



Texas Department of Health

William R. Archer III, M.D.
Commissioner

1100 West 49th Street
Austin, Texas 78756-3189
(512) 458-7111

Patti J. Patterson, M.D., M.P.H.
Executive Deputy Commissioner

Radiation Control
(512) 834-6688
FAX (512) 834-6654

December 7, 1999

Waste Control Specialists, LLC
Attn: David Kania
1710 West Broadway
Andrews, Texas 79714

Ref: Compliance No. L991460
License No. L04971

Re: Inspection of November 16, 1999, by Eric Skotak at 30 miles West of Andrews, State Highway 176. Site No. 000.

Dear Mr. Kania:

The Bureau of Radiation Control has recently evaluated a written report of the compliance inspection referenced above. By this correspondence, we are pleased to inform you that your radiation safety program, as it pertains to current authorizations, adequate recordkeeping, and conformance to approved operating and safety procedures, appears to be in compliance.

If you have any questions, please contact me at (512) 834-6688, ext. 2009.

Sincerely,

Robert L. Green
Regional Health Physics Coordinator
Division of Compliance and Inspection-RAM

RLG/sd

B/22

COV
(09/16/99)

TEXAS DEPARTMENT OF HEALTH
Bureau of Radiation Control

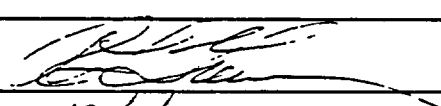
Inspection Date 11/16/1999

INSPECTION REPORT

991460

(Use this form for inspections only)

Compliance No. =>

Name and Address of Licensee/Registrant Waste Control Specialists, LLC Attn: David Kania 1710 West Broadway Andrews, TX 79714		Lic/Reg No.: L04971 Site No.: 000
		Expiration Date: 11/30/04 Inspection Region: 09 Category Code: 04 Industrial Use Code: 079 Type of Use: Waste Proc. III
Address of Inspection 30 miles west of Andrews, State Highway 176		Type of Inspection <input type="checkbox"/> Announced <input type="checkbox"/> Field <input checked="" type="checkbox"/> Unannounced
Inspection Notice to (Name, Title, Address) same as above		Radiation Safety Officer David Kania RSO Phone No. 505-394-4300
Copy of Inspection Notice to (Name, Title, Address)		"Inspection Findings" were discussed with: David Kania
Telephone No. 505-394-4300	Accompanying Inspector(s) None	
Inspector: Eric Skotak	Reviewed by: 	
Report Date: 12/3/1999	Date Reviewed: 12/16/99	

Inspection Findings: Items of Noncompliance

No items of noncompliance were noted.

RECEIVED
TDH

DEC 03 1999

BUREAU OF
RADIATION CONTROL

Scope of Operations:

Primary operations include the processing, and interim storage of radioactive and mixed waste, and disposal of exempt waste. Other operations include source leak testing, and pocket-dosimeter calibration.

General Information:

David Kania (RSO), Steve Jacobs (Radiation Safety Supervisor), and Lydia Jacobs (Waste Tracking) were the primary contacts for this inspection.

Document Posting:

Document posting was compliant with 25 TAC §289.203(b). The various records required by the license and TRCR were located in either the RSO's office, the Radiation Safety Supervisor's office, or the fireproof vault.

RPP & ALARA Program:

The RPP annual audit was last performed in December 1998, and was reviewed during a previous inspection. The RPP was reviewed during a previous inspection.

Training Program:

Training records were reviewed for the period since the previous inspection. Training provided during this period included Radiation safety tech. training, Rad. worker challenge test, 8 hour refresher, 40 hour Hazwoper, respirator physicals, respirator fit tests, bioassays, whole body counts, and other hazardous materials training.

Waste Volume Limits:

The license sets limits on the volume of waste to be present in certain buildings at any given time. The limits are in units of ft³, and are: 262,440 ft³ in the bin storage area, 36,750 ft³ in the container storage building, and 3,675 ft³ in the stabilization building. The November 2, 1999 inventory lists the following volumes: 32,459.56 ft³ in the bin storage area, and 10,875.2 ft³ in the container storage area. The volume of waste in the stabilization building was not listed.

The November 2, 1999 inventory supplied by the licensee, *Inventory Shipment & Processing Files*, is attached to this report.

