DOE ORDER #
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MEDAHL, T.		
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RANN, H.P.		
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SETLOCK, G.H.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
SWILKINSON, R.B.		
SWILLIAMS, S. (ORC)		
SWILSON, J.M.		
SWYANT, R.B.		
SUSBY, W.S	X	X
SAKE, D.Y.Q.	✓	
Peterman, BD	✓	✓
Berman, SG	✓	✓
Anderson, GA	✓	✓
McHugh, MF	✓	✓
CORRES.CONTROL	X	X
RECORDS CTR (2)	X	X ✓
RM TRACKING		
TRAFFIC		

CLASSIFICATION

UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE
DOCUMENT CLASSIFICATION REVIEW WAIVER PER
DATE CLASSIFICATION OFFICE
REPLY TO RFP CC NO:
N/A

ACTION ITEM STATUS
PARTIAL/OPEN
X CLOSED

FOR APPROVALS:
ADP:

ORIG & TYPIST INITIALS
BDP dql

AR-46469 (Rev. 9/93)

EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.
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January 19, 1994

94-RF-00898

Richard J. Schassburger
Acting Director
Environmental Restoration Division
DOE, RFO

SUBMITTAL OF THE EVALUATION OF INDIVIDUAL HAZARDOUS SUBSTANCE SITES FOR THE INDUSTRIAL AREA OPERABLE UNITS (8, 9, 10, 12, 13, 14) - WSB-009-94

EG&G Rocky Flats, Inc. is submitting the formal first draft of the Industrial Area Operable Units (IA OU) Individual Hazardous Substance Sites (IHSS) Evaluation for OUs 8, 9, 10, 12, 13, and 14. The IA OU IHSS Evaluation provides the basis for the ongoing Strategic Planning effort for the IA and is utilized for the identification of IHSSs that should be linked to Decontamination and Decommissioning (D&D)/Transition, thus deferring environmental restoration activities currently scoped for the IA OUs.

The IA OU IHSS evaluation consists of two items, a detailed spreadsheet listing all the IHSSs within the IA OUs and a detailed narrative describing the spreadsheet. The spreadsheet and narrative were utilized to identify the physical aspects for each IHSS in a decision process to determine whether or not environmental characterization work should be linked to D&D/Transition schedules. The original IA OU IHSS evaluation was sent informally to Department of Energy, Rocky Flats Office (DOE, RFO), the Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH) for review and comment in May, 1993. A meeting with EPA, CDH, and DOE, RFO was held on September 29, 1993 to discuss the regulatory agencies' comments on the IHSS Evaluation. The enclosures have been developed with consideration of both DOE, RFO and the agency comments.

Two additional enclosures have been provided in conjunction with the IA OU IHSS Evaluation. These enclosures are to be used as backup documentation for each of the IHSSs listed in the spreadsheet. These enclosures include a narrative entitled "Process for Determining the Remediation Category of IHSSs" and a "Preliminary IHSS Evaluation Matrix." An example of a filled out IHSS Evaluation Matrix has also been provided.

All of the enclosures are in a preliminary draft format and EG&G Rocky Flats requests DOE, RFO's input and concurrence on the application of this process and approach prior to evaluating each IHSS in the IA in extensive detail. In particular the IHSS evaluation spreadsheet has been modified to included several new columns that are described in the

narrative and are not yet filled out completely. This additional information will be added following the completion of the detailed IHSS Evaluation Matrix and summary chart following DOE, RFO concurrence to this approach.

If you have any questions or require additional information regarding this matter, please contact B. D. Peterman at extension 8659 of Remediation Project Management.

