

THE CONTENTS OF THIS DOCUMENT ARE
THE HIGHEST QUALITY AVAILABLE.

INITIAL BAB DATE 8/18/94

INDUSTRIAL WASTE MANAGEMENT INFORMATION
FOR 1979 AND RECORD-TO-DATE

JULY 1980



IDAHO OPERATIONS OFFICE



IDAHO NATIONAL ENGINEERING LABORATORY

DEPARTMENT OF ENERGY

IDO-10057(79)
Distribution Category
Limited

INDUSTRIAL WASTE MANAGEMENT INFORMATION
FOR 1979 AND YEAR-TO-DATE

H. M. Batchelder
Waste Management Programs

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Published July 1980

PREPARED FOR THE
U.S. DEPARTMENT OF ENERGY
IDAHO OPERATIONS OFFICE
UNDER CONTRACT NO. DE-AC07-76ID01570

CONTENTS

Acronyms	v
Conversion Factors	vi
Abstract	vii
Summary	viii
INEL Industrial Waste Summary, Record-to-Date	1
INEL Solid & Liquid Industrial Waste Summary, Record-to-Date	2
INEL Industrial Waste Summary, 1979	3
Airborne & Liquid Industrial Waste Substances Summary, Record-to-Date	4
Airborne & Liquid Industrial Waste Substances Summary, 1979	6
INEL Fuel Oil Summary, Record-to-Date	7
INEL Water Usage Summary, Record-to-Date	8
Industrial Waste Management Information, 1979	
Idaho National Engineering Laboratory (INEL)	
Report 1 INEL Monthly Water Usage Summary	9
Report 2 INEL Year-to-Date Water Usage Summary	10
Report 3 INEL Industrial Waste Summary	11
Report 4 INEL Airborne & Liquid Disposed Substances Summary	14
Report 5 INEL Monthly Fuel Oil Summary	16
Report 6 INEL Year-to-Date Fuel Oil Summary	17
EG&G Idaho, Incorporated	
Report 104 TRA Airborne Disposed Substances Summary	18
Report 105 TRA Liquid Disposed Substances Summary	19
Report 106 TRA Industrial Waste Summary	23
Report 107 TRA Water Usage & Disposal Summary	24
Report 108 TRA Fuel Oil Usage & Stack Effluents Summary	25
Report 126 WMC Industrial Waste Summary	26
Report 127 WMC Water Usage & Disposal Summary	27
Report 128 WMC Fuel Oil Usage & Stack Effluents Summary	29

Report 135	PBF Liquid Disposed Substances Summary . . .	30
Report 136	PBF Industrial Waste Summary	33
Report 137	PBF Water Usage & Disposal Summary	34
Report 138	PBF Fuel Oil Usage & Stack Effluents Summary	36
Report 146	ARA Industrial Waste Summary	37
Report 147	ARA Water Usage & Disposal Summary	38
Report 148	ARA Fuel Oil Usage & Stack Effluents Summary	39
Report 155	TAN Liquid Disposed Substances Summary . . .	40
Report 156	TAN Industrial Waste Summary	43
Report 157	TAN Water Usage & Disposal Summary	44
Report 158	TAN Fuel Oil Usage & Stack Effluents Summary	46
Report 165	CFA Liquid Disposed Substances Summary . . .	47
Report 166	CFA Industrial Waste Summary	49
Report 167	CFA Water Usage & Disposal Summary	50
Report 168	CFA Fuel Oil Usage & Stack Effluents Summary	51
Exxon Nuclear Idaho Company (ENICO)		
Report 204	CPP Airborne Disposed Substances Summary . .	52
Report 205	CPP Liquid Disposed Substances Summary . . .	54
Report 206	CPP Industrial Waste Summary	56
Report 207	CPP Water Usage & Disposal Summary	57
Report 208	CPP Fuel Oil Usage & Stack Effluents Summary	58
Naval Reactors Facility (NRF)		
Report 304	NRF Airborne Disposed Substances Summary . .	59
Report 305	NRF Liquid Disposed Substances Summary . . .	60
Report 306	NRF Industrial Waste Summary	63
Report 307	NRF Water Usage & Disposal Summary	65
Report 308	NRF Fuel Oil Usage & Stack Effluents Summary	66

Argonne National Laboratory-West (ANL)		
Report 404	ANL Airborne Disposed Substances Summary . .	67
Report 405	ANL Liquid Disposed Substances Summary . . .	69
Report 406	ANL Industrial Waste Summary	73
Report 407	ANL Water Usage & Disposal Summary	74
Report 408	ANL Fuel Oil Usage & Stack Effluents Summary	76
Engineered Release Points to the Environment		77

ACRONYMS

ANL	Argonne National Laboratory-West
ARA	Auxiliary Reactor Area
CFA	Central Facilities Area
CPP	Chemical Processing Plant
EBR	Experimental Breeder Reactor I
INEL	Idaho National Engineering Laboratory
IWMIS	Industrial Waste Management Information System
LOFT	Loss of Fluid Test Facility
LPT	Low Power Test Facility
NRF	Naval Reactor Facility
PBF	Power Burst Facility
TAN	Test Area North
TRA	Test Reactor Area
WMC	Waste Management Complex

CONVERSION FACTORS

<u>To Convert</u>	<u>Into</u>	<u>Multiply By</u>
cubic metres	cubic feet	35.31
litres	gallons (U.S. liquid)	0.2642
kilograms	pounds	2.2046

ABSTRACT

The industrial waste data associated with activities at the Idaho National Engineering Laboratory (INEL) for 1979 and record-to-date are summarized. Summaries of the quantities of liquid industrial waste, the volumes of solid waste, the fuel oil and water used, and the quantities of SO₂ and particulates released are included. The waste data are from the INEL Industrial Waste Management Information System (IWMIS).

SUMMARY

A computerized Industrial Waste Management Information System (IWMIS) has been used at the Idaho National Engineering Laboratory (INEL) since 1971. The system provides for timely reports on the amount of all types of industrial waste that has been stored and disposed at the INEL, fuel oil usage, and water usage and disposal. The system serves as the official record for all types of industrial wastes stored or disposed at the INEL. The quantities of industrial waste are reported for the following categories: disposal of airborne and liquid effluents, fuel oil consumption, and water usage.

A total of 31,380 m³ of solid industrial waste was disposed to sanitary landfills at the INEL during 1979. This represents an increase from the 26,250 m³ in 1978.

During 1979, a total of 42,100 litres of waste oils and solvents was disposed of by mixing it with No. 5 oil and utilizing it as fuel in the INEL boilers. This compares with 23,060 litres in 1978 and 31,930 litres in 1977.

A total of 4,379,000 kg of liquid and airborne industrial waste was discharged in 1979. This includes 2,355,900 kg of chemicals, 1,592,000 kg of total dissolved solids, and 431,100 kg of total hardness which were discharged as liquid wastes to the lithosphere at the INEL. This liquid waste represents a decrease from the total quantity of 4,999,000 kg in 1978 and 5,533,900 kg in 1977.

During 1979, a total of 20,000,000 litres of fuel oil was used at the INEL, which produced 308,300 kg of SO₂ and 26,250 kg of particulates. During 1978, 20,710,000 litres of fuel oil were used, producing 247,900 kg of SO₂ and 26,410 kg of particulates. The reduction in fuel consumption usage reflects changes in facility operations and energy conservation efforts.

A total of 8,695,000,000 litres of water was used at the INEL during 1979, compared to 9,022,000,000 litres in 1978, and 8,997,000,000 litres in 1977. However, the majority of this water is returned to the lithosphere through injection wells and seepage ponds. The remaining water is lost to the atmosphere through cooling towers and other evaporatory processes.

The following reports are included in this document:

Report 1 - INEL Monthly Water Usage Summary

This report summarizes the quantity of water pumped at each facility and the quantity of water disposed to the atmosphere, ground surfaces, and subsurfaces. The percent accountability is also shown.

Report 2 - INEL Year-to-Date Water Usage Summary

This report provides the quantity of water pumped and disposed and the percent accountability at each facility for the year-to-date.

Report 3 - INEL Industrial Waste Summary

This report summarizes the quantity and type of industrial waste for each area at the INEL. The waste is shown by Types 1 through 9, which correspond generally with the standard classifications for sanitary wastes.

Report 4 - INEL Airborne & Liquid Disposed Substances Summary

This report provides the monthly total weight of all substances disposed to the environment. It also provides the total amount of waste disposed for the year-to-date.

Report 5 - INEL Monthly Fuel Oil Summary

This report summarizes information on the types and quantities of fuel oil used during the month for each facility at the INEL. It also provides the quantities of SO₂, NO_x, and particulates released to the atmosphere.

Report 6 - INEL Year-to-Date Fuel Oil Summary

This report provides similar information to Report 5 for the year-to-date.

Series XX4, (Facility) Airborne Disposed Substances Summary

Series XX5, (Facility) Liquid Disposed Substances Summary

Series XX6, (Facility) Industrial Waste Summary

Series XX7, (Facility) Water Usage & Disposal Summary

Series XX8, (Facility) Fuel Oil Usage & Stack Effluents Summary

INEL INDUSTRIAL WASTE SUMMARY
RECORD-TO-DATE

WASTE TYPE	1971-1976	1977	1978	1979
SANITARY WASTE (CU. METERS)	132,200	16,360	26,250	31,380
OIL-SOLVENTS (LITERS)	302,200	31,930	23,060	42,100
LIQUID WASTE (KILOGRAMS)	25,530,000	5,181,000	4,559,000	4,128,000
AIRBORNE WASTE (KILOGRAMS)*	4,156,000	706,500	714,600	585,900
FUEL OIL:				
QUANTITY (LITERS)	164,800,000	23,830,000	22,820,000	22,030,000
SO ₂ (KILOGRAMS)	3,055,000	326,500	247,930	308,300
PARTICULATES (KILOGRAMS)	197,100	27,960	26,410	26,250
WATER-USED (1,000 LITERS)	58,070,000	8,998,000	9,022,000	8,695,000

* NOTE: INCLUDES SO₂ AND PARTICULATES FROM FUEL OIL TOTALS

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL SOLID AND LIQUID INDUSTRIAL WASTE SUMMARY
RECORD-TO-DATE

YEAR	ANL	ARA	CFA	CPP	NRF	PBF	TAN	TRA	WYC	TOTAL
RECORD-TO-DATE (71-77)										
SANITARY WASTE (CU. METERS)	17,470	<1	27,350	17,000	46,620	3,726	15,850	20,510		148,500
OILS & SOLVENTS (LITERS)	8,766		102,200		216,900		568	5,678		334,100
CHEMICALS LIQUIDS (LITERS)	4				43,190	284	18	6,281	145	49,920
SOLIDS (KILOGRAMS)	274		1,355		3,625		<1	17,580		22,840
1978										
SANITARY WASTE (CU. METERS)	3,094	197	5,292	4,972	7,157	211	2,708	2,398	225	26,250
OILS & SOLVENTS (LITERS)	4,319				18,740					23,060
CHEMICALS LIQUIDS (LITERS)							17,030			17,030
SOLIDS (KILOGRAMS)										
1979										
SANITARY WASTE (CU. METERS)	4,179	497	4,438	7,866	6,710	507	3,491	3,503	185	31,380
OILS & SOLVENTS (LITERS)	1,980				40,120					42,100
CHEMICALS LIQUIDS (LITERS)					57					57
SOLIDS (KILOGRAMS)					6,332					6,332

IMEL INDUSTRIAL WASTE SUMMARY IN CUBIC METERS*
FOR JANUARY THROUGH DECEMBER 1979

TYPES	AHL	ARA	CFA	CPP	NRF	PBF	TAN	TRA	WMC	TOTAL
1. TRASH	2,766	441	2,931	4,561	3,857	450	2,703	2,698	183	20,590
2. CAFETERIA GARBAGE	564		521	759	1,217		552	127		3,741
3. WOOD & SCRAP LUMBER	20	19	513	1,239	753	18	116	125	<1	2,805
4. MASONRY & CONCRETE	772	24	205	456	440	6	63	120		2,085
5. SCRAP METAL	42		101	767	418		21	5		1,355
6. OIL (LITERS)	1,980				40,120					42,100
7. SOLVENTS (LITERS)										
8. CHEMICALS										
LIQUID (LITERS)					57					57
SOLIDS (KILOGRAMS)					6,332					6,332
9. OTHERS										
LIQUID (LITERS)	416	396	4,556	58	121			671		6,220
SOLIDS (CU. METERS)	14	13	163	84	25	32	36	426	<1	793
TOTALS										
SANITARY TYPES 1, 2, 3, 4, 5, & 9 (CUBIC METERS)	4,179	497	4,438	7,866	6,710	507	3,491	3,503	185	31,380
OILS & SOLVENTS (TYPES 6 & 7 (LITERS)	1,980				40,120					42,100
CHEMICALS										
LIQUIDS (GALLONS)					57					57
SOLIDS (KILOGRAMS)					6,332					6,332

* EXCEPT AS NOTED

AIRBORNE AND LIQUID
INDUSTRIAL WASTE SUBSTANCES SUMMARY IN KILOGRAMS
RECORD-TO-DATE

SUBSTANCE IDENTIFICATION	1971-1977	1978	1979	TOTAL
AMIDES	672	66	78	816
AUTO CLEANERS	15,140	2,003	2,014	19,150
BETZ 4-9	68			68
BETZ DE 419	2,675			2,675
BETZ DE 453	113			113
BETZ DE 481	7,878			7,878
BETZ DIANODIC 194	828			828
BETZ J-12	18			18
BETZ NEUTKMEEM	1,669			1,669
BETZ 109	35			35
BETZ 194	301			301
BETZ 406	129			129
BETZ 429	5,171			5,171
BETZ 65	544			544
BICLIDE D-2	9,640			9,640
BLEACH	898			898
CALCIUM ION	809	1,936	2,577	5,322
CARBONTHIOCYANATES	96	13	16	124
CHLORIDE ION	2,593,000	513,300	444,100	3,551,000
CHLOROCARBONS	2			2
CHLOROHYDROCARBONS	472			472
CHLOROSULFONES	512	53	62	628
CHROMATE ION	112	29	57	199
CYCLOHYDROCARBONS				
DIANODIC 194	15,530			15,530
DIMETHYLAMINE	247	254	263	764
DIPHOSPHONATE	3,789	3,185	2,883	9,857
DISPERSANT 403	13,030			13,030
HEXAVALENT CR	2,559	23	18	2,600
HPA	1,885	1,351	916	4,151
HYDRAZINE	12			12
HYDROCARBON-AMINES	16	10	10	36
HYDROCARBONS	955	132	156	1,243
HYDROXYCARBON	66			66
HYDROXYCARBONS	5,319	4,254	3,859	13,430
HYPOCHLORITE	16,050			16,050
HYPOCHLORITE ION	2,147	5,279	6,991	14,420
KP40 COULANT CNTRL	73			73
KWIK KLEEN	2,098			2,098
LAUNDRY PRODUCTS	7,085	4,134	4,381	16,200
M-60 ALGAEICIDE	4			4
M-80T ALGAEICIDE	4			4
METHYLTHIOCYANATE			68	68
MURPHOLINE	323	297	111	730
N-HYDROCARBON	2,219	904	594	3,717
NALCO 7312	178			178
NALCO 7323	185			185
NALCOL 7351	840			840
NAPTHA	39			39