Waste Activity Limits:

A waste inventory is produced monthly. The most recent inventory was produced on November 2, 1999, and listed the following activities by waste category: Category I = 1.35 Ci; Category II = 0.0408 Ci; Category III = 0.138 Ci; Category IV = 16,000 Ci.

The above inventory was well within the licensed limits. The inventory category with the greatest percentage of the authorized maximum activity was Category IV, 16,000 Ci, which was 8% of the 200,000 Ci authorized.

Special Nuclear Material is limited to quantities not to exceed that specified in 25 TAC §289.201(b). The licensee's inventory of November 2, 1999 listed the following: 0.0108 grams U-233 (limit = 200g), 163 grams of U-235 (limit = 350g), 1.22 grams of Pu (limit = 200g). The combination of these isotopes calculates to be 0.4719 (limit = 1.0).

Incident Related Cs-137 Contaminated K061 Waste Processing and Disposal:

From the licensee's records, the activity received was 911.68 mCi, the activity returned to the generator was 371.9 mCi, the remaining activity was 539.77 mCi. Not all of the 539.77 mCi has been transferred for disposal. The activity authorized by TDH for disposal was 652.4 mCi.

TDH records agree with the licensee's records regarding activity authorized for transfer for disposal. TDH authorized 157.4 mCi on September 24, 1998, 220 mCi on December 28, 1998, and 275 mCi on August 19, 1999.

The 16 rolloffs of K061 waste containing Am-241 are still stored in the bin storage area. The licensee is preparing a sampling plan to determine the actual activity of Am-241 in the individual K061 containers, and then plans to request disposal of K061 in the containers for which the sample analysis results show no Am-241 is present (Letter dated August 19, 1999 from Hance, Scarborough, & Wright, Attorneys, to TNRCC).

WCS received four rail cars of K061 waste the morning of the inspection.

Exempt Source Material Disposal:

The morning of the inspection, WCS received three rail cars of exempt source material from the U.S. Corps of Engineers, which contained DuPont FUSRAP steel. The licensee expects to receive a total of fourteen rail cars, approximately 2000 tons, of the material. The receipt of this material was approved by TDH. The licensee performed a gamma survey of the external surfaces of the rail cars. I also performed a similar survey, with results not above background. The survey instrument used for my survey was the Ludlum 12S, serial # 67663. See page 7 for two photos of the rail cars.

Exempt NORM Disposal:

At the time of the inspection, the licensee had received twenty-six containers of exempt NORM from the Freeport McMoRan sulphur mine near Pecos. The receipt of this material was approved by TDH. The NORM is fixed inside pipe used in the mining process. Personnel and equipment for the analysis of the NORM was provided by Canberra. Of the containers received, the maximum concentration measured by Canberra was 27 pCi/gram. Copies of the analysis results are attached.

Monitoring Program:

Daily surveys are performed at vent hoods #1, #2, and #3, and at the receiving lab, prep lab, BTU lab, and lunch room. Weekly gamma surveys and wipe samples are performed in the administrative offices, lunch room, chemistry lab, radiation counting room, chemical 90-day storage, construction trailer, ladies personal building, mens locker, P.C. storage, change-out room, container storage area, bin storage area, and the stabilization building. Monthly surveys were performed on the on-site vehicles and equipment. Ludlum models 19 and 3 were used for these surveys. Of the documents reviewed, the survey instruments had been calibrated within the appropriate interval, and the survey results were under applicable limits.

Permacon drum release surveys are required prior to drum removal from the Permacon. Permacon end-of-shift surveys are also required. Of the records reviewed, the Models 19 and 3 used for these surveys were calibrated within the appropriate interval, and the survey results were under applicable limits.

Incoming and outgoing shipment surveys are required. The shipments are by rail or truck. Of the records reviewed, the Models 19 and 3 used for these surveys were calibrated within the appropriate interval, and the survey results were under applicable limits.