W. S. Busby
Director
ERM/Remediation Project Management
EG&G Rocky Flats, Inc.

BDP:dql

Orig. and 1 cc - R. J. Schassburger

Attachments:
As Stated

cc:
R. H. Birk - DOE, RFO
S. R. Grace - " "
B. K. Thatcher - " "

INDUSTRIAL AREA OU INTEGRATION
IHSS EVALUATION

OUs 8, 9, 10, 12, 13, 14

Purpose

The purpose of this effort is to evaluate the Industrial Area Operable Units (IA OUs) to determine a basis for scheduling of intrusive fieldwork activities (consistent with the Phase I RFI/RI Work Plans) following implementation of the non-intrusive fieldwork in FY93 and FY94. In the most recent Five-Year Plan, intrusive fieldwork in all the IA OUs was categorically linked to completion of Transition/Decontamination & Decommissioning (T/D&D) efforts. The result of this assumption was that a majority of the intrusive work was pushed into the outyears by 5 to 22 years. There are Individual Hazardous Substance Sites (IHSSs) that need to be deferred to completion of D&D, especially large IHSSs adjacent to buildings, but there are several IHSSs that should not be linked to D&D efforts. Based on historical knowledge, these IHSSs will most likely require minimal intrusive work and may be closed in an accelerated manner. The main purpose of this effort is to identify these select IHSSs and move the corresponding work into the FY94 time frame.

Also, funding levels in FY93 were inadequate to maintain compliance with the IAG milestones, and this IHSS evaluation effort will provide the scope and schedule to support upcoming extension requests to the agencies for the IA OUs. Several factors that are considered for the IHSS evaluation and subsequent scheduling and implementation of intrusive work for the IA OUs are:

- Transition and D&D interaction
- Physical access restrictions e.g. utilities, building location/clearances
- Proposed intrusive activities
- Location and access
- OU Work Plan compliance
- Current and outyear funding levels

The information collected has been compared to a set of selection criteria used to provide the basis for estimating what work can be performed following the non-intrusive fieldwork and what work should be deferred. The work scope of each IA OU IHSS is limited to the initial stages of intrusive field work efforts used for the current Five-Year Plan. The individual Phase I RFI/RI Work Plans also detail some intrusive work, but most of the intrusive efforts will be determined by the results of the FY93 and FY94 non-intrusive fieldwork.

DRAFT

Each IA OU has been evaluated on an IHSSs by IHSSs basis. This effort is designed to meet three goals and is based on as much factual information as possible. These goals are:

1. Demonstrate to EPA and CDH that investigation of the IA OUs is dependent on D&D and transition efforts.

2. Provide definitive guidance for outyear planning efforts thereby reducing last minute planning decisions.

3. Provide a basis for extension requests for IA OU IAG milestones.

Process

Preliminary IHSS Evaluation Matrix

The first step is to determine the IHSSs' general remediation category: No Further Action (NFA), Potential Early Action (PEA), or Remedial Investigation/Feasibility Study (RI/FS) or T/D&D. These paths are determined through 16 criteria:

1. Exposure potential
2. Current environmental quality
3. Representativeness of data
4. Potential for contaminant migration
5. Environmental impact
6. Waste generation
7. Ease of waste disposal
8. Implementability
9. Flexibility
10. Technology
11. Design/implementation schedule
12. Worker safety
13. Work force
14. Achieves final resolution
15. Public and agency acceptability
16. Other

Each IHSS is evaluated against each of the 16 factors and given a score from 1 through 5 for each factor (see attached description "Process for Determining the Remediation Category of IHSSs"). The first four factors determine if there is a risk and if so, what is its extent? Factors 5-15 pertain to the efficacy of each IHSS through the implementation of a remedial action, even though the remedial action has not been determined. The last factor is a miscellaneous category which permits influence from other factors not necessarily pertinent to all IHSSs. A total score is then calculated for each IHSS. Three groups will emerge from the total score calculation: very high scores (NFA), medium scores (PEA), and very low scores (RI/FS or T/D&D). Examples of this process can be seen on the attached Preliminary IHSS Evaluation Matrix.

IHSS Selection Criteria Spreadsheet

The second question to be answered is which IHSSs should be linked to T/D&D and which IHSSs could be remediated through the RI/FS process immediately following the non-intrusive effort. The results of this effort are presented on the attached spreadsheet.

