

US ECOLOGY DATA SYSTEM

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US Ecology

The US Ecology computer data system was instituted March 1, 1982. This system was designed to manage the increasing flow of paperwork and data associated with the receipt and disposal of low-level radioactive waste at Richland, Washington and Beatty, Nevada. The system was modified and upgraded in 1984 to accommodate a revised shipping manifest pursuant to the requirements of 10 CFR 20.311. The data system is used to generate various reports for both internal and external distribution.

The computer system is located at US Ecology's corporate headquarters in Louisville, Kentucky. Remote access terminals are located at the disposal sites. The system is supported by a Wang VS-100 processor. In addition to supporting the radwaste data system, the system supports a chemical waste data base, word processing, and electronic mail.

The radwaste data base is derived from two documents; a generator registration form and the shipping manifest. The generator registration form provides basic information about the generator of the waste. All other data is derived from the shipping manifest and site operations input. Copies of both documents are attached.

In reality, the information about the generator is input by Louisville personnel and an identification number is assigned. At that point, we are assured that the requisite permits have been issued and other paperwork requirements have been satisfied.

When a shipment of waste arrives at a site, a check is run to verify generator identity. Entries are input from the manifest and a routine is run to verify waste class (A, B, or C) and to check totals. Any variation results in delays in disposal and requires the generator to verify corrections. All this is done prior to receipt by US Ecology. The data base may be updated if, following off-loading, discrepancies are identified; e.g., the container count does not match that of the manifest. At the time the entries are completed at the disposal site, the data is available, company-wide, to authorized users. It is, essentially, an up-to-the-minute data base.

Each user has a specific menu accessed by password and user I.D.. The programs on a menu may represent screens such as those attached as figures 4 through 8. These programs permit the user to:

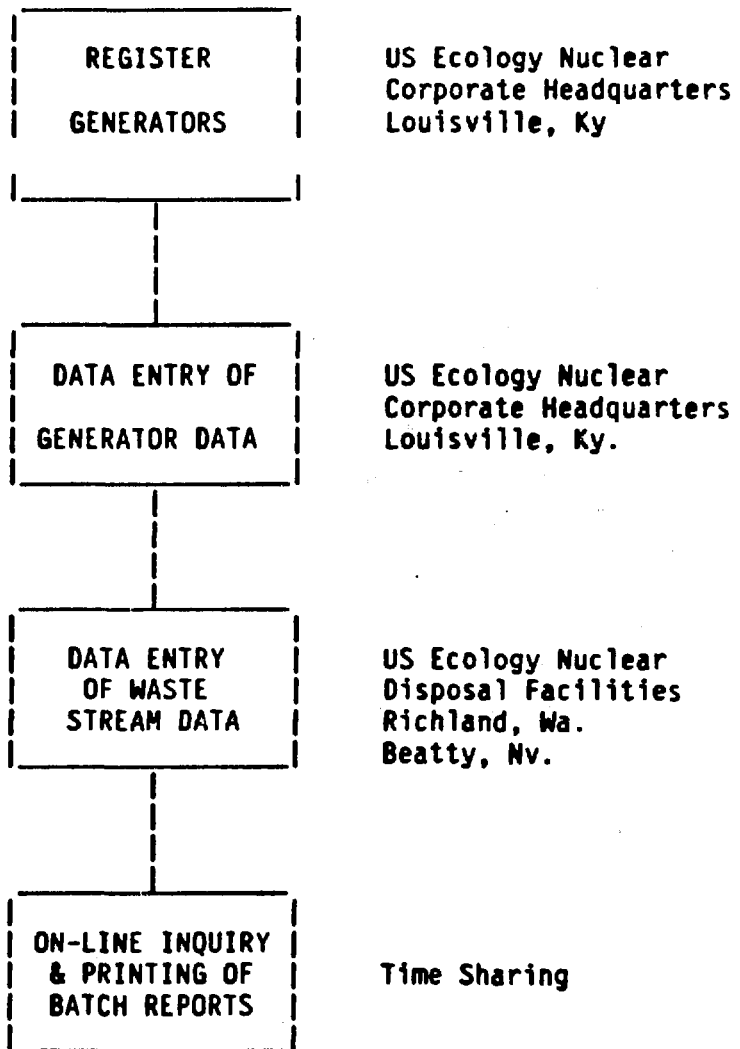
1. inquire into the generator data base for basic information about the generator.
2. review the data contained on the front page of the manifest.
3. look at the data from the continuation pages of the manifest by container.
4. obtain summary information about each container.
5. display summary information about each shipment
6. submit a batch job for processing.

As previously stated, US Ecology generates various reports for both internal and external distribution. Attached are some sample reports as follows:

1. ECF 500 - shipment summaries by generator
2. ECF 505 - breakdown of volume by compact regions.
3. ECF 510 - generator activity by class
4. ECF 515 - breakdown by generator by state
5. ECF 540 - volume and activity per generator by state and compact commission
6. ECF 530 - isotope report by generator
7. ECF 535 - summary report by isotope

US Ecology has entered into agreements with the Washington DSHS and Illinois Department of Nuclear Safety to provide equipment and access to the data base. Further details regarding access to the data base can be had by contacting US Ecology. We believe access to the system by compact commissions and regulatory agencies would provide useful data to support their respective efforts.