Instrument Calibration:

The licensee's procedures state instruments and equipment used for quantitative radiation measurement will be calibrated at intervals not to exceed 12 months. Procedures also state specifically that air sampling equipment, and pocket ionization chambers will be calibrated at intervals not to exceed 12 months. A calibration history follows:

Manufacturer	Model #	Serial #	Calibration Dates
Alpha	6A1	574	8/25/99
Alpha	6A1	561	1/7/99
ELF #2			6/15/99
ELF #3			6/17/99
ELF #4			6/16/99
ELF #6			6/15/99
Ludlum	333-2 CAM	149346	7/26/99, 11/23/98
Ludlum	333-2 CAM	149349	6/16/99, 1/6/99
Ludlum	333-2 CAM	132877	6/1/99, 2/1/99
Ludlum	333-2 CAM	149347	1/11/99
Aptec	PMW-2	9804-014	12/15/98
Eberline	R020	2566	8/29/99, 2/2/99
Eberline	R020	2454	10/12/99, 4/27/99
Ludlum (portal)	L-52		daily operational checks
Ludlum	19	148175	7/29/99, 4/2/99, 10/22/98
Ludlum	19	148146	9/22/99, 4/27/99, 10/22/98
Ludlum	19	144743	2/2/99
Ludlum	19	141417	3/15/99
Ludlum	19	148177	10/22/98
Ludlum	19	151683	3/17/99
Ludlum	77-3	143251	5/7/99
Ludlum	77-3	143253	11/30/99
Ludlum	16	143002	4/12/99
Ludlum	14C	144734	4/27/99
Ludlum	14C	144725	10/15/99, 11/5/98
Ludlum	2929	147746	6/23/99
Ludlum	2929	143873	7/13/99, 12/23/98
Ludlum	3500-3000	150006	5/28/99
Ludlum	3	143753	7/29/99, 11/2/98
Ludlum	3	144372	4/12/99, 10/15/98
Ludlum	3	151380	8/22/99, 4/2/99
Ludlum	3	144286	2/2/99
Ludlum	3	144197	8/29/99, 3/15/99
Ludlum	3	144222	9/22/99, 4/2/99
Ludlum	3	146210	9/29/99, 3/15/99
Ludlum	3	151451	9/22/99, 4/2/99
Ludlum	3	154464	7/30/99, 2/2/99
Ludlum	3	151785	7/30/99, 2/3/99
Ludlum	3	143737	10/15/99, 4/12/99
Ludlum	3	144457	11/2/99
Ludlum	3	143432	9/22/99, 7/29/99
Ludlum	3	143732	9/22/99, 4/27/99
Ludlum	3	151778	2/3/99
Sierra	Mass Flow	31574	11/24/98
HiQ	HD-29A	5527	4/22/99

Manufacturer	Model #	Serial #	Calibration Dates
HiQ	AFC-5 Digital	6940	5/13/99
HiQ	AVS-28A	5860	4/22/99, 12/15/98
HiQ	AVS-28A	6874	6/22/99
HiQ	AVS-28A	6875	6/22/99
HiQ	AVS-28A	6876	6/22/99
HiQ	AVS-28A	6877	6/22/99
HiQ	AVS-28A	6878	6/23/99
HiQ	AVS-28A	6879	6/22/99
HiQ	AVS-28A	6924	4/13/99
HiQ	AVS-28A	6925	4/13/99
HiQ	RV23-0523	7229	4/13/99
HiQ	RV23-0523	7228	4/13/99
HiQ	RV23-0523	6920	4/13/99
HiQ	VS230523CV	7448	4/13/99
HiQ	MVR-0523CV	7450	4/13/99
HiQ	VS23-0523CV	7449	4/13/99
HiQ	VS23-0523CV	7447	4/13/99
HiQ	H809V1	8238	4/22/99
HiQ	H809V1	8238	2/11/99
Bicron	MicroRem	C112A	5/11/99
EG&G Ortec	GV1	Unit1	2/1999
EG&G Ortec	GV1	Unit2	2/19/99
Gamma Products	G5000		6/14/99
Ludlum	2350-1	142503	1/6/99
Ludlum	2200	138675	2/3/99
Ludlum	3-97EP	149353	1/7/99
Ludlum	3	121545	4/12/99
Ludlum	3	143737	11/7/97
Ludlum	3	143753	11/7/97
Ludlum	177	150470	9/17/99, 4/23/99
Ludlum	177	150472	7/30/99, 2/3/99
Ludlum	177	140820	5/12/99
Ludlum	177	140764	5/12/99

Source Inventory & Leak Testing:

No new sources were received since the previous inspection. The latest source inventory was performed on March 4, 1999. An inventory of sealed sources is not required by the license. The license authorizes calibration reference sources only, with a maximum allowed calibration reference source activity of 50 μ Ci. A copy of the inventory is attached.

