

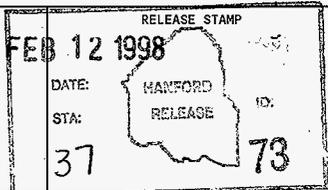
ENGINEERING CHANGE NOTICE

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Page 1 of 2

Proj.
ECN

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Hanford Analytical Sample Projections FY 1998 - FY 2002

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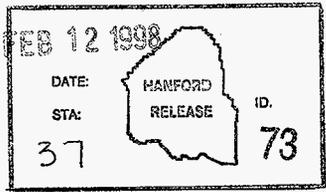
Key Words: Analytical Services strategy, sample projections, Environmental Restoration, TWRS, Liquid Effluents, Solid Waste, Industrial Hygiene, Site Monitoring, Field Sampling, TRU.

Abstract: Analytical Services projections are compiled for the Hanford site based on inputs from the major programs for the years 1998 through 2002. Projections are categorized by radiation level, protocol, sample matrix and Program. Analyses requirements are also presented.

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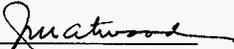
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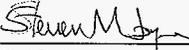
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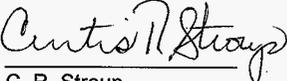


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Document Title: Hanford Analytical Sample Projections FY 1998 - FY 2002

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1.0 PURPOSE

This document summarizes the Hanford sample projections for fiscal years 1998 to 2002. Sample projections are based on inputs submitted to Analytical Services covering Environmental Restoration, Tank Waste Remediation Systems (TWRS), Solid Waste, Liquid Effluents, Spent Nuclear Fuels, Transition Projects, Site Monitoring, Industrial Hygiene, Analytical Services and miscellaneous Hanford support activities. In addition, details on laboratory scale technology (development) work, Sample Management, and Data Management activities are included. This information will be used by Hanford Analytical Services (HAS) and the Sample Management Working Group (SMWG) to assure that laboratories and resources are available and effectively utilized to meet these documented needs.

2.0 SCOPE

The sample projections for each activity are categorized by radioactivity, analyte, protocol, matrix, laboratory scale technology (development), sample management, and data management as follows:

- Radioactivity:
- | | |
|------------|---|
| Category 1 | Non-Radioactive |
| Category 2 | <1 mR/hr β - γ ; <10 nCi/g α |
| Category 3 | 1 mR/hr β - γ to <10 mR/hr β - γ ; and <10 nCi/g α |
| Category 4 | <10 mR/hr β - γ ; and <200 nCi/g α |
| Category 5 | 10 mR/hr β - γ to <100 mR/hr β - γ ; and <200nCi/g α |
| Category 6 | >100 mR/hr β - γ |
| Category 7 | >200 nCi/g α |
- Analytes: Analytes are grouped into the following categories: VOA/semi-VOA, Pesticides/PCBs, WTPH/Oil and Grease, Flash Point, Other Organics, Anions, Metals, DSC/TGA, Wet Chemistry, TOC/TIC, Cyanide, Mercury, Cr-VI, TCLP, Density/SpG, pH/Conductivity/OH⁻, Other Inorganics, Mass Spectrometry, Asbestos, NDA, Gross Alpha/Beta, Gamma Energy Analysis, Uranium, Am-241, C-14, H-3, I-129, Pu-238/239/240, Se-79, Sr-90, Tc-99, NDA and other Radiochemistry.
- Protocol: Protocols include: Resources Conservation Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Clean Water Act (CWA), Clean Air Act (CAA), Industrial Hygiene (IH), NDA, process control, and National Pollution Discharge Elimination System (NPDES), Permit 216, 10 CFR 834, 10 CFR 835, CLP, and others.

Matrix: The matrix describes the physical characteristics of samples. Matrices are grouped into the following categories: liquid, solid/soils, sludge, vapor, and other.

Laboratory Scale Technology (development):

The laboratory scale technology (development) section includes a listing with a brief description on each project support activity, cost, resources, and space requirements.

Sample Management:

The sample management section identifies the organizations and the number of FTE's which support activities for data management, contract management, project coordination, laboratory overview, sample/waste return support, and planning/data quality objectives.

Data Management:

The data management activities section identifies data bases utilized and links to other systems including laboratory systems.

Funding levels (fully burdened) associated with the sample projections were requested and are included by activity when provided.

Program activities for which sample projections were anticipated are listed below; inputs not received are identified with an asterisk:

Environmental Restoration:

- 100 Area: 100-Area Remaining Sites, 100-BC, 100-BC-5 RI, 100-HR-3 IRM, 100-HR-3 RI, 100-KR-4 IRM, 100-KR-4 RI, 100-N Deactivation, 100-N NFM, 100-NR-2 Process, 100-NR-2 RI, 183-N Water Plant 216 Permitting, 116-N Stack, N Area/N Springs
- 200 Area: 200-BP-11, 200-UP-1 IRM, 200-ZP-1 IRM, 200 Areas Source
- 300 Area: 300-FF-1, 300-FF-5
- D&D Projects
- Horn Rapids
- Environmental Restoration Disposal Facility
- Non-Radioactive Dangerous Waste Landfill (NRDWL)

Tank Waste Remediation System (TWRS):

- TWRS Waste Storage and Operations
 - o Tank Farm Operations
 - West Area Tank Farms*
 - East Area Tank Farms*
 - o TWRS Characterization Project
 - Cores
 - Grab
 - Vapor
 - Evaporator Process Samples
- TWRS Waste Disposal
 - o TWRS Privatization (Retrieval)
 - o TWRS Privatization (Treatment and Disposal)
- Vitrification Plant*
- Waste Form Certification*

Solid Waste:

- Central Waste Complex
- Mixed Waste Trench
- WRAP 1
- T-Plant

Liquid Effluents:

- 200 Area LEF (Liquid Effluent Facility)
- 300 Area LEF
- 242A Evaporator (included for this revision with TWRS)

Spent Nuclear Fuels:

- Spent Nuclear Fuel Basin Sludge Characterization
- Liquid Discharge
- Center Basin
- Effluent Treatment Facility Transfer water
- KW Filter Pit
- KW Canister Liquid
- 183-KE Air Laboratory

Transition Projects:

- Plutonium Finishing Plant (PFP) Transition Project
- B-Plant
- WESF Transition Project
- FFTF
- 309 Facility Transition Waste Characterization

Analytical Services:

- Sample/Secondary Waste Return
- QA Samples
- Operations Support
- Decentralized Laboratory Support*

Site Monitoring:

- Environmental Monitoring
- Hanford Groundwater Monitoring Project
- Bioassay Program
- Environmental Support (Effluent and Near Field Monitoring)
- Stack Monitoring*
- Room Air Monitoring*
- Spent Nuclear Fuel

Industrial Hygiene:

- Industrial Hygiene
- Drinking Water*

Miscellaneous Hanford Support:

- Construction Projects*

3.0 SUMMARY

During FY 1995 and FY 1996 substantial reductions in analytical service needs occurred at Hanford. Analytical service needs in FY 1998 are projected to be at a level similar to FY 1996 and FY 1997. Decreases in analytical needs are projected for FY 1999 through FY 2002. The projections for fiscal years 1998 through 2002 are summarized in five Tables: Table 1 provides the overall Hanford site sample projection summary, Table 2 categorizes the information by radiation level, Table 3 by analysis, Table 4 by protocol, and Table 5 by sample matrix.

Table 1
Hanford Program Sample Projection Summary

Program	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Analytical Services	1251	1213	1213	1213	1213
Environmental Restoration	6799	2279	1826	1829	1755
Industrial Hygiene	2894	2894	2894	2894	2894
Liquid Effluents	1795	1795	1795	1997	1593
Site Monitoring	9623	9590	9571	9552	9533
Solid Waste	6444	6308	6087	5903	5903
Spent Nuclear Fuels	5722	7681	7681	6617	6617
Tank Waste Remediation System	2034	1636	1267	1613	1313
Transition Projects	23637	23107	23135	19958	19957
TOTAL	60199	56503	55469	51576	50778

Table 2
Yearly Sample Projections Summary by Radiation Level

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	10341	9413	9302	9461	9074
<1 mR/hr beta-gamma; <10 nCi/g alpha	17432	17017	16486	15267	15186
1 to <10 mR/h beta-gamma; and <10 nCi/g alpha	6542	4959	4798	4809	4780
<10 mR/hr beta-gamma; and <200 nCi/g alpha	37	30	30	29	29
10 to <100 mR/hr beta-gamma; and <200 nCi/g alpha	655	587	592	587	587
>100 mR/hr beta-gamma	1179	1061	775	1134	834

>200 nCi/g alpha	24013	23436	23486	20289	20288
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Table 3
Yearly Sample Analysis Projections Summary

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	1208	746	656	680	628
ANIONS	10267	10026	9225	6566	6218
ASBESTOS	1632	1563	1448	1448	1448
AT/TB	19153	22424	21726	20847	20273
C-14	235	282	230	219	191
CR-VI	586	180	290	311	276
CYANIDE	678	725	664	699	577
DENSITY/SpG	1070	1230	731	945	753
DSC/TGA	10610	10018	8596	6047	5613
FLASH POINT	253	251	233	223	213
GEA	8031	6992	6383	5533	5152
H-3	2627	2512	2460	2471	2396
I-129	478	490	478	490	478
MASS SPEC	1962	1970	1700	1744	1699
MERCURY	1328	1068	1062	1132	984
METALS	15084	10969	9867	7034	6577
NDA	10742	10775	10767	10767	10767
OTHER INORGANICS	4811	4524	4389	4405	4380
OTHER ORGANICS	1596	1810	1342	1310	1300
OTHER RAD CHEM	29874	27842	27464	24501	24384
PEST/PCB	577	499	377	359	339

pH/CONDUCT/OH-	6935	3409	3158	3184	3145
PU-238/39/40	3958	3415	3365	3158	3125
SE-79	62	52	44	38	38
SR-90	3051	2527	2403	2397	2397
TC-99	930	815	719	750	694
TCLP	272	224	218	213	213
TIC/TOC	4528	5011	3911	4171	3885
URANIUM	2581	2053	1949	1980	1831
VOA/SVOA	6197	2393	2239	2265	2137
WET CHEMISTRY	1688	1509	1509	1685	1333
WTPH/OIL/GREASE	402	398	382	370	358
TOTAL	153306	138602	129885	117842	113702

Table 4
Yearly Sample Projections by Protocol

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
10CFR834	2146	2146	2146	2146	2146
10CFR835	17035	18994	18994	18994	18994
216 PERMIT	160	320	160	320	320
40CFR61 (CAA)	65	65	65	65	65
CAA	600	600	600	600	600
CWA	197	197	197	330	64
DOE5633.3	450	450	450	450	450
DOE5633.3/5820.2A	7	7	7	7	7
EPA	4728	1122	869	892	818
IH	3064	2994	2894	2894	2894

NPDES	4	4	4	4	4
OTHER	150	150	150	150	150
PROCESS CONTROL	18945	17450	17492	13306	13230
RCRA	7460	6901	6353	6350	5968
SCREENING	30	30	30	30	30
SDWA	18	18	18	18	18
TRU	135	35	20	0	0
WIPP	5005	5020	5020	5020	5020

Table 5
Yearly Sample Projections by Matrix

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	14026	13890	13745	9871	9479
OTHER	33692	35280	34774	34603	34546
SLUDGE	1058	989	748	1102	766
SOLID/SOIL	10303	5439	5375	5181	5168
VAPOR	1120	905	827	819	819

This report includes only those program needs and funding which were identified in correspondence. The overall quality of inputs received from the programs is judged to be good. Uncertainties in some programs are evident from omissions in the sample projections. Known activities for which information was not provided include TWRS West and East Area Tank Farms, Vitrification Plant, Waste Form Certification, and Drinking Water. Needs for Stack and Room Air Monitoring, Construction Projects, Environmental Support and Industrial Hygiene were only partially identified by the programs. During the next quarter HAS will work with Hanford contractors (PHMC companies, BHI, and PNNL) to improve these projections.

4.0 DISCUSSION

The Analytical Services Program updates this Hanford Analytical Sample Projections report bi-annually (November and May). A request for a sample projection update was distributed to Hanford programs in April, 1997. The sample projections are utilized by the Hanford Analytical Services to assure that timely, cost effective, and quality laboratory support is available. It is understood that sample information may not always be well defined (i.e. budgets, strategies, etc.), but programs were still requested to provide their best estimate of analytical needs. The tables list number of samples by category. There is limited information on the complexity or amount of analytical work required to analyze the samples.

4.1 Environmental Restoration

Sample projections for the Environmental Restoration program are provided for 100, 200, and 300 Areas, plus Decontamination and Decommissioning, Horn Rapids, Environmental Restoration Disposal Facility, and NRDWL.

Table 6 provides the yearly sample projection by radiation level. Table 7 provides the yearly sample analysis summary. Table 8 provides the yearly sample projections by protocol. Table 9 provides the yearly sample projections by matrix. Table 10 provides the yearly funding levels where identified.

TREND

Environmental Restoration sample projections for FY 1998 compared to FY 1997 show a leveling in the number of samples, with a greater number of low activity samples and fewer category 3 samples. There is a significant growth in the number of TRU samples; D&D projects forecast 135 TRU samples which require metals and radchemistry analyses. Also a doubling in the number of analyses is projected, with the greatest increase in metals, pH/conductivity, and VOA/SVOA. In addition there is a shift to more complex matrices (soils and sludges).

Environmental Restoration sample projections for FY 1999 and beyond show a significant decrease in the number of samples (factor of 3) and in the number of analyses (factor of 4) when compared to FY 1998 projections.

Additional information provided by ER reflects a nearly 50% decrease in the number of samples during the last half of FY 1997 compared to the November 1996 projections.

Table 6

Yearly Sample Projections by Radiation Level for the Environmental Restoration Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	1332	437	344	347	331
<1 mR/hr beta-gamma;<10 nCi/g alpha	2678	910	736	744	715
1 to <10 mR/h beta-gamma; and <10 nCi/g alpha	2654	892	721	733	704
>100 mR/hr beta-gamma	0	5	5	5	5
>200 nCi/g alpha	135	35	20	0	0

Table 7
 Yearly Sample Analysis Summary for the Environmental Restoration Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	319	8	8	8	8
ANIONS	14	14	14	14	14
ASBESTOS	178	100	0	0	0
AT/TB	281	277	277	277	277
C-14	8	8	8	8	8
CR-VI	389	100	182	182	182
CYANIDE	0	0	0	0	0
DENSITY/SpG	0	0	0	0	0
DSC/TGA	0	0	0	0	0
FLASH POINT	0	0	0	0	0
GEA	686	55	55	55	55
H-3	78	78	78	78	78
I-129	8	8	8	8	8
MASS SPEC	0	0	0	0	0
MERCURY	207	0	0	0	0
METALS	4598	775	483	488	452
NDA	0	0	0	0	0
OTHER INORGANICS	20	0	0	0	0
OTHER ORGANICS	182	182	182	182	182
OTHER RAD CHEM	4340	1075	763	766	704
PEST/PCB	173	94	0	0	0
pH/CONDUCT/OH-	4258	1032	916	918	906
PU-238/39/40	472	61	46	26	26

SE-79	0	0	0	0	0
SR-90	415	104	104	104	104
TC-99	73	73	29	29	29
TCLP	100	100	100	100	100
TIC/TOC	6	6	6	6	6
URANIUM	472	61	46	26	26
VOA/SVOA	4498	783	645	648	632
WET CHEMISTRY	114	101	101	101	80
WTPH/OIL/GREASE	0	0	0	0	0
TOTAL	21789	4995	3951	3924	3777

Table 8

Yearly Sample Projection Summary by Protocol for the Environmental Restoration Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
216 PERMIT	160	320	160	320	320
EPA	4728	1122	869	892	818
IH	170	100	0	0	0
NPDES	4	4	4	4	4
PROCESS CONTROL	1602	698	773	613	613
TRU	135	35	20		

Table 9

Yearly Sample Projection Summary by Matrix for the Environmental Restoration Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	1147	1144	1056	1059	1035

OTHER	937	682	402	402	352
SOLID/SOIL	4715	453	368	368	368

Table 10
 Yearly Funding Identified by Task for the Environmental Restoration Program
 (\$ in 1000s)

TASK	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
100 AREA						
ER100AIR	TBD	TBD	TBD	TBD	TBD	TBD
ER100ARS	TBD	TBD	TBD	TBD	TBD	TBD
ER100BC	3100	TBD	TBD	TBD	TBD	TBD
ER100BC5RI	3115	TBD	TBD	TBD	TBD	TBD
ER100HR3IRM	3110	5	5	5	5	5
ER100HR3RI	3110	2	2	2	2	2
ER100KR4IRMPERF	3110	3	3	3	3	3
ER100KR4RI	3110	26	26	26	26	26
ER100NNEARMON	DB7118	TBD	TBD	TBD	TBD	TBD
ER100NR2PROCESS	3125	4	4	4	4	4
ER100NR2RI	3125	32	32	32	32	32
ER183NWATERPLT	TBD	TBD	TBD	TBD	TBD	TBD
ERNDEACTIVATION	UN2EV/2W W/26C	TBD	TBD	TBD	TBD	TBD
ERNSPRINGS	TBD	TBD	TBD	TBD	TBD	TBD
200 AREA						
ER200ASOURCE	3200	TBD	1900	1900	1900	1900
ER200BP11	BHI	65	TBD	TBD	TBD	TBD
ER200UP1IRM	3210	18	18	TBD	TBD	TBD

ER200ZP1IRM	3210	1	1	1	1	1
300 AREA						
ER300FF1	VARIOUS	TBD	TBD	TBD	TBD	TBD
ER300FF5	3800/3510	66	66	66	66	TBD
ER300FF5SEEP	TBD	TBD	TBD	TBD	TBD	TBD
D&D						
ERD&D	EM-40	TBD	TBD	TBD	TBD	TBD
ERDF						
ERERDF	RFS	39	39	39	39	39
ERERDFGW	3700	TBD	TBD	TBD	TBD	TBD
HORN RAPIDS						
ERHORNRL	3800/3510	26	26	26	26	TBD

4.2 Tank Waste Remediation System

Tank Waste Remediation System (TWRS) includes TWRS Waste Storage and Operations, TWRS Waste Disposal, Vitrification Plant, and Waste Form Certification. TWRS Waste Storage and Operations include West and East Tank Farm Operations and TWRS Characterization Project (cores, grab, vapor, and evaporator process). The projections for the 242A Evaporator previously reported in this section have been moved to section 4.4 Liquid Effluents. No information was received from Tank Farm West and East Area Operations, Vitrification Plant, and Waste Form Certification.

Table 11 provides the yearly sample projection by radiation level. Table 12 provides the yearly sample analysis summary. Table 13 provides the yearly sample projections by protocol. Table 14 provides the yearly sample projections by matrix. Table 15 provides the yearly funding identified by task.

TRENDS

Tank Waste Remediation System sample projections for FY 1998 show a level (42 AEU's) comparable to previous projections for FY 1997. The FY 1998 projections show increases in the number of GEA analyses (factor of 13), TOC (factor of 4), Mass Spec (factor of 4), Pu isotopic (factor of 2), Tc-99 (factor of 2). TWRS Characterization shows a 10% decrease in the number of samples in FY 1999 from FY 1998. The total

number of analyses projected for FY 2000 and the out-years decreases by a factor of 2 from the FY 1998-1999 level.

Table 11
Yearly Sample Projections by Radiation Level for the Tank Waste Remediation System Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
<1 mR/hr beta-gamma;<10 nCi/g alpha	301	86	8	0	0
10 to <100 mR/hr beta-gamma; and <200 nCi/g alpha	622	562	557	552	552
>100 mR/hr beta-gamma	1111	988	702	1061	761

Table 12
Yearly Sample Analysis Summary for the Tank Waste Remediation System Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	262	112	42	77	35
ANIONS	1832	1645	871	1227	899
ASBESTOS	0	0	0	0	0
AT/TB	1520	1518	1112	1297	1075
C-14	44	91	39	28	0
CR-VI	162	0	28	49	14
CYANIDE	159	161	100	88	60
DENSITY/SpG	879	1009	514	723	541
DSC/TGA	3286	3200	1778	2224	1800
FLASH POINT	15	10	10	10	10
GEA	1532	1198	618	678	612
H-3	206	91	39	49	0

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
I-129	0	0	0	0	0
MASS SPEC	227	105	35	79	34
MERCURY	150	90	85	80	80
METALS	2054	1790	973	1260	996
NDA	0	0	0	0	0
OTHER INORGANICS	532	237	116	141	118
OTHER ORGANICS	646	266	29	20	20
OTHER RAD CHEM	346	196	130	140	133
PEST/PCB	20	10	10	10	10
pH/CONDUCT/OH-	496	232	117	156	139
PU-238/39/40	374	112	46	56	35
SE-79	0	0	0	0	0
SR-90	284	162	50	64	57
TC-99	206	91	39	70	14
TCLP	150	90	85	80	80
TIC/TOC	1831	1761	891	1139	913
URANIUM	249	155	43	78	8
VOA/SVOA	115	70	65	60	60
WET CHEMISTRY	166	0	0	21	0
WTPH/OIL/GREASE	15	10	10	10	10
TOTAL	17758	14412	7875	9914	7753

Table 13
Yearly Sample Projection Summary by Protocol for the Tank Waste Remediation System Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
PROCESS CONTROL	56	0	0	0	0
RCRA	1978	1636	1267	1613	1313

Table 14
Yearly Sample Projection Summary by Matrix for the Tank Waste Remediation System Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	146	78	28	55	39
OTHER	447	432	432	432	432
SLUDGE	980	920	684	1016	732
SOLID/SOIL	160	120	115	110	110
VAPOR	301	86	8	0	0

Table 15
Yearly Funding Identified by Task for the Tank Waste Remediation System Program
(\$ in 1000s)

Sub Program	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
CORE/AUGER ANALYSIS						
All cores & auger samples	1130	9094	9094	9094	9094	9094
GRAB SAMPLE ANALYSIS						
All grab samples	1130	939	939	939	939	939

VAPOR SAMPLE ANALYSIS						
All vapor samples	1130	1969	1969	200	0	0
MISCELLANEOUS						
All miscellaneous samples	1130	138	139	139	139	139

4.3 Solid Waste

Sample projections for the Solid Waste Program have been provided for the Central Waste Complex, Mixed Waste Trench, WRAP-1, and T-Plant.

Table 16 provides the yearly sample projection by radiation level. Table 17 provides the yearly sample analysis summary. Table 18 provides the yearly sample projections by protocol. Table 19 provides the yearly sample projections by matrix. Table 20 provides the yearly funding identified by task.

TREND

Projections show an increase from November 1996, due to the inclusion of non-destructive assay (NDA) at WRAP-1, on the order of 5000 drums per year. Few TRU samples were identified which require laboratory analysis (5 samples in FY 1998, 20 samples per year for FY 1999 through FY 2002). The projections show a slight decrease over the period FY 1998 to FY 2002.

Table 16
Yearly Sample Projections by Radiation Level for the Solid Waste Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
<1 mR/hr beta-gamma;<10 nCi/g alpha	1344	1013	772	588	588
1 to <10 mR/h beta-gamma; and <10 nCi/g alpha	3826	4006	4016	4016	4016
10 to <100 mR/hr beta-gamma; and <200 nCi/g alpha	19	19	29	29	29
>200 nCi/g alpha	1255	1270	1270	1270	1270

Table 17
Yearly Sample Analysis Summary for the Solid Waste Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	38	32	27	23	23
ANIONS	109	138	125	115	115
ASBESTOS	0	0	0	0	0
AT/TB	1379	1067	822	638	638
C-14	0	0	0	0	0
CR-VI	35	80	80	80	80
CYANIDE	35	80	80	80	80
DENSITY/SpG	20	50	50	50	50
DSC/TGA	0	0	0	0	0
FLASH POINT	20	50	50	50	50
GEA	58	47	38	31	31
H-3	0	0	0	0	0
I-129	0	0	0	0	0
MASS SPEC	120	750	550	550	550
MERCURY	35	80	80	80	80
METALS	203	208	178	155	155
NDA	10035	10080	10080	10080	10080
OTHER INORGANICS	138	166	152	141	141
OTHER ORGANICS	229	850	633	620	620
OTHER RAD CHEM	39	84	84	84	84
PEST/PCB	35	80	80	80	80
pH/CONDUCT/OH-	203	208	178	155	155

PU-238/39/40	53	62	57	53	53
SE-79	44	34	26	20	20
SR-90	0	0	0	0	0
TC-99	0	0	0	0	0
TCLP	15	30	30	30	30
TIC/TOC	248	848	626	609	609
URANIUM	0	0	0	0	0
VOA/SVOA	129	150	133	120	120
WET CHEMISTRY	0	0	0	0	0
WTPH/OIL/GREASE	20	50	50	50	50
TOTAL	13240	15224	14209	13894	13894

Table 18
Yearly Sample Projection Summary by Protocol for the Solid Waste Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
10CFR834	26	26	26	26	26
RCRA	1383	1232	1011	827	827
SCREENING	30	30	30	30	30
WIPP	5005	5020	5020	5020	5020

Table 19
Yearly Sample Projection Summary by Matrix for the Solid Waste Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	211	168	161	145	145
OTHER	6167	6075	5856	5692	5692
SLUDGE	25	19	14	10	10

SOLID/SOIL	41	46	56	56	56
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Table 20
 Yearly Funding Identified by Task for the Solid Waste Program
 (\$ in 1000s)

Sub Program	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
CENTRAL WASTE COMPLEX						
CWC	A4A01	2	2	2	2	2
MIXED WASTE TRENCH						
MWT	A7A01	3	3	3	3	3
T PLANT						
TP	2320	200	200	200	150	150
WASTE RECEIVING AND PROCESSING						
WRAP1	2320	28	28	28	28	28
WRAP1NDAOP	2320	1157	1298	1348	1723	1768

4.4 Liquid Effluents

Sample projections for the Liquid Waste Disposal program have been provided for the 200 Area LEF, 300 Area LEF, and the 242A Evaporator. Previous projections included the 242-A Evaporator with the TWRS projections.

Table 21 provides the yearly sample projections by radiation level. Table 22 provides the yearly sample analysis summary. Table 23 provides the yearly sample projections by protocol. Table 24 provides the yearly sample projections by matrix. Table 25 provides the yearly funding identified by task.

TRENDS

Sample projections for the Liquid Effluents Program have increased slightly from the November 1996 projections. Projections now include a small number of high activity samples in support of 242-A Evaporator operations. The projections indicate a level

workload for FY 1998 through FY 2002. The cyclic operations of treatment facilities continue to cause peak and valley work loads for the laboratories.

Table 21
Yearly Sample Projections by Radiation Level for the Liquid Effluents Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	500	500	500	676	324
<1 mR/hr beta-gamma; <10 nCi/g alpha	1189	1189	1189	1215	1163
1 to <10 mR/h beta-gamma; and <10 nCi/g alpha	60	60	60	60	60
>100 mR/hr beta-gamma	46	46	46	46	46

Table 22
 Yearly Sample Analysis Summary for the Environmental Liquid Effluents Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	175	175	175	180	170
ANIONS	533	533	533	538	528
ASBESTOS	0	0	0	0	0
AT/TB	642	642	642	812	472
C-14	170	170	170	170	170
CR-VI	0	0	0	0	0
CYANIDE	385	385	385	432	338
DENSITY/SpG	136	136	136	141	131
DSC/TGA	19	19	19	24	14
FLASH POINT	0	0	0	0	0
GEA	500	500	500	658	342
H-3	233	233	233	246	220
I-129	170	170	170	170	170
MASS SPEC	592	592	592	592	592
MERCURY	599	599	599	672	526
METALS	650	650	650	728	572
NDA	0	0	0	0	0
OTHER INORGANICS	348	348	348	348	348
OTHER ORGANICS	0	0	0	0	0
OTHER RAD CHEM	390	390	390	414	366
PEST/PCB	0	0	0	0	0
pH/CONDUCT/OH-	393	393	393	398	388

PU-238/39/40	175	175	175	180	170
SE-79	18	18	18	18	18
SR-90	303	303	303	308	298
TC-99	270	270	270	270	270
TCLP	0	0	0	0	0
TIC/TOC	271	271	271	302	240
URANIUM	297	297	297	348	246
VOA/SVOA	846	846	846	897	795
WET CHEMISTRY	1125	1125	1125	1280	970
WTPH/OIL/GREASE	118	118	118	118	118
TOTAL	9358	9358	9358	10244	8472

Table 23

Yearly Sample Projection Summary by Protocol for the Environmental Liquid Effluents Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
CWA	133	133	133	266	0
PROCESS CONTROL	98	98	98	136	60
RCRA	1564	1564	1564	1595	1533

Table 24

Yearly Sample Projection Summary by Matrix for the Liquid Effluents Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	1769	1769	1769	1945	1593
SLUDGE	26	26	26	52	0

Table 25
 Yearly Funding Identified by Task for the Liquid Effluents Program
 (\$ in 1000s)

Sub Program	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
200 AREA LEF & LERF						
200LEFETF2NDWASTE		*	*	*	*	*
200LEFETFGW		*	*	*	*	*
200LEFETFPC	2300-0	840	840	840	840	840
200LEFETFVERIFTK		*	*	*	*	*
200LEFLERFCOMP		*	*	*	*	*
200LEFLERFPC	2300-0	263	263	263	263	263
200LEFTEDFEOP	2300-0	395	395	395	395	395
200LEFTEDFGW		*	*	*	*	*
200LEFTEDFPC		*	*	*	*	*
242A EVAPORATOR						
242ABOILERDISCHARGE		*	*	*	*	*
242ACOOINGWATER		*	*	*	*	*
242AFEEDSTREAM		*	*	*	*	*
242AFEEDTANKS	2300-0	400	400	400	400	400
242APROCESSCOND		*	*	*	*	*
242ASLURRYSTREAM		*	*	*	*	*
242ASTEAMCOND		*	*	*	*	*
300 AREA LEF						
300TEDF307B	2300	391	391	391	391	391
300TEDF340V	2300	158	118	118	98	78

Sub Program	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
300TEDFCOMP		+	+	+	+	+
300TEDFCOMP2		+	+	+	+	+
300TEDFCOMPTSS		+	+	+	+	+
300TEDFCOMPWET		+	+	+	+	+
300TEDFDNR		+	+	+	+	+
300TEDFP		+	+	+	+	+
300TEDFUV		+	+	+	+	+
300TEDFWCS		+	+	+	+	+

- * All 200 Area funding included under 200LEFETFPC, 200LEFLERFPC, 200LEFTEDFEOP, 242AFEEDTANKS
- + All 300 Area funding included under 300TEDF307B and 300TEDF340V

4.5 Spent Nuclear Fuels

Sample projections for the Spent Nuclear Fuels Program are provided for center basin, backwash filter pit, Department of Health, Effluent Treatment Plant, 183 air, ion exchanger, KW canister liquid, and the KW filter pit.

