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INDUSTRIAL WASTE MANAGEMENT INFORMATION

FOR 1976 AND RECORD-TO-DATE

COMPILED BY:

S. S. WHITE

OFFICE OF WASTE MANAGEMENT

IDAHO OPERATIONS OFFICE

IDAHO NATIONAL ENGINEERING LABORATORY

DEPARTMENT OF ENERGY

INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION

1976 AND RECORD-TO-DATE

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ABSTRACT

This report summarizes the industrial waste data associated with activities at the Idaho National Engineering Laboratory (INEL) for 1976 and record-to-date. The quantities of liquid industrial waste, the volumes of solid waste, the fuel oil and water used, and the quantitites of SO_2 and particulates released are summarized in this report. The waste data has been taken from the INEL Industrial Waste Management Information System (IWMIS).

ABBREVIATIONS

IDENTIFICATION	ABBREVIATION
Argonne National Laboratory	ANL
Auxiliary Reactor Area	ARA
Central Facilities Area	CFA
Chemical Processing Plant	CPP
Experimental Breeder Reactor No. 2	EBR-II
Idaho National Engineering Laboratory	INEL
Loss of Fluid Test Facility	LOFT
Low Power Test Facility	LPT
Naval Reactors Facility	NRF
Power Burst Facility	PBF
Special Power Excursion Reactor Test	SPERT (PER)
Test Area North	TAN
Technical Support Facilities (TAN)	TSF
Test Reactors Area	TRA
Transient Reactor Test Facility	TREAT
Waste Management Complex	WMC

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 and accurate reports on the amount of all types of industrial waste which has been stored and disposed at the INEL and 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. It has been an effective tool in the management of industrial waste at the INEL.

This document provides detailed waste management data on the types and quantities of industrial waste, fuel oil usage, and water usage for the year 1976 and record-to-date. It also provides summary reports on INEL industrial waste management for 1976, and provides a measure of the effectiveness of the industrial waste management program at the INEL.

A total of 19,160 cubic yards of solid industrial waste was disposed to sanitary landfills at the INEL during 1976. This represents a decrease from the 24,250 cubic yards in 1975 and 35,010 cubic yards in 1974.

During 1976, a total of 6,000 gallons 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 8,617 gallons in 1975 and 20,660 gallons in 1974.

A total quantity of 12,940,000 pounds of industrial waste was discharged in 1976. This includes 5,278,000 pounds of chemicals, 6,077,000 pounds of total dissolved solids, and 1,585,000 pounds 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 13,350,000 pounds in 1975, and an increase from the total quantity of 11,780,000 in 1974.

During 1976, a total of 6,633,000 gallons of fuel oil was used at the INEL which produced 1,078,000 pounds of SO_2 and 69,450 pounds of particulates. During 1975, 7,247,000 gallons of fuel oil was used producing 1,201,000 pounds of SO_2 and 103,000 pounds of particulates. The slight decrease in the quantities of SO_2 and particulates from 1975 to 1976 is attributed to the normal fluctuation of the chemical constituents in the fuel oil.

A total of 2,552,000,000 gallons of water was used at the INEL during 1976 compared to 2,495,000,000 gallons in 1975, and 2,878,000,000 gallons in 1974. However, the majority of this water is returned to the lithosphere via injection wells and seepage ponds. The remaining water is lost to the atmosphere via cooling towers and other evaporatory processes.

A number of reports have been developed for the system. The following are the reports with a brief description and purpose for each:

1. 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.

2. Report 2, INEL Year-to-Date Water Usage Summary. This report provides the quantity of water pumped and disposed and percent accountability at each facility for the year-to-date.

3. 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.

4. Report 4, INEL Airborne and 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.

5. 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 SO_2, NO_x, and particulates released to the atmosphere.

6. Report 6, INEL Year-to-Date Fuel Oil Summary. This report provides similar information to Report 5 for the year-to-date.

Other reports available from the system are:

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

INEL INDUSTRIAL WASTE SUMMARY
RECORD-TO-DATE

WASTE TYPE		1971-1973	1974	1975	1976
SANITARY WASTE	(CUBIC YARDS)	94,430	35,010	24,250	19,160
OIL-SOLVENTS	(GALLONS)	44,560	20,660	8,617	6,000
LIQUID WASTE	(POUNDS)	20,210,000	11,080,000	12,820,000	12,180,000
AIRBORNE WASTE	(POUNDS)*	3,358,000	2,061,000	1,835,000	1,908,000
FUEL OIL:					
QUANTITY	(GALLONS)	21,280,000	7,358,000	7,744,000	7,170,000
SO2	(POUNDS)	3,230,000	1,227,000	1,201,000	1,078,000
PARTICULATES	(POUNDS)	128,200	133,800	103,000	69,450
WATER-USED	(1,000 GALLONS)	7,417,000	2,878,000	2,495,000	2,552,000

* 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	TFA	WMC	TOTAL
RECORD-TO-DATE (71-74)										
SANITARY WASTE (CU. YDS)	15,590	1	23,430	14,060	40,570	4,840	12,070	18,890		129,400
OILS & SOLVENTS (GALLONS)	110		27,000		36,460		150	1,500		65,220
CHEMICALS										
LIQUIDS (GALLONS)					10,770	75		1,659		12,500
SOLIDS (POUNDS)	590		2,988		7,992			38,770		50,340
1975										
SANITARY WASTE (CU. YDS)	2,501		3,723	3,672	6,991	9	4,027	3,327		24,250
OILS & SOLVENTS (GALLONS)	556				8,061					8,617
CHEMICALS										
LIQUIDS (GALLONS)	1				200		<1			202
SOLIDS (POUNDS)	15									15
1976										
SANITARY WASTE (CU. YDS)	2,456		2,750	2,290	6,463	24	2,610	2,568		19,160
OILS & SOLVENTS (GALLONS)					6,000					6,000
CHEMICALS										
LIQUIDS (GALLONS)										
SOLIDS (POUNDS)							1			1

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL INDUSTRIAL WASTE SUMMARY IN CUBIC YARDS*
FOR JANUARY THROUGH DECEMBER 1976

TYPES	ANL	CFA	CPP	NRF	PBF	TAN	TRA	TOTAL
1. TRASH	2,050	1,894	1,760	4,120	24	2,240	2,455	14,540
2. CAFETERIA GARBAGE	408	628	530	1,272		337	83	3,258
3. WOOD & SCRAP LUMBER		162		413			12	587
4. MASONRY & CONCRETE		66		454		30	12	562
5. SCRAP METAL				187		3	6	196
6. OIL (GALLONS)				6,000				6,000
7. SOLVENTS (GALLONS)								
8. CHEMICALS								
LIQUID (GALLONS)								
SOLIDS (POUNDS)						1		1
9. OTHERS								
LIQUID (GALLONS)								
SOLIDS (CU. FT.)				450				450
TOTALS								
SANITARY TYPES 1. 2, 3, 4, 5, & 9 (CUBIC YARDS)	2,458	2,750	2,290	6,463	24	2,610	2,568	19,160
OILS & SOLVENTS TYPES 6 & 7 (GALLONS)				6,000				6,000
CHEMICALS								
LIQUIDS (GALLONS)								
SOLIDS (POUNDS)						1		1

* EXCEPT AS NOTED

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

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

SUBSTANCE IDENTIFICATION	1971-1974	1975	1976	TOTAL
AMIDES			520	520
AUTO CLEANERS	20,010	4,456	4,552	29,020
BETZ A-9	150			150
BETZ DE 419	4,097	1,800		5,897
BETZ DE 453	250			250
BETZ DE 481	17,370			17,370
BETZ DIANODIC 194	170	1,554	100	1,824
BETZ J-12	40			40
BETZ NEUTRMEEN	3,382	217	81	3,680
BETZ 109	5	70	1	76
BETZ 194	663			663
BETZ 406	246	39		285
BETZ 429		11,400		11,400
BETZ 65	1,200			1,200
BIOCIDE O-2	21,250			21,250
BLEACH	1,531	257	191	1,979
CALCIUM ION	802	184	206	1,192
CARBONTHIOCYANATES			48	48
CHLORIDE ION	2,832,000	952,200	1,005,000	4,789,000
CHLOROCARBONS			5	5
CHLORCHYDROCARBONS			965	965
CHLOROSULFONES			380	380
CHROMATE ION			99	99
CLORCHYDROCARBONS				
DIANODIC 194	34,240			34,240
DIPHOSPHONATE			3,744	3,744
DISPERSANT 403	28,720			28,720
HEXAVALENT CR	5,317	127	116	5,560
HPA			1,235	1,235
HYDRAZINE		27		27
HYDROCARBON-AMINES			9	9
HYDROCARBONS			483	483
HYDROXYCARBON			146	146
HYDROXYCARBONS			5,164	5,164
HYPOCHLORITE	32,160	2,215	1,016	35,390
HYPOCHLORITE ION			1,514	1,514
KP40 COOLANT CNTRL			160	160
KWIK KLEEN	2,425	1,200	1,000	4,625
LAUNDRY PRODUCTS	3,793	1,754	5,215	10,760
M-60 ALGAECIDE			8	8
M-80T ALGAECIDE			8	8
MORPHOLINE		72	2	74
N-HYDROCARBON			2,092	2,092
NALCO 7312		392		392
NALCO 7323		408		408
NALCOOL 7351		1,853		1,853
NAPTHA			56	56
NITRATE ION	168,300	60,960	89,110	318,400
NITROGEN DIOXIDE	699,400	530,900	760,700	1,991,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

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

SUBSTANCE IDENTIFICATION	1971-1974	1975	1976	TOTAL
ORCCCL 194	150			150
ORCCCL 734	116,400	33,610	4,984	155,000
OXYCARBONS			1	1
PHOSPHATE			200	200
PHOSPHATE ION	80,650	27,540	24,130	132,300
PHOSPHONATES			51	51
PHOTO LAB CHEMICAL	12,880	5,040	5,280	23,200
POLYHYDROXYCARBON			25	25
POLYNODIC 606	54,000	43,450	39,700	137,200
POLYNODIC 633		5,000		5,000
POTASSIUM ION			4,386	4,386
SILICACARBONS			45	45
SILICATE ION			79	79
SKASOL		960	400	1,360
SKAZOL	6,976			6,976
SLIMICIDE A-9	13,540	7,080	1,280	21,900
SLIMICIDE C-35	3,703	3,196	672	7,571
SLIMICIDE D-2	4,484			4,484
SLIMICIDE J-12	7,458	6,260	2,867	16,590
SLIMICIDE J-9	22,180	9,480	3,440	35,100
SLIMICIDE 403	4,968			4,968
SOAP	59,760	3,421	4,752	67,930
SODIUM ION	2,615,000	780,200	660,100	4,055,000
SODIUM PHOSPHATE				
SPRA-SAF	1,900			1,900
SULFATE ION	9,899,000	2,633,000	2,633,000	15,160,000
SULFITE ION	11,310	885	1,610	13,810
SULFONATES			1,909	1,909
SULFUR DIOXIDE	16,880	1,332		18,210
TDS	14,150,000	7,042,000	6,077,000	27,270,000
THIOCARBONS			38	38
THIOHYDROCARBONS			98	98
TOTAL HARDNESS	1,027,000	1,179,000	1,585,000	3,791,000
TRIVALENT CR	164	389	844	1,397
ZINC ION	3,865	126	292	4,283
TOTAL	31,990,000	13,350,000	12,940,000	58,280,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

AIRBORNE AND LIQUID
INDUSTRIAL WASTE SUBSTANCES SUMMARY IN POUNDS
FOR JANUARY THROUGH DECEMBER, 1976

SUBSTANCE IDENTIFICATION	ANL	CFA	CPP	NRF	PBF	TAN	TPA	TOTAL
AMIDES	20			500				520
AUTO CLEANERS		4,552						4,552
BETZ DIANODIC 194					100			100
BETZ NEUTRMEEN	81							81
BETZ 109					1			1
BLEACH		191						191
CALCIUM ION	20	56	87			41		206
CARBONTHIOCYANATES	4			44				48
CHLORIDE ION	56	14,870	605,300	351,900		32,590	531	1,005,000
CHLOROCARBONS	5							5
CHLOROHYDROCARBONS				965				965
CHLOROSULFONES	16			364				380
CHROMATE ION					99			99
CLOROHYDROCARBONS								
DIPHOSPHONATE							3,744	3,744
HEXAVALENT CR	43			72				116
HPA					42		1,192	1,235
HYDROCARBON-AMINES	9							9
HYDROCARBONS	40			443				483
HYDROXYCARBON				146				146
HYDROXYCARBONS	13			1,093			4,057	5,164
HYPOCHLORITE		409					607	1,016
HYPOCHLORITE ION		440	223			104	747	1,514
KP40 COOLANT CNTRL	160							160
KWIK KLEEN		1,000						1,000
LAUNDRY PRODUCTS		5,215						5,215
M-60 ALGAECIDE	8							8
M-80T ALGAECIDE	8							8
MORPHOLINE	2							2
N-HYDROCARBON				1,568			524	2,092
NAPTHA				56				56
NITRATE ION			89,110					89,110
NITROGEN DIOXIDE			760,700					760,700
OROCOL 734				4,984				4,984
OXYCARBONS	1							1
PHOSPHATE		200						200
PHOSPHATE ION	591			10,470	88	655	12,330	24,130
PHOSPHONATES	51							51
PHOTO LAB CHEMICAL	5,280							5,280
POLYHYDROXYCARBON					25			25
POLYNODIC 606							39,700	39,700
POTASSIUM ION							4,386	4,386
SILICACARBONS	45							45
SILICATE ION				79				79
SKASOL	400							400
SLIMICIDE A-9				1,280				1,280
SLIMICIDE C-35				672				672
SLIMICIDE J-12				1,392			1,475	2,867
SLIMICIDE J-9				1,440			2,000	3,440