The sources are not required to be leak tested due to their low activity, but the licensee leak tests the sealed sources quarterly. A copy of the most recent leak test, performed on July 1, 1999, is attached.

Personnel Monitoring:

The licensee does not maintain a 21-2 record for individuals. The licensee does summarize individual dose on a 21-3 equivalent form. The dosimeter supplier is R.S. Landauer which provides quarterly TLD's. Pocket dosimeters are also supplied to individuals by the licensee. The licensee is authorized to calibrate the pocket dosimeters.

The licensee does hire individuals under the age of 18, but assigns duties such that they will not receive an occupational dose. These minors are monitored with whole body dosimeters.

The maximum whole body dose (DDE) for the first quarter 1999 was 40 mRem. The maximum DDE for the second quarter 1999 was 9 mRem.

Control dosimeters are in the guard shack at the truck entry gate, and in the administration building.

Dose summaries are provided to individuals when requested, at the end of each year, and upon termination of employment.

Incidents:

There were no incidents reported since the previous inspection.

There was an instance of receipt of a leaking drum of waste, and later, discovery of other leaking drums. These drums of waste were part of a shipment of 60 drums WCS received from NSSI for interim storage which contained mercury, with low concentrations of Thorium. The contamination was reported to TDH and to TNRCC. Records of the clean-up of the two instances of contamination were reviewed. The very low levels of radioactive contamination did not require a report to TDH. The licensee has notified TDH the 60 drums are being returned to NSSI. The fact that there was a leaking drum of waste at the time of receipt appears to be a violation, by NSSI, of U.S.D.O.T. rules. NSSI will be contacted regarding the drum that was leaking during transport. See page 7 for pictures of the drums of waste received from NSSI.

Previous Inspection:

No violations were issued for the previous inspection of 5/11/1999.

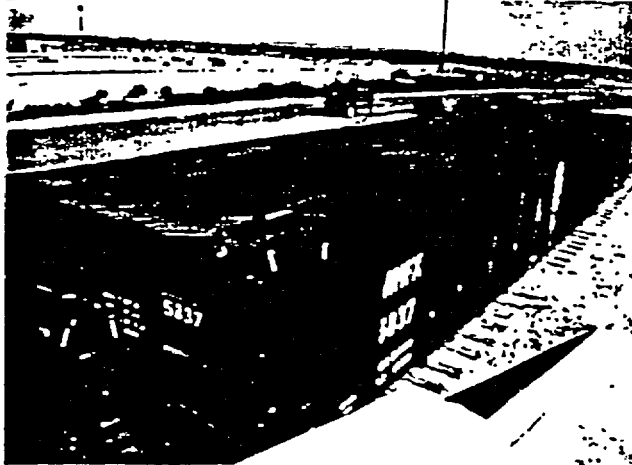
Survey:

Various areas of the facility was surveyed with a TDH Ludlum Model 12, serial #67663. The maximum external gamma survey results were 400 μ R/hr. in the container storage area, and 100 μ R/hr. in the Permacon. The licensee posts current survey results at the entrance to radiation areas in the bin storage area and in the container storage area. See page 7 for a picture of one of these postings.

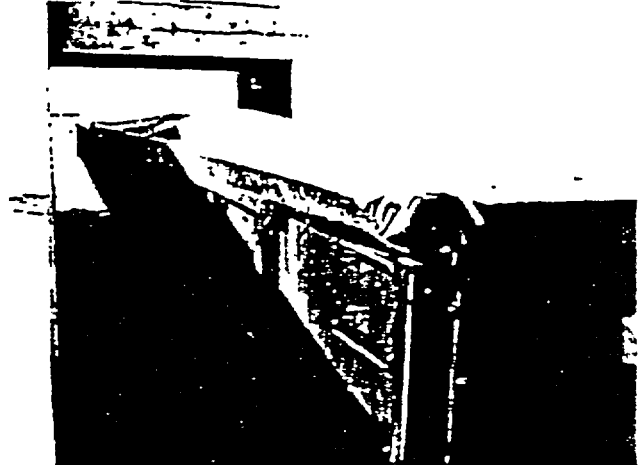
Summary:

The exit summary was conducted with David Kania, at which time he was told it appeared there were no items of noncompliance.