Table 26 provides the yearly sample projections by radiation level. Table 27 provides the yearly sample analysis summary. Table 28 provides the yearly sample projections by protocol. Table 29 provides the yearly sample projections by matrix. Table 30 provides the yearly funding identified by task.

TRENDS

Sample projections for the Spent Nuclear Fuels Program show an upward trend due to fuel transfer operations beginning in May 1998. There is considerable uncertainty in the duration of the transfer operations (projections provided assume level loading of analytical support is required during the next 5 years to support fuel transfer operations) and in the analytical work load because of the unknown activity level of ion exchange samples (projections provided assume ion exchange samples are category 2).

Table 26
Yearly Sample Projections by Radiation Level for the Spent Nuclear Fuel Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
<1 mR/hr beta-gamma;<10 nCi/g alpha	5689	7648	7648	6584	6584
<10 mR/hr beta-gamma; and <200 nCi/g alpha	5	5	5	5	5
10 to <100 mR/hr beta-gamma; and <200 nCi/g alpha	6	6	6	6	6
>100 mR/hr beta-gamma	22	22	22	22	22

Table 27
Yearly Sample Analysis Summary for the Spent Nuclear Fuel Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	50	50	50	38	38
ANIONS	22	22	22	22	22
ASBESTOS	0	0	0	0	0
AT/TB	8491	12166	12166	11102	11102
C-14	0	0	0	0	0
CR-VI	0	0	0	0	0
CYANIDE	0	0	0	0	0
DENSITY/SpG	22	22	22	22	22
DSC/TGA	18	18	18	18	18
FLASH POINT	0	0	0	0	0
GEA	3182	3182	3182	2118	2118
H-3	544	544	544	532	532

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
I-129	0	0	0	0	0
MASS SPEC	22	22	22	22	22
MERCURY	0	0	0	0	0
METALS	28	28	28	28	28
NDA	0	0	0	0	0
OTHER INORGANICS	4	4	4	4	4
OTHER ORGANICS	20	20	20	20	20
OTHER RAD CHEM	2654	4492	4492	4492	4492
PEST/PCB	24	24	24	24	24
pH/CONDUCT/OH-	27	27	27	27	27
PU-238/39/40	367	367	367	355	355
SE-79	0	0	0	0	0
SR-90	346	346	346	334	334
TC-99	10	10	10	10	10
TCLP	0	0	0	0	0
TIC/TOC	25	25	25	25	25
URANIUM	55	55	55	43	43
VOA/SVOA	12	12	12	12	12
WET CHEMISTRY	0	0	0	0	0
WTPH/OIL/GREASE	0	0	0	0	0
TOTAL	15923	21436	21436	19248	19248

Table 28
Yearly Sample Projection Summary by Protocol for the Spent Nuclear Fuel Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
10CFR835	2533	4492	4492	4492	4492
PROCESS CONTROL	3156	3156	3156	2092	2092
RCRA	33	33	33	33	33

Table 29
Yearly Sample Projection Summary by Matrix for the Spent Nuclear Fuel Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	3162	3162	3162	2098	2098
OTHER	2538	4497	4497	4497	4497
SLUDGE	22	22	22	22	22

TABLE 30
Yearly Funding Identified by Task for the Spent Nuclear Fuel Program

Sub Program	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
CENTERBASIN		200	380	380	TBD	TBD
DOH		*	*	*	*	*
EFFTRMTPLT		*	*	*	*	*
SNF183AIR		*	*	*	*	*
IX		TBD	TBD	TBD	TBD	TBD
SNFKWCANLIQUID		500	500	500	500	500
SNFKWFLRPIT		560	560	560	560	560

* Centerbasin funding includes DOH, EFFTRMTPLT, & SNF183AIR

+ SNFKWCANLIQUID

4.6 Transition Projects

Sample projections for Transition Projects are provided for the Plutonium Finishing Plant (PFP) Transition Project, the B-Plant/WESF Transition Project, and the FFTF Stabilization Project. No inputs were received from PUREX.

Table 31 provides the yearly sample projections by radiation level. Table 32 provides the yearly sample analysis summary. Table 33 provided the yearly sample projections by protocol. Table 34 provides the yearly sample projections by matrix. Table 35 provides the yearly funding identified by task.

TRENDS

Projections show level needs from FY 1998 through FY 2002, except for a 10 percent drop in PFP air monitoring samples. Overall projections are significantly higher than the November 1996 projections as the PFP air monitoring samples are now included.

Table 31
Yearly Sample Projections by Radiation Level for the Transition Projects Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	282	282	283	282	282
<1 mR/hr beta-gamma; <10 nCi/g alpha	690	668	630	633	633
1 to <10 mR/h beta-gamma; and <10 nCi/g alpha	2	1	1	0	0
<10 mR/hr beta-gamma; and <200 nCi/g alpha	32	25	25	24	24
10 to <100 mR/hr beta-gamma; and <200 nCi/g alpha	8	0	0	0	0
>200 nCi/g alpha	22623	22131	22196	19019	19018

Table 32
Yearly Sample Analysis Summary for the Transition Projects Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	18	23	8	8	8
ANIONS	6457	6436	6432	3432	3432
ASBESTOS	6	15	0	0	0
AT/TB	999	963	928	954	954
C-14	0	0	0	0	0
CR-VI	0	0	0	0	0
CYANIDE	5	5	5	5	5
DENSITY/SpG	4	4	0	0	0
DSC/TGA	7280	6774	6774	3774	3774
FLASH POINT	14	11	3	3	3
GEA	65	41	20	24	24
H-3	0	0	0	0	0
I-129	0	0	0	0	0
MASS SPEC	1001	501	501	501	501
MERCURY	2	2	1	3	1
METALS	6401	6406	6443	3263	3262
NDA	702	690	682	682	682
OTHER INORGANICS	1	1	1	3	1
OTHER ORGANICS	21	18	14	14	14
OTHER RAD CHEM	21700	21200	21200	18200	18200
PEST/PCB	21	21	13	15	15
pH/CONDUCT/OH-	809	806	816	819	819

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
PU-238/39/40	39	158	196	8	8
SE-79	0	0	0	0	0
SR-90	92	56	27	31	31
TC-99	0	0	0	0	0
TCLP	7	4	3	3	3
TIC/TOC	272	263	255	253	255
URANIUM	0	0	0	0	0
VOA/SVOA	75	72	88	88	88
WET CHEMISTRY	10	10	10	10	10
WTPH/OIL/GREASE	21	18	14	14	14
TOTAL	46022	44498	44434	32107	32104

Table 33
Yearly Sample Projection Summary by Protocol for the Transition Projects Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
10CFR834	26	26	26	26	26
10CFR835	14502	14502	14502	14502	14502
40CFR61 (CAA)	65	65	65	65	65
DOE5633.3	450	450	450	450	450
DOE5633.3/5820.2A	7	7	7	7	7
PROCESS CONTROL	8307	7772	7739	4739	4739
RCRA	280	285	346	169	168

Table 34
Yearly Sample Projection Summary by Matrix for the Transition Projects Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	4031	4022	4022	1022	1022
OTHER	14656	14656	14656	14656	14656
SOLID/SOIL	4950	4429	4457	4280	4279

Table 35
Yearly Funding Identified by Task for the Transition Projections Program
(\$ in 1000s)

SubProgram	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
300 AREA						
309TRANCHAR	6643	85	16	TBD	TBD	TBD
B PLANT						
BPLANT	6626	10	TBD	TBD	TBD	TBD
FFTF						
FFTFWASTECHAR	6640	10	10	10	10	10
PLUTONIUM FINISHING PLANT						
PFP Analytical Laboratory	6624-0	2691	2691	2691	TBD	TBD
CAM Air Filter Samples	6624-0	168	168	168	TBD	TBD
Stack Monitor Samples	6624-0	84	84	84	TBD	TBD
Standards Laboratory	6624-0	70	70	70	TBD	TBD
Commercial Sample Analysis	6624-0	175	175	175	TBD	TBD

SubProgram	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Nondestructive Analysis	6624-0	882	882	882	TBD	TBD
Nondestructive Examination	6624-0	189	189	189	TBD	TBD
225-WC Wastewater, 26" Vacuum, LLWTF Samples	6624-0	25	25	25	TBD	TBD

4.7 Analytical Services

Sample projections for Analytical Services are provided for 222-S and WSCF, plus waste returns from commercial laboratories. Work loads from other site laboratories are not included.

Table 36 provides the yearly sample projections by radiation level. Table 37 provides the yearly sample analysis summary. Table 38 provided the yearly sample projections by protocol. Table 39 provides the yearly sample projections by matrix. Table 40 provides the yearly funding identified by task.

TREND

Analytical Services sample projections for FY 1998 through FY 2002 remain level.

Table 36

Yearly Sample Projections by Radiation Level for the Analytical Services Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	15	15	15	15	15
<1 mR/hr beta-gamma;<10 nCi/g alpha	1236	1198	1198	1198	1198

Table 37
 Yearly Sample Analysis Summary for the Analytical Services Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	19	19	19	19	19
ANIONS	226	188	188	188	188
ASBESTOS	20	20	20	20	20
AT/TB	1463	1425	1425	1425	1425
C-14	5	5	5	5	5
CR-VI	0	0	0	0	0
CYANIDE	42	42	42	42	42
DENSITY/SpG	9	9	9	9	9
DSC/TGA	7	7	7	7	7
FLASH POINT	0	0	0	0	0
GEA	666	628	628	628	628
H-3	24	24	24	24	24
I-129	5	5	5	5	5
MASS SPEC	0	0	0	0	0
MERCURY	159	121	121	121	121
METALS	452	414	414	414	414
NDA	0	0	0	0	0
OTHER INORGANICS	48	48	48	48	48
OTHER ORGANICS	0	0	0	0	0
OTHER RAD CHEM	0	0	0	0	0
PEST/PCB	0	0	0	0	0
pH/CONDUCT/OH-	579	541	541	541	541

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
PU-238/39/40	23	23	23	23	23
SE-79	0	0	0	0	0
SR-90	101	63	63	63	63
TC-99	5	5	5	5	5
TCLP	0	0	0	0	0
TIC/TOC	117	79	79	79	79
URANIUM	44	44	44	44	44
VOA/SVOA	62	24	24	24	24
WET CHEMISTRY	273	273	273	273	273
WTPH/OIL/GREASE	0	0	0	0	0
TOTAL	4349	4007	4007	4007	4007

Table 38
 Yearly Sample Projection Summary by Protocol for the Analytical Services Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
PROCESS CONTROL	1093	1093	1093	1093	1093
RCRA	158	120	120	120	120

Table 39
Yearly Sample Projection Summary by Matrix for the Analytical Services Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	1198	1185	1185	1185	1185
OTHER	3	1	1	1	1
SLUDGE	5	2	2	2	2
SOLID/SOIL	45	25	25	25	25

Table 40
Yearly Funding Identified by Task for the Analytical Services Program

SubProgram	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
222-S & WSCF	7100-0	1253	1253	1253	1253	1253

4.8 Site Monitoring

Sample projections for the Site Monitoring Program are provided for Environmental Monitoring, the Hanford Groundwater Monitoring Project, Bioassay Program, Environmental Support (Effluent and Near Field Monitoring). Limited data was received for Stack Monitoring (100 and 300 Areas were not received) and room air monitoring.

Table 41 provides the yearly sample projections by radiation level. Table 42 provides the yearly sample analysis summary. Table 43 provides the yearly sample projections by protocol. Table 44 provides the yearly sample projections by matrix. Table 45 provides the yearly funding identified by task.

TRENDS

Sample projections for the Site Monitoring Program remain level during the next 5 years.

Table 41
 Yearly Sample Projections by Radiation Level for the Site Monitoring Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	6932	6899	6880	6861	6842
<1 mR/hr beta-gamma;<10 nCi/g alpha	2691	2691	2691	2691	2691

Table 42
 Yearly Sample Analysis Summary for the Site Monitoring Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	327	327	327	327	327
ANIONS	1074	1050	1040	1030	1020
ASBESTOS	0	0	0	0	0
AT/TB	4378	4366	4354	4342	4330
C-14	8	8	8	8	8
CR-VI	0	0	0	0	0
CYANIDE	52	52	52	52	52
DENSITY/SpG	0	0	0	0	0
DSC/TGA	0	0	0	0	0
FLASH POINT	204	180	170	160	150
GEA	1342	1341	1342	1341	1342
H-3	1542	1542	1542	1542	1542
I-129	295	307	295	307	295
MASS SPEC	0	0	0	0	0
MERCURY	176	176	176	176	176
METALS	698	698	698	698	698

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
NDA	5	5	5	5	5
OTHER INORGANICS	2360	2360	2360	2360	2360
OTHER ORGANICS	204	180	170	160	150
OTHER RAD CHEM	405	405	405	405	405
PEST/PCB	304	270	250	230	210
pH/CONDUCT/OH-	170	170	170	170	170
PU-238/39/40	2455	2457	2455	2457	2455
SE-79	0	0	0	0	0
SR-90	1510	1493	1510	1493	1510
TC-99	366	366	366	366	366
TCLP	0	0	0	0	0
TIC/TOC	1758	1758	1758	1758	1758
URANIUM	1464	1441	1464	1441	1464
VOA/SVOA	460	436	426	416	406
WET CHEMISTRY	0	0	0	0	0
WTPH/OIL/GREASE	228	202	190	178	166
TOTAL	21785	21590	21533	21422	21365

Table 43
Yearly Sample Projection Summary by Protocol for the Site Monitoring Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
10CFR834	2094	2094	2094	2094	2094
CAA	600	600	600	600	600
CWA	64	64	64	64	64

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
OTHER	150	150	150	150	150
PROCESS CONTROL	4633	4633	4633	4633	4633
RCRA	2064	2031	2012	1993	1974
SDWA	18	18	18	18	18

Table 44
Yearly Sample Projection Summary by Matrix for the Site Monitoring Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
LIQUID	2362	2362	2362	2362	2362
OTHER	6050	6043	6036	6029	6022
SOLID/SOIL	392	366	354	342	330
VAPOR	819	819	819	819	819

Table 45
Yearly Funding Identified by Task for the Site Monitoring Program

SubProgram	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
BIO	TBD	TBD	TBD	TBD	TBD	TBD
DYNCORPCLEANUP	TBD	TBD	TBD	TBD	TBD	TBD
DYNCORPWSCF	TBD	TBD	TBD	TBD	TBD	TBD
GW	TBD	TBD	TBD	TBD	TBD	TBD
NEARFIELDMON	TBD	TBD	TBD	TBD	TBD	TBD
SE	TBD	TBD	TBD	TBD	TBD	TBD
Stacks & Near Field Monitoring Effluents	7340-0	720	820	810	810	830

4.9 Industrial Hygiene

Industrial Hygiene projections include breathing air, drinking water, asbestos, and miscellaneous samples. No information was received for Industrial Hygiene drinking water sample analyses.

Table 46 provides the yearly sample projection by radiation level. Table 47 provides the yearly sample analysis summary. Table 48 provides the yearly sample projections by protocol. Table 49 provides the yearly sample projections by matrix. Table 50 provides the yearly funding identified by task.

TRENDS

Industrial Hygiene sample loads are anticipated to remain level from FY 1998 through FY 2002.

Table 46
Yearly Sample Projections by Radiation Level for the Industrial Hygiene Program

Radiation Level	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Non-Radioactive	1280	1280	1280	1280	1280
<1 mR/hr beta-gamma;<10 nCi/g alpha	1614	1614	1614	1614	1614

Table 47
Yearly Sample Analysis Summary for the Industrial Hygiene Program

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
AM-241	0	0	0	0	0
ANIONS	0	0	0	0	0
ASBESTOS	1428	1428	1428	1428	1428
AT/TB	0	0	0	0	0
C-14	0	0	0	0	0
CR-VI	0	0	0	0	0

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
CYANIDE	0	0	0	0	0
DENSITY/SpG	0	0	0	0	0
DSC/TGA	0	0	0	0	0
FLASH POINT	0	0	0	0	0
GEA	0	0	0	0	0
H-3	0	0	0	0	0
I-129	0	0	0	0	0
MASS SPEC	0	0	0	0	0
MERCURY	0	0	0	0	0
METALS	0	0	0	0	0
NDA	0	0	0	0	0
OTHER INORGANICS	1360	1360	1360	1360	1360
OTHER ORGANICS	294	294	294	294	294
OTHER RAD CHEM	0	0	0	0	0
PEST/PCB	0	0	0	0	0
pH/CONDUCT/OH-	0	0	0	0	0
PU-238/39/40	0	0	0	0	0
SE-79	0	0	0	0	0
SR-90	0	0	0	0	0
TC-99	0	0	0	0	0
TCLP	0	0	0	0	0
TIC/TOC	0	0	0	0	0
URANIUM	0	0	0	0	0
VOA/SVOA	0	0	0	0	0

Analysis	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
WET CHEMISTRY	0	0	0	0	0
WTPH/OIL/GREASE	0	0	0	0	0
TOTAL	3082	3082	3082	3082	3082

Table 48
Yearly Sample Projection Summary by Protocol for the Industrial Hygiene Program

Protocol	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
IH	2894	2894	2894	2894	2894

Table 49
Yearly Sample Projection Summary by Matrix for the Industrial Hygiene Program

Matrix	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
OTHER	2894	2894	2894	2894	2894

Table 50
Yearly Funding Identified by Task for the Industrial Hygiene Program

SubProgram	Funding Source (ADS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
IH	TBD	410	410	410	410	410

4.10 Miscellaneous Hanford Support

No information was received on Construction Project analytical service needs.

4.11 Laboratory Scale Technology (Development) Support

A summary of Laboratory Scale Technology (Development) needs is provided in Table 51 for 222-S and Table 52 for PFP support. Projections include process development needs and needs for laboratory space and resources.

Table 51
222-S Laboratories Scale Technology Support

NEED	REQUIREMENTS		FISCAL YEARS		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
<u>TWRS OPERATIONS</u> Compatibility Test (Waste Reactivity) Sludge and supernate (Includes PRSST/Propagation Tester)	10 - Hotcell 6 - Hot lab	People - 2.5 Material - 5.0 Cap Equip - 0 New Tech - To Be Negotiated	●	●	●
Emerging Technology Requirements (LOE)	8 - Hot Lab	People - 0.3 Material - 5.0	○	●	●
Polychlorinated Biphenyl (Regulatory DQO)	100 - Hot Lab	People - 1.0 Material - 10.0 New Technology - Rapid Screening	○	○	●
Compatibility of Spent Fuel Basin Sludge with Waste Tanks	50 - Hotcell 24 - Hot Lab	People - 2.0 Material - 20.0 Cap Equip - 100	○	○	●
Flammable Gas Phenomenology, Formation and Accumulation Chemistry of Flammable Gas in Waste Tanks (Compatibility DQO)	75 - Hotcell 50 - Hot Lab	People - 4.0 Material - 10.	●	●	○

NEED	REQUIREMENTS		FISCAL YEAR		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
TWRS OPERATIONS (cont'd) Flammable Gas - Ammonia	40 - Cold Lab	People - 0.8 Material - 2.0	●	○	○
Corrosion Rate Coupons, Parametric Studies, Electronic Disturbances	24 - Hot Lab	People - 1.5 Material - 2.0	○	●	●
Cross Site Waste Transfer	30 - Hotcell 50 - Cold Lab	People - 2.0 Material - 10.0	○	○	○
TWRS EVAPORATOR Improve Turnaround of Evaporator Feed Characterization to Meet Schedules	30 - Hotcell 50 - Hot Lab	People - 1.5 Material - 5.0 New Technology - To Be Negotiated	○	○	○
DISPOSAL PROGRAMS Process Control - Retrieval of C-106 and Validation of In-Tank Monitoring Compatibility Testing	10 - Hotcell 20 - Hot Lab	People - 1.0 Material - 5.0 New Tech - Useful Test Conditions	○	●	●
Feed Staging/Characterization for Privatization	30 - Hotcell 10 - Hot Lab	People - 1.3 Shipping - 1.0 Material - 5.0	●	●	○

NEED	REQUIREMENTS		FISCAL YEAR		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
DISPOSAL PROGRAMS (cont'd) Dilution/Dissolution for Privatization	15 - Hotcell 20 - Hot Lab	People - 1.0 Material - 2.0 New Tech - Test Plan Negotiated	○	●	○
Sludge Settling Rate and Sludge Washing Tests for Pretreatment Studies	30 - Hotcell 30 - Cold Lab	People - 3.0 Materials - 10.0 Cap Equip - 25.0 New Tech - Transfer from PNNL	○	●	●
Cesium Ion Exchange Flow Testing	10 - Hotcell	People - 1.0	●	○	○
Technetium Removal Studies	15 - Hotcell 10 - Hot Lab	People - 1.0 Material - 10.0 New Tech - TBD	○	●	○
Pretreatment of High Organic Wastes	15 - Hotcell	People - 1.0 Material - 5.0 New Tech - TBD	○	●	○
Sodium Assay Methodology	8 - Hotcell 15 - Hot Lab	People - 2.0 Material - 20.0 Cap Equip - TBD	○	●	○

NEED	REQUIREMENTS		FISCAL YEAR		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
<u>HANFORD TANK INITIATIVE SUPPORT</u> Program Development		People - 1.0	●	●	●
In-Tank Characterization Support	50 - Cold Lab	People - 1.0 Material - 20.0 Cap Equip - TBD	○	●	●
<u>SPENT NUCLEAR FUEL</u> Characterization of Spent Fuel Sludge Includes Uranium Metal Content	30 - Hotcell	People - 1.5 Material - 5.0 Cap Equip - TBD New Tech - TBD	○	●	●
Radionuclide Transport Monitoring During Sludge Retrieval	50 - Cold Lab	People - 1.0 Material - 5.0 Cap Equip - TBD	○	●	●
Process Control During Stabilization Processing	30 - Hotcell	People - 2.5 Material - 2.0	○	●	●
Particle Shape of Sludge Particulates	10 - Hot Lab	People - 0.5 Material - 5.0 New Tech - TBD	○	●	●

NEED	REQUIREMENTS		FISCAL YEAR		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
SPENT NUCLEAR FUEL (cont'd) Pyrophoricity of Spent Fuel Sludge (Metallic Zr, U, Hydride) Suggested Methodology X-Ray Diffraction)	20 - Hotcell	People - 0.5 Material - 5.0 Cap Equip - 150 New Tech - Transfer from PNNL	○	●	●
Fe and Al Hydrates in sludges (Suggested Methodology X-Ray Diffraction)	20 - Hotcell	People - 0.5 Material - 3.0	○	○	○
OTHER DEVELOPMENT ACTIVITIES Criticality Lab Uranium Fuel Characterization	20 - Hot Lab	People - 0.5 Material - 2.0	●	●	○
N-Reactor Fuel Characterization	20 - Hot Lab	People - 1.0 Material - 5.0	○	●	●
Technetium Analysis Improvement (EM-50 Funding Expected)	10 - Hot Lab	People - 1.0 Material - 5.0 New Tech - Analysis Method	○	●	○
Rapid TRU Screening (Appropriate for Disposal Program Funding)	20 - Hot Lab	People - 1.5 Material - 100.0 New Tech - Implement Available Tech	○	○	○

NEED	REQUIREMENTS		FISCAL YEAR		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
OTHER DEVELOPMENT ACTIVITIES Laser Ablation Mass Spectrometer Validation (EM-50 Funding Expected)	30 - Hotcell 50 - Hot Lab	People - 2.0 Material - 10.0 New Tech - From PNNL	○	●	○
Clean Salt Process Demonstration (EM-50 Funding Anticipated)	20 - Hotcell 150 - Cold Lab	People - 4.0 Material - 100.0 New Tech - To Be Demonstrated Pilot Scale	○	●	●
Zeta Potential (peptization of sludges)	10 - Hot Lab	People - 0.3 Material - 10.0 Cap Equip - 25.0	○	○	○
General Cost, Schedule, Employee Ergonomics Improvements	30 - Hotcell 50 - Hot Lab	People - 2.0 Material - 10.0	○	●	○
HASQARD Compliance with OCRA and 033P (NTS Repository)		People - 1.0	○	●	○

○ Unfunded in Current Budget ● Work Funded in Current Baseline Budget

Table 52
 PFP Laboratory Scale Technology Support

NEED	REQUIREMENTS		FISCAL YEARS		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
Facilities Stabilization PFP Cleanout - Vault Materials Characterization	100 - Glovebox 50 Hot Lab	People - 2.0 Material - 15.0	○	●	●

<p><u>PFP FY1997 Tasks</u></p> <ul style="list-style-type: none"> - Development/Demonstration of process for the conversion of the plutonium bearing solutions to plutonium oxide - Development/demonstration of process for the cementation of Sand, Slag and Crucible (SS&C) - Investigation of the feasibility of silver persulfate for removal of plutonium from ash materials - Development of operating parameters for the treatment of plutonium bearing solutions prior to calcination - Investigation of various decontamination methods for possible use on the facility gloveboxes/canyon 	<p>---</p>	<p>People - 9.0 Funding - \$965</p>	<p>●</p>	<p>○</p>	<p>○</p>
--	------------	---	----------	----------	----------

NEED	REQUIREMENTS		FISCAL YEARS		
	SPACE (ft ²)	RESOURCES FTE/K\$	97	98	99
<p><u>PFY FY1997 Tasks (cont'd)</u></p> <ul style="list-style-type: none"> - Provide technical support to the K Basin Spent Fuels program - Investigation of the organic solubilities in the high-level waste tanks - Investigation of the "red oil" (TBP-nitric acid) reactions for DOE-HQ 					

Unfunded in Current Budget Work Funded in Current Baseline Budget

4.12 Sample Management Support

Inputs on sample management support were received from the three Sample Management Offices of HASP, BHI and PNNL. Table 53 provides a summary of FTE's assigned to these activities in fiscal years 1996 and 1997. Information on other Sample Management Office work performed in the projects was not received.

Table 53
Sample Management Office Support

FTE's			
Organization	FY 1996	Nov. 1996	May 1997
HASP	13	8	7
BHI	19	10	6
PNNL	4.7	2	5*

* Includes 3 PNNL Groundwater SMO FTE's

4.13 Data Management Support

A compilation of the electronic data management systems in use is shown in Table 54, Data Management Support. They are listed by data source and data system name. The list includes systems used at both the laboratory analysis level and at the sample management level.

Table 54
Data Management Support.