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

AIRBORNE AND LIQUID
INDUSTRIAL WASTE SUBSTANCES SUMMARY IN POUNDS
FOR JANUARY THROUGH DECEMBER, 1976

SUBSTANCE IDENTIFICATION	ANL	CFA	CPP	NRF	PBF	TAN	TRA	TOTAL
SOAP		4,752						4,752
SODIUM ION	9,428	9,437	252,100	243,900	2,795	25,080	117,400	660,100
SODIUM PHOSPHATE								
SULFATE ION	59,970		10,710	456,800	4,109	5,238	2,096,000	2,633,000
SULFITE ION					2	1,595	13	1,610
SULFONATES				1,909				1,909
TDS			1,714,000	885,000			3,478,000	6,077,000
THIOCARBONS	38							38
THIOHYDROCARBONS				98				98
TOTAL HARDNESS							1,585,000	1,585,000
TRIVALENT CR	844							844
ZINC ION	276				16			292
TOTAL	77,410	41,120	3,432,000	1,965,000	7,279	65,290	7,348,000	12,940,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL FUEL OIL SUMMARY
RECORD-TO-DATE

	1971-1974				1975				1976			
AREA	FUEL OIL (GAL)	SO2 (LBS)	PART. (LBS)	DIESEL (GAL)	FUEL OIL (GAL)	SO2 (LBS)	PART. (LBS)	DIESEL (GAL)	FUEL OIL (GAL)	SO2 (LBS)	PART. (LBS)	DIESEL (GAL)
ANL	3,275,000	354,800	24,420		530,500	23,960	603		387,200	17,920	2,380	
ARA	128,000	9,554	1,153		12,040	357			33,900	1,952		
CFA	2,469,000	324,800	49,060		816,100	34,660			492,900	28,390		
CPP	6,852,000	550,700	12,140		1,640,000	75,250			2,100,000	115,100		
NRF	6,822,000	1,579,000	49,430		1,842,000	536,300	29,730		1,418,000	374,500	25,380	
PBF	102,700	5,417	509		38,120	1,071			36,210	1,627		11,520
TAN	3,036,000	661,000	56,900	700	980,000	212,900	23,140		1,145,000	263,000		
TRA	4,508,000	972,100	68,360	1,445,000*	1,188,000	314,200	49,310	497,600*	1,004,000	274,500	41,680	525,200*
WMC									15,820	911		
TOTAL	27,190,000	4,457,000	262,000	1,446,000*	7,247,000	1,201,000	103,000	497,600*	6,633,000	1,078,000	69,450	536,700*

* TRA EMERGENCY GENERATOR

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

INEL WATER USAGE SUMMARY IN THOUSAND GALLONS

RECORD-TO-DATE

AREA	1971-1974	1975	1976	TOTAL
ANL	403,700	174,600	141,400	719,700
ARA	115,000	41,360	33,440	189,800
CFA	468,300	117,600	97,780	683,700
CPP	1,420,000	367,400	504,600	2,292,000
NRF	2,168,000	606,400	330,800	3,105,000
PBF	36,330	8,119	9,771	54,220
TAN	175,900	96,640	121,100	393,600
TRA	5,509,000	1,083,000	1,301,000	7,892,000
WMC			12,500	12,500
TOTAL	10,300,000	2,495,000	2,552,000	15,340,000

DETAILS MAY NOT ADD UP TO TOTALS BECAUSE OF ROUNDING

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

INEL MONTHLY WATER USAGE SUMMARY
DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

AREA OF ORIGIN	MONTHLY VOLUME PUMPED	MONTHLY VOLUME DISPOSED					ACCOUNTA-BILITY (%)
		AIR	SURFACE	SUBSURFACE	SEWAGE	TOTAL	
ANL	11,568	6,406	2,784		827 *	10,017	86.6
AFA	3,703	*	*	3,529 *	174 *	3,703	100.0
CFA	12,823	*	458 *	121	3,547	4,126	32.2
CPP	40,000		*	27,290	846	28,136	70.3
NRF	22,370	15,390 *	3,220 *		2,046	20,658	92.3
PBF	690	87	*	358 *	52 *	497	72.0
TAN	6,047	*	1,559 *	1,956 *	346 *	3,861	63.8
TRA	132,110	11,740	67,690 *	40,740	773	120,943	91.5
WMC	2,283	*	2,012 *	253 *	6	2,271	99.5
GRAND TOTALS	231,594	33,623	77,723	74,247	8,619	194,212	83.9

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

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

INEL YEAR-TO-DATE WATER USAGE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

AREA OF ORIGIN	YEARLY VOLUME PUMPED	YEARLY VOLUME DISPOSED					ACCOUNTA-BILITY (%)
		AIR	SURFACE	SUBSURFACE	SEWAGE	TOTAL	
ANL	141,418	75,813	42,787		7,491 *	126,091	89.2
ARA	33,437	*	*	31,349 *	2,088 *	33,437	100.0
CFA	97,768	*	23,476 *	1,303	42,276	67,055	68.6
CPP	504,590		*	354,370	8,988	363,358	72.0
NRF	330,839	124,509 *	165,801 *		18,017	308,327	93.2
PBF	9,771	833	*	3,922 *	596 *	5,351	54.8
TAN	121,064	*	50,654 *	39,285 *	4,702 *	94,641	78.2
TRA	1,300,694	274,020	431,410 *	457,060	8,800	1,171,290	90.1
WMC	12,503	*	4,565 *	7,647 *	192	12,404	99.2
GRAND TOTALS	2,552,084	475,175	718,693	894,936	93,150	2,181,954	85.5

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

INEL INDUSTRIAL WASTE SUMMARY
DECEMBER 1976

AREA OF ORIGIN / TYPE OF WASTE		MONTHLY VOLUME OR WEIGHT	UNITS	YEAR-TO-DATE VOLUME OR WEIGHT	UNITS
ANL					
DISPOSED WASTE					
1 - TRASH	SOLID	210.0	CU. YD.	2,050.0	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	40.0	CU. YD.	408.0	CU. YD.
CFA					
DISPOSED WASTE					
1 - TRASH	SOLID	240.0	CU. YD.	1,894.0	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	32.0	CU. YD.	628.0	CU. YD.
3 - WOOD AND SCRAP LUMBER	SOLID			162.0	CU. YD.
4 - MASONRY AND CONCRETE	SOLID			57.0	CU. YD.
STORED WASTE					
4 - MASONRY AND CONCRETE	SOLID			9.0	CU. YD.
CPP					
DISPOSED WASTE					
1 - TRASH	SOLID	130.0	CU. YD.	1,980.0	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	32.0	CU. YD.	564.0	CU. YD.
NRF					
DISPOSED WASTE					
1 - TRASH	SOLID	350.0	CU. YD.	4,120.1	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	112.0	CU. YD.	1,272.0	CU. YD.
3 - WOOD AND SCRAP LUMBER	SOLID	35.3	CU. YD.	412.8	CU. YD.
4 - MASONRY AND CONCRETE	SOLID	2.8	CU. YD.	454.5	CU. YD.
5 - SCRAP METAL	SOLID	9.3	CU. YD.	186.8	CU. YD.
9 - OTHER	SOLID			450.0	CU. FT.
STORED WASTE					
6 - OIL	LIQUID			6,000.0	GALLONS
PBF					
DISPOSED WASTE					
1 - TRASH	SOLID			24.0	CU. YD.
TAN					
DISPOSED WASTE					
1 - TRASH	SOLID	186.0	CU. YD.	2,240.4	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	40.0	CU. YD.	337.0	CU. YD.
4 - MASONRY AND CONCRETE	SOLID			21.0	CU. YD.
8 - CHEMICALS	SOLID			1.0	POUNDS
STORED WASTE					

INEL INDUSTRIAL WASTE SUMMARY
DECEMBER 1976

AREA OF ORIGIN / TYPE OF WASTE		MONTHLY VOLUME OR WEIGHT	UNITS	YEAR-TO-DATE VOLUME OR WEIGHT	UNITS
TAN					
STORED WASTE					
4 - MASONRY AND CONCRETE	SOLID	9.0	CU. YD.	9.0	CU. YD.
5 - SCRAP METAL	SOLID			3.0	CU. YD.
TRA					
DISPOSED WASTE					
1 - TRASH	SOLID	240.0	CU. YD.	2,455.0	CU. YD.
2 - CAFETERIA GARBAGE	SOLID			83.0	CU. YD.
3 - WOOD AND SCRAP LUMBER	SOLID			12.0	CU. YD.
4 - MASONRY AND CONCRETE	SOLID			9.0	CU. YD.
5 - SCRAP METAL	SOLID			6.0	CU. YD.
STORED WASTE					
4 - MASONRY AND CONCRETE	SOLID			3.0	CU. YD.
INEL GRAND TOTALS					
DISPOSED WASTE					
1 - TRASH	SOLID	1,356.0	CU. YD.	14,763.5	CU. YD.
2 - CAFETERIA GARBAGE	SOLID	256.0	CU. YD.	3,292.0	CU. YD.
3 - WOOD AND SCRAP LUMBER	SOLID	35.3	CU. YD.	566.8	CU. YD.
4 - MASONRY AND CONCRETE	SOLID	2.8	CU. YD.	541.5	CU. YD.
5 - SCRAP METAL	SOLID	9.3	CU. YD.	192.8	CU. YD.
8 - CHEMICALS	SOLID			1.0	POUNDS
9 - OTHER	SOLID			450.0	CU. FT.
STORED WASTE					
4 - MASONRY AND CONCRETE	SOLID	9.0	CU. YD.	21.0	CU. YD.
5 - SCRAP METAL	SOLID			3.0	CU. YD.
6 - OIL	LIQUID			6,000.0	GALLONS

INEL AIRBORNE AND LIQUID DISPOSED SUBSTANCES SUMMARY
DECEMBER 1976

ALL FACILITIES	MONTHLY				YEAR-TO-DATE			
SUBSTANCES	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)
AMIDES		34		34		520		520
AUTO CLEANERS			376	376			4,552	4,552
BETZ CIANODIC 194							100	100
BETZ NEUTRMEEN						81		81
BETZ 109							1	1
BLEACH							191	191
CALCIUM ION		3	25	28		61	141	202
CARBONTHIOCYANATES		5		5		48		48
CHLORIDE ION		19,918	48,437	68,355		380,900	624,340	1,005,240
CHLOROCARBONS						5		5
CHLOROHYDROCARBONS						965		965
CHLOROSULFONES		26		26		380		380
CHROMATE ION			14	14			99	99
CLOROHYDROCARBONS								
DIPHOSPHONATE			447	447			3,744	3,744
HEXAVALENT CR	5			5	43	72		116
HPA			169	169			1,235	1,235
HYDROCARBON-AMINES		1		1		9		9
HYDROCARBONS		55		55		483		483
HYDROXYCARBON						146		146
HYDROXYCARBONS		16	444	460		1,106	4,057	5,164
HYPOCHLORITE						252	868	1,120

ALL FACILITIES	MONTHLY				YEAR-TO-DATE			
SUBSTANCES	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)
HYPOCHLORITE ION		46	160	206		263	1,138	1,401
KP40 COOLANT CNTRL						160		160
KWIK KLEEN							1,100	1,100
LAUNDRY PRODUCTS			518	518			5,215	5,215
M-60 ALGAECIDE						8		8
M-80T ALGAECIDE						8		8
MORPHOLINE						2		2
N-HYDROCARBON		23		23		1,568	524	2,092
NAPTHA		1		1		56		56
NITRATE ION							77,971	77,971
NITROGEN DIOXIDE					534,200			534,200
ORGOIL 734						4,984		4,984
OXYCARBONS						1		1
PHOSPHATE			100	100			100	100
PHOSPHATE ION		332	1,294	1,626		11,523	12,610	24,133
PHOSPHONATES						51		51
PHOTO LAB CHEMICAL		440		440		5,280		5,280
POLYHYDROXYCARBON			3	3			25	25
POLYNODIC 606							39,700	39,700
POTASSIUM ION			586	586			4,386	4,386
SILICACARBONS						45		45
SILICATE ION		7		7		79		79

