1.01E1		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW stored on site, as reported.

TOTAL ACTIVITY 2.53E7 MBq

C.2 Off site - List radionuclides contained in LLRW in interim storage off site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	1.05E1	Sr-90	5.52E1	Am-241	9.46E-1
C-14	4.47E3	Tc-99	3.09E0	Cm-242	1.47e-1
Mn-54	2.35E4	Cs-134	2.70E2	Cm-243	2.74E-1
Fe-55	1.08E5	Cs-137	6.74E3		
Co-58	2.87E2	Ce-144	1.38E3		
Co-60	1.04E5	Pu-238	3.28E-1		
Ni-59	2.16E0	Pu-239	1.97E-1		
Ni-63	1.38E3	Pu-241	3.79e0		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW being stored off site, as reported.

TOTAL ACTIVITY 2.50E5 MBq

C.3 If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.	
None	

SECTION V. STORAGE FACILITY INFORMATION

NOTE: If your facility manages LLRW by storage for decay only, you only need to complete the Condensed Form for Decay in Storage Only.

ON-SITE STORAGE FACILITIES	
A.1	Briefly describe your on-site LLRW storage facilities. Include facilities you have for storage of special LLRW forms such as freezers, shielded areas for high-radiation-level wastes, or bermed storage areas for liquid wastes, and estimate the storage capacity for each.
Storage facility consists of 2 concrete pits at Unit 1 and 3 concrete rooms at Unit 2 with sufficient storage capacity for Unit 1 and Unit 2 for 20 years.	
A.2	Total Storage Capacity: <u>4360</u> m ³
A.3	Estimated maximum volume of LLRW held in storage for decay at any one time: <u>55</u> m ³
B	Do you have any plans for increasing your on-site storage capacity? <input type="checkbox"/> No. Skip to C. <input checked="" type="checkbox"/> Yes. Complete this section.
Describe such plans and indicate your expected new storage capacity.	

OFF-SITE STORAGE FACILITIES	
C	Off-site storage facility information. Use additional pages if necessary.
Please indicate if off-site storage is for storage for decay or interim storage. <input type="checkbox"/> Storage for decay <input checked="" type="checkbox"/> Interim storage	
Name of facility:	<u>Studsvik Processing Facility</u> <u>GTS Duratek</u>
Address:	<u>Erwin, TN</u> <u>Oak Ridge, TN</u>
Contact and phone number:	<u>Dave Schlosser 423-735-6300</u> <u>Dennis Hennen 865-220-1632</u>

NOTE: Please answer the following question based on LLRW requiring disposal at licensed LLRW disposal facilities, *not* LLRW held in storage for decay. DO NOT USE DESCRIPTIVE TERMS SUCH AS UNLIMITED, CONTINUOUS, OR INDEFINITE.

ESTIMATED STORAGE TIME FOR LLRW REQUIRING DISPOSAL	
D	Based on your anticipated LLRW generation rate and your anticipated capacity to store waste as of December 31, 2002, HOW MANY MONTHS could you continue to produce and store LLRW on site if access to licensed LLRW disposal facilities were no longer available?
NOTE: Answer <i>must</i> be in months.	
<u>240</u> months	

SECTION VI. FUTURE LLRW GENERATION

FUTURE LLRW GENERATION THAT WILL REQUIRE DISPOSAL				
Year	Class	Activity (MBq)	Volume (m ³)	Radionuclides
2003	A	1.85E7	60	H-3, C-14, Cr-51, Mn-54, Fe-55, Fe-59, Co-58,
	B	5.55E6	5	Co-60, Ni-59, Ni-63, Sr-90, Tc-99, Ag-110m
	C	4.00E7	5	Cs-137, Ce-144, Pu-238, Pu-239, Pu-241,
	Total	6.41E7	70	Am-241, Cm-242, Cm-243.
2004	A	1.85E6	60	Same as 2003
	B	5.55E6	5	
	C	7.00E8	5	
	Total	7.07E8	70	
2005	A	1.85E7	60	Same as 2004
	B	5.55E6	5	
	C	4.00E7	5	
	Total	6.41E7	70	
2006	A	1.85E6	60	Same as 2005
	B	5.55E6	5	
	C	7.00E8	5	
	Total	7.07E8	70	
2007	A	1.85E7	60	Same as 2006
	B	5.55E6	5	
	C	5.55E6	5	
	Total	6.41E7	70	

D	Identify, by issuing authority and number, permits that authorize transfer of your LLRW to a licensed LLRW disposal facility:		
	Issuing Authority	Disposal Site Location	Disposal Site Use Permit Number
	South Carolina DHEC	Barnwell, SC	0004-31-03-X
E	FACILITY TYPE CODE Type in the appropriate letter and number for the appropriate code OR choose one from EACH DROP-DOWN MENU BELOW. Refer to the instructions to determine the facility type code that best describes your facility. Choose only one code consisting of a letter and number.		
	Choose a Letter: A. Nuclear Power Plant Choose a Number: 1. Boiling Water Reactor		
F	Briefly describe the activities, processes, or uses of radioactive material that result in LLRW generation at your facility.		
	Processing waste water for reuse in plant systems. Dry active waste is generated from operation and maintenance activities and from plant modifications.		
This Report Form has been submitted by the preparer listed in item I(C) above. In submitting this form, preparer hereby certifies that the information set forth is true to the best of the preparer's knowledge.			DATE: 2/28/04 3-28-04

SECTION II. INFORMATION ON LLRW

A. LLRW AS GENERATED				
Waste Description Code	Waste Management Method	Chemical Form Code	Other Hazard Code	
1	2	3	4	
1	32	W1	C4	H8
2	32	W1	C4	H8
3	39	W1	C4	H8
4	40	W1	C4	H8
5	59	W1	C4	H8
6	32	W5	C4	H8
7				
8				
9				
10				
11				

CODES for SECTION II of the LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

Note: If you respond "other" to any item, please provide an explanation on the Attachment Sheet provided in Section VII.

A. LLRW AS GENERATED

1 WASTE DESCRIPTION CODE

Choose the category that best describes the waste.

- 20 Charcoal
- 21 Incinerator Ash
- 22 Soil
- 23 Gas
- 24 Oil
- 25 Aqueous Liquid
- 26 Filter Media
- 27 Mechanical Filter
- 29 Demolition Rubble
- 30 Cation Ion-exchange Media
- 31 Anion Ion-exchange Media
- 32 Mixed Bed Ion-exchange Media
- 33 Contaminated Equipment
- 34 Organic Liquid (except oil)
- 35 Glassware or Labware
- 36 Sealed Source/Device
- 37 Paint or Plating
- 38 Evaporator Bottoms/ Sludges/Concentrates
- 39 Dry or Compactible Trash (paper, plastic, glass, etc.)
- 40 Noncompactible Trash (metal components, etc.)
- 41 Animal Carcass
- 42 Biological Material (except animal carcass)
- 43 Activated Material
- 44 Material that will be Incinerated
- 59 Other (describe)

2 WASTE MANAGEMENT METHOD

Transfer to Authorized Recipient

- W1 Transfer to Disposal Site via Broker
- W2 Transfer to Disposal Site Directly
- W3 Transfer - Other (describe)

Interim Storage

- W4 Placed in Storage before current reporting year
- W5 Placed in Storage during current reporting year
- W6 Shipped for Treatment prior to Storage

Storage for Decay

- W7 Storage for Decay (Only limited information required See instructions.)

3 CHEMICAL FORM CODE

- C1 Paper and Plastic
- C2 Glass
- C3 Metals
- C4 Metal Oxides
- C5 Inorganic Salts
- C6 Organic Salts
- C7 Nucleic Acids
- C8 Amino Acids, Proteins, Enzymes
- C9 Carbohydrates, Sugars
- C10 Lipids, Fatty Acids
- C11 Other (describe)

4 OTHER HAZARD CODE

- H1 Ignitable
- H2 Corrosive
- H3 Toxic
- H4 Reactive
- H5 Pathogenic
- H6 Carcinogenic
- H7 Other (describe)
- H8 None

B. ON-SITE WASTE TREATMENT

Treatment Code		Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (m ³)
5		6	7	8
1	T19		NONE	11.0
2	T19		NONE	6.8
3	T21			
4	T21			
5	T21			
6	T19		NONE	5.5
7				
8				
9				
10				
11				

B. ON-SITE WASTE TREATMENT

5 TREATMENT CODE

- T1 Compaction
- T2 Supercompaction
- T3 Evaporation/ Crystallization
- T4 Fluid Bed Drying/ Calcination
- T5 Wet Oxidation
- T6 Membrane Separation (ultrafiltration, reverse osmosis)
- T7 Incineration
- T8 Solidification
- T9 Adsorption
- T10 Sorting/Segregation
- T11 Macroencapsulation
- T12 Absorption
- T13 Decontamination
- T14 Surface Removal (scabbing, abrasive cleaning)
- T15 Dry Chemical Packing (lime)
- T16 Size Reduction (sectioning, shredding, cutting)
- T17 Steam Reform
- T18 Catalytic Extraction Process
- T19 Dewatered
- T20 Other (describe)
- T21 None

6 SOLIDIFICATION OR SORPTION CODE

Sorption

- 60 Speedi Dri
- 61 Celetom
- 62 Floor Dry/Superfine
- 63 Hi Dri
- 64 Safe T Sorb
- 65 Safe N Dri
- 66 Florco
- 67 Florco X
- 68 Solid A Sorb
- 69 Chemsil 30
- 70 Chemsil 50
- 72 Dicaperl HP200
- 73 Dicaperl HP500
- 74 Petrosel
- 75 Petrosel II
- 76 Aquaset
- 77 Aquaset II
- 89 Other (describe)

Solidification

- 90 Cement
- 91 Concrete (encapsulation)
- 92 Bitumen
- 93 Vinyl Chloride
- 94 Vinyl Ester Styrene
- 99 Other (describe)
- 100 None Required

7 EFFECT OF TREATMENT

Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 8 or 9, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME

Volume must be noted in cubic meters (m³).

SECTION II. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
1	7	5.5	2	BC10	P10	T17
2	7	3.4	2	BC10	P10	T17
3	2	72.5	7	BC-10	P1	T7
4	2	36.3	3	BC10	P1	T13
5	2	27.2	2	BC10	P10	T20
6	7	5.5	1	BC10	P10	T17
7						
8						
9						
10						
11						

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 15 Other (describe)

10 CONTAINER VOLUME

Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL

Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS

This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

13 BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

14 PROCESSOR CODE

- P1 GTS Duratek
- P2 NSSI
- P3 DSSI
- P4 Chem Nuclear, IL
- P5 Alaron
- P6 Quadrex, TN
- P7 Permafrix, FL
- P8 ATG, TN
- P9 ATG, WA
- P10 Other (describe)

15 TREATMENT CODE

See codes B-5.