DATA SOURCE	DATA SYSTEM NAME	SITE DATA LINKS	PROGRAM	CONTACT	ADS #	FUNDING	DESCRIPTION
Analytical Results 222-S & WSCF	LABCORE LIMS	ABCASH ERS LEMIS TCD	Analytical Services	T F Dale			The Laboratory Information Management System (LIMS) is based on Multi LIMS. Internal data links with laboratory instrumentation and the Laboratory training System (LTS).
HASP Analytical Results (Commercial Laboratories)	SDT (Sample Data Track)	None	Analytical Services	JG Paetel			Sample and data tracking system
BHI Analytical Results (Commercial Laboratories)	SDT (Sample Data Track)	HEIS	ERC	BA Kissinger	3400		Sample and data tracking system developed for BHI
BHI Analytical Results	HEIS	EDMS HGIS PSDB SDT WIDS	ERC	BA Kissinger	3400		Oracle data base. Uses MS Access as user interface

DATA SOURCE	DATA SYSTEM NAME	SITE DATA LINKS	PROGRAM	CONTACT	ADS #	FUNDING	DESCRIPTION
Bioassay	REX		Industrial Hygiene Bioassay, Project, PNNL	JA MacLellan			Data loaded directly through hardwired connection with bioassay analytical contractor - Quanterra
PFP Analytical Results	RLIMS Lite		PFP Transition Projects	GA Westsik	6624-0		Scheduled for implementation in 1997
Analytical Results, ACL	StarLIMS	None	PNNL 325 Analytical Chemistry Laboratory	JM Latkovich			Used for sample tracking and status
QES 318 (TLDs) 320 (I-129) DCL (non-rad) Groundwater	HEIS	HEIS LCT MAIN ALL (Paradox) See BHI Analytical Results (HEIS)	PNNL Site Monitoring Surface Environmental Surveillance Project	BM Gillespie - TA RL Dirkes - PM	85000		HEIS Results Tables HEIS SESP Scheduling LCT MAIN and ALL for non-rad sample tracking and storing data before loaded to HEIS. Groundwater also listed as BHI Analytical Results using HEIS
NDA Measurements	SIE and DMS	SWITS	Solid Waste WRAP	ME Palmer			NDA Measurements in the WRAP facility
NDA Measurements and Real-Time Radiography	SWITS	None	Solid Waste TRUSAF	R Clinton			Drum assay and examination for Transuranics

DATA SOURCE	DATA SYSTEM NAME	SITE DATA LINKS	PROGRAM	CONTACT	ADS #	FUNDING	DESCRIPTION
222-S PNNL	TCD (Tank Characterization Data Base)	LABCORE LIMS TWINS WWW	TWRS Tank Characterization	T J Kelley	1130		PNNL developed data base, required by the TPA to manage all tank characterization data.
306 Gas Laboratory Analytical Results	TMACS and DACS	TMACS	TWRS Tank Safety	DD Tate			Data is loaded into systems depending on application. Tank Monitoring & Control System (TMACS) and Data Acquisition and Control System (DACS).
Environmental Monitoring & Investigations Data		QES ERS ABCASH LABCORE LIMS		JJ Dorian			Quanterra sends results directly from QES to ERS. WSCF uses ABCASH and LABCORE LIMS to report results to EMI
SAS Analytical Results	RLIMS-Lite			LL Lockrem			Sample status and result reporting
SNF FO	SMTD	LABCORE LIMS	K-Basins	MA Green	LC087	0.2 FTE	Sample data trending

HNF-SD-WM-TI-608 Rev. 6

APPENDIX I

ENVIRONMENTAL RESTORATION
PROGRAM INPUTS

A-1-153

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
C. G. Mattsson, FDH 372-8381	J. E. Hyatt, WMH	FDH-9761247

Subject: ERC ANALYTICAL PROJECTIONS UPDATE FOR NOVEMBER 1997

DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		<u>Fluor Daniel Hanford, Inc.</u>		
		R. L. Bisping	N1-26	X
		CGM File/LB		
		<u>Waste Management Federal</u>		
		<u>Services of Hanford, Inc.</u>		
		S. M. Joyce	H6-06	



FLUOR DANIEL

Fluor Daniel Hanford, Inc.
P.O. Box 1000
Richland, WA 99352

HNF-SD-WM-TI-608 Rev. 6

December 2, 1997

FDH-9761247

Ms. Jeannette E. Hyatt
Waste Management Federal Services
of Hanford, Inc. T6-04
P.O. Box 700
Richland, Washington 99352

Dear Ms. Hyatt:

ERC ANALYTICAL PROJECTIONS UPDATE FOR NOVEMBER 1997

Reference: Letter, W. H. Price, BHI, to R. L. Bisping, FDH, "ERC Analytical Projections Update for November 1997," CCN 053639, dated November 24, 1997.

Attached, and forwarded for your use, are the Environmental Restoration Contract Sample Projections for FY 1998 through 2002.

If you have questions or need more information on this matter, please contact Mr. Russ Bisping at 376-5695.

Sincerely,

Russell Bisping for

C. G. Mattsson, Project Director
Waste Management

CGM/rib/lhr

Attachments



**Attachment for FDH-9761247
ERC ANALYTICAL PROJECTIONS UPDATE FOR NOVEMBER 1997**

Consisting of 139 pages including cover sheet

Bechtel

3350 George Washington Way
Richland, WA 99352
Tel: (509) 375-4640
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HNF-SD-WM-TI-608 Rev. 6

053639

Job No. 22192
Written Response Required: NO
Due Date: N/A
Action: N/A
Closes CCN: 052957
OU: N/A
TSD: N/A
ERA: N/A
Subject Code: 8610

NOV 24 1997

Fluor Daniel Hanford, Inc.
R. L. Bisping, Program Manager
Project Direction
P.O. Box 1000, N1-26
Richland, Washington 99352

Subject: **ERC ANALYTICAL PROJECTIONS UPDATE FOR NOVEMBER 1997**

Reference: Letter, D. B. Van Leuven, WMH, to Contractors, "Analytical Services Projections Update for November 1997," CCN 052957, dated October 31, 1997

Dear Mr. Bisping:

Attached are the Environmental Restoration Contract Sample Projections for FY 1998 through 2002. They are being provided to you in hard copy and electronic format. Attached are the tables for Sample Management, Development and Research, and Data Management that have been reviewed and updated.

If you have any questions, please contact Joan Kessner on 372-9538.

Sincerely,



W. H. Price, Manager
Sample and Data Management

JHK:fcj

Attachments: ERC Sample Projections for FY 1998 through 2002
ERC Sample Projections for FY 1998 through 2002 Diskette - S. M. Joyce only
Table Update - Sample Management, Development and Research, and Data Management

cc: S. M. Joyce (WMH) H6-06, w/a
D. M. Wanek (RL) H0-12, w/a



Bechtel Hanford, Inc.

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SAMPLE MANAGEMENT PROJECTIONS

PROGRAM	ACTIVITY	CONTACT	ORGANIZATION	FACILITY	ADS#	FUNDING	DESCRIPTION
Environmental Restoration	Sample Management for ERC Activities	J. H. Kessner	Sample and Data Management	All	3400 & Projects		Strategic planning for BHI and integration of site analytical needs and resources.

DEVELOPMENT AND RESEARCH SUPPORT

ACTIVITY	DEVELOPMENT OR RESEARCH	PROGRAM	FACILITY	ADS#	FUNDING	DESCRIPTION
No change						

DATA MANAGEMENT

DATA SOURCE	DATA SYSTEM NAME	SITE DATA LINKS	PROGRAM	CONTACT	ADS#	FUNDING	DESCRIPTION
BHI Analytical Results	SDT (Sample Data Track)	HEIS	ERC	B. A. Kissinger	3400		Sample and Data tracking system developed by BHI.
BHI Analytical Results	HEIS	EDMS HGIS PSDB SDT WIDS	ERC	B. A. Kissinger	3400		Oracle database. Uses MS Access as user interface.

FY 1998

SAMPLE PROJECTIONS SUMMARY WORKSHEET

FY1998

053639

HNF-SD-WM-TI-608 Rev. 6

	# of Samples	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	2,696	All	375	305	0	1,141	1,079	0	155	774	619	0	615	
Quick Turnaround Laboratory	617	All	126/24	106	59	374	617	0	78	72	13			
Low Level Protocol Lab	1,459	All	461/22	136	167	754	1,193	0	359	322	0	0	0	
222-S/ PNNL	107	All	1	1	0	1	19	0	1	1	1	1	88	
Industrial Hygiene	181	All	0	0	0	0	0	0	0	0	0	0	181	
WSCF	548	All	0	0	0	0	548	0	0	0	0	0	0	
Other (PC, TRU)	167	All	5	5	0	100	167	0	5	15	0	0		
Additional Comments:														

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SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100 B/C

Funding Source: 3100

Contact: Jon Fancher

Reference: Remedial Action

Planned Funding Amount: \$857K

	# of Samples	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other			
Field Analysis	300(A)	Soil					300									GEA
Quick Turnaround Laboratory	150 (B)	Soil				120	150									GEA, GEA add-on, ICP metals, Cr6, Hg, Am241,Pu,U,Sr
Low Level Protocol Lab	300 (C)	soil				150	300									GEA, GEA add-on, ICP metals, Cr6, Hg, Am241,Pu,U,Sr
222-S/ PNNL																
Industrial Hygiene	30(D)	Other													30	Asbestos
Other (PC, TRU)																
Additional Comments:			(1) Assumes: 300 samples to 100N RCF. (2) Assume all require radiochemical and 50% require metals analysis (3) Assume all require radiochemical and 50% require metals analysis (4) 40 samples for asbestos analysis at WSCF													

These samples represent 52 sampling events. The frequency of these events is weekly.

6-A

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100 B/C

Funding Source: DB8049

Planned Funding Amount: \$18.2 K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Frank Corpuz

	# of Samples ↕	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other		
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	62	Air					62(B)								These samples are done bi-annually (2 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

↕ These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-10

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100-BC-5 RI

Funding Source: ADS3115

Planned Funding Amount: \$18.4 K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples ⁺	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other			
Field Analysis	52 8	Water Water				8(A)						52	52		52	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab	12	Water				12(B)	12(C)		12(D)							
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments:			(A) = Cr+6 (B) = ICP Metals – filtered and unfiltered (C) = Gross Alpha, Gross Beta, H3, and Sr – Total (D) = Anions													

⁺These samples represent 5 sampling events. The frequency of these events is 4 quarterly and 1 annually.

A-11

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6.

Year: FY1998

Project: 100-D Remedial Action

Funding Source: ADS3115

Planned Funding Amount: \$18.4K

Contact: Gary G Hamilton

Reference: Multiyear Work Plan

	# of Samples+	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other			
Field Analysis	680	Soil		150		170(A)	360(B)									RCF (2/day for remainder of FY98); XRF analysis by ERC onsite.
Quick Turnaround Laboratory	152	Soil	24/24	24/24		152(C)	152(D)									
Low Level Protocol Lab	35	Soil	20/20	20/20		35(E)	35(F)									
222-S/ PNNL																
Industrial Hygiene	15	Other												15		Asbestos samples to WSCF.
Other (PC, TRU)																

Additional Comments: This assumes the approval of carryover, BCP 98-012, and Baseline Change 98-024 adding/accelerating work at 100-D Remediation.

- (A) = XRF (As, Cd, Cr, Pb, Hg), Cr+6
- (B) = RCF (Am-241, Co-60, Eu-152, Eu-154, Eu-155, U-238)
- (C) = ICP, ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (D) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Ni-63, Sr-Total
- (E) = ICP (Cr, Pb), ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (F) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Sr-Total

A-12

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100 D/DR

Funding Source: DB8050

Planned Funding Amount: \$25.3K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Wayne Pelly

	# of Samples†	Matrix	ANALYSIS											Comments				
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical								
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other					
PNNL	20	TLDs														20	Dosimetry read/cal. This is done quarterly (5 samples per quarter).	
WSCF	104	Air					104(A)											These samples are done bi-weekly (4 samples during each bi-weekly sampling event).
WSCF	8	Air					8(B)											These samples are done bi-annually (4 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium																		

A-13

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100-HR-3 IRM

Funding Source: ADS3110

Planned Funding Amount: \$67K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples↕	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other			
Field Analysis	193 136	Water Water				136(A)						193	193		193	The other analyses is for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab	103	Water				73(D)	53(B)					103(C)				
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Tc 99, Total U (C) = NO3 (D) = ICP Metals																

A-14

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100-KR-4 IRM

Funding Source: ADS3110

Planned Funding Amount: \$65K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other		
Field Analysis	147	Water				84(A)					147	147		147	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	30	Water				25(D)	30(B)		25(C)						
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Gross Alpha, Gross Beta, Gamma Spec, C-14 (C) = Anions (D) = ICP Metals, Mercury															

A-15

*These samples represent ___ sampling events. The frequency of these events is _____

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100-NR-2 Process

Funding Source: ADS3125

Planned Funding Amount: \$4.5K

Contact: B. Ford

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	24	Water					24(A)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: A = Sr - Total														

A-16

†These samples represent 12 sampling events. The frequency of these events is monthly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Funding Source: ADS3125
 Planned Funding Amount: \$30K

Project: 100-NR-2-IAM

Year: FY1998

Contact: B. Ford Reference: _____

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	30	Water								30	30		30	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	34	Water			5(A)	30(B)	19(C)				29(D)			
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: (A) = TPH
 (B) = ICP Metals
 (C) = Gamma Spec, Gross Alpha, Gross Beta, 113, and Sr.
 (D) = Antons, Oil & Grease, pH, Ammonia

*These samples represent 2 sampling events. The frequency of these events is 1 short and 1 annual.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: DB8073

Planned Funding Amount: \$7K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Joe Zoric

	# of Samples†	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
PNNL	20	TLDs											20	Dosimetry read/cal. Done quarterly (5 samples per quarter).
WSCF	26	Air					26(A)							These samples are done bi-weekly.
WSCF	2	Air					2(B)							These samples are done bi-annually.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium														

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-18

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: to be provided by
Facilities Services

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: Drinking Water Requirements

	# of Samples+	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	4	Water				4								1 sample per quarter for process control.
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: WAC 246-290-300 (9). Analyze for Radium 226-228, Gross Alpha/Gross Beta, Tritium, and Sr-90. * The work has been identified, but funding sources are still being evaluated.														

+These samples represent 4 sampling events. The frequency of these events is quarterly.

A-19

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 116N Stack

Funding Source: TBD

Planned Funding Amount: *TBD

Contact: Joe Zoric/Tom Kisenwether

Reference: Air Operating Permit

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)	8	Air					8								These Process Control samples are being sent to WSCF for Gamma Spec, Sr-Total, Gross Alpha, and Gross Beta.
Additional Comments: *The work has been identified, but funding sources are still being evaluated.															

A-20

*These samples represent 1 sampling events. The frequency of these events is yearly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: 77BK27YA43

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: 183N Water Plant 216 Permit

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other.					pH	Cond	Geo-Tech.	Other		
Field Analysis	160	Water					160 ^(A)								Process Control support.
Quick Turnaround Laboratory															
Low Level Protocol Lab	160	Water	160 ^(B)		160 ^(C)				160 ^(D)	160					Process Control support.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = GEA at RCF (B) = VOA (C) = Acrylamide (D) = TSS, Chlorine (Total Residual), Sulfate, TDS. * The work has been identified, but funding sources are still being evaluated.															

A-21

*These samples represent 38 sampling events. The frequency of these events is 26 are done biweekly and 12 are done monthly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Jim Rugg/Roger Landon

Reference: Near Field Monitoring

	# of Samples	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	14	Water					14(A)							Process Control support for the N-Springs Seep Wells
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: Annual river shoreline sampling of N-Springs seep wells for Near Field Monitoring Program. (A) = Gross Alpha, Gross Beta, Isotopic U, Sr 90. * The work has been identified, but funding sources are still being evaluated.														

◆ These samples represent 1 sampling events. The frequency of these events is yearly.

A-22

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Bruce Ford

Reference: NPDES Permit

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	4	Water							4	4				1 sample per quarter.	
Quick Turnaround Laboratory															
Low Level Protocol Lab	4	Water				4									1 sample per quarter for iron and chromium.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)	4	Water					4								1 sample per quarter for screening for offsite transport.
Additional Comments: Well 199-N-8T. <ul style="list-style-type: none"> • The work has been identified, but funding sources are still being evaluated. 															

A-23

◆ These samples represent 4 sampling events. The frequency of these events is quarterly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Waste Sites

Funding Source: _____

Planned Funding Amount: \$40K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: _____

	# of Samples ⁺	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
PNNL	48	TLDs											48	Dosimetry read/cal. (Done quarterly. 12 samples during each sampling event).
WSCF	78	Air					78(A)							These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)							These samples are done bi-annually (3 samples during each bi-annual sampling event).
WSCF	3	Soil					3(B)							This is an annual sampling event.
WSCF	3	Veg					3(B)							This is an annual sampling event.
WSCF	10	Liquid					10(C)							This is an annual sampling event.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium (C) = Sr 90, Gamma Spec, and Tritium.														

⁺These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-24

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 105-C ISS

Funding Source: D&D Project Funding
Planned Funding Amount:

Contact: Rikki Harris

Reference: _____

	# of Samples†	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory	10	Solid Liquid Other	10	10		10	10								Estimated - Any or all of the listed matrices could be encountered.
Low Level Protocol Lab	10	Soil	10	10		10	10				10				
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: Sample projections are for 1998 only. Project to be concluded in FY1998.															

†These samples represent ___ sampling events. The frequency of these events is ____.

A-25

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998-2002

Project: 105F/105DR Reactors

Funding Source: TBD

Planned Funding Amount: TBD

Contact: _____

Reference: _____

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: This project is currently in the planning stage. The schedule for and amount of analytical services for the project will be captured in the next set of sample projections.															

A-26

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 200-BP-11

Funding Source: BHI

Planned Funding Amount: \$65K

Contact: Mark Buckmaster

Reference: _____

	# of Samples ⁺	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory	13	Soil	13	13		13(A)	13(B)		13(C)	13	13	13		Full chemical and physical analysis of 13 samples from a borehole. To be validated.
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = ICP Supertrace, Mercury, Tin. (B) = Gross Alpha, Gross Beta, Gamma Spec, Am-241, Pu, U, Sr, Tc-99. (C) = Anions, NO2/NO3, Ammonia, pH.														

⁺These samples represent 1 sampling events. The frequency of these events is annually.

A-27

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 200-CW-1

Funding Source: B20CW1670C

Planned Funding Amount: \$95K

Contact: Greg Mitchum

Reference: DWP

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	15 1	Soil Water	15 1	15 1		15 1	15 1		15 1	11		11	11	45 day turnaround time. 8 high-level rad samples. Summary Validation.
222-S/ PNNL	14	Water					14							Process control
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: ASSUMPTIONS: Samples associated with one borehole to groundwater at the 216-B-2-2 Ditch.

A-28

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 200-UP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$83K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	104	Water	104				104(A)			104	104		104	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	104	Water					104(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = Total U (B) = Tc99 Shutdown in 1999														

A-29

†These samples represent 4 sampling events. The frequency of these events is quarterly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 200-ZP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$37K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis	66	Water	66(A)						66	66		66	The other analyses are for turbidity and temperature.	
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA														

+These samples represent 6 sampling events. The frequency of these events is 4 quarterly and 2 semiannually.

A-30

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1

Funding Source: DB8055

Planned Funding Amount: \$14.2K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Charlie Johnson

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other		
WSCF	78	Air					78 ^A								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6 ^B								These samples are done bi-annually (3 samples during each bi-annual sampling event).
Additional Comments: A = Gross Alpha and Gross Beta B = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

*These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-31

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1/Landfill 1A

Funding Source: ADS3300/WP RNDFI A

Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson

Reference: DOE/RL-96-70

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	continuous continuous as needed 120 5	Soil Air Air Soil Other	X 5	5		120 5	X 5			5	5			H&S, ERDF WAC (RCTs) H&S, Air emissions OVM, breathing zone (Weston) 1 XRF/150 cubic yards anomalous (HazCat, IMA, XRF)
Quick Turnaround Laboratory	10 3 3	Soil/Other Other Other	3	3	3	3	10 3 3			3	3			Offsite Screen (RCF) Anomalous (RCF) Anomalous (Commercial)(A)
Low Level Protocol Lab	8	Soil	8			8	8							Verification (COCS)(B)
222-S/ PNNL														
Industrial Hygiene	2	Other											2	Asbestos (WSCF)
Other (PC, TRU)														

Additional Comments: (A) = Requested analyses for QTL anomalous waste will be determined based on field analysis; will likely be a subset of fractions identified by "x" Metals analyses may include TCLP. Turnaround time requested will likely be 3-5 days, depending on requested analyses.

(B) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.

Project is scheduled for completion by the end of FY1998.

A-32

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1/Landfill 1D

Funding Source: ADS3300/WP RNDFI1D

Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson

Reference: DOE/RL-96-70

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	continuous continuous as needed 35 5	Soil Air Air Soil Other	X			35 5	X X 5			5	5				H&S, ERDF WAC (RCTs) H&S, Air emissions OVM, breathing zone (Weston) 1 XRF/150 cubic yards anomalous (HazCat, IMA, XRF)
Quick Turnaround Laboratory	10 3 3	Soil/Other Other Other	3	3	3	3	10 3 3			3	3				Offsite Screen (RCF) Anomalous (RCF) Anomalous (Commercial)(A)
Low Level Protocol Lab	8	Soil	8			8	8								Verification (COCs)(B)
222-S/ PNNL															
Industrial Hygiene	2	Other											2		Asbestos (WSCF)
Other (PC, TRU)															

Additional Comments: (A) = Requested analyses for QTL anomalous waste will be determined based on field analysis; will likely be a subset of fractions identified by "x" Metals analyses may include TCLP. Turnaround time requested will likely be 3-5 days, depending on requested analyses.

(B) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.

Project is scheduled for completion by the end of FY1998.

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SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1/North Process Pond

Funding Source: ADS3300/WP RNPACS

Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson

Reference: DOE/RL-96-70

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	continuous continuous 25	Soil Air Soil				25	X X								H&S, ERDF WAC (RCTs) H&S, Air emissions XRF
Quick Turnaround Laboratory	18	Soil					18								Offsite Screen (RCF)
Low Level Protocol Lab	18	Soil	18			18	18								Verification (COCs)(A)
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.

Project is scheduled for completion at end of FY1998.

A-35

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608, Rev. 6

Year: FY1998

Project: 300-FF-1/Process Trenches

Funding Source: ADS3300/WP RPTACS
 Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson Reference: DOE/RL-96-70

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	continuous 8	Soil Air Soil				8	X X								H&S, ERDF WAC (RCTs) H&S, Air emissions XRF
Quick Turnaround Laboratory	8	Soil					8								OffSite Screen (RCF)
Low Level Protocol Lab	8	Soil	8			8	8								Verification (COCs)(A)
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.

Project is scheduled for completion by the end of FY1998.

A-36

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1/South Process Pond

Funding Source: ADS3300/WP RSPAC
 Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson

Reference: DOE/RL-96-70

	# of Samples	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	continuous 60	Soil Air Soil				60	X X								H&S, ERDF WAC (RCTs) H&S, Air emissions XRF
Quick Turnaround Laboratory	42	Soil					42								Offsite Screen (RCF)
Low Level Protocol Lab	42	Soil	42			42	42								Verification (COCs)(A)
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.

Project is scheduled for completion by the end of FY1998.

A-37

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-1/618-4 Burial Ground

Funding Source: ADS3300/WP RG6184
 Planned Funding Amount: _____

Contact: J. A. Lerch/R. A. Carlson

Reference: DOE/RL-96-70

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	continuous continuous as needed 160 140	Soil Air Air Soil Other	X			160 140	X X 140			140	140				H&S, ERDF WAC (RCTs) H&S, Air emissions OVM, breathing zone (Weston) 1 XRF/150 cubic yards anomalous (HazCat, IMA, XRF)
Quick Turnaround Laboratory	70 30 50	Soil/Other Other Other	50	50	50	50	70 30 50			50	50				Offsite Screen (RCF) Anomalous (RCF) Anomalous (Commercial)(A)
Low Level Protocol Lab	20	Soil	20			20	20								Verification (COCs)(B)
222-S/ PNNL															
Industrial Hygiene	10													10	Asbestos (WSCF)
Other (PC, TRU)															

A-38

Additional Comments: (A) = Requested analyses for QTL anomalous waste will be determined based on field analysis; will likely be a subset of fractions identified by "x"
 Metals analyses may include TCLP. Turnaround time requested will likely be 3-5 days, depending on requested analyses.
 (B) = 300-FF-1 COC list includes ICP metals (As, Tl), Semi-VOA (Chrysene, Benzo(a)pyrene), PCBs, Isotopic Uranium, Cobalt-60. Turnaround time for verification samples is expected to be 15 days with a summary deliverable package.
 Project is scheduled to be completed by the end of FY1998.

Year: FY1998

Project: 300-FF-2

Funding Source: P22104

Planned Funding Amount: \$18K

Contact: L. C. Hulstrom

Reference: DOE/RL-96-42

	# of Samples+	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	3	GW								3	3		3	
Quick Turnaround Laboratory														
Low Level Protocol Lab	8	GW	4/2		2	6	3							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: One annual round of sampling at well 699-13-3A. Semi-annual sampling at well 699-S6-E4A. Metals include both filtered and unfiltered. Rad Chem includes gross alpha, gross beta, total uranium, and GEA. Other Organic include the WTPH series (TPH, WTPH-D, WTPH-G). VOA/Semi-VOA include the 2 E4A samples plus a VOA trip blank for each event and include a tri-butyl phosphate analysis. Other Physical includes temperature, turbidity, and dissolved oxygen. Sampling for each fiscal year is projected to be the same unless conditions or work scope changes occur.														

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†These samples represent 2 sampling events. The frequency of these events is 1 annual and 1 semi-annual.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-5

Funding Source: ADS 3800 or 3510
 Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples†	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.	Other	
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	9	Water	2(A)				9(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments:		(A) = VOA (B) = Total U												

†These samples represent sampling events. The frequency of these events is .

09-A

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 300-FF-5 Rivershore Sampling

Funding Source: ADS 3115

Planned Funding Amount: \$40K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	3	Water	3(A)				3(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: These are near shore river samples. (A) = VOA (B) = Total U														

+These samples represent 2 sampling events. The frequency of these events is yearly.

A-41

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: D&D Projects

Funding Source: EM-40

Planned Funding Amount: TBD

Contact: J. Rugg

Reference: D&D Long-Term Surveillance & Maintenance Schedule

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	300 20	Other Soil	100	80		200	300			125		20		
222-S/ PNNL														
Industrial Hygiene	150	Other											150	Asbestos and lead paint
Other (PC, TRU)	TRU = 135	Other				85	135							U, Pu, Am, Np, Cm
Additional Comments: TRU samples may have >10 ⁶ dpm smearable alpha contamination. TRU = Transuranic														

+These samples represent _____ sampling events. The frequency of these events is _____.

A-42

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: D & D Projects

Funding Source: D&D Project Funding

Planned Funding Amount: TBD

Contact: Rikki Harris

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	5	Solid/ Liquid	5	5			5		5					
Additional Comments:														

†These samples represent ___ sampling events. The frequency of these events is ____.

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SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: D & D Projects 233-S

Funding Source: D&D Project Funding
 Planned Funding Amount: _____

Contact: Rikki Harris

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory	20	Solid/ Liquid/ Other	20			20	20							Estimated. All matrices listed could be encountered.
Low Level Protocol Lab	10	Soil	10	10		10	10				10			
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	15	Solid/ Liquid				15	15				15			Samples may contain >10 ⁶ dpm smearable alpha contamination.
Additional Comments:														

† These samples represent __ sampling events. The frequency of these events is ____.

A-44

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: ERDF

Funding Source: DB8006

Planned Funding Amount: \$18.2K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Fred Roeck

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)								These samples are done bi-annually (3 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: ERDF

Funding Source: ADS3700

Planned Funding Amount: \$10.2K

Contact: F. Roeck (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	8	Water							8	8		8	The other analyses are for turbidity and temperature.	
Quick Turnaround Laboratory														
Low Level Protocol Lab	8	Water	8(A)			8(B)	8(C)		8(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = ICP Metals plus GFAA Metals for Arsenic and Selenium (C) = Gross Alpha, Gross Beta, I 129, Total Radium, C 14, Tc 99, and Total U. (D) = TDS, Anions (Cl, F, SO4), Alkalinity, NO2/NO3, TOX														

†These samples represent 2 sampling events. The frequency of these events is semiannually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: ERDF

Funding Source: Waste Management (WMFS)

Planned Funding Amount: \$39.4 K

Contact: Mike Casbon

Reference: _____

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
A-47 Low Level Protocol Lab	130	Air					130								3 sites X 26, biweekly and 1 site X 52, weekly samples for Gross Alpha and Gross Beta. 2 sites X 4, quarterly for GEA, Sr-90, U, Pu, and Am 1 sample per 200,000 gallons of leachate 1 sample yearly
	8	Air					8								
	6	Water	6(A)			6	6		6(B)	6					
	1	Soil					1								
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = VOA
 (B) = Total Dissolved Solids, Total Suspended Solids, Anions, ammonia, Total Organic Carbon

All air sampling is now being done through Fluor Daniel for BHI

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: Horn Rapids

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis	12	Water								12	12		12	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	12	Water	10(A)			2(B)								
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total Cr														

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*These samples represent 5 sampling events. The frequency of these events is yearly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: N-Basin Cleanout (Sludge Sample)

Funding Source: ADS3600

Planned Funding Amount: \$61.5K

Contact: S. J. Trent/Garth Duncan

Reference: _____

# of Samples+	Matrix	ANALYSIS										Comments	
		ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
		VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis													
Quick Turnaround Laboratory													
Low Level Protocol Lab													
222-S/ PNNL	1	Other	1	1		1(A)	1(B)		1	1	1	1	Need 15 working day turn around on preliminary data for rads, geotech, and viscosity. All other data required within 45 working days of delivery. All analyses to be performed in accordance with SW846 QAQC procedural protocols.
Industrial Hygiene													
Other (PC, TRU)													
Additional Comments: (A) = TCLP and Total Metals (B) = GEA, AEA, Gross Alpha, Gross Beta, Isotopic Uranium, and Sr-89/90													

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: N-Basin Cleanout (Water Samples)

Funding Source: ADS3600

Planned Funding Amount: \$6K

Contact: S. J. Trent/Garth Duncan

Reference: _____

# of Samples+	Matrix	ANALYSIS										Comments	
		ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
		VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis													
Quick Turnaround Laboratory	6	Water				6(A)		6(B)					Assuming a 7 day turnaround time.
Low Level Protocol Lab													
222-S/ PNNL													
Industrial Hygiene													
Other (PC, TRU)													
Additional Comments:		(A) = GEA (B) = Total Organic Carbon and Total Suspended Solids											

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: NRDWL

Funding Source: BHI

Planned Funding Amount: \$34K

Contact: Mark Buckmaster

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	50	Soil Gas	50											Same day TAT.
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments:														

FY 1999

SAMPLE PROJECTIONS SUMMARY WORKSHEET

FY1999

HNF-SD-WM-TI-608 Rev. 6

	# of Samples	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	1,915	All	170	0	0	418	1,069	0	0	616	616	0	616	
Quick Turnaround Laboratory	277	All	30/10	10	0	149	277	0	0	0	0	0	0	
Low Level Protocol Lab	1,643	All	673/70	130	165	940	1,397	0	343	563	357	357	357	
222-S/ PNNL	106	All	0	0	0	0	18	0	0	0	0	0	0	
Industrial Hygiene	135	All	0	0	0	0	0	0	0	0	0	0	135	
WSCF	464	All	0	0	0	0	464	0	0	0	0	0	0	
Other (PC, TRU)	67	All	5	5	0	35	67	5	0	15	0	0	0	

Additional Comments:

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100 B/C

Funding Source: 3100

Planned Funding Amount: \$1,020K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	300(A)	Soil					300								GEA
Quick Turnaround Laboratory	100 (A)	Soil				50	100								GEA, GEA add-on, ICP metals, Cr+6, Hg, Am241,Pu,U,Sr(D)
Low Level Protocol Lab	300 (B)	soil				150	300								GEA, GEA add-on, ICP metals, Cr+6, Hg, Am241,Pu,U,Sr(D)
222-S/ PNNL															
Industrial Hygiene	20(C)	Other											40		Asbestos
Other (PC, TRU)															
Additional Comments:			(A) Assumes: 300 samples to 100N RCF. (B) Assume all require radiochemical and 50% require metals analysis (C) 20 samples for asbestos analysis at WSCF (D) Assume 50% will require Ni-63 analysis.												