**RADWASTE SYSTEM
GENERAL PROCESSING FLOW**



Please Print or Type
Shaded Areas For US Ecology Use Only

① GENERATOR NAME _____

② GENERATING FACILITY ADDRESS _____

③ CITY _____ COUNTY _____

STATE _____ ④ ZIP CODE _____

⑤ ADMINISTRATIVE CONTACT _____

TELEPHONE
NORMAL HOURS A/C _____ - _____ - _____ EXT. _____
AFTER HOURS A/C _____ - _____ - _____ EXT. _____

⑥ Indicate the site user permit number(s) assigned to you by the state.

Beatty, Nevada _____

Richland, Washington _____

⑦ If you have been assigned a US EPA generator ID Number for hazardous wastes generated at the above facility address, please indicate it here:

USEPA GENERATOR NUMBER _____ - _____ - _____

⑧ Briefly describe the nature of your business:

⑨ What regulatory authority issued the license for the generating facility:

- US Nuclear Regulatory Commission
- Agreement State

⑩ Will you be using the services of a broker in shipping wastes to US Ecology for disposal?

- No
- Yes

Name of Broker _____

⑪ How much waste do you expect to ship during a typical 12 Month period?

CU. FT. _____

_____ - _____ - _____

DETACH AND RETURN COMPLETED

US ECOLOGY, INC.
P.O. BOX 7246
LOUISVILLE, KY 40207-0246

⑫ Signature _____

Print Name _____

Date _____

GENERATOR NUMBER

RADIOACTIVE WASTE SHIPMENT & DISPOSAL MANIFEST

US ECOLOGY, INC.

EXECUTIVE OFFICE: (502) 426-7150
P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207

Page 1 of 2

(4) CONTACTED BY

 By phone
 By mail (Registration # _____)
509.377.4411 P.O. BOX 578
HWY 95 12 mi. S. of
Beatty, NV 89003
702-553-2203

CONTACT

ADDRESS

CITY

PHONE

SHIPPING DATE

(5) CARRIER

CARRIER EPA # (if any)

ADDRESS

CITY

PHONE

CASK TYPE

CASK SURFACE EXPOSURE RATE

(1) GENERATOR NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
CONTACT _____ PHONE _____
USER PERMIT # _____ SHIPMENT # _____(2) BILL DISPOSAL CHARGES TO _____
NAME _____ PURCHASE ORDER # _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____(3) AGENT/BROKER _____
BROKER'S US ECOLOGY # _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
CONTACT _____ PHONE _____
BROKER SHIPMENT # _____ BROKER USER PERMIT # _____

Broker's Authorized Signature Acknowledging Waste Receipt

Date

TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
# OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n.o.s. - Radioactive Material	UN2918
		Radioactive Material, low specific activity, n.o.s. - Radioactive Material	UN2912
		Radioactive Material, n.o.s. - Radioactive Material	UN2982
		Radioactive Material, limited quantity, n.o.s. - Radioactive Material	UN2910
		Radioactive Material, special form, n.o.s. - Radioactive Material	UN2974
		Radioactive Material, instruments and articles - Radioactive Material	UN2911
		Thorium Nitrate - Radioactive Material	UN2916
		Uranyl Acetate (RQ-5000/2270) - Radioactive Material	NA9180
		Uranyl Nitrate, solid (RQ-5000/2270) - Radioactive Material	UN2981

SHIPMENT TOTALS (DO NOT WRITE IN SHADED AREAS)							
VOLUME (cu ft)	TOTAL # OF PACKAGES	SOURCE MATERIAL (kg)	SPECIAL NUCLEAR MATERIAL (grams)				
			U-233	U-235	PLUTONIUM	TOTAL	
ACTIVITY							
ACTIVITY TOTALS:			TRITIUM	C-14	Tc-99	I-129	ALL ISOTOPE
<input type="checkbox"/> Curies							
MiliCuries <input type="checkbox"/>							
(10CFR20.311)							

(6) THIS IS TO CERTIFY THAT THE HEREIN-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND ARE IN COMPLIANCE WITH ALL REQUIREMENTS APPLICABLE AT THE APPLICABLE DISPOSAL SITE AND THAT THE MATERIALS ARE CLASSIFIED AND RECEIVED IN ACCORDANCE WITH THE REQUIREMENTS OF 10CFR PART 81 AND PART 20.311 OR EQUIVALENT STATE REGULATIONS.

Authorized Signature

Title

Date

TERMS AND CONDITIONS

A. TITLE: Upon receipt and acceptance at the disposal site by US Ecology and all appropriate regulatory authorities, title to the Waste which conforms to Company's representations herein shall terminate in favor of the Customer and be vested in US Ecology.