The spreadsheet provides a basis for meeting selection criteria by evaluating each IHSSs and then making a decision to move intrusive work into FY94-FY95 or to have the work linked to T/D&D efforts. The IHSS data presented is based on information from the Phase I RFI/RI Work Plans,

historical records, site photos, field inspections, and professional judgment. The idea is to provide the best information regarding the physical layout, location, access restrictions, paving, utility locations, and security requirements involved with each IHSS. The information is a result of RPM's ongoing effort to date.

None of the selection criteria are used separately to eliminate any IHSS from the early investigative process. Each IHSS is considered equally for its merits within a particular IHSS selection criteria. Also note that conditions of the IHSS can change and that the purpose of the IHSS selection is to balance the investigative process that must be performed on all the IHSSs with the available funding. Additionally, determinations made from this process will need to be revisited on a regular basis to maintain consistency with the preliminary data collection, changes in the T/D&D schedules, funding priorities, and regulatory agency and DOE concurrence with the methodology.

Industrial Area IHSS Selection Criteria

OU

The proper OU number for each of the IA OU IHSSs.

IHSS #

The reference number of the IHSS as per the respective OU's Work Plans.

Dimension

The approximate dimensions of each IA OU IHSS are listed in the attached spreadsheet. The dimensions are given and used for the basis of selecting IHSSs on size alone. The overall assumption that applies to this selection criteria is that smaller IHSSs inherently require less intrusive field work and are more likely to be accurately characterized earlier in the investigative process. Also, there is a higher probability that smaller IHSSs will meet closure criteria from implementation of the first stage of intrusive fieldwork. Thus, further requirements for investigation or remediation may be met and the IHSS closed. Size selection criteria only relates to the layout and relative size of the IHSS. No consideration is given to the type of contaminants, location of utilities, etc. Large IHSSs will not meet the size selection criteria, thereby reducing the relative weight for selecting the IHSS for early characterization. However, there still are instances where larger IHSSs have been selected for early investigation (IHSS 170 - P.U.&D. Yard in OU 10). The rationale for selection of large IHSSs would be explained on a case-by-case basis.

The IHSS dimension must be less that 100 ft. by 100 ft. (10,000 sq. ft.). For example an IHSS measuring 150 ft. by 20 ft. (3,000 sq. ft.) would meet the size selection criteria because the area is less than the allowable area.

If the IHSS meets the above selection criteria, the IHSS could be chosen for implementation of accelerated remediation. Even if the IHSS does not meet the selection criteria for size, other factors (utility location, proximity to buildings, etc.) are considered that may allow the IHSS to be selected.

Note: IHSS dimensions listed in the spreadsheet are approximate. The majority of the IHSSs vary in shape and are not actually rectangular areas. The dimensions in the spreadsheet are listed as rectangular dimensions to provide total coverage of the IHSS and to simplify the IHSS selection process.

Building #s

When applicable, the Building #s that are adjacent to the IHSSs are given.

Building %

This number represents the estimated percentage of how much of the IHSS area is covered by the previous column's building(s).

Accessibility

These criteria are mainly related to selecting an IHSS based on future T/D&D efforts. These criteria were used to provide a basis for overall selection of the IHSS:

- Surface Coverage - the type of IHSS surface material related to paving type i.e. asphalt, concrete, natural or artificial fill materials, determined from aerial photos and field inspections.

- Utility Locations - concerned mainly with overhead types of utilities. Underground utilities are likely to be a problem anywhere in the industrial area. Specific utility maps are being evaluated but were not part of this initial selection criteria.

- Stored Material - consists of materials stored on IHSSs which can include equipment, hazardous and non-hazardous waste material, stocked materials, etc. Usually items stored on IHSSs can be moved or worked around.

All of the access criteria were evaluated on an IHSS by IHSS basis from historical data, work plan information, and onsite field inspections. For this effort RPM performed field inspections on each IA OU IHSS. The main goal of the access criteria is to evaluate relative ease for performance of intrusive fieldwork. For example if any IHSS is paved with concrete and utilities are identified in the IHSS, then selection of the IHSS for early intrusive field work may not be possible, and investigation of the IHSS would be deferred until completion of T/D&D activities.