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

AIRBORNE AND LIQUID
INDUSTRIAL WASTE SUBSTANCES SUMMARY IN KILOGRAMS
RECORD-TO-DATE

SUBSTANCE IDENTIFICATION	1971-1977	1978	1979	TOTAL
NITRATE ION	218,600	130,400	121,100	470,100
NITRIC OXIDE	46,070	40,800	20,440	107,300
NITROGEN DIOXIDE	1,209,000	399,400	230,900	1,839,000
OROCOL 194	68			68
OROCOL 734	70,310			70,310
OXYCARBONS				
PHOSPHATE	635	544	544	1,724
PHOSPHATE ION	74,970	15,510	14,970	105,450
PHOSPHONATE	31	424	1,080	1,535
PHOSPHONATES	23			23
PHOTO LAB CHEMICAL	13,060	2,309	1,960	17,320
POLYHYDROXYCARBON	23	2	20	45
POLYMETHACRYLATE	20	283	720	1,023
POLYNODIC 606	62,210			62,210
POLYNODIC 633	2,268			2,268
POLYPHOSPHATE	71	990	2,521	3,582
POTASSIUM ION	4,775	3,334	2,459	10,570
SILICALCARBONS	20			20
SILICATE ION	59			59
SKAZOL	617			617
SKAZOL	3,164			3,164
SLIMICIDE A-9	9,935			9,935
SLIMICIDE C-35	3,434			3,434
SLIMICIDE D-2	2,034			2,034
SLIMICIDE J-12	7,523			7,523
SLIMICIDE J-9	15,920			15,920
SLIMICIDE 403	2,253			2,253
SOAP	33,970	3,198	3,243	40,410
SODIUM ION	2,190,000	374,600	344,300	2,909,000
SODIUM PHOSPHATE	7	2	1	10
SPRA-SAF	862			862
SULFATE ION	7,965,000	1,274,000	1,141,000	10,380,000
SULFITE ION	6,683	423	570	7,676
SULFONATE	20	283	720	1,023
SULFONATES	1,416			1,416
SULFUR DIOXIDE	8,259			8,259
IDS	14,640,000	1,806,000	1,592,000	18,040,000
THIOLCARBONS	17			17
THIOLHYDROCARBONS	48			48
TOTAL HARKNESS	2,655,000	408,900	431,100	3,495,000
TRIVALENT CR	1,031	397	357	1,786
ZINC ION	2,079	129	122	2,330
TOTAL	31,970,000	4,999,000	4,379,000	41,350,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

AIRBORNE AND LIQUID
INDUSTRIAL WASTE SUBSTANCES SUMMARY IN KILOGRAMS
FOR JANUARY THROUGH DECEMBER, 1979

SUBSTANCE IDENTIFICATION	ANL	CFA	CPP	N&F	PBF	TAN	TRA	TOTAL
AMIDES	78							78
AUTO CLEANERS		2,014						2,014
CALCIUM ION	356	100	88	2,031			2	2,577
CARBONITRILIDES	16							16
CHLORIDE ION	201	7,068	252,600	167,700	1	16,600	462	444,100
CHLOROSULFONES	62							62
CHROMATE ION					57			57
DIMETHYLAMINE	263							263
DIPHOSPHONATE							2,883	2,883
HEXAVALENT CR	18							18
HPA					33		883	916
HYDROCARBON-AMINES	10							10
HYDROCARBONS	156							156
HYDROXYCARBONS							3,859	3,859
HYPOCHLORITE ION	228	671	220	5,210			651	6,991
LAUNDRY PRODUCTS		4,381						4,381
METHYLISOTHIOCYANATE	68							68
MORPHOLINE	111							111
N-HYDROCARBON							594	594
NITRATE ION			121,103		2			121,100
NITRIC OXIDE			20,440					20,440
NITROGEN DIOXIDE			230,900					230,900
PHOSPHATE		544						544
PHOSPHATE ION	695			2,655	50	414	11,150	14,970
PHOSPHONATE				1,080				1,080
PHOTO LAB CHEMICAL	1,960							1,960
POLYHYDROXYCARBON					20			20
POLYMERACRYLATE				720				720
POLYPHOSPHATE				2,521				2,521
POTASSIUM ION							2,459	2,459
SOAP		3,243						3,243
SODIUM ION	12,050	4,280	152,100	95,800	1,035	12,360	66,700	344,300
SODIUM PHOSPHATE					1			1
SULFATE ION	60,750		47,260	235,400	1,279	2,820	793,000	1,141,000
SULFITE ION					2	552	16	570
SULFONATE				720				720
TDS			811,400				780,700	1,592,000
TOTAL HARDNESS							431,100	431,100
TRIVALENT CR	357							357
ZINC ION	113				9			122
TOTAL	77,490	22,300	1,636,000	513,300	2,489	32,750	2,095,000	4,379,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL FUEL OIL SUMMARY
RECORD-TO-DATE

AKLA	1971-1977				1978				1979			
	FUEL OIL (LITERS)	SO2 (KG)	PART. (KG)	DIESEL (LITERS)	FUEL OIL (LITERS)	SO2 (KG)	PART. (KG)	DIESEL (LITERS)	FUEL OIL (LITERS)	SO2 (KG)	PART. (KG)	DIESEL (LITERS)
ANL	17,240,000	188,800	14,330		1,131,000	4,938	1,490		1,323,000	5,150	1,743	
AKA	893,800	7,108	523		125,900	773			237,400	1,344		
CFA	10,210,000	100,700	22,260		2,050,000	12,090			2,112,000	11,960		
LPP	48,300,000	385,000	5,504		7,027,000	38,160			5,954,000	63,960		
NKE	41,980,000	1,201,000	55,620		3,635,000	64,620	6,853		4,339,000	117,800	9,308	
PBF	818,300	4,535	231	62,480	145,900	844		31,880	193,200	1,110		61,210
TAN	23,050,000	590,800	36,310	29,900	2,928,000	29,670		34,010	2,732,000	16,000		45,750
TRA	20,980,000	814,800	90,240	11,000,000*	3,633,000	96,580	18,060	2,041,000*	3,057,000	90,740	15,200	1,921,000*
WMC	130,300	891			37,330	215			51,700	260		
TOTAL	177,600,000	3,382,000	225,000	11,100,000*	20,710,000	247,900	26,410	2,107,000*	20,000,000	308,300	26,250	2,028,000*

* TRA EMERGENCY GENERATOR

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL WATER USAGE SUMMARY IN THOUSAND LITERS

RECORD-TO-DATE

AREA	1971-1977	1978	1979	TOTAL
ANL	3,222,000	527,100	524,800	4,274,000
AKA	855,600	139,900	103,600	1,099,000
LFA	2,937,000	376,700	466,200	3,780,000
LPP	10,660,000	2,113,000	1,681,000	14,450,000
NKF	13,480,000	2,087,000	2,015,000	17,590,000
PBF	262,100	71,650	44,740	378,500
IAN	1,972,000	1,029,000	902,100	3,903,000
TRA	33,590,000	2,627,000	2,849,000	39,060,000
WMC	94,420	50,010	109,100	253,500
TOTAL	67,070,000	9,022,000	8,695,000	84,790,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING



IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 IREL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

IREL MONTHLY WATER USAGE SUMMARY
 DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

AREA OF ORIGIN	MONTHLY VOLUME PUMPED	MONTHLY VOLUME DISPOSED				TOTAL	ACCOUNTABILITY (%)
		AIR	SURFACE	SUBSURFACE	SEWAGE		
AWL	32,900	15,416	13,298		1,840 *	30,623	93.1
ARZ	8,320	*	7,764 *		556 *	8,320	100.0
UFA	20,032	*	238 *	386	11,511	12,136	60.6
UFF	92,740		*	88,046	4,694	92,740	100.0
HRF	115,372	54,130 *	46,105 *		9,130	109,365	94.8
PEF	2,623	329	325 *	1,664 *	231 *	2,570	98.0
IAW	76,872	*	40,578 *	30,877 *	2,971 *	74,427	96.8
TAH	233,148	117,988	4,001 *	74,760	2,956	199,705	85.7
AKL	11,379	*	235 *	11,030 *	114	11,379	100.0
GRAND TOTALS	593,387	187,933	112,545	206,783	34,003	541,264	91.2

IDaho OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL YEAR-TO-DATE WATER USAGE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

AREA OF ORIGIN	YEARLY VOLUME PUMPED	YEARLY VOLUME DISPOSED				TOTAL	ACCOUNTABILITY (%)
		AIR	SURFACE	SUBSURFACE	SEWAGE		
ANL	524,839	264,975	142,638		58,536 *	466,152	88.8
ARA	103,577	*	96,900 *	*	6,677 *	103,577	100.0
CPA	416,190	*	122,912 *	7,624	147,237	277,773	59.6
CFI	1,686,767		*	1,433,909	50,329	1,484,239	88.3
HRF	2,014,635	737,460 *	1,122,516 *		72,678	1,932,653	95.9
PBF	44,742	1,828	3,248 *	16,167 *	2,635 *	23,878	53.4
TAN	902,086	*	498,163 *	265,826 *	40,999 *	805,008	89.2
TKA	2,849,464	1,065,323	274,854 *	1,016,959	33,140	2,390,277	83.9
WNC	109,047	*	4,520 *	103,324 *	1,136	109,039	100.0
GRAND TOTALS	8,695,307	2,669,590	2,265,831	2,643,809	413,367	7,592,596	87.3

NOTE: "*" IN COLUMNS INDICATE A PORTION OF VOLUME IS ESTIMATED

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

RUN DATE: 05/12/80

 INEL INDUSTRIAL WASTE SUMMARY
 DECEMBER AND YEAR-TO-DATE 1979

Pg 1 RPT 3-1

AREA OF ORIGIN	TYPE OF WASTE	MONTHLY		YEAR-TO-DATE	
		VOLUME OR WEIGHT	UNITS	VOLUME	UNITS
ATL	DISPOSED WASTE				
	1 - TRASH	SOLID	206.5 CU. METERS	2,766.5 CU. METERS	
	2 - CAFETERIA GARBAGE	SOLID	42.8 CU. METERS	564.3 CU. METERS	
	3 - WOOD AND SCRAP LUMBER	SOLID		19.9 CU. METERS	
	4 - MASONRY AND CONCRETE	SOLID		772.3 CU. METERS	
	5 - SCRAP METAL	SOLID		42.1 CU. METERS	
	6 - OIL	LIQUID	57.9 LITERS	1,977.7 LITERS	
	9 - OTHER	LIQUID		416.4 LITERS	
	9 - OTHER	SOLID		13.6 CU. METERS	
ARA	DISPOSED WASTE				
	1 - TRASH	SOLID	15.3 CU. METERS	441.2 CU. METERS	
	3 - WOOD AND SCRAP LUMBER	SOLID		19.1 CU. METERS	
	4 - MASONRY AND CONCRETE	SOLID		23.7 CU. METERS	
	9 - OTHER	LIQUID		396.3 LITERS	
	9 - OTHER	SOLID		13.0 CU. METERS	
CFA	DISPOSED WASTE				
	1 - TRASH	SOLID	195.7 CU. METERS	2,930.7 CU. METERS	
	2 - CAFETERIA GARBAGE	SOLID	27.5 CU. METERS	521.1 CU. METERS	
	3 - WOOD AND SCRAP LUMBER	SOLID	22.2 CU. METERS	512.6 CU. METERS	
	4 - MASONRY AND CONCRETE	SOLID	7.6 CU. METERS	204.5 CU. METERS	
	5 - SCRAP METAL	SOLID		100.8 CU. METERS	
	9 - OTHER	LIQUID		4,556.4 LITERS	
	9 - OTHER	SOLID	12.1 CU. METERS	163.3 CU. METERS	
CPP	DISPOSED WASTE				
	1 - TRASH	SOLID	328.8 CU. METERS	4,560.9 CU. METERS	
	2 - CAFETERIA GARBAGE	SOLID	39.8 CU. METERS	758.5 CU. METERS	
	3 - WOOD AND SCRAP LUMBER	SOLID	40.5 CU. METERS	1,239.4 CU. METERS	
	4 - MASONRY AND CONCRETE	SOLID	6.4 CU. METERS	456.1 CU. METERS	
	5 - SCRAP METAL	SOLID		767.3 CU. METERS	
	9 - OTHER	LIQUID		58.3 LITERS	
	9 - OTHER	SOLID		83.7 CU. METERS	
NRF	DISPOSED WASTE				
	1 - TRASH	SOLID	276.0 CU. METERS	3,856.8 CU. METERS	
	2 - CAFETERIA GARBAGE	SOLID	85.6 CU. METERS	1,217.3 CU. METERS	
	3 - WOOD AND SCRAP LUMBER	SOLID	1.5 CU. METERS	753.2 CU. METERS	

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL INDUSTRIAL WASTE SUMMARY
 DECEMBER AND YEAR-TO-DATE 1979

AREA OF ORIGIN	TYPE OF WASTE		MONTHLY		YEAR-TO-DATE	
			VOLUME	OR WEIGHT UNITS	VOLUME	OR WEIGHT UNITS
NAF	DISPOSED WASTE					
	4	MASONRY AND CONCRETE	SOLID	14.5 CU. METERS	439.8 CU. METERS	
	5	SCRAP METAL	SOLID		7.6 CU. METERS	
	8	CHEMICALS	LIQUID		56.8 LITERS	
	8	CHEMICALS	SOLID	1,660.1 KILOGRAMS	6,332.1 KILOGRAMS	
	9	OTHER	LIQUID		121.1 LITERS	
	9	OTHER	SOLID		6.4 CU. METERS	
	STORED WASTE					
	5	SCRAP METAL	SOLID	11.3 CU. METERS	410.1 CU. METERS	
	6	OIL	LIQUID		40,124.2 LITERS	
9	OTHER	SOLID		18.3 CU. METERS		
PPF	DISPOSED WASTE					
	1	TRASH	SOLID	2.3 CU. METERS	450.4 CU. METERS	
	3	WOOD AND SCRAP LUMBER	SOLID	.1 CU. METERS	18.1 CU. METERS	
	4	MASONRY AND CONCRETE	SOLID	.1 CU. METERS	6.3 CU. METERS	
	9	OTHER	SOLID	.6 CU. METERS	32.0 CU. METERS	
TAN	DISPOSED WASTE					
	1	TRASH	SOLID	206.5 CU. METERS	2,703.0 CU. METERS	
	2	CAFETERIA GARBAGE	SOLID	42.8 CU. METERS	552.1 CU. METERS	
	3	WOOD AND SCRAP LUMBER	SOLID		118.2 CU. METERS	
	4	MASONRY AND CONCRETE	SOLID		62.7 CU. METERS	
	5	SCRAP METAL	SOLID		21.4 CU. METERS	
9	OTHER	SOLID		35.9 CU. METERS		
TFA	DISPOSED WASTE					
	1	TRASH	SOLID	215.6 CU. METERS	2,698.0 CU. METERS	
	2	CAFETERIA GARBAGE	SOLID	9.2 CU. METERS	127.3 CU. METERS	
	3	WOOD AND SCRAP LUMBER	SOLID	5.4 CU. METERS	125.3 CU. METERS	
	4	MASONRY AND CONCRETE	SOLID	10.7 CU. METERS	119.7 CU. METERS	
	5	SCRAP METAL	SOLID		5.4 CU. METERS	
	9	OTHER	LIQUID		671.1 LITERS	
	9	OTHER	SOLID	14.1 CU. METERS	426.3 CU. METERS	
	WMC	DISPOSED WASTE				
1		TRASH	SOLID	12.2 CU. METERS	183.1 CU. METERS	
3		WOOD AND SCRAP LUMBER	SOLID		.8 CU. METERS	