SECTION II. INFORMATION ON LLRW (cont.)

E. POST-PROCESSOR TREATMENT INFORMATION		F. OTHER CHARACTERISTICS				
Effect of Treatment	Total Post-Treatment Volume (m ³)	Source Material		SNM		
		Source Material Code	Weight of Source Material (grams)	SNM Code	Total SNM (grams)	Maximum grams SNM in any shipment (grams)
16	17	18	19	20	21	22
1	6:1	66.2	NONE	0	NONE	0
2	8:1	0.8	NONE	0	SNM1	4.78E-4
3	12:	41.6	NONE	0	SNM1	5.41E-5
4	10:	11.2	NONE	0	SNM1	5.88E-6
5	-	-	NONE	0	NONE	0
6	-	-	NONE	0	SNM1	2.42E-5
7						
8						
9						
10						
11						

E. POST-PROCESSOR TREATMENT INFORMATION

16 EFFECT OF TREATMENT
See instructions for B-7.

17 TOTAL POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³).

F. OTHER CHARACTERISTICS

18 SOURCE MATERIAL CODE
Source Material C Enter one code per line. Use a separate line for each type of source material transferred.

- NU Natural Uranium
- DU Depleted Uranium
- UO Uranium Ores
- NT Natural Thorium
- TO Thorium Ores

19 WEIGHT OF SOURCE MATERIAL
Weight must be noted in grams (g).

20 SNM CODE
Special Nuclear Material means one of the following:

- SNM1 Plutonium
- SNM2 Uranium-233
- SNM3 Uranium enriched in the isotope 233 or in the isotope 235
- SNM4 Any material artificially enriched by any of the foregoing

21 TOTAL SNM
Weight must be noted in grams(g).

22 MAXIMUM GRAMS SNM IN ANY SHIPMENT
Self-explanatory.

SECTION II. INFORMATION ON LLRW (cont.)

F. OTHER CHARACTERISTICS (cont.)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m ³)	Weight (kg)					
23	24	25	26	27	28	29	30
1				A	D2	DS2	
2				A	D2	DS2	
3				A	D2	DS2	
4				A	D2	DS2	
5				*	D2	DS4	
6				A	D2	DS2	S5
7							
8							
9							
10							
11							

3 CHELATE CODE

- CA1 EDTA
- CA2 DTPA
- CA3 Carboic Acid
- CA4 Hydroxy-carboic Acids
- CA5 Citric Acid
- CA6 Glucinic Acid
- CA7 Other (describe)

4 VOLUME OF LLRW

Volume of LLRW containing chelating agents (m³).

5 WEIGHT OF LLRW

Weight of LLRW containing chelating agents (kg).

6 WEIGHT % CHELATES

Weights less than 1% need not be reported.

G. DISPOSAL AND STORAGE

27 LLRW CLASS

Class of radioactive waste as described in sections 61.55 and 61.56 of Title 10, Code of Federal Regulations, as in effect on January 26, 1983, attached following instructions
 AS Class A stable
 AU Class A unstable
 B Class B
 C Class C

28 DISPOSITION CODE

- D1 Directly to disposal
- D2 Treatment prior to disposal
- D3 Treatment/returned for storage
- D4 Treatment/no disposal (decontamination and reuse)
- D5 Storage/no treatment
- D6 Hold for decay on site and dispose as non-radioactive
- D7 Hold for decay off site and dispose as non-radioactive
- D8 Treatment/off-site storage
- D9 Other (describe)

29 DISPOSAL SITE

- DS1 Barnwell, SC
- DS2 Clive, UT
- DS3 Richland, WA
- DS4 Other (describe)

30 STORAGE SITE

- S1 On site
- S2 Radiac
- S3 NDL
- S4 Adco
- S5 Other (describe)

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA

LLRW Class	Hazard Code	Volume (m ³)	Activity (MBq)	Radionuclides
31	32	33	34	35

H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA

- 31 LLRW CLASS
See codes G-27.
- 32 HAZARD CODE
See codes B-4.
- 33 VOLUME
Volume must be noted in cubic meters (m³).
- 34 ACTIVITY
Activity must be reported in MegaBecquerels (MBq).
- 35 RADIONUCLIDES
As applicable to H-3.

I. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)

LLRW Class	Volume (m ³)	Activity by Radionuclide (MBq)
36	37	38
		See attached

Containers > 2 mSv

Waste Class	A		A		A		A		A	
Volume (m3)	5.5		5.5		3.4		3.4		5.5	
Dose Rate (mSv)	10		20		250		600		30	
	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq
C-14	6.10E+01	2.26E+03	7.55E+01	2.79E+03	1.14E+01	4.22E+02	2.34E+00	8.66E+01	2.15E+01	7.98E+02
Mn-54	7.23E+02	2.68E+04	9.31E+02	3.44E+04	1.56E+04	5.77E+05	3.15E+04	1.17E+06	1.60E+03	5.92E+04
Fe-55	2.13E+03	7.89E+04	2.57E+03	9.53E+04	1.32E+04	4.88E+05	2.72E+04	1.01E+06	2.11E+03	7.81E+04
Co-58	2.77E+01	1.02E+03	0.00E+00	0.00E+00	1.56E+03	5.77E+04	3.11E+03	1.16E+05	2.34E+01	8.66E+02
Co-60	1.52E+03	5.63E+04	1.86E+03	6.88E+04	1.32E+04	4.88E+05	2.72E+04	1.01E+06	2.56E+03	9.47E+04
Ni-63	1.85E+01	6.85E+02	2.28E+01	8.44E+02	1.28E+02	4.74E+03	2.65E+02	9.81E+03	3.37E+01	1.25E+03
Sr-90	5.48E+00	2.03E+02	6.71E+00	2.48E+02	2.40E-01	8.88E+00	5.12E-01	1.89E+01	5.52E-01	2.04E+01
Ag-110m	0.00E+00	0.00E+00	1.36E+01	5.02E+02	1.08E+02	4.00E+03	1.26E+02	4.66E+03	1.66E+01	6.14E+02
Cs-137	7.65E+02	2.83E+04	9.35E+02	3.45E+04	3.37E+01	1.25E+03	7.21E+01	2.67E+03	1.58E+02	5.85E+03
Ce-144	4.70E+02	1.74E+04	5.30E+02	1.96E+04	1.74E+01	6.44E+02	3.72E+01	1.38E+03	1.41E+01	5.22E+02
Pu-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-02	4.00E+01	2.32E-02	8.58E+01	4.15E-03	1.54E+01
Pu-239	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-03	3.42E+01	1.98E-02	7.33E+01	1.43E-03	5.29E+02
Pu-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-01	2.12E+01	1.23E+00	4.55E+01	8.09E-02	2.99E+00
Am-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-03	1.95E+01	1.12E-02	4.14E+01	4.58E-03	1.69E+01
Cm-242	9.81E-02	3.83E+00	1.04E-01	3.85E+00	1.87E-03	6.92E+02	3.97E-03	1.47E+01	7.50E-03	2.78E+01
Cm-243	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	4.07E+02	2.35E-03	8.70E+02	1.19E-03	4.40E+02
Total	5.73E+03	2.12E+05	6.95E+03	2.57E+05	4.39E+04	1.62E+06	8.95E+04	3.31E+08	6.54E+03	2.42E+05

SECTION III. LLRW SUMMARY

A. DISPOSAL TOTALS FOR THIS YEAR									
Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		SUBTOTALS BY CLASS		
Class A	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume -A	Activity -A	
Via Broker/ Processor	2.600	485000.000	58.300	5110000.000			60.900	5595000.000	
Direct Transfer							0.000	0.000	
Class B							Volume -B	Activity -B	
Via Broker/ Processor							0.000	0.000	
Direct Transfer							0.000	0.000	
Class C							Volume -C	Activity -C	
Via Broker/ Processor							0.000	0.000	
Direct Transfer							0.000	0.000	
TOTALS	2.600	485000.000	58.300	5110000.000	0.000	0.000			
TOTAL ALL CLASSES							VOLUME	ACTIVITY	
							60.900	5595000.000	

- B. - INTERIM STORAGE TOTALS

Classes	Placed in Interim Storage during this year:		Placed in Interim Storage before this year		SUBTOTALS BY CLASS	
Class A	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume - A	Activity - A
On Site					0.000	0.000
Off Site	5.500	242000.000			5.500	242000.000
Class B					Volume - B	Activity - B
On Site					0.000	0.000
Off Site					0.000	0.000
Class C					Volume - C	Activity - C
On Site					0.000	0.000
Off Site					0.000	0.000
TOTALS	5.500	242000.000	0.000	0.000		
TOTAL ALL CLASSES					5.500	242000.000

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed of during this year (see response to Section III-A). Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	3.030	C-14	5580.000	Mn-54	1850000.000
Fe-55	1760000.000	Co-58	175000.000	Co-60	1680000.000
N-63	16300.000	Sr-90	482.000	Ag-110m	9160.000
Cs-137	69200.000	Ce-144	40200.000	Pu-238	1.490
Pu-239	1.210	Pu-241	75.100	Am-241	1.280
Cm-242	8.040	Cm-243	0.253		
					Total Activity in MBq 5606012.403

Total activity for all radionuclides listed above:
 Total activity should equal total for LLRW disposed of, as reported in Section III-A.

A.2	If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.

C.2 Off site B List radionuclides contained in LLRW in interim storage off site as of December 31. Use additional sheets as necessary.

Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
C-14	795.000	Mn-54	59200.000	Fe-55	78100.000
Co-58	866.000	Co-60	94700.000	Ni-63	1250.000
Sr-90	20.400	Aq-110m	614.000	Cs-137	5850.000
Ce-144	522.000	Pu-238	0.154	Pu-239	0.052
Pu-214	0.299	Am-241	0.169	Cm-242	0.278
Cm-243	0.044				
					Total Activity in MBq 241919.395

Total activity for all radionuclides listed above:
 Total activity should equal total for LLRW being stored off site, as reported.

C.3 If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.