ALL FACILITIES	MONTHLY				YEAR-TO-DATE			
SUBSTANCES	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)	ATMOSPHERE (POUNDS)	SURFACE (POUNDS)	SUBSURFACE (POUNDS)	TOTAL (POUNDS)
SKASOL						400		400
SLIMICIDE A-9						1,280		1,280
SLIMICIDE C-35						672		672
SLIMICIDE J-12						1,392	1,475	2,867
SLIMICIDE J-9						1,440	2,000	3,440
SOAP			450	450			4,752	4,752
SODIUM ION		23,756	1,995	25,751		390,922	242,351	633,274
SODIUM PHOSPHATE								
SULFATE ION		324,980	536,770	861,750		2,178,974	1,114,394	3,293,367
SULFITE ION		279	67	346		1,206	403	1,610
SULFONATES		166		166		1,909		1,909
TDS		236,053	330,344	566,398		1,740,274	4,336,446	6,076,720
THIOCARBONS						38		38
THIOHYDROCARBONS						98		98
TOTAL HARDNESS			135,406	135,406			1,585,187	1,585,187
TRIVALENT CR		82		82		844		844
ZINC ION		26	2	29	3	273	16	292

SCHED. NO. INF6164-A

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

RUN DATE: 04/22/77

INEL MONTHLY FUEL OIL SUMMARY
DECEMBER 1976

PG 1 RPT 5-1

AREA OF ORIGIN	FUEL OIL IN GALLONS					POUNDS DISCHARGED		
	TYPE 2	TYPE 5	TYPE 6	KEROSENE	DIESEL	SO2	NOX	PARTICULATES
ANL	26,150					1,390		288
CFA	71,860					4,139		
CPP	213,800			16,920		12,316		
NRF		166,600				62,341	4,498	2,982
PBF	5,835					155		
TAN	6,500	105,800				26,170		
TRA		144,400			39,340	37,748		5,993
WMC	5,562					320		
GRAND TOTALS	329,707	416,800		16,920	39,340	144,579	4,498	9,263

SCHED. NO. INF6164-B

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

RUN DATE: 04/22/77

INEL YEAR-TO-DATE FUEL OIL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA OF ORIGIN	FUEL OIL IN GALLONS					POUNDS DISCHARGED		
	TYPE 2	TYPE 5	TYPE 6	KEROSENE	DIESEL	SO2	NOX	PARTICULATES
ANL	387,188					17,920		2,380
CFA	492,860					28,388		
CPP	1,998,800			25,460		115,137		
NRF		1,418,170				374,515	38,290	25,384
PBF	36,212				11,523	1,627		
TAN	83,760	618,140		443,080		154,117		
TRA		960,100		44,270	525,160	263,639		41,682
WMC	15,823					911		
GRAND TOTALS	3,014,643	2,996,410		512,810	536,683	956,254	38,290	69,446

TRA AIRBORNE DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWERS EVAP VOLUME (CU.FT. IN 1000)	3,379 3,255	3,862 2,180	2,853 3,183	2,295 6,225	1,632 2,699	2,962 1,507	36,032
STEAM LOSS (WATER) VOLUME (CU.FT. IN 1000)	132 25	74 14	64 15	64 39	60 41	26 64	618

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CHLORIDE ION WEIGHT (POUNDS)							68	101	112	123	73	54	531
DIPHOSPHONATE WEIGHT (POUNDS)							1,134	201	652	819	490	447	3,743
HPA WEIGHT (POUNDS)							479	99	198	110	142	165	1,193
HYDROXYCARBONS WEIGHT (POUNDS)							1,096	155	749	1,012	601	444	4,057
HYPOCHLORITE WEIGHT (POUNDS)	117	112	112	102	112	52							607
HYPOCHLORITE ION WEIGHT (POUNDS)							89	147	157	173	102	79	747
N-HYDROCARBON WEIGHT (POUNDS)							210		105	105	105		525
PHOSPHATE ION WEIGHT (POUNDS)	21	528	786	378	605	335	2,746	1,381	1,698	1,689	947	1,215	12,329
POLYNODIC 606 WEIGHT (POUNDS)	6,975	7,700	6,875	7,700	3,300	7,150							39,700
POTASSIUM ION WEIGHT (POUNDS)							1,657	351	703	611	478	586	4,386
SLIMICIDE J-12 WEIGHT (POUNDS)					575	900							1,475
SLIMICIDE J-9 WEIGHT (POUNDS)	625	375	625	375									2,000
SODIUM ION WEIGHT (POUNDS)	10,930	7,404	8,841	9,450	10,665	6,333	12,036	9,814	9,912	13,383	9,372	9,248	117,388
SULFATE ION WEIGHT (POUNDS)	168,212	144,686	128,592	147,567	155,958	147,812	221,237	180,451	198,573	262,503	185,964	637,035	2,578,590
SULFITE ION WEIGHT (POUNDS)	3	4	3									3	13

TPA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
TDS WEIGHT (POUNDS)	189,011	166,843	226,569	171,906	265,546	264,364	457,752	333,167	375,082	406,071	279,821	339,979	3,478,111
TOTAL HARDNESS WEIGHT (POUNDS)	109,360	94,611	120,916	85,837	117,668	118,886	195,526	134,533	163,136	193,671	115,636	135,406	1,585,186

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
CHEMICAL WASTE POND SURFACE													
VOLUME (GAL. IN 1000)	2,376	1,763	2,052	1,867	2,354	1,764	2,548	2,089	2,135	2,981	2,275	2,239	26,463
HYDROGEN-ION CONC. (PH)													
SODIUM ION													
CONCENTRATION (PPM)	220.98	502.99	516.05	599.92	542.67	430.05	539.48	557.09	537.98	521.44	480.05	482.84	522.95
WEIGHT (POUNDS)	10,925	7,400	8,838	9,447	10,660	6,331	11,471	9,712	9,585	12,972	9,125	9,022	115,488
SULFATE ION													
CONCENTRATION (PPM)	6013.77	1625.67	5064.69	6254.20	6986.95	6425.61	1426.44	6800.67	6368.42	7894.32	7007.84	5407.19	6,651.45
WEIGHT (POUNDS)	119,242	112,193	86,730	96,487	137,256	94,591	157,913	118,557	113,466	196,387	133,046	101,033	1,463,901
DESERT SURFACE													
VOLUME (GAL. IN 1000)	17,090	13,040	20,480	17,600	30,650	8,706	50,380	45,580	24,320	37,720	47,230	65,450	378,246
HYDROGEN-ION CONC. (PH)													
TDS													
CONCENTRATION (PPM)	192.00	176.00	235.00	255.00	260.00	239.00	253.00	258.00	300.00	266.00	264.00	247.00	251.75
WEIGHT (POUNDS)	27,333	19,118	40,091	37,385	66,382	17,333	106,175	97,958	60,776	83,579	103,864	134,664	794,658
DISPOSAL WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	40,520	33,210	34,810	30,760	40,130	32,000	49,520	36,050	41,580	44,370	33,370	40,740	457,060
HYDROGEN-ION CONC. (PH)	8.3	8.2	8.1	7.8	8.1	7.4	8.3	7.9	7.7	8.1	9.4	8.3	8.1
CHLORIDE ION													
CONCENTRATION (PPM)							.14	.27	.32	.29	.16	.07	.11
WEIGHT (POUNDS)							56	80	112	106	45	23	422
DIPHOSPHONATE													
CONCENTRATION (PPM)							2.14	.67	1.88	2.21	1.77	1.31	.98
WEIGHT (POUNDS)							1,134	201	652	819	490	447	3,743
HPA													
CONCENTRATION (PPM)							1.16	.33	.57	.30	.51	.49	.31
WEIGHT (POUNDS)							479	99	198	110	142	165	1,193
HYDROXYCARBONS													
CONCENTRATION (PPM)							2.65	.51	2.16	2.73	2.15	1.30	1.06
WEIGHT (POUNDS)							1,096	155	749	1,012	601	444	4,057
HYPOCHLORITE													
CONCENTRATION (PPM)	.20	.25	.24	.23	.15	.14							.09
WEIGHT (POUNDS)	69	70	69	58	52	37							355

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
HYPOCHLORITE ION													
CONCENTRATION (PPM)							.17	.39	.45	.40	.22	.10	.15
WEIGHT (POUNDS)							72	116	157	149	60	33	587
N-HYDROCARBON													
CONCENTRATION (PPM)							.51		.30	.28	.38		.14
WEIGHT (POUNDS)							210		105	105	105		525
PHOSPHATE ION													
CONCENTRATION (PPM)	.06	1.91	2.71	1.48	1.81	1.26	6.65	4.60	4.89	4.57	3.41	3.57	3.23
WEIGHT (POUNDS)	21	528	786	378	605	335	2,746	1,381	1,698	1,689	947	1,215	12,329
POLYNODIC 606													
CONCENTRATION (PPM)	20.63	27.78	23.67	30.00	9.85	26.17							10.41
WEIGHT (POUNDS)	6,975	7,700	6,875	7,700	3,300	7,150							39,700
POTASSIUM ION													
CONCENTRATION (PPM)							4.01	1.17	2.02	1.65	1.72	1.73	1.15
WEIGHT (POUNDS)							1,657	351	703	611	478	586	4,386
SLIMICIDE J-12													
CONCENTRATION (PPM)					1.72	3.37							.39
WEIGHT (POUNDS)					575	900							1,475
SLIMICIDE J-9													
CONCENTRATION (PPM)	1.85	1.35	2.15	1.46									.52
WEIGHT (POUNDS)	625	375	625	375									2,000
SODIUM ION													
CONCENTRATION (PPM)	.02	.02	.02	.01	.02		1.36	.33	.94	1.11	.90	.87	.50
WEIGHT (POUNDS)	5	4	4	3	4	3	565	102	326	411	247	226	1,900
SULFATE ION													
CONCENTRATION (PPM)	144.82	117.24	144.11	191.20	55.85	199.30	153.24	205.74	245.27	178.56	190.02	1576.55	290.93
WEIGHT (POUNDS)	48,970	32,493	41,862	49,080	18,702	53,221	63,324	61,894	85,107	66,115	52,918	536,002	1,109,688
SULFITE ION													
CONCENTRATION (PPM)	.01	.01	.01									.01	
WEIGHT (POUNDS)	3	4	3									3	13
TDS													
CONCENTRATION (PPM)	479.00	534.00	650.00	525.00	586.00	850.00	816.00	714.00	890.00	857.00	633.00	605.00	687.64
WEIGHT (POUNDS)	161,678	147,725	188,479	134,521	195,890	237,238	336,601	214,412	308,262	316,749	175,956	205,315	2,622,826

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

TRA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
TOTAL HARDNESS													
CONCENTRATION (PPM)	324.00	342.00	417.00	335.00	352.00	446.00	474.00	448.00	471.00	524.00	416.00	399.00	415.60
WEIGHT (POUNDS)	109,360	94,611	120,916	85,837	117,668	118,886	195,526	134,533	163,136	193,671	115,636	135,406	1,585,186
IRRIGATION SURFACE													
VOLUME (GAL. IN 1000)					1,512	4,919	7,106	9,677	2,419	2,592			28,225
HYDROGEN-ION CONC. (PH)													
TDS													
CONCENTRATION (PPM)					260.00	239.00	253.00	258.00	300.00	266.00			257.40
WEIGHT (POUNDS)					3,275	9,793	14,976	20,797	6,045	5,743			60,629
SEWAGE PLANT SURFACE													
VOLUME (GAL. IN 1000)	685	581	529	723	1,018	612	1,029	779		801	675	773	8,205
HYDROGEN-ION CONC. (PH)	7.5	7.6	7.6	7.4	7.3	7.4	7.4	7.5		7.5	7.5	7.5	7.5
CHLORIDE ION													
CONCENTRATION (PPM)							1.40	3.23		2.47	5.06	4.88	1.60
WEIGHT (POUNDS)							12	21		16	28	31	108
HYPOCHLORITE													
CONCENTRATION (PPM)	8.38	8.53	9.87	7.21	7.17	2.91							3.68
WEIGHT (POUNDS)	48	41	44	44	61	15							253
HYPOCHLORITE ION													
CONCENTRATION (PPM)							2.03	4.69		3.58	7.34	7.09	2.32
WEIGHT (POUNDS)							17	30		24	41	46	158

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

SCHED. NO. INF6102-6

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

RUN DATE: 04/22/77

TRA INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID	228.0	305.0	216.0	266.0	210.0	140.0	280.0	140.0	15.0	210.0	205.0	240.0	2,455.0
2 Y SOLID	3.0	11.0	12.0	42.0	6.0	3.0				6.0			83.0
3 Y SOLID		12.0											12.0
4 Y SOLID	3.0					6.0							9.0
CFA SCRAPYARD													
DISPOSED WASTE													
5 Y SOLID										6.0			6.0
STORED WASTE													
4 Y SOLID								3.0					3.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	228.0	305.0	216.0	266.0	210.0	140.0	280.0	140.0	15.0	210.0	205.0	240.0	2,455.0
2 Y SOLID	3.0	11.0	12.0	42.0	6.0	3.0				6.0			83.0
3 Y SOLID		12.0											12.0
4 Y SOLID	3.0					6.0							9.0
5 Y SOLID										6.0			6.0
STORED WASTE													
4 Y SOLID								3.0					3.0

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

TRA INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	VOLUME OR WEIGHT BY MONTH JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS

END OF SCHED. NO. INF6162-B

TRA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	1,172	17,500	26,320		4,078	947	117,100	94,670	61,020	115,600	92,930	82,470	613,807
3 WATER PUMPED (GAL)		121						5,045	2,607		44		7,817
4 WATER PUMPED (GAL)	97,050	68,000	63,160	77,730	95,380	78,230	30,700	21,280	41,720	34,080	22,100	49,640	679,070
TOTAL WATER PUMPED (GAL)	98,222	85,621	89,480	77,730	99,458	79,177	147,800	120,995	105,347	149,680	115,074	132,110	1,300,694
WATER DISPOSAL													
AIR (GAL)	26,260	25,440	21,810	17,650	12,650	22,350	24,530	16,310	23,920	46,860	20,500	11,740	274,020
SURFACE (GAL) *	19,460	14,800	22,530	19,480	33,000	15,390	60,030	57,350	28,870	43,300	49,510	67,690	431,410
SUBSURFACE (GAL)	40,520	33,210	34,810	30,760	40,130	32,000	49,520	36,050	41,580	44,370	33,370	40,740	457,060
SEWAGE DATA													
BUILD VOL. (GAL)	685	581	529	723	1,018	612	1,029	779	595	801	675	773	8,800
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)	62.0	44.7	74.9	73.3	57.1	26.9	50.2	46.2		30.1	50.9	60.6	52.4
FINAL CONC. (PPM)	23.5	25.5	24.4	17.6	14.6	19.3	17.9	12.9		8.6	14.6	16.9	17.8
% REMOVED	62.1	43.0	67.4	76.0	74.4	28.3	64.3	72.1		71.4	71.3	72.1	66.0
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)	1.6	2.3	.9	12.1	1.0	.9	.4	.7		1.0	1.7	1.7	2.2
FINAL CONC. (PPM)	4.8	4.3	5.0	5.4	49.2	4.2	4.8	4.1		5.0	4.8	5.2	8.8
INCREASED FACTOR	2.0	.9	4.6	-.6	48.2	3.7	11.0	4.9		4.0	1.8	2.1	3.0
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)	3.4	4.3	3.9	2.7	3.5	2.6	3.4	3.3		3.7	2.6	3.4	3.3
FINAL CONC. (ML/L)	.05	.05	.05	.05	.05	.05	.05	.05		.05	.05	.05	.05
% REMOVED	98.5	98.8	98.7	98.1	98.6	98.1	98.5	98.5		98.6	98.1	98.5	98.5
PH-FINAL	7.7	7.5	7.6	7.6	7.7	7.6	7.7	7.6		7.7	7.7	7.7	7.6
TOTAL SEWAGE VOL. (GAL)	685	581	529	723	1,018	612	1,029	779	595	801	675	773	8,800
TOTAL WATER DISPOSED (GAL)	86,925	78,031	79,679	68,613	86,798	70,352	135,109	110,489	94,965	135,331	104,055	120,943	1,171,290
ACCOUNTABILITY (%)	88.5	91.1	89.0	88.3	87.3	88.9	91.4	91.3	90.1	90.4	90.4	91.5	90.1

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

TRA FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE / EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DIESEL													
VOLUME (GAL)	37	46	38	41	45	47	41	37	42	65	43	39	525
SO2 (LBS)	2	3	2	2	3	3	2	2	2	4	2	2	29
NOX (LBS)													
PARTICULATES (LBS)													
KEROSENE													
VOLUME (GAL)							44						44
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)							2						2
TYPE 5													
VOLUME (GAL)	152	121	107	87	83	46		34	28	76	82	144	960
SO2 (LBS)	37	30	26	21	20	11		8	6	17	20	35	231
NOX (LBS)													
PARTICULATES (LBS)	6	5	4	4	3	2		1	1	3	3	6	38
GRAND TOTALS													
SO2 (LBS)	39	33	28	23	23	14	2	10	8	21	22	37	260
NOX (LBS)													
PARTICULATES (LBS)	6	5	4	4	3	2	2	1	1	3	3	6	40

WMC WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	1,018	131	66	116	12	64	104	138	119	163	33	265	2,229
WMC WATER PUMPED (GAL)	1,755	1,716	1,738	1,300	64	61	437	401	114	272	398	2,018	10,274
TOTAL WATER PUMPED (GAL)	2,773	1,847	1,804	1,416	76	125	541	539	233	435	431	2,283	12,503
WATER DISPOSAL													
AIR (GAL) *													
SURFACE (GAL) *	212	212	212	212	58	55	431	395	108	266	392	2,012	4,565
SUBSURFACE (GAL) *	2,543	1,616	1,573	1,113		52	92	126	107	151	21	253	7,647
SEWAGE DATA													
BUILD VOL. (GAL)											6	6	12
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													

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

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
SEWAGE DATA													
EBR BUILD VOL. (GAL)	12	12	12	12	12	12	12	12	12	12			120
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
WMC BUILD VOL. (GAL)	6	6	6	6	6	6	6	6	6	6			60
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (GAL)	18	18	18	18	18	18	18	18	18	18	6	6	192
TOTAL WATER DISPOSED (GAL)	2,773	1,846	1,803	1,343	76	125	541	539	233	435	419	2,271	12,404
ACCOUNTABILITY (%)	100.0	99.9	99.9	94.8	100.0	100.0	100.0	100.0	100.0	100.0	97.2	99.5	99.2

SCHED. NO. INF6164-C

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

RUN DATE: 04/22/77

WMC FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

PG 1 RPT 128-I
WMC

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (GAL)	2	2	1								6	6	17
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
GRAND TOTALS													
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													

PBF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
BETZ DIANODIC 194 WEIGHT (POUNDS)					100								100
BETZ 109 WEIGHT (POUNDS)			1										1
CHLORIDE ION WEIGHT (POUNDS)													
CHROMATE ION WEIGHT (POUNDS)								42		6	37	14	99
HPA WEIGHT (POUNDS)								20		10	8	4	42
PHOSPHATE ION WEIGHT (POUNDS)								37		5	32	12	86
POLYHYDROXYCARBON WEIGHT (POUNDS)								12		6	5	3	26
SODIUM ION WEIGHT (POUNDS)	216	287	287	287	144	216	144	255	72	80	103	703	2,794
SODIUM PHOSPHATE WEIGHT (POUNDS)													
SULFATE ION WEIGHT (POUNDS)	426	396	485	441	396	485	176	295	88	92	114	715	4,109
SULFITE ION WEIGHT (POUNDS)					1					1			2
ZINC ION WEIGHT (POUNDS)								7		1	6	2	16

PRF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
CHEM DISPOSAL WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	15	20	20	20	10	15	10	15	5	83	5	40	258
HYDROGEN-ION CONC. (PH)													
BETZ DIAMOIC 194													
CONCENTRATION (PPM)					1198.29								46.45
WEIGHT (POUNDS)					100								100
BETZ 109													
CONCENTRATION (PPM)			8.99										.70
WEIGHT (POUNDS)			1										1
CHLORIDE ION													
CONCENTRATION (PPM)											8.63		.17
WEIGHT (POUNDS)													
CHROMATE ION													
CONCENTRATION (PPM)							4.25	336.48		8.51	874.85	42.06	45.94
WEIGHT (POUNDS)								42		6	37	14	99
HPA													
CONCENTRATION (PPM)								159.77		14.44	197.72	12.73	19.74
WEIGHT (POUNDS)								20		10	8	4	42
PHOSPHATE ION													
CONCENTRATION (PPM)								298.97		7.56	111.33	37.37	40.67
WEIGHT (POUNDS)								37		5	32	12	86
POLYHYDROXYCARBON													
CONCENTRATION (PPM)								95.86		8.66	118.63	7.64	11.84
WEIGHT (POUNDS)								12		6	5	3	26
SODIUM ION													
CONCENTRATION (PPM)	1722.55	1722.55	1722.55	1722.55	1722.55	1722.55	1724.29	2038.88	1722.55	115.00	2477.44	2104.35	1,297.67
WEIGHT (POUNDS)	216	287	287	287	144	216	144	255	72	80	103	702	2,793
SULFATE ION													
CONCENTRATION (PPM)	3402.07	2375.59	2903.49	2639.54	4751.17	3871.33	2111.63	2354.40	2111.63	133.35	2742.84	2141.98	1,908.67
WEIGHT (POUNDS)	426	396	485	441	396	485	176	295	88	92	114	715	4,109
ZINC ION													
CONCENTRATION (PPM)								53.44		1.35	138.95	6.68	7.27
WEIGHT (POUNDS)								7		1	6	2	16

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

PBF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL AVE
WARM WASTE WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	325	365	321	302	301	296	292	316	138	451	232	318	3,707
HYDROGEN-ION CONC. (PH)													
SODIUM ION													
CONCENTRATION (PPM)					.18					.15		.08	.04
WEIGHT (POUNDS)										1			1
SODIUM PHOSPHATE													
CONCENTRATION (PPM)						.06				.03		.04	.01
WEIGHT (POUNDS)													
SULFITE ION													
CONCENTRATION (PPM)					.31	.01				.26		.13	.07
WEIGHT (POUNDS)					1					1			2

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

SCHED. NO. INF0162-H

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

RUN DATE: 04/22/77

PBF INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID			24.0										24.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID			24.0										24.0

PBF WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	381	15	426	295	486	666	702	619	69	351	532	445	5,487
2 WATER PUMPED (GAL)	387	557	94	280	298	281	198	690	141	589	524	245	4,284
TOTAL WATER PUMPED (GAL)	768	572	520	575	784	947	900	1,309	210	1,440	1,056	690	9,771
WATER DISPOSAL													
AIR (GAL)	118	29	96	45	93	143				147	75	87	833
SURFACE (GAL) *													
SUBSURFACE (GAL) *	418	463	64	322	311	311	380	331	143	534	287	358	3,922
SEWAGE DATA													
619 BUILD VOL. (GAL)	33	33	45	45	45	45	45	45	45	45	45	45	516
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													

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

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

WELL 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. (GAL)	7	7	7	7	3	7	7	7	7	7	7	7	80
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (GAL)	40	40	52	52	48	52	52	52	52	52	52	52	596
TOTAL WATER DISPOSED (GAL)	576	532	212	419	452	506	432	383	195	733	414	497	5,351
ACCOUNTABILITY (%)	75.0	93.0	40.8	72.9	57.7	53.4	48.0	29.3	92.9	50.9	39.2	72.0	54.8

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE / EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DIESEL													
VOLUME (GAL)	3		2		1	3				2			11
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
TYPE 2													
VOLUME (GAL)	12	3	6	3					1	2	5	6	38
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
GRAND TOTALS													
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													

ARA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	1,098	945	965	1,219	943	1,136	1,218	1,117	1,121	1,160	1,212	1,617	13,751
3 WATER PUMPED (GAL)	2,219	2,043	2,388	2,085	1,529	1,481	2,095	1,777	1,029	288	666	2,086	19,686
TOTAL WATER PUMPED (GAL)	3,317	2,988	3,353	3,304	2,472	2,617	3,313	2,894	2,150	1,448	1,878	3,703	33,437
WATER DISPOSAL													
AIR (GAL) *													
SURFACE (GAL) *													
SUBSURFACE (GAL) *	3,143	2,814	3,179	3,130	2,298	2,443	3,139	2,720	1,976	1,274	1,704	3,529	31,349
SEWAGE DATA													
BUILD VOL. (GAL) *	174	174	174	174	174	174	174	174	174	174	174	174	2,088
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (GAL)	174	174	174	174	174	174	174	174	174	174	174	174	2,088
TOTAL WATER DISPOSEL (GAL)	3,317	2,988	3,353	3,304	2,472	2,617	3,313	2,894	2,150	1,448	1,878	3,703	33,437
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

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

TAN LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CALCIUM ION WEIGHT (POUNDS)				41									41
CHLORIDE ION WEIGHT (POUNDS)	3,641	4,490	3,853	6,918	941	2,184	2,397	2,033	91	1,820	2,852	1,365	32,585
HYPOCHLORITE ION WEIGHT (POUNDS)				104									104
PHOSPHATE ION WEIGHT (POUNDS)	19	148		17	13	38	47	35	10	89	105	135	656
SODIUM ION WEIGHT (POUNDS)	2,798	3,308	2,908	5,382	885	1,641	1,786	1,430	130	1,385	2,094	1,327	25,074
SULFATE ION WEIGHT (POUNDS)	437	883	355	935	264	159	942	123		164	260	715	5,237
SULFITE ION WEIGHT (POUNDS)	187	56	190	300	63	95	97	54	28	89	93	342	1,594