B. WASTE PRODUCTS: Customer represents and warrants that data set forth in this Radioactive Waste Shipment & Disposal Manifest is true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and the designated facility license.

C. INDEMNIFICATION: Customer agrees to indemnify US Ecology, its officers, employees and agents against all loss and liability whatsoever if such loss or liability results from the failure of the Waste to conform in all material respects to the data supplied on the Radioactive Waste Shipment & Disposal Manifest or this agreement title to meet all standards prescribed by the Department of Transportation or any other governmental agency having jurisdiction over such matter.

FOR US ECOLOGY'S USE ONLY

TYPE OF CONTAINER	CONTAINER VOLUME CU FT	# OF PKGS	CU FT PER CONTAINER TYPE
DRUMS			
OVERPACK			
55	7.50		
30	4.01		
5	0.87		
OTHER			
BOXES			
1st SIZE			
2nd SIZE			
3rd SIZE			
CASK LINES			
OTHER			
OTHER			
SHIPMENT TOTALS			

LOAD EVALUATION

CHECK ALL THAT APPLY TO THIS LOAD DESCRIBE inadequacies IN COMMENT SECTION

<input type="checkbox"/> Mechanical Waste Dam/leakage inadequate	<input type="checkbox"/> Breaching Inadequate
<input type="checkbox"/> Contamination or Leakage Detected	<input type="checkbox"/> Label Markings, etc. Inadequate
<input type="checkbox"/> Unprotected Exposure Rates Detected	<input type="checkbox"/> Container Integrity Inadequate
<input type="checkbox"/> No Ventilation Detected on the Load	<input type="checkbox"/> Other _____

DESCRIBE THE EXTENT OF ANY VIOLATION CHECKED ABOVE AND THE REMEDIAL ACTION TAKEN

CHECK HERE IF A SUPPLEMENTAL REPORT IS ATTACHED

BURIAL DATA

Container Separation: _____

(Each of the following apply to the load)

CLASS: See 10 CFR 172.101 - 1 (1) 1st size (10 CFR 172.101 - 2)

10 CFR 172.101 - 2 (1) 2nd size (10 CFR 172.101 - 3)

10 CFR 172.101 - 3 (1) 3rd size (10 CFR 172.101 - 4)

See 10 CFR 172.101 - 5

SHIPPING	RECEIVING	CLASS 1	CLASS 2	CLASS 3
NO FEET				

Date Received _____

Date Disposed _____

Trench No _____

This material meets licensed limits
 This material was disposed of in accordance with license

AUTHORIZED INITIALS _____

US ECOLOGY INVOICE #	_____
US ECOLOGY CUSTOMER #	_____
(Must agree with Agent entered in Block 3)	
US ECOLOGY INVOICE DATE:	MO DAY YEAR
DISCREPANCY CODE(S):	_____

BATES #

CONSIGNEE ORIGINAL COPY

(MUST ACCOMPANY WASTE IN TRANSIT)

GENERATOR NO _____

US ECOLOGY, INC.

GENERATOR NAME _____

CONTINUATION SHEET

AGENT/BROKER _____

REV 8/85

MANIFEST # _____
PAGE _____ OF _____

10 Item No.	11 Container Type	12 Container Volume (Lit. or Gall.)	13 Container Weight (Pounds or Kilograms)	14 Physical Form	15 Hazardous Waste Description (See Note #1)	16 Hazardous Waste Identification Code	17 UN Sub Class (A, B, C, D, etc.)	18 Quantity (Liters or Gallons)	19 Total Weight (Pounds or Kilograms)	Regulation Criteria			20 EPCRA 615a	21 EPCRA 615b	22 EPCRA 616	23 EPCRA 617	24 EPCRA 618	25 EPCRA 619	26 EPCRA 620	27 EPCRA 621	28 EPCRA 622	29 EPCRA 623		
										24 RCRA 302	25 RCRA 303	26 RCRA 304												
					Chemical Form Cleaning Agent 10CFR20.311																		Radioactive -	
																							Radioactive -	
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(30) PAGE TOTALS

- NOTE #1 - Waste Description Codes**
- 3 Dry Solid
 - 3 Soluble Liquid
 - 4 Biological (not animal carcasses) in Vials in Absorbent
 - 7 Filter Media
 - 8 Decontaminated
 - 9 Sol-Aer Resins
 - 10 Absorbent Aqueous Liquid
 - 11 Absorbent Organic Liquid
 - 12 Bentonite (or organic) Liquid in Vials in Absorbent
 - 13 Aqueous Liquid in Vials in Absorbent
 - 14 Animal Carcasses in Absorbent
 - 15 Other

- NOTE #2 - Solidified or Absorbent Media Codes**
- 7 Spent-Dry
 - 8 Calcium (HCl-7H)
 - 9 Filter Dry/Super Fine
 - 9 H₂O
 - 9 Fibrous or Fibrous II
 - 7 Instant-On
 - 9 Self-T-Sorb
 - 9 Oil-Dr (Self H₂O)
 - 10 Zeolite, Grades 2, 3, 4
 - 11 Dow Media
 - 12 Cement
 - 13 Asphalt
 - 14 Deformed Cotton Media
 - 15 Enrichment
 - 16 Krome
 - 17 Other

- NOTE #3 - MPC Subfamily Codes**
- S - Soluble
 - M - Insoluble

* Any use of "Other" as a description must include a written and signed explanation attached to this manifest.