Photos referenced in this report:



One of the rail cars of U.S. Corps of Engineer's, DuPont FUSRAP waste, exempt source material



The two other rail cars of FUSRAP exempt source material.



The 60 drums from NSSI are in the three rows of drums pictured here.



The 4 overpacked (leaking or potentially leaking) drums from NSSI are in the larger yellow drums.



The current survey results and caution posting to the entrance of a radiation area.

Inventory Shipment & Processing Files

		Group I	Group II	Group III	Group IV
<i>mCi Totals :</i>	1.60E+07	1.35E+02	4.08E+01	1.38E+03	1.60E+07
<i>mCi Allowed :</i>		2.00E+05	2.00E+06	2.00E+07	2.00E+08
<i>% mCi Used :</i>	8.07%	0.07%	0.00%	0.01%	8.00%

<i>Total Cubic Feet By Location</i>	<i>Total Volume Cu Ft</i>	<i>Storage Location</i>
<i>Note CuFt Limits:</i>	32459.56	BSA
<i>BSA=262,440;</i>	10875.20	CSB
<i>CSB=36,750;</i>		
<i>Stab Bldg=3,675;</i>	11199.66	TRACK

Grand Total Cu Ft: 54534.42

CuFt Auth Fed Agency:

Cu Ft K061 on Site: 39252.66

Commercial Cu Ft Allowed: 36344.00

Commercial Cu Ft Available: 21062.24

K061 Cu Ft Available: 19067.34

<i>Inventory SNM</i>	<i>Site Id</i>	<i>U-233</i>	<i>U-235</i>	<i>Pu</i>	<i>TotSNM</i>
	DOE Mound	0.00E+00	3.17E+01	3.71E-02	3.18E+01
	Entergy	0.00E+00	0.00E+00	5.55E-09	5.55E-09
	Gould OH	0.00E+00	4.24E+01	0.00E+00	4.24E+01
	Los Alamos	0.00E+00	1.30E+01	2.76E-05	1.30E+01
	Los Alamos	0.00E+00	6.57E+00	2.16E-03	6.57E+00
	MMT	0.00E+00	4.18E-02	1.32E-06	4.18E-02
	NSSI	0.00E+00	0.00E+00	3.24E-06	3.24E-06
	USDOE ETPP	0.00E+00	9.49E-01	1.30E-04	9.49E-01
	USDOE ETPP	0.00E+00	7.92E-01	5.57E-02	8.47E-01
	USDOE PGDP	0.00E+00	0.00E+00	1.13E+00	1.13E+00
	Westinghou	1.08E-02	6.78E+01	1.51E-05	6.78E+01
	<i>Grand Totals SNM g</i>	1.08E-02	1.63E+02	1.22E+00	1.65E+02
	<i>Allowed g</i>	200	350	200	
	<i>Percent of Amount %</i>	0.01%	46.65%	0.61%	47.27%

*Sum of
Fractions*

Freeport-McMoRan Sulphur LLC
Culberson Mine NORM Removal Project

PRELIMINARY ACTIVITY COUNTS

Count time is approximately 60 minutes per box. 4 counts per box at 15 minutes each.

15% added to readings as a radon "exhalation" factor

Each box contains approximately 16 joints of pipe, or approximately 8 cubic yards of material per box.

	Date	Box Number	Gross Wt LBS	Tare Wt LBS	Net Wt LBS	Net Wt Grams	Total Activity Curies/Box	Total Activity pCi/gram	Shipping Manifest Number
R	11/7/99	274150	21,540	6,700	14,840	6,737,360	0.000104	15.500	2053685
R	11/8/99	274049	22,000	6,700	15,300	6,946,200	0.000066	9.520	2053686
R	11/9/99	274087	23,640	6,100	17,540	7,963,160	0.000105	13.180	2053687
R	11/10/99	274169	23,260	6,100	17,160	7,790,640	0.000065	8.325	2053688
R	11/10/99	274232	23,000	6,100	16,900	7,672,600	0.000163	21.300	2053689
R	11/10/99	274327	20,420	6,100	14,320	6,501,280	0.000037	5.630	2053690
R	11/14/99	B1083	22,640	6,100	16,540	7,509,160	0.000107	14.310	2053691

Chris,

Please review the attached documents and confirm that this shipment is OK to ship.