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL INDUSTRIAL WASTE SUMMARY
 DECEMBER AND YEAR-TO-DATE 1979

AREA OF ORIGIN TYPE OF WASTE		MONTHLY VOLUME OF WEIGHT UNITS	YEAR-TO-DATE VOLUME OR WEIGHT UNITS
WPL	DISPOSED WASTE 9 - OTHER	SOLID	.8 CU. METERS
INEL GRAND TOTALS			
DISPOSED WASTE			
	1 - TRASH	SOLID	1,458.9 CU. METERS
	2 - CAFETERIA GARBAGE	SOLID	247.7 CU. METERS
	3 - WOOD AND SCRAP LUMBER	SOLID	69.7 CU. METERS
	4 - MASONRY AND CONCRETE	SOLID	41.4 CU. METERS
	5 - SCRAP METAL	SOLID	944.6 CU. METERS
	6 - OIL	LIQUID	1,979.7 LITERS
	8 - CHEMICALS	LIQUID	56.8 LITERS
	8 - CHEMICALS	SOLID	1,660.1 KILOGRAMS
	9 - OTHER	LIQUID	6,332.1 KILOGRAMS
	9 - OTHER	SOLID	6,219.6 LITERS
			775.0 CU. METERS
STORED WASTE			
	5 - SCRAP METAL	SOLID	11.3 CU. METERS
	6 - OIL	LIQUID	40,124.2 LITERS
	9 - OTHER	SOLID	18.3 CU. METERS

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL AIRBORNE AND LIQUID DISPOSED SUBSTANCES SUMMARY
 DECEMBER AND YEAR-TO-DATE 1979

ALL FACILITIES SUBSTANCES	MONTHLY				YEAR-TO-DATE			
	ATMOSPHERE (KILOS)	SURFACE (KILOS)	SUB SURFACE (KILOS)	TOTAL (KILOS)	ATMOSPHERE (KILOS)	SURFACE (KILOS)	SUB SURFACE (KILOS)	TOTAL (KILOS)
AMIDES		4		4		78		78
AUTO CLEANERS			145	145			2,014	2,014
CALCIUM ION		94	14	108		2,390	188	2,577
CARBONTHIOCYANATES		1		1		16		16
CHLORIDE ION		20,377	12,070	32,447		182,544	261,547	444,092
CHLOROSULFONES		3		3		62		62
CHROMATE ION						47	10	57
DIMETHYLAMINE		23		23		263		263
DIPHOSPHONATE			260	260			2,883	2,883
HEXAVALENT CR	2			2	18			18
HPA			45	45		33	883	916
HYDROCARBON-AMINES		1		1		10		10
HYDROCARBONS		8		8		156		156
HYDROXYCARBONS			332	332			3,859	3,859
HYPOCHLORITE ION		205	87	293		5,788	1,203	6,991
LAUNDRY PRODUCTS			209	209			4,381	4,381
METHYLSULFONATE						68		68
MORPHOLINE		12		12		111		111
N-HYDROCARBON			48	48			594	594
NITRATE ION			6,584	6,584		2	121,054	121,056
NITRIC OXIDE	4,681			4,681	20,438			20,438
NITROGEN DIOXIDE	35,882			35,882	230,911			230,911

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM
 INEL AIRBORNE AND LIQUID DISPOSED SUBSTANCES SUMMARY
 DECEMBER AND YEAR-TO-DATE 1979

ALL FACILITIES SUBSTANCES	MONTHLY			YEAR-TO-DATE				
	ATMOSPHERE (KILOS)	SURFACE (KILOS)	SUBSURFACE (KILOS)	TOTAL (KILOS)	ATMOSPHERE (KILOS)	SURFACE (KILOS)	SUBSURFACE (KILOS)	TOTAL (KILOS)
PHOSPHATE			45	45			544	544
PHOSPHATE ION		236	368	604		3,745	11,222	14,966
PHOSPHONATE		46		46		1,060		1,060
PHOTO LAB CHEMICAL		163		163		1,960		1,960
POLYHYDROXYCARBON						20		20
POLYMETACRYLATE		31		31		720		720
POLYPHOSPHATE		107		107		2,521		2,521
POTASSIUM ION			197	197			2,459	2,459
SOAP			272	272			3,243	3,243
SODIUM ION		13,300	7,706	21,006		184,782	159,508	344,290
SODIUM PHOSPHATE							1	1
SULFATE ION		58,099	31,431	89,530		823,827	316,677	1,140,504
SULFITE ION		36	10	46		482	68	570
SULFONATE		31		31		720		720
TDS			108,396	108,396		41,906	1,550,246	1,592,152
TOTAL HARDNESS			64,097	64,097			431,133	431,133
TRIVALENT CR		21		21		357		357
ZINC ION		6		7	1	120	1	122

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL MONTHLY FUEL OIL SUMMARY
 DECEMBER 1979

AREA OF ORIGIN	FUEL OIL IN LITERS				KILOGRAMS DISCHARGED			
	TYPE 2	TYPE 5	TYPE 6	KEROSENE	DIESEL	SO2	NOX	PARTICULATES
ANL	173,518					676		229
ARA	44,704					253		
LFA	111,600					1,050		
CPP		535,620				13,709		
NRV		667,727				20,175	2,160	1,432
PLF	50				38,534	218		
TAN	446,067	51,827				2,943		
TRA		411,084			154,857	11,987		2,044
JPC								
GRAND TOTALS	846,128	1,646,257			193,391	50,990	2,160	3,705

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INEL YEAR-TO-DATE FUEL OIL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA OF ORIGIN	FULL OIL IN LITERS					KILOGRAMS DISCHARGED		
	TYPE 2	TYPE 5	TYPE 6	KEROSENE	DIESEL	SO2	NOX	PARTICULATES
ANL	1,322,527					5,150		1,743
AKA	237,391					1,344		
CFA	2,111,993					11,962		
CPP	4,436,372	1,517,148				63,957		
NEE		4,559,430				117,771	14,040	9,306
PBF	193,179				61,212	1,110		
TAN	2,697,181	35,234			45,745	15,997		
TKA		3,056,959			1,921,085	90,735		15,202
WPC	51,696					260		
GRAND TOTALS	11,050,339	8,948,771			2,026,043	308,287	14,040	26,253

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SLP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWERS EVAP VOLUME (CU.M. IN 1000)	150,480 266,212	132,274 12,472	78,876 137,047	122,948 165,245	122,060 0	178,567 173,016	1,539,197
STEAM LOSS (WATER) VOLUME (CU.M. IN 1000)	6,639 0	4,754 0	3,810 0	4,493 0	3,277 0	0 0	22,973

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 IREL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CALCIUM ION WEIGHT (KGS)												2	2
CHLORIDE ION WEIGHT (KGS)	32	36	27	51	32	35	63	45	45	56	14	27	463
DIPHOSPHONATE WEIGHT (KGS)	316	260	149	296	260	205	449	222	205	260		260	2,682
HPA WEIGHT (KGS)	120	120	90	120	15	210	165					45	863
HYDROCARBONS WEIGHT (KGS)	408	345	204	415	317	297	682	262	272	325		332	3,858
HYPOCHLORITE ION WEIGHT (KGS)	44	50	39	69	47	49	86	63	62	80	20	42	651
N-HYDROCARBON WEIGHT (KGS)	48	48		95		48	119	48	95	48		48	595
PHOSPHATE ION WEIGHT (KGS)	499	310	2,260	2,351	260	1,578	904	528	1,406	356	336	356	11,154
POTASSIUM ION WEIGHT (KGS)	313	275	169	275	166	331	322	150	112	150		197	2,458
SODIUM ION WEIGHT (KGS)	3,181	3,362	3,116	4,694	25,553	3,306	4,157	4,096	4,515	3,772	2,957	3,994	60,704
SULFATE ION WEIGHT (KGS)	65,557	55,397	53,208	69,718	63,514	60,788	96,331	68,213	85,633	62,777	37,368	74,528	193,632
SULFITE ION WEIGHT (KGS)	3	3	2	2	1	1				1	1	1	16
TDS WEIGHT (KGS)	73,709	41,875	57,703	67,463	50,919	54,123	86,959	64,138	49,270	51,316	125,540	57,716	780,730
TOTAL HARDNESS WEIGHT (KGS)	47,225	26,252	34,229	203	25,119	30,983	45,468	35,783	27,283	35,290	59,203	64,097	431,134

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
CHEMICAL WASTE POND SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	6,533	5,481	5,807	5,337	4,486	4,679	5,939	6,060	5,296	6,348	4,989	5,402	66,296
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	482.27 3,020	569.09 3,229	523.21 3,039	851.26 4,543	5667.40 25,421	664.56 3,203	662.23 3,933	664.67 3,988	833.32 4,413	573.57 3,641	592.31 2,955	715.09 3,863	984.27 65,248
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	5598.86 39,193	6426.59 35,225	6642.63 38,571	8577.99 45,763	2464.23 12,452	6311.74 29,530	2144.28 54,309	8496.66 50,979	11068.84 58,617	7212.26 45,783	7490.05 37,368	8631.99 40,627	7,511.18 524,435
CONDENSATE LOSS SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)						2,177	644		379	447	1,419	2,124	7,186
DISPOSAL WELL SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	106,156 7.7	71,466 7.7	90,242 8.1	74,760 7.5	62,912 7.7	77,599 7.7	99,023 7.3	76,274 7.3	70,444 7.7	81,838 7.4	126,732 7.7	72,640 7.6	1,010,466 7.6
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	1.6 13	2.2 18	1.6 14	3.6 24	2.6 16	2.2 22	3.7 36	2.4 11	3.6 25	4.0 32		2.4 18	2.3 229
DIFLUORIDE CONCENTRATION (MG/L) WEIGHT (KGS)	2.97 316	2.54 260	1.66 149	3.56 296	4.14 260	2.64 205	4.53 449	2.92 222	2.90 205	3.18 260		3.56 260	2.85 2,682
MPA CONCENTRATION (MG/L) WEIGHT (KGS)	1.12 120	1.68 120	1.00 90	1.60 120	2.4 15	2.70 210	1.86 155					6.2 45	8.7 885
HYDROXYCARBONS CONCENTRATION (MG/L) WEIGHT (KGS)	3.63 408	4.82 345	2.26 204	5.55 415	5.04 317	3.82 297	6.90 682	3.43 262	3.86 272	3.97 325		4.57 332	3.82 3,858
HYPOCHLORITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	1.6 17	2.3 24	2.3 21	4.1 30	3.7 24	3.9 30	4.8 47	1.8 14	4.6 32	5.5 45		2.3 24	3.4 307
N-HYDROCCARBON CONCENTRATION (MG/L) WEIGHT (KGS)	45 48	67 48		1.27 95			61 48	1.20 119	62 48	1.35 48		65 48	5.9 555

IDAHO OPERATIONS OFFICE
U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>4.89</u> 499	<u>4.34</u> 310	<u>22.17</u> 2,258	<u>31.50</u> 2,351	<u>4.13</u> 260	<u>20.37</u> 1,578	<u>2.11</u> 974	<u>6.93</u> 528	<u>20.00</u> 1,406	<u>4.35</u> 356	<u>2.85</u> 336	<u>4.92</u> 358	11.64 11,154
POTASSIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2.93</u> 313	<u>3.85</u> 275	<u>1.67</u> 169	<u>3.68</u> 275	<u>2.64</u> 166	<u>4.26</u> 331	<u>3.25</u> 322	<u>1.97</u> 150	<u>1.60</u> 112	<u>1.83</u> 150		<u>2.71</u> 197	2.43 2,436
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>1.50</u> 161	<u>1.67</u> 133	<u>.85</u> 78	<u>2.02</u> 150	<u>2.09</u> 131	<u>1.33</u> 103	<u>2.25</u> 224	<u>1.45</u> 111	<u>1.44</u> 103	<u>1.60</u> 131	<u>.01</u> 2	<u>1.41</u> 132	1.44 1,457
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>247.44</u> 26,364	<u>262.26</u> 26,174	<u>164.19</u> 14,636	<u>320.16</u> 23,535	<u>334.79</u> 21,062	<u>402.81</u> 31,258	<u>424.36</u> 42,022	<u>225.95</u> 17,234	<u>383.52</u> 27,017	<u>207.66</u> 16,994		<u>384.09</u> 27,901	266.63 268,597
SULFITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>.02</u> 3	<u>.04</u> 3	<u>.02</u> 2	<u>.03</u> 2	<u>.01</u> 1	<u>.01</u> 1	<u>.01</u> 1		<u>.01</u> 1	<u>.01</u> 1	<u>.01</u> 1	<u>.02</u> 1	.02 16
TDS CONCENTRATION (MG/L) WEIGHT (KGS)	693.00 73,709	587.00 41,875	639.30 57,586	752.00 56,117	642.00 40,316	642.00 49,728	789.50 78,037	790.00 60,146	680.00 47,815	615.00 50,239	992.40 125,540	796.00 57,716	731.21 738,622
TOTAL HARDNESS CONCENTRATION (MG/L) WEIGHT (KGS)	444.00 47,226	368.00 26,252	380.00 34,229	2.72 203	400.00 25,119	400.00 30,983	460.00 45,468	470.00 35,783	388.00 27,283	432.00 35,290	468.00 59,203	884.00 64,097	426.69 431,134
GLUTHERMAL WELL 1 SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)			52,805 8.0	42,547	36,630 8.0		178						132,160 8.0
TDS CONCENTRATION (MG/L) WEIGHT (KGS)			2.20 116	255.70 10,859	240.00 8,775		246.00 44						149.79 19,795
IRRIGATION SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)				1,908	7,631 8.0	17,855	36,157	18,010	6,257 8.0	5,341 7.4			93,160 7.8
TDS CONCENTRATION (MG/L) WEIGHT (KGS)				255.70 487	240.00 1,828	246.60 4,395	246.00 8,875	222.00 3,991	233.00 1,455	202.00 1,077			237.37 22,112

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

194 LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
SEWAGE PLANT SURFACE VOLUME (L. IN 1000)	2,503	2,400	2,521	3,543	2,661	2,362	3,089	2,502	2,370	3,452	2,305	2,956	33,005
HYDROGEN-ION CONC. (PH)	7.5	7.5	7.5	7.4	7.4	7.6	7.5	7.6	7.5	7.5	7.6	7.6	7.5
CALCIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)												2.75	.07
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	6.33 18	7.65 18	9.95 12	1.62 27	6.13 16	5.48 13	8.52 26	13.59 34	8.62 26	6.97 24	6.10 14	2.99 9	1.05 232
HYPOCHLORITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	2.18 27	11.10 27	7.18 18	11.05 39	8.90 24	7.95 19	12.36 38	12.73 49	12.51 29	10.11 36	8.85 20	8.26 19	10.41 344