These samples represent 52 sampling events. The frequency of these events is weekly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100 B/C

Funding Source: DB8049

Planned Funding Amount: \$18.2 K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Frank Corpuz

	# of Samples†	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	62	Air					62(B)								These samples are done bi-annually (2 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-BC-5 RI

Funding Source: ADS3115

Planned Funding Amount: \$18.4 K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples †	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other	
Field Analysis	52 8	Water Water				8(A)					52	52		52	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	12	Water				12(B)	12(C)			12(D)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments:			(A) = Cr+6 (B) = ICP Metals – filtered and unfiltered (C) = Gross Alpha, Gross Beta, H3, and Sr – Total (D) = Anions												

† These samples represent 5 sampling events. The frequency of these events is 4 quarterly and 1 annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-D Remedial Action

Funding Source: ADS3115

Planned Funding Amount: \$865K

Contact: Gary G Hamilton

Reference: Multiyear Work Plan

	# of Samples+	Matrix	ANALYSIS										Comments			
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other		
Field Analysis	590	Soil				190(A)	400(B)									RCF (2/day for remainder of FY98); XRF analysis by ERC onsite.
Quick Turnaround Laboratory	52	Soil	10/10	10/10		52(C)	52(D)									
Low Level Protocol Lab	121	Soil	70/70	70/70		121(E)	121(F)									
222-S/ PNNL																
Industrial Hygiene	15	Other												15		Asbestos samples to WSCF.
Other (PC, TRU)																

Additional Comments: This assumes the approval of carryover, BCP 98-012, and Baseline Change 98-024 adding/accelerating work at 100-D Remediation.

- (A) = XRF (As, Cd, Cr, Pb, Hg), Cr+6
- (B) = RCF (Am-241, Co-60, Eu-152, Eu-154, Eu-155, U-238)
- (C) = ICP, ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (D) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Ni-63, Sr-Total
- (E) = ICP (Cr, Pb), ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (F) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Sr-Total

A-57

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100 D/DR

Funding Source: DB8050

Planned Funding Amount: \$25.3K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Wayne Pelly

	# of Samples [†]	Matrix	ANALYSIS										Comments				
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical							
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other			
PNNL	20	TLDs													20	Dosimetry read/cal. This is done quarterly (5 samples per quarter).	
WSCF	104	Air					104(A)										These samples are done bi-weekly (4 samples during each bi-weekly sampling event).
WSCF	8	Air					8(B)										These samples are done bi-annually (4 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium																	

[†]These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-58

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100F

Funding Source: 3100

Planned Funding Amount: \$ 40K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	30(A)	Soil					30								GEA
Quick Turnaround Laboratory	30(B)	Soil				8	30								GEA, GEA add-on, ICP Metals, Cr +6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
Low Level Protocol Lab															
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: NOTE: Analytes have not been determined, these are preliminary.

1 = Ship to 100N RCF

2 = Assume all require Radiochemistry and 25% require Metals analysis.

A-59

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100H

Funding Source: 3100

Planned Funding Amount: \$350K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	75(A)	Soil					75								GEA
Quick Turnaround Laboratory	75(B)	Soil				19	75								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
Low Level Protocol Lab	10(B)	Soil				2	10								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium..
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Ship to 100N RCF (B) = Assume all require Radiochemistry and 25% require Metals analysis.															

A-60

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-HR-3 IRM

Funding Source: ADS3110

Planned Funding Amount: \$67K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other	
Field Analysis	193 136	Water Water				136(A)					193	193		193	The other analyses is for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	103	Water				73(D)	53(B)			103(C)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Tc 99, Total U (C) = NO3 (D) = ICP Metals															

19-1

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-KR-4 IRM

Funding Source: ADS3110

Planned Funding Amount: \$65K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	147	Water				84(A)					147	147		147	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	30	Water				25(D)	30(B)		25(C)						
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Gross Alpha, Gross Beta, Gamma Spec, C-14 (C) = Anions (D) = ICP Metals, Mercury															

+These samples represent sampling events. The frequency of these events is

A-62

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-NR-2 Process

Funding Source: ADS3125

Planned Funding Amount: \$4.5K

Contact: B. Ford

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	24	Water					24(A)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: A = Sr - Total														

A-63

†These samples represent 12 sampling events. The frequency of these events is monthly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100-NR-2 IAM

Funding Source: ADS3125

Planned Funding Amount: \$30K

Contact: B. Ford

Reference: _____

A-64

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	30	Water								30	30		30	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	34	Water			5(A)	30(B)	19(C)		29(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = TPH (B) = ICP Metals (C) = Gamma Spec, Gross Alpha, Gross Beta, H3, and Sr. (D) = Anions, Oil & Grease, pH, Ammonia														

*These samples represent 2 sampling events. The frequency of these events is 1 short and 1 annual.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100N Deactivation

Funding Source: DB8073

Planned Funding Amount: \$7K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Joe Zoric

	# of Samples ↕	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
PNNL	20	TLDs											20	Dosimetry read/cal. Done quarterly (5 samples per quarter).
WSCF	26	Air					26(A)							These samples are done bi-weekly.
WSCF	2	Air					2(B)							These samples are done bi-annually.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium														

↕ These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-65

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100N Deactivation

Funding Source: to be provided by
Facilities Services

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: Drinking Water Requirements

	# of Samples †	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL	4	Water					4								1 sample per quarter for process control.
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: WAC 246-290-300 (9). Analyze for Radium 226-228, Gross Alpha/Gross Beta, Tritium, and Sr-90.															
* The work has been identified, but funding sources are still being evaluated.															

† These samples represent 4 sampling events. The frequency of these events is quarterly.

A-66

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 116N Stack

Funding Source: TBD

Planned Funding Amount: *TBD

Contact: Joe Zoric/Tom Kisenwether

Reference: Air Operating Permit

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	8	Air					8							These Process Control samples are being sent to WSCF for Gamma Spec, Sr-Total, Gross Alpha, and Gross Beta.
Additional Comments: *The work has been identified, but funding sources are still being evaluated.														

†These samples represent 1 sampling events. The frequency of these events is yearly.

A-67

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100N Deactivation

Funding Source: 77BK27YA43

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: 183N Water Plant 216 Permit

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis	160	Water					160 ^(A)								Process Control support.
Quick Turnaround Laboratory															
Low Level Protocol Lab	160	Water	160 ^(B)		160 ^(C)				160 ^(D)	160					Process Control support.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments:			(A) = GEA at RCF (B) = VOA (C) = Acrylamide (D) = TSS, Chlorine (Total Residual), Sulfate, TDS. * The work has been identified, but funding sources are still being evaluated.												

A-68

*These samples represent 38 sampling events. The frequency of these events is 26 are done biweekly and 12 are done monthly .

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Jim Rugg/Roger Landon

Reference: Near Field Monitoring

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/PNNL	14	Water					14(A)							Process Control support for the N-Springs Seep Wells
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: Annual river shoreline sampling of N-Springs seep wells for Near Field Monitoring Program.

(A) = Gross Alpha, Gross Beta, Isotopic U, Sr 90.

* The work has been identified, but funding sources are still being evaluated.

†These samples represent 1 sampling events. The frequency of these events is yearly.

A-69

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1998

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Bruce Ford

Reference: NPDES Permit

	# of Samples†	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	4	Water								4	4			1 sample per quarter.
Quick Turnaround Laboratory														
Low Level Protocol Lab	4	Water				4								1 sample per quarter for iron and chromium.
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	4	Water					4							1 sample per quarter for screening for offsite transport.

Additional Comments: Well 199-N-8T.

- The work has been identified, but funding sources are still being evaluated.

†These samples represent 4 sampling events. The frequency of these events is quarterly.

A-70

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 100N Waste Sites

Funding Source: _____

Planned Funding Amount: \$40K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: _____

	# of Samples	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other			
PNNL	48	TLDs													48	Dosimetry read/cal. (Done quarterly. 12 samples during each sampling event.)
WSCF	78	Air					78(A)									These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)									These samples are done bi-annually (3 samples during each bi-annual sampling event).
WSCF	3	Soil					3(B)									This is an annual sampling event.
WSCF	3	Veg					3(B)									This is an annual sampling event.
WSCF	10	Liquid					10(C)									This is an annual sampling event.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium (C) = Sr 90, Gamma Spec, and Tritium.																

† These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-71

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 200 Areas Source

Funding Source: ADS3200

Planned Funding Amount: \$1900K

Contact: Greg Mitchum

Reference: 200A Strategy

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other	
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab	357	Soil	357			357	357				357	357	357	357	45 day turnaround time. Validated data.
222-S/ PNNL	14	Water					14								Process control
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: ASSUMPTIONS: 51 SAMPLES PER WASTE SITE sw-846/CLP-level analyses; Twenty-eight 200 Area Source waste sites to be characterized in FY1999-FY2002.
 Cost is based on unit cost of \$4.6K/sample for SW-846/CLP analysis set plus an allowance of \$40K/waste site for high-level ad samples.
 8 samples per SDG.
 Samples from 1 borehole, 2 test pits, 1 surface rad survey per waste site roughly evenly spaced during FY1999 - 2002

A-72

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 200-UP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$83K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples↕	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other			
Field Analysis	104	Water	104					104(A)				104	104		104	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab	104	Water						104(B)								
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = Total U (B) = Tc99 Shutdown in 1999																

↕ These samples represent 4 sampling events. The frequency of these events is quarterly.

A-73

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 200-ZP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$37K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	66	Water	66(A)								66	66		66	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = VOA

†These samples represent 6 sampling events. The frequency of these events is 4 quarterly and 2 semiannually.

A-74

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: 300-FF-5

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples ⁺	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	9	Water	2(A)				9(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total U														

A-75

⁺These samples represent sampling events. The frequency of these events is .

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: D&D Projects

Funding Source: EM-40

Planned Funding Amount: TBD

Contact: J. Rugg

Reference: D&D Long-Term Surveillance & Maintenance Schedule

	# of Samples†	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab	195	Other	50	50		140	195				50				
222-S/PNNL															
Industrial Hygiene	100	Other											100	Asbestos and lead paint	
Other (PC, TRU)	TRU = 35	Other				20	35							Pu, Am, Np, Cm	
Additional Comments: TRU samples may have >10 ⁶ dpm smearable alpha contamination. TRU = Transuranic															

A-76

†These samples represent _____ sampling events. The frequency of these events is _____.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: D & D Projects

Funding Source: D&D Project Funding

Planned Funding Amount: TBD

Contact: Rikki Harris

Reference: _____

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	5	Solid/ Liquid	5	5			5		5					
Additional Comments:														

*These samples represent __ sampling events. The frequency of these events is ____.

LL-77

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: D & D Projects 233-S

Funding Source: D&D Project Funding
 Planned Funding Amount: TBD

Contact: Rikki Harris

Reference: _____

A-78

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory	20	Solid/Liquid/Other	20			20	20							Estimated. All matrices listed could be encountered.
Low Level Protocol Lab	10	Soil	10	10		10	10			10				
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	15	Solid/Liquid				15	15			15				Samples may contain >10 ⁶ dpm smearable alpha contamination.

Additional Comments: _____

*These samples represent ___ sampling events. The frequency of these events is ___.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: ERDF

Funding Source: DB8006

Planned Funding Amount: \$18.2K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Fred Roeck

	# of Samples ↕	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other			
WSCF	78	Air					78(A)									These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)									These samples are done bi-annually (3 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr-90, GEA, Isotopic Uranium, Isotopic Plutonium																

↕ These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-79

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: ERDF

Funding Source: ADS3700

Planned Funding Amount: \$10.2K

Contact: F. Roeck (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments			
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other		
Field Analysis	8	Water									8	8		8	The other analyses are for turbidity and temperature.	
Quick Turnaround Laboratory																
Low Level Protocol Lab	8	Water	g(A)			g(B)	g(C)				g(D)					
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = VOA (B) = ICP Metals plus GFAA Metals for Arsenic and Selenium (C) = Gross Alpha, Gross Beta, I 129, Total Radium, C 14, Tc 99, and Total U. (D) = TDS, Anions (Cl, F, SO4), Alkalinity, NO2/NO3, TOX																

A-80

† These samples represent 2 sampling events. The frequency of these events is semiannually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: ERDF

Funding Source: Waste Management (WMFS)

Planned Funding Amount: \$39.4 K

Contact: Mike Casbon

Reference: _____

	# of Samples†	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
18-A Low Level Protocol Lab	130	Air					130								3 sites X 26, biweekly and 1 site X 52, weekly samples for Gross Alpha and Gross Beta. 2 sites X 4, quarterly for GEA, Sr90, U, Pu, and Am 1 sample per 200,000 gallons of leachate 1 sample yearly
	8	Air					8								
	6	Water	6(A)			6	6		6(B)	6					
	1	Soil					1								
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments:

(A) = VOA

(B) = Total Dissolved Solids, Total Suspended Solids, Anions, ammonia, Total Organic Carbon

All air sampling is now being done through Fluor Daniel for BHI

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY1999

Project: Horn Rapids

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond	Geo-Tech.		Other	
Field Analysis	12	Water									12	12		12	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	12	Water	10(A)			2(B)									
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = VOA (B) = Total Cr															

† These samples represent 5 sampling events. The frequency of these events is yearly.

A-82

FY 2000

SAMPLE PROJECTIONS SUMMARY WORKSHEET

FY2000

HNF-SD-WM-TI-608 Rev. 6

	# of Samples	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis	2,006	All	66	0	0	418	1,160	0	0	512	512	0	508	
Quick Turnaround Laboratory	622	All	30/10	10	0	210	622	0	0	0	0	0	0	
Low Level Protocol Lab	1,274	All	623/70	80	165	717	1,033	0	343	533	357	357	357	
222-S/ PNNL	52	All	0	0	0	0	32	0	0	0	0	0	20	
Industrial Hygiene	15	All	0	0	0	0	0	0	0	0	0	0	15	
WSCF	252	All	0	0	0	0	252	0	0	0	0	0	0	
Other (PC, TRU)	62	All	5	5	0	25	52	5	15	0	0	0	25	

Additional Comments:

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100 B/C

Funding Source: DB8049

Planned Funding Amount: \$18.2 K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Frank Corpuz

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	62	Air					62(B)								These samples are done bi-annually (2 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

*These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-85

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100-D Remedial Action

Funding Source: ADS3115

Planned Funding Amount: \$865K

Contact: Gary G Hamilton

Reference: Multiyear Work Plan

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis	590	Soil				190(A)	400(B)								RCF (2/day for remainder of FY98); XRF analysis by ERC onsite.
Quick Turnaround Laboratory	52	Soil	10/10	10/10		52(C)	52(D)								
Low Level Protocol Lab	121	Soil	70/70	70/70		121(E)	121(F)								
222-S/ PNNL															
Industrial Hygiene	15	Other												15	Asbestos samples to WSCF.
Other (PC, TRU)															

A-87

Additional Comments: This assumes the approval of carryover, BCP 98-012, and Baseline Change 98-024 adding/accelerating work at 100-D Remediation.

- (A) = XRF (As, Cd, Cr, Pb, Hg), Cr+6
- (B) = RCF (Am-241, Co-60, Eu-152, Eu-154, Eu-155, U-238)
- (C) = ICP, ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (D) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Ni-63, Sr-Total
- (E) = ICP (Cr, Pb), ICP Super Trace (Sb, As, Ba, Cd, Cr, Pb, Ag), Cr+6
- (F) = GEA (add-on Am-241, U-238), Am-241, Isotopic Pu, Isotopic U, Sr-Total

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100H

Funding Source: 3100

Planned Funding Amount: \$350K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	200(A)	Soil					200								GEA
Quick Turnaround Laboratory	150(B)	Soil				38	150								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
Low Level Protocol Lab	130(B)	Soil				33	130								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium..
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)	10(C)	Insulation												10	

Additional Comments: (A) = Ship to 100N RCF
 (B) = Assume all require Radiochemistry.
 (C) = Assume all require Radiochemistry and 25% require metals analysis.
 (D) = Asbestos analysis at WSCF.

A-88

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100-HR-3 IRM

Funding Source: ADS3110

Planned Funding Amount: \$67K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other	
Field Analysis	193 136	Water Water				136(A)					193	193		193	The other analyses is for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	103	Water				73(D)	53(B)			103(C)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Tc 99, Total U (C) = NO3 (D) = ICP Metals															

A-89

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100-KR-4 IRM

Funding Source: ADS3110

Planned Funding Amount: \$65K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples*	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	147	Water				84(A)					147	147		147	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	30	Water				25(D)	30(B)		25(C)						
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Gross Alpha, Gross Beta, Gamma Spec, C-14 (C) = Anions (D) = ICP Metals, Mercury															

*These samples represent ___ sampling events. The frequency of these events is _____

A-90

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100-NR-2 Process

Funding Source: ADS3125

Planned Funding Amount: \$4.5K

Contact: B. Ford

Reference: _____

	# of Samples†	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other			
Field Analysis																
Quick Turnaround Laboratory																
Low Level Protocol Lab	24	Water					24(A)									
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: A = Sr - Total																

†These samples represent 12 sampling events. The frequency of these events is monthly.

16-A

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6^a

Year: FY2000

Project: 100-NR-2 IAM

Funding Source: ADS3125

Planned Funding Amount: \$30K

Contact: B. Ford

Reference: _____

	# of Samples ⁺	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis	30	Water								30	30		30	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	34	Water			5(A)	30(B)	19(C)		29(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: (A) = TPH
 (B) = ICP Metals
 (C) = Gamma Spec, Gross Alpha, Gross Beta, H3, and Sr.
 (D) = Anions, Oil & Grease, pH, Ammonia

⁺These samples represent 2 sampling events. The frequency of these events is 1 short and 1 annual.

A-92

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100N Deactivation

Funding Source: DB8073

Planned Funding Amount: \$7K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Joe Zoric

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
PNNL	20	TLDs												20	Dosimetry read/cal. Done quarterly (5 samples per quarter).
WSCF	26	Air					26(A)								These samples are done bi-weekly.
WSCF	2	Air					2(B)								These samples are done bi-annually.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium															

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-93

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100N Deactivation

Funding Source: to be provided by
Facilities Services

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: Drinking Water Requirements

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	4	Water					4							1 sample per quarter for process control.
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: WAC 246-290-300 (9). Analyze for Radium 226-228, Gross Alpha/Gross Beta, Tritium, and Sr-90.

* The work has been identified, but funding sources are still being evaluated.

† These samples represent 4 sampling events. The frequency of these events is quarterly.

A-94

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 116N Stack

Funding Source: TBD

Planned Funding Amount: *TBD

Contact: Joe Zoric/Tom Kisenwether

Reference: Air Operating Permit

	# of Samples ⁺	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	8	Air					8							These Process Control samples are being sent to WSCF for Gamma Spec, Sr-Total, Gross Alpha, and Gross Beta.
Additional Comments: *The work has been identified, but funding sources are still being evaluated.														

⁺These samples represent 1 sampling events. The frequency of these events is yearly.

A-95

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100N Deactivation

Funding Source: 77BK27YA43

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: 183N Water Plant 216 Permit

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis	160	Water					160 ^(A)								Process Control support.
Quick Turnaround Laboratory															
Low Level Protocol Lab	160	Water	160 ^(B)		160 ^(C)				160 ^(D)	160					Process Control support.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = GFA at RCF (B) = VOA (C) = Acrylamide (D) = TSS, Chlorine (Total Residual), Sulfate, TDS. * The work has been identified, but funding sources are still being evaluated.															

† These samples represent 38 sampling events. The frequency of these events is 26 are done biweekly and 12 are done monthly.

A-96

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Jim Rugg/Roger Landon

Reference: Near Field Monitoring

	# of Samples†	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis															
Quick Tumaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL	14	Water					14(A)								Process Control support for the N-Springs Seep Wells
Industrial Hygiene															
Other (PC, TRU)															
<p>Additional Comments: Annual river shoreline sampling of N-Springs seep wells for Near Field Monitoring Program. (A) = Gross Alpha, Gross Beta, Isotopic U, Sr 90.</p> <p style="text-align: center;">* The work has been identified, but funding sources are still being evaluated.</p>															

† These samples represent 1 sampling events. The frequency of these events is yearly.

A-97

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Bruce Ford

Reference: NPDES Permit

	# of Samples↕	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	4	Water							4	4			1 sample per quarter.	
Quick Turnaround Laboratory														
Low Level Protocol Lab	4	Water				4								1 sample per quarter for iron and chromium.
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	4	Water					4							1 sample per quarter for screening for offsite transport.
Additional Comments: Well 199-N-8T. <ul style="list-style-type: none"> • The work has been identified, but funding sources are still being evaluated. 														

↕These samples represent 4 sampling events. The frequency of these events is quarterly.

A-98

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 200 Areas Source

Funding Source: ADS3200

Planned Funding Amount: \$1900K

Contact: Greg Mitchum

Reference: 200A Strategy

	# of Samples	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	357	Soil	357			357	357			357	357	357	357	45 day turnaround time. Validated data.
222-S/ PNNL	14	Water					14							Process control
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: ASSUMPTIONS: 51 SAMPLES PER WASTE SITE sw-846/CLP-level analyses; Twenty-eight 200 Area Source waste sites to be characterized in FY1999-FY2002.
 Cost is based on unit cost of \$4.6K/sample for SW-846/CLP analysis set plus an allowance of \$40K/waste site for high-level ad samples.
 8 samples per SDG.
 Samples from 1 borehole, 2 test pits, 1 surface rad survey per waste site roughly evenly spaced during FY1999 - 2002

A-99

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 200-ZP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$37K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	66	Water	66(A)						66	66		66	The other analyses are for turbidity and temperature.	
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA														

*These samples represent 6 sampling events. The frequency of these events is 4 quarterly and 2 semiannually.

001-Y

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 300-FF-5

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples*	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.	Other	
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	9	Water	2(A)				9(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total U														

*These samples represent sampling events. The frequency of these events is .

A-101

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: D&D Projects

Funding Source: EM-40

Planned Funding Amount: TBD

Contact: J. Rugg

Reference: D&D Long-Term Surveillance & Maintenance Schedule

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab	195	Other	50	50		140	195			50					
222-S/ PNNL															
Industrial Hygiene	100	Other											100	Asbestos and lead paint	
Other (PC, TRU)	TRU = 35	Other				20	35							Pu, Am, Np, Cm	
Additional Comments: TRU samples may have >10 ⁶ dpm smearable alpha contamination. TRU = Transuranic															

*These samples represent _____ sampling events. The frequency of these events is _____.

A-102

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: D & D Projects

Funding Source: D&D Project Funding

Planned Funding Amount: TBD

Contact: Rikki Harris

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	5	Solid/ Liquid	5	5			5		5					
Additional Comments:														

A-103

*These samples represent ___ sampling events. The frequency of these events is ____.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: D & D Projects 233-S

Funding Source: D&D Project Funding
 Planned Funding Amount: TBD

Contact: Rikki Harris

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem.	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory	20	Solid/Liquid/Other	20			20	20								Estimated. All matrices listed could be encountered.
Low Level Protocol Lab	10	Soil	10	10		10	10				10				
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)	15	Solid/Liquid				15	15				15				Samples may contain >10 ⁶ dpm smearable alpha contamination.
Additional Comments:															

*These samples represent ___ sampling events. The frequency of these events is ___.

A-104

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: ERDF

Funding Source: ADS3700

Planned Funding Amount: \$10.2K

Contact: F. Roeck (B. H. Ford)

Reference: _____

	# of Samples→	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	8	Water									8	8		8	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	8	Water	g(A)			g(B)	g(C)			g(D)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = VOA (B) = ICP Metals plus GFAA Metals for Arsenic and Selenium (C) = Gross Alpha, Gross Beta, I 129, Total Radium, C 14, Tc 99, and Total U. (D) = TDS, Anions (Cl, Fl, SO4), Alkalinity, NO2/NO3, TOX															

A-105

→ These samples represent 2 sampling events. The frequency of these events is semiannually.

Year: FY2000

Project: ERDF

Funding Source: Waste Management (WMFS)

Planned Funding Amount: \$39.4 K

Contact: Mike Casbon

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	130	Air					130							3 sites X 26, biweekly and 1 site X 52, weekly samples for Gross Alpha and Gross Beta.
	8	Air					8							2 sites X 4, quarterly for GEA, Sr90, U, Pu, and Am
	6	Water	6(A)			6	6	6(B)	6					1 sample per 200,000 gallons of leachate
	1	Soil					1							1 sample yearly
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments:

(A) = VOA

(B) = Total Dissolved Solids, Total Suspended Solids, Anions, ammonia, Total Organic Carbon

All air sampling is now being done through Fluor Daniel for BHI

A-106

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: ERDF

Funding Source: DB8006

Planned Funding Amount: \$18.2K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Fred Roeck

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)								These samples are done bi-annually (3 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

+These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-107

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: Horn Rapids

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other
Field Analysis	12	Water								12	12		12	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	12	Water	10(A)			2(B)								
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total Cr														

A-108

†These samples represent 5 sampling events. The frequency of these events is yearly

FY 2001

SAMPLE PROJECTIONS SUMMARY WORKSHEET

FY2001

HNF-SD-WM-TI-608 Rev. 6

	# of Samples	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis	1,016	All	66	0	0	228	360	0	0	512	512	0	512	
Quick Turnaround Laboratory	160	All	0	0	0	80	160	0	0	0	0	0	0	
Low Level Protocol Lab	1,188	All	543	0	165	667	947	0	343	523	357	357	357	
222-S/ PNNL	100	All	0	0	0	0	32	0	0	0	0	0	68	
Industrial Hygiene	27	All	0	0	0	0	0	0	0	0	0	0	27	
WSCF	268	All	0	0	0	0	268	0	0	0	0	0	0	
Other (PC, TRU)	32	All	0	0	0	10	32	0	0	0	0	0		

Additional Comments:

A-110

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100 B/C

Funding Source: DB8049

Planned Funding Amount: \$18.2 K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Frank Corpuz

	# of Samples*	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	62	Air					62(B)								These samples are done bi-annually (2 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

*These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

III-V

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100-BC-5 RI

Funding Source: ADS3115

Planned Funding Amount: \$18.4 K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples†	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis	52 8	Water Water				g(A)				52	52		52	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	12	Water				12(B)	12(C)		12(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = Cr+6 (B) = ICP Metals – filtered and unfiltered (C) = Gross Alpha, Gross Beta, H3, and Sr – Total (D) = Anions														

A-112

†These samples represent 5 sampling events. The frequency of these events is 4 quarterly and 1 annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100F

Funding Source: 3100

Planned Funding Amount: \$ 40K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	200(A)	Soil					200								GEA
Quick Turnaround Laboratory	160(B)	Soil				80	160								GEA, GEA add-on, ICP Metals, Cr +6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
Low Level Protocol Lab	240(B)	Soil				120	240								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
222-S/ PNNL															
Industrial Hygiene	27(c)	Insul-Ation												27	
Other (PC, TRU)															

Additional Comments: NOTE: Analytes have not been determined, these are preliminary.