We will ship these seven boxes Tuesday Afternoon (Nov. 16, 1999).



Bill Jaco

Chief Chemist

Freeport McMoRan Sulphur, LLC.

Freeport-McMoRan Sulphur LLC
Culberson Mine NORM Removal Project

PRELIMINARY ACTIVITY COUNTS

Count time is approximately 60 minutes per box. 4 counts per box at 15 minutes each.

15% added to readings as a radon "exhalation" factor

Each box contains approximately 16 joints of pipe, or approximately 8 cubic yards of material per box.

	Date	Box Number	Gross Wt LBS	Tare Wt. LBS	Net Wt. LBS	Net Wt. Grams	Total Activity Curies/Box	Total Activity pCi/gram	Shipping Manifest Number
R	11/6/99	274132	23,540	6,700	16,840	7,645,360	0.000081	10.570	2053680
R	11/7/99	274302	22,160	6,700	15,460	7,018,840	0.000105	15.030	2053681
R	11/11/99	25S02	21,520	6,100	15,420	7,000,680	0.000043	6.210	2053682
R	11/11/99	274085	20,540	6,100	14,440	6,555,760	0.000040	6.080	2053683
R	11/13/99	274309	22,340	6,100	16,240	7,372,960	0.000147	19.900	2053684

Chris,

Please review the attached documents and confirm that this shipment is OK to ship
We will ship these five boxes Tuesday morning (Nov. 16, 1999).



Bill Jacob
Chief Chemist
Freeport McMoRan Sulphur, LLC.

Freeport-McMoRan Sulphur LLC
Culberson Mine NORM Removal Project

PRELIMINARY ACTIVITY COUNTS

Count time is approximately 60 minutes per box. 4 counts per box at 15 minutes each.

15% added to readings as a radon "exhalation" factor

Each box contains approximately 16 joints of pipe, or approximately 8 cubic yards of material per box.

	Date	Box Number	Gross Wt LBS	Tare Wt LBS	Net Wt LBS	Net Wt Grams	Total Activity Curies/Box	Total Activity pCi/gram	Shipping Manifest Number
•	11/6/99	25S05	20,340	6,100	14,240	6,464.960	0.000051	7.950	2053673
•	11/6/99	20S39	21,470	6,100	15,370	6,977.980	0.000093	13.380	2053665
•	11/6/99	274173	22,700	6,700	16,000	7,264.000	0.000074	10.250	2053669
	11/6/99	20S40	20,600	6,100	14,500	6,583.000	0.000095	14.410	2053667
	11/9/99	274229	24,430	6,700	17,730	8,049.420	0.000145	18.050	2053675

Chns,

Please review the attached documents and confirm that this includes all of the information that you require

Please confirm to me by phone at 915-445-0239 after your review

These documents complete the shipment to your facility on Wednesday.



Bill Jaco
Chief Chemist
Freeport McMoRan Sulphur, LLC.

Freeport-McMoRan Sulphur LLC
Culberson Mine NORM Removal Project

PRELIMINARY ACTIVITY COUNTS

Count time is approximately 60 minutes per box. 4 counts per box at 15 minutes each.

15% added to readings as a radon "exhalation" factor

Each box contains 16 joints of pipe, or approximately 8 cubic yards of material per box.

	Date	Box Number	Gross Wt. LBS	Tare Wt. LBS	Net Wt. LBS	Net Wt. Grams	Total Activity Curies/Box	Total Activity pCi/gram
	11/6/99	25S05	20,340	6,100	14,240	6,464,860	0.000086	13.344
	11/6/99	20S39	21,470	6,100	15,370	6,977,880	0.000163	23.409
	11/6/99	274042	21,250	6,700	14,550	6,605,700	0.000115	17.366
	11/6/99	274173	22,700	6,700	16,000	7,264,000	0.000129	17.733
	11/6/99	20S40	20,600	6,100	14,500	6,583,000	0.000165	25.050
	11/7/99	274328	21,720	6,700	15,020	6,819,080	0.000170	24.875
	11/7/99	274150	21,540	6,700	14,840	6,737,380	0.000182	27.000
	11/7/99	20S35	22,880	6,100	16,780	7,618,120	0.000179	23.550
	11/7/99	274302	22,160	6,700	15,460	7,018,840	0.000185	26.300