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH											
TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
LFA LANDFILL													
DISPOSED WASTE													
1 F SOLID	230.9	245.4	237.0	281.4	255.4	230.2	235.5	177.4	172.8	269.9	146.4	215.6	2,050.0
2 M SOLID	9.2	9.2	3.1	12.2	9.2	9.2	15.3	12.2	15.7	12.2	10.7	9.2	127.5
3 M SOLID		.8	.4	11.8	3.1		9.9	3.1	1.9	34.8	54.3	5.4	125.5
4 M SOLID				26.8	.4		46.6	16.8	10.7	3.1	4.6	10.7	119.7
5 M SOLID								2.3			3.1		5.4
9 M SOLID			19.9										19.9
ASBESTOS												7.6	7.6
9 F SOLID													
ASBESTOS MATERIALS													.8
9 M SOLID				.8									.8
ASPHALT											198.8	6.1	204.9
9 M SOLID												.4	64.6
CHROMATE							45.9		18.4				64.3
9 M SOLID													64.3
DIRT													15.3
9 M SOLID							15.3		45.9				61.2
GRAVELL										11.5			11.5
9 M SOLID													11.5
OTHER-GLASS							6.1						6.1
9 M SOLID													6.1
SOD								15.3					15.3
9 F SOLID													15.3
SOD AND DIRT									34.4				34.4
9 M SOLID													34.4
SURVIVAL CRACKERS													
LFA WESCON													
DISPOSED WASTE													
9 L LIQUID							254.8		416.4				671.2
CHEMICALS													671.2
GRAND TOTALS													
DISPOSED WASTE													
1 M SOLID	230.9	245.4	237.0	281.4	255.4	230.2	235.5	177.4	172.8	269.9	146.4	215.6	2,050.0
2 M SOLID	9.2	9.2	3.1	12.2	9.2	9.2	15.3	12.2	15.7	12.2	10.7	9.2	127.5
3 M SOLID		.8	.4	11.8	3.1		9.9	3.1	1.9	34.8	54.3	5.4	125.5
4 M SOLID				26.8	.4		46.6	16.8	10.7	3.1	4.6	10.7	119.7
5 M SOLID								2.3			3.1		5.4
9 M SOLID			19.9										19.9
9 L LIQUID							254.8		416.4				671.2
9 F SOLID				.8			67.3	15.3	98.6	11.5	198.8	14.1	426.3

IDAHO OPERATIONS OFFICE
U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
1 WATER PUMPED (L)	26,047		3,475	3,782	5,776	18,313	51,139	4,512	11,015	3,649	961	2,207	130,877
3 WATER PUMPED (L)	2,566		23,995	6,049		7,658	3,365	2,112	3,017	1,242			50,004
4 WATER PUMPED (L)	219,434	193,126	202,173	259,066	224,052	225,528	305,928	213,985	191,385	241,048	161,859	230,941	2,666,525
TOTAL WATER PUMPED (L)	248,047	193,126	229,643	268,896	229,828	251,499	360,432	220,607	205,417	245,939	162,821	233,148	2,849,404
WATER DISPOSAL													
AIR (L)	107,124	93,459	56,401	86,910	85,472	121,773	181,543	8,506	93,459	112,688		117,988	1,065,323
SURFACE (L)	6,533	5,481	58,596	76,596	48,755	22,534	6,117	24,010	11,553	11,689	4,989	4,001	274,854
SUBSURFACE (L)	108,556	71,466	90,242	74,760	62,912	79,794	99,023	76,274	70,785	82,255	128,132	74,760	1,016,959
SEWAGE DATA													
BUILD VOL. (L)	2,903	2,476	2,521	3,543	2,661	2,362	3,089	2,502	2,370	3,452	2,305	2,956	33,140
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)	132.0	126.0	134.0	120.0	128.0	146.0	140.0	122.0	131.3	137.0	148.0	193.0	138.1
FINAL CONC. (MG/L)	18.2	70.0	10.0	13.4	14.4	10.4	14.8	1.2	16.3	16.3	20.8	16.0	18.7
% REMOVED	86.2	44.4	92.5	88.8	88.8	92.9	69.4	99.0	87.6	88.1	85.9	90.7	86.5
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)	.6	.7	.8	.8	.7	.6	1.0	1.2	1.6	1.2	1.2	1.7	1.0
FINAL CONC. (MG/L)	3.6	2.8	3.3	3.2	3.0	4.8	4.6	3.0	2.8	3.7	4.5	5.1	3.7
INCREASED FACTOR	5.0	3.0	3.1	3.0	3.3	7.0	3.6	1.5	.8	2.1	2.8	2.0	2.7
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)	5.3	6.3	3.9	5.2	4.7	4.7	4.1	3.6	4.8	4.9	5.4	7.3	5.0
FINAL CONC. (ML/L)	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
% REMOVED	99.1	99.2	98.7	99.0	98.9	98.9	98.8	98.6	99.0	99.0	99.1	99.3	99.0
PH-FINAL	7.5	7.5	7.5	7.5	7.6	7.6	7.8	7.6	7.5	7.6	7.6	7.6	7.6
TOTAL SEWAGE VOL. (L)	2,903	2,476	2,521	3,543	2,661	2,362	3,089	2,502	2,370	3,452	2,305	2,956	33,140
TOTAL WATER DISPOSED (L)	223,117	172,682	207,760	235,809	199,799	226,463	289,772	111,292	178,167	210,084	135,427	199,705	2,390,277
ACCOUNTABILITY (%)	89.9	89.5	90.5	87.7	86.9	90.0	80.4	50.4	86.7	85.4	83.2	85.7	83.9

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TRA FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE	EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DIESEL	VOLUME (LITERS)	174	186	155	161	161	226	259	150	137	177	22	155	1,921
	SO ₂ (KGS)	1	1	1	1	1	2	2	1	1	1		1	13
	NO _x (KGS)													
	PARTICULATES (KGS)													
TYPE 5	VOLUME (LITERS)	612	396	351	326	194	159	57		27	233	290	411	3,057
	SO ₂ (KGS)	14	11	8	9	5	4	2		1	6	8	11	77
	NO _x (KGS)													
	PARTICULATES (KGS)	3	2	2	2	1	1				1	1	2	15
GRAND TOTALS														
	SO ₂ (KGS)	15	12	9	10	6	6	3	1	2	7	8	12	91
	NO _x (KGS)													
	PARTICULATES (KGS)	3	2	2	2	1	1				1	1	2	15

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INLL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

WMC INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION TYPL OF WASTE	LOCATION		VOLUME OR WEIGHT BY MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	
CFA LANDFILL DISPOSED WASTE														
1 M SOLID	45.0	9.2		12.6		9.9	6.1	39.8	21.4	6.1	19.9	12.2	183.1	
3 M SOLID										.8	.8		.8	
9 M SOLID OTHER-WEEDS														
GRAND TOTALS DISPOSED WASTE	45.9	9.2		12.6		9.9	6.1	39.8	21.4	6.1	19.9	12.2	183.1	
1 M SOLID											.8		.8	
3 M SOLID														
9 M SOLID														

WMC WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
EBR WATER PUMPED (L)	2,018	178	2,036	2,313	64	269	295	83	178	178	1,476	1,669	10,758
WMC WATER PUMPED (L)	22,227	18,957	24,816	13,222	640	556	333	386	1,662	227	5,553	9,709	98,269
TOTAL WATER PUMPED (L)	24,245	19,135	26,853	15,535	704	825	628	469	1,840	405	7,029	11,379	109,027
WATER DISPOSAL													
AIR (L)	*												
SURFACE (L)	*	235	235	235	235	511	288	341	1,616	182	235	235	4,580
SOIL SURFACE (L)	*	23,936	18,628	26,546	15,232	405	201	227	15	110	6,681	11,030	103,324
SEWAGE DATA													
EBR BUILD VOL. (L)	23	23	23	23	23	68	66	68	68	68	68	66	591
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													

WMC WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. 7 SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
SEWAGE DATA													
WMC BUILD VOL. (L)	45	45	45	45	45	45	45	45	45	45	45	45	545
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (L)	68	68	68	68	68	114	114	114	114	114	114	114	1,136
TOTAL WATER DISPOSED (L)	24,241	19,131	26,849	15,535	708	825	628	469	1,840	405	7,029	11,379	109,039
ACCOUNTABILITY (%)	100.0	100.0	100.0	100.0	100.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

LMC FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FULL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
TYPE 2													
VOLUME (LITERS)	15			20	4					13			52
SO2 (KGS)													
NOX (KGS)													
PARTICULATES (KGS)													
GRAND TOTALS													
SO2 (KGS)													
NOX (KGS)													
PARTICULATES (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

PBF LIQUID DISPOSAL SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CHLORIDE ION WEIGHT (KGS)				1									1
CHROMATE ION WEIGHT (KGS)	9	4		13	1	22		9					58
MPA WEIGHT (KGS)				4		6		23					33
NITRATE ION WEIGHT (KGS)						1		1					2
PHOSPHATE ION WEIGHT (KGS)	8	3		11		20		7					49
POLYHYDROXYCARBON WEIGHT (KGS)				2		4		14					20
SODIUM ION WEIGHT (KGS)	171	69	195	109	262	20		14	65	130			14035
SODIUM PHOSPHATE WEIGHT (KGS)													
SULFATE ION WEIGHT (KGS)	206	83	240	169	320	16		6	80	160			14279
SULFITE ION WEIGHT (KGS)		1											2
ZINC ION WEIGHT (KGS)	1			2		4		1					9

PDF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
EVAPORATION POND SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	95	38	114	568	151	19		95	38	76			1,192
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)				<u>2.40</u> 1									1.14 1
CHROMATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>24.21</u> 9	<u>100.94</u> 4		<u>22.43</u> 13	<u>8.51</u> 1	<u>1177.68</u> 22		<u>88.83</u> 9					46.15 58
HPA CONCENTRATION (MG/L) WEIGHT (KGS)				<u>6.59</u> 4		<u>322.53</u> 6		<u>232.66</u> 23					27.39 33
NITRATE ION CONCENTRATION (MG/L) WEIGHT (KGS)						<u>97.93</u> 1		<u>14.38</u> 1					1.90 2
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>83.71</u> 8	<u>69.69</u> 3		<u>19.93</u> 11		<u>1046.41</u> 20		<u>78.93</u> 7					41.66 49
POLYHYDROXYCARBON CONCENTRATION (MG/L) WEIGHT (KGS)				<u>3.95</u> 2		<u>197.72</u> 4		<u>143.80</u> 14					16.44 20
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>1727.64</u> 173	<u>1802.51</u> 68	<u>1722.55</u> 195	<u>192.08</u> 109	<u>1726.03</u> 261	<u>1035.86</u> 20		<u>144.81</u> 14	<u>1722.55</u> 65	<u>1722.55</u> 130			866.62 1,032
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2179.61</u> 296	<u>2164.46</u> 83	<u>2111.63</u> 240	<u>227.73</u> 169	<u>2111.63</u> 320	<u>842.71</u> 16		<u>64.09</u> 8	<u>2111.63</u> 80	<u>2111.63</u> 160			1,073.13 1,279
ZINC ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>14.96</u> 1	<u>16.03</u>		<u>3.56</u> 2		<u>187.05</u> 4		<u>14.11</u> 1					7.48 9
WARM WASTE WELL SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	1,045	1,045	1,052	1,272	1,893				1,476				7,783

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 IREL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

PBF LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>.01</u>	<u>.47</u>	<u>.05</u>	<u>.04</u>	<u>.17</u>				<u>.02</u>				.17 1
SODIUM PHOSPHATE CONCENTRATION (MG/L) WEIGHT (KGS)	<u>.10</u>	<u>.14</u>	<u>.02</u>	<u>.16</u>					<u>.04</u>				.10
SULFITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>.53</u>	<u>.82</u>	<u>.09</u>	<u>.07</u>	<u>.30</u>				<u>.04</u>				.29 2

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 ILL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

PPF INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION TYPE OF WASTE	VOLUME OR WEIGHT BY MONTH												TOTALS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
CFA LANDFILL													
DISPOSED WASTE													
1 M SOLID	45.9	45.9	145.3	6.9	76.5	51.2		48.2	22.9	3.1	2.3	2.3	450.4
3 M SOLID				2.3	1.5	8.0		3.1	3.1		.1	.1	18.1
4 M SOLID			1.5			3.1		1.5		.1		.1	6.3
9 M SOLID						16.4							16.4
CANS													7.6
9 M SOLID	7.6												7.6
OTHER-INSULATED PADS							.8						.8
9 M SOLID													.8
PLASTIC TRAPS								3.6					3.6
9 M SOLID													3.6
RESINS												.6	.6
9 M SOLID													.6
SMELT METAL									.8				.8
9 M SOLID													.8
SURVIVAL CRACKERS													
GRAND TOTALS													
DISPOSED WASTE													
1 M SOLID	45.9	45.9	145.3	6.9	76.5	51.2		48.2	22.9	3.1	2.3	2.3	450.4
3 M SOLID				2.3	1.5	8.0		3.1	3.1		.1	.1	18.1
4 M SOLID			1.5			3.1		1.5		.1		.1	6.3
9 M SOLID	7.6					19.1		3.6	.8			.6	32.0

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

PEF WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
1 WATER PUMPED (L)	3,470	2,135	6,647	1,847	901	1,124	1,018	1,480	1,374	1,768	1,609	961	24,339
2 WATER PUMPED (L)	2,301	2,665	1,760	1,548	1,927	2,275	996	825	1,143	969	2,332	1,662	20,403
TOTAL WATER PUMPED (L)	5,776	4,800	8,407	3,395	2,828	3,399	2,014	2,305	2,517	2,737	3,940	2,623	44,742
WATER DISPOSAL													
WATER (L)		314	337		197	220			197	220	15	329	1,828
WATER SURFACE (L)		38	114	57	477	326	326	401	363	401	326	326	3,248
WATER SUBSURFACE (L)	1,045	1,045	1,052	1,272	1,893		1,438	1,571	1,476	1,798	1,893	1,684	16,167
SEWAGE DATA													
619 BUTED VOL. (L)	170	170	170	170	182	182	182	182	182	182	182	182	2,135
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
IN-FINAL													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

CELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
SEWAGE DATA													
620 BUILD VOL. (L)	26	26	26	26	49	49	49	49	49	49	49	49	560
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
FM-FINAL													
TOTAL SEWAGE VOL. (L)	197	197	197	197	231	231	231	231	231	231	231	231	2,635
TOTAL WATER DISPOSED (L)	1,536	1,594	1,700	1,525	2,797	776	1,995	2,203	2,267	2,650	2,464	2,570	23,876
ACCOUNTABILITY (%)	23.1	33.2	20.2	44.9	98.9	22.8	99.1	95.6	90.1	96.8	62.5	98.0	53.4

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INLL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

PRF FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DIESEL													
VOLUME (LITERS)				7				7		6	3	39	61
SO2 (KGS)													
NOX (KGS)													
PARTICULATES (KGS)													
TYPE 2													
VOLUME (LITERS)	55	14	29	28	23	8			8	26			195
SO2 (KGS)													1
NOX (KGS)													
PARTICULATES (KGS)													
GRAND TOTALS													
SO2 (KGS)													1
NOX (KGS)													
PARTICULATES (KGS)													

ISLAND OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INLL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

AKA INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH												TOTALS
TITLE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
CFA LANDFILL														
DISPOSED WASTE														
1 M SOLID	45.9	46.9	39.8	42.1	38.2	25.2	22.9	81.8	35.2	30.6	15.3	15.3	441.2	
3 M SOLID	7.6		3.8	3.1		2.3	2.3						19.1	
4 M SOLID	9.2					4.6			6.1	3.8			23.7	
9 M SOLID											6.1		6.1	
OTHER														
9 M SOLID SURVIVAL CRACKERS									.8				.8	
9 M SOLID WELLS									1.5	4.6			6.1	
CFA WESQU.														
DISPOSED WASTE														
9 L LIQUID ACID						396.3							396.3	
GRAND TOTALS														
DISPOSED WASTE														
1 M SOLID	45.9	46.9	39.8	42.1	38.2	25.2	22.9	81.8	35.2	30.6	15.3	15.3	441.2	
3 M SOLID	7.6		3.8	3.1		2.3	2.3						19.1	
4 M SOLID	9.2					4.6			6.1	3.8			23.7	
9 L LIQUID						396.3							396.3	
9 M SOLID									2.3	4.6	6.1		13.0	