(A) = Ship to 100N RCF

(B) = Assume all require Radiochemistry and 25% require Metals analysis.

(C) = Asbestos analysis at WSCF.

A-113

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100-HR-3 IRM

Funding Source: ADS3110

Planned Funding Amount: \$67K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other	
Field Analysis	193 136	Water Water									193	193	193	The other analyses is for turbidity and temperature.	
Quick Turnaround Laboratory															
Low Level Protocol Lab	103	Water				73(D)	53(B)				103(C)				
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = Cr+6
 (B) = Sr, H3, Tc 99, Total U
 (C) = NO3
 (D) = ICP Metals

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100-KR-4 IRM

Funding Source: ADS3110

Planned Funding Amount: \$65K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other			
Field Analysis	147	Water				84(A)						147	147		147	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab	30	Water				25(D)	30(B)									
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Gross Alpha, Gross Beta, Gamma Spec, C-14 (C) = Anions (D) = ICP Metals, Mercury																

*These samples represent ___ sampling events. The frequency of these events is _____

115

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100-NR-2 Process

Funding Source: ADS3125

Planned Funding Amount: \$4.5K

Contact: B. Ford

Reference: _____

	# of Samples↕	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	24	Water					24(A)							
222-S/PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: A = Sr - Total														

↕ These samples represent 12 sampling events. The frequency of these events is monthly.

911-V

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100-NR-2 IAM

Funding Source: ADS3125

Planned Funding Amount: \$30K

Contact: B. Ford

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	30	Water									30	30		30	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	34	Water			5(A)	30(B)	19(C)			29(D)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: (A) = TPH
 (B) = ICP Metals
 (C) = Gamma Spec, Gross Alpha, Gross Beta, H3, and Sr.
 (D) = Anions, Oil & Grease, pH, Ammonia

†These samples represent 2 sampling events. The frequency of these events is 1 short and 1 annual.

11-1

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100N Deactivation

Funding Source: DB8073

Planned Funding Amount: \$7K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Joe Zoric

	# of Samples	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other	
PNNL	20	TLDs												20	Dosimetry read/cal. Done quarterly (5 samples per quarter).
WSCF	26	Air					26(A)								These samples are done bi-weekly.
WSCF	2	Air					2(B)								These samples are done bi-annually.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium															

◆ These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-118

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100N Deactivation

Funding Source: to be provided by
Facilities Services

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: Drinking Water Requirements

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	4	Water					4							1 sample per quarter for process control.
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: WAC 246-290-300 (9). Analyze for Radium 226-228, Gross Alpha/Gross Beta, Tritium, and Sr-90.

* The work has been identified, but funding sources are still being evaluated.

*These samples represent 4 sampling events. The frequency of these events is quarterly.

A-119

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 116N Stack

Funding Source: TBD

Planned Funding Amount: *TBD

Contact: Joe Zoric/Tom Kisenwether

Reference: Air Operating Permit

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/PNNL														
Industrial Hygiene														
Other (PC, TRU)	8	Air					8							These Process Control samples are being sent to WSCF for Gamma Spec, Sr-Total, Gross Alpha, and Gross Beta.
Additional Comments: *The work has been identified, but funding sources are still being evaluated.														

*These samples represent 1 sampling events. The frequency of these events is yearly.

A-120

SAMPLE PROJECTIONS WORKSHEET₁

 Year: FY2001

 Project: 100N Deactivation
 HNF-SD-WM-TI-608 Rev. 6

 Funding Source: 77BK27YA43
 Planned Funding Amount: *TBD

 Contact: Joe Zoric/Dick Martin

 Reference: 183N Water Plant 216 Permit

	# of Samples ⁺	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis	160	Water					160 ^(A)							Process Control support.
Quick Turnaround Laboratory														
Low Level Protocol Lab	160	Water	160 ^(B)		160 ^(C)			160 ^(D)	160					Process Control support.
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = GEA at RCF (B) = VOA (C) = Acrylamide (D) = TSS, Chlorine (Total Residual), Sulfate, TDS. * The work has been identified, but funding sources are still being evaluated.														

A-121
 †These samples represent 38 sampling events. The frequency of these events is 26 are done biweekly and 12 are done monthly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Jim Rugg/Roger Landon

Reference: Near Field Monitoring

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	14	Water					14(A)							Process Control support for the N-Springs Seep Wells
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: Annual river shoreline sampling of N-Springs seep wells for Near Field Monitoring Program.
(A) = Gross Alpha, Gross Beta, Isotopic U, Sr 90.

* The work has been identified, but funding sources are still being evaluated.

*These samples represent 1 sampling events. The frequency of these events is yearly.

A-122

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Bruce Ford

Reference: NPDES Permit

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	4	Water							4	4			1 sample per quarter.	
Quick Turnaround Laboratory														
Low Level Protocol Lab	4	Water				4							1 sample per quarter for iron and chromium.	
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	4	Water					4						1 sample per quarter for screening for offsite transport.	
Additional Comments: Well 199-N-8T. <ul style="list-style-type: none"> • The work has been identified, but funding sources are still being evaluated. 														

†These samples represent 4 sampling events. The frequency of these events is quarterly.

A-123

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 100N Waste Sites

Funding Source: _____

Planned Funding Amount: \$40K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: _____

	# of Samples †	Matrix	ANALYSIS										Comments			
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other		
PNNL	48	TLDs													48	Dosimetry read/cal. (Done quarterly. 12 samples during each sampling event).
WSCF	78	Air					78(A)									These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)									These samples are done bi-annually (3 samples during each bi-annual sampling event).
WSCF	3	Soil					3(B)									This is an annual sampling event.
WSCF	3	Veg					3(B)									This is an annual sampling event.
WSCF	10	Liquid					10(C)									This is an annual sampling event.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium (C) = Sr 90, Gamma Spec, and Tritium.																

† These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-124

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 200 Areas Source

Funding Source: ADS3200

Planned Funding Amount: \$1900K

Contact: Greg Mitchum

Reference: 200A Strategy

	# of Samples →	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	357	Soil	357		357	357			357	357	357	357	45 day turnaround time. Validated data.	
222-S/ PNNL	14	Water				14							Process control	
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: ASSUMPTIONS: 51 SAMPLES PER WASTE SITE sw-846/CLP-level analyses; Twenty-eight 200 Area Source waste sites to be characterized in FY 1999-FY2002.
 Cost is based on unit cost of \$4.6K/sample for SW-846/CLP analysis set plus an allowance of \$40K/waste site for high-level ad samples.
 8 samples per SDG.
 Samples from 1 borehole, 2 test pits, 1 surface rad survey per waste site roughly evenly spaced during FY 1999 - 2002

A-125

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 200-ZP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$37K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples*	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other			
Field Analysis	66	Water	66(A)									66	66		66	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab																
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = VOA																

* These samples represent 6 sampling events. The frequency of these events is 4 quarterly and 2 semiannually.

A-126

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: 300-FF-5

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples↕	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.	Other	
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	9	Water	2(A)				g(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total U														

A-127

↕ These samples represent 5 sampling events. The frequency of these events is yearly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: D&D Projects

Funding Source: EM-40

Planned Funding Amount: TBD

Contact: J. Rugg

Reference: D&D Long-Term Surveillance & Maintenance Schedule

	# of Samples*	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab	195	Other	50	50		140	195				50				
222-S/PNNL															
Industrial Hygiene	100	Other												100	Asbestos and lead paint
Other (PC, TRU)	TRU = 35	Other				20	35								Pu, Am, Np, Cm
Additional Comments: TRU samples may have >10 ⁶ dpm smearable alpha contamination. TRU = Transuranic															

*These samples represent _____ sampling events. The frequency of these events is _____.

A-128

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: ERDF

Funding Source: ADS3700

Planned Funding Amount: \$10.2K

Contact: F. Roeck (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS											Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical						
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other			
Field Analysis	8	Water										8	8		8	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory																
Low Level Protocol Lab	8	Water	g(A)			g(B)	g(C)				g(D)					
222-S/ PNNL																
Industrial Hygiene																
Other (PC, TRU)																
Additional Comments: (A) = VOA (B) = ICP Metals plus GFAA Metals for Arsenic and Selenium (C) = Gross Alpha, Gross Beta, I 129, Total Radium, C 14, Tc 99, and Total U. (D) = TDS, Anions (Cl, F, SO4), Alkalinity, NO2/NO3, TOX																

A-129

+These samples represent 2 sampling events. The frequency of these events is semiannually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: ERDF

Funding Source: Waste Management (WMFS)

Planned Funding Amount: \$39.4 K

Contact: Mike Casbon

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
A-130 Low Level Protocol Lab	130	Air					130							3 sites X 26, biweekly and 1 site X 52, weekly samples for Gross Alpha and Gross Beta. 2 sites X 4, quarterly for GEA, Sr90, U, Pu, and Am 1 sample per 200,000 gallons of leachate 1 sample yearly
	8	Air					8							
	6	Water	6(A)			6	6	6(B)	6					
	1	Soil					1							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														

Additional Comments: (A) = VOA

(B) = Total Dissolved Solids, Total Suspended Solids, Anions, ammonia, Total Organic Carbon

All air sampling is now being done through Fluor Daniel for BHI

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2001

Project: Horn Rapids

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples*	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other	
Field Analysis	12	Water									12	12		12	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	12	Water	10(A)			2(B)									
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = VOA (B) = Total Cr															

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*These samples represent 5 sampling events. The frequency of these events is yearly.

FY 2002

SAMPLE PROJECTIONS SUMMARY WORKSHEET

FY2002

HNF-SD-WM-TI-608 Rev. 6

	# of Samples	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo- Tech.	Other	
Field Analysis	816	All	66	0	0	228	160	0	0	512	512	0	508	
Quick Turnaround Laboratory	0	All	0	0	0	0	0	0	0	0	0	0	0	
Low Level Protocol Lab	898	All	543	0	165	517	657	0	343	523	523	523	523	
222-S/ PNNL	86	All	0	0	0	0	18	0	0	0	0	0	68	
Industrial Hygiene	0	All	0	0	0	0	0	0	0	0	0	0	0	
WSCF	268	All	0	0	0	0	268	0	0	0	0	0	0	
Other (PC, TRU)	12	All	0	0	0	0	12	0	0	0	0	0	0	
Additional Comments:														

A-133

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100 B/C

Funding Source: DB8049

Planned Funding Amount: \$18.2 K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Frank Corpuz

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
WSCF	78	Air					78(A)								These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	62	Air					62(B)								These samples are done bi-annually (2 samples during each bi-annual sampling event).
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, GEA, Isotopic Uranium, Isotopic Plutonium															

A-134

+These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100-BC-5 RI

Funding Source: ADS3115

Planned Funding Amount: \$18.4 K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	52 8	Water Water				8(A)					52	52		52	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	12	Water				12(B)	12(C)		12(D)						
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments:			(A) = Cr+6 (B) = ICP Metals – filtered and unfiltered (C) = Gross Alpha, Gross Beta, H3, and Sr – Total (D) = Anions												

+These samples represent 5 sampling events. The frequency of these events is 4 quarterly and 1 annually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100-HR-3 IRM

Funding Source: ADS3110

Planned Funding Amount: \$67K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	193 136	Water Water				136(A)					193	193		193	The other analyses is for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	103	Water				73(D)	53(B)			103(C)					
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Tc 99, Total U (C) = NO3 (D) = ICP Metals															

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SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100-KR-4 IRM

Funding Source: ADS3110

Planned Funding Amount: \$65K

Contact: A. J. Knepp (B. H. Ford)

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	147	Water				84(A)					147	147		147	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory															
Low Level Protocol Lab	30	Water				25(D)	30(B)		25(C)						
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: (A) = Cr+6 (B) = Sr, H3, Gross Alpha, Gross Beta, Gamma Spec, C-14 (C) = Anions (D) = ICP Metals, Mercury															

†These samples represent ___ sampling events. The frequency of these events is _____

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100-NR-2 Process

Funding Source: ADS3125

Planned Funding Amount: \$4.5K

Contact: B. Ford

Reference: _____

	# of Samples†	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab	24	Water					24(A)								
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments: A = Sr - Total															

†These samples represent 12 sampling events. The frequency of these events is monthly.

A-138

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100-NR-2 IAM

Funding Source: ADS3125

Planned Funding Amount: \$30K

Contact: B. Ford

Reference: _____

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	30	Water								30	30		30	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	34	Water			5(A)	30(B)	19(C)		29(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = TPH (B) = ICP Metals (C) = Gamma Spec, Gross Alpha, Gross Beta, H3, and Sr. (D) = Anions, Oil & Grease, pH, Ammonia														

A-139

*These samples represent 2 sampling events. The frequency of these events is 1 short and 1 annual.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100N Deactivation

Funding Source: DB8073

Planned Funding Amount: \$7K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: Joe Zoric

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
PNNL	20	TLDs											20	Dosimetry read/cal. Done quarterly (5 samples per quarter).
WSCF	26	Air					26(A)							These samples are done bi-weekly.
WSCF	2	Air					2(B)							These samples are done bi-annually.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium														

†These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

041-A

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100N Deactivation

Funding Source: to be provided by
Facilities Services

Planned Funding Amount: *TBD

Contact: Joe Zoric/Dick Martin

Reference: Drinking Water Requirements

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL	4	Water					4							1 sample per quarter for process control.
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: WAC 246-290-300 (9). Analyze for Radium 226-228, Gross Alpha/Gross Beta, Tritium, and Sr-90. * The work has been identified, but funding sources are still being evaluated.														

†These samples represent 4 sampling events. The frequency of these events is quarterly.

A141

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 116N Stack

Funding Source: TBD

Planned Funding Amount: *TBD

Contact: Joe Zoric/Tom Kisenwether

Reference: Air Operating Permit

	# of Samples+	Matrix	ANALYSIS											Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other		
Field Analysis															
Quick Turnaround Laboratory															
Low Level Protocol Lab															
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)	8	Air					8								These Process Control samples are being sent to WSCF for Gamma Spec, Sr-Total, Gross Alpha, and Gross Beta.
Additional Comments: *The work has been identified, but funding sources are still being evaluated.															

+These samples represent 1 sampling events. The frequency of these events is yearly.

A-142

SAMPLE PROJECTIONS WORKSHEET₁

 Year: FY2002

 Project: 100N Deactivation
HNF-SD-WM-TI-608 Rev. 6

 Funding Source: 77BK27YA43
 Planned Funding Amount: *TBD

 Contact: Joe Zoric/Dick Martin

 Reference: 183N Water Plant 216 Permit

	# of Samples ⁺	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond	Geo-Tech.		Other	
Field Analysis	160	Water					160 ^(A)								Process Control support.
Quick Turnaround Laboratory															
Low Level Protocol Lab	160	Water	160 ^(B)		160 ^(C)				160 ^(D)	160					Process Control support.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															
Additional Comments:		(A) = GEA at RCF (B) = VOA (C) = Acrylamide (D) = TSS, Chlorine (Total Residual), Sulfate, TDS. * The work has been identified, but funding sources are still being evaluated.													

⁺These samples represent 38 sampling events. The frequency of these events is 26 are done biweekly and 12 are done monthly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Jim Rugg/Roger Landon

Reference: Near Field Monitoring

	# of Samples*	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/Semi-VOA	Pest/PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/PNNL	14	Water					14(A)							Process Control support for the N-Springs Seep Wells
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: Annual river shoreline sampling of N-Springs seep wells for Near Field Monitoring Program. (A) = Gross Alpha, Gross Beta, Isotopic U, Sr 90. * The work has been identified, but funding sources are still being evaluated.														

*These samples represent 1 sampling events. The frequency of these events is yearly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100N Deactivation

Funding Source: UN2EV

Planned Funding Amount: *TBD

Contact: Bruce Ford

Reference: NPDES Permit

	# of Samples†	Matrix	ANALYSIS											Comments
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.	Other	
Field Analysis	4	Water								4	4			I sample per quarter.
Quick Turnaround Laboratory														
Low Level Protocol Lab	4	Water				4								I sample per quarter for iron and chromium.
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)	4	Water					4							I sample per quarter for screening for offsite transport.
Additional Comments: Well 199-N-8T. <ul style="list-style-type: none"> • The work has been identified, but funding sources are still being evaluated. 														

†These samples represent 4 sampling events. The frequency of these events is quarterly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 100N Waste Sites

Funding Source: _____

Planned Funding Amount: \$40K

Contact: C. J. Perkins (WMNW 372-8042)

Reference: _____

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
PNNL	48	TLDs											48	Dosimetry read/cal. (Done quarterly. 12 samples during each sampling event.)
WSCF	78	Air					78(A)							These samples are done bi-weekly (3 samples during each bi-weekly sampling event).
WSCF	6	Air					6(B)							These samples are done bi-annually (3 samples during each bi-annual sampling event).
WSCF	3	Soil					3(B)							This is an annual sampling event.
WSCF	3	Veg					3(B)							This is an annual sampling event.
WSCF	10	Liquid					10(C)							This is an annual sampling event.
Additional Comments: (A) = Gross Alpha and Gross Beta (B) = Sr 90, Gamma Spec, Isotopic Uranium, Isotopic Plutonium (C) = Sr 90, Gamma Spec, and Tritium.														

+These samples represent 32 sampling events. The frequency of these events is 4 quarterly, 26 bi-weekly and 2 bi-annually.

A-146

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 200 Areas Source

Funding Source: ADS3200

Planned Funding Amount: \$1900K

Contact: Greg Mitchum

Reference: 200A Strategy

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	357	Soil	357			357	357			357	357	357	357	45 day turnaround time. Validated data.
222-S/ PNNL	14	Water					14							Process control
Industrial Hygiene														
Other (PC, TRU)														
<p>Additional Comments: ASSUMPTIONS: 51 SAMPLES PER WASTE SITE sw-846/CLP-level analyses; Twenty-eight 200 Area Source waste sites to be characterized in FY1999-FY2002. Cost is based on unit cost of \$4.6K/sample for SW-846/CLP analysis set plus an allowance of \$40K/waste site for high-level ad samples. 8 samples per SDG. Samples from 1 borehole, 2 test pits, 1 surface rad survey per waste site roughly evenly spaced during FY1999 - 2002</p>														

A-147

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 200-ZP-1 IRM

Funding Source: ADS3210

Planned Funding Amount: \$37K

Contact: M. Buckmaster (B. H. Ford)

Reference: _____

	# of Samples†	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi-VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	66	Water	66(A)						66	66		66	The other analyses are for turbidity and temperature.	
Quick Turnaround Laboratory														
Low Level Protocol Lab														
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA														

†These samples represent 6 sampling events. The frequency of these events is 4 quarterly and 2 semiannually.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: 300-FF-5

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other
Field Analysis														
Quick Turnaround Laboratory														
Low Level Protocol Lab	9	Water	2(A)				9(B)							
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments:		(A) = VOA (B) = Total U												

+These samples represent sampling events. The frequency of these events is .

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: ERDF

Funding Source: ADS3700
 Planned Funding Amount: \$10.2K

Contact: F. Roeck (B. H. Ford)

Reference: _____

	# of Samples→	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other
Field Analysis	8	Water								8	8		8	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	8	Water	8(A)			8(B)	8(C)		8(D)					
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = ICP Metals plus GFAA Metals for Arsenic and Selenium (C) = Gross Alpha, Gross Beta, I 129, Total Radium, C 14, Tc 99, and Total U. (D) = TDS, Anions (Cl, F, SO ₄), Alkalinity, NO ₂ /NO ₃ , TOX														

*These samples represent 2 sampling events. The frequency of these events is semiannually.

A-110

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2002

Project: Horn Rapids

Funding Source: ADS 3800 or 3510

Planned Funding Amount: \$26K

Contact: Bruce Ford

Reference: DOE-RL-95-7.3 and BHI Chron #041489

	# of Samples+	Matrix	ANALYSIS										Comments	
			ORGANIC			Metals	Rad Chem	Coliform BOD	Wet Chem	Physical				
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond	Geo- Tech.		Other
Field Analysis	12	Water								12	12		12	The other analyses are for turbidity and temperature.
Quick Turnaround Laboratory														
Low Level Protocol Lab	12	Water	10(A)			2(B)								
222-S/ PNNL														
Industrial Hygiene														
Other (PC, TRU)														
Additional Comments: (A) = VOA (B) = Total Cr														

A-152

+These samples represent 5 sampling events. The frequency of these events is yearly.

SAMPLE PROJECTIONS WORKSHEET

HNF-SD-WM-TI-608 Rev. 6

Year: FY2000

Project: 100F

Funding Source: 3100

Planned Funding Amount: \$ 40K

Contact: Jon Fancher

Reference: Remedial Action

	# of Samples+	Matrix	ANALYSIS										Comments		
			ORGANIC			Metals	Rad Chem	Coliform, BOD	Wet Chem	Physical					
			VOA/ Semi- VOA	Pest/ PCB	Other					pH	Cond.	Geo-Tech.		Other	
Field Analysis	400(A)	Soil					400								GEA
Quick Turnaround Laboratory	400(B)	Soil				100	400								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
Low Level Protocol Lab	85(B)	Soil				21	85								GEA, GEA add-on, ICP Metals, Cr+6, Mercury, Am-241, Plutonium, Uranium, and Strontium.
222-S/ PNNL															
Industrial Hygiene															
Other (PC, TRU)															

Additional Comments: NOTE: Analytes have not been determined, these are preliminary.

(A) = Ship to 100N RCF

(B) = Assume all require Radiochemistry and 25% require Metals analysis.

APPENDIX II

TANK WASTE REMEDIATION SYSTEM
PROGRAM INPUTS

B-1-27

HNF-SD-WM-TI-608 Rev. 6

Code	Priority	Doeler	SY-102	Grab	1	3	3	Compatibility	222-S	0.07	0.11	0.18	18-Feb-98	GSHZ-4	18-Feb-98	Feb-98	3	
AS12-4			TX-104	Auger	2	2	4	SS	222-S	0.24	0.00	0.24	20-Feb-98	Supports Organic Nitrate USQ Resolution	AS12-4	20-Feb-98	Feb-98	4
GSDM-4		Blak	AW-105	Grab	1	3	3	C	222-S	0.07	0.11	0.18	26-Feb-98	Estimated?	GSDM-4	21-May-98	May-98	3
GSQ1-4	Privatization-LL	Wiemes	SY-105	Grab	1	5	5		222-S				05-Mar-98	Estimated?	GSQ1-4	01-Sep-98	Sep-98	5
FS1-4			S-111	Push	1	11	11		222-S				11-Mar-98	RGS One Previously Unsampld Riser	FS1-4	11-Mar-98	Mar-98	11
GSXD-4		Blak	AP-103	Grab	1	3	3	C?	222-S				15-Mar-98	Estimated?	GSXD-4	10-Jun-98	Jun-98	3
RS44-4	High Priority		SX-103	Rotary	2	19	26		222-S				16-Mar-98	Requires SX Farm Ventilation Adjustment	RS44-4	12-Sep-98	Sep-98	26
RS11-4			SX-104	Rotary	2	12	24	High Priority	222-S				18-Mar-98		RS11-4	14-Sep-98	Sep-98	24
FS22-4			U-109	Push	1	10	10		222-S				04-Apr-98	RGS One Previously Unsampld Riser	FS22-4	06-Apr-98	Apr-98	10
RS4V-4		Bogen	Z-361	Rotary	2	6	12	High Alpha	222-S				16-Apr-98		RS4V-4	16-Apr-98	Apr-98	12
RS4K-4	18FOSE	18FOSF9	AW-102	Rotary	2	17	34		222-S				17-Apr-98	Minor Modifications Including Temporary	RS4K-4	01-May-98	May-98	34
CP02-4		HTI	Cone Penetrometer Cold Test	1	1	1			222-S				24-Apr-98		CP02-4	24-Apr-98	Apr-98	1
GS36-4	Privatization	Gasper	Tank TBD	Grab	1	5	5		222-S				07-May-98	5 L of Envelope A For Privatization	GS36-4	03-Nov-98	Nov-98	5
LD05-4		HTI	AX-104	Sludge	4	1	4	Light Duty Utility A	222-S				14-May-98		LD05-4	14-May-98	May-98	4
GS65-4	Privatization	Gasper	Tank TBD	Grab	1	5	5		222-S				21-May-98	5 L of Envelope B For Privatization	GS65-4	17-Nov-98	Nov-98	5
RS91-4	High Priority		S-110	Rotary	2	8	16	High Priority	222-S				22-May-98	Requires Rotary Exhauster C Available	RS91-4	18-Nov-98	Nov-98	16
Disolution	12-20		AN-104	Archive	1	1	1	Dissolution Test	222-S				23-May-98	Analysis Only - Does not include Development	Disolution	23-May-98	May-98	1
GSXB-4	Privatization	Gasper	Tank TBD	Grab	1	5	5		222-S				05-Jun-98	3 L of Envelope C For Privatization	GSXB-4	02-Dec-98	Dec-98	5
GSFM-4			AP-106	Grab	1	3	3	C?	222-S				24-Jun-98	Estimated?	GSFM-4	22-Sep-98	Sep-98	3
RS36-4	High Priority		U-107	Rotary	2	9	18	SS, O	222-S	1.08	0.04	1.12	26-Jun-98	Requires Rotary Exhauster B Available	RS36-4	23-Jul-98	Dec-98	18
Disolution	12-20		AW-101	Archive	1	1	1	Dissolution Test	222-S				01-Jul-98	Analysis Only - Does not include Development	Disolution	10-Jul-98	Jul-98	1
GS72-4		Blak	AP-104	Grab	1	3	3	C?	222-S				01-Jul-98	Estimated?	GS72-4	29-Sep-98	Sep-98	3
RS41-4	High Priority		BY-105	Rotary	2	9	18	SS, Hix, O	222-S	1.08	0.07	1.15	09-Jul-98		RS41-4	03-Jan-99	Jan-99	18
AN-105			AN-105	Archive	1	1	1		222-S				24-Jul-98		AN-105	20-Jan-99	Jan-99	0
AN-104			AN-104	Archive	1	1	1		222-S				24-Jul-98		AN-104	20-Jan-99	Jan-99	0
AN-101			AN-101	Archive	1	1	1		222-S				24-Jul-98		AN-101	20-Jan-99	Jan-99	0
AN-103			AN-103	Archive	1	1	1		222-S				24-Jul-98		AN-103	20-Jan-99	Jan-99	0
GS28-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				03-Aug-98	Pre-Sludging/After Caustic Addition	GS28-4	21-Aug-98	Aug-98	3
GS38-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				04-Aug-98		GS38-4	04-Aug-98	Aug-98	0
GS24-4	High Priority		TX-118	Rotary	2	6	12	SS, Hix, O	222-S	0.72	0.05	0.77	05-Aug-98	Post Batch #1.1.1 (W-320) Requires Dome Load Resolution	GS24-4	01-Feb-99	Feb-99	12
GS59-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				06-Aug-98	Post Batch #1.1.1 (W-320)	GS59-4	03-Sep-98	Sep-98	3
GSCT-4		HLW	AZ-101	Grab	1	5	5		222-S				06-Aug-98	After Mixer Pump Run	GSCT-4	03-Feb-99	Feb-99	5
GSQ1-4	12D25D	Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				11-Aug-98	Post Batch #1.1.2 (W-320)	GSQ1-4	08-Sep-98	Sep-98	3
GSQD-4		Privatization	Tank TBD	Grab	1	5	5		222-S				15-Aug-98		GSQD-4	09-Feb-99	Feb-99	5
GSQV-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				18-Aug-98	Post Batch #1.1.3 (W-320)	GSQV-4	15-Sep-98	Sep-98	3
Disolution	12-20		AN-103	Archive	1	1	1	Dissolution Test	222-S				20-Aug-98	Analysis Only - Does not include Development	Disolution	20-Aug-98	Aug-98	1
GSQX-4		Blak	AP-107	Grab	1	3	3	C?	222-S				20-Aug-98	Estimated?	GSQX-4	18-Nov-98	Nov-98	3
CP01-4		HTI	AX-104	Cone Penetro	1	1	1	Outside Tank	222-S				22-Aug-98		CP01-4	19-Sep-98	Sep-98	3
GSQZ-4	Privatization	Tank TBD		Grab	1	5	5	Priv.	222-S	0.00	1.00	1.00	27-Aug-98		GSQZ-4	23-Feb-99	Feb-99	5
GSFA-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				28-Aug-98	Post Batch #1.2.2 (W-320)	GSFA-4	25-Sep-98	Sep-98	3
GS82-4			TBD - Salt Wells	Grab	1	3	3	C?	222-S				03-Sep-98	Estimated?	GS82-4	02-Dec-98	Dec-98	3
GSHX-4		Bogen	Z-361	Grab	1	3	3		222-S				03-Sep-98		GSHX-4	03-Sep-98	Sep-98	3
RS29-4	High Priority		BY-103	Rotary	2	9	18	SS, Hix, O	222-S	1.08	0.07	1.15	10-Sep-98		RS29-4	09-Mar-99	Mar-99	18
GSHB-4		Privatization	Tank TBD	Grab	1	5	5	Priv.	222-S	0.00	1.00	1.00	11-Sep-98		GSHB-4	10-Mar-99	Mar-99	5
GSXC-4		Retrieval	AY-102 (C-106)	Grab	1	3	3		222-S				13-Sep-98	Post Batch #1.2.3 (W-320)	GSXC-4	11-Oct-98	Oct-98	3