IHSS Obstructed by a "Permanent" Structure?

If the IHSS is obstructed by a "permanent" structure (parking lot, pad, valve vault, pipeline, etc.) potential for early intrusive fieldwork within the IHSS is greatly decreased. If there is little potential for contaminant migration then the IHSS will likely be investigated following T/D&D activities

Potential for Recontamination During D&D?

If the IHSS will likely be recontaminated during upcoming T/D&D activities, potential for accelerated cleanup of the IHSS is greatly decreased. However, if the contaminant migration potential while waiting for D&D activities outweighs the cost of "re-cleaning" the IHSS, the IHSS could be removed as an accelerated action.

Affected by Utilities?

The location of many utility lines within the IA are not known. "As-built" drawings of water, steam, sewer, electric, gas, phone, security, and various effluent waste lines often do not exist, or are incorrect. Both above and below ground utilities could cause a serious threat to human health and/or normal plant operations. These risks must be weighed against the benefits of accelerating the cleanup of the IHSS.

Physical Location Accessible?

If the location of the IHSS is not conducive to getting the proper removal/treatment equipment into position (inadequate clearances between/within buildings), the IHSS cleanup could be deferred until after T/D&D takes place.

Tank removal may consist of removing the tank intact which could prove to be infeasible until after T/D&D activities commence. For example, if a building wall had to be removed, or a doorway widened in order to get the tank out, it might be more cost effective to leave the tank in place until after T/D&D.

Any Added Value for Removing Before D&D?

The above considerations will apply to the majority of the IHSSs, however some IHSSs will not conform to the standard selection criteria. For these IHSSs, field experience and professional judgment will prove invaluable in determining proper IHSS categorization and remedy selection.

Security Access

Due to security restrictions within the IA, difficulties with equipment mobilization, subcontractor badging, and mandatory escorts have been considered. A "0" in this column indicates the IHSS is within the PA, while a "1" in this column indicates the IHSS is outside the PA boundary.

Meets Select Criteria

When an IHSS has been selected for intrusive field activities then the column in the spreadsheet "Meet Selection Criteria" is marked with a "Y". The spreadsheet was sorted by OU and on the "Meet Selection Criteria" column. This IHSS selection effort is still in the draft stage and revisions will be made. As more information is collected the spreadsheets will be updated.

Remedial Action Category

The categorization of the IHSSs has been taken from the December 20, 1993 version of the Strategic Plan for reference purposes only. Discrepancies between this and the previous column will be revisited as the selection criteria process continues.