ARA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
2 WATER PUMPED (L)	7,546	4,550	6,409	5,182	5,333	4,565	4,467	5,205	3,778	4,334	4,175	5,175	60,720
3 WATER PUMPED (L)	5,280	4,118	4,535	2,646	3,077	2,915	4,103	4,448	2,722	2,646	3,221	3,146	42,857
TOTAL WATER PUMPED (L)	12,828	8,668	10,943	7,828	8,411	7,480	8,570	9,653	6,499	6,980	7,396	8,320	103,577
WATER DISPOSAL													
AIR (L)	*												
SURFACE (L)	*	12,272	6,112	10,367	7,272	7,854	6,923	8,013	9,096	5,943	6,424	6,840	96,900
SUBSURFACE (L)	*												
SEWAGE DATA													
BLIND VOL. (L)	*	556	556	556	556	556	556	556	556	556	556	556	6,677
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (L)	556	556	556	556	556	556	556	556	556	556	556	556	6,677
TOTAL WATER DISPOSED (L)	12,828	8,668	10,943	7,828	8,411	7,480	8,570	9,653	6,499	6,980	7,396	8,320	103,577
ACCOUNTABILITY (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

ISLAND OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

AKA FULL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE	EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2	VOLUME (LITERS)	41	66	8	50	16		9					45	237
	SO ₂ (KGS)													1
	NO _x (KGS)													
	PARTICULATES (KGS)													
GRAND TOTALS	SO ₂ (KGS)													1
	NO _x (KGS)													
	PARTICULATES (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TAN LIQUID DISPOSAL SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CHLORIDE ION WEIGHT (KGS)	1,702	1,677	1,390	2,436	2,126	1,872	922	344	137	206	1,665	2,064	16,603
PHOSPHATE ION WEIGHT (KGS)	49	46	34	41	31	97	35			5	31	46	413
SODIUM ION WEIGHT (KGS)	1,291	1,190	1,004	1,766	1,606	1,417	768	249	115	228	1,272	1,455	12,362
SULFATE ION WEIGHT (KGS)	255	144	195	359	454	192	305	62	34	213	423	182	2,820
SULFITE ION WEIGHT (KGS)	61	65	47	54	42	157	52			5	24	45	552

TAN LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

PG 2 RPT 155-1
 TAN-L

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
DISPOSAL POND SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	33,159	5,198	7,665	7,847	1,037	382	9,759	7,612	7,203	5,754	5,485	5,320	96,370
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	40.67 1,349	259.31 1,335	150.81 1,156	219.22 1,720	1545.80 1,603	3895.31 1,466	60.64 592	18.08 137		2.39 14	228.32 1,252	320.41 1,706	126.17 12,351
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	52 31	5.89 30	2.97 23	4.21 33	22.82 24	238.55 91	3.11 30			53 3	3.87 21	8.27 34	3.32 320
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	27.49 911	116.97 511	102.14 783	149.25 1,171	1048.81 1,088	2930.44 1,116	44.68 436	13.42 102		4.37 25	156.81 860	219.13 1,167	88.96 8,572
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)		9.32 42	4.58 35	9.17 72	46.24 48	232.76 89	3.37 33	4.08 31		5.56 32	17.49 95	16.68 89	5.94 572
SULFITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	1.18 39	8.39 43	4.13 32	4.62 38	29.99 31	377.44 144	4.43 43			50 3	3.20 18	6.22 33	4.38 422
LEFT DISPOSAL POND SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	60,073	18,548	12,416	49,663	58,369	62,117	40,730	16,860	4,523	23,234	54,243	38,080	436,856
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	4.12 248	11.13 206	8.87 110	6.87 440	5.19 303	3.10 193	4.73 193	12.24 206		8.29 193	5.07 275	5.06 193	5.83 2,560
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	07 4	21 4	37 5	10 5	07 4	05 3	12 5				04 2	06 2	08 34
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	4.10 252	9.19 171	10.53 131	6.27 410	6.13 358	2.57 160	5.64 230	1.93 134	2.86 13	8.46 196	5.46 297	4.13 157	5.72 2,509
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	3.28 235	3.88 72	11.55 143	5.79 287	6.56 383	1.15 72	5.68 239		5.36 24	7.11 165	4.85 264	1.62 62	4.44 1,950

TAN LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
SULFITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>0.12</u> 8	<u>0.50</u> 9	<u>0.70</u> 9	<u>0.19</u> 10	<u>0.11</u> 6	<u>0.11</u> 7	<u>0.21</u> 8					<u>0.06</u> 3	<u>0.14</u> 59
LOFT DISPOSAL WELL SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	9,740	11,526	10,209	10,190	11,117	4,523	14,706	20,660	26,111	22,447	17,094	25,986	184,310
LOFT SEPTIC TANK SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	170	170	170	170	170	170	170	170	170	170	170	170	2,044
LPT DISPOSAL WELL SUBSURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	6,515	8,842	731	2,680	6,969	7,499	17,621	11,284	10,762	7,063	8,419	4,891	93,274
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>25.35</u> 105	<u>15.56</u> 137	<u>109.80</u> 124	<u>102.64</u> 275	<u>31.60</u> 220	<u>25.69</u> 193	<u>7.81</u> 137		<u>12.79</u> 137		<u>16.35</u> 137	<u>33.77</u> 155	<u>18.15</u> 1,692
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2.10</u> 14	<u>1.31</u> 12	<u>0.73</u> 5	<u>1.13</u> 3	<u>0.44</u> 3	<u>0.32</u> 2				<u>0.21</u> 1	<u>0.24</u> 8	<u>2.11</u> 10	<u>0.65</u> 60
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>12.72</u> 128	<u>12.32</u> 109	<u>124.18</u> 91	<u>68.73</u> 194	<u>22.93</u> 160	<u>18.54</u> 139	<u>5.80</u> 102	<u>1.16</u> 13	<u>9.50</u> 102	<u>0.88</u> 6	<u>13.72</u> 116	<u>26.80</u> 131	<u>13.74</u> 1,261
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2.45</u> 16	<u>2.71</u> 24	<u>21.92</u> 16		<u>3.44</u> 24	<u>4.26</u> 32	<u>1.86</u> 33	<u>2.75</u> 31	<u>0.91</u> 10	<u>2.26</u> 16	<u>7.60</u> 64	<u>6.54</u> 32	<u>3.19</u> 297
SULFITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2.21</u> 15	<u>1.47</u> 13	<u>2.48</u> 7	<u>2.90</u> 8	<u>0.66</u> 5	<u>0.88</u> 7				<u>0.20</u> 1	<u>0.79</u> 7	<u>1.17</u> 9	<u>0.75</u> 70

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TAN INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH											
TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CFA LANDFILL													
DISPOSED WASTE													
1 M SOLID	152.9	152.9	244.7	275.3	245.4	321.9	229.4	267.6	152.9	237.8	215.6	206.5	2,703.0
2 M SOLID	30.6	30.6	42.8	61.2	48.9	61.2	55.1	55.1	30.6	50.5	42.8	42.8	552.1
3 M SOLID		3.1	10.7	74.2	9.9	9.9			7.6	.8			110.2
4 M SOLID	3.1	3.1	3.1	18.4	14.5	8.4		4.6		7.6			62.7
5 M SOLID							6.1	6.1			9.2		21.4
9 M SOLID									7.6				7.6
ASBESTOS													
9 M SOLID				3.8									3.8
OTHER													
9 M SOLID										20.6			20.6
ROOFING MATERIAL													
9 M SOLID									3.8				3.8
SURVIVAL CRACKERS													
GRAND TOTALS													
DISPOSED WASTE													
1 M SOLID	152.9	152.9	244.7	275.3	245.4	321.9	229.4	267.6	152.9	237.8	215.6	206.5	2,703.0
2 M SOLID	30.6	30.6	42.8	61.2	48.9	61.2	55.1	55.1	30.6	50.5	42.8	42.8	552.1
3 M SOLID		3.1	10.7	74.2	9.9	9.9			7.6	.8			110.2
4 M SOLID	3.1	3.1	3.1	18.4	14.5	8.4		4.6		7.6			62.7
5 M SOLID							6.1	6.1			9.2		21.4
9 M SOLID				3.8					11.5	20.6			35.9

TAN WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. 7 SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
L01 WATER PUMPED (L)	46,105	16,311	9,565	36,176	37,281	49,057	30,411	12,783	15,966	20,081	40,692	64,237	378,666
L02 WATER PUMPED (L)	46,332	12,223	9,535	40,276	52,464	45,483	32,289	13,158	14,683	25,433	30,820		323,696
LPT WATER PUMPED (L)	6,515	6,842	731	269	6,969	7,502	17,621	11,284	10,762	7,063	8,419	4,891	90,666
TF1 WATER PUMPED (L)	9,353	6,490	11,356	8,585	7,268	10,750	13,313	7,487	9,917	6,174	8,358	7,745	166,797
TF2 WATER PUMPED (L)										61			61
TOTAL WATER PUMPED (L)	108,305	45,866	31,187	85,306	103,982	113,794	93,633	44,712	51,329	58,812	88,288	76,872	902,066
WATER DISPOSAL													
AIR (L)	*	*	*	*	*	*	*	*	*	*	*	*	*
SURFACE (L)	86,721	20,172	16,330	54,130	55,379	62,495	46,938	21,512	9,191	27,277	57,461	40,578	498,183
SUBSURFACE (L)	16,254	20,369	10,936	12,870	18,086	12,022	32,326	20,191	36,873	29,510	25,513	30,877	265,826
SEWAGE DATA													
523 GULL VOL. (L)	3,626	3,524	3,751	3,373	4,020	4,981	3,547	2,835	2,536	1,711	2,248	2,601	38,955
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)	158.3	135.5	93.4	126.0	127.8	128.8	22.5	113.8	235.0	147.5	30.0	4.2	110.2
FINAL CONC. (MG/L)	46.7	21.3	31.1	14.9	21.0	25.0	8.5	27.3	16.0	20.5	12.0	7.9	21.0
% REMOVED	70.5	84.3	66.7	88.2	83.6	80.6	62.2	76.0	93.2	86.1	60.0		60.9
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)	5.0	1.5	1.9	.2	.4	.7	4.9	.8	3.5		2.3	40.0	5.4
FINAL CONC. (MG/L)	6.3	5.1	6.5	4.9	4.6	4.9	6.3	3.2	7.4	4.9	7.8	10.0	6.0
INCREASED FACTOR	1.1	2.4	2.4	23.5	10.5	6.0	.3	3.0	1.1		2.4	-0.8	
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)	1.6	4.1	5.7	3.6	6.3	3.8	1.2	3.4	.3	2.6	2.3	3.5	3.2
FINAL CONC. (ML/L)	.20	1.15	.24	.29	.50	.28	.05	.27	.12	.29	.21	.15	.31
% REMOVED	88.9	72.0	95.6	91.9	92.1	92.6	95.8	92.1	60.0	88.8	90.9	95.7	90.3
PH-FINAL	8.3	9.0	8.3	7.9	8.3	8.0	7.7	7.6	7.6	7.5	7.9	8.8	8.1

NOTE: "*" IN COLUMNS INDICATE A PORTION OF VOLUME IS ESTIMATED

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

TAN WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

CELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGE
SEWAGE DATA													
736 BUILD VOL. (L) *	170	170	170	170	170	170	170	170	170	170	170	170	2,044
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
FH-FINAL													
TOTAL SEWAGE VOL. (L)	3,791	3,694	3,922	3,543	4,190	5,152	3,717	3,006	2,706	1,881	2,419	2,971	40,999
TOTAL WATER DISPOSED (L)	106,772	44,235	31,167	70,543	77,655	79,669	82,981	44,708	46,770	56,668	85,393	74,427	805,006
ACCOUNTABILITY (%)	98.6	96.4	100.0	82.7	74.7	70.0	88.6	100.0	95.0	99.8	96.7	96.8	69.2

TAN FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS

DIESEL													
VOLUME (LITERS)				1				8	30	7			46
SO ₂ (KGS)													
NO _x (KGS)													
PARTICULATES (KGS)													
TYPE 2													
VOLUME (LITERS)	500	490	242	290	234	146	48			43	256	446	2,697
SO ₂ (KGS)	3	3	1	2	1	1					1	3	15
NO _x (KGS)													
PARTICULATES (KGS)													
TYPE 5													
VOLUME (LITERS)											3	32	35
SO ₂ (KGS)													
NO _x (KGS)													
PARTICULATES (KGS)													
GRAND TOTALS													
SO ₂ (KGS)	3	3	1	2	1	1					1	3	16
NO _x (KGS)													
PARTICULATES (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CFA LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRADE TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
AUTO CLEANERS WEIGHT (KGS)	163	163	163	163	163	181	161	163	161	161	163	145	2,014
CALCIUM ION WEIGHT (KGS)	8	12	8	8	8	8	8	8	8	8	8	8	102
CHLORIDE ION WEIGHT (KGS)	590	586	591	593	593	588	591	591	586	588	585	585	7,067
HYPOCHLORITE ION WEIGHT (KGS)	57	51	60	62	62	54	59	60	52	54	50	49	671
LAUNDRY PRODUCTS WEIGHT (KGS)	519	435	550	413	507	321	321	268	255	334	230	209	4,381
PHOSPHATE WEIGHT (KGS)	45	45	45	45	45	45	45	45	45	45	45	45	544
SOAP WEIGHT (KGS)	245	272	272	272	272	272	272	272	272	272	272	272	3,243
SODIUM ION WEIGHT (KGS)	357	357	357	357	357	357	357	357	357	357	357	357	4,278

CFA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SEWAGE PLANT SUBSURFACE VOLUME (L. IN 1000)	15,929	12,192	13,771	13,771	14,365	14,021	13,718	12,628	9,637	12,325	9,555	11,901	153,193
HYDROGEN-ION CONC. (PH)	7.5	7.4	7.6	7.5	7.5		7.9	7.8	7.7	7.9	7.6	7.7	7.6
AUTO CLEANERS CONCENTRATION (MG/L)	10,25	13,39	11,86	11,86	11,37	12,94	13,23	12,53	18,83	14,72	17,13	12,20	13,10
WEIGHT (KGS)	163	163	163	163	163	181	181	163	181	181	163	145	2,014
CALCIUM ION CONCENTRATION (MG/L)	50	98	58	58	55	57	58	63	83	65	84	67	65
WEIGHT (KGS)	8	12	8	8	8	8	8	8	8	8	8	8	102
CHLORIDE ION CONCENTRATION (MG/L)	37,03	48,04	42,96	43,06	41,30	41,94	43,12	46,85	60,81	47,69	61,36	49,12	45,96
WEIGHT (KGS)	596	586	591	593	593	588	591	591	586	588	585	585	7,067
HYPOCHLORITE ION CONCENTRATION (MG/L)	3,98	4,19	4,34	4,48	4,32	3,88	4,33	4,74	5,35	4,40	5,27	4,16	4,36
WEIGHT (KGS)	57	51	60	62	62	54	59	60	52	54	50	49	671
LAUNDRY PRODUCTS CONCENTRATION (MG/L)	32,58	35,68	39,92	29,97	35,27	22,90	23,41	22,77	26,45	27,12	24,12	17,53	26,49
WEIGHT (KGS)	519	435	550	413	507	321	321	288	255	334	230	209	4,361
PHOSPHATE CONCENTRATION (MG/L)	2,85	3,72	3,29	3,29	3,16	3,24	3,31	3,59	4,71	3,68	4,76	3,81	3,54
WEIGHT (KGS)	45	45	45	45	45	45	45	45	45	45	45	45	544
SOAP CONCENTRATION (MG/L)	15,66	22,32	19,76	19,76	18,95	19,41	19,84	21,55	28,24	22,08	28,54	22,87	21,09
WEIGHT (KGS)	249	272	272	272	272	272	272	272	272	272	272	272	3,243
SODIUM ION CONCENTRATION (MG/L)	24,39	29,26	25,90	25,90	24,83	25,44	26,00	28,25	37,01	28,94	37,41	29,97	27,83
WEIGHT (KGS)	357	357	357	357	357	357	357	357	357	357	357	357	4,278