SECTION V. STORAGE FACILITY INFORMATION

NOTE: If your facility manages LLRW by storage for decay only, you only need to complete the Condensed Form for Decay in Storage Only.

ON-SITE STORAGE FACILITIES	
A.1	Briefly describe your on-site LLRW storage facilities. Include facilities you have for storage of special LLRW forms such as freezers, shielded areas for high-radiation-level wastes, or bermed storage areas for liquid wastes, and estimate the storage capacity for each.
Storage facility consists of 2 concrete pits at Unit 1 and 3 concrete rooms at Unit 2 with sufficient storage for Unit 1 and 2 for 20 years.	
A.2	Total Storage Capacity: <u>4360</u> m ³
A.3	Estimated maximum volume of LLRW held in storage for decay at any one time: <u>0</u> m ³
B	Do you have any plans for increasing your on-site storage capacity? <input checked="" type="checkbox"/> No. Skip to C. <input type="checkbox"/> Yes. Complete this section.
Describe such plans and indicate your expected new storage capacity.	

OFF-SITE STORAGE FACILITIES	
C Off-site storage facility information. Use additional pages if necessary.	
Please indicate if off-site storage is for storage for decay or interim storage.	<input type="checkbox"/> Storage for decay <input checked="" type="checkbox"/> Interim storage
Name of facility: Studsvik Processing Facility	
Address: TC Runion Road Erwin, TN	
Contact and phone number: Ron Leonard 423-735-6300	

NOTE: Please answer the following question based on LLRW requiring disposal at licensed LLRW disposal facilities, *not* LLRW held in storage for decay. DO NOT USE DESCRIPTIVE TERMS SUCH AS UNLIMITED, CONTINUOUS, OR INDEFINITE.

ESTIMATED STORAGE TIME FOR LLRW REQUIRING DISPOSAL	
D Based on your anticipated LLRW generation rate and your anticipated capacity to store waste as of December 31, HOW MANY MONTHS could you continue to produce and store LLRW on site if access to licensed LLRW disposal facilities were no longer available?	NOTE: Answer <i>must</i> be in months. <u>240</u> months

SECTION VI. FUTURE LLRW GENERATION

2003 FUTURE LLRW GENERATION THAT WILL REQUIRE DISPOSAL				
Year	Class	Activity (MBq)	Volume (m ³)	Radionuclides
2004	A	1850000.000	60.000	H-3, C-14, Cr-51, Mn-54, Fe-55, Fe-59, Co-58, Co-60, Ni-59, Ni-63,
	B	5550000.000	5.000	Sr-90, Tc-99, Ag-110m, Cs-137, Ce-144, Pu-238, Pu-239, Pu-241,
	C	700000000.000	5.000	Am-241, Cm-242, Cm-243.
	Total	707400000.000	70.000	
2005	A	18500000.000	60.000	Same as 2004
	B	5550000.000	5.000	
	C	40000000.000	5.000	
	Total	64050000.000	70.000	
2006	A	1850000.000	60.000	Same as 2004
	B	5550000.000	5.000	
	C	700000000.000	5.000	
	Total	707400000.000	70.000	
2007	A	18500000.000	60.000	Same as 2004
	B	5550000.000	5.000	
	C	40000000.000	5.000	
	Total	64050000.000	70.000	
2008	A	1850000.000	60.000	Same as 2004
	B	5550000.000	5.000	
	C	700000000.000	5.000	
	Total	707400000.000	70.000	

SECTION VII. ATTACHMENT SHEET

FOR ANY ADDITIONAL INFORMATION (Table will automatically expand as information is entered)

Column 1, Line 5 - Sewage sediment

Column 13, Lines 1,2,6 - Studsvik Processing Facility

Column 13, Lines 3,4,5 - GTS Duratek

Column 14, Lines 1,2,6 - Studsvik Processing Facility

Column 15, Line 5 - Assayed by processor and released for burial in sanitary municipal landfill.

Column 27,29, lne 5 - Original waste assayed by processor and disposed in sanitary municipal landfill

Column 30, Line 6 - Interim storage at Studsvik awaiting processing

Note: Discrepancies between total activity of waste shipped from Nine Mile Point and total activity of waste buried by processors is due rounding errors in compiling the data.

CODE (official use only)
 | | | | |

RETURN BY MARCH 1, 2002

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
 Radioactive Waste Policy and Nuclear Coordination Program

2001 LOW-LEVEL RADIOACTIVE WASTE
REPORT FORM

NOTE Please refer to the Instructions before completing this form. Also, see Public Authorities Law, Section 1854-d(l) and Part 502 of Chapter A of Title 21 NYCRR (Reporting Regulations) provided with this form.
 FOR THE PERIOD: JANUARY 1 THROUGH DECEMBER 31, 2001

PLEASE TYPE OR PRINT LEGIBLY

SECTION 1. GENERATOR INFORMATION

A Updated Generator Information			
Licensing Agencies		License No(s)	
New York State Department of Labor			
New York State Department of Health			
New York City Department of Health			
U.S. Nuclear Regulatory Commission		NPF-69	
Your Facility Phone No.: (315) 342-5337		Ext.	Email Address taylors@nimo.com
Contact Skip Taylor		Title General Supervisor	
Facility Name Nine Mile Point, LLC. <u>UNIT 2</u>			
Street Address PO Box 63			
City Oswego	County Oswego	State NY	Zip Code 13903
B Name and principal office of facility where LLRW is generated if different from A (above)			
Street address PO Box 63			
City Lycoming	County Oswego	State NY	Zip Code 3444Z 13093
C Preparer's Name Skip Taylor		Title General Supervisor	Telephone and Extension 315-349-4982
D Identify, by issuing authority and number, permits that authorize transfer of your LLRW to a licensed LLRW disposal facility:			
Issuing Authority		Disposal Site Location	Disposal Site Use Permit Number
State Of South Carolina		Barnwell, SC	0408-31-02-X
E FACILITY TYPE CODE <u>A1</u>		Refer to the instructions to determine the facility type code that best describes your facility. Use only one code	
F Briefly describe the activities, processes, or uses of radioactive material that result in LLRW generation at your facility. Power Generation Facility that uses Nuclear fuel to generate steam to generate electricity			
SIGNATURE OF PREPARER: Skip Taylor <i>ST</i>			DATE: 3/1/02

SECTION 11. INFORMATION ON LLRW

A. LLRW AS GENERATED				B. ON-SITE WASTE TREATMENT			
Waste Description Code	waste Management Method	Chemical Form Code	Other Hazard Code	Treatment Code	Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (M)
1	2	3	4	5	6	7	8
26	W1	C4	H8	T21			
33	W1	C4	H8	T21			
32	W2	C4	H4	T21			
32	W3	C4	H4	T21			
38	W5	C4	H2	T21			
32	W5	C4	H4	T21			
39	W3	C4	H8	T21			
40	W3	C4	H8	T21			
32	W4	C4	H4	T21			

CODES for SECTION 11 of the 2001 LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

A. LLRWASGENERATED

- 1 WASTE DESCRIPTION CODE
Choose the category that best describes the waste
- 20 Charcoal
 - 21 Incinerator Ash
 - 22 Soil
 - 23 Gas
 - 24 Oil
 - 25 Aqueous Liquid
 - 26 Filter Media
 - 27 Mechanical Filter
 - 29 Demolition Rubble
 - 30 Cation Ion-exchange Media
 - 31 Anion Ion-exchange Media
 - 32 Mixed Bed Ion-exchange Media
 - 33 Contaminated Equipment
 - 34 Organic Liquid (except oil)
 - 35 Glassware or Labware
 - 36 Sealed Source/Device
 - 37 Paint or Plating
 - 38 Evaporator Bottoms/
Sludges/Concentrates
 - 39 Dry or Compactible Trash
(paper, plastic, glass, etc.)
 - 40 Noncompactible Trash (metal
components, etc.)
 - 41 Animal Carcass
 - 42 Biological Material (except
animal carcass)
 - 43 Activated Material
 - 44 Material that will be
Incinerated
 - 59 Other (describe)

- 2 WASTE MANAGEMENT METHOD
- W1 Transfer to Authorized Recipient
 - W3 Transfer to Disposal Site via
Broker
 - W2 Transfer to Disposal Site Directly
 - W3 Transfer - Other (describe)
 - Interim Storage
 - W4 Placed in Storage before
2000
 - W5 Placed in Storage during 2000
 - W6 Shipped for Treatment prior to
Storage
 - Storage for Deca
 - W7 Storage for Decay (Only
limited information required.
See instructions.)

- 3 CHEMICAL FORM CODE
- C1 Paper and Plastic
 - C2 Glass
 - C3 Metals
 - C4 Metal Oxides
 - C5 Inorganic Salts
 - C6 Organic Salts
 - C7 Nucleic Acids
 - C8 Amino Acids, Proteins,
Enzymes
 - C9 Carbohydrates, Sugars
 - C10 Lipids, Fatty Acids
 - C11 Other (describe)

- 4 OTHER HAZARD CODE
- 1-11 Ignitable
 - H2 Corrosive
 - H3 Toxic

- H4 Reactive
- H5 Pathogenic
- H6 Carcinogenic
- H7 Other (describe)
- H8 None

- T21 None

- 6 SOLIDIFICATION OR SORPTION CODE
- Sorption
 - 60 SpeediDri
 - 61 Celetom
 - 62 Floor Dry/Superfine
 - 63 Hi Dri
 - 64 Safe T Sorb
 - 65 Safe N Dri
 - 66 Florco
 - 67 Florco X
 - 68 Solid A Sorb
 - 69 Chemsil30
 - 70 Chemsil50
 - 71 Chemsil 3030
 - 72 Dicaped HP200
 - 73 Dicaped HP500
 - 74 Petroset
 - 75 Petroset 11
 - 76 Aquaset
 - 77 Aquaset It
 - 89 Other (describe)
 - Solidification
 - 90 Cement
 - 91 Concrete (encapsulation)
 - 92 Bitumen
 - 93 Vinyl Chloride
 - 94 Vinyl Ester Styrene
 - 99 Other (describe)
 - 100 None Required