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
DISPOSAL POND SURFACE													
VOLUME (GAL. IN 1000)	419	399	536	372	505	672	612	785	407	351	312	1,126	6,496
HYDROGEN-ION CONC. (PH)													
CALCIUM ION													
CONCENTRATION (PPM)				13.10									.75
WEIGHT (POUNDS)				41									41
CHLORIDE ION													
CONCENTRATION (PPM)	694.58	856.51	638.19	1768.95		292.37	320.79	231.72		373.42	815.68	67.80	410.98
WEIGHT (POUNDS)	2,427	2,852	2,852	5,492		1,638	1,638	1,517		1,092	2,124	637	22,269
HYPOCHLORITE ION													
CONCENTRATION (PPM)				33.65									1.93
WEIGHT (POUNDS)				104									104
PHOSPHATE ION													
CONCENTRATION (PPM)		40.18				4.46	4.89	3.82	1.97	18.29	17.21	7.12	7.02
WEIGHT (POUNDS)		134				25	25	25	7	54	45	67	382
SODIUM ION													
CONCENTRATION (PPM)	471.24	574.47	478.13	1181.53		159.20	218.57	159.30	2.04	260.81	551.66	78.23	287.52
WEIGHT (POUNDS)	1,646	1,913	2,137	3,668		1,116	1,116	1,043	7	763	1,436	735	15,580
SULFATE ION													
CONCENTRATION (PPM)		142.89	47.32		50.16	18.87	26.70	8.08			20.30	67.51	34.15
WEIGHT (POUNDS)		476	211		211	106	106	53			53	634	1,850
SULFITE ION													
CONCENTRATION (PPM)	36.36		28.42	61.36		11.33	12.43	7.27	1.87	17.37	16.10	27.03	17.94
WEIGHT (POUNDS)	127		127	190		63	63	48	6	51	42	254	971
LOFT DISPOSAL POND SURFACE													
VOLUME (GAL. IN 1000)	4,228	8,465	1,104	6,206	3,117	4,647	5,868	917	338	4,377	8,911	733	48,911
HYDROGEN-ION CONC. (PH)													
CHLORIDE ION													
CONCENTRATION (PPM)	24.08	18.04	69.16	20.50	22.16	4.69	8.05	27.76	32.28	11.63	5.71	69.40	16.06
WEIGHT (POUNDS)	850	1,274	637	1,062	576	182	394	212	91	425	425	425	6,553
PHOSPHATE ION													
CONCENTRATION (PPM)	.53	.20		.33	.02	.01	.19	.98	1.18	.05	.10	.23	.20
WEIGHT (POUNDS)	19	14		17	1		10	7	3	2	8	1	82

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

TAN LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SODIUM ION													
CONCENTRATION (PPM)	25.55	16.21	52.61	27.56	22.66	6.38	8.01	21.52	43.82	10.41	5.34	50.93	16.08
WEIGHT (POUNDS)	901	1,145	485	1,427	569	247	392	165	124	381	397	312	6,565
SULFATE ION													
CONCENTRATION (PPM)	10.88	5.02	9.86	17.09			15.99			3.54	1.84	4.48	6.84
WEIGHT (POUNDS)	384	355	91	885			783			129	137	27	2,791
SULFITE ION													
CONCENTRATION (PPM)	1.69	.79		.90			.04		7.66	.18	.24	4.05	.57
WEIGHT (POUNDS)	60	56		46			2		22	7	18	25	236
LOFT DISPOSAL WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	292	324	58	338	2,650	3,691	3,246	2,947	2,836	2,318	3,366	151	22,217
HYDROGEN-ION CONC. (PH)													
LOFT SEPTIC TANK SUBSURFACE													
VOLUME (GAL. IN 1000)	45	45	45	45	45	45	45	45	45	45	45	45	540
HYDROGEN-ION CONC. (PH)													
LPT DISPOSAL WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	942	700	700	935	740	952	1,599	1,752	1,721	2,395	2,215	1,805	16,456
HYDROGEN-ION CONC. (PH)													
CHLORIDE ION													
CONCENTRATION (PPM)	46.30	62.30	62.32	46.65	58.98	45.85	27.28	20.75		15.18	16.41	20.14	27.39
WEIGHT (POUNDS)	364	364	364	364	364	364	364	303		303	303	303	3,760
PHOSPHATE ION													
CONCENTRATION (PPM)					2.02	1.57	.94	.17		1.67	2.82	4.44	1.40
WEIGHT (POUNDS)					12	12	12	2		33	52	67	190
SODIUM ION													
CONCENTRATION (PPM)	31.83	42.83	49.09	36.75	47.93	34.96	20.81	15.24		12.08	14.13	18.57	21.34
WEIGHT (POUNDS)	250	250	287	267	296	278	278	223		241	261	280	2,931
SULFATE ION													
CONCENTRATION (PPM)	6.72	9.05	9.05	6.40	8.56	6.66	3.96	4.82		1.76	3.81	3.51	4.34
WEIGHT (POUNDS)	53	53	53	50	53	53	53	70		35	70	53	596
SULFITE ION													
CONCENTRATION (PPM)			10.87	8.14	10.29	4.00	2.38	.43		1.59	1.79	4.22	2.83
WEIGHT (POUNDS)			63	63	63	32	32	6		32	33	63	387

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

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

TAN INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LAND FILL													
DISPOSED WASTE													
1 Y SOLID													
2 Y SOLID					21.0								21.0
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID	200.0	280.0	360.0	360.0		240.0	240.0	4.4		150.0	220.0	186.0	2,240.4
2 Y SOLID	9.0	7.0	68.0	78.0		11.0	17.0	6.0		32.0	48.0	40.0	316.0
4 Y SOLID						3.0	12.0	6.0					21.0
8 P SOLID													
MERCURY													
8 P SOLID				1.0									1.0
POWDERED BORIC ACID													
CFA SCRAPYARD													
STORED WASTE													
4 Y SOLID												9.0	9.0
CFA SCRAPYD#2													
STORED WASTE													
5 Y SOLID	3.0												3.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	200.0	280.0	360.0	360.0		240.0	240.0	4.4		150.0	220.0	186.0	2,240.4
2 Y SOLID	9.0	7.0	68.0	78.0	21.0	11.0	17.0	6.0		32.0	48.0	40.0	337.0
4 Y SOLID						3.0	12.0	6.0					21.0
8 P SOLID				1.0									1.0
STORED WASTE													
4 Y SOLID												9.0	9.0
5 Y SOLID	3.0												3.0

SCHED. NO. INF6161-C

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INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

RUN DATE: 04/22/77

TAN WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
WATER DATA													
LO1 WATER PUMPED (GAL)	2,534	5,062	1,038	4,725	4,253	4,414	4,793	3,137	2,014	3,465	6,254	1,383	43,072
LO2 WATER PUMPED (GAL)	2,633	4,016	680	3,060	3,636	4,485	4,984	3,174	2,106	3,475	6,213	1,351	39,813
LPT WATER PUMPED (GAL)	942	700	700	935	740	952	1,599	1,752	1,721	2,395	2,215	1,805	16,456
TF1 WATER PUMPED (GAL)	1,563	1,344	1,426	1,688	1,458	1,952	2,383	2,164	1,503	1,515	1,193	1,300	19,489
TF2 WATER PUMPED (GAL)	82	53	132	107	100	133	129	336	109	710	135	208	2,234
TOTAL WATER PUMPED (GAL)	7,754	11,175	3,976	10,515	10,187	11,936	13,888	10,563	7,453	11,560	16,010	6,047	121,064
WATER DISPOSAL													
AIR (GAL) *													
SURFACE (GAL) *	4,383	8,592	1,255	6,276	3,198	4,855	5,331	1,268	541	4,377	9,019	1,559	50,654
SUBSURFACE (GAL) *	1,234	1,024	758	1,273	3,390	4,643	5,457	4,699	4,557	4,713	5,581	1,956	39,285
SEWAGE DATA													
623 BUILD VOL. (GAL)	264	272	384	303	424	486	537	433	203	351	204	301	4,162
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)	195.5	127.0	155.0	164.5	165.3	101.0	128.7	83.2		196.7	170.8	197.6	153.2
FINAL CONC. (PPM)	37.1	26.0	26.0	36.1	40.4	17.4	23.9	18.6		32.0	36.7	26.2	29.1
% REMOVED	81.0	79.5	83.2	78.1	75.6	82.8	81.4	77.6		83.7	78.5	86.7	81.0
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)	.1		.1	.1									.1
FINAL CONC. (PPM)	.1	.8	.9	.1	.6	2.5	1.4	1.3		.6	1.1	1.2	1.0
INCREASED FACTOR			8.0										
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)											4.0	1.2	2.6
FINAL CONC. (ML/L)	.05												.05
% REMOVED													
PH-FINAL	7.5	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.4	7.5	7.6	7.6	7.5

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

TAN WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

WELL OR BUILDING NO. / SEWAGE BUILDING NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS & AVERAGES
SEWAGE DATA													
736 BUILD VOL. (GAL) *	45	45	45	45	45	45	45	45	45	45	45	45	540
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													
TOTAL SEWAGE VOL. (GAL)	309	317	429	348	469	531	582	478	248	396	249	346	4,702
TOTAL WATER DISPOSED (GAL)	5,926	9,933	2,442	7,897	7,057	10,029	11,370	6,445	5,346	9,486	14,849	3,861	94,641
ACCOUNTABILITY (%)	76.4	88.9	61.4	75.1	69.3	84.0	81.9	61.0	71.7	82.1	92.7	63.8	78.2

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

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TAN FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE / EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
KEROSENE													
VOLUME (GAL)			84	360									444
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
TYPE 2													
VOLUME (GAL)	14	11	11	7	9	7	3			6	9	7	84
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
TYPE 5													
VOLUME (GAL)	98	90			61	46	37	47	19	31	85	106	620
SO2 (LBS)	24	22			15	11	9	12	5	8	21	26	153
NOX (LBS)													
PARTICULATES (LBS)													
GRAND TOTALS													
SO2 (LBS)	24	22			15	11	9	12	5	8	21	26	153
NOX (LBS)													
PARTICULATES (LBS)													

CFA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
AUTO CLEANERS WEIGHT (POUNDS)	360	376	392	400	368	376	384	392	360	400	368	376	4,552
BLEACH WEIGHT (POUNDS)	30	30	35	30	35	31							191
CALCIUM ION WEIGHT (POUNDS)							11	7	7	11	9	14	59
CHLORIDE ION WEIGHT (POUNDS)	1,214	1,214	1,214	1,214	1,214	1,214	1,241	1,268	1,265	1,260	1,269	1,281	14,868
HYPOCHLORITE WEIGHT (POUNDS)	81	72	88	75	73	20							409
HYPOCHLORITE ION WEIGHT (POUNDS)							39	79	75	67	80	98	438
KWIK KLEEN WEIGHT (POUNDS)	100	100	100	100	100	100	100	100	100	100	100		1,100
LAUNDRY PRODUCTS WEIGHT (POUNDS)	315	303	425	455	491	398	403	336	195	863	510	518	5,212
PHOSPHATE WEIGHT (POUNDS)												100	100
SOAP WEIGHT (POUNDS)	502	400	400	350	350	300	400	400	300	400	500	450	4,752
SODIUM ION WEIGHT (POUNDS)	786	786	786	786	786	786	786	786	786	786	786	786	9,432

CFA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SEWAGE PLANT SUBSURFACE													
VOLUME (GAL. IN 1000)	3,520	3,232	3,782	3,497	3,710	3,930	4,187	3,958	3,377	3,197	3,516	3,668	43,574
HYDROGEN-ION CONC. (PH)	7.7						7.6				7.7	7.6	7.7
AUTO CLEANERS													
CONCENTRATION (PPM)	12.26	13.94	12.42	13.71	11.89	11.46	10.99	11.87	12.77	14.99	12.54	12.28	12.52
WEIGHT (POUNDS)	360	376	392	400	368	376	384	392	360	400	368	376	4,552
BLEACH													
CONCENTRATION (PPM)	1.02	1.11	1.11	1.03	1.13	.95							.53
WEIGHT (POUNDS)	30	30	35	30	35	31							191
CALCIUM ION													
CONCENTRATION (PPM)							.30	.21	.25	.40	.30	.46	.16
WEIGHT (POUNDS)							11	7	7	11	9	14	59
CHLORIDE ION													
CONCENTRATION (PPM)	41.31	45.00	38.45	41.55	39.20	37.00	35.50	38.39	44.89	47.22	43.25	41.86	40.88
WEIGHT (POUNDS)	1,214	1,214	1,214	1,214	1,214	1,214	1,241	1,268	1,265	1,260	1,269	1,281	14,868
HYPOCHLORITE													
CONCENTRATION (PPM)	2.77	2.66	2.78	2.59	2.34	.62							1.13
WEIGHT (POUNDS)	81	72	88	75	73	20							409
HYPOCHLORITE ION													
CONCENTRATION (PPM)							1.12	2.40	2.66	2.52	2.74	3.21	1.21
WEIGHT (POUNDS)							39	79	75	67	80	98	438
KWIK KLEEN													
CONCENTRATION (PPM)	3.40	3.71	3.17	3.43	3.23	3.05	2.86	3.03	3.55	3.75	3.41		3.03
WEIGHT (POUNDS)	100	100	100	100	100	100	100	100	100	100	100		1,100
LAUNDRY PRODUCTS													
CONCENTRATION (PPM)	10.72	11.23	13.48	15.61	15.87	12.14	11.53	10.16	6.94	32.37	17.38	16.94	14.34
WEIGHT (POUNDS)	315	303	425	455	491	398	403	336	195	863	510	518	5,212
PHOSPHATE													
CONCENTRATION (PPM)												3.27	.28
WEIGHT (POUNDS)												100	100
SOAP													
CONCENTRATION (PPM)	17.09	14.83	12.67	11.99	11.30	9.15	11.45	12.11	10.65	14.99	17.04	14.70	13.07
WEIGHT (POUNDS)	502	400	400	350	350	300	400	400	300	400	500	450	4,752