WCS Source Inventory Sheet

<u>Isotope</u>	<u>Manu</u>	<u>Serial #</u>	<u>3/4/99 Date OF CAL</u>	<u>Time Years</u>	<u>Half Life</u>	<u>Original Activity micro ci</u>	<u>Present Activity micro ci</u>	<u>DPM</u>
Individuals								
CS-137	Source	97CS5002678	9/17/97	1 46E+00	3 02E+01	9 80E-01	9 48E-01	2.10E+06
PU-239	Source	98PU4700988	3/19/98	9 59E-01	2 41E+04	1 67E-02	1 67E-02	3 71E+04
TC-99	Source	98TC4700989	3/19/98	9 59E-01	2 13E+05	1 40E-02	1 40E-02	3 10E+04
CO-60	Source	98CO5000990	3/24/98	9 45E-01	5 27E+00	5 00E-02	4 42E-02	9 80E+04
PB-210	Techniques	PB-210 #1	4/1/98	9 23E-01	2 23E+01	1.00E-01	9 72E-02	2.16E+05
PU-239	ISOTOPE	564-11-2	6/15/98	7.18E-01	2 41E+04	6 77E-03	6 77E-03	1 50E+04
CS-137	ISOTOPE	564-15-2	6/15/98	7.18E-01	3.02E+01	8 53E-03	8 39E-03	1 86E+04
CS-137	Techniques	CS 1	5/1/98	8 41E-01	3 02E+01	5 00E+00	4 90E+00	1 09E+07
CS-137	Techniques	CS 2	5/1/98	8 41E-01	3 02E+01	5 00E+00	4 90E+00	1 09E+07
CS-137	Techniques	CS 3	5/1/98	8 41E-01	3 02E+01	5 00E+00	4 90E+00	1 09E+07
THORIUM	LANTERN	CAM TH	NA	NA	NA	NA	NA	NA
THORIUM	LANTERN	PMW2E	NA	NA	NA	NA	NA	NA
PB-210	Source	8722	9/23/98	4 44E-01	2.23E+01	9 00E-03	8 88E-03	1 97E+04
SR-90	Source	98SR2504003	9/23/98	4 44E-01	2 85E+01	5 00E-01	4 95E-01	1.10E+06
500 ml soil								
AM-241	Analytcs	55951-481	4/1/98	9 23E-01	4 32E+02	1 32E-01	1 32E-01	2 93E+05
CD-109	Analytcs	55951-481	4/1/98	9 23E-01	1.27E+00	1 80E+00	1 09E+00	2 41E+06
CO-57	Analytcs	55951-481	4/1/98	9 23E-01	7 45E-01	4 10E-02	1 74E-02	3 85E+04
CE-139	Analytcs	55951-481	4/1/98	9 23E-01	3 77E-01	6 50E-02	1 19E-02	2 64E+04
HG-203	Analytcs	55951-481	4/1/98	9 23E-01	1 28E-01	1 25E-01	8 32E-04	1 85E+03
SN-113	Analytcs	55951-481	4/1/98	9 23E-01	3.15E-01	1 05E-01	1.38E-02	3 06E+04
CS-137	Analytcs	55951-481	4/1/98	9 23E-01	3 02E+01	5 50E-02	5 38E-02	1.20E+05
Y-88	Analytcs	55951-481	4/1/98	9 23E-01	2 92E-01	1 83E-01	2 05E-02	4 55E+04
CO-60	Analytcs	55951-481	4/1/98	9 23E-01	5 27E+00	8 60E-02	7.62E-02	1.69E+05
1Liter Water								
AM-241	Analytcs	55616-11	4/1/98	9 23E-01	4.32E+02	1.06E-01	1 06E-01	2 35E+05
CD-109	Analytcs	55616-11	4/1/98	9 23E-01	1 27E+00	1 50E+00	9 02E-01	2 00E+06
CO-57	Analytcs	55616-11	4/1/98	9 23E-01	7 45E-01	3 90E-02	1 65E-02	3 67E+04
CE-139	Analytcs	55616-11	4/1/98	9 23E-01	3 77E-01	5 40E-02	9 90E-03	2 20E+04
HG-203	Analytcs	55616-11	4/1/98	9 23E-01	1 28E-01	1 03E-01	1 89E-02	4.19E+04
SN-113	Analytcs	55616-11	4/1/98	9 23E-01	3 15E-01	8.70E-02	5 79E-04	1.29E+03
CS-137	Analytcs	55616-11	4/1/98	9 23E-01	3.02E+01	4 60E-02	6 05E-03	1 34E+04
Y-88	Analytcs	55616-11	4/1/98	9 23E-01	2 92E-01	1 52E-01	1 49E-01	3 30E+05
CO-60	Analytcs	55616-11	4/1/98	9 23E-01	5.27E+00	7.10E-02	7 94E-03	1.76E+04