- B. ON-SITE WASTE TREATMENT
- 5 TREATMENT CODE
- T1 Compaction
 - T2 Supercompaction
 - T3 Evaporation/Crystallization
 - T4 Fluid Bed
Drying/Calcination
 - T5 Wet Oxidation
 - T6 Membrane Separation
(ultrafiltration, reverse
osmosis)
 - T7 Incineration
 - T8 Solidification
 - T9 Adsorption
 - T10 Sorting/Segregation
 - T11 Macroencapsulation
 - T12 Absorption
 - T13 Decontamination
 - T14 Surface Removal (scabbing,
abrasive cleaning)
 - T15 Dry Chemical Packing
(lime)
 - T16 Size Reduction (sectioning,
shredding, cutting)
 - T17 Steam Reibrm
 - T18 Catalytic Extraction
Process
 - T19 Dewatered
 - T20 Other (describe)

SECTION 11. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
5	1.63	68500	2	BC10	P1	T21
13	3.41	38	1	BC10	P1	T21
13	5.55	30.0	6	BC11	P1	T21
13	5.83	40.0	3	BC11	P1	T21
13	5.55	1.5	1	BC11	P1	T21
13	5.83	25.0	3	BC11	P1	T21
13	3.41	45.0	3	BC11	P1	T21
13	5.83	25.0	6	BC11	P8	T21
13	67.2	0.52	2	BC11	P1	T21
2	35.84	0.001	2	BC11	P8	T21
13	3.51	38.0	13903	BC11	P1	T21

Continued on next page

7 EFFECT OF TREATMENT
Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME
Volume must be noted in cubic meters (d).

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 19 Other (describe)

10 CONTAINER VOLUME

Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL

Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS
This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

13 BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

14 PROCESSOR CODE

- pl GTS Duratek
- P NSSI
- 2 DSSI
- 4 Chem Nuclear, IL
- P Alaron
- 5 Quadrex, TN
- F Permatix, FL
- P ATG, TN
- 8 ATG, WA
- P10 Other (describe)

15 TREATMENT CODE

See codes B-5.

If you have responded "OTHER" to any request for information please identify column, line, and waste description (from A-1). Use additional pages as necessary.

col. 2 lines 3,4,5 - transfer to processor for volume reduction and disposal.

COL. 13 lines 1,2 - WMG broker, Duratek for burial

SECTION 11. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
1 2	35.84	1.4	1	BC11	P9	T1
2 2	2.69	9.4	4	BC11	P1	T1
3 13	5.83	18.0	6	BC11	BC10	
4						
5						
6						
7						
8						
9						
10						
11						

7 EFFECT OF TREATMENT
Impact of treatment on volume maybe shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME
Volume must be noted in cubic meters (d).

C. ON-SITE CONTAINER INFORMATION

- 9 CONTAINER DESCRIPTION CODE
- 1 Wooden Box or Crate
 - 2 Metal Box
 - 3 Plastic Drum or Pail
 - 4 Metal Drum or Pail
 - 5 Metal Tank or Liner
 - 6 Concrete Tank or Liner
 - 7 Polyethylene Tank or Liner
 - 8 Fiberglass Tank or Liner
 - 9 Demineralizer
 - 10 Gas Cylinder
 - 11 Bulk, Unpackaged Waste
 - 12 Unpackaged Components
 - 13 High-Integrity Container
 - 14 Fiberboard Drum
 - 19 Other (describe)

10 CONTAINERVOLUME
Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL
Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS
This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

- 13 BROKER CODE
- BC1 NDL
 - BC2 Radiac
 - BC3 Adco
 - BC4 Teledyne
 - BC5 US Ecology
 - BC6 Chem-Nuclear
 - BC7 SEG
 - BC8 Bionomics
 - BC9 Direct transfer
 - BC10 Other (describe)
 - BC11 None

- 14 PROCESSOR CODE
- pl GTS Duratek
 - P NSSI
 - 2 DSSI
 - R Chem Nuclear, IL
 - R Alaron
 - 5 Quadrex, TN
 - F Permafex, FL
 - P ATG, TN
 - 8 ATG, WA
 - P10 Other (describe)

15 TREATMENT CODE
See codes B-5.

If you have responded "OTHER" to any request for information please identify column, line, and waste description (from A-1). Use additional pages as necessary.

col. 14 lines 3, - stored on site for 2001

Section II (Cont)

1. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200 mR/hr)		
LLRW ³⁶	Volume (rii) ³⁷	Activity (MBq) ³⁸
A	5.55 m ³	1.13E +05
A	5.55	5.77E +04
A	5.55	2.05E +05
A	5.55	7.14E +04
A	5.83	1.44E +06
A	5.83	1.67E +05
A	5.83	7.7E +05
A	5.83	1.01E +06
A	5.83	6.36E +05
A	3.41	3.22E +05
A	3.41	7.29E +04
A	3.41	3.26E +05
A	5.83	3.12E +05
A	5.83	2.13E +05
A	5.83	2.09E +05
A	5.83	4.33E +05
A	5.83	9.73E +05
A	5.83	9.40E +05
A	5.83	8.45E +05
A	5.83	8.45E +05
A	5.83	2.95E +05
A	5.83	2.51E +05
A	5.83	1.87E +05
A	5.83	1.89E +05
A	2.69	5.81E +03
A	2.69	1.79E +03
A	3.51	1.40E +05
A	2.69	1.27E +03

SECTION 11. INFORMATION ON LLRW (cont.)

F. OTHER CHARACTERISTICS (cont)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m)	Weight(kg)					
1				B	D1	DS1	
2				C	D1	DS1	
3				AU	D5	DS4	
4				AU	D1	DS1	
5				AU	D2	DS4	
6							
7							
8							
9							
10							
11							

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA				
LLRW Class	Hazard Code	Volume (M)	Activity (MBq)	Radionuclides

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

col 29, line 3 stored on site

col 29, line 5 sent to Duratek or ATG for processing /burial

28 DISPOSITION CODE

- D1 Directly to disposal
- D2 Treatment prior to disposal
- D3 Treatment/returned for storage
- D4 Treatment/no disposal (decontamination and reuse)
- D5 Storage/no treatment
- D6 Hold for decay on site and dispose as non-radioactive
- D7 Hold for decay off site

and dispose as non-radioactive

- D8 Treatment/off-site storage
- D9 Other (describe)

29 DISPOSAL SITE

- DS1 Barnwell, SC
- DS2 Clive, UT
- DS3 Richland, WA
- DS4 Other (describe)

30 STORAGE SITE

- S1 On site
- S Radiac
- 2 NDL
- S Adco
- 3 Other (describe)
- S

H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA

31 LLRW CLASS

See codes G-27.

32 HAZARD CODE

See codes B-4.

33 VOLUME

Volume must be noted in cubic meters (m³).

34 ACTIVITY

Activity must be reported in MegaBecquerels (MBq).

35 RADIONUCLIDES

As applicable to H-3.

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed during 2001 (see response to Section 111-A). Use additional sheets necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
Co-60	8.63E08	H-3	4.72E03	Pu-238	9.73E02
Zn-65	8.54E05	Fe-59	3.12E03	Pu-239	1.85E00
Mn-54	8.96E06	Zr-95	8.51E00	Sb-124	5.04E02
Cs-137	7.28E03	Tc-99	1.18E03		
Ce-144	9.81E01	Cr-51	3.88E04		
C-14	6.88E04	Ag-110m	1.12E04		
Ni-63	4.97E07	Pu-241	2.25E02		
Ni-59	2.95E05	Am-241	3.7E-01		
Fe-55	5.51E08	Cm-242	4.22E01		
Sr-90	8.95E01	Nb-94	1.22E03		
Co-58	1.07E05	Cm-243	1.37E01		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW disposed of, as reported in Section 111-A.

TOTAL ACTIVITY 1.48E09

A.2 If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.	

BA List the radionuclides contained in the LLRW being held in storage for decay on the of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide

B.2 List the radionuclides contained in the LLRW being held in storage for decay off the of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide

CA On site -List radionuclides contained in LLRW in Interim storage on sites of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
Co-60	1.7E06	Fe-55	1.71E06	Ag-110m	3.64E03
Zn-65	5.19E05	Co-58	1.06E04	Pu-241	7.4E03
Mn-54	2.28E05	Sr-90	1.99E02	Au-199	2.46E-02
Cs-137	4.49E04	H-3	1.94E03	Sb-124	1.8E03
Ce-144	2.08E03	Fe-59	1.76E04		
C-14	6.22E03	Sr-89	5.77E-08		
Ni-63	1.22E05	Tc-99	1.78E03		
Ni-59	1.10E04	Cr-51	1.89E04		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW stored on sitpas reported.

TOTAL ACTIVITY	MBq
4.4E06	

C.2 Off site -List radionuclides contained in LLRW in Interim storage off sites of December 31, 2001. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW being stored off sitpas reported.

TOTAL ACTIVITY	MBq

C.3 If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.	

SECTION 11. INFORMATION ON LLRW

A. LLRW AS GENERATED				B. ON-SITE WASTE TREATMENT			
Waste Description Code	waste Management Method	Chemical Form Code	Other Hazard Code	Treatment Code	Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (M)
1	2	3	4	5	6	7	8
26	W2	C4	H8	T19	-----	None	-----
32	W2	C4	H8	T19	-----	None	-----
32	W3	C4	H8	T21	-----	-----	-----
20	W3	C4	H8	T21	-----	-----	-----
38	W3	C4	H8	T21	-----	-----	-----
26	W3	C4	H8	T21	-----	-----	-----
40	W2	C4	H8	T21	-----	-----	-----
26	W2	C4	H8	T21	-----	-----	-----
39	W3	C4	H8	T21	-----	-----	-----
40	W3	C4	H8	T21	-----	-----	-----
40	W2	C4	H8	T21	-----	-----	-----

CODES for SECTION 11 of the 2002 LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

A. LLRWAS GENERATED

- 1 WASTE DESCRIPTION CODE
Choose the category that best describes the waste
 20 Charcoal
 21 Incinerator Ash
 22 Soil
 23 Gas
 24 Oil
 25 Aqueous Liquid
 26 Filter Media
 27 Mechanical Filter
 29 Demolition Rubble
 30 Cation Ion-exchange Media
 31 Anion Ion-exchange Media
 32 Mixed Bed Ion-exchange Media
 33 Contaminated Equipment
 34 Organic Liquid (except oil)
 35 Glassware or Labware
 36 Sealed Source/Device
 37 Paint or Plating
 38 Evaporator Bottoms/
 Sludges/Concentrates
 39 Dry or Compactable Trash
 (paper, plastic, glass, etc.)
 40 Noncompactible Trash (metal
 components, etc.)
 41 Animal Carcass
 42 Biological Material (except
 animal carcass)
 43 Activated Material
 44 Material that will be
 incinerated
 59 Other (describe)