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 IREL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CFA INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH												TOTALS
TYPE OF WASTE	LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
CFA LANDFILL														
DISPOSED WASTE														
1	M SOLID	229.4	330.3	267.6	373.1	265.3	212.6	146.8	253.9	210.1	209.5	236.3	195.7	2,930.7
2	M SOLID	30.6	15.3	9.2	36.7	77.2	73.4	67.3	74.9	34.0	33.6	41.3	27.5	521.1
3	M SOLID	9.2	47.4	35.2	36.7	45.1	86.4	22.2	31.4	28.6	51.2	97.1	22.2	512.6
4	M SOLID	0.1	3.1	9.2	11.5	16.8	12.2	26.8	22.9	24.9	43.6	19.9	7.6	204.5
5	M SOLID						18.4	23.7		13.6	45.1			100.8
CFCF CONTAINERS-EMPTY														
9	M SOLID				44.3	5.4			33.6			26.0	.8	110.1
OTHER														
9	M SOLID										29.8			29.8
OTHER-WEEDS														
9	M SOLID								3.8					3.8
SURVIVAL CRACKERS														
9	M SOLID												11.3	11.3
TILE														
CFA W/SCOP														
DISPOSED WASTE														
9	L LIQUID				2,290.1		2,266.3							4,556.4
CHEMICALS														
9	M SOLID				4.7						2.7			7.4
ECS EQUIPMENT														
GRAND TOTALS														
DISPOSED WASTE														
1	M SOLID	229.4	330.3	267.6	373.1	265.3	212.6	146.8	253.9	210.1	209.5	236.3	195.7	2,930.7
2	M SOLID	30.6	15.3	9.2	36.7	77.2	73.4	67.3	74.9	34.0	33.6	41.3	27.5	521.1
3	M SOLID	9.2	47.4	35.2	36.7	45.1	86.4	22.2	31.4	28.6	51.2	97.1	22.2	512.6
4	M SOLID	0.1	3.1	9.2	11.5	16.8	12.2	26.8	22.9	24.9	43.6	19.9	7.6	204.5
5	M SOLID						18.4	23.7		13.6	45.1			100.8
9	L LIQUID				2,290.1		2,266.3							4,556.4
9	M SOLID				49.0	5.4			33.6	3.8	32.5	26.8	12.1	163.5

CFA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
FS2 WATER PUMPED (L)	1,351	6,965	3,611	102	125	352	3,441	848	291	79	893	3,384	21,444
1 WATER PUMPED (L)	76	8	57	45	6,761	21,906	12,647	7,502	956	322	30	26	50,337
2 WATER PUMPED (L)	20,441	22,197	26,944	20,921	56,931	72,943	42,433	41,222	35,317	21,031	17,409	16,621	394,409
TOTAL WATER PUMPED (L)	21,868	29,170	30,612	21,069	63,816	95,200	58,521	49,572	36,566	21,432	18,332	20,032	466,190
WATER DISPOSAL													
AIR (L)	*												
SURFACE (L)	*	231	500	662	659	4,440	50,761	28,549	25,638	10,391	450	394	122,912
SUBSURFACE (L)		927	696	768	712	1,041	659	318	458	632	469	363	7,624
SEWAGE DATA													
991 BUILT VOL. (L)	15,001	11,303	13,003	13,669	13,324	13,366	13,400	12,628	9,005	11,859	9,168	11,511	147,237
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)	126.0	125.0	139.0	150.0	104.0	137.5	76.3	112.0	120.0	111.2	164.0	102.0	122.4
FINAL CONC. (MG/L)	12.5	16.0	9.5	15.0	9.3	11.0	9.5	15.0	16.8	16.5	22.6	13.0	13.9
% REMOVED	90.2	87.2	93.2	90.3	91.1	92.0	87.5	86.6	86.0	85.2	86.2	87.3	88.6
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)	.7	.5	.8	.7	.6	.9	1.4	2.0	1.1	1.4	1.4	1.8	1.1
FINAL CONC. (MG/L)	5.3	3.3	3.5	4.3	3.4	4.0	5.3	4.4	3.6	5.0	4.6	5.2	4.3
INCREASED FACTOR	6.6	5.6	3.4	5.1	4.7	3.4	2.8	1.2	2.3	2.6	2.3	1.9	2.9
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)	5.2	3.7	3.8	4.6	4.7	4.8	4.7	4.8	4.2	4.6	5.4	5.4	4.7
FINAL CONC. (ML/L)	.05	.05	.05	.05	.05	.50	.65	.05	.50	.05	.05	.05	.13
% REMOVED	99.0	98.6	98.7	98.9	98.9	89.6	96.9	99.0	88.1	99.0	99.1	99.1	97.2
PH-FINAL	7.5	7.4	7.6	7.5	7.5	7.7	7.9	7.8	7.7	7.9	7.6	7.7	7.7
TOTAL SEWAGE VOL. (L)	15,001	11,303	13,003	13,669	13,324	13,366	13,400	12,628	9,005	11,859	9,168	11,511	147,237
TOTAL WATER DISPOSED (L)	16,159	12,692	14,433	15,039	18,805	64,715	42,267	38,724	20,028	12,779	9,925	12,136	277,773
ACCOUNTABILITY (%)	73.9	43.5	47.1	71.4	29.5	68.1	72.2	78.1	54.8	59.6	54.1	60.6	59.6

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CFA FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (LITERS)	324	224	461	221	115	130	70		11	29	347	162	2,112
SO ₂ (KGS)	2	1	3	1	1	1					2	1	12
NO _x (KGS)													
PARTICULATES (KGS)													
GRAND TOTALS													
SO ₂ (KGS)	2	1	3	1	1	1					2	1	12
NO _x (KGS)													
PARTICULATES (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CFP AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
NITRIC OXIDE WEIGHT (KGS)						760	3,572	5,420	4,684		1,320	4,661	20,437
NITROGEN DIOXIDE WEIGHT (KGS)						11,654	56,956	41,552	64,630		20,238	35,882	230,911

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 ILL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CFP AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEF	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
STACK 7 CFP							
VOLUME (CC.M. IN 1000)	128,290	139,051	140,184	0	237,038	136,502	901,142
NITRIC OXIDE							
CONCENTRATION (CC/CF)	.00	.00	.00	.00	.00	.00	20.36
WEIGHT (KGS)	3,572	5,420	4,684	0	1,320	4,681	20,437
NITROGEN DIOXIDE							
CONCENTRATION (CC/CF)	.00	.00	.00	.00	.00	.00	150.04
WEIGHT (KGS)	56,950	41,552	64,630	0	20,238	11,654	230,911

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CIP LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CALCIUM ION WEIGHT (KGS)	9	8	8	9	8	9	5	9	6	5	5	5	66
CHLORIDE ION WEIGHT (KGS)	24,373	22,369	18,103	28,509	2,734	26,374	33,077	32,643	26,574	14,784	11,694	11,302	252,556
HYPOCHLORITE ION WEIGHT (KGS)	22	20	21	22	21	22	14	22	21	12	13	14	226
NITRATE ION WEIGHT (KGS)	26,274	18,223	9,564	8,269	843	14,045	8,168	1,634	12,262	4,336	10,853	6,584	121,054
SODIUM ION WEIGHT (KGS)	17,329	14,891	11,613	18,376	1,754	19,075	20,344	20,948	8,874	4,721	7,046	7,086	152,057
SULFATE ION WEIGHT (KGS)	7,044	6,040	3,567	608	350	4,644	4,970	6,983	3,837	2,174	3,523	3,498	47,256
TDS WEIGHT (KGS)	121,083	75,080	54,736	62,424	7,726	88,576	85,721	91,296	130,290	34,599	1,213	50,680	811,423

IDAHO OPERATIONS OFFICE
U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CPP LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVG
DISPOSAL WELL	SUBSURFACE												
VOLUME (L. IN 1000)	112,007	104,323	85,548	135,362	13,627	166,175	155,576	174,881	115,452	62,230	98,039	89,863	1,313,063
HYDROGEN-ION CONC. (PH)	5.2	5.8	7.9	6.7	8.1	8.3	8.3	8.3	7.8	8.2	7.6	7.8	7.5
CHLORIDE ION													
CONCENTRATION (MG/L)	218.00	215.00	212.00	211.00	201.00	159.00	213.00	187.00	230.60	238.00	119.50	126.00	192.35
WEIGHT (KGS)	24,373	22,389	18,103	28,509	2,734	26,374	33,077	32,643	26,574	14,784	11,694	11,302	252,556
NITRATE ION													
CONCENTRATION (MG/L)	235.00	175.00	112.00	61.20	62.00	84.67	52.60	9.36	106.40	69.80	110.90	73.40	92.20
WEIGHT (KGS)	26,274	18,223	9,564	8,269	843	14,045	8,168	1,634	12,262	4,336	10,853	6,584	121,054
SODIUM ION													
CONCENTRATION (MG/L)	155.00	143.00	136.00	135.00	129.00	115.00	131.00	120.00	77.00	76.00	72.00	79.00	115.81
WEIGHT (KGS)	17,329	14,891	11,613	18,376	1,754	19,075	20,344	20,946	8,874	4,721	7,046	7,066	152,057
SULFATE ION													
CONCENTRATION (MG/L)	63.00	56.00	42.00	4.50	25.70	28.00	32.00	40.00	33.30	35.00	36.00	39.00	35.99
WEIGHT (KGS)	7,044	6,040	3,587	608	350	4,644	4,970	6,983	3,837	2,174	3,523	3,498	47,256
TDS													
CONCENTRATION (MG/L)	1863.00	721.00	641.00	462.00	568.00	534.00	552.00	523.00	1200.00	557.00	12.40	565.00	616.00
WEIGHT (KGS)	121,083	75,080	54,736	62,424	7,726	88,576	85,721	91,296	138,290	34,599	1,213	50,680	611,423
SEWAGE PLANT	SUBSURFACE												
VOLUME (L. IN 1000)	4,126	4,372	4,243	3,782	4,224	4,467	4,277	4,149	4,429	3,464	4,126	4,694	50,352
HYDROGEN-ION CONC. (PH)	7.4	7.4	7.4	7.2	7.3	7.4	7.4	7.3	7.4	7.8	7.5	7.5	7.4
CALCIUM ION													
CONCENTRATION (MG/L)	2.05	1.84	1.56	2.27	1.97	1.92	1.29	2.07	1.87	1.36	1.21	1.18	1.75
WEIGHT (KGS)	9	8	8	9	8	9	5	9	8	5	5	5	68
HYPOCHLORITE ION													
CONCENTRATION (MG/L)	5.25	4.71	5.02	5.83	5.05	4.93	3.32	5.31	4.81	3.49	3.10	3.03	4.48
WEIGHT (KGS)	22	20	21	22	21	22	14	22	21	12	13	14	226

CPP INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION TYPE OF WASTE	LOCATION		VOLUME OR WEIGHT BY MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	
CFA LANDFILL														
DISPOSED WASTE														
1 M SOLID	184.7	81.8	304.3	350.2	519.8	335.3	419.0	623.6	452.3	555.9	405.3	328.8	4,560.9	
2 M SOLID	36.7	18.4	121.6	187.3	66.5	32.9	52.0	43.6	48.9	61.2	49.7	39.8	758.5	
3 M SOLID	401.7	347.1	104.0	106.3	31.2	36.7	22.2	36.7	45.0	42.8	25.2	40.5	1,239.4	
4 M SOLID		2.1	34.4	38.2	28.9	204.9	16.1	19.9	35.9	48.9	18.4	8.4	456.1	
5 M SOLID			3.1			753.6	10.7						767.3	
9 M SOLID								50.1					50.1	
OTHER														
9 M SOLID										12.2			12.2	
OTHER-GRAVEL														
9 M SOLID										.8			.8	
OTHER-STRAW														
9 M SOLID										2.2			2.2	
OTHER-WEEDS														
9 M SOLID								9.2					9.2	
SAND														
9 M SOLID									9.2				9.2	
SURVIVAL CRACKERS														
CFA W/SCON														
DISPOSED WASTE														
9 L LIQUID								58.3					58.3	
LIQUID														
GRAND TOTALS														
DISPOSED WASTE														
1 M SOLID	184.7	81.8	304.3	350.2	519.8	335.3	419.0	623.6	452.3	555.9	405.3	328.8	4,560.9	
2 M SOLID	36.7	18.4	121.6	187.3	66.5	32.9	52.0	43.6	48.9	61.2	49.7	39.8	758.5	
3 M SOLID	401.7	347.1	104.0	106.3	31.2	36.7	22.2	36.7	45.0	42.8	25.2	40.5	1,239.4	
4 M SOLID		2.1	34.4	38.2	28.9	204.9	16.1	19.9	35.9	48.9	18.4	8.4	456.1	
5 M SOLID			3.1			753.6	10.7						767.3	
9 L LIQUID								58.3					58.3	
9 M SOLID								59.3	9.2	15.2			83.7	

CFR WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
WATER PUMPED (L)	121,925	124,006	102,430	158,226	155,197	187,297	175,638	209,668	140,056	104,853	108,752	92,740	1,680,787
WATER DISPOSAL													
AIR (L)													
SURFACE (L)													
SUBSURFACE (L)	112,007	104,323	85,548	135,362	136,271	166,175	155,576	174,881	115,452	62,230	98,039	88,046	1,433,909
SEWAGE DATA													
BUILD VOL. (L)	4,126	4,372	4,243	3,782	4,224	4,467	4,277	4,126	4,429	3,464	4,126	4,694	50,329
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)	96.1	113.6	128.0	92.0	175.5	236.0	262.0	221.0	173.7	183.0	194.0	132.7	167.3
FINAL CONC. (MG/L)	16.8	21.5	35.2	22.6	97.0	122.0	100.0	97.7	85.8	53.0	94.0	61.2	67.2
% REMOVED	82.5	81.1	72.5	75.4	44.7	48.3	61.8	55.8	50.6	71.0	51.5	53.9	59.8
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)	.8	2.1	.6	.1	1.1	4.3	1.1	.7	.4	2.0	.1	2.7	1.3
FINAL CONC. (MG/L)	2.0	1.1	.6	.1	.6	3.7	.3	.1	.1	.1	.1	1.0	.8
INCREASED FACTOR	1.5	-0.5			-0.5	-0.1	-0.7	-0.9	-0.8	-1.0		-0.6	-0.4
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)	5.2	5.7	6.2	5.8	5.4	7.8	8.3	7.7	6.9	6.9	10.7	10.2	7.2
FINAL CONC. (ML/L)	.08	.24	.23	.46	.12	.18	.16	.14	.24	.38	.27	.26	.23
% REMOVED	98.8	95.8	96.3	92.1	97.8	97.7	98.1	98.2	96.5	94.5	97.5	97.5	96.8
FR-FINAL	7.4	7.4	7.4	7.2	7.3	7.4	7.4	7.3	7.4	7.9	7.5	7.5	7.4
TOTAL SEWAGE VOL. (L)	4,126	4,372	4,243	3,782	4,224	4,467	4,277	4,126	4,429	3,464	4,126	4,694	50,329
TOTAL WATER DISPOSED (L)	116,133	108,695	89,791	139,144	140,495	170,641	159,853	179,007	119,880	65,694	102,165	92,740	1,464,239
ACCOUNTABILITY (%)	95.2	87.7	87.7	87.9	90.5	91.1	91.0	85.4	85.6	62.7	93.9	100.0	88.3