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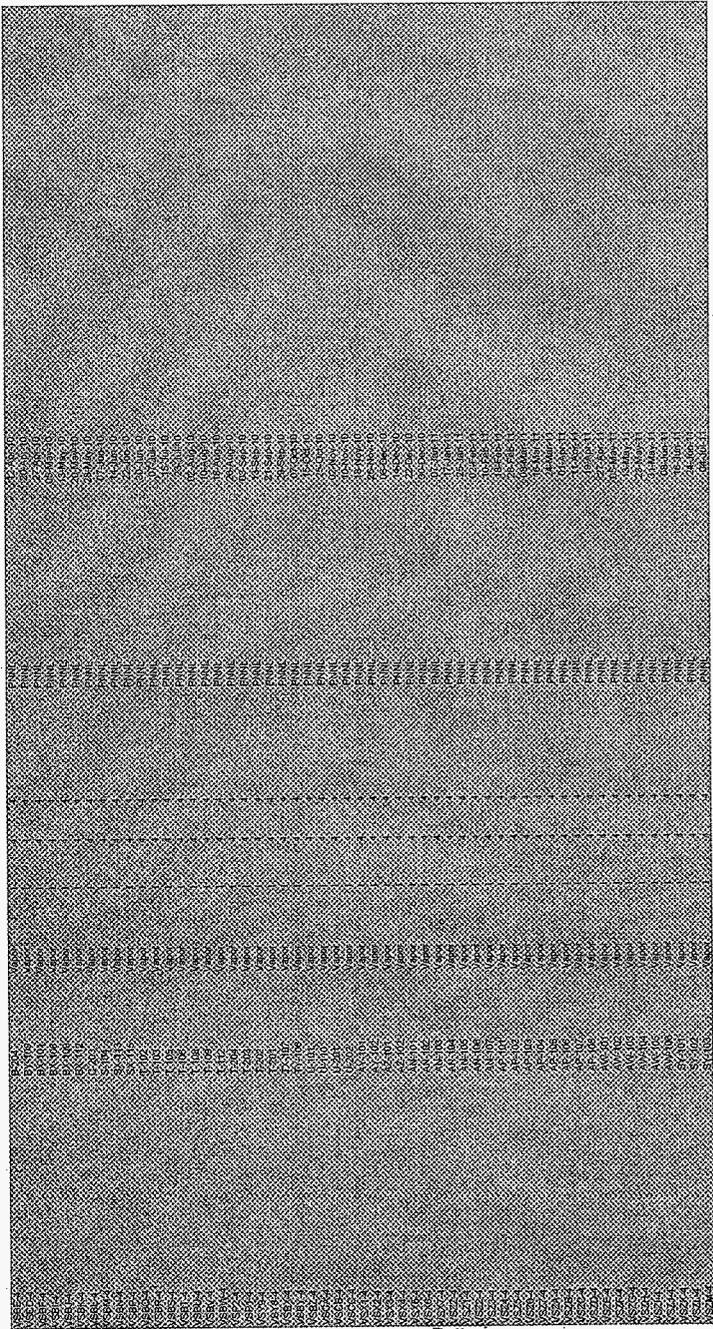
GSFD-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	18-Sep-98	Post Batch #2.1.1	(W-320)	GSFD-4	16-Oct-98	Oct-98	3	
GSFK-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	25-Sep-98	Post Batch #2.1.2	(W-320)	GSFK-4	23-Oct-98	Oct-98	3	
GSFH-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	30-Sep-98	Post Batch #2.2.1		GSFH-4	26-Oct-98	Oct-98	3	
RS73-4	High Priority	TX-111	Rotary	2	8	16	SS	01-Oct-98			RS73-4	30-Mar-99	Mar-99	16	
GSGB-4	Blask	SY-102	Grab	1	3	3	99-2 Compatibility	05-Oct-98			GSGB-4	05-Oct-98	Oct-98	3	
GS73-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	16-Oct-99	Post Batch #2.2.2	(W-320)	GS73-4	13-Nov-98	Nov-98	3	
GSHF-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	21-Oct-99	Post Batch #3.1.1	(W-320)	GSHF-4	18-Nov-98	Nov-98	3	
GSX3-4	Retrieval	AP-106	Grab	1	3	3	99-2 Compatibility	22-Oct-99			GSX3-4	22-Oct-99	Oct-99	3	
RS74-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	28-Oct-98	Post Batch #3.2.1	(W-320)	GS74-4	23-Nov-98	Nov-98	3	
GSHL-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	02-Nov-98	Post Batch #3.2.1	(W-320)	GSHL-4	30-Nov-98	Nov-98	3	
FS35-4		A-103	Rush	2	8	16	222-S	04-Nov-98	RGS Secondary Waste Type 1B		PS35-4	04-Nov-98	Nov-98	16	
GSFH-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	07-Nov-98	Post Batch #3.2.2	(W-320)	GSFH-4	05-Dec-98	Dec-98	3	
GSQC-4	Blask	AW-104	Grab	1	3	3	99-2 Compatibility	10-Nov-98			GSQC-4	10-Nov-98	Nov-98	3	
RS75-4		TX-113	Rotary	2	11	22	SS	11-Nov-98			RS75-4	16-May-99	May-99	22	
GS97-4		AZ-101	Grab	1	3	3	222-S	13-Nov-98	Estimated		GS97-4	09-Feb-99	Feb-99	3	
GS1Q-4	Retrieval	AY-102 (C-106)	Grab	1	3	3	222-S	24-Nov-98	Post Batch #3.2.3	(W-320)	GS1Q-4	22-Dec-98	Dec-98	3	
Dissolution	12-20	AN-107	Archive	1	1	1	Dissolution Test	03-Dec-98	Analysis Only - Does not include Development		Dissolution	03-Dec-98	Dec-98	1	
GSAAW-4	12K20A	Privitization	AN-107	Grab	1	5	LAW	03-Dec-98			GSAAW-4	01-Jan-99	Jan-99	5	
GSX4-4		Blask	AN-101	Grab	1	3	99-3 Compatibility	08-Dec-98			GSX4-4	08-Dec-98	Dec-98	3	
PS54-4	12R20A	Retrieval	SY-101	Push	1	22	LAW	14-Dec-98			PS54-4	12-Jan-99	Jan-99	22	
GSHD-4		AP-107	Grab	2	3	6	Campaign 99-2	22-Dec-98	Evaporator?		GSHD-4	22-Dec-98	Dec-98	6	
Totals 1998															
RS95-4	16J05E	16J05F?	C-104	Rotary	2	5	10	HL	222-S		RS95-4	20-Jan-99	Jan-99	10	
RS33-4			SX-102	Rotary	2	11	22	222-S			RS33-4	06-Jul-99	Jul-99	22	
Dissolution	12-20		AN-106	Archive	1	1	1	Dissolution Test	222-S		Dissolution	03-Feb-99	Feb-99	1	
GSX4-4	12M20A	Retrieval	AN-106	Grab	1	5	LAW	03-Feb-99	Analysis Only - Does not include Development		GSX4-4	02-Aug-99	Aug-99	5	
GSX6-4			AP-103	Grab	2	3	6	Campaign 99-3	222-S		GSX6-4	17-Feb-99	Feb-99	6	
RS99-4			S-103	Fush	2	6	12	222-S			RS99-4	18-Feb-99	Feb-99	12	
GSGL-4			SY-102	Grab	1	3	3	00-1 Compatibility	222-S		GSGL-4	04-Mar-99	Mar-99	3	
GSXF-4			AW-104	Grab	1	3	3	Compatibility 00-1	222-S		GSXF-4	13-Mar-99	Mar-99	3	
RS42-4			SX-105	Rotary	2	13	26	222-S			RS42-4	21-Sep-99	Sep-99	26	
FS23-4	12T20A		SY-103	Push	1	15	15	LAW	222-S		FS23-4	26-Mar-99	Requires USQ Review for Group 1 Tank - Com	Sep-99	15
GSXG-4			AP-106	Grab	1	3	3	00-1 Compatibility	222-S		GSXG-4	01-Apr-99	Apr-99	3	
GSQM-4			SY-102	Grab	1	3	3	00-1 Compatibility	222-S		GSQM-4	06-Apr-99	Apr-99	3	
GSQP-4			AP-104	Grab	2	3	6	Campaign 00-1	222-S		GSQP-4	20-Apr-99	Evaporator?	Apr-99	6
GSGR-4			AP-107	Grab	2	3	6	Campaign 00-1	222-S		GSGR-4	04-May-99	Evaporator?	May-99	6
RS71-4			TX-110	Rotary	2	10	20	SS	222-S	1.20	RS71-4	01-Dec-99	Dec-99	20	
AS39-4			SX-115	Auger	2	1	2	222-S			AS39-4	04-Dec-99	Dec-99	2	
RS32-4			TX-105	Rotary	2	12	24	222-S			RS32-4	02-Feb-00	Feb-00	24	
AS48-4			B-102	Auger	2	1	2	222-S			AS48-4	01-Apr-00	Apr-00	2	
RS12-4			SX-109	Rotary	2	5	10	222-S			RS12-4	02-Apr-00	Apr-00	10	
GSQN-4			Blask	SY-102	Grab	1	3	3	00-2 Compatibility	222-S	GSQN-4	20-Oct-99	Oct-99	3	
RSAJ-4			U-102	Rotary	2	3	6	6-8 only	222-S		RSAJ-4	19-Apr-00	Apr-00	6	
GSAY-4	12V10A		AP-101	Grab	1	5	5	LAW	222-S		GSAY-4	01-May-00	May-00	5	
GSBC-4	12W10A		AW-104	Grab	1	5	5	LAW	222-S		GSBC-4	01-May-00	May-00	5	
PS43-4	16H05E		AY-102	Rotary	2	18	36	HLW	222-S		PS43-4	18-Nov-99	Nov-99	36	
RS16-4			SX-114	Rotary	2	4	8	222-S			RS16-4	28-May-00	May-00	8	
FS36-4			S-112	Fush	2	11	22	222-S			FS36-4	06-Dec-99	Dec-99	22	
Totals 1999															
FS37-4			U-111	Push	2	7	14	222-S			FS37-4	13-Jan-00	Jan-00	14	
RS78-4			TX-116	Rotary	2	12	24	222-S			RS78-4	05-Aug-00	Aug-00	24	
GSQQ-4			AP-104	Grab	2	3	6	Campaign 00-2	222-S		GSQQ-4	03-Mar-00	Mar-00	6	
AS35-4			AX-102	Auger	2	1	2	222-S			AS35-4	03-Sep-00	Sep-00	2	
RS53-4			A-106	Rotary	2	2	4	222-S			RS53-4	13-Sep-00	Sep-00	4	
RS77-4			TX-115	Rotary	2	11	22	222-S			RS77-4	29-Oct-00	Oct-00	22	
RS87-4			C-102	Rotary	2	8	16	222-S			RS87-4	29-Nov-00	Nov-00	16	
RS68-4			TX-106	Rotary	2	8	16	222-S			RS68-4	16-Jan-01	Jan-01	16	
RS13-4			SX-110	Rotary	2	2	4	222-S			RS13-4	16-Apr-01	Apr-01	4	

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P845-4		T-109	Push	2	2	4	222-S	17-Nov-00	PS45-4	17-Nov-00	Nov-00	4
GSEX-4	16A52C	AZ-101	Grab	1	5	5	HL	23-Nov-00	GSEX-4	07-Dec-00	Dec-00	5
RS66-4		TX-102	Rotary	1	5	3		29-Nov-00	RS66-4	28-May-01	May-01	3
Totals 2000												
RS10-4		SX-107	Rotary	2	2	4	222-S		RS10-4	11-Jul-01	Jul-01	4
PS46-4		T-103	Push	2	1	2	222-S	12-Jan-01	PS46-4	24-Jan-01	Jan-01	2
GSES-4	16A52H	AZ-101	Grab	1	5	5	HL	24-Jan-01	GSES-4	12-Feb-01	Feb-01	5
RS94-4		TY-105	Rotary	2	5	10	222-S	29-Jan-01	RS94-4	21-Aug-01	Aug-01	10
GSEV-4	16A52N	AZ-101	Grab	1	5	5	HL	02-Feb-01	GSEV-4	18-Apr-01	Apr-01	5
RS14-4		SX-111	Rotary	2	3	6	222-S	09-May-01	RS14-4	05-Nov-01	Nov-01	6
GSEV-4	16A66D	AZ-101	Grab	1	5	5	HL - Vendor Quality	08-Jun-01	GSEV-4	04-Sep-01	Sep-01	5
RS76-4		TX-114	Rotary	2	11	22	222-S	06-Jul-01	RS76-4	02-Jan-02	Jan-02	22
GSEZ-4	13B30F	AN-105	Grab	1	5	5	LL	09-Jul-01	GSEZ-4	23-Jul-01	Jul-01	5
RS15-4		SX-112	Rotary	2	2	4	222-S	26-Jul-01	RS15-4	22-Jan-02	Jan-02	4
GSAZ-4	15B42C1	AF-102	Grab	1	5	5	LL - Process Control	24-Aug-01	GSAZ-4	07-Sep-01	Sep-01	5
GSCK-4	15B58C1	AF-104	Grab	1	5	5	LL - Process Control	01-Sep-01	GSCK-4	15-Sep-01	Sep-01	5
RS84-4		TX-103	Rotary	2	3	6	222-S	21-Sep-01	RS84-4	20-Mar-02	Mar-02	6
GSD-4	15B34A	AP-102	Grab	1	19	19	LL - Feed Qualificat	23-Sep-01	GSD-4	23-Oct-01	Oct-01	19
GSCM-4	15B50A	AP-104	Grab	1	19	19	LL - Feed Qualificat	03-Oct-01	GSCM-4	31-Oct-01	Oct-01	19
RS46-4		SX-108	Rotary	2	2	4	222-S	26-Oct-01	RS46-4	24-Apr-02	Apr-02	4
Totals 2001												
GSFN-4	12C10A	AY-101 Grab Sample	Grab	1	5	5	LL	04-Jan-02	GSFN-4	03-Jul-02	Jul-02	5
GSEP-4	13E30F	AN-104 Grab Sample	Grab	1	3	3	LL	18-Jan-02	GSEP-4	01-Feb-02	Feb-02	3
RS3-4		TX-101	Rotary	2	3	6	222-S	23-Jan-02	RS3-4	22-Jul-02	Jul-02	6
RSAE-4		BY-101	Rotary	2	8	16	222-S	23-Jan-02	RSAE-4	22-Jul-02	Jul-02	16
GSCN-4	15E30C1	AP-102 - (4AN)	Grab	1	5	5	LL - Process Control	05-Mar-02	GSCN-4	19-Mar-02	Mar-02	5
GSEQ-4	15E85C1	AP-104 - (4AN)	Grab	1	3	3	LL - Process Control	13-Mar-02	GSEQ-4	27-Mar-02	Mar-02	3
RS17-4		T-101	Rotary	2	2	4	222-S	27-Mar-02	RS17-4	23-Sep-02	Sep-02	4
RSQ2-4		C-106	Rotary	2	5	10	222-S	27-Mar-02	RSQ2-4	23-Sep-02	Sep-02	10
GSBH-4	15E10A	AP-102 - (4AN)	Grab	1	19	19	LL - Sample Qualific	08-Apr-02	GSBH-4	06-May-02	May-02	19
GSCQ-4	15E45A	AP-104 - (4AN)	Grab	1	19	19	LL - Sample Qualific	15-Apr-02	GSCQ-4	13-May-02	May-02	19
GSPF-4	16F85C	AZ-102	Grab	1	5	5	HL	14-May-02	GSPF-4	28-May-02	May-02	5
RS69-4		TX-108	Rotary	2	3	6	222-S	19-Jun-02	RS69-4	16-Dec-02	Dec-02	6
RSAH-4		BX-111	Rotary	2	4	8	222-S	09-Jul-02	RSAH-4	05-Jan-03	Jan-03	8
RS74-4	16F65H	AZ-102	Grab	1	5	5	HL	20-Jul-02	RS74-4	04-Feb-03	Feb-03	5
GFR-4		TX-112	Rotary	2	13	26	222-S	08-Aug-02	GFR-4	03-Aug-02	Aug-02	26
RS09-4		AZ-102	Grab	1	5	5	HL	23-Sep-02	RS09-4	07-Oct-02	Oct-02	5
RS79-4		BX-102	Rotary	2	2	4	222-S	24-Sep-02	RS79-4	23-Mar-03	Mar-03	4
RS55-4		TX-117	Rotary	2	10	20	222-S	26-Sep-02	RS55-4	25-Mar-03	Mar-03	20
RS21-4		B-105	Rotary	2	3	6	222-S	28-Oct-02	RS21-4	26-Apr-03	Apr-03	6
GSFS-4		TY-103	Rotary	2	4	8	222-S	20-Nov-02	GSFS-4	19-May-03	May-03	8
RS97-4	16F50D	AZ-102	Grab	1	5	5	HL - Vendor Qualific	02-Dec-02	RS97-4	28-Feb-03	Feb-03	5
Totals 2002												
RS85-4		U-104	Rotary	2	2	4	222-S	04-Feb-03	RS85-4	03-Aug-03	Aug-03	4
RS72-4		TY-102	Rotary	2	2	4	222-S	18-Feb-03	RS72-4	17-Aug-03	Aug-03	4
GSER-4	13G30H	AW-101	Grab	1	3	3	LL	25-Mar-03	GSER-4	08-Apr-03	Apr-03	3
RS70-4		TX-109	Rotary	2	8	16	222-S	10-Apr-03	RS70-4	07-Oct-03	Oct-03	16
RS60-4		S-105	Rotary	2	9	18	222-S	17-Apr-03	RS60-4	14-Oct-03	Oct-03	18
GSB1-4	15G30C1	AP-102 (IAW)	Grab	1	5	5	LL - Process Control	04-May-03	GSB1-4	18-May-03	May-03	5
GSCR-4	15G65C1	AP-104 (IAW)	Grab	1	5	5	LL - Process Control	14-May-03	GSCR-4	28-May-03	May-03	5
RSAF-4		C-204	Rotary	2	1	2	222-S	23-May-03	RSAF-4	19-Nov-03	Nov-03	2
GSBL-4	15G10A	AP-102 (IAW)	Grab	1	19	19	LL - Qualification	09-Jun-03	GSBL-4	07-Jul-03	Jul-03	19
GSC7-4	15G45A	AP-104 (IAW)	Grab	1	19	19	LL - Qualification	01-Jul-03	GSC7-4	29-Jul-03	Jul-03	19
RSAG-4		C-101	Rotary	2	2	4	222-S	15-Jul-03	RSAG-4	11-Jan-04	Jan-04	4
RS63-4		S-108	Rotary	2	9	18	222-S	28-Jul-03	RS63-4	24-Jan-04	Jan-04	18
GSFU-4	16H27C	AV-102	Grab	1	5	5	HL	06-Aug-03	GSFU-4	20-Aug-03	Aug-03	5
RS2-4		TY-101	Rotary	2	3	6	222-S	29-Sep-03	RS2-4	27-Mar-04	Mar-04	6
GSFV-4	16H27H	AV-102	Grab	1	5	5	HL	12-Oct-03	GSFV-4	26-Oct-03	Oct-03	5
GSFT-4	13J30H	AN-103	Grab	1	5	5	HL	25-Oct-03	GSFT-4	08-Nov-03	Nov-03	5
RS92-4		U-101	Rotary	2	1	2	222-S	31-Oct-03	RS92-4	28-Apr-04	Apr-04	2
RS97-4		A-104	Rotary	2	1	2	222-S	03-Nov-03	RS97-4	01-May-04	May-04	2

GSBM-4	1530C1	AP-102 (3AN)	Grab	1	5	5	LL - Process Control	222-S	04-Dec-03	Feed Adjustment	GSBM-4	18-Dec-03	Dec-03	5
GSCU-4	15R65C1	AP-104 (3AN)	Grab	1	5	5	LL - Process Control	222-S	14-Dec-03	Feed Adjustment	GSCU-4	28-Dec-03	Dec-03	5
GSFY-4	16H27N	AY-102	Grab	1	5	5	HL	222-S	19-Dec-03	In Tank Washing	GSFY-4	02-Jan-04	Jan-04	5
Totals 2003														
GSBP-4	15J10A	AF-102 (3AN)	Grab	1	19	19	LL - Qualification	222-S	05-Jan-04	Doesnot include Environmental DQOs	GSBP-4	02-Feb-04	Feb-04	19
GSCW-4	1545A	AP-104 (3AN)	Grab	1	19	19	LL - Qualification	222-S	20-Jan-04	Doesnot include Environmental DQOs	GSCW-4	17-Feb-04	Feb-04	19
RS98-4	A-105	A-105	Rotary	2	1	2	222-S		29-Jan-04		RS98-4	27-Jul-04	Jul-04	2
GSFW-4	16H50D	AY-102	Grab	1	5	5	HL - Vendor Qualific	222-S	24-Feb-04	Feed Certification	GSFW-4	22-May-04	May-04	5
GSBQ-4	15V30C1	AP-102 (1AP/4AW)	Grab	1	5	5	LL - Process Control	222-S	19-Jun-04	Feed Adjustment	GSBQ-4	03-Jul-04	Jul-04	5
GSCX-4	15V95C1	AP-104 (1AP/4AW)	Grab	1	5	5	LL - Process Control	222-S	19-Jun-04	Feed Adjustment	GSCX-4	03-Jul-04	Jul-04	5
GSBR-4	15V10A	AP-102 (1AP/4AW)	Grab	1	19	19	LL - Qualification	222-S	11-Aug-04	Doesnot include Environmental DQOs	GSBR-4	06-Sep-04	Sep-04	19
GSCZ-4	15V45A	AP-104 (1AP/4AW)	Grab	1	19	19	LL - Qualification	222-S	16-Aug-04	Doesnot include Environmental DQOs	GSCZ-4	13-Sep-04	Sep-04	19
Totals 2004														
GSBS-4	15O05C1	AP-104 (1AY)	Grab	1	5	5	LL - Process Control	222-S	11-Apr-05	Feed Adjustment	GSBS-4	25-Apr-05	Apr-05	5
GSEM-4	15O30C1	AP-102 (1AY)	Grab	1	5	5	LL - Process Control	222-S	11-Apr-05	Feed Adjustment	GSEM-4	25-Apr-05	Apr-05	5
GSBT-4	15O10A	AP-102 (1AY)	Grab	1	19	19	LL - Qualification	222-S	23-May-05	Doesnot include Environmental DQOs	GSBT-4	20-Jun-05	Jun-05	19
GSDB-4	15O45A	AP-104 (1AY)	Grab	1	19	19	LL - Qualification	222-S	27-May-05	Doesnot include Environmental DQOs	GSDB-4	24-Jun-05	Jun-05	19
GSDZ-4	15K10A	AN-107	Grab	1	19	19	LL - Qualification	222-S	18-Jun-05	Doesnot include Environmental DQOs	GSDZ-4	16-Jul-05	Jul-05	19
GSFK-4	15K10A	AN-107	Grab	1	5	5	HL - Process Control	222-S	22-Jun-05	Feed Adjustment	GSFK-4	06-Jul-05	Jul-05	5
GSEW-4	16J85C	C-104	Grab	1	5	5	HL	222-S	03-Sep-05	In Tank Washing	GSEW-4	17-Sep-05	Sep-05	5
GSCI-4	13P50B	SY-102	Grab	1	5	5	LL	222-S	03-Oct-05	Dilution Adjustment	GSCI-4	17-Oct-05	Oct-05	5
GSBK-4	16J85H	C-104	Grab	1	5	5	HL	222-S	08-Nov-05	In Tank Washing	GSBK-4	22-Nov-05	Nov-05	5
GSEB-4	13P50E	SY-102	Grab	1	5	5	LL	222-S	02-Dec-05	Dilution Adjustment	GSEB-4	16-Dec-05	Dec-05	5
Totals 2005														
GSBN-4	16J85N	C-104	Grab	1	5	5	HL	222-S	12-Jan-06	In Tank Washing	GSBN-4	26-Jan-06	Jan-06	5
Dissolution	12-20-	SY-101	Archive	1	1	1	Dissolution Test	222-S	14-Mar-06	Analysis Only - Does not include Development	Dissolution	14-Mar-06	Mar-06	1
GSBF-4	13R30F	SY-101	Grab	1	5	5	LL	222-S	14-Mar-06	Dilution Adjustment	GSBF-4	28-Mar-06	Mar-06	5
GSBU-4	16J50D	C-104	Grab	1	5	5	HL - Qualification	222-S	15-Mar-06	Feed Certification	GSBU-4	11-Jun-06	Jun-06	5
GSBW-4	15L30C1	AP-102 (2AN)	Grab	1	5	5	LL - Process Control	222-S	17-Apr-06	Feed Adjustment	GSBW-4	01-May-06	May-06	5
GSBV-4	15L10A	AP-102 (2AN)	Grab	1	19	19	LL - Qualification	222-S	19-Mar-06	Doesnot include Environmental DQOs	GSBV-4	16-Jun-06	Jun-06	19
GSDA-4	15L65C1	AP-104 (2AN)	Grab	1	5	5	LL - Process Control	222-S	23-Jun-06	Feed Adjustment	GSDA-4	07-Jul-06	Jul-06	5
GSDN-4	15L45A	AP-104 (2AN)	Grab	1	19	19	LL - Qualification	222-S	26-Jul-06	Doesnot include Environmental DQOs	GSDN-4	23-Aug-06	Aug-06	19
GSCA-4	15M30C1	AP-102 (6AN)	Grab	1	5	5	LL - Process Control	222-S	11-Sep-06	Feed Adjustment	GSCA-4	25-Sep-06	Sep-06	5
GSDY-4	15M10A	AP-102 (6AN)	Grab	1	19	19	LL - Qualification	222-S	17-Oct-06	Doesnot include Environmental DQOs	GSDY-4	16-Nov-06	Nov-06	19
GSDP-4	15M85C1	AP-104 (6AN)	Grab	1	5	5	LL - Process Control	222-S	14-Nov-06	Feed Adjustment	GSDP-4	28-Nov-06	Nov-06	5
GSDS-4	15M45A	AP-104 (6AN)	Grab	1	19	19	LL - Qualification	222-S	27-Dec-06	Doesnot include Environmental DQOs	GSDS-4	24-Jan-07	Jan-07	19
Totals 2006														
Dissolution	12-20-	SY-103	Archive	1	1	1	Dissolution Test	222-S	11-Mar-07	Analysis Only - Does not include Development	Dissolution	11-Mar-07	Mar-07	1
GSBG-4	13T30F	SY-103	Grab	1	5	5	LL	222-S	17-Mar-07	Dilution Adjustment	GSBG-4	25-Mar-07	Mar-07	5
GSCB-4	15R30C1	AP-102 (1SY)	Grab	1	5	5	LL - Process Control	222-S	08-May-07	Feed Adjustment	GSCB-4	22-May-07	May-07	5
GSCD-4	15R10A	AP-102 (1SY)	Grab	1	19	19	LL - Qualification	222-S	18-May-07	Doesnot include Environmental DQOs	GSCD-4	16-Jul-07	Jul-07	19
GSDU-4	15R85C1	AP-104 (1SY)	Grab	1	5	5	LL - Process Control	222-S	13-Aug-07	Feed Adjustment	GSDU-4	27-Aug-07	Aug-07	5
GSDW-4	15R45A	AP-104 (1SY)	Grab	1	19	19	LL - Qualification	222-S	20-Aug-07	Doesnot include Environmental DQOs	GSDW-4	17-Sep-07	Sep-07	19
GSCG-4	15T30C1	AP-102 (3SY)	Grab	1	5	5	LL	222-S	02-Dec-07	Feed Adjustment	GSCG-4	16-Dec-07	Dec-07	5
Totals 2007														
GSBZ-4	15T10A	AP-102 (3SY)	Grab	1	19	19	LL - Qualification	222-S	11-Jan-08	Doesnot include Environmental DQOs	GSBZ-4	08-Feb-08	Feb-08	19
GSDX-4	15T85C1	AP-104 (3SY)	Grab	1	5	5	LL - Process Control	222-S	04-Feb-08	Feed Adjustment	GSDX-4	18-Feb-08	Feb-08	5
GSDT-4	15T45A	AP-104 (3SY)	Grab	1	19	19	LL - Qualification	222-S	17-Mar-08	Doesnot include Environmental DQOs	GSDT-4	14-Apr-08	Apr-08	19

GSBP-4	A-104	Grab					P/IN							
GSBQ-4	B-101	Grab					P/IN							
GSBR-4	B-102	Grab					P/IN							
GSBW-4	B-103	Grab					P/IN							
GSBZ-4	B-104	Grab					P/IN							
GSBQ-4	B-105	Grab					P/IN							
GSBR-4	B-110	Grab					P/IN							
GSBW-4	B-111	Grab					P/IN							
GSBZ-4	B-112	Grab					P/IN							
GSBQ-4	B-201	Grab					P/IN							
GSBR-4	B-202	Grab					P/IN							