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

CFA LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SODIUM ION													
CONCENTRATION (PPM)	26.77	29.16	24.92	26.95	25.40	23.98	22.51	23.81	27.90	29.48	26.80	25.69	25.95
WEIGHT (POUNDS)	786	786	786	786	786	786	786	786	786	786	786	786	9,432

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

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

CFA INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID	226.0	148.0	213.0	178.0	110.0	175.0	166.0	82.0		226.0	130.0	240.0	1,894.0
2 Y SOLID	72.0	28.0	52.0	38.0	57.0	75.0	105.0	60.0		64.0	45.0	32.0	628.0
3 Y SOLID		58.0	24.0	8.0	12.0		36.0			24.0			162.0
4 Y SOLID	3.0	8.0			3.0	3.0				9.0	6.0		32.0
CFA SCRAP YD													
DISPOSED WASTE													
4 Y SOLID					6.0		7.0	12.0					25.0
CFA SCRAP YD1													
STORED WASTE													
4 Y SOLID	3.0												3.0
CFA SCRAP YD2													
STORED WASTE													
4 Y SOLID	3.0												3.0
CFA SCRAP YD3													
STORED WASTE													
4 Y SOLID				3.0									3.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	226.0	148.0	213.0	178.0	110.0	175.0	166.0	82.0		226.0	130.0	240.0	1,894.0
2 Y SOLID	72.0	28.0	52.0	38.0	57.0	75.0	105.0	60.0		64.0	45.0	32.0	628.0
3 Y SOLID		58.0	24.0	8.0	12.0		36.0			24.0			162.0
4 Y SOLID	3.0	8.0			9.0	3.0	7.0	12.0		9.0	6.0		57.0
STORED WASTE													
4 Y SOLID	6.0			3.0									9.0

CFA WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	5,849	4,666	4,205	983	3	601	3,561	2,139	3,795	5,424	2,241	543	34,010
2 WATER PUMPED (GAL)	3	133	1	5,275	6,239	7,408	15,090	10,550	4,334		2,445	12,280	63,758
TOTAL WATER PUMPED (GAL)	5,852	4,799	4,206	6,258	6,242	8,009	18,651	12,689	8,129	5,424	4,686	12,823	97,768
WATER DISPOSAL													
AIR (GAL) *													
SURFACE (GAL) *	117	784	21	276	1,240	2,448	9,987	6,200	1,875	12	58	458	23,476
SUBSURFACE (GAL)	143	140	154	83	88	94	94	192	57	42	95	121	1,303
SEWAGE DATA													
691 BUILD VOL. (GAL)	3,377	3,100	3,627	3,414	3,621	3,836	4,092	3,765	3,320	3,155	3,422	3,547	42,276
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)	69.8	61.2	95.0	83.5	78.2	60.9	68.0			57.0	36.6	57.0	66.7
FINAL CONC. (PPM)	3.4	6.0	6.0	7.2	7.0	4.9	3.8			3.0	1.9	2.7	4.6
% REMOVED	95.1	90.2	93.7	91.4	91.0	92.0	94.4			94.7	94.8	95.3	93.1
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)	1.2	1.9	.4	1.5	1.1	1.9	.4			2.1	2.4	1.0	1.4
FINAL CONC. (PPM)	6.4	7.3	6.1	6.0	3.5	5.3	6.4			5.4	4.4	5.4	5.6
INCREASED FACTOR	4.3	2.8	14.3	3.0	2.2	1.8	15.0			1.6	.8	4.4	3.0
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)	4.0	4.0	2.9	3.4	4.1	3.8	4.7			5.1	3.6	2.9	3.9
FINAL CONC. (ML/L)	.05	.05	.06	.23	.05	.05	.05			.05	.05	.05	.07
% REMOVED	98.8	98.8	97.9	93.2	98.8	98.7	98.9			99.0	98.6	98.3	98.2
PH-FINAL	7.7	7.5	7.5	7.4	7.6	7.8	7.6			7.7	7.7	7.6	7.6
TOTAL SEWAGE VOL. (GAL)	3,377	3,100	3,627	3,414	3,621	3,836	4,092	3,765	3,320	3,155	3,422	3,547	42,276
TOTAL WATER DISPOSED (GAL)	3,637	4,024	3,802	3,773	4,949	6,378	14,173	10,157	5,252	3,209	3,575	4,126	67,055
ACCOUNTABILITY (%)	62.1	83.9	90.4	60.3	79.3	79.6	76.0	80.0	64.6	59.2	76.3	32.2	68.6

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

CFA FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (GAL)	40	70	53	47	34	22	8	24	18	37	67	72	492
SO2 (LBS)	2	4	3	3	2	1		1	1	2	4	4	27
NOX (LBS)													
PARTICULATES (LBS)													
GRAND TOTALS													
SO2 (LBS)	2	4	3	3	2	1		1	1	2	4	4	27
NOX (LBS)													
PARTICULATES (LBS)													

CPP AIRBORNE DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
NITROGEN DIOXIDE WEIGHT (POUNDS)				48,500	242,700	243,000							534,200

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
STACK 708							
VOLUME (CU.FT. IN 1000)	0	0	0	4,463,997	4,463,997	4,463,907	
	0	0	0	0	0	0	13,391,901
NITROGEN DIOXIDE							
CONCENTRATION (PPM)	.00	.00	.00	.17	.87	.87	
	.00	.00	.00	.00	.00	.00	.64
WEIGHT (POUNDS)	0	0	0	48,500	242,700	243,000	
	0	0	0	0	0	0	534,200

NOTE: UNDERLINE = CALCULATED CONCENTRATION

CPP LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
CALCIUM ION WEIGHT (POUNDS)	7	7	9	9	7	2	13			7	12	11	84
CHLORIDE ION WEIGHT (POUNDS)	43,907	46,927	40,278	52,643	71,649	71,011	57,072	62,455	48,810	26,531	37,178	46,829	605,290
HYPOCHLORITE WEIGHT (POUNDS)	19	17	22	22	17	6							103
HYPOCHLORITE ION WEIGHT (POUNDS)							33			17	31	28	109
NITRATE ION WEIGHT (POUNDS)	7,458	5,353	4,529	9,918	10,085	18,098	10,633	11,896					77,970
SODIUM ION WEIGHT (POUNDS)	28,571	29,976	8,217	33,315	40,340	37,076	10,123	37,671					225,289
TDS WEIGHT (POUNDS)	129,516	128,469	108,660	158,438	192,368	179,098	157,699	191,662	143,605	92,042	107,032	125,029	1,713,618

CPP LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
DISPOSAL WELL SUBSURFACE													
VOLUME (GAL. IN 1000)	25,220	21,420	21,490	30,530	36,140	37,720	36,060	39,670	30,840	24,500	23,490	27,290	354,370
HYDROGEN-ION CONC. (PH)	8.0	7.6	7.6	7.7	7.7	7.7	7.8	7.7		8.4	8.4	8.3	7.9
CHLORIDE ION													
CONCENTRATION (PPM)	209.00	263.00	225.00	207.00	238.00	226.00	190.00	189.00	190.00	130.00	190.00	206.00	204.68
WEIGHT (POUNDS)	43,907	46,927	40,278	52,643	71,649	71,011	57,072	62,455	48,810	26,531	37,178	46,829	605,290
NITRATE ION													
CONCENTRATION (PPM)	35.50	30.00	25.30	39.00	33.50	57.60	35.40	36.00					26.37
WEIGHT (POUNDS)	7,458	5,353	4,529	9,918	10,085	18,098	10,633	11,896					77,970
SODIUM ION													
CONCENTRATION (PPM)	136.00	168.00	45.90	131.00	134.00	118.00	33.70	114.00					76.18
WEIGHT (POUNDS)	28,571	29,976	8,217	33,315	40,340	37,076	10,123	37,671					225,289
TDS													
CONCENTRATION (PPM)	616.50	720.00	607.00	623.00	639.00	570.00	525.00	580.00	559.00	451.00	547.00	550.00	579.46
WEIGHT (POUNDS)	129,516	128,469	108,660	158,438	192,368	179,098	157,699	191,662	143,605	92,042	107,032	125,029	1,713,618
SEWAGE PLANT SUBSURFACE													
VOLUME (GAL. IN 1000)	662	630	710	707	615	750	728	916	797	799	829	846	8,989
HYDROGEN-ION CONC. (PH)	7.6	7.6	7.5	7.3	7.2	7.3	7.2			7.6	7.5	7.6	7.4
CALCIUM ION													
CONCENTRATION (PPM)	1.35	1.28	1.45	1.45	1.29	.39	2.13			1.01	1.76	1.56	1.11
WEIGHT (POUNDS)	7	7	9	9	7	2	13			7	12	11	84
HYPOCHLORITE													
CONCENTRATION (PPM)	3.47	3.28	3.71	3.73	3.30	.49							1.38
WEIGHT (POUNDS)	19	17	22	22	17	6							103
HYPOCHLORITE ION													
CONCENTRATION (PPM)							5.46			2.58	4.53	3.99	1.47
WEIGHT (POUNDS)							33			17	31	28	109

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

DISPOSAL OR STORAGE LOCATION TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LAND FILL													
DISPOSED WASTE													
1 Y SOLID	210.0	210.0	210.0			185.0							815.0
2 Y SOLID	56.0	56.0	86.0			48.0							246.0
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID				210.0	180.0		220.0	120.0		180.0	125.0	130.0	1,165.0
2 Y SOLID				86.0	48.0		40.0	32.0		48.0	32.0	32.0	318.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	210.0	210.0	210.0	210.0	180.0	185.0	220.0	120.0		180.0	125.0	130.0	1,980.0
2 Y SOLID	56.0	56.0	86.0	86.0	48.0	48.0	40.0	32.0		48.0	32.0	32.0	564.0

CPP WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	43,180	30,030	32,790	36,000	62,780	50,170	46,210	46,200	42,700	32,530	40,000	40,000	504,590
WATER DISPOSAL													
AIR (GAL)													
SURFACE (GAL) *													
SUBSURFACE (GAL)	25,220	21,420	21,490	30,530	36,140	37,720	36,060	39,670	30,840	24,500	23,490	27,290	354,370
SEWAGE DATA													
BUILD VOL. (GAL)	662	629	710	707	615	750	728	916	797	799	829	846	8,988
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)	128.0	89.7	124.2	122.1	112.2	107.0	130.0			97.9	107.4	114.5	113.3
FINAL CONC. (PPM)	15.5	18.3	19.8	21.6	21.8	20.3	25.1			12.4	21.3	13.9	19.0
% REMOVED	87.9	79.6	84.1	82.3	80.6	81.0	80.7			87.3	80.2	87.9	83.2
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)	3.0	2.9	1.9	2.3	.6	.5	.1			2.4	2.1	3.4	1.9
FINAL CONC. (PPM)	3.6	4.3	3.5	3.6	3.2	2.5	3.2			5.3	4.7	5.5	3.9
INCREASED FACTOR	.2	.5	.8	.6	4.3	4.0	31.0			1.2	1.2	.6	1.1
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)	6.1	7.4	7.5	8.2	4.9	3.6	4.6			4.0	3.7	5.9	5.6
FINAL CONC. (ML/L)				7.30						.05	.05	.05	1.86
% REMOVED				11.0						98.8	98.6	99.2	
PH-FINAL	7.6	7.5	7.5	7.5	7.4	7.3	7.3			7.6	7.5	7.6	7.5
TOTAL SEWAGE VOL. (GAL)	662	629	710	707	615	750	728	916	797	799	829	846	8,988
TOTAL WATER DISPOSED (GAL)	25,882	22,049	22,200	31,237	36,755	38,470	36,788	40,586	31,637	25,299	24,319	28,136	363,358
ACCOUNTABILITY (%)	59.9	73.4	67.7	82.2	58.5	76.7	79.6	87.8	74.1	77.8	60.8	70.3	72.0

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

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INEL INDUSTRIAL WASTE MANAGEMENT INFORMATION SYSTEM

CPP FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
KEROSENE													
VOLUME (GAL)										1	8	17	26
SO2 (LBS)													
NOX (LBS)													
PARTICULATES (LBS)													
TYPE 2													
VOLUME (GAL)	248	250	166	153	169	124	125	125	105	169	151	214	1,999
SO2 (LBS)	14	14	10	9	10	7	7	7	6	10	9	12	115
NOX (LBS)													
PARTICULATES (LBS)													
GRAND TOTALS													
SO2 (LBS)	14	14	10	9	10	7	7	7	6	10	9	12	115
NOX (LBS)													
PARTICULATES (LBS)													

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NRF AIRBORNE DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWERS							
VOLUME (CU.FT. IN 1000)	1,066 992	915 1,565	1,216 1,519	1,220 1,869	1,509 781	1,934 2,057	15,643