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CPF FULL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (LITERS)	850	816	574	541	398	310	266	337	304				4,430
SO2 (KGS)	5	5	3	3	2	2	2	2	2				25
NOX (KGS)													
PARTICULATES (KGS)													
TYPE 5													
VOLUME (LITERS)										395	587	536	1,517
SO2 (KGS)										10	15	14	39
NOX (KGS)													
PARTICULATES (KGS)													
GRAND TOTALS													
SO2 (KGS)	5	5	3	3	2	2	2	2	2	10	15	14	64
NOX (KGS)													
PARTICULATES (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

NRG AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWERS VOLUME (CU.M. IN 1000)	35,969 124,614	67,219 65,632	180,787 85,981	96,638 64,832	24,878 129,110	126,168 79,375	1,061,402

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CALCIUM ION WEIGHT (KGS)	125	91	132	130	244	151	225	455	230	101	82	66	2,031
CHLORIDE ION WEIGHT (KGS)	3,957	12,131	12,105	5,386	32,135	12,103	12,108	12,108	18,990	22,725	4,995	18,454	167,198
HEXAVALLENT CR WEIGHT (KGS)													
HYPOCHLORITE ION WEIGHT (KGS)	320	235	337	334	626	389	578	1,168	590	258	211	171	5,215
PHOSPHATE ION WEIGHT (KGS)	164	111	198	144	571	149	316	199	293	291	76	138	2,654
PHOSPHORATE WEIGHT (KGS)	43	68	113	78	91	143	176	101	114	80	27	46	1,080
POLYMETHACRYLATE WEIGHT (KGS)	29	45	75	52	61	95	117	68	76	53	18	31	719
POLYPHOSPHATE WEIGHT (KGS)	101	158	264	181	212	334	411	236	267	186	63	108	2,521
SODIUM ION WEIGHT (KGS)	5,300	7,350	7,517	5,382	9,093	5,726	10,142	7,646	10,367	16,792	2,706	7,778	95,795
SULFATE ION WEIGHT (KGS)	24,137	13,682	24,388	13,885	51,297	14,105	32,453	14,108	27,614	10,830	2,008	6,862	235,368
SULFONATE WEIGHT (KGS)	29	45	75	52	61	95	117	68	76	53	18	31	719

IDAHO OPERATIONS OFFICE
U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
INCL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

REF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
SEWAGE POND SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	22,413 9.1	5,053 8.7	5,424 8.5	4,845	5,969	1,843 9.8	3,657 10.8	3,551 11.1	3,176 10.4	3,978 10.9	3,638 9.5	9,130 8.1	12,678 9.7
WASTE DITCH SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	30,566 2.6	55,492 7.8	68,400 8.7	42,356 8.2	119,237 5.9	46,635 8.7	86,349 8.5	52,464 6.8	91,907 7.6	58,331 8.2	13,120 7.5	46,105 8.3	716,965 7.4
CALCIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	3.41 125	1.65 91	1.92 132	3.07 130	2.04 244	3.24 151	2.55 225	8.67 455	2.50 230	1.72 101	6.26 82	1.44 66	2.63 2,031
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	106.40 3,957	219.00 12,131	177.36 12,105	127.40 5,386	270.00 32,135	260.00 12,103	137.30 12,108	231.20 12,108	207.00 18,990	390.30 22,725	381.40 4,995	401.00 16,454	232.57 167,196
HEXAVALENT CR CONCENTRATION (MG/L) WEIGHT (KGS)											.02		
HYPOCHLORITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	8.75 320	4.23 235	4.94 337	7.89 334	5.25 626	8.33 389	6.54 578	22.26 1,166	6.42 590	4.43 258	16.07 211	3.70 171	7.25 5,215
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	4.50 164	2.00 111	2.90 198	3.40 144	4.80 571	3.20 149	3.60 318	3.80 199	3.20 293	5.00 291	6.00 78	3.00 138	3.69 2,654
PHOSPHONATE CONCENTRATION (MG/L) WEIGHT (KGS)	1.16 43	1.22 68	1.65 113	1.63 78	.76 91	3.07 143	2.00 176	1.93 101	1.25 114	1.37 80	2.04 27	1.00 46	1.50 1,060
POLYMETHACRYLATE CONCENTRATION (MG/L) WEIGHT (KGS)	.79 29	.81 45	1.10 75	1.22 52	.51 61	2.04 95	1.33 117	1.29 66	.63 76	.91 53	1.36 18	.67 31	1.00 719
POLYPHOSPHATE CONCENTRATION (MG/L) WEIGHT (KGS)	6.76 101	2.85 158	3.26 254	4.27 181	1.76 212	7.16 334	4.66 411	4.51 236	2.91 267	3.19 186	4.71 63	2.33 108	3.51 2,521
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	145.20 5,300	132.70 7,350	110.10 7,517	127.30 5,362	76.40 9,093	123.00 5,726	115.00 10,142	146.00 7,646	113.00 10,367	288.40 16,792	206.60 2,706	169.00 7,776	133.25 95,799

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SULFATE ION (CONCENTRATION (MG/L) WEIGHT (KGS))	661.30 24,137	247.06 13,682	357.20 24,388	328.40 13,885	431.00 51,297	303.00 14,105	368.00 32,453	269.40 14,108	301.00 27,614	186.00 10,830	153.30 2,008	149.10 6,862	327.40 235,368
SULFONATE (CONCENTRATION (MG/L) WEIGHT (KGS))	<u>.79</u> 29	<u>.81</u> 45	<u>1.10</u> 75	<u>1.22</u> 52	<u>.51</u> 61	<u>2.04</u> 95	<u>1.33</u> 117	<u>1.29</u> 68	<u>.83</u> 76	<u>.91</u> 53	<u>1.36</u> 18	<u>.67</u> 31	1.00 719

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

INF INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH											
TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
CFA LANDFILL													
DISPOSED WASTE													
1 F SOLID	267.6	267.6	382.3	308.1	344.1	344.1	347.9	321.1	271.4	354.0	372.4	276.0	3,856.8
2 M SOLID	87.2	85.6	110.1	97.9	110.1	110.1	122.3	107.0	85.6	117.8	97.9	85.6	1,211.5
3 M SOLID	31.7	54.1	113.4	75.7	16.8	21.8	151.8	127.3	49.7	65.8	43.6	1.5	753.2
4 M SOLID		.6	14.3	2.3	11.5	170.9	68.8	65.0	26.0	6.9	58.9	14.5	439.8
5 M SOLID								3.8		3.8			7.6
8 KG SOLID										4,127.7			4,127.7
SOQA ASH													
9 L LIQUID			121.1										121.1
PAINT													
9 M SOLID									6.1				6.1
ASBESTOS													
9 M SOLID										.5			.5
SURVIVAL CRACKERS													
CFA OIL DEPOT													
STORED WASTE													
6 L LIQUID		1,135.0	3,974.6							1,514.1			6,624.3
OIL													
6 L LIQUID	6,056.5			3,406.8	14,762.7		2,081.9		3,785.3		3,406.8		33,499.9
WASTE OIL													
9 M SOLID									10.0	8.3			18.3
EMPTY OIL DRUMS													
CFA SCRAPYARD													
STORED WASTE													
5 M SOLID	10.6	55.0	166.0	30.1	14.1	9.9	2.3	5.1	4.5	78.8	2.3	11.5	410.1
CFA WILSON													
DISPOSED WASTE													
8 L LIQUID							56.8						56.8
POTASSIUM CHROMATE WASTE													
6 KG SOLID								544.3					544.3
MISCELLANEOUS DRY CHEMICALS													
8 KG SOLID												1,660.1	1,660.1
WASTE CHEMICALS													
GRAND TOTALS													
DISPOSED WASTE													
1 M SOLID	267.6	267.6	382.3	308.1	344.1	344.1	347.9	321.1	271.4	354.0	372.4	276.0	3,856.8
2 M SOLID	87.2	85.6	110.1	97.9	110.1	110.1	122.3	107.0	85.6	117.8	97.9	85.6	1,211.5
3 M SOLID	31.7	54.1	113.4	75.7	16.8	21.8	151.8	127.3	49.7	65.8	43.6	1.5	753.2
4 M SOLID		.6	14.3	2.3	11.5	170.9	68.8	65.0	26.0	6.9	58.9	14.5	439.8

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

IRF INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH											TOTALS	
TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
GRAND TOTALS														
DISPOSED WASTE														
5 M SOLID								3.8		3.8				7.6
6 L LIQUID						56.8								56.8
8 KG SOLID								544.3		4,127.7		1,660.1		6,332.1
9 L LIQUID			121.1											121.1
9 M SOLID									6.1	.3				6.4
STORED WASTE														
5 F SOLID	10.6	55.0	186.0	30.1	14.1	9.9	2.3	5.1	4.5	78.8	2.3	11.3		410.1
6 L LIQUID	6,056.5	1,135.6	3,974.6	5,406.8	14,762.7		2,081.9		3,785.3	1,514.1	3,406.8			40,124.2
9 F SOLID									10.0	8.3				18.3

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

NRW WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
1 WATER PUMPED (L)		47,430	205,428	116,414	193,807	60,716	84,034	113,900	107,616	93,383	92,323	89,371	1,204,623
2 WATER PUMPED (L)	458	397	79	23	420	3,236	299	8	11	23	11	26	4,993
3 WATER PUMPED (L)	85,775	63,669	5,318	3,588	11,481	163,411	196,495	41,865	117,836	67,151	22,254	25,975	804,619
TOTAL WATER PUMPED (L)	86,233	111,496	210,826	120,426	205,708	227,364	280,828	155,773	225,464	160,557	114,589	115,372	2,014,635
WATER DISPOSAL													
AIR (L)	24,529	45,840	123,287	65,902	16,966	86,040	84,980	44,894	58,634	44,212	88,046	54,130	737,460
SURFACE (L)	36,566	33,492	66,400	42,358	180,862	129,949	182,754	102,355	157,090	107,465	13,120	46,105	1,122,516
SUBSURFACE (L)													
SEWAGE DATA													
BUILD VOL. (L)	22,413	5,053	5,424	4,845	5,969	1,843	3,657	3,551	3,176	3,978	3,638	9,130	72,676
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)	37.7	82.0	68.7			90.0	75.0	50.0	55.0	45.0	127.0	200.0	83.1
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)		.1	.2			1.3			5.1		4.9		2.3
FINAL CONC. (MG/L)													
INCREASE FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
FH-FINAL	9.1	8.7	8.5			9.8					9.5	8.1	9.0
TOTAL SEWAGE VOL. (L)	22,413	5,053	5,424	4,845	5,969	1,843	3,657	3,551	3,176	3,978	3,638	9,130	72,676
TOTAL WATER DISPOSED (L)	83,508	106,386	197,112	113,105	203,797	217,833	271,391	150,799	218,900	155,655	104,804	109,365	1,932,653
ACCOUNTABILITY (%)	96.8	95.4	93.5	93.9	99.1	95.8	96.6	96.8	97.1	96.9	91.5	94.6	95.9

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

NRF FULL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FULL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 5													
VOLUME (LITERS)	685	525	524	383	265	66	109	45	76	398	597	668	4,359
SO2 (KGS)	24	18	18	6	4	1			1	7	18	20	118
NOX (KGS)	2	2	2	1	1					1	2	2	14
PARTICULATES (KGS)	1	1	1	1	1					1	1	1	9
GRAND TOTALS													
SO2 (KGS)	24	18	18	6	4	1			1	7	18	20	118
NOX (KGS)	2	2	2	1	1					1	2	2	14
PARTICULATES (KGS)	1	1	1	1	1					1	1	1	9

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

AND AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA (FAND TOTALS SUBSTANCE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
HEXA VALENT CR WEIGHT (KGS)	2	1	1	1	1	2	1	1	2	2	2	1	18
ZINC ION WEIGHT (KGS)													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

ANL AIRBORNE DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWER 757 VOLUME (CU.M. IN 1000)	456 427	271 408	332 506	287 461	289 623	452 414	4,926
HEXAVALENT CR CONCENTRATION (MG/KG)	<u>5.38</u> <u>5.37</u>	<u>5.38</u> <u>5.39</u>	<u>5.37</u> <u>5.40</u>	<u>5.37</u> <u>5.37</u>	<u>5.37</u> <u>5.38</u>	<u>5.38</u> <u>5.38</u>	5.36
WEIGHT (KGS)	2 1	1 1	1 2	1 2	1 2	2 1	16
ZINC ION CONCENTRATION (MG/KG)	<u>.45</u> <u>.39</u>	<u>.26</u> <u>.33</u>	<u>.28</u> <u>.33</u>	<u>.36</u> <u>.41</u>	<u>.41</u> <u>.32</u>	<u>.32</u> <u>.34</u>	.35
WEIGHT (KGS)	0 0	0 0	0 0	0 0	0 0	0 0	0

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

RUN DATE: 05/12/80

 ANL LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

 PG 1 RFI 405-1
 ANL-L

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
AMIDES WEIGHT (KGS)	8	4	8		8	4	8	8	8	8	8	4	78
CALCIUM ION WEIGHT (KGS)	34	30	32	29	21	27	32	34	29	33	28	25	356
CARBONTHIOCYANATES WEIGHT (KGS)	2	1	2		2	1	2	2	2	2	2	1	17
CHLORIDE ION WEIGHT (KGS)	19	17	18	17	13	15	18	19	17	18	16	15	201
CHLOROSULFONES WEIGHT (KGS)	6	3	6		6	3	6	6	6	6	6	3	61
DIMETHYLAMINE WEIGHT (KGS)	23	23	23	23	14	23	23	23	23	23	23	23	263
HYDROCARBON-AMINES WEIGHT (KGS)	1	1	1	2	2							1	16
HYDROCARBONS WEIGHT (KGS)	16	8	16	1	16	8	16	16	16	16	16	8	156
HYPOCHLORITE ION WEIGHT (KGS)	22	20	20	19	13	17	20	22	19	21	18	16	229
METHYLTHIOCYANATE WEIGHT (KGS)					23	23		23					68
MORPHOLINE WEIGHT (KGS)	12	12	12	8	4	8	4	9	8	8	15	12	111
PHOSPHATE ION WEIGHT (KGS)	65	55	42	60	63	64	69	57	29	67	62	62	694
PHOTO LAB CHEMICAL WEIGHT (KGS)	163	163	163	163	163	163	163	163	163	163	163	163	1,960
SODIUM ION WEIGHT (KGS)	587	1,165	917	751	1,334	1,293	1,367	3,244	424	381	254	336	12,054
SULFATE ION WEIGHT (KGS)	5,257	4,012	4,908	3,421	4,358	5,634	5,706	6,051	7,121	5,257	4,563	4,460	60,747