**CONSIGNEE ORIGINAL COPY
(MUST ACCOMPANY WASTE IN TRANSIT)**

SYSTEM PROCEDURES

```
*****
*
* 08/21/86          American Ecology - Wang VS System #1          10:51 AM *
* ID: CWP                                     W/S: 43 *
*
*           Primary Menu for
*
*
* (1) Radioactive Waste Management
*
* (2) Electronic Mail
*
*
* (32) LOGOFF VS SYSTEM
*
* [01]   [Copr. (c) 1985 FWM DigiTech, Inc.]  MenuTech Version 03.18
*
*****
```

Figure 1

This is the primary menu for the American Ecology Time Sharing System (AETS). From this menu the operator can enter the various systems available to him/her depending on access authorization.

SYSTEM PROCEDURES

```
*****
*
*
*          REGIONAL COMPACT MASTER MENU
*          RADWASTE SYSTEM
*
* PFKEY                                     ECF590C
*
* PF1 - Display Generator Information.....Enter Generator#
* PF2 - Display Shipment Summary Information..Enter Generator#, Bates#, RSR#
* PF3 - Display Container Information.....Enter Gen#, Bates#, RSR#, Seq#
* PF4 - Browse Container Summary Information..Enter Generator#, Bates#, RSR#
*
* PF6 - Browse Shipment Summary Information...Enter Generator#
*
* PF10 - Submit A Batch Job For Background Processing
*
* PF15 - Displays Operator Instructions
* PF16 - Exit Menu
*
*
*          GENERATOR# XXX XX-XXX-XXXX BATES# ***** RSR# ***** SEQ# *****
*
* ---- PLEASE SELECT THE DESIRED FUNCTION AND PRESS THE APPROPRIATE PFKEY ----
*
*****
```

Figure 2

This screen presents the various functions available to the user. Note that each function acts as a loop and that when work on a particular function is completed, the user is returned to the menu screen to make the next choice.

Several sub-programs, along with EXIT (to leave the RADWASTE SYSTEM) are available for use.

SYSTEM PROCEDURES

PF KEY

PF1 This program provides the basic information about the generator of the waste. Information displayed includes generator name and address, permit number, administrative contact and phone number. Figure 3 is an example of the actual screen that the user can expect to receive when using this PFKey.

```
*****
*
* 10/18/84          INQUIRY INTO THE GENERATOR DATA BASE          ECF591*
* 14:09:10
*
*                      GENERATOR INFORMATION
* GENERATOR NUMBER: ALZ 96-040-6896
* COMPANY NAME: Smithville Power & Light Inc
* ADDRESS LINE 1: 10484 Greenwood Road
* ADDRESS LINE 2: P. O. BOX 608
* CITY: Smithville
* STATE: AL ZIP 72801-0608
* COUNTY: Pope
* ADMINISTRATIVE CONTACT: John K. Smith
* TELEPHONE NORMAL HOURS: 982 964 3240 EXT.
* TELEPHONE AFTER HOURS: 982 968 6561 EXT.
* PERMIT NUMBER: 1234
* ENTER NEXT GENERATOR= XXX XX XXX-XXXX
* -----
* Return Key Gets Another Generator
* PF16 Returns To Menu Screen, PF11 Prints Screen
*
*****
```

. figure 3

SYSTEM PROCEDURES

PF2 This program displays information contained on the front page of the shipment and disposal manifest. Information displayed includes generator or broker name and address, permit number, shipment totals, and disposal date. See Figure 4.

```
*****
*
* 10/18/85          INQUIRY SHIPMENT SUMMARY DATA BASE          ECF592*
* 14:09:58          SITE: Richland                               USER: Bill Green*
*                   SHIPMENT SUMMARY INFORMATION
* GENERATOR# ALZ 96-040-6896 BATES# 012050 RSR# 048852
*                   AGENT/BROKER: Thomas Graham & Associates
*                   ADDRESS LINE 1: 236 Linnwood Drive
*                   ADDRESS LINE 2: P. O. BOX 608
*                   CITY: Westwood
*                   STATE: NJ ZIP 00801-0608
*                   ADMIN. CONTACT: Jack Jones
*                   PHONE NORMAL HRS: 501 964 3240 EXT
*                   PHONE AFTER HRS: 501 968 6561 EXT
* BROKER ID#: NJR 01-030-2251 PERMIT #: 97082 SHIPPING DATE: 01/07/85
*                   VOLUME PKGS SOURCE U-233 U-235 PLUTONIUM
*                   105.00 2
* C/M TRITIUM C-14 TC-99 I-129 ALL ISOTOPES*
* M 32.440 90.420 43.670 68,495.918*
* WEIGHT RECEIVED DATE DISPOSAL DATE
* 3,200.00 01/09/85 01/09/85
* -----
* Enter Next Generator: XXX XX XXX XXXX Bates# RSR#
*
* Return Key Gets Another Record
* PF16 Returns To Menu Screen, PF11 Prints Screen
*****
```