2 WASTE MANAGEMENT METHOD

- Transfer to Authorized Recipient
 W1 Transfer to Disposal Site via
 Broker
 W2 Transfer to Disposal Site Directly
 W3 Transfer - Other (describe)
Interim Storage
 W4 Placed in Storage before
 2002
 W5 Placed in Storage during 2002
 W6 Shipped for Treatment prior to
 Storage
Storage for Decay
 W7 Storage for Decay (Skip
 to item G30)

3 CHEMICAL FORM CODE

- C1 Paper and Plastic
 C2 Glass
 C3 Metals
 C4 Metal Oxides
 C5 Inorganic Salts
 C6 Organic Salts
 C7 Nucleic Acids
 C8 Amino Acids, Proteins,
 Enzymes
 C9 Carbohydrates, Sugars
 C10 Lipids, Fatty Acids
 C11 Other (describe)

4 OTHER HAZARD CODE

- H1 Ignitable
 H2 Corrosive
 H3 Toxic

- H4 Reactive
 H5 Pathogenic
 H6 Carcinogenic
 H7 Other (describe)
 H8 None

T21 None

B. ON-SITE WASTE TREATMENT

5 TREATMENT CODE

- T1 Compaction
 T2 Supercompaction
 T3 Evaporation/Crystallization
 T4 Fluid Bed
 Drying/Calcination
 T5 Wet Oxidation
 T6 Membrane Separation
 (ultrafiltration, reverse
 osmosis)
 T7 Incineration
 T8 Solidification
 T9 Adsorption
 T10 Sorting/Segregation
 T11 Macroencapsulation
 T12 Absorption
 T13 Decontamination
 T14 Surface Removal (scabbing,
 abrasive cleaning)
 T15 Dry Chemical Packing
 (lime)
 T16 Size Reduction (sectioning,
 shredding, cutting)
 T17 Steam Reform
 T18 Catalytic Extraction
 Process
 T19 Dewatered
 T20 Other (describe)

6 SODIFICATION OR SORPTION CODE

- Sorption
 60 SpeediDri
 61 Celetom
 62 Floor Dry/Superfine
 63 Hi Dri
 64 Safe T Sorb
 65 Safe N Dri
 66 Florco
 67 Florco X
 68 Solid A Sorb
 69 Chemsil30
 70 Chemsil50
 71 Chemsil 3030
 72 Dicaperl HP200
 73 Dicaperl H P500
 74 Petrosel
 75 Petrosel 11
 76 Aquaset
 77 Aquaset 11
 89 Other (describe)
Solidification
 90 Cement
 91 Concrete (encapsulation)
 92 Bitumen
 93 Vinyl Chloride
 94 Vinyl Ester Styrene
 99 Other (describe)
 100 None Required

SECTION 11. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m3)	Maximum Surface Radiation Level (mS/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
1	2	3	4	5	6	7
1	67.20	1	7	BC11	P1	T21
2	35.84	0.7	4	BC11	P1	T21
3	2.52	26	1	BC11	P1	T21
4	5.87	30	1	BC11	P1	T21
5	5.55	120	1	BC11	P1	T21
6	5.83	50	7	BC11	P1	T21
7	3.41	800	1	BC11	P1	T19
8	5.83	50	1	BC11	P1	T19
9	5.83	150	11	BC11	P10	T21
10						
11						

7 EFFECT OF TREATMENT
Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 1 or 1, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m3).

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 19 Other (describe)

10 CONTAINERVOLUME
Volume must be noted in cubic meters (m3).

11 MAXIMUM SURFACE RADIATION LEVEL
Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS
This information is required for each waste form.

D. BROKER / PROCESSOR INFORMATION

- 13 BROKER CODE**
- BC1 NDL
 - BC2 Radiac
 - BC3 Adco
 - BC4 Teledyne
 - BC5 US Ecology
 - BC6 Chem-Nuclear
 - BC7 SEG
 - BC8 Bionomics
 - BC9 Direct transfer
 - BC10 Other (describe)
 - BC11 None

- 14 PROCESSOR CODE**
- P1 GTS Duratek
 - P2 NSSI
 - P3 DSSI
 - P4 Chem Nuclear, IL
 - P5 Alaron
 - P6 Quadrex, TN
 - P7 Permafrix, FL
 - P8 ATG, TN
 - P9 ATG, WA
 - P10 Other (describe)

15 TREATMENT CODE
See codes B-5.

If you have responded "OTHER" to any request for information please identify column, line, and waste description (from A-1). Use additional pages as necessary.

Col 2, lines 3, 4, 5, 6, 9, 10: transfer to processor for Volume Reduction / disposal.

Col 14, line 9: to Studsvik for processing.

SECTION 11. INFORMATION ON LLRW (cont.)

E. POST-PROCESSOR TREATMENT		F. OTHER CHARACTERISTICS					
Effect of Treatment	Total Post-Treatment Volume (m3)	Source Material		SNM			
		Source Material Code	Weight of Source Material (grams)	SNM Code	Total SNM (grams)	Maximum grams SNM in any shipment (grams)	
1	*↓ 25.17	N/A	N/A	SNMI	1.95E-3	1.945E-3	
2	**↓ 14.17	N/A					
3							
4							
5							
6							
7							
8							
9							
10							
11							

E. POST-PROCESSOR TREATMENT INFORMATION

16 EFFECT OF TREATMENT
See instructions for B-7.

17 TOTAL POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³).

F. OTHER CHARACTERISTICS

18 SOURCE MATERIAL CODE
Source Material - Enter one code per line. Use a separate line to each type of source material transferred
NU Natural Uranium
DU Depleted Uranium
UO Uranium Ores
NT Natural Thorium
TO Thorium Ores

19 WEIGHT OF SOURCE MATERIAL
Weight must be noted in grams (g).

20 SNM CODE
Special Nuclear Material means one of the following:
SNM1 Plutonium
SNM2 Uranium-233

SNM3 Uranium enriched in the isotope 233 or in the isotope 235
SNM4 Any material artificially enriched by any of the foregoing

21 TOTAL SNM
Weight must be noted in grams (g).

22 MAXIMUM GRAMS SNM IN ANY SHIPMENT
Self-explanatory.

23 CHELATE CODE
CA1 EDTA
CA2 DTPA
CA3 Carboic Acid
CA4 Hydroxy-carboic Acids
CA5 Citric Acid
CA6 Glucinic Acid
CA7 Other (describe)

24 VOLUME OF LLRW
Volume of LLRW containing chelating agents (m³).

25 WEIGHT OF LLRW
Weight of LLRW containing chelating agents (kg).

26 WEIGHT % CHELATES
Weights less than 1% need not be reported.

G. DISPOSAL AND STORAGE

27 LLRW CLASS
Class of radioactive waste as described in sections 61.55 and 61.56 of Title 10, Code of Federal Regulations, as in effect on January 26, 1983, attached following instructions.
AS Class A stable
AU Class A unstable
B Class B
C Class C

If you have responded "OTHER" to any request for information please identify column, line, and waste description (from A-1). Use additional pages as necessary.

* E.1 Per processor reduction is 24 to 1.

** E.2 Per processor reduction is 4.53 to 1.

SECTION 11. INFORMATION ON LLRW (cont.)

F. OTHER CHARACTERISTICS (CONT.)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m3)	Weight(kg)					
23	24	25	26	27	28	29	30
1	-----	-----	-----	B	D1	DS1	N/A
2				Au	D5	DS4	N/A
3				Au	D1	DS1	N/A
4				As	D1	DS1	N/A
5				Au	D2	DS4	N/A
6				As	D2	DS4	N/A
7							
8							
9							
10							
11							

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA				
LLRW Class	Hazard Code	Volume (m3)	Activity (MBq)	Radionuclides
31	32	33	34	35
-----	-----	-----	-----	-----

If you have responded "OTHER" to any request for information, please identify column, line, and waste description (from A-1). Use additional pages as necessary.

Col 29, line 2: Stored on site.

Col 29, Lines 5, 6: Sent to Duratek or Studsvik for processing / burial.

28 DISPOSITION CODE

- D1 Directly to disposal
- D2 Treatment prior to disposal
- D3 Treatment/returned for storage
- D4 Treatment/no disposal (decontamination and reuse)
- D5 Storage/no treatment
- D6 Hold for decay on site and dispose as non-radioactive
- D7 Hold for decay off site

- and dispose as non-radioactive
- D8 Treatment / off-site storage
- D9 Other (describe)

29 DISPOSAL SITE

- DS1 Barnwell, SC
- DS2 Clive, UT
- DS3 Richland, WA
- DS4 Other (describe)

30 STORAGE SITE

- S1 On site
- S2 Radiac
- S3 NDL
- S4 Adco
- S5 Other (describe)

H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA

31 LLRW CLASS
See codes G-27.

32 HAZARD CODE
See codes E-4.

33 VOLUME
Volume must be noted in cubic meters (m3).

34 ACTIVITY
Activity must be reported in MegaSecquerels (MI3q).

35 RADIONUCLIDES
As applicable to H-3.

SECTION 11. INFORMATION ON LLRW (cont.)

1. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)		
LLRW Class	Volume (m3)	Activity by Radionuclide (MBq)
Au	5.83	1.70E+05
Au	5.83	1.29E+05 (Continued on
Au	5.83	6.43E+05 supplemental page)

SECTION III. LLRW SUMMARY

A. 2002 DISPOSAL TOTALS							
Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		
Class A	Volume (m3)	Activity (MBq)	Volume (m3)	Activity (MBq)	Volume (m3)	Activity (MBq)	SUBTOTALS BY CLASS
Via Broker/ Processor	26.05 (DK) 1.56 (SV)	3.33E+6 (DK) 2.22E+06 (SV)	24.49 (DK) 9.39 (SV)	1.83E+05 (DK) 8.13E+06 (SV)			Volume -A Activity -A
Direct Transfer	17.25	2.93E+6					78.74 1.683E+7
Class B							Volume B Activity -B
Via Broker/ Processor							
Direct Transfer	3.41	1.04E+07					3.41 1.04E+07
Class C							Volume -C Activity -C
Via Broker/ Processor							
Direct Transfer							
TOTALS	48.27	1.89E07	33.88	8.31E06			
TOTAL ALL CLASSES						VOLUME	ACTIVITY
						82.15	2.72E+07

B. 2002 Interim Storage Totals						
Classes	Placed in Interim storage during 2002		Place in Interim Storage Before 2002		Subtotals by Class	
Class A	Volume (m3)	Activity (MBq)	Volume (m3)	Activity (MBq)	Volume - A	Activity - A
On Site	50.18	1.86E+06			50.18	1.86E+06
Off site						
Class B					Volume - B	Activity - B
On Site						
Off Site						
Class C					Volume - C	Activity - C
On Site						
Off Site						
TOTALS	50.18	1.86E+06			VOLUME	ACTIVITY
TOTAL ALL CLASSES					50.18	1.86E+06

SECTION II: Information on LLRW (Continued)

1. Containers with surface radiation levels greter than 2mSv/hr (200 mR/hr).
(Continued)

LLRW (36)	Volume (m3) (37)	Activity by Radionuclide (mBq) (38)
As	5.83	3.37E+06
Au	5.83	3.58E+05
As	5.83	2.01E+06
As	5.83	7.48E+05
Au	5.83	3.20E+05
Au	5.83	2.21E+05
Au	5.83	4.95E+05
Au	5.87	5.86E+05
B	3.41	1.04E+07
As	5.83	7.65E+05
Au	5.83	6.72E+05
Au	5.83	3.71E+05
Au	5.83	6.73+05
Au	5.83	1.44E+05
Au	5.83	5.37E+05
As	5.55	1.58E+06
As	5.83	1.10E+06
As	5.83	1.37E+06
Au	2.52	1.27E+05

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed during 2002 (see response to Section 111-A). Use additional sheets necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
Au-199	2.37E-31	Co-58	1.46E+05	Nb-95	9.02E+02
Co-60	6.72E+06	H-3	4.54E+02	Sb-125	2.29E+04
Zn-65	2.21E+06	Fe-59	1.07E+05	Sb-124	1.10E+04
Mn-54	3.10E+06	Zr-95	8.03E+02	I-129	1.10E+02
Cs-137	4.90E+04	Tc-99	9.57E+03		
Ce-144	1.56E+03	Cr-51	8.56E+04		
C-14	3.56E+04	Ag-110m	4.97E+04		
Ni-63	1.72E+05	Pu-241	7.20E+03		
Ni-59	1.84E+02	Am-241	3.28E+04		
Fe-55	1.44E+07	Sn-113	2.61E+03		
Sr-90	2.52E+02	Ag-110	5.74E+02		

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW disposed of, as reported in Section 111-A.

TOTAL ACTIVITY 2.72E+07

A.2	If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.
	None.

B.1 List the radionuclides contained in the LLRW being held in storage for decay on site of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
None					

B.2 List the radionuclides contained in the LLRW being held in storage for decay off site of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide	Radionuclide
None					

C1 On site List radionuclides contained in LLRW in Interim storage on site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
Co-60	5.30E+05	Co-58	5.76E+04		
Zn-65	1.17E+05	H-3	7.16E+01		
Mn-54	3.48E+05	Fe-59	4.96E+04		
Cs-137	2.17E+02	Cr-51	7.74E+04		
C-14	1.32E+03	Ag-110m	1.75E+04		
Ni-63	9.85E+03	Au-199	3.89E+02		
Nb-95	2.17E+02	Sb-124	2.75E+03		
Fe-55	6.76E+05				

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW stored on site as reported.

TOTAL ACTIVITY	MBq
1.88E+06	

C.2 Off site -List radionuclides contained in LLRW in Interim storage off site as of December 31, 2002. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
None					

Total activity for all radionuclides listed above:

Total activity should equal total for LLRW being stored off site as reported.

TOTAL ACTIVITY	MBq

C.3 If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.	
None.	

SECTION V. STORAGE FACILITY INFORMATION

NOTE: If your facility manages LLRW by storage for decay only, you only need to complete the Condensed Form for Decay in Storage Only.

ON-SITE STORAGE FACILITIES	
A.1	Briefly describe your on-site LLRW storage facilities. Include facilities you have for storage of special LLRW forms such as freezers, shielded areas for high-radiation-level wastes, or bermed storage areas for liquid wastes, and estimate the storage capacity for each. Concrete pits at both Unit 1 and Unit 2 have sufficient storage capacity for twenty (20) years at current processing rates.
A.2	Total Storage Capacity: <u>1.24E+04</u> m ³
A.3	Estimated maximum volume of LLRW held in storage for decay at any one time: <u>22</u> m ³
B	Do you have any plans for increasing your on-site storage capacity? <u>No</u> <div style="float: right;"> <input checked="" type="checkbox"/> No. Skip to C. <input type="checkbox"/> Yes. Complete this section. </div>
Describe such plans and indicate your expected new storage capacity.	

OFF-SITE STORAGE FACILITIES	
c	Off-site storage facility information. Use additional pages if necessary. <u>None</u>
Please indicate if off-site storage is for storage for decay or interim storage. <div style="float: right;"> <input type="checkbox"/> Storage for decay <input type="checkbox"/> Interim storage </div>	
Name of facility:	
Address:	
Contact and phone number:	

NOTE: Please answer the following question based on LLRW requiring disposal at licensed LLRW disposal facilities, not LLRW held in storage for decay. DO NOT USE DESCRIPTIVE TERMS SUCH AS UNLIMITED, CONTINUOUS, OR INDEFINITE

ESTIMATED STORAGE TIME FOR LLRW REQUIRING DISPOSAL	
D	Based on your anticipated LLRW generation rate and your anticipated capacity to store waste as of December 31, 2002, HOW MANY MONTHS could you continue to produce and store LLRW on site if access to licensed LLRW disposal facilities were no longer available? <u>240</u> months
NOTE: Answer must be in months	

SECTION VI. FUTURE LLRW GENERATION

FUTURE LLRW GENERATION THAT WILL REQUIRE DISPOSAL				
Year	Class	Activity (MBq)	Volume (m ³)	Radionuclides
2003	A	3.7E7	120	Co-60, Zn-65, Mn-54, Cs-137, Ce-144, C-14, Ni-63,
	B	1.5E7	3.71	Ni-59, Fe-55, Co-58, Sr-90, H-3, Fe-59, Sr-89, Tc-99,
	C	2.22E10	1.7	Ag-110m, Pu-241, Am-241, Cm-242, Pu-239,
	Total	2.23E10	125.41	Pu-238, Sb-124
2004	A	3.7E7	120	Distribution of nuclides is not expected to change
	B	1.5E7	3.71	significantly.
	C	0	0	
	Total	5.2E7	123.71	Note: Numbers assume volume reduction for DAW,
2005	A	3.7E7	120	no volume reduction for Bead Resin or Powdered
	B	1.5E7	3.71	Resin.
	C	0	0	
	Total	5.2E7	123.71	
2006	A	3.7E9	120	Note: Volume reduction methods will be used for
	B	1.5E7	3.71	all waste when fiscally prudent.
	C	2.2E10	1.7	
	Total	2.23E10	125.41	
2007	A	3.7E7	120	
	B	1.5E7	3.71	
	C	0	0	
	Total	5.2E7	123.71	

Unit 2 2003

RETURN ANNUALLY BY MARCH 1st TO:

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Radioactive Waste Policy and Nuclear Coordination Program
 17 Columbia Circle
 Albany, NY 12203-6399
 llrwadmin@NYSERDA.ORG

CODE (official use only)

NOTE: Please refer to the Instructions before completing this form.

**LOW-LEVEL RADIOACTIVE WASTE
 REPORT FORM**

FOR THE PERIOD: JANUARY 1st THROUGH DECEMBER 31st

PLEASE TYPE OR PRINT LEGIBLY

- Place mailing label from postcard in the space to the right
- Mark any corrections in the table below

Place Mailing Label Here
 (Leave Blank If Submitting Electronically)

SECTION I. GENERATOR INFORMATION

A Updated Generator Information			
ENTER 4-DIGIT GENERATOR ID (can be found on the mailing label on annual postcard) <u>0352</u>		ENTER REPORTING YEAR <u>2003</u>	
Licensing Agencies		License No(s).	
New York State Department of Labor			
New York State Department of Health			
New York City Department of Health			
U.S. Nuclear Regulatory Commission		NPF-69	
Your Facility Phone No.: (315)349 - 2749		Ext.	Email Address Thomas.Paeno@constellation.com
Contact Thomas Paeno		Title Radwaste Operations Manager	
Facility Name Nine Mile Point Unit 2			
Street Address 348 Lake Road			
City Oswego		County Oswego	State NY Zip Code 13126
B Name and principal office of facility where LLRW is generated if different from A (above)			
Street Address			
City		County	State Zip Code
C	Preparer's Name Tim Carroll	Title Technician C	Telephone and Extension (315) 349 - 4116

D	Identify, by issuing authority and number, permits that authorize transfer of your LLRW to a licensed LLRW disposal facility:		
	Issuing Authority	Disposal Site Location	Disposal Site Use Permit Number
	South Carolina DHEC	Barnwell	0408-31-03-X
E	FACILITY TYPE CODE Type in the appropriate letter and number for the appropriate code OR choose one from EACH DROP-DOWN MENU BELOW. Refer to the instructions to determine the facility type code that best describes your facility. Choose only one code consisting of a letter and number.		
	Choose a Letter: A. Nuclear Power Plant Choose a Number: 1. Bolling Water Reactor		
F	Briefly describe the activities, processes, or uses of radioactive material that result in LLRW generation at your facility.		
	Processing waste water for reuse in plant systems. Dry active waste is generated from operation and maintenance activities and from plant modifications.		
This Report Form has been submitted by the preparer listed in item 1(C) above. In submitting this form, preparer hereby certifies that the information set forth is true to the best of the preparer's knowledge.		DATE: 3/30/04	

SECTION II. INFORMATION ON LLRW

CODES for SECTION II of the LOW-LEVEL RADIOACTIVE WASTE REPORT FORM

Note: If you respond "other" to any item, please provide an explanation on the Attachment Sheet provided in Section VII.

A. LLRW AS GENERATED				
Waste Description Code	Waste Management Method	Chemical Form Code	Other Hazard Code	
1	2	3	4	
1	32	W1	C4	H8
2	32	W1	C4	H8
3	39	W1	C4	H8
4	32	W1	C4	H8
5	38	W1	C4	H8
6	38	W1	C4	H8
7				
8				
9				
10				
11				

A. LLRW AS GENERATED

1 WASTE DESCRIPTION CODE

Choose the category that best describes the waste.