Remarks: _____

Signature of Individual physically Verifying Source. _____

Date Form Created 5/31/98

WCS Source Inventory Sheet

				A/S Disk				
CD-109	Analytics	55850-481	4/1/98	9 23E-01	1 27E+00	5 46E-02	3 29E-02	7.31E+04
CO-57	Analytics	55850-481	4/1/98	9 23E-01	7 45E-01	2 98E-02	1 26E-02	2 80E+04
CE-139	Analytics	55850-481	4/1/98	9 23E-01	3 77E-01	4 35E-02	7.98E-03	1.77E+04
HG-203	Analytics	55850-481	4/1/98	9 23E-01	1.28E-01	8 51E-02	5 66E-04	1.26E+03
SN-113	Analytics	55850-481	4/1/98	9 23E-01	3 15E-01	5 71E-02	7 50E-03	1 67E+04
CS-137	Analytics	55850-481	4/1/98	9 23E-01	3 02E+01	3 93E-02	3 84E-02	8 54E+04
Y-88	Analytics	55850-481	4/1/98	9 23E-01	2 92E-01	1 45E-01	1 62E-02	3 59E+04
CO-60	Analytics	55850-481	4/1/98	9 23E-01	5 27E+00	7 15E-02	6 33E-02	1 41E+05

Remarks: _____

Signature of Individual physically Verifying Source: _____

Date Form Created: 5/31/98

Leak Test

Radiological Survey Report
Form 3.1.5-1

Survey Number <u>2 EB</u> <u>99070002</u> <u>1/6/99</u>		Date <u>7 1 99</u>	Time <u>1410</u>	Instruments Used		
RWP <u>99010001</u>		Reason:	Surveyor: <u>Steven Chubb</u>	Location	Model	6-5000
DPM/100 CM ² UNLESS OTHERWISE NOTED		Routine / QUARTERLY	<u>S</u>	Count	S/N	<u>019802</u>
				Rm.	Cal Due	<u>9399</u>
					Bkg	<u>.1α / 1.45B</u>
		Postings:			N/A	N/A

#	α	β/γ	NOTES	ID #	ISOTOPE
1.	∅	3.5	Source	564-11-2	Pu-239
2.	∅	∅		PmW2E B	TH-232
3.	∅	17.7		55951-481	Am-241, MIXED Y
4.	∅	7.1		8722	Pb-210
5.	3.51	7.1		08-98-2939	Cs-137
6.	7.0	10.6		1	Pb-210
7.	7.0	7.1		55856-481	MIXED Y
8.	∅	3.5		97CS5002678	Cs-137
9.	∅	10.6		98 98SR2504003	Sy-90
10.	7.0	42.5		71	Cs-137
11.	∅	21.3		2 and 3	Cs-137
12.	∅	7.1		98CD5000990	Co-60
13.	∅	10.6		98Pu4700988	Pu-239
14.	∅	7.1		98TC4700989	Tc-99
15.	∅	7.1		FRONT CAM	TH-232
16.	∅	3.5	Source	564-15-2	Cs-137
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					

COPY

Count Rm Tech: <u>[Signature]</u>	Air Sample Reference Number: <u>N/A</u>	Remarks: <u>N/A</u>
Reviewed By: <u>[Signature]</u>		