Figure 4

SYSTEM PROCEDURES

PF3

This program displays information contained on the continuation sheets of the shipment and disposal manifest. Information displayed includes volume, weight, waste class, radiation level, isotope activity, etc. See Figure 5.

```

*****
*
* 10/18/85          INQUIRY INTO CONTAINER DATA BASE          ECF593 *
* 14:09:43        SITE: Richland                               USER: Bill Green *
*                  INFORMATION FOR CONTAINER NO. 0001          *
*
* GENERATOR# ALZ 96-040-6896 BATES# 012050 RSR# 048852 PAGE# 002 ITEM# 103 *
* CONT        CONT        CONT        PHY    WASTE    SOLID    CHEMICAL    CURIES/    *
* TYPE        VOLUME      WEIGHT    FORM    DESC    AGENT    FORM        MILLICURIES*
* HIC         52.50       1,600.00  01      02      FISSON/OXIDE  M          *
*
* ISOTOPE      ACTIVITY ISOTOPE      ACTIVITY ISOTOPE      ACTIVITY ISOTOPE      ACTIVITY*
* AM-241       .009 C-14          30.600 CE-144         4.520 CM-242          .099*
* CM-244       .015 CO-58         2,000.000 CO-60       7,930.000 CS-134     15,030.000*
* CS-137      29,430.000 FE-55         3,810.000 I-129         41.200 NI-59         95.200*
* NI-63        4,920.000 PU-238         .020 PU-239          .016 PU-241          1.810*
* SR-90        1,180.000 TC-99          85.300
*
* U-233        U-235        PLUTONIUM        SOURCE W S -RADIATION LEVELS- TR *
*                MATERIAL C C SURFACE 1-METER NO. *
*                C S 20,000.00 3000.00 11 *
* ----- *
* Enter Next Generator: ALZ 96-040-6896 Bates# 012050 RSR# 048852 Seq# *
* Return Key Gets Another Record, PF11 Prints Screen, *
* PF13 Displays Description Of Codes, PF16 Returns To Menu Screen *
*
*****

```

Figure 5

SYSTEM PROCEDURES

PF4

This program allows the operator to search the file to obtain summary information about disposal for a given generator. Note that the search can be restricted at three levels. One, if only the generator number is entered, all container records for the generator are displayed. Two, if generator and bates number are entered, only records for that generator and bates number are displayed. Three, if generator, bates, and manifest number are entered, only records for that manifest number are displayed. See Figure 6.

```
*****
*
* 10/18/85                               BROWSE CONTAINER RECORDS                               ECF594
* 14:09:34                               USER: Bill Green
*
* SUMMARY OF CONTAINER INFORMATION
* GENERATOR# ALZ 96-040-6896
* BATES# RSR# SEQ# SITE CONTAINER VOLUME WEIGHT ACTIVITY SOURCE MATERIAL
* 012050 048852 0001 RCH 103 52.50 1,600.00 64,558.789
* 012050 048852 0002 RCH 1-85 52.50 1,600.00 3,937.129
* 012052 048852 0001 RCH 102 52.50 1,600.00 54,860.017
* 012068 048854 0001 RCH 101 52.50 1,600.00 22,591.569
* 012076 048855 0001 RCH 285 52.50 1,600.00 22,591.569
* 012076 048855 0002 RCH 3-85 52.50 1,600.00 9,674.829
* 012083 048857 0001 RCH FL4-85 52.50 1,600.00 9,674.842
* 012102 048859 0001 RCH FL5-85 52.50 1,600.00 16,140.682
* 012103 048860 0001 RCH FL6-85 52.50 1,600.00 12,920.767
* 012103 048860 0002 RCH FL785 52.50 1,600.00 32,257.445
* 012110 048858 0001 RCH 1085 7.50 340.00 77.617
* 012110 048858 0002 RCH 1086 7.50 300.00 473.017
* 012110 048858 0003 RCH 1087 7.50 350.00 61.101
* 012110 048858 0004 RCH 1092 7.50 300.00 81.022
* 012110 048848 0005 RCH 1093 7.50 330.00 239.730
* More Exist On History File
*
* -----
* Return Key Gets Container Detail
* PF16 Returns To Menu Screen, PF11 Prints Screen, PF14 Next, PF15 Previous
*
*****
```