- 20 Charcoal
- 21 Incinerator Ash
- 22 Soil
- 23 Gas
- 24 Oil
- 25 Aqueous Liquid
- 26 Filter Media
- 27 Mechanical Filter
- 29 Demolition Rubble
- 30 Cation Ion-exchange Media
- 31 Anion Ion-exchange Media
- 32 Mixed Bed Ion-exchange Media
- 33 Contaminated Equipment
- 34 Organic Liquid (except oil)
- 35 Glassware or Labware
- 36 Sealed Source/Device
- 37 Paint or Plating
- 38 Evaporator Bottoms/ Sludges/Concentrates
- 39 Dry or Compactible Trash (paper, plastic, glass, etc.)
- 40 Noncompactible Trash (metal components, etc.)
- 41 Animal Carcass
- 42 Biological Material (except animal carcass)
- 43 Activated Material
- 44 Material that will be Incinerated
- 59 Other (describe)

2 WASTE MANAGEMENT

- METHOD**
- Transfer to Authorized Recipient
- W1 Transfer to Disposal Site via Broker
 - W2 Transfer to Disposal Site Directly
 - W3 Transfer - Other (describe)
- Interim Storage
- W4 Placed in Storage before current reporting year
 - W5 Placed in Storage during current reporting year
 - W6 Shipped for Treatment prior to Storage
- Storage for Decay
- W7 Storage for Decay (Only limited information required. See instructions.)

3 CHEMICAL FORM CODE

- C1 Paper and Plastic
- C2 Glass
- C3 Metals
- C4 Metal Oxides
- C5 Inorganic Salts
- C6 Organic Salts
- C7 Nucleic Acids
- C8 Amino Acids, Proteins, Enzymes
- C9 Carbohydrates, Sugars
- C10 Lipids, Fatty Acids
- C11 Other (describe)

4 OTHER HAZARD CODE

- H1 Ignitable
- H2 Corrosive
- H3 Toxic
- H4 Reactive
- H5 Pathogenic
- H6 Carcinogenic
- H7 Other (describe)
- H8 None

B. ON-SITE WASTE TREATMENT

Treatment Code		Sorption or Solidification Code	Effect of Treatment	Post-Treatment Volume (m ³)
5		6	7	8
1	T19		NONE	116
2	T19		NONE	11.4
3	T21		NONE	145
4	T19		NONE	7.6
5	T21		NONE	17.4
6	T19		NONE	17.4
7				
8				
9				
10				
11				

B. ON-SITE WASTE TREATMENT

5 TREATMENT CODE

- T1 Compaction
- T2 Supercompaction
- T3 Evaporation/ Crystallization
- T4 Fluid Bed Drying/ Calcination
- T5 Wet Oxidation
- T6 Membrane Separation (ultrafiltration, reverse osmosis)
- T7 Incineration
- T8 Solidification
- T9 Adsorption
- T10 Sorting/Segregation
- T11 Macroencapsulation
- T12 Absorption
- T13 Decontamination
- T14 Surface Removal (scabbing, abrasive cleaning)
- T15 Dry Chemical Packing (lime)
- T16 Size Reduction (sectioning, shredding, cutting)
- T17 Steam Reform
- T18 Catalytic Extraction Process
- T19 Dewatered
- T20 Other (describe)
- T21 None

6 SOLIDIFICATION OR SORPTION CODE

Sorption

- 60 Speedi Dri
- 61 Celetom
- 62 Floor Dry/Superfine
- 63 Hi Dri
- 64 Safe T Sorb
- 65 Safe N Dri
- 66 Florco
- 67 Florco X
- 68 Solid A Sorb
- 69 Chemsil 30
- 70 Chemsil 50
- 72 Dicaperl HP200
- 73 Dicaperl HP500
- 74 Petroset
- 75 Petroset II
- 76 Aquaset
- 77 Aquaset II
- 89 Other (describe)

Solidification

- 90 Cement
- 91 Concrete (encapsulation)
- 92 Bitumen
- 93 Vinyl Chloride
- 94 Vinyl Ester Styrene
- 99 Other (describe)
- 100 None Required

7 EFFECT OF TREATMENT

Impact of treatment on volume may be shown in percent or ratio. Note increase or decrease by 8 or 9, and describe change in chemical and physical form.

8 POST-TREATMENT VOLUME

Volume must be noted in cubic meters (m³).

SECTION II. INFORMATION ON LLRW (cont.)

C. ON-SITE CONTAINER INFORMATION				D. BROKER/PROCESSOR INFORMATION		
Container Description Code	Container Volume (m ³)	Maximum Surface Radiation Level (mSv/hr)	Number of Containers	Broker Code	Processor Code	Treatment Code
9	10	11	12	13	14	15
1 7	5.8	255	23	BC10	P10	T17
2 7	3.8	10	3	BC10	P10	T17
3 2	72.5	0.4	2	BC10	P1	T7
4 7	3.8	1040	2	BC10	P10	T17
5 7	5.8	30	3	BC10	P1	T3
6 7	5.8	50	3	BC10	P10	T21
7						
8						
9						
10						
11						

C. ON-SITE CONTAINER INFORMATION

9 CONTAINER DESCRIPTION CODE

- 1 Wooden Box or Crate
- 2 Metal Box
- 3 Plastic Drum or Pail
- 4 Metal Drum or Pail
- 5 Metal Tank or Liner
- 6 Concrete Tank or Liner
- 7 Polyethylene Tank or Liner
- 8 Fiberglass Tank or Liner
- 9 Demineralizer
- 10 Gas Cylinder
- 11 Bulk, Unpackaged Waste
- 12 Unpackaged Components
- 13 High-Integrity Container
- 14 Fiberboard Drum
- 19 Other (describe)

10 CONTAINER VOLUME

Volume must be noted in cubic meters (m³).

11 MAXIMUM SURFACE RADIATION LEVEL

Surface radiation must be noted in mSv/hr.

12 NUMBER OF CONTAINERS

This information is required for each waste form.

D. BROKER/PROCESSOR INFORMATION

13 BROKER CODE

- BC1 NDL
- BC2 Radiac
- BC3 Adco
- BC4 Teledyne
- BC5 US Ecology
- BC6 Chem-Nuclear
- BC7 SEG
- BC8 Bionomics
- BC9 Direct transfer
- BC10 Other (describe)
- BC11 None

14 PROCESSOR CODE

- P1 GTS Duratek
- P2 NSSI
- P3 DSSI
- P4 Chem Nuclear, IL
- P5 Alaron
- P6 Quadrex, TN
- P7 Permafex, FL
- P8 ATG, TN
- P9 ATG, WA
- P10 Other (describe)

15 TREATMENT CODE

See codes B-5.

SECTION II. INFORMATION ON LLRW (cont.)

E. POST-PROCESSOR TREATMENT INFORMATION		F. OTHER CHARACTERISTICS					
Effect of Treatment	Total Post-Treatment Volume (m ³)	Source Material		SNM			
		Source Material Code	Weight of Source Material (grams)	SNM Code	Total SNM (grams)	Maximum grams SNM in any shipment (grams)	
16	17	18	19	20	21	22	
1	13:	9.9	NONE	0	NONE	0	0
2	13:	0.9	NONE	0	NONE	0	0
3	17:	8.1	NONE	0	NONE	0	0
4	8:1	0.9	NONE	0	NONE	0	0
5	44:	0.4	NONE	0	NONE	0	0
6	----	----	NONE	0	NONE	0	0
7							
8							
9							
10							
11							

E. POST-PROCESSOR TREATMENT INFORMATION

16 EFFECT OF TREATMENT
See instructions for B-7,

17 TOTAL POST-TREATMENT VOLUME
Volume must be noted in cubic meters (m³).

F. OTHER CHARACTERISTICS

18 SOURCE MATERIAL CODE
Source Material C Enter one code per line. Use a separate line for each type of source material transferred.

- NU Natural Uranium
- DU Depleted Uranium
- UO Uranium Ores
- NT Natural Thorium
- TO Thorium Ores

19 WEIGHT OF SOURCE MATERIAL
Weight must be noted in grams (g).

20 SNM CODE
Special Nuclear Material means one of the following:

- SNM1 Plutonium
- SNM2 Uranium-233
- SNM3 Uranium enriched in the isotope 233 or in the isotope 235
- SNM4 Any material artificially enriched by any of the foregoing

21 TOTAL SNM
Weight must be noted in grams(g).

22 MAXIMUM GRAMS SNM IN ANY SHIPMENT
Self-explanatory.

SECTION II. INFORMATION ON LLRW (cont.)

F. OTHER CHARACTERISTICS (cont.)				G. DISPOSAL AND STORAGE INFORMATION			
Waste With Chelating Agents				LLRW Class	Disposition Code	Disposal Site Code	Storage Site Code
Chelate Code	Volume and Weight of LLRW		Weight % Chelates				
	Volume (m ³)	Weight (kg)					
23	24	25	26	27	28	29	30
1				AU	D2	DS2	
2				AU	D2	DS2	
3				AU	D2	DS2	
4				AU	D2	DS1	
5				AU	D2	DS2	
6				AU	D9	DS2	S5
7							
8							
9							
10							
11							

3 CHELATE CODE

- CA1 EDTA
- CA2 DTPA
- CA3 Carboic Acid
- CA4 Hydroxy-carboic Acids
- CA5 Citric Acid
- CA6 Glucinic Acid
- CA7 Other (describe)

4 VOLUME OF LLRW

Volume of LLRW containing chelating agents (m³).

5 WEIGHT OF LLRW

Weight of LLRW containing chelating agents (kg).

6 WEIGHT % CHELATES

Weights less than 1% need not be reported.

G. DISPOSAL AND STORAGE

27 LLRW CLASS

Class of radioactive waste as described in sections 61.55 and 61.56 of Title 10, Code of Federal Regulations, as in effect on January 26, 1983, attached following instructions.