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Includes Sa

SPG	FH COND	OTHER	MASS											OTHER RADIO	Estimated Cost Sub Dollars	Program Sub	
RSST																	
3.3		1.5			3.3	2.3	0.3							1.5	0.3	\$306,516	RSAC-4
3		2			3									1		\$85,440	PS15-4
3		2			3									1		\$128,160	RSAD-4
3		1.5	2		3									1.5		\$85,440	PS55-4
1	2					1	1	1						1	1	\$64,080	GS68-4
3		1.5	2		3									1.5		\$128,160	RS52-4
1	2					1	1	1	1					1	1	\$64,080	GSJK-4
1	2	2.5			1	1	1	1	1	1	1	1	1	1	1	\$64,080	GSXA-4
1	2	2.5			1	1	1	1	1	1	1	1	1	1	1	\$64,080	GSHS-4
3		1.5			3									1.5		\$132,432	PS44-4
3		1.5			3									1.5		\$39,160	PS38-4

																\$0	AS16-4
																\$202,920	GSHT-4
1	2	0.5			1	1	1						1	1		\$0	GSJU-4

																\$0	VS14-4
						2								1		\$42,720	GSDA-4
						2								1		\$21,360	RS96-4

																\$0	RS86-4
																\$0	RSF-4
																\$0	RSF-4
3		1			3.5									1		\$242,792	PS28-4

																\$0	VS7-4
																\$0	VS9U-4
1		0.3	1		1	1	1	1					1	1	1	\$142,400	ASGS-4
3.3		1.5			3.3	2.3	0.3						1.5	0.3		\$0	PS53-4

						2								1		\$0	US17-4
																\$0	GSX2-4
																\$0	VS11-4
0.34	0.68	0.34			0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	2	GSQU-4

3.3		1.5			3.3	2.3	0.3						1.5	0.3		\$0	PS15-4
1	2				1	1	1						1	1		\$0	RS45-4

																\$0	GSJY-4
																\$0	VS10-4

0.34	0.68	0.34			0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	2	GSJY-4
3.2		2			3.2	2.2	2.2						2.5	2.2		\$0	PS04-4
0.34	0.68	0.34			0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	2	GSJW-4
0.34	0.68	0.34			0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	2	GSDF-4
3.3		1.5			3.3	2.3	0.3						1.5	0.3		\$198,648	RSAY-4

0.34	0.68	0.34			0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	2	GS23-4

																\$0	GS04-4
																\$0	GS04-4
3	3	4	2		103	81							103	70		\$150,000	Disorder
3.1					2	2	2	2	1	1			2	2	1	\$322,359	GSFE-4
		0.2			3.1	2.1	2.1						2.1			\$285,512	PS10-4
3																\$0	GSDD-4

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										2		estimated - Project W-320	GSFD-4
2	1	1								2		estimated - Project W-320	USGM-4
2	1	2								2		estimated - Project W-320	GSFK-4
3.3		1.5		3.3	2.3	0.3				1.5	0.3	estimated - Project W-320	GSFH-4
0.34	0.68	0.34		0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	RS73-4
2	2	2											\$341,760
1	1			1	2							2	\$0
0.34	0.68	0.34		0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	GSGB-4
2	1	1										2	estimated - Project W-320
2	1	2										2	estimated - Project W-320
3.1	0.2			3.1	2.1	2.1						2	estimated - Project W-320
2	1	1										2	estimated - Project W-320
0.34	0.68	0.34		0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	GSJ-4
3.3		1.5		3.3	2.3	0.3						1.5	GSJL-4
4	3		2	2	2	2	2	2	2	2	2	2	PS54-4
2	1	2		2	2							2	\$0
37				103	81						103	70	estimated - Project W-320
3	3	4	2	2	2	2	2	1	1	2	2	1	\$150,000
0.34	0.68	0.34		0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	Disseolio
3	3	4	2	2	2	2	2	1	1	2	2	1	\$322,359
1	2	2.5		1	1	1	1	1	1	1	1	1	\$0
													Assumes 100% Liquid/Solid
													GSAX-4
													\$0
													Assumes 100% Liquid/Solid
													\$1,418,380
													PS54-4
													\$0
													Does not include Environmental Analysis
													\$23,182
													\$0
													RS95-4
													RS33-4
													Disseolio
													\$150,000
													\$322,359
													Assumes 100% Liquid/Solid
													\$0
													GSAX-4
													PS23-4
													Estimated
													\$0
													GSGL-4
													\$0
													GSXF-4
													\$0
													RS42-4
													\$0
													Assumes 100% Liquid/Solid
													\$967,077
													PS23-4
													\$0
													GSXG-4
													\$0
													GSQM-4
													\$0
													GSQP-4
													\$0
													GSQR-4
													\$0
													RS71-4
													\$427,200
													\$0
													AS39-4
													\$0
													RS32-4
													\$0
													AS48-4
													\$0
													RS12-4
													\$0
													GSQN-4
													\$0
													RSJ-4
													\$0
													GSAY-4
													\$322,359
													Assumes 100% Liquid/Solid
													\$322,359
													Assumes 100% Liquid/Solid
													\$83,454
													Does not include Environmental Analysis
													\$0
													PS43-4
													\$0
													RS16-4
													\$0
													PS84-4
													\$0
													Estimated
													\$0
													PS37-4
													\$0
													RS78-4
													\$0
													GSQQ-4
													\$0
													AS35-4
													\$0
													RS33-4
													\$0
													RS77-4
													\$0
													RS74-4
													\$0
													RS68-4
													\$0
													RS13-4

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3		2		3						1					Estimated	\$0	PS45-4
2	3		2	2	2	2	2	2	2	2	2	2	2	2		\$154,784	GS6X-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS66-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS10-4
3		2		3						1					Estimated	\$0	PS46-4
2	3		2	2	2	2	2	2	2	2	2	2	2	2		\$154,784	GSES-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS94-4
2	3		2	2	2	2	2	2	2	2	2	2	2	2		\$154,784	GSEV-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS14-4
4	3		2	2	2	2	2	2	2	2	2	2	2	2		\$181,804	GSEY-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS76-4
1	1													estimated	\$10,000	GSEZ-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS15-4
1	1													estimated	\$10,000	GSAZ-4	
1	1													estimated	\$10,000	GSCK-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS84-4
1	1				1	1	1			1		1		estimated	\$206,059	GSD-4	
1	1				1	1	1			1		1	1	estimated	\$206,059	GSCM-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS46-4
3	3	4	2	2	2	2	2	1	1	2	2	1	2	2	Assumes 100% Liquid/Solid	\$322,359	GSFN-4
1	1													estimated	\$10,000	GSEP-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS93-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RSAE-4
1	1													estimated	\$10,000	GSCN-4	
1	1													estimated	\$10,000	GSEQ-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS17-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RSQ2-4
1	1				1	1	1			1		1		estimated	\$206,059	GSBH-4	
1	1				1	1	1			1		1		estimated	\$206,059	GSCQ-4	
2	3		2	2	2	2	2	2	2	2	2	2	2			\$154,784	GSFP-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS69-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RSAH-4
2	3		2	2	2	2	2	2	2	2	2	2	2			\$154,784	GSFQ-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS74-4
2	3		2	2	2	2	2	2	2	2	2	2	2			\$154,784	GSFR-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS09-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS79-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS55-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS21-4
4	3		2	2	2	2	2	2	2	2	2	2	2			\$181,804	GSFS-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS85-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS72-4
1	1													estimated	\$10,000	GSER-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS70-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS60-4
1	1													estimated	\$10,000	GSDJ-4	
1	1													estimated	\$10,000	GSCR-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RSAF-4
1	1				1	1	1			1		1		estimated	\$206,059	GSBL-4	
1	1				1	1	1			1		1		estimated	\$206,059	GSDT-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RSAG-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS63-4
2	3		2	2	2	2	2	2	2	2	2	2	2			\$154,784	GSFU-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS22-4
2	3		2	2	2	2	2	2	2	2	2	2	2			\$154,784	GSFV-4
1	1													estimated	\$10,000	GSFT-4	
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS92-4
3.3		1.5		3.3	2.3	0.3				1.5						\$0	RS97-4

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1	1																	estimated	\$10,000	GSBM-4		
1	1																	estimated	\$10,000	GSCU-4		
2	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2	estimated	\$154,784	GSFY-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSBP-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSCW-4		
3,3	3	1.5		3.3	2.3	0.3						1.5		0.3				estimated	\$0	RS98-4		
4	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2	estimated	\$181,804	GSFW-4		
1	1																	estimated	\$10,000	GSBQ-4		
1	1																	estimated	\$10,000	GSCX-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSBR-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSCZ-4		
1	1																	estimated	\$10,000	GSBS-4		
1	1																	estimated	\$10,000	GSEM-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSBT-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSDB-4		
1	1	1			1	1	1					1		1	1			estimated	\$206,059	GSDZ-4		
1	1																	estimated	\$10,000	GSFK-4		
1	1		2		2	2	2	2	2	2	2	2	2	2	2	2	2	estimated	\$154,784	GSEW-4		
2	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2	estimated	\$10,000	GSCJ-4		
2	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2	estimated	\$154,784	GSBK-4		
1	1																	estimated	\$10,000	GSEB-4		
2	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2		\$154,784	GSBN-4		
1	1	37			103	81											103	70		\$150,000	Dissolutio	
1	1																		estimated	\$10,000	GSBF-4	
4	3		2		2	2	2	2	2	2	2	2	2	2	2	2	2		\$181,804	GSBU-4		
1	1																		estimated	\$10,000	GSBW-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSBV-4	
1	1																		estimated	\$10,000	GSDV-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSDN-4	
1	1																		estimated	\$10,000	GSCA-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSBY-4	
1	1																		estimated	\$10,000	GSDP-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSDS-4	
1	1	37			103	81												103	70		\$150,000	Dissolutio
1	1																		estimated	\$10,000	GSBG-4	
1	1																		estimated	\$10,000	GSCC-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSCD-4	
1	1																		estimated	\$10,000	GSDU-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSDW-4	
1	1																		estimated	\$10,000	GSCG-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSBZ-4	
1	1																		estimated	\$10,000	GSDX-4	
1	1	1			1	1	1					1		1	1				estimated	\$206,059	GSDT-4	

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ples + Duplicates

Regt ID	Reint	Number of Sample	Sort	Radiation	Report	Notification	Turnaround	Special QC	Sample	LabType	Extract	Bulk Composit	Ship to Archive Location	VOA	PEST	WTPH OIL	FLASH	OTHER	DSC	WET	TIC				
Complete	Complete																								
23-Dec-97	Dec-97	16	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	32	32	0	0	0	0	32	105.6	105.6	211.2	32	89.6	
07-Jul-97	Jul-97	4	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	4	0	0	0	0	0	8	24	24	48	0	12	
11-Jan-98	Jan-98	6	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	12	0	0	0	0	0	12	36	36	72	0	16	
28-Jul-97	Jul-97	4	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	4	0	0	0	0	0	8	24	24	48	16	16	
29-Oct-97	Oct-97	0	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	
08-Feb-98	Feb-98	6	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	12	0	0	0	0	0	12	36	36	72	24	24	
16-Nov-97	Nov-97	0	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	
25-Aug-97	Aug-97	5	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	20	0	0	10	10	10	20	10	25	
11-Sep-97	Sep-97	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	12	0	0	6	6	6	12	12	15	
16-Sep-97	Sep-97	6	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	12	0	0	0	0	0	12	36	36	72	0	24	
23-Sep-97	Sep-97	2	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	4	0	0	0	0	0	4	12	12	24	0	8	
01-Jan-98	Jan-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	6	0	0	0	0	0	
10-Oct-97	Oct-97	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	6	6	6	12	6	6	
17-Oct-97	Oct-97	2	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	4	4	0	0	0	0	0	0	4	16	0	0	
19-Apr-98	Apr-98	1	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	2	2	0	0	0	0	0	2	8	0	0	0	
31-Oct-97	Oct-97	11	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	22	0	0	0	0	0	132	66	66	132	0	88	
26-Nov-97	Nov-97	4	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	8	0	0	0	0	0	9.6	10.4	8	16	0	6.4	
25-May-98	May-98	11	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	22	22	0	0	0	0	22	72.6	72.6	145.2	22	61.6	
09-Jun-98	Jun-98	3	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	6	6	0	0	0	0	0	6	24	0	0	0	
12-Dec-97	Dec-97	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	2.04	2.04	4.08	2.04	2.04	
14-Jun-98	Jun-98	9	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	18	18	0	0	0	0	18	58.4	58.4	116.8	18	50.4	
19-Mar-98	Mar-98	4	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	8	0	0	0	0	0	8	8	8	16	8	8	
07-Jan-98	Jan-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	
05-Jan-98	Jan-98	30	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	60	60	0	120	0	0	0	420	192	192	384	0	342
14-Jan-98	Jan-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	2.04	2.04	4.08	2.04	2.04	
21-Jan-98	Jan-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	2.04	2.04	4.08	2.04	2.04	
20-Jul-98	Jul-98	9	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	18	18	0	0	0	0	18	59.4	59.4	118.8	18	50.4	
25-Jan-98	Jan-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	2.04	2.04	4.08	2.04	2.04	
01-Feb-98	Feb-98	1	Archive	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	128	154	68	98	264		
05-Aug-98	Aug-98	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	0	10	0	0	10	20	20	10	20	20	
10-Feb-98	Feb-98	11	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	22	22	0	48.4	0	0	22	88.2	116.6	132	48.4	70.4	
12-May-98	May-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	6	0	0	0	0	0	

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18-Feb-98	Feb-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	6	0	0	0	0	0	0	0	2.04	2.04	4.08	2.04	2.04	
20-Feb-98	Feb-98	4	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	8	0	0	0	0	0	0	0	0	9.6	10.4	8	16	0	6.4
21-May-98 TWRS Archive RCRA LAB																											
27-May-98	May-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
01-Sep-98	Sep-98	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	0	10	0	0	0	0	0	10	20	10	20	20	20
11-Mar-98	Mar-98	11	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	22	22	0	48.4	0	0	0	0	0	22	88.2	116.6	132	48.4	70.4
10-Jun-98	Jun-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
12-Sep-98	Sep-98	26	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	52	52	0	0	0	0	0	0	0	52	171.6	171.6	343.2	52	145.6
14-Sep-98	Sep-98	24	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	48	48	0	0	0	0	0	0	0	48	158.4	158.4	316.8	48	134.4
08-Apr-98 TWRS Archive RCRA LAB																											
08-Apr-98	Apr-98	10	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	20	20	0	44	0	0	0	0	0	20	62	106	120	44	64
16-Aug-98	Aug-98	12	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	24	0	0	96	0	0	0	0	0	0	48	48	96	96	0
01-May-98 TWRS Archive RCRA LAB																											
01-May-98	May-98	34	Sludge	0	0	TWRS	0	14	TWRS	Archive	RCRA	LAB	98	98	98	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr-98 TWRS Archive RCRA LAB																											
24-Apr-98	Apr-98	1	0	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	2	0	0	0	0	0	0	0	0	2.4	2.6	2	4	0	1.6
03-Nov-98	Nov-98	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	20	20
14-May-98	May-98	4	Sludge	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	8	0	0	0	0	0	0	0	0	8	16	8	16	0	6.4
17-Nov-98	Nov-98	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	20	20
18-Nov-98 TWRS Archive RCRA LAB																											
18-Nov-98	Nov-98	18	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	32	32	0	0	0	0	0	0	0	32	105.6	105.6	211.2	32	89.6
25-May-98	May-98	1	Archive	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	128	184	68	98	284
02-Dec-98	Dec-98	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	20	20
22-Sep-98 TWRS Archive RCRA LAB																											
22-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
23-Dec-98	Dec-98	18	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	36	36	0	0	0	0	0	0	0	36	118.8	118.8	237.6	36	100.8
01-Jul-98	Jul-98	1	Archive	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	128	184	68	98	284
29-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
05-Jan-99	Jan-99	18	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	36	36	0	0	0	0	0	0	0	36	118.8	118.8	237.6	36	100.8
20-Jan-99 TWRS Archive RCRA LAB																											
20-Jan-99	Jan-99	0	Archive	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan-99	Jan-99	0	Archive	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan-99	Jan-99	0	Archive	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan-99	Jan-99	0	Archive	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug-98	Aug-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	RCRA	LAB	6	6	6	0	0	0	0	0	0	6	6	0	0	0	6
04-Aug-98	Aug-98	0	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-Sep-98	Sep-98	2	Liquid	0	0	TWRS	0	28	TWRS	Archive	RCRA	LAB	6	6	6	0	0	0	0	0	0	6	6	0	0	0	6
01-Feb-99	Feb-99	12	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	24	24	0	0	0	0	0	0	0	24	79.2	79.2	158.4	24	67.2
03-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	RCRA	LAB	6	6	0	0	0	0	0	0	0	6	6	0	0	0	6
02-Feb-99	Feb-99	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	10	20
09-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	0	0	0	6
09-Feb-99	Feb-99	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	10	20
15-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	PC	LAB	6	6	0	0	0	0	0	0	0	6	12	6	12	6	6
20-Aug-98	Aug-98	1	Archive	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	0	0	0	0	0	0	0	0	0	0	128	184	68	98	284
18-Nov-98	Nov-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
19-Sep-98 TWRS Archive RCRA LAB																											
19-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	PC	LAB	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug-98	Aug-98	1	Contn Pen	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	2	0	0	0	0	0	0	0	0	2.4	2.6	2	4	0	1.6
23-Feb-99	Feb-99	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	10	20
25-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	0	0	0	6
02-Dec-98	Dec-98	3	Liquid	0	0	TWRS	0	90	TWRS	Archive	RCRA	LAB	6	0	0	0	0	0	0	0	0	6	6	12	6	6	6
03-Sep-98	Sep-98	3	Liquid	0	0	TWRS	0	0	TWRS	Archive	RCRA	LAB	6	0	0	24	0	0	0	0	0	0	12	12	24	24	0
09-Mar-99	Mar-99	18	Sludge	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	36	36	0	0	0	0	0	0	0	36	118.8	118.8	237.6	36	100.8
10-Mar-99	Mar-99	5	Liquid	0	0	TWRS	0	180	TWRS	Archive	RCRA	LAB	10	10	10	10	0	0	0	0	0	10	20	10	20	10	20
11-Oct-88	Oct-88	3	Liquid	0	0	TWRS	0	28	TWRS	Archive	PC	LAB	6	6	0	0	0	0	0	0	0	6	12	6	12	6	6

SPG PH COND OTHER MASS

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OTHER RADIO

0	0	0	0	105.6	0	112	0	0	105.6	73.6	9.6	0	0	0	0	0	0	48	0	9.6	0	0	0	0	
0	0	0	0	24	0	24	0	0	24	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	
0	0	0	0	36	0	36	0	0	36	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	
0	0	0	0	24	0	20	16	0	24	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	36	0	30	24	0	36	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	10	20	25	0	0	10	10	10	10	10	10	10	10	10	10	10	10	10	0	40	0	
3	0	0	0	6	12	15	0	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	24	0	
0	0	0	0	36	0	30	0	0	36	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	
0	0	0	0	12	0	10	0	0	12	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	
0	0	0	0	0	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	6	12	3	0	0	6	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0	
4	0	0	0	0	0	12	0	0	8	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	
2	0	0	0	0	0	6	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	66	0	44	0	0	77	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	
0	0	0	0	8	0	10.4	8	0	8	8	0	8	0	0	0	0	0	8	0	8	8	0	0	0	
0	0	0	0	72.6	0	77	0	0	72.6	50.6	6.6	0	0	0	0	0	0	33	0	6.6	0	0	0	0	
8	0	0	0	0	0	18	0	0	12	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	
0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12
0	0	0	0	59.4	0	63	0	0	59.4	41.4	5.4	0	0	0	0	0	0	27	0	5.4	0	0	0	0	
0	0	0	0	8	16	8	0	0	0	8	8	8	0	0	0	0	0	8	0	8	0	0	0	0	
6	0	0	0	150.04	20.08	364.44	8	0	154.04	110.04	22.04	18.04	2.04	2.04	2.04	2.04	2.04	84.04	0	30.04	10.04	0	0	0	
0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12
0	0	0	0	192	0	240	0	0	192	132	132	0	0	0	0	0	0	150	0	132	0	0	0	0	
0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12	
0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12	
0	0	0	0	59.4	0	63	0	0	59.4	41.4	5.4	0	0	0	0	0	0	27	0	5.4	0	0	0	0	
0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12	
0	0	0	0	0	74	0	0	0	206	162	0	0	0	0	0	0	0	206	140	0	0	0	0	0	
2.0	20	0	0	30	30	60	20	0	20	20	20	20	10	10	10	10	0	20	20	0	20	0	20	Assumes 100% Liquid/Solid	
4.4	0	0	0	68.2	0	48.4	0	0	68.2	48.2	48.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

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0	0	0	0	2.04	4.08	8.04	0	0	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	0	2.04	2.04	0	12	0
0	0	0	0	8	0	16.4	8	0	8	8	0	8	0	0	0	8	0	8	8	0	0	0
0	0	0	0	6	12	6	0	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0
20	20	0	0	30	30	60	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
4.4	0	0	0	68.2	0	48.4	0	0	68.2	48.2	48.2	0	0	0	0	0	48.2	0	0	0	0	0
0	0	0	0	6	12	6	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0	0
0	0	0	0	171.6	0	162	0	0	171.6	118.6	15.6	0	0	0	78	0	15.6	0	0	0	0	0
0	0	0	0	158.4	0	168	0	0	158.4	110.4	14.4	0	0	0	72	0	14.4	0	0	0	0	0
4	0	0	0	62	0	44	0	0	62	42	42	0	0	0	0	0	42	0	0	0	0	0
0	0	0	0	24	48	24	48	0	0	48	0	0	0	0	0	48	0	0	0	0	48	0
0	0	0	0	0	0	204	0	0	68	68	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	2	0	2.6	2	0	2	2	0	2	0	0	2	0	2	2	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	8	0	10.4	8	0	8	8	0	8	0	0	8	0	8	8	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	105.8	0	112	0	0	105.6	73.6	9.6	0	0	0	48	0	9.6	0	0	0	0	0
0	0	0	0	0	74	0	0	0	206	162	0	0	0	0	0	0	206	140	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	6	12	6	0	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0
0	0	0	0	118.8	0	126	0	0	118.8	82.8	10.8	0	0	0	54	0	10.8	0	0	0	0	0
0	0	0	0	0	74	0	0	0	206	162	0	0	0	0	0	0	206	140	0	0	0	0
0	0	0	0	6	12	6	0	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0
0	0	0	0	118.8	0	126	0	0	118.8	82.8	10.8	0	0	0	54	0	10.8	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	6	0	0	6	6	24	0	0	0	6	6	6	0	0	6	0	6	6	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	6	6	6	0	0	6	12	0	0	0	0	0	0	12	0	0	0	0	0
0	0	0	0	79.2	0	84	0	0	79.2	55.2	7.2	0	0	0	36	0	7.2	0	0	0	0	0
0	0	0	0	6	6	6	0	0	6	12	0	0	0	0	0	0	12	0	0	0	0	0
20	20	0	0	30	30	60	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	12	6	12	0	0	0	12	0	0	0	0	0	0	12	0	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	12	6	18	0	0	12	12	0	0	0	0	0	0	12	0	0	0	0	0
0	0	0	0	0	74	0	0	0	206	162	0	0	0	0	0	0	206	140	0	0	0	0
0	0	0	0	6	12	6	0	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0
0	0	0	0	12	6	18	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
0	0	0	0	2	0	2.6	2	0	2	2	0	2	0	0	2	0	2	2	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	12	6	12	0	0	0	12	0	0	0	0	0	0	12	0	0	0	0	0
0	0	0	0	6	12	6	0	0	0	6	6	6	0	0	0	6	0	6	0	0	0	0
0	0	0	0	6	12	6	12	0	0	12	0	0	0	0	0	12	0	0	0	0	12	0
0	0	0	0	118.8	0	126	0	0	118.8	82.8	10.8	0	0	0	54	0	10.8	0	0	0	0	0
20	20	0	0	30	30	70	20	0	20	20	20	10	10	0	20	20	10	20	0	20	Assumes 100% Liquid/Solid	0
0	0	0	0	12	6	18	0	0	12	12	0	0	0	0	0	0	12	0	0	0	0	0

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APPENDIX III

SOLID WASTE
PROGRAM INPUTS

C-1-10

From: Christian_R_Haas@apexc.rl.gov
 Sent: Thursday, December 18, 1997 1:46 PM
 To: Thomas_G_Ibsen@apimc01.rl.gov
 Cc: Kent_M_McDonald@apexc.rl.gov; Steven_M_Joyce@apimc01.rl.gov
 Subject: Re: Sample Projections - May 1997 Data

tplt/197

swm/197



MS Excel spreadsheet MS Excel spreadsheet

Tom,

Attached you will find the updated sample projections for all of Solid Waste Project- including CWC, MWT, and T Plant. In addition, Solid Waste Project has budgeted \$148.8K for sampling activities in FY1998.

If you have any questions, please contact me or Kent.

Thanks,
 Chris

Reply Separator

Subject: Sample Projections - May 1997 Data
 Author: Thomas_G_Ibsen@apimc01.rl.gov at ~EXCHANGE
 Date: 12/11/97 7:43 AM

Chris,

Attached is the data from the May 1997 submittal (excel file, just modify it), and forms for sample and data management (wp5.1 format), and development samples (wp5.1 format) if they apply. A template (excel file) for the sample projections is also included if you want to start from scratch.

If you have any problems give me a call.

Tom
 372-2095

Joyce, Steven M

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From: Norman_P_Willis@apexc.rl.gov
Sent: Tuesday, December 23, 1997 12:00 PM
Cc: Steven_M_Joyce@apimc01.rl.gov; Thomas_G_lbsen@apimc01.rl.gov
Subject: Re: Sample Projections - WRAP May 1997 Data



S Excel spreadsheet S Excel spreadsheet

See attached files for the latest forecast.

Norm Willis

Reply Separator

Subject: Sample Projections - WRAP May 1997 Data
Author: Thomas_G_lbsen@apimc01.rl.gov at ~EXCHANGE
Date: 12/22/97 08:59 AM

Norm,

Attached are excel files with the May 1997 Wrap sample and funding projections and a blank template. Modification of the May data will likely be easier though.

Also included are WordPerfect (version 5.1) files with sample and data management information.

Please update the files you can and return them as soon as you can.

If you have any problems give me a call.