Figure 6

SYSTEM PROCEDURES

PF6 This program allows the operator to display summary information about each shipment. Information displayed includes received date, number of containers, total volume and total activity. See figure 7.

```
*****
*
* 08/08/86 Browse Shipment Records ECF596
* 15:41:13 User: Bill Green
*
* Summary Of Shipment Information
* Generator# ALZ 96-040-6896
* Bates# RSR# Site Rec. Date #Pkgs Volume Activity C/M
* 014541 073901 RCH 03/19/86 31 573.40 2,393.787 M
* 014544 073903 RCH 03/20/86 78 609.60 432.102 M
* 014570 073904 RCH 03/31/86 82 615.00 1,261.753 M
* 014590 073912 RCH 04/09/86 38 615.00 1,466.536 M
* 014600 073909 RCH 04/17/86 32 237.00 3,917.400 M
* 014705 073905 RCH 05/22/86 31 416.00 2,910.604 M
* 014752 073917 RCH 06/03/86 44 576.00 1,343.855 M
* 014800 073919 RCH 06/17/86 82 615.00 114.800 M
* 014810 073918 RCH 06/19/86 70 690.00 195.504 M
* 014818 073921 RCH 06/23/86 79 604.80 462.800 M
* 014895 073922 RCH 07/21/86 20 480.00 1,573.600 M
* 014900 073925 RCH 07/21/86 60 450.00 1,904.340 M
* 333767 020685 BTY 03/21/83 36 270.00 2,160.000 M
* 333772 020605 BTY 03/28/83 36 270.00 2,160.000 M
* 333776 020661 BTY 04/05/83 36 270.00 2,160.000 M
* More Exist On History File
*
* RETURN Key Gets Shipment Detail
* PF16 To Menu, PF11 Prints Screen, PF5 Last Page, PF14 Next, PF15 Previous
*
*****
```

Figure 7

SYSTEM PROCEDURES

PF10

This key provides the menu to submit a batch job as indicated in Figure 8. (See the explanation following the reproduction of this menu for details.)

```
*****
*
* 7/2/85          SUBMIT BATCH JOB FOR BACKGROUND PROCESSING          ECF595 *
* 09:14:15                                     USER: Bill Green      *
*
*                               RADWASTE SYSTEM                          *
*
* PF1 - Generator Totals Report (ECF500)                               *
* PF2 - Regional Breakdown Report (ECF505)                             *
* PF3 - Totals By Business Category (ECF510)                           *
* PF4 - State Report By Generator (ECF515)                             *
* PF5 - Volume & Activity BY Compact Region (ECF540)                   *
* PF6 - Generator Totals By Isotope (ECF530)                           *
* PF7 - Isotope Summary Report (ECF535)                                *
* PF16 - Return To Master Menu                                         *
*
* Report Beginning Date = MMDDYY                                       *
* Report Ending Date   = MMDDYY                                       *
*
*
*****
```

Figure 8

Before submitting any report listed on the foregoing menu by pressing the keys indicated, the beginning and ending dates for the period desired MUST be entered first. After processing is complete, the reports will appear on the print queue until released by the user (refer to printing received files). The reports that can be obtained by each PFKEY is self-explanatory.

PF16 will return the user to the Master Menu.

See the attached examples of reports available on the following pages. (Examples 1 - 7)

REPORT NUMBER: ECF500

RADIATION WASTE PROGRAM
GENERATOR TOTALS

RUN DATE 1/04/83
PAGE NUMBER 1

START DATE: 1/01/82 END DATE: 1/01/83

PERMIT NUMBER: 7652

GENERATOR NAME: KOL INC.

BATES NUMBER	DATE RECEIVED	TOTAL VOLUME CUBIC FEET	TOTAL MILLCURIES	TOTAL SOURCE MATERIAL	NUMBER OF PACKAGES	TRENCH NUMBER
06798 82	6/01/82	60.00	.210	.00	8	10
PERMIT 7652	TOTAL	60.00	.210	.00	8	10

RADIATION WASTE PROGRAM
 REPORT NUMBER: ECF505 REGIONAL BREAKDOWN

RUN DATE: 01/03/83
 PAGE NUMBER: 1

START DATE: 01/01/83 END DATE 01/31/83

STATE	VOLUME		ACTIVITY				SOURCE	
	CU FT	PERCENT	MILLICURIES	PERCENT	SNM	PERCENT	MATERIAL	PERCENT
ALABAMA	.00	0.00	.000	0.00	.00	0.00	.00	0.00
FLORIDA	1,000.00	47.81	79.000	65.28	.00	0.00	.00	0.00
GEORGIA	1,146.00	52.19	42.013	34.72	.00	0.00	.00	0.00
MISSISSIPPI	.00	0.00	.000	0.00	.00	0.00	.00	0.00
SOUTH CAROLINA	.00	0.00	.000	0.00	.00	0.00	.00	0.00
TENNESSEE	.00	0.00	.000	0.00	.00	0.00	.00	0.00
 SOUTHEAST REGION	 2,146.00	 100.00	 121.013	 100.00	 .00	 0.00	 .00	 0.00