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
AMIDES WEIGHT (POUNDS)			25	25			25	100	72	25	194	34	500
CARBONTHIOCYANATES WEIGHT (POUNDS)											39	5	44
CHLORIDE ION WEIGHT (POUNDS)	54,865	54,158	53,114	24,559	20,896	39,045	35,570	22,637	10,507	5,855	12,070	18,817	351,913
CHLORCHYDROCARBONS WEIGHT (POUNDS)			147	442			80	147		147			963
CHLOROSULFONES WEIGHT (POUNDS)			17	17			17	67	48	17	155	26	364
HEXAVALENT CR WEIGHT (POUNDS)	11	19	20		4	4	9		5				72
HYDROCARBONS WEIGHT (POUNDS)											388	55	443
HYDROXYCARBON WEIGHT (POUNDS)			12	24			66	22	22				146
HYDROXYCARBONS WEIGHT (POUNDS)			127	257			114	256	159	126	39	16	1,094
N-HYDROCARBON WEIGHT (POUNDS)			143	197			486	185	270	81	184	23	1,569
NAPTHA WEIGHT (POUNDS)			5	5			5	20	14	5		1	55
OROCOL 734 WEIGHT (POUNDS)	1,760	624			550	2,050							4,984
PHOSPHATE ION WEIGHT (POUNDS)	1,580	451	235	2,329	554	632	1,723	481	703	552	987	240	10,467
SILICATE ION WEIGHT (POUNDS)			7	4			20	22		9	10	7	79
SLIMICIDE A-9 WEIGHT (POUNDS)	400				880								1,280

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
SLIMICIDE C-35 WEIGHT (POUNDS)	168	168			168	168							672
SLIMICIDE J-12 WEIGHT (POUNDS)	348	348			348	348							1,392
SLIMICIDE J-9 WEIGHT (POUNDS)	460	240			480	240							1,440
SODIUM ION WEIGHT (POUNDS)	36,337	31,367	36,273	20,236	20,208	25,599	28,086	13,508	4,464	4,174	11,728	11,879	243,859
SULFATE ION WEIGHT (POUNDS)	25,171	17,571	17,572	137,861	33,299	28,462	62,081	17,505	32,264	24,693	39,340	209,645	645,464
SULFONATES WEIGHT (POUNDS)			175	105			484	530		214	234	166	1,908
TDS WEIGHT (POUNDS)	162,951	144,798				125,576	190,975		66,828		88,471	101,389	884,988
THICHYDROCARBONS WEIGHT (POUNDS)			15	45			8	15		15			98

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVG
SEWAGE POND SURFACE													
VOLUME (GAL. IN 1000)	1,371	1,388	1,519	1,164	1,182	1,306	1,988	1,740	953	1,581	1,777	2,049	18,017
HYDROGEN-ION CONC. (PH)	8.8	8.3	8.0	7.7	11.3	10.6	11.0	10.9			10.6	9.3	9.7
WASTE DITCH SURFACE													
VOLUME (GAL. IN 1000)	11,360	9,030	9,941	12,770	10,720	10,840	33,420	6,498	16,240	5,840	11,920	3,220	141,799
HYDROGEN-ION CONC. (PH)	7.3	7.3	10.2	2.4	10.1	7.8	7.5	7.0	7.3	2.8	3.6	2.6	6.3
AMIDES													
CONCENTRATION (PPM)			.30	.23			.09	1.85	.53	.51	1.95	1.25	.42
WEIGHT (POUNDS)			25	25			25	100	72	25	194	34	500
CARBONTHIOCYANATES													
CONCENTRATION (PPM)											.39	.20	.04
WEIGHT (POUNDS)											39	5	44
CHLORIDE ION													
CONCENTRATION (PPM)	580.00	720.00	641.40	230.87	234.00	432.40	127.05	418.21	77.67	120.35	121.56	101.54	297.39
WEIGHT (POUNDS)	54,885	54,158	53,114	24,559	20,896	39,045	35,370	22,637	10,507	5,855	12,070	18,817	351,913
CHLOROHYDROCARBONS													
CONCENTRATION (PPM)			1.78	4.15			.29	2.72		3.02			.82
WEIGHT (POUNDS)			147	442			80	147		147			963
CHLOROSULFONES													
CONCENTRATION (PPM)			.20	.16			.06	1.24	.35	.34	1.56	.98	.31
WEIGHT (POUNDS)			17	17			17	67	48	17	155	26	364
HEXAVALENT CR													
CONCENTRATION (PPM)	.12	.25	.24		.04	.04	.03		.04				.06
WEIGHT (POUNDS)	11	19	20		4	4	9		5				72
HYDROCARBONS													
CONCENTRATION (PPM)											3.90	2.05	.37
WEIGHT (POUNDS)											388	55	443
HYDROXYCARBON													
CONCENTRATION (PPM)			.14	.23			.24	.41	.16				.12
WEIGHT (POUNDS)			12	24			66	22	22				146
HYDROXYCARBONS													
CONCENTRATION (PPM)			1.53	2.42			.41	4.72	1.17	2.60	.40	.58	.92
WEIGHT (POUNDS)			127	257			114	256	159	126	39	16	1,094

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

NRF LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
N-HYDROCARBON													
CONCENTRATION (PPM)			1.72	1.84			1.74	3.42	2.00	1.66	1.85	.85	1.32
WEIGHT (POUNDS)			143	197			486	185	270	81	184	23	1,569
NAPTHA													
CONCENTRATION (PPM)			.06	.05			.02	.37	.11	.10		.05	.05
WEIGHT (POUNDS)			5	5			5	20	14	5		1	55
DROCOL 734													
CONCENTRATION (PPM)	18.57	8.28			6.15	22.66							4.21
WEIGHT (POUNDS)	1,760	624			550	2,050							4,984
PHOSPHATE ION													
CONCENTRATION (PPM)	16.70	6.00	2.84	21.85	6.20	7.00	6.19	8.89	5.20	11.35	9.93	8.95	8.85
WEIGHT (POUNDS)	1,580	451	235	2,325	554	632	1,723	481	703	552	987	240	10,467
SILICATE ION													
CONCENTRATION (PPM)			.09	.04			.07	.41		.18	.10	.26	.07
WEIGHT (POUNDS)			7	4			20	22		9	10	7	79
SLIMICIDE A-9													
CONCENTRATION (PPM)	4.22				9.84								1.08
WEIGHT (POUNDS)	400				880								1,280
SLIMICIDE C-35													
CONCENTRATION (PPM)	1.77	2.23			1.88	1.86							.57
WEIGHT (POUNDS)	168	168			168	168							672
SLIMICIDE J-12													
CONCENTRATION (PPM)	3.67	4.62			3.69	3.85							1.18
WEIGHT (POUNDS)	348	348			348	348							1,392
SLIMICIDE J-9													
CONCENTRATION (PPM)	5.06	3.18			5.37	2.65							1.22
WEIGHT (POUNDS)	480	240			480	240							1,440
SODIUM ION													
CONCENTRATION (PPM)	384.00	417.00	438.04	190.24	226.30	283.50	100.89	249.55	33.00	85.80	118.11	442.86	206.[illegible]
WEIGHT (POUNDS)	36,337	31,367	36,273	20,236	20,208	25,599	28,086	13,508	4,464	4,174	11,728	11,879	243,859
SULFATE ION													
CONCENTRATION (PPM)	266.00	233.60	212.20	1296.00	372.90	315.20	223.00	323.40	238.50	507.60	396.20	7816.00	545.46
WEIGHT (POUNDS)	25,171	17,571	17,572	137,861	33,299	28,462	62,081	17,505	32,264	24,693	39,340	209,645	645,464

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

RELEASE POINT DESCRIPTION SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
SULFONATES													
CONCENTRATION (PPM)			2.12	.59			1.73	5.78		4.40	2.35	6.17	1.61
WEIGHT (POUNDS)			175	105			484	530		214	234	166	1,908
TDS													
CONCENTRATION (PPM)	1722.00	1925.00				1435.00	686.00		494.00		891.00	3780.00	747.87
WEIGHT (POUNDS)	162,951	144,798				129,576	190,975		66,828		88,471	101,389	884,988
THIOHYDROCARBONS													
CONCENTRATION (PPM)			.18	.42			.23	.28		.31			.08
WEIGHT (POUNDS)			15	45			8	15		15			98

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

NRF INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION / TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID	400.0	450.0	455.0	400.0	250.0	450.0	340.7	250.0		346.0	428.4	350.0	4,120.1
2 Y SOLID	128.0	144.0	128.0	128.0	80.0	144.0	96.0	80.0		120.0	112.0	112.0	1,272.0
3 Y SOLID	40.1	64.2	32.9	31.5	5.6	25.7	14.2	42.6	42.7	28.4	49.6	35.3	412.8
4 Y SOLID	28.3	35.2	52.5	26.7		21.7	103.0	5.6	36.7	30.6	111.4	2.8	454.5
5 Y SOLID			5.4	13.6	.4								19.4
9 F SOLID							450.0						450.0
SPRAY POND SILT													
CFA OIL DEPOT													
STORED WASTE													
6 K LIQUID	1,850.0		550.0				1,200.0			2,400.0			6,000.0
WASTE OIL													
CFA SCRAPYARD													
DISPOSED WASTE													
5 Y SOLID	4.7	27.6					28.2	17.1		79.1	1.4	9.3	167.4
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	400.0	450.0	455.0	400.0	250.0	450.0	340.7	250.0		346.0	428.4	350.0	4,120.1
2 Y SOLID	128.0	144.0	128.0	128.0	80.0	144.0	96.0	80.0		120.0	112.0	112.0	1,272.0
3 Y SOLID	40.1	64.2	32.9	31.5	5.6	25.7	14.2	42.6	42.7	28.4	49.6	35.3	412.8
4 Y SOLID	28.3	35.2	52.5	26.7		21.7	103.0	5.6	36.7	30.6	111.4	2.8	454.5
5 Y SOLID	4.7	27.6	5.4	13.6	.4		28.2	17.1		79.1	1.4	9.3	186.8
9 F SOLID							450.0						450.0
STORED WASTE													
6 K LIQUID	1,850.0		550.0				1,200.0			2,400.0			6,000.0

NRF WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	21,250	16,630	18,640	22,240	22,500	30,280	31,950	24,350	27,070	22,570	20,020	21,920	279,820
2 WATER PUMPED (GAL)	19	55	114	66	696	775	936	1,132	137	79	23	26	4,058
3 WATER PUMPED (GAL)	323	1,337	2,811	1,764	4,839	12,170	10,770	9,468	2,605	306	144	424	46,961
TOTAL WATER PUMPED (GAL)	21,592	18,022	21,565	24,070	28,435	43,225	43,656	34,950	29,812	22,955	20,187	22,370	330,839
WATER DISPOSAL													
AIR (GAL) *	7,976	6,848	9,098	9,123	11,290	14,470	7,421	11,710	11,360	13,980	5,843	15,390	124,509
SURFACE (GAL) *	11,360	9,030	9,941	12,770	14,720	25,840	23,420	21,500	16,240	5,840	11,920	3,220	165,801
SUBSURFACE (GAL)													
SEWAGE DATA													
BUILD VOL. (GAL)	1,371	1,388	1,519	1,164	1,182	1,306	1,988	1,740	953	1,581	1,777	2,048	18,017
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)	90.2	112.0	108.0	48.5	9.5	114.0	65.5	100.0			35.4	32.6	71.6
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)				.1	11.0	1.0	8.4	13.3			14.1	.6	6.9
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL	8.8	8.3	8.0	7.7								9.3	8.4
TOTAL SEWAGE VOL. (GAL)	1,371	1,388	1,519	1,164	1,182	1,306	1,988	1,740	953	1,581	1,777	2,048	18,017
TOTAL WATER DISPOSED (GAL)	20,707	17,266	20,558	23,057	27,192	41,616	32,829	34,950	28,553	21,401	19,540	20,658	308,327
ACCOUNTABILITY (%)	95.9	95.8	95.3	95.8	95.6	96.3	75.2	100.0	95.8	93.2	96.8	92.3	93.2

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

NRF FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 5													
VOLUME (GAL)	202	186	187	149	104	80	63	23	49	88	121	167	1,419
SO2 (LBS)	54	45	80	41	29	27	6	6	3	8	13	62	374
NOX (LBS)	5	5	5	4	3	2	2	1	1	2	3	4	37
PARTICULATES (LBS)	4	3	3	3	2	1	1		1	2	2	3	25
GRAND TOTALS													
SO2 (LBS)	54	45	80	41	29	27	6	6	3	8	13	62	374
NOX (LBS)	5	5	5	4	3	2	2	1	1	2	3	4	37
PARTICULATES (LBS)	4	3	3	3	2	1	1		1	2	2	3	25

ANL AIRBORNE DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
HEXAVALENT CR WEIGHT (POUNDS)	3	3	2	2	4	4	3	4	3	4	3	5	40
ZINC ION WEIGHT (POUNDS)													