ICAHN OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

ANL LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
TRIVALENT CR WEIGHT (KGS)	50	16	21	20	29	34	45	34	43	37	28	21	358
ZINC ION WEIGHT (KGS)	10	5	6	6	9	10	14	10	13	11	9	6	111

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

ANL LIQUID DISPOSED SUBSTANCES SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
FACILITY 779 SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	7,578	7,465	5,363	6,617	6,257	6,670	6,692	3,691	2,071	1,900	1,870	1,794	57,587
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	±48/4	±49/4	±67/4	±55/4	±58/4	±54/4	±54/4	±98/4	±75/4	±91/4	±94/4	±02/4	.75/44
INDUSTRIAL POND 74E SURFACE VOLUME (L. IN 1000) HYDROGEN-ION CONC. (PH)	3,035	3,577	13,442	5,765	7,866	13,131	17,730	18,014	18,760	13,385	13,635	13,298	142,638
AMIDES CONCENTRATION (MG/L) WEIGHT (KGS)	2±13/8	1±14/4	±61/8	±08	1±04/8	±31/4	±46/8	±45/8	±44/8	±61/8	±52/8	±31/4	.55/78
CALCIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	8±58/34	8±55/30	2±37/32	5±09/29	2±67/21	2±04/27	1±80/32	1±91/34	1±56/29	2±48/33	2±03/28	1±52/25	2.50/356
CARBONNITRILE CONCENTRATION (MG/L) WEIGHT (KGS)	±43/2	±23/1	±12/2	±02	±21/2	±06/1	±09/2	±02/2	±02/2	±12/2	±12/2	±06/1	.11/17
CHLORIDE ION CONCENTRATION (MG/L) WEIGHT (KGS)	3±97/15	3±78/14	1±05/14	2±25/13	1±15/9	±90/12	±80/14	±85/15	±69/13	1±10/15	±90/12	±85/11	1.10/158
CHLOROSULFONES CONCENTRATION (MG/L) WEIGHT (KGS)	1±70/6	±91/3	±49/6	±06	±83/6	±25/3	±37/6	±36/6	±35/6	±49/6	±47/6	±25/3	.44/61
DIMETHYLAMINE CONCENTRATION (MG/L) WEIGHT (KGS)	5±91/23	6±34/23	1±69/23	3±93/23	1±73/14	1±73/23	1±28/23	1±26/23	1±21/23	1±69/23	1±64/23	1±41/23	1.84/263
HYDROCARBON-AMINES CONCENTRATION (MG/L) WEIGHT (KGS)	±21/1	±32/1	±06/1	±30/2	±22/2	±02	±03	±02	±01	±04	±04	±06/1	.07/10
HYDROCARBONS CONCENTRATION (MG/L) WEIGHT (KGS)	4±26/16	2±28/8	1±21/16	±16	2±08/16	±62/8	±92/16	±91/16	±67/16	1±22/16	1±18/16	±61/8	1.07/156

ANL LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1979

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVL
HYPOCHLORITE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>5.76</u> 22	<u>5.49</u> 20	<u>1.52</u> 20	<u>3.27</u> 19	<u>1.67</u> 13	<u>1.31</u> 17	<u>1.15</u> 20	<u>1.23</u> 22	<u>1.00</u> 19	<u>1.59</u> 21	<u>1.30</u> 18	<u>1.23</u> 16	1.60 229
METHYLBISTHIOCYANATE CONCENTRATION (MG/L) WEIGHT (KGS)					<u>2.88</u> 23	<u>1.73</u> 23		<u>1.26</u> 23					.48 68
MORPHOLINE CONCENTRATION (MG/L) WEIGHT (KGS)	<u>3.05</u> 12	<u>3.25</u> 12	<u>.88</u> 12	<u>1.41</u> 8	<u>.55</u> 4	<u>.59</u> 8	<u>.23</u> 4	<u>.48</u> 9	<u>.41</u> 8	<u>.58</u> 8	<u>1.12</u> 15	<u>.68</u> 12	.78 111
PHOSPHATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>16.88</u> 65	<u>15.51</u> 55	<u>3.14</u> 42	<u>10.45</u> 60	<u>7.99</u> 63	<u>4.88</u> 64	<u>3.90</u> 69	<u>3.16</u> 57	<u>1.52</u> 29	<u>4.96</u> 67	<u>4.50</u> 62	<u>4.67</u> 62	4.87 694
PHOTO LAB CHEMICAL CONCENTRATION (MG/L) WEIGHT (KGS)	<u>42.58</u> 163	<u>45.63</u> 163	<u>12.15</u> 163	<u>28.32</u> 163	<u>20.76</u> 163	<u>12.44</u> 163	<u>9.21</u> 163	<u>9.06</u> 163	<u>8.70</u> 163	<u>12.20</u> 163	<u>11.80</u> 163	<u>12.28</u> 163	13.74 1,960
SODIUM ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>153.07</u> 587	<u>322.62</u> 1,165	<u>66.23</u> 917	<u>130.29</u> 751	<u>169.59</u> 1,334	<u>98.48</u> 1,293	<u>77.11</u> 1,367	<u>180.08</u> 3,244	<u>22.58</u> 424	<u>28.45</u> 381	<u>18.40</u> 254	<u>25.28</u> 336	84.51 12,054
SULFATE ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>1371.06</u> 5,257	<u>1120.98</u> 4,012	<u>365.12</u> 4,908	<u>593.46</u> 3,421	<u>553.99</u> 4,358	<u>429.02</u> 5,634	<u>321.83</u> 5,702	<u>335.89</u> 6,051	<u>379.60</u> 7,121	<u>392.77</u> 5,257	<u>329.82</u> 4,563	<u>335.37</u> 4,460	425.92 60,747
TRIVALENT CR CONCENTRATION (MG/L) WEIGHT (KGS)	<u>7.76</u> 30	<u>4.59</u> 16	<u>1.54</u> 21	<u>3.54</u> 20	<u>3.75</u> 29	<u>2.57</u> 34	<u>2.56</u> 45	<u>1.89</u> 34	<u>2.27</u> 43	<u>2.73</u> 37	<u>2.01</u> 28	<u>1.56</u> 21	2.51 358
ZINC ION CONCENTRATION (MG/L) WEIGHT (KGS)	<u>2.43</u> 10	<u>1.44</u> 5	<u>.48</u> 8	<u>1.11</u> 6	<u>1.16</u> 9	<u>.81</u> 10	<u>.60</u> 14	<u>.59</u> 10	<u>.71</u> 13	<u>.86</u> 11	<u>.63</u> 9	<u>.49</u> 8	.79 111

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

ANL INDUSTRIAL WASTE SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

DISPOSAL OR STORAGE LOCATION		VOLUME OR WEIGHT BY MONTH											
TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
ANL BOILERS													
DISPOSED WASTE													
6 L LIQUID	242.3		18.9	26.5	26.5	1,094.0	416.4		37.9	41.6	37.9	37.9	1,979.7
WASTE OIL FROM LBR-11 TURBINE													
CFA LANDFILL													
DISPOSED WASTE													
1 M SOLID	150.8	152.9	279.9	295.9	249.3	206.5	275.3	217.2	217.2	275.3	234.0	206.5	2,766.5
2 M SOLID	38.2	38.6	55.1	67.3	48.9	42.8	55.1	42.8	42.8	55.1	42.8	42.8	564.3
3 M SOLID						16.8	3.1						19.9
4 M SOLID	6.1	3.1		11.5		9.2	73.4	12.2		643.8	13.0		772.5
5 M SOLID			3.1				26.0			3.1	9.9		42.1
9 M SOLID										7.6			7.6
MCPA FILTERS													
9 F SOLID									6.1				6.1
SURVIVAL CRACKERS													
CFA WESCOH													
DISPOSED WASTE													
9 L LIQUID				208.2									208.2
CHEMICALS													
9 L LIQUID						208.2							208.2
PAINT													
GRAND TOTALS													
DISPOSED WASTE													
1 M SOLID	150.8	152.9	279.9	295.9	249.3	206.5	275.3	217.2	217.2	275.3	234.0	206.5	2,766.5
2 M SOLID	38.2	38.6	55.1	67.3	48.9	42.8	55.1	42.8	42.8	55.1	42.8	42.8	564.3
3 M SOLID						16.8	3.1						19.9
4 M SOLID	6.1	3.1		11.5		9.2	73.4	12.2		643.8	13.0		772.5
5 M SOLID			3.1				26.0			3.1	9.9		42.1
6 L LIQUID	242.3		18.9	26.5	26.5	1,094.0	416.4		37.9	41.6	37.9	37.9	1,979.7
9 L LIQUID				208.2		208.2							416.4
9 F SOLID									6.1	7.6			13.8

ANL WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. 7 SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
1 WATER PUMPED (L)	19,695	14,982	18,340	15,077	18,419	27,125	29,730	27,095	31,017	23,230	21,258	16,451	262,420
2 WATER PUMPED (L)	19,695	14,982	18,340	15,077	18,419	27,125	29,730	27,095	31,017	23,230	21,258	16,451	262,420
TOTAL WATER PUMPED (L)	39,390	29,964	36,680	30,154	36,839	54,251	59,459	54,190	62,033	46,461	42,516	32,902	524,839
WATER DISPOSAL													
AIR (L)	20,028	16,553	15,978	14,167	18,658	26,857	29,798	28,652	32,236	24,389	22,178	15,486	264,979
SURFACE (L)	3,835	3,577	13,442	5,765	7,866	13,131	17,730	18,014	18,760	13,385	13,835	13,298	142,638
SUBSURFACE (L)													
SEWAGE DATA													
720 BUILD VOL. (L)	*	45	45	45	45	45	45	45	45	45	45	45	545
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)													
FINAL CONC. (MG/L)													
INCREASED FACTOR													
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													

IDAHO OPERATIONS OFFICE
 U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

 ANL WATER USAGE AND DISPOSAL SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VOLUMES = NEAREST THOUSAND LITERS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
SEWAGE DATA													
779 BUILD VOL. (L)	7,578	7,465	5,383	6,617	6,257	6,670	6,692	3,694	2,071	1,900	1,670	1,794	57,991
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (MG/L)					135.0	110.0	170.0	53.0	152.0	110.0			121.7
FINAL CONC. (MG/L)					125.0	85.0	79.0	194.0	78.0	140.0			115.3
% REMOVED					7.4	22.7	58.8		48.7				5.3
DISSOLVED OXYGEN (DO)													
RAW CONC. (MG/L)					.2	.2	1.8	.1					.6
FINAL CONC. (MG/L)					7.1	.4	.1	.1	5.4				2.6
INCREASED FACTOR					34.5	1.0	-0.9						
SETTLABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
FR-FINAL					8.7	7.7	7.9	8.4	7.9	8.3			6.2
TOTAL SEWAGE VOL. (L)	7,624	7,510	5,428	6,662	6,303	6,715	6,738	3,740	2,116	1,946	1,915	1,840	58,536
TOTAL WATER DISPOSED (L)	31,486	27,640	34,847	26,614	32,826	46,703	54,266	50,386	53,112	39,719	37,929	30,623	466,152
ACCOUNTABILITY (%)	79.9	92.2	95.0	88.3	89.1	86.1	91.3	93.0	85.6	85.5	89.2	93.1	88.8

ANL FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
 FOR JANUARY THROUGH DECEMBER 1979

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (LITERS)	246	217	163	122	130	32	51	52	21	53	62	174	1,323
SO2 (KGS)	1	1	1		1							1	5
NOX (KGS)													
PARTICULATES (KGS)													2
GRAND TOTALS													
SO2 (KGS)	1	1	1		1							1	5
NOX (KGS)													
PARTICULATES (KGS)													2

ENGINEERED RELEASE POINTS TO THE ENVIRONMENT

<u>Type of Discharge</u>	<u>Area/Location</u>	<u>Type and Description of Discharge Point</u>
Airborne	ANL	Cooling tower. Circulation rate of 7.6×10^4 lpm. Drift rate 0.01%. Blowdown rate of 100-190 lpm.
	CPP	76.2 m stack, $47.2 \text{ m}^3/\text{s}$ discharge capacity. Sampled at the 27 m level.
	NRF/A1W & S5G	Cooling towers (2), capacity 1.3×10^6 l each.
	NRF/S1W	Spray ponds (2), capacity of 1.5×10^7 l.
	PBF	Cooling tower, capacity of 2.95×10^6 l, maximum flow 5.7×10^4 lpm.
	TRA/ETR	Cooling tower, 3 m x 113 m x 12.8 m. Evaporation rate at full reactor power 3.8×10^3 lpm.
	TRA/ATR	Cooling tower, 2.4 m x 66 m x 14.6 m. Evaporation rate at full reactor power 6.6×10^3 lpm.
	Liquid	ARA
ANL		Sanitary lagoon, 3 ponds (~ 2.3 acres), flow rate 5.8×10^7 l per year.
ANL		Industrial pond, ~ 3 acres, flow rate 1.4×10^8 l per year.
ANL		TREAT septic tank. Effluent to tile field. Flow rate $\sim 5.5 \times 10^6$ l per year.
CFA		Sewage plant with tile field of 61 m x 610 m. Average annual flow 1.5×10^8 l.

ENGINEERED RELEASE POINTS TO THE ENVIRONMENT (cont)

<u>Type of Discharge</u>	<u>Area/Location</u>	<u>Type and Description of Discharge Point</u>
Liquid	CPP	Disposal well, 0.25 m dia. x 182 m deep. Annual flow 1.3×10^9 l.
	CPP	Sewage plant to tile field. Annual flow 5.0×10^7 l.
	LOFT	Disposal pond, 76 m x 152 m x 6 m. Capacity $\sim 6.8 \times 10^7$ l. Annual flow 4.4×10^8 l.
	LOFT	Septic tank. Effluent to the tile field. Annual flow $\sim 2.0 \times 10^6$ l.
	LOFT	Disposal well, 0.25 m dia. x 91 m deep. Annual flow $\sim 1.8 \times 10^8$ l.
	NRF	2 sewage ponds, 1.25 acres each. Total annual flow $\sim 7.3 \times 10^7$ l.
	NRF	Waste ditch, flow rate 7.0×10^8 l/year.
	PBF	Warm waste well, 0.25 m dia. x 33.5 m deep. Annual flow 7.8×10^6 l.
	PBF	Evaporation pond, 45.7 m x 45.7 m x 1.7 m. Lined pond with capacity of 3.5×10^6 l. Annual flow 1.2×10^6 l.
	TAN	Disposal pond, 305 m x 427 m x 1.5 m. Capacity of 1.8×10^9 l. Annual flow 9.7×10^7 l.
	TRA	Chemical waste pond, 52 m x 52 m x 1.5 m. Capacity of 4.4×10^6 l. Annual flow 6.6×10^7 l.
	TRA	Disposal well, 0.15 m dia. x 387 m deep. Design flow 6400 l/minute. Annual flow 1.0×10^9 l.
	TRA	Sewage plant with leaching pond. Average flow 62 l/minute.

ENGINEERED RELEASE POINTS TO THE ENVIRONMENT (cont)

<u>Type of Discharge</u>	<u>Area/Location</u>	<u>Type and Description of Discharge Point</u>
Liquid	WRRTF	Disposal well, 0.2 m dia. x 95.4 m deep. Annual flow 9.3×10^7 l.
	All Facilities	Waste oil and solvents are collected at CFA. Fluids are recycled, used as supplementary fuel or as dust suppressor on gravel road.
Solid	All Facilities	All routine nonradioactive wastes are placed in the landfill at CFA. Special or hazardous wastes are handled on a case basis.