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REPORT NUMBER: 5CF510

RADIATION WASTE PROGRAM
GENERATOR ACTIVITY BY CLASS

RUN DATE 1/03/83
PAGE NUMBER 1

START DATE: 1/01/82 END DATE: 1/01/83

CLASS DESCRIPTION	VOLUME		ACTIVITY		SNM	SNM PERCENT	SOURCE MATERIAL	SOURCE PERCENT
	CUBIC FEET	PERCENT	MILlicURIES	PERCENT				
ELECTRIC SERVICES	758,720.00	50.04	392,195.210	13.88				
HEALTH SERVICES	155,772.67	10.44	1,070,803.040	37.88	284.00	61.74	1.20	
EDUCATIONAL SERVICES	399,237.03	26.75	998,591.000	35.33	98.00	21.30	344,660.90	100.00
GOVERNMENT	42,714/30	2.86	307,753.680	10.89	78.00	16.96	.90	
INDUSTRIAL	135,700.00	9.10	57,125.760	2.02				
TOTAL	1,492,224.000	100.00	2,826,468.690	100.00	460.00	100.00	344,663.00	100.00

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START DATE: 01/01/83 END DATE: 09/30/83

STATE	GENERATOR NAME	PERMIT NUMBER	VOLUME CUBIC FEET	MILLICURIES	SOURCE MATERIAL	SMM
CALIFORNIA	BECKMAN INSTRUMENTS, INC	1450	232.50	1,227.400		2.00
	BIO-SCIENCE LABORATORIES	1560	255.00	81.297		
	QUIDEL	1762	15.00	406.173		
	CITY OF HOPE MEDICAL CENTER	2120	232.50	123.583		
	WHITTER INSTITUTE FOR DIABETES	2387	15.00	4.408		
	ISOTOPES PRODUCTS LABS	3790	37.50	3,460.000		
	STHRN CA PERMANENTE MED. GROUP	3939	75.00	2.008		
	KAISER PERMANENTE LABORATORY	3940	89.50	18.700		
	LAC-USC MEDICAL CENTER	4040	75.00	20.000		
	MONOBOND, INC.	4810	30.00	100.000		
	SCRIPPS CLINIC & RESEARCH	6400	130.00	424.152		
THOMAS GRAY & ASSOCIATES, INC.	6920	2.73	2,760.000			
KOL INC.	7652	80.00	.215			
TOTAL			1,262.73	8,627.936		2.00
FLORIDA	FLORIDA POWER & LIGHT COMPANY	3035	1,050.00	79.000		
TOTAL			1,050.00	79.000		
GEORGIA	GEORGIA POWER COMPANY	3190	1,146.00	42.013		
TOTAL			1,146.00	42.013		
ILLINOIS	ALLIED CHEMICAL COMPANY	1087	1,365.90	44.640		
	COMMONWEALTH EDISON, DRESDEN	2280	487.50	130.693		
	COMMONWEALTH EDISON COMPANY	2290	585.00	251.031		
TOTAL			2,438.40	426.364		
MASSACHUSETTS	NUCLEAR METALS, INC.	5361	1,536.30	5,166.600	3,446.60	
TOTAL			1,536.30	5,166.600	3,446.60	
MINNESOTA	NORTHERN STATES POWER COMPANY	5190	183.00	36.894		
	NORTHERN STATES POWER COMPANY	5200	849.80	1,185.749		
TOTAL			1,832.80	1,222.643		
NEW JERSEY	GPU NUCLEAR CORPORATION	5510	1,776.60	1,943.275		
TOTAL			1,776.60	1,943.275		
NEW YORK	NUCLEAR DIAGNOSTIC LABS, INC.	5320	1,423.81	10,258.456	.03	2.60
TOTAL			1,423.81	10,258.456	.03	2.60