ANL AIRBORNE DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION SUBSTANCE	JAN JUL	FEB AUG	MAR SEP	APR OCT	MAY NOV	JUN DEC	ANNUAL TOT & AVE
COOLING TOWER 757							
VOLUME (CU.FT. IN 1000)	10	10	7	7	14	12	
	10	14	9	13	10	14	130
HEXAVALENT CR							
CONCENTRATION (PPM)	5.43	5.43	5.44	5.38	5.32	5.41	
	5.42	5.34	5.36	5.36	5.41	5.37	5.38
WEIGHT (POUNDS)	3	3	2	2	4	4	
	3	4	3	4	3	5	40
ZINC ION							
CONCENTRATION (PPM)	.31	.47	.38	.30	.28	.42	
	.33	.24	.31	.37	.39	.37	.34
WEIGHT (POUNDS)	0	0	0	0	0	0	
	0	0	0	0	0	0	0

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
AMIDES WEIGHT (POUNDS)										20			20
BETZ NEUTRAMEEN WEIGHT (POUNDS)	20	18	23	14		6							81
CALCIUM ION WEIGHT (POUNDS)	1	1	1	1	1	1	1	3	4	1	3	3	21
CARBONTHIOCYANATES WEIGHT (POUNDS)										4			4
CHLORIDE ION WEIGHT (POUNDS)					8		8	8	8	8	8	8	56
CHLOROCARBONS WEIGHT (POUNDS)					1		1	1	1				4
CHLORCHYDROCARBONS WEIGHT (POUNDS)													
CHLOROSULFONES WEIGHT (POUNDS)										16			16
CLORCHYDROCARBONS WEIGHT (POUNDS)													
HYDROCARBON-AMINES WEIGHT (POUNDS)					1		2	1	2	1	1	1	9
HYDROCARBONS WEIGHT (POUNDS)										40			40
HYDROXYCARBONS WEIGHT (POUNDS)					3		3	3	3				12
KP40 COOLANT CNTRL WEIGHT (POUNDS)						160							160
M-60 ALGAECIDE WEIGHT (POUNDS)						8							8
M-80T ALGAECIDE WEIGHT (POUNDS)						8							8

AREA GRAND TOTALS SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTALS
MORPHOLINE WEIGHT (POUNDS)									1				1
OXYCARBONS WEIGHT (POUNDS)													
PHOSPHATE ION WEIGHT (POUNDS)	96	120	72	84	22	27	21	22	17	67	21	23	592
PHOSPHONATES WEIGHT (POUNDS)					13		13	13	13				52
PHOTO LAB CHEMICAL WEIGHT (POUNDS)	440	440	440	440	440	440	440	440	440	440	440	440	5,280
SILICACARBONS WEIGHT (POUNDS)					11		11	11	11				44
SKASOL WEIGHT (POUNDS)	80	80	80	80		80							400
SODIUM ION WEIGHT (POUNDS)	768	707	755	617	589	520	517	878	879	749	640	1,809	9,428
SULFATE ION WEIGHT (POUNDS)	3,857	3,911	3,163	2,855	4,811	4,425	3,533	5,290	5,624	4,692	4,165	13,640	59,966
THIOCARBONS WEIGHT (POUNDS)					10		10	10	10				40
TRIVALENT CR WEIGHT (POUNDS)	57	72	43	50	70	94	73	76	59	95	73	82	844
ZINC ION WEIGHT (POUNDS)	18	22	13	16	22	29	23	24	18	39	23	26	273

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVG
FACILITY 779 SURFACE													
VOLUME (GAL. IN 1000)	843	473	412	450	552	517	597	673	695	613	707	815	7,347
HYDROGEN-ION CONC. (PH)													
CHLORIDE ION													
CONCENTRATION (PPM)					1.74		1.61	1.43	1.38	1.56	1.36	1.18	.91
WEIGHT (POUNDS)					8		8	8	8	8	8	8	56
SKASOL													
CONCENTRATION (PPM)	11.38	20.25	23.26	21.31		18.56							6.52
WEIGHT (POUNDS)	80	80	80	80		80							400
INDUSTRIAL POND 746 SURFACE													
VOLUME (GAL. IN 1000)	4,073	3,258	3,170	2,101	3,633	5,066	3,088	4,755	4,562	2,784	3,513	2,784	42,787
HYDROGEN-ION CONC. (PH)													
AMIDES													
CONCENTRATION (PPM)										.86			.06
WEIGHT (POUNDS)										20			20
BETZ NELTRMEEN													
CONCENTRATION (PPM)	.59	.65	.88	.80		.14							.23
WEIGHT (POUNDS)	20	18	23	14		6							81
CALCIUM ION													
CONCENTRATION (PPM)	.03	.03	.03	.05	.03	.02	.04	.08	.10	.04	.10	.12	.06
WEIGHT (POUNDS)	1	1	1	1	1	1	1	3	4	1	3	3	21
CARBONTHIOCYANATES													
CONCENTRATION (PPM)										.17			.01
WEIGHT (POUNDS)										4			4
CHLOROCARBONS													
CONCENTRATION (PPM)					.04		.05	.03	.03				.01
WEIGHT (POUNDS)					1		1	1	1				4
CHLORCHYDROCARBONS													
CONCENTRATION (PPM)													
WEIGHT (POUNDS)													
CHLOROSULFONES													
CONCENTRATION (PPM)										.69			.04
WEIGHT (POUNDS)										16			16

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

ANL LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
CLORCHYDROCARBONS													
CONCENTRATION (PPM)													
WEIGHT (POUNDS)													
HYDROCARBON-AMINES													
CONCENTRATION (PPM)					.02		.07	.03	.05	.03	.04	.03	.02
WEIGHT (POUNDS)					1		2	1	2	1	1	1	9
HYDROCARBONS													
CONCENTRATION (PPM)										1.72			.11
WEIGHT (POUNDS)										40			40
HYDROXYCARBONS													
CONCENTRATION (PPM)					.11		.13	.08	.08				.04
WEIGHT (POUNDS)					3		3	3	3				12
KP4C COOLANT CNTRL													
CONCENTRATION (PPM)						3.78							.45
WEIGHT (POUNDS)						160							160
M-6C ALGAECIDE													
CONCENTRATION (PPM)						.19							.02
WEIGHT (POUNDS)						8							8
M-8CT ALGAECIDE													
CONCENTRATION (PPM)						.19							.02
WEIGHT (POUNDS)						8							8
MORPHOLINE													
CONCENTRATION (PPM)					.01		.02	.01	.01	.01	.01	.01	.01
WEIGHT (POUNDS)									1				1
OXYCARBONS													
CONCENTRATION (PPM)					.01		.01						
WEIGHT (POUNDS)													
PHOSPHATE ION													
CONCENTRATION (PPM)	2.82	4.41	2.72	4.79	.72	.64	.81	.55	.44	2.86	.72	.99	1.66
WEIGHT (POUNDS)	96	120	72	84	22	27	21	22	17	67	21	23	592
PHOSPHONATES													
CONCENTRATION (PPM)					.42		.50	.32	.34				.14
WEIGHT (POUNDS)					13		13	13	13				52

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

ANL LIQUID DISPOSED SUBSTANCES SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

RELEASE POINT DESCRIPTION / SUBSTANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOT & AVE
PHOTO LAB CHEMICAL													
CONCENTRATION (PPM)	12.94	16.18	16.63	25.10	14.51	10.41	17.07	11.09	11.56	18.94	15.01	18.94	14.79
WEIGHT (POUNDS)	440	440	440	440	440	440	440	440	440	440	440	440	5,280
SILICACARBONS													
CONCENTRATION (PPM)					.37		.43	.28	.29				.13
WEIGHT (POUNDS)					11		11	11	11				44
SODIUM ION													
CONCENTRATION (PPM)	22.59	26.00	28.54	35.19	15.43	12.30	25.06	22.13	23.08	32.24	21.83	77.86	26.40
WEIGHT (POUNDS)	768	707	755	617	589	520	517	878	879	749	640	1,809	9,428
SULFATE ION													
CONCENTRATION (PPM)	113.47	143.85	119.56	162.83	158.68	104.67	137.10	133.31	147.72	201.95	142.07	587.09	167.94
WEIGHT (POUNDS)	3,857	3,911	3,163	2,855	4,811	4,425	3,533	5,290	5,624	4,692	4,165	13,640	59,966
THIOCARBONS													
CONCENTRATION (PPM)					.32		.37	.24	.25				.11
WEIGHT (POUNDS)					10		10	10	10				40
TRIVALENT CR													
CONCENTRATION (PPM)	1.68	2.63	1.63	2.85	2.32	2.22	2.83	1.92	1.55	4.09	2.49	3.53	2.36
WEIGHT (POUNDS)	57	72	43	50	70	94	73	76	59	95	73	82	844
ZINC ION													
CONCENTRATION (PPM)	.53	.81	.49	.91	.73	.69	.89	.60	.49	1.68	.78	1.12	.77
WEIGHT (POUNDS)	18	22	13	16	22	29	23	24	18	39	23	26	273

NOTE: UNDERLINE = CALCULATED CONCENTRATION BASED UPON CHEMICAL USAGE

ANL INDUSTRIAL WASTE SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

DISPOSAL OR STORAGE LOCATION TYPE OF WASTE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
	VOLUME OR WEIGHT BY MONTH												
CFA LANDFILL													
DISPOSED WASTE													
1 Y SOLID	160.0	160.0	200.0	160.0	160.0	200.0	160.0	160.0	160.0	160.0	160.0	210.0	2,050.0
2 Y SOLID	32.0	32.0	40.0	32.0	32.0	40.0	32.0	32.0	32.0	32.0	32.0	40.0	408.0
GRAND TOTALS													
DISPOSED WASTE													
1 Y SOLID	160.0	160.0	200.0	160.0	160.0	200.0	160.0	160.0	160.0	160.0	160.0	210.0	2,050.0
2 Y SOLID	32.0	32.0	40.0	32.0	32.0	40.0	32.0	32.0	32.0	32.0	32.0	40.0	408.0

ANL WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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 (GAL)	5,519	4,793	3,671	4,067	7,844	7,056	6,758	8,069	5,705	6,424	5,019	5,784	70,709
2 WATER PUMPED (GAL)	5,519	4,793	3,671	4,067	7,844	7,056	6,758	8,069	5,705	6,424	5,019	5,784	70,709
TOTAL WATER PUMPED (GAL)	11,038	9,586	7,342	8,134	15,688	14,112	13,516	16,138	11,410	12,848	10,038	11,568	141,418
WATER DISPOSAL													
AIR (GAL)	5,599	5,187	3,078	4,987	7,024	6,294	9,144	9,367	4,917	8,265	5,545	6,406	75,813
SURFACE (GAL)	4,073	3,258	3,170	2,101	3,633	5,066	3,088	4,755	4,562	2,784	3,513	2,784	42,787
SUBSURFACE (GAL)													
SEWAGE DATA													
720 BUILD VOL. (GAL) *	12	12	12	12	12	12	12	12	12	12	12	12	144
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
% REMOVED													
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)													
FINAL CONC. (PPM)													
INCREASED FACTOR													
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL													

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

ANL WATER USAGE AND DISPOSAL SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VOLUMES = NEAREST THOUSAND GALLONS)

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. (GAL)	843	473	412	450	552	517	597	673	695	613	707	815	7,347
BIOCHEMICAL OXYGEN DEMAND (BOD)													
RAW CONC. (PPM)				200.0	187.0	135.0	287.0	138.0	165.0	143.0			179.3
FINAL CONC. (PPM)				37.8	22.8	63.9	32.8	49.9	44.6	30.0			40.3
% REMOVED				81.1	87.8	52.7	88.6	63.8	73.0	79.0			77.5
DISSOLVED OXYGEN (DO)													
RAW CONC. (PPM)				.5	.1		.2						.3
FINAL CONC. (PPM)				.4	5.7		.2		.1	7.3			2.7
INCREASED FACTOR				-.2	56.0								
SETTLEABLE SOLIDS (SS)													
RAW CONC. (ML/L)													
FINAL CONC. (ML/L)													
% REMOVED													
PH-FINAL				7.5	6.4	8.0	7.5	9.6	7.8	8.5			8.2
TOTAL SEWAGE VOL. (GAL)	855	485	424	462	564	529	609	685	707	625	719	827	7,491
TOTAL WATER DISPOSED (GAL)	10,527	8,930	6,672	7,550	11,221	11,889	12,841	14,807	10,186	11,674	9,777	10,017	126,091
ACCOUNTABILITY (%)	95.4	93.2	90.9	92.8	71.5	84.2	95.0	91.8	89.3	90.9	97.4	86.6	89.2

ANL FUEL OIL USAGE AND STACK EFFLUENTS SUMMARY
FOR JANUARY THROUGH DECEMBER 1976

(ALL VALUES = NEAREST THOUSAND)

FUEL OIL TYPE EFFLUENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
TYPE 2													
VOLUME (GAL)	59	55	70	50	5	12	13	7	20	13	56	26	386
SO2 (LBS)	3	2	3	2		1	1		1	1	3	1	18
NOX (LBS)													
PARTICULATES (LBS)				1							1		2
GRAND TOTALS													
SO2 (LBS)	3	2	3	2		1	1		1	1	3	1	18
NOX (LBS)													
PARTICULATES (LBS)				1							1		2