DRAFT

INDUSTRIAL AREA IHSS SELECTION CRITERIA

1/19/94

OU	IHSS #	DIMENSION	BLDG. #s	% ACCESSIBILITY	BLDG. %	IHSS OBSTRUCTED BY PERM. STRUCTURE?	POTENTIAL RECONTAMI-NATION DURING D&D?	AFFECTED BY UTILITIES ?	PHYSICAL LOCATION ACCESSIBLE?	ANY ADDED VALUE FOR REMOVING BEFORE D&D?	SECURITY ACCESS	MEET SELECT CRITERIA	REMEDIAL ACTION CATEGORY
8	123.1	400 x 25		C, F, OHE	0						1	Y	PEA
8	135	100 X 60		75%PC, PA, T, Schedule for tank upgrades FY95	0						1	Y	PEA
8	139.2	40 x 25		40%PA, T, OHE, EQ	0			N			1	Y	PEA
8	150.4	20 x 20		100%PA, OHE, OHP	0						1	Y	PEA
8	151	60 x 45		100%PC, C, P, EQ, Diesel tank sched upgrade FY9	0						1	Y	PEA
8	163.1	50 x 125	T771G	50%PA, OHE, 50% OUT FENCE, RD 207-C	10			N			1	Y	PEA
8	163.2	60 x 40	T771A	10%PA, OHE, EQ	15			N			1	Y	PEA
8	173	125 x 40	NI only, 991	25%PA, EQ, Drums, Scrap, Palettes, 75%PC	60			N			1	Y	T/D&D
8	184	50 x 75	NI only	100%PA, EQ, Drums, Storm Drain	0			N			1	Y	PEA
8	139.1N	25 x 25		100%PA, 5%PC, T, EQ, OHE	10			N			1	Y	PEA
8	139.1S	35 x 25		40%PA, T, OHE, EQ	0			Y			1	Y	PEA
8	118.1	25 x 40	701	50%PA; OHP, C	5			Y			1	N	PEA
8	118.2	30 x 20		100%PA; OHE, T	0						1	N	PEA
8	137	140 x 100	712, 713	80%OHE, P, EQ, Blow Down	40			Y			1	N	NFA
8	138	50 x 50		30%P, OHE	0						1	N	PEA
8	150.1	60 x 360	771	100%PA, 5%OHE, EQ	10						1	N	T/D&D
8	150.2	680 x 90	771, 776	20%PA, OHE, OHP, EQ, F	60						1	N	T/D&D
8	150.3	150 x 30	771; Tunnel	Sloping, P, PC, Enclosed Tunnel	0			Y			1	N	T/D&D
8	150.6	125 x 180	705, 706	30%P, OHE,	25						1	N	T/D&D
8	150.7	370 x 130	776, 778	50%PC, 50%PA, OHE, C, EQ(VV),T Limited access	40						1	N	T/D&D
8	150.8	combined as part of IHSS 150.6										N	T/D&D
8	172	4,350 x 60	adj 771	100%PA, Wetlands	0						1 - part	N	T/D&D
8	188	110 x 65		100%PA	0						1	N	PEA
8	139.1N Tank	65 X 35		F, 30%T, PCB Contaminated, Wetlands	0			N			1	N	PEA
8	144N	25 x 70		P, OHP, C, EQ	0			N			1	N	T/D&D
8	144S	15 x 170		100%PA, OHP	0						1	N	T/D&D
8	150.5	deletion - same as IHSS 123.2 in OU9											
9	122	2 x 3,000 gal	441	Inspect, residue and soil samples	50						0	Y	PEA
9	123.2	50 x 40	559	Accessible	0						1	Y	T, RI/FS
9	124.1	1 x 30,000 gal	774	Inspect, residue and soil samples	0						1	Y	PEA
9	124.2	2 x 14,000 gal	774	Inspect, residue and soil samples								Y	PEA
9	124.3	2 x 14,000 gal	774	Inspect, residue and soil samples								Y	PEA
9	125	1 x 14,000 gal	774	same as IHSS 124.1	0						1	Y	PEA
9	126	2 x 25,000 gal	771	Inspect, residue and soil samples	100						1	Y	PEA
9	127	60	774	Accessible for test pits	0						1	Y	T, RI/FS
9	132	2 x 22,500 gal	776	Inspect, residue and soil samples	100						1	Y	PEA
9	132	2 x 4,500 gal	776	Inspect, residue and soil samples								Y	
9	146	2 x 3,000 gal	774	Inspect, residue samples	100						1	Y	PEA (Wash)
9	146	4 x 6,000 gal	774	Inspect, residue samples								Y	
9	147.1	40 x 190	Portal 1	Accessible - parking lot	0						0	Y	T, RI/FS
9	149	650	Pond 207A	Accessible - close to Solar Ponds	0						1	Y	T, RI/FS
9	159	30 x 150	559		0							Y	T, RI/FS
9	215	1 x unk gal	774	Inspect, residue samples	100						1	Y	PEA (Wash)
9	121-P01	180	123	Outside portion accessible for test pits	33			N			0	Y	T, RI/FS
9	121-P03	162	441	Accessible for test pits	2						0	Y	
9	121-P04	1,773	444	Accessible for test pits	0						0	Y	
9	121-P05	1,561	444	Outside portion accessible for test pits	90						0	Y	
9	121-P06	1,300	881	Outside portion accessible for test pits	46						0	Y	
9	121-P07	440	881	Test pit access questionable	81						0	Y	
9	121-P09	504	883	Accessible for test pits	19						0	Y	
9	121-P10	1,190	865	Outside portion accessible for test pits	62						0	Y	