REPORT NO: ECF540
 RUN DATE: 08/20/86

RADIATION WASTE PROGRAM
 VOLUME & ACTIVITY BY COMPACT REGION
 RICHLAND, WASHINGTON FACILITY

PAGE 1
 05/01/86 THRU 05/31/86

<u>GENERATOR#</u>	<u>GENERATOR NAME</u>	<u>REC. DATE</u>	<u>MANIFEST#</u>	<u>CUBIC FEET</u>	<u>MILLCURIES</u>	
DED 00-393-0807	DE PONT EI DE NEMOURS	05/19/86	060445	75.00	74.485	
DER 99-000-8922	DU PONT EI DE NEMOURS	05/19/86	060424	22.50	0.060	
				97.50	74.545	STATE = DELAWARE
MDR 99-000-7379	JOHNS HOPKINS UNIV	05/19/86	060447	37.50	105.895	
				37.50	105.895	STATE = MARYLAND
				135.00	180.440	COMPACT = APPALACHIAN
ILR 99-001-1637	ADCO SERVICES INC	05/08/86	060982	1,063.15	2,110.336	
ILR 99-001-1637	ADCO SERVICES INC	05/12/86	060984	521.51	1,348.000	
ILD 00-627-8170	ALLIED CHEMICAL CO	05/27/86	025212	552.00	6.030	
ILD 00-627-8170	ALLIED CHEMICAL CO	05/28/86	025211	552.00	5.970	
ILR 99-000-5282	COMMONWEALTH EDISON	05/02/86	045057	905.40	212.756	
ILD 00-080-3643	COMMONWEALTH EDISON	05/05/86	070510	105.00	61,856.933	
ILD 00-080-3643	COMMONWEALTH EDISON	05/05/86	070511	591.00	198.642	
ILD 00-080-3643	COMMONWEALTH EDISON	05/09/86	070512	105.00	44,484.676	
ILD 00-080-3643	COMMONWEALTH EDISON	05/12/86	070513	105.00	42,877.936	
ILR 99-000-5282	COMMONWEALTH EDISON	05/13/86	045034	517.50	786.752	
ILD 00-080-3643	COMMONWEALTH EDISON	05/15/86	070514	105.00	45,423.371	
ILD 00-080-3643	COMMONWEALTH EDISON	05/19/86	070515	105.00	81,123.590	
ILD 00-080-3643	COMMONWEALTH EDISON	05/27/86	070516	105.00	14,669.300	
ILD 00-080-3643	COMMONWEALTH EDISON	05/27/86	070517	105.00	64,667.436	
ILR 99-000-5282	COMMONWEALTH EDISON	05/27/86	045033	105.00	700.287	
ILR 99-000-5563	COMMONWEALTH EDISON	05/05/86	063533	738.00	227.228	
ILR 99-000-5563	COMMONWEALTH EDISON	05/07/86	063534	738.00	263.259	
ILR 99-000-5563	COMMONWEALTH EDISON	05/13/86	063535	708.00	195.783	
ILR 99-000-5563	COMMONWEALTH EDISON	05/13/86	063536	630.00	315.306	
ILR 99-000-5563	COMMONWEALTH EDISON	05/19/86	063538	666.00	320.709	
ILR 99-000-5563	COMMONWEALTH EDISON	05/27/86	063537	666.00	384.931	
ILD 04-506-3450	US ECOLOGY INC	05/09/86	025170	45.00	0.006	
				9,733.56	362,179.237	STATE = ILLINOIS
KYD 00-083-0851	KENTUCKY UNIVERSITY OF	05/09/86	046404	210.00	184.500	
				210.00	184.500	STATE = KENTUCKY
				9,943.56	362,363.737	COMPACT = CENTRAL MIDWEST
				10,078.56	362,544.177	***GRAND TOTAL***

REPORT NUMBER: ECF530

RADIATION WASTE PROGRAM
GENERATOR TOTALS (ALPHABETICAL LISTING)

RUN DATE 2/02/83
PAGE NUMBER 1

START DATE: 6/01/82 END DATE: 12/31/82

91087
ALLIED CHEMICAL COMPANY
P. O. BOX 430
HIGHWAY 45 NORTH
METROPOLIS, IL 62960

ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY
TE-127	17.430	PU-240	27.210						

TOTAL WASTE VOLUME
1,365.90 CU.FT.

TOTAL SPECIAL RUC MATERIAL
.00 GR

TOTAL SOURCE MATERIAL
.00 KG

TOTAL BYPRODUCT ACTIVITY
44.640

BATES NUMBERS 06705-82 06711-82 06713-82

TOTAL NUMBER OF PACKAGES 74

REPORT NUMBER ECF535

RADIATION WASTE PROGRAM
SUMMARY REPORT

RUN DATE 01/01/83
PAGE NUMBER 1

START DATE: 06/01/82 END DATE: 06/01/82

ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY	ISOTOPE	ACTIVITY
H-3	16.200	BA-140	1,835.577	CA-45	5.605	CA-51	5.000	CE-139	20.000
CE-141	321.533	CE-144	13.741	CO-57	43.030	CO-58	229.300	CR-51	6,692.936
CO-60	.080	CR-51	797.056	CS-134	475.799	CS-137	7,629.936	CS-138	.006
C-14	101.796	CU-64	.008	CU-67	.500	FE-59	.130	GA-67	.020
GA-67	.100	HF-181	.500	HG-203	9,209.848	HO-166	1.000	IN-111	.260
I-125	2,304.359	I-125	1.370	I-131	2,229.256	K-40	420.190	LA-140	1,691.816
LA-138	1.370	MN-54	.030	MN-56	232.676	MO-99	.100	U-NAT	17.430
NA-22	1.300	NB-95	3.123	PA-233	9.306	PD-103	486.651	RA-226	7.000
SB-124	11.850	SB-125	7.639	SC-46	.500	SR-85	1.500	SR-89	3.182
SR-90	.407	S-35	163.575	TC-99	139.770	TL-201	.645	SR-90	27.210
U-235	1,308.000	CS-137	.090	XR-95	.543	ZN-65	30.160	ZR-95	1.721

TOTAL WASTE VOLUME

10,396.04 CU. FT.

TOTAL SPECIAL NUC MATERIAL

4.60 GR

TOTAL SOURCE MATERIAL

3,446.63 KG

TOTAL BYPRODUCT ACTIVITY

36,502.733

TOTAL NUMBER OF PACKAGES 950