- AS Class A stable
- AU Class A unstable
- B Class B
- C Class C

28 DISPOSITION CODE

- D1 Directly to disposal
- D2 Treatment prior to disposal
- D3 Treatment/returned for storage
- D4 Treatment/no disposal (decontamination and reuse)
- D5 Storage/no treatment
- D6 Hold for decay on site and dispose as non-radioactive
- D7 Hold for decay off site and dispose as non-radioactive
- D8 Treatment/off-site storage
- D9 Other (describe)

29 DISPOSAL SITE

- DS1 Bamwell, SC
- DS2 Clive, UT
- DS3 Richland, WA
- DS4 Other (describe)

30 STORAGE SITE

- S1 On site
- S2 Radiac
- S3 NDL
- S4 Adco
- S5 Other (describe)

H. LLRW NOT MEETING DISPOSAL FACILITY ACCEPTANCE CRITERIA

LLRW Class	Hazard Code	Volume (m ³)	Activity (MBq)	Radionuclides
31	32	33	34	35

H. LLRW WITH UNACCEPTABLE DISPOSAL CRITERIA

- 31 LLRW CLASS**
See codes G-27.
- 32 HAZARD CODE**
See codes B-4.
- 33 VOLUME**
Volume must be noted in cubic meters (m³).
- 34 ACTIVITY**
Activity must be reported in MegaBecquerels (MBq).
- 35 RADIONUCLIDES**
As applicable to H-3.

I. CONTAINERS WITH SURFACE RADIATION LEVELS GREATER THAN 2mSv/hr (200mR/hr)

LLRW Class	Volume (m ³)	Activity by Radionuclide (MBq)
36	37	38
		See Attached Sheets

Packages >2 mSv

A		A		A		A	
5.8		5.8		5.8		5.8	
50		25		50		50	
mCi	MBq	mCi	MBq	mCi	MBq	mCi	MBq
4.07E-01	1.51E+01	4.07E-01	1.51E+01	4.07E-01	1.51E+01	3.05E-01	1.13E+01
6.30E+00	2.33E+02	4.87E+00	1.80E+02	3.77E+00	1.39E+02	4.70E+00	1.74E+02
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.40E+03	5.18E+04	1.27E+03	4.70E+04	9.26E+02	3.43E+04	9.83E+02	3.64E+04
7.33E+03	2.71E+05	5.66E+03	2.09E+05	4.37E+03	1.62E+05	5.42E+03	2.01E+05
4.23E+01	1.57E+03	4.62E+01	1.71E+03	3.58E+01	1.32E+03	1.95E+01	7.22E+02
6.68E+01	2.47E+03	7.54E+01	2.79E+03	4.85E+01	1.79E+03	2.90E+01	1.07E+03
4.34E+03	1.61E+05	3.35E+03	1.24E+05	2.59E+03	9.58E+04	3.22E+03	1.19E+05
4.64E+01	1.72E+03	3.59E+01	1.33E+03	2.78E+01	1.03E+03	3.46E+01	1.28E+03
1.44E+03	5.33E+04	1.35E+03	5.00E+04	9.91E+02	3.67E+04	8.45E+02	3.13E+04
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4.16E+01	1.54E+03	4.47E+01	1.65E+03	3.55E+01	1.31E+03	2.95E+01	1.09E+03
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.33E+00	4.92E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.25E+01	8.33E+02	1.74E+01	6.44E+02	1.34E+01	4.96E+02	1.68E+01	6.22E+02
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.47E+04	5.45E+05	1.19E+04	4.39E+05	9.04E+03	3.35E+05	1.06E+04	3.92E+05

SECTION III. LLRW SUMMARY

A. DISPOSAL TOTALS FOR THIS YEAR								
Classes	Disposed at: Barnwell, SC		Disposed at: Clive, UT		Disposed at: Richland, WA		SUBTOTALS BY CLASS	
Class A	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume -A	Activity -A
Via Broker/ Processor	0.900	33600000.000	19.360	16381900.000			20.260	49981900.00 0
Direct Transfer							0.000	0.000
Class B							Volume -B	Activity -B
Via Broker/ Processor							0.000	0.000
Direct Transfer							0.000	0.000
Class C							Volume -C	Activity -C
Via Broker/ Processor							0.000	0.000
Direct Transfer							0.000	0.000
TOTALS	0.900	33600000.000	19.360	16381900.000	0.000	0.000		
TOTAL ALL CLASSES							VOLUME	ACTIVITY
							20.260	49981900.00 0

B. INTERIM STORAGE TOTALS

Classes	Placed in Interim Storage during this year		Placed in Interim Storage before this year		SUBTOTALS BY CLASS	
	Volume (m³)	Activity (MBq)	Volume (m³)	Activity (MBq)	Volume - A	Activity - A
Class A						
On Site					0.000	0.000
Off Site	17.400	1170000.000			17.400	1170000.000
Class B					Volume - B	Activity - B
On Site					0.000	0.000
Off Site					0.000	0.000
Class C					Volume - C	Activity - C
On Site					0.000	0.000
Off Site					0.000	0.000
TOTALS	17.400	1170000.000	0.000	0.000		
TOTAL ALL CLASSES					17.400	1170000.000

SECTION IV. RADIONUCLIDE INFORMATION FOR WASTE DISPOSED, HELD FOR DECAY, AND STORED

NOTE: Radionuclides mean each individual radionuclide if known, or, at a minimum, all radionuclides that have been or would have to be identified on disposal site manifests. H-3, C-14, Tc-99, and I-129 must be identified where present.

A.1 List the radionuclides contained in the LLRW disposed of during this year (see response to Section III-A). Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H-3	3280.000	C-14	15400.000	Cr-51	34300.000
Mn-54	2730000.000	Fe-55	26200000.000	Fe-59	50300.000
Co-58	85500.000	Co-60	11100000.000	Ni-63	169000.000
Zn-65	9500000.000	Sr-90	34.900	Zr-95	471.000
Nb-95	204.000	Ag-110m	80500.000	Sn-113	428.000
Sb-124	2960.000	Sb-125	6250.000	Cs-137	6440.000
Ce-144	957.000				
					Total Activity in MBq 49986024.900

Total activity for all radionuclides listed above:
 Total activity should equal total for LLRW disposed of, as reported in Section III-A.

A.2 If any of the radionuclides listed in Table A-1 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.	
All waste disposed of consists of mixed fission products. Radionuclides with half-lives less than 90 days can not be separated from the waste, and are disposed of with the other mixed fission products.	

C.2 Off site ▸ List radionuclides contained in LLRW in Interim storage off site as of December 31. Use additional sheets as necessary.					
Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)	Radionuclide	Activity (MBq)
H3	41.400	C-14	494.000	Mn-54	118000.000
Fe-55	572000.000	Fe-59	3760.000	Co-58	5660.000
Co-60	339000.000	Ni-63	3640.000	Zn-65	118000.000
Aq-110m	4060.000	Cs-137	1760.000		
					Total Activity in MBq 1166415.400

Total activity for all radionuclides listed above:
Total activity should equal total for LLRW being stored off site, as reported.

C.3	If any of the radionuclides listed in Table C-1 or C-2 have half-lives of less than 90 days, please explain why these are not being held for decay and eventual disposal as non-radioactive waste.

SECTION V. STORAGE FACILITY INFORMATION

NOTE: If your facility manages LLRW by storage for decay only, you only need to complete the Condensed Form for Decay in Storage Only.

ON-SITE STORAGE FACILITIES	
A.1	Briefly describe your on-site LLRW storage facilities. Include facilities you have for storage of special LLRW forms such as freezers, shielded areas for high-radiation-level wastes, or bermed storage areas for liquid wastes, and estimate the storage capacity for each.
Storage facility consists of 2 concrete pits at Unit 1 and 3 concrete rooms at Unit 2 with sufficient storage capacity for Unit 1 and 2 for 20 years	
A.2	Total Storage Capacity: <u>4360</u> m ³
A.3	Estimated maximum volume of LLRW held in storage for decay at any one time: <u>0</u> m ³
B	Do you have any plans for increasing your on-site storage capacity? <input checked="" type="checkbox"/> No. Skip to C. <input type="checkbox"/> Yes. Complete this section.
Describe such plans and indicate your expected new storage capacity.	

OFF-SITE STORAGE FACILITIES	
C Off-site storage facility information. Use additional pages if necessary.	
Please indicate if off-site storage is for storage for decay or interim storage.	
<input type="checkbox"/> Storage for decay <input checked="" type="checkbox"/> Interim storage	
Name of facility: Studsvik Processing Facility	
Address: TC Runion Road Erwin, TN	
Contact and phone number: Ron Leonard 423-735-6300	

NOTE: Please answer the following question based on LLRW requiring disposal at licensed LLRW disposal facilities, *not* LLRW held in storage for decay. DO NOT USE DESCRIPTIVE TERMS SUCH AS UNLIMITED, CONTINUOUS, OR INDEFINITE.

ESTIMATED STORAGE TIME FOR LLRW REQUIRING DISPOSAL	
D Based on your anticipated LLRW generation rate and your anticipated capacity to store waste as of December 31, HOW MANY MONTHS could you continue to produce and store LLRW on site if access to licensed LLRW disposal facilities were no longer available?	NOTE: Answer <i>must</i> be in months. <div style="text-align: right;"><u>240</u> months</div>

SECTION VI. FUTURE LLRW GENERATION

2003 FUTURE LLRW GENERATION THAT WILL REQUIRE DISPOSAL				
Year	Class	Activity (MBq)	Volume (m ³)	Radionuclides
2004	A	37000000.000	120.000	Co-60, Zn-65, Mn-54, Cs-137, Ce-144, C-14, Ni-63, Ni-59, Fe-55,
	B	15000000.000	3.710	Fe-59, Co-58, Sr-90, H-3, Sr-89, Sr-90, Tc-99, Ag-110m.
	C			
	Total	52000000.000	123.710	
2005	A	37000000.000	120.000	Same as above
	B	15000000.000	3.710	
	C			
	Total	52000000.000	123.710	
2006	A	3700000000.000	120.000	Same as above
	B	15000000.000	3.710	
	C			
	Total	3715000000.000	123.710	
2007	A	37000000.000	120.000	Same as above
	B	15000000.000	3.710	
	C			
	Total	52000000.000	123.710	
2008	A	37000000.000	120.000	Same as above
	B	15000000.000	3.710	
	C			
	Total	52000000.000	123.710	

SECTION VII. ATTACHMENT SHEET

FOR ANY ADDITIONAL INFORMATION (Table will automatically expand as information is entered)

Section IIc Rows 1, 2, 4 Column 13 Studsvik Processing Facility

Section IIc Rows 3, 5 Column 13 GTS Duratek

Section IIc Rows 1, 2, 4 Column 14 Studsvik Processing Facility

Section IIc Row 6 Column 28 Not processed by year's end - In interim storage awaiting processing in 2004

Section IIc Row 6 Column 29 Studsvik Porcessing Facility