Tom
372-2095

Program Sample Projection Funding

WRAP1	5/1/97	1998	2320	12
WRAP1	5/1/97	1999	2320	28
WRAP1	5/1/97	2000	2320	28
WRAP1	5/1/97	2001	2320	28
WRAP1	5/1/97	2002	2320	28
WRAP1NDAOP	5/1/97	1998	2320	1157
WRAP1NDAOP	5/1/97	1999	2320	1298
WRAP1NDAOP	5/1/97	2000	2320	1348
WRAP1NDAOP	5/1/97	2001	2320	1723
WRAP1NDAOP	5/1/97	2002	2320	1768

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wrap0597.xls

INPUT REQUEST FORM

PROGRAM

SW

SUBPROGRAM

Listed

RCMTID	Site SubProgramID	RqmtDate	RqmtYr	NoSamples	SampleMatrix	SortMatrix	AcidSolubExtr	PCoefRqmt	HeptachlorEtoxRqmt	Tri-n-butylRqmt	StyreneRqmt	SampleDiposal	Protocol	LabType (Lab or Field)	VOA SVOCs	ESTRAC	WPH/OLIGREASE	FLASHPOINT	OTHER ORGANIC	ANIONS
WRAP1		05/01/97	1998	4	SOLID	SOLID/SOIL	3	E	OTH	14		R	RCRA	Lab	4	4	0	0	4	4
WRAP1		05/01/97	1998	2	SOLID	SOLID/SOIL	5	E	OTH	14		R	RCRA	Lab	2	2	0	0	2	2
WRAP1		05/01/97	1998	4	LIQUID	LIQUID	3	E	OTH	14		R	RCRA	Lab	4	4	4	4	4	4
WRAP1		05/01/97	1998	2	LIQUID	LIQUID	5	E	OTH	14		R	RCRA	Lab	2	2	2	2	2	2
WRAP1		05/01/97	1998	20	SOLID	SOLID/SOIL	3	E	OTH	30			10CFR834	Lab	0	0	0	0	0	0
WRAP1		05/01/97	1999	7	SOLID	SOLID/SOIL	3	E	OTH	14		R	RCRA	Lab	7	7	0	0	7	7
WRAP1		05/01/97	1999	3	SOLID	SOLID/SOIL	5	E	OTH	14		R	RCRA	Lab	3	3	0	0	3	3
WRAP1		05/01/97	1999	7	LIQUID	LIQUID	3	E	OTH	14		R	RCRA	Lab	7	7	7	7	7	7
WRAP1		05/01/97	1999	3	LIQUID	LIQUID	5	E	OTH	14		R	RCRA	Lab	3	3	3	3	3	3
WRAP1		05/01/97	1999	200	VAPOR	OTHER	3	E	OTH	14			RCRA	Field	0	0	0	0	675	0
WRAP1		05/01/97	1999	26	SOLID	SOLID/SOIL	3	E	OTH	30			10CFR834	Lab	0	0	0	0	0	0
WRAP1		05/01/97	2000	10	SOLID	SOLID/SOIL	3	E	OTH	14		R	RCRA	Lab	10	10	0	0	10	10
WRAP1		05/01/97	2000	5	SOLID	SOLID/SOIL	5	E	OTH	14		R	RCRA	Lab	5	5	0	0	5	5
WRAP1		05/01/97	2000	10	LIQUID	LIQUID	3	E	OTH	14		R	RCRA	Lab	10	10	10	10	10	10
WRAP1		05/01/97	2000	5	LIQUID	LIQUID	5	E	OTH	14		R	RCRA	Lab	5	5	5	5	5	5
WRAP1		05/01/97	2000	500	VAPOR	OTHER	3	E	OTH	14			RCRA	Field	0	0	0	0	500	0

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FROM/TO	Sub/Program/D	Sample/Date	RegUL	NC/Samples	Sample/Matr.	Soil/Matr.	Radionucl.	Repor/Int	Method/Int	Time/Int	Special/Int	Simple/Int	Trace/Int	Lab/Int	NOA/SVO	REST/CH	MTH/OL/GREASE	FLASH/INT	OTHER/ORGANIC	AMIONS
	WRAP1	05/01/87	2000	28	SOLID	SOLID/SOIL	3	E	OTH	30				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2001	15	SOLID	SOLID/SOIL	3	E	OTH	14		R		Lab	15	0	0	15	15	
	WRAP1	05/01/87	2001	5	SOLID	SOLID/SOIL	3	E	OTH	14		R		Lab	5	5	0	0	5	5
	WRAP1	05/01/87	2001	15	LIQUID	LIQUID	5	E	OTH	14		R		Lab	15	15	15	15	15	15
	WRAP1	05/01/87	2001	5	LIQUID	LIQUID	5	E	OTH	14		R		Lab	5	5	5	5	5	5
	WRAP1	05/01/87	2001	600	VAPOR	OTHER	3	E	OTH	14				Field	0	0	0	0	600	0
	WRAP1	05/01/87	2001	26	SOLID	SOLID/SOIL	3	E	OTH	30				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2002	15	SOLID	SOLID/SOIL	3	E	OTH	14		R		Lab	15	15	0	0	15	15
	WRAP1	05/01/87	2002	5	SOLID	SOLID/SOIL	5	E	OTH	14		R		Lab	5	5	0	0	5	5
	WRAP1	05/01/87	2002	15	LIQUID	LIQUID	3	E	OTH	14		R		Lab	15	15	15	15	15	15
	WRAP1	05/01/87	2002	5	LIQUID	LIQUID	5	E	OTH	14		R		Lab	5	5	5	5	5	5
	WRAP1	05/01/87	2002	600	VAPOR	OTHER	3	E	OTH	14				Field	0	0	0	0	600	0
	WRAP1	05/01/87	2002	26	SOLID	SOLID/SOIL	3	E	OTH	30				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	1998	3750	DRUM	OTHER	3	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	1998	1250	DRUM	OTHER	7	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	1999	3750	DRUM	OTHER	3	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	1999	1250	DRUM	OTHER	7	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2000	3750	DRUM	OTHER	3	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2000	1250	DRUM	OTHER	7	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2001	3750	DRUM	OTHER	3	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2001	1250	DRUM	OTHER	7	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2002	3750	DRUM	OTHER	3	E	OTH	7				Lab	0	0	0	0	0	0
	WRAP1	05/01/87	2002	1250	DRUM	OTHER	7	E	OTH	7				Lab	0	0	0	0	0	0

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RCMTID	SubProgramID	RamIDDate	RamYr	NoSamples	SampleMatrix	SortMatrix	RadionuclLevel	ReportRamt	NotificationRamt	TimecardRamt	SpillIndCtgmt	SampleDisposal	Contract	LabType (Lab or Field)	MOISVOT	PEST/CE	WTR/MUL/ORELSE	FLA SHPOUT	OTHER/ORGANIC	ANIONS
	WRAP1	05/01/97	1998	0	LIQUID	LIQUID	7	E	OTH	14		R	WIPP	Lab	0	0	0	0	0	0
	WRAP1	05/01/97	1999	7	LIQUID	LIQUID	7	E	OTH	14		R	WIPP	Lab	7	7	7	7	7	7
	WRAP1	05/01/97	2000	38	LIQUID	LIQUID	7	E	OTH	14		R	WIPP	Lab	30	30	30	30	30	30
	WRAP1	05/01/97	2001	39	LIQUID	LIQUID	7	E	OTH	14		R	WIPP	Lab	39	39	39	39	39	39
	WRAP1	05/01/97	2002	39	LIQUID	LIQUID	7	E	OTH	14		R	WIPP	Lab	39	39	39	39	39	39

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METALS	DSCTGA	WETCHEM	TIC/TOC	CH	HG	CR-VI	TCLP	DENSITY/SPG	PHOSPHOR	OTHERINORGANICS	MASS SPEC	ASBESTOS	AT/IB	GEA	LI	AM/241	C-14	H-3	P-32	SR-90	TC-99	NDA	OTHERRADIOCHEM	COMMENT	
4	0	0	0	4	4	4	4	4	4	4	0	0	4	0	0	0	0	0	0	0	0	4	4	4	
2	0	0	2	2	2	2	2	2	2	2	0	0	2	0	0	0	0	0	0	0	0	2	2	2	
4	0	0	4	4	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	4	4	4	
2	0	0	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	2	2	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	28	3	0	3	0	0	0	3	0	0	0	3	MESHAP'S STACK SAMPLES
7	0	0	0	7	7	7	7	7	7	7	7	7	7	0	0	0	0	0	0	7	0	0	7	7	
3	0	0	0	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	3	0	0	3	3	
7	0	0	7	7	7	7	7	7	7	7	7	7	0	0	0	0	0	0	0	0	0	7	7	7	
3	0	0	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	3	3	3	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HEAD GAS SAMPLES
0	0	0	0	0	0	0	0	0	0	0	0	0	28	4	0	4	0	0	0	4	0	0	4	4	MESHAP'S STACK SAMPLES
10	0	0	0	10	10	10	10	10	10	10	10	10	10	0	0	0	0	0	0	10	0	0	10	10	
5	0	0	0	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	5	0	0	5	5	
10	0	0	10	10	10	10	10	10	10	10	10	10	10	0	0	0	0	0	0	0	0	0	10	10	
5	0	0	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	5	5	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HEAD GAS SAMPLES

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METALS	DISC/TGA	WETCHEM	TI/TOTC	CN	HG	CR-VI	TCF	DENSITY/PC	PHOSPHOR	OTHER ORGANICS	MASS SPEC	ASBESTOS	ATTB	SEA	D	AM-241	C-14	H-2	S-78	PH-238/239/40	SE-78	SR-30	TC-89	NDA	OTHER RADIONUCLIDES	COMMENT	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TRU WPP compliance
7	0	0	7	7	7	7	0	7	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	TRU WPP compliance
30	0	0	30	30	30	30	0	30	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	TRU WPP compliance
39	0	0	39	39	39	39	0	39	39	39	39	0	0	0	0	0	0	0	0	0	0	0	0	39	39	39	TRU WPP compliance
39	0	0	39	39	39	39	0	39	39	39	39	0	0	0	0	0	0	0	0	0	0	0	0	39	39	39	TRU WPP compliance

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APPENDIX IV

LIQUID EFFLUENTS
PROGRAM INPUTS

D-1-11

From: Phillip_M_Phil_Olson@apexc.rl.gov
Sent: Tuesday, December 02, 1997 3:32 PM
To: Thomas_G_Ibsen@apimc01.rl.gov
Cc: Michael_J_Brown@apexc.rl.gov; Brian_H_Von_Bargen@apexc.rl.gov
Subject: Sample Projections - 200 Liquid Effluent May 1997 Data



S Excel spreadshee

The attached file is our best estimate for sample projections.

Phil Olson

Forward Header

Subject: Sample Projections - 200 Liquid Effluent May 1997 Data
Author: Brian H Von Bargen at ~HANFORD05E
Date: 12/1/97 8:38 AM

Phil,

Remember this biannual requirement? Looks like its coming around again. I'll stop by and we'll figure out how we want to update this.

Brian

Forward Header

Subject: Sample Projections - 200 Liquid Effluent May 1997 Data
Author: Thomas_G_Ibsen@apimc01.rl.gov at ~EXCHANGE
Date: 11/26/97 12:03 PM

Brian,

Steve Lowe said that you are the contact for the 200 area liquid effluents program for sample projections. I've sent you a copy of the letter requesting input that was sent to each company. Attached is the May 1997 data that you can just update if there are any changes.

The input was due 11/21/97 so please provide what you can as soon as possible.

Thanks, Tom
372-2095

From: Ibsen, Thomas G
Sent: Friday, January 16, 1998 12:06 PM
To: Joyce, Steven M
Subject: FW: Sample Projections

Steve,

Liquid Effluents 300 area projections.

Tom

-----Original Message-----

From: Lisa_D_Berneski@apexc.ri.gov [SMTP:Lisa_D_Berneski@apexc.ri.gov]
Sent: Wednesday, December 03, 1997 2:20 PM
To: Thomas_G_Ibsen@apimc01.ri.gov
Cc: Dale_L_Halgren@apexc.ri.gov
Subject: Sample Projections

Dale Halgren forwarded me the Excel File to update. If you have any questions, give me a call on 373-1112.



S Excel spreadshee

Lisa

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D-10		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000	5100	5200	5300	5400	5500	5600	5700	5800	5900	6000	6100	6200	6300	6400	6500	6600	6700	6800	6900	7000	7100	7200	7300	7400	7500	7600	7700	7800	7900	8000	8100	8200	8300	8400	8500	8600	8700	8800	8900	9000	9100	9200	9300	9400	9500	9600	9700	9800	9900	10000
10000	10001	10002	10003	10004	10005	10006	10007	10008	10009	10010	10011	10012	10013	10014	10015	10016	10017	10018	10019	10020	10021	10022	10023	10024	10025	10026	10027	10028	10029	10030	10031	10032	10033	10034	10035	10036	10037	10038	10039	10040	10041	10042	10043	10044	10045	10046	10047	10048	10049	10050	10051	10052	10053	10054	10055	10056	10057	10058	10059	10060	10061	10062	10063	10064	10065	10066	10067	10068	10069	10070	10071	10072	10073	10074	10075	10076	10077	10078	10079	10080	10081	10082	10083	10084	10085	10086	10087	10088	10089	10090	10091	10092	10093	10094	10095	10096	10097	10098	10099	10100	

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APPENDIX V

SPENT NUCLEAR FUELS
PROGRAM INPUTS

E-1-12

Rentgen — *S. J. Hyatt*

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CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

C. D. Lucas, DESH
373-1626

D. B. Van Leuven, WMH

DESH-9759898 R1

Subject: ANALYTICAL SERVICES PROJECTIONS UPDATE FOR NOVEMBER 1997

DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	

DE&S Hanford, Inc.

		D. C. Best	R3-13	X
		A. S. Daughtridge	R3-85	
		J. W. Foster	R3-11	
		J. R. Gregory	X3-72	
X	<i>[Signature]</i>	M. W. Gmyrek	X3-71	X
	<i>12/9/97</i>	F. G. Hudson	R3-11	X
X	<i>[Signature]</i>	P. G. Huntley	X3-72	X
	<i>12-9-97</i>	P. G. Leroy	R3-15	
		C. D. Lucas	X3-67	X
		C. T. Miller	X3-71	
		W. H. Rasin	R3-11	
		R. P. Ruth	R3-11	
		J. A. Swenson	R3-11	
		R. B. Wilkinson	R3-11	
		SNF Project Files	R3-11	X
		PGL File/LB	R3-15	X
		T. L. McConnell	H5-30	X
		<u>WMH</u>		
		P. K. Brockman	H1-11	X
		S. M. Joyce	H6-06	X
		C. R. Stroup	H6-06	X





DE&S
HANFORD

HNF-SD-WM-TI-608 Rev. 6

P.O. Box 350
Richland, WA 99352

December 9, 1997

DESH-9759898 R1

D. B. Van Leuven, President
and General Manager
Waste Management Federal Services of Hanford, Inc.
Post Office Box 700
Richland, Washington 99352

Dear Mr. Van Leuven:

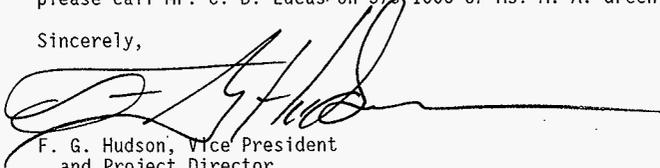
ANALYTICAL SERVICES PROJECTIONS UPDATE FOR NOVEMBER 1997

Reference: Letter, D. B. Van Leuven, WMH, to President, DESH, same
subject, WMH-9759898, dated October 31, 1997.

As requested in the Reference, attached is the analytical services
projections update provided by DE&S Hanford, Inc. for the Spent Nuclear
Fuel Project.

If you have specific questions regarding the information provided,
please call Mr. C. D. Lucas on 373-1006 or Ms. M. A. Green on 373-1463.

Sincerely,



F. G. Hudson, Vice President
and Project Director
Spent Nuclear Fuel Project

vlp

Attachment

HNF-SD-WM-TI-608 Rev. 6

DESH-9759898 R1

ATTACHMENT

Page 1 of 7
including this cover sheet

SubProgram Information

1197snsp
Program

SNF

SubProgramID	SubProgramName	ProgramID	Location	ContactName	Note
SNFFOPROC	SNF FACILITY OPS. PROCESS CONTROL SAMPLES	SNF	100K	Mary Ann Green	
SNFFOPS	SNF FACILITY OPS. PROCESS STANDARD SAMPLES	SNF	100K	Mary Ann Green	
SNFFOTANK	SNF FACILITY OPS. CVD TANKER SAMPLES	SNF	100K	Mary Ann Green	
SNFFOCVD	SNF FACILITY OPS. CVD PROCESS CONTROL SAMPLES	SNF	100K	Mary Ann Green	
SNFFONLOP	SNF FACILITY OPS. KW BACKWASH PIT SAMPLE	SNF	100K	Mary Ann Green	
SNFFOENVA	SNF FACILITY OPS. ENVIRONMENTAL AIR SAMPLES	SNF	100K	Mary Ann Green	
SNFFOENVW	SNF FACILITY OPS. ENV. WATER SAMPLES	SNF	100K	Mary Ann Green	
SNFFOTSS	SNF FACILITY OPS. 183KE HOLDUP BASIN SAMPLES	SNF	100K	Mary Ann Green	

E-5

1197snfd

Program Sample Projection Funding

SNF Program

FundCntr	SubProgramID	RqmtDDate	RqmtYr	FundingSource	FundingAmount	Note
	SNFFOPROC	11/01/97	1998		310K	
	SNFFOPS	11/01/97	1998			INCLUDED IN SNFFOPROC
	SNFFOTANK	11/01/97	1998			INCLUDED IN SNFFOPROC
	SNFFOCVD	11/01/97	1998			INCLUDED IN SNFFOPROC
	SNFFONLOP	11/01/97	1998			INCLUDED IN SNFFOPROC
	SNFFOENVA	11/01/97	1998		150K	
	SNFFOENVW	11/01/97	1998			INCLUDED IN SNFFOENVA
	SNFFOTSS	11/01/97	1998		5K	
	SNFFOPROC	11/01/97	1999		455K	
	SNFFOPS	11/01/97	1999			INCLUDED IN SNFFOPROC
	SNFFOTANK	11/01/97	1999			INCLUDED IN SNFFOPROC
	SNFFOCVD	11/01/97	1999			INCLUDED IN SNFFOPROC
	SNFFONLOP	11/01/97	1999			INCLUDED IN SNFFOPROC
	SNFFOENVA	11/01/97	1999		180K	
	SNFFOENVW	11/01/97	1999			INCLUDED IN SNFFOENVA

E-6

1197lefd
HNF-SD-WM-TI-608 Rev. 6

Fund Cntr	SubProgramID	RqmtIDDate	RqmtYr	FundingSource	FundingAmount	Note
	SNFFOTSS	11/01/97	1999		5K	
	SNFFOPROC	11/01/97	2000		630K	
	SNFFOPS	11/01/97	2000			INCLUDED IN SNFFOPROC
	SNFFOTANK	11/01/97	2000			INCLUDED IN SNFFOPROC
	SNFFOCVD	11/01/97	2000			INCLUDED IN SNFFOPROC
	SNFFONLOP	11/01/97	2000			INCLUDED IN SNFFOPROC
	SNFFOENVA	11/01/97	2000		190K	
	SNFFOENVW	11/01/97	2000			INCLUDED IN SNFFOENVA
	SNFFOTSS	11/01/97	2000		6K	
	SNFFOPROC	11/01/97	2001		640K	
	SNFFOPS	11/01/97	2001			INCLUDED IN SNFFOPROC
	SNFFOTANK	11/01/97	2001			INCLUDED IN SNFFOPROC
	SNFFOCVD	11/01/97	2001			INCLUDED IN SNFFOPROC
	SNFFONLOP	11/01/97	2001			INCLUDED IN SNFFOPROC
	SNFFOENVA	11/01/97	2001		200K	
	SNFFOENVW	11/01/97	2001			INCLUDED IN SNFFOENVA
	SNFFOTSS	11/01/97	2001		7K	
	SNFFOPROC	11/01/97	2002		650K	

B-7

FundCntr	SubProgramID	RqmdDate	RqmdYr	FundingSource	FundingAmount	Note
	SNFPOPS	11/01/97	2002			INCLUDED IN SNFPOPROC
	SNFOTANK	11/01/97	2002			INCLUDED IN SNFPOPROC
	SNFPOCVD	11/01/97	2002			INCLUDED IN SNFPOPROC
	SNFONLOP	11/01/97	2002			INCLUDED IN SNFPOPROC
	SNFOENVA	11/01/97	2002		210K	
	SNFOENVA	11/01/97	2002			INCLUDED IN SNFOENVA
	SNFOTSS	11/01/97	2002		8K	
	SNFPOPROC	11/01/97	2003		660K	
	SNFOPS	11/01/97	2003			INCLUDED IN SNFPOPROC
	SNFOTANK	11/01/97	2003			INCLUDED IN SNFPOPROC
	SNFPOCVD	11/01/97	2003			INCLUDED IN SNFPOPROC
	SNFONLOP	11/01/97	2003			INCLUDED IN SNFPOPROC
	SNFOENVA	11/01/97	2003		220K	
	SNFOENVA	11/01/97	2003			INCLUDED IN SNFOENVA
	SNFOTSS	11/01/97	2003		9K	

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E-9
PROGRAM
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LISTED

ATTACHMENT II
SAMPLING, FIELD, AND LABORATORY PROJECTIONS

PROGRAM	DATE	TIME	LOCATION	DEPTH	TYPE	STATUS	REMARKS	LAB	RESULTS	UNIT	CONCENTRATION	REMARKS	LAB	RESULTS	UNIT	CONCENTRATION	REMARKS
PROGRAM LISTED	10/29/97	1338	24	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	24	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
	10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24
10/29/97	1338	0	1000	2	OH		LAB	24	24	24	24	LAB	24	24	24	24	

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HNF-SD-WM-TI-608 Rev.6

APPENDIX VI

TRANSITION PROJECTS
PROGRAM INPUTS

F-1-17

From: Ibsen, Thomas G
Sent: Friday, January 16, 1998 12:08 PM
To: Joyce, Steven M
Subject: FW: PFP 6 MNTH SAMPLE PROJECTION UPDATE

Steve,

Transition Projects PFP sample projections.

Tom

-----Original Message-----

From: Joyce, Steven M
Sent: Thursday, November 20, 1997 7:30 AM
To: Ibsen, Thomas G
Subject: FW: PFP 6 MNTH SAMPLE PROJECTION UPDATE

-----Original Message-----

From: George_A_Westsik@apexc.ri.gov [SMTP:George_A_Westsik@apexc.ri.gov]
Sent: Wednesday, November 19, 1997 6:10 PM
To: Steven_M_Joyce@apimc01.ri.gov; Alan_A_Grasher@apimc01.ri.gov
Cc: E_W_Liz_Curfman@apexc.ri.gov; Peter_D_Jensen@apexc.ri.gov; George_A_Westsik@apexc.ri.gov
Subject: PFP 6 MNTH SAMPLE PROJECTION UPDATE

Please see attached. Please contact me if you have any questions.



S Excel spreadshee

George Westsik

1197asfd
HNF-SD-WM-TI-608 Rev. 6

1197pfpf.xls	TP	Program Sample Projection Funding				
FundCntr	SubProgramID	RqmtIDDate	RqmtYr	FundingSource	FundingAmount	Note
	PPFSOLIDWASTE	11/01/97	1998	TBD	0	TBD
	PPFSOLIDWASTE	11/01/97	1999	TBD	0	TBD
	PPFSOLIDWASTE	11/01/97	2000	TBD	0	TBD
	PPFSOLIDWASTE	11/01/97	2001	TBD	0	TBD
	PPFSOLIDWASTE	11/01/97	2002	TBD	0	TBD

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G10

F-8

From: Joyce, Steven M
Sent: Friday, November 21, 1997 1:29 PM
To: Ibsen, Thomas G
Subject: FW: LABORATORY PROJECTION UPDATE

-----Original Message-----

From: Grasher, Alan A
Sent: Friday, November 21, 1997 12:29 PM
To: Joyce, Steven M
Subject: FW: LABORATORY PROJECTION UPDATE

-----Original Message-----

From: Pappan, Jeffrey L
Sent: Thursday, November 20, 1997 2:07 PM
To: Grasher, Alan A
Cc: Pennock, Janice L (Jan); Smith, Donald K (Kent); Barron, Pamela K (Kay); Stewart, Susan D; Pappan, Jeffrey L; Speer, Dwayne R
Subject: LABORATORY PROJECTION UPDATE

AI -

Per our telephone conversation this afternoon, Jan Pennock has said that the MYWP for WESF is as accurate as we can be at this time, which would make the 05/01/97 submittal good with very few changes. Kent Smith has said after FY98, all stack samples become the responsibility of BHI, otherwise it's much the same. The Excel file is attached. If you have any questions, or if I can provide additional information, please call. Thanks.

Jeff Pappan



TPbplt-r1.xls

372-0120

WQ000

TP Report 1-18

TP
PROGRAM
SUBPROGRAM

TP	Subprogram	Activity	Code	Unit	Material	Quantity	Unit Price	Total Price	Notes
F-10	NONPOTABLE	WATER	100	24	LIN	1	1	1	1
	NONPOTABLE	WATER	100	1	LIN	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1
	NONPOTABLE	WATER	100	1	ADVERT	1	1	1	1

From: Lucinda_L_Penn@apexc.ri.gov
Sent: Monday, December 22, 1997 1:54 PM
To: Curtis_R_Stroup@apimc01.ri.gov; Alan_A_Grasher@apimc01.ri.gov;
Steven_M_Joyce@apimc01.ri.gov
Cc: Lucinda_L_Penn@apexc.ri.gov; Thomas_A_Tom_Dillhoff@apexc.ri.gov
Subject: laboratory usage update

Mr. Stroup.

I have reviewed the information sent by your office for potential modification. The next 6 months laboratory usage projection is identical to the current usage projection. No changes are necessary.

This constitutes the FFTF update for laboratory usage.

Lucinda Penn

Program Sample Projection Funding

3091197f.xls
Program TP

FundCntr	SubProgramID	RqmntDate	RqmntYr	FundingSource	FundingAmount	Note
	309TRANCHAR	11/1/97	1998	6643	51	
	309TRANCHAR	11/1/97	1999	6643	16	

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1196tpfd
Program TP

Program Sample Projection Funding

FundCntr	SubProgramID	RqmtDDate	RqmtYr	FundingSource	FundingAmount	Note
	309TRANCHAR	11/17/97 8	1998	6643	51	
	309TRANCHAR	11/17/97 2	1999	6643	16	



B&W Protec, Inc.

a McDermott company

HNF-SD-WM-TI-608 Rev. 6

P.O. Box 800
Richland, WA 99352-0800

Remenges
Copies to
3) S. Joyce

November 19, 1997

BWP-9759898 R1

Mr. D. B. Van Leuven, President and General Manager
Waste Management Federal Services
of Hanford, Inc. H6-10
Post Office Box 700
Richland, Washington 99352-0700

Dear Mr. Van Leuven:

ANALYTICAL SERVICES PROJECTIONS UPDATE FOR NOVEMBER 1997

Reference: Letter, D. B. Van Leuvan, WMH, to Distribution, same subject, WMH-9759898, dated October 31, 1997.

B&W Protec, Inc., does not make direct requests for analytical services. Any needs we may have are included by the facilities we support.

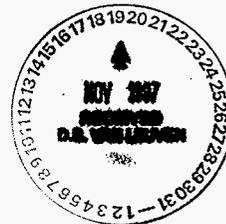
Sincerely,

D. L. Baker, Director
Safeguards and Security

jas

Correspondence Control A3-01

BWP - C. W. Walton L4-01



HNF-SD-WM-TI-608 Rev. 6

APPENDIX VII

SITE MONITORING PROGRAM INPUTS

G-1-17

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

B. J. Dixon, 376-7053

D. E. McKenney, WHM

DYN-9761049

Subject: ANALYTICAL SERVICES PROJECTION UPDATE FOR NOVEMBER 1997

DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		<u>Fluor Daniel hanford, Inc.</u>		
		T. J. Harper	H8-69	
		<u>Waste Management Federal</u>		
		<u>Services of Hanford, Inc.</u>		
		S. M. Joyce	H6-06	X
		<u>DynCorp Tri-Cities Services, Inc.</u>		
		D. S. Broussard	H5-33	
<u>B.H.W.</u>	<u>1/2/97</u>	B. J. Dixon	G3-25	X
<u>hjf</u>	<u>1/15/97</u>	R. S. Frix	H5-33	X
		L. S. McDaniel	G3-25	
<u>j</u>	<u>n</u>	J. L. Williams	H5-33	

Tri-Cities Services, Inc.
P.O. Box 1400
Richland, WA 99352
(509) 376-6068
FAX (509) 372-1938

November 21, 1997

DYN-9761049

Mr. R. T. Wilde, Vice President
Waste Management Services
Waste Management Federal Services of Hanford, Inc.
Post Office Box 700
Richland, Washington 99352-0700

Dear Mr. Wilde:

ANALYTICAL SERVICES PROJECTION UPDATE FOR NOVEMBER 1997

Reference: Letter, S. M. Joyce, WMH, to Distribution, same subject,
WMH-9759898, dated October 31, 1997.

The information on DynCorp Tri-Cities Services, Inc. analytical needs has been updated per your request in the referenced letter. The data was submitted electronically on November 21, 1997.

Please be advised that these updates are estimates based on historic analytical needs and our projection of future work activities. As an infrastructure services organization, our workscope is largely determined by the needs of others. These projections should not be considered to be a commitment that DYN will require these levels of analytical services work. It should also be noted that funding sources for such service have not yet been identified.

Should you have any questions please feel free to contact Mr. B. J. Dixon of my staff on 376-7053.

Sincerely,



Lon S. McDaniel, Director
Environmental, Safety, Health,
and Quality

mar

1196left
 HNF-SD-WM-TI-608 Rev. 6

0597smfd			Program Sample Projection Funding				
SM	Program						
Fund Ctr	SubProgramID	RqmtID	Date	Rqmt Yr	Funding Source	Funding Amount	Note
	DYNCORPCLEANUP	11/01/97		1998	TBD	0	
	DYNCORPCLEANUP	11/01/97		1999	TBD	0	
	DYNCORPCLEANUP	11/01/97		2000	TBD	0	
	DYNCORPCLEANUP	11/01/97		2001	TBD	0	
	DYNCORPCLEANUP	11/01/97		2002	TBD	0	
	DYNCORPCLEANUP	11/01/97		2003 -2046	TBD	0	
	DYNCORPWSCF	11/01/97		1998	TBD	0	
	DYNCORPWSCF	11/01/97		1999	TBD	0	
	DYNCORPWSCF	11/01/97		2000	TBD	0	
	DYNCORPWSCF	11/01/97		2001	TBD	0	
	DYNCORPWSCF	11/01/97		2002	TBD	0	
	DYNCORPWSCF	11/01/97		2003 -2046	TBD	0	

G-10

Pacific Northwest National Laboratory

Operated by Battelle for the U.S. Department of Energy

HNF-SD-WM-TI-608 Rev. 6

December 5, 1997

Mr. D. B. Van Leuven, President and General Manager
Waste Management Federal Services of Hanford, Inc.
P. O. Box 700
Richland, WA 99352-7000

Dear Mr. Van Leuven:

ANALYTICAL SERVICES PROJECTIONS UPDATE FOR NOVEMBER 1997

Ref: Your letter, same subject, dated October 31, 1997.

As requested in your letter, we have completed our projections of analytical needs for those projects that the Pacific Northwest National Laboratory is responsible. Those projections are attached in the format requested in your letter. I have also ensured that they have been electronically transmitted today to S. M. Joyce.

If you have any questions, please contact me, or Barbara Gillespie, at 376-5802.

Very truly yours,



J. M. Latkovich
Project Management Group

JML:ksg
Attachments

cc: S. M. Joyce, RFSH, w/att.