PA=Asphalt, PC=Concrete, OHE=Overhead Electrical, OHP=Overhead Pipe, P=Pipe, C=Columns, T=Tanks, EQ=Other Equip, WP=Well points, F=Fence, RR=Railroad Tracks, NI=Non-Intrusive 0=Out Protected Area, 1=In Protected Area, 2=In Exclusion Area

OU	IHSS #	DIMENSION	BLDG. #s	% ACCESSIBILITY	BLDG. %	IHSS OBSTRUCTED BY PERM. STRUCTURE?	POTENTIAL RECONTAMI-NATION DURING D&D?	AFFECTED BY UTILITIES ?	PHYSICAL LOCATION ACCESSIBLE?	ANY ADDED VALUE FOR REMOVING BEFORE D&D?	SECURITY ACCESS	MEET SELECT CRITERIA	REMEDIAL ACTION CATEGORY
9	121-P11	175	Portal 1	Accessible for test pits	0						0	Y	
9	121-P12		Portal 1	Accessible - fence area special case	0						1	Y	
9	121-P13	500	Portal 1	Accessible - fence area special case	0						1	Y	
9	121-P14	648	707	Outside portion accessible for test pits	75						1	Y	
9	121-P15	785	707	Accessible - tight area	0						1	Y	
9	121-P16	170	559	Accessible for test pits	35						1	Y	
9	121-P19	603	777	Outside portion tight but accessible	76						1	Y	
9	121-P21	386	771	Accessible	20						1	Y	
9	121-P23	410	771	Accessible	0						1	Y	
9	121-P24	306	771	Accessible	4						1	Y	
9	121-P25	562	774	Accessible	12						1	Y	
9	121-P26	2,750	Pond 207A		49						1	Y	
9	121-P27	185	774	Accessible	33						1	Y	
9	121-P28	128	774	Accessible	0						1	Y	
9	121-P29	187	774	Accessible	34						1	Y	
9	121-P34	198	774		100						1	Y	
9	121-P35	142	Pond 207C		100						1	Y	
9	121-P36	599	Pond 207A		14						1	Y	
9	121-P37	1,449	779	Accessible for test pits	7						1	Y	
9	121-P38	800	Pond 207A		14						1	Y	
9	121-P39	1,817	990	Accessible - has break area E of 782	4						1	Y	
9	121-P40	232	995	Accessible for test pits	0						1	Y	
9	121-P41	1,537	779		68						1	Y	
9	121-P42	213	779		12						1	Y	
9	121-P43	100	777		0						1	Y	
9	121-P44	135	777		0						1	Y	
9	121-P45	130	779		0						1	Y	
9	121-P46	142	779		0						1	Y	
9	121-P47	135	Pond 207A		0						1	Y	
9	121-P48	193	Pond 207C		66						1	Y	
9	121-P49	85	Pond 207C	Accessible - close to Solar Ponds	0						1	Y	
9	121-P50	105	Pond 207B	Accessible - close to Solar Ponds	48						1	Y	
9	121-P56	170	774	Accessible	0						1	Y	
9	121-P57	112	123	Accessible	0						0	Y	
9	121-T01	1 x 800 gal	122	Soil sample	0						0	Y	PEA
9	121-T03	2 x 3,000 gal	441	Inspect, residue and soil sample	50						0	Y	
9	121-T04	3 x 60 gal	444	Inspect, residue samples	100						0	Y	
9	121-T06	2 x 500 gal	444	Inspect, residue samples	100						0	Y	
9	121-T08	2 x 25,000 gal	771	Inspect, residue and soil sample	100						1	Y	
9	121-T09	2 x 22,500 gal	777	Inspect, residue and soil sample	100						1	Y	
9	121-T10	2 x 4,500 gal	777	Inspect, residue and soil sample	100						1	Y	
9	121-T13	1 x 600 gal	774	Inspect, residue samples	100						1	Y	
9	121-T14	1 x 30,000 gal	774	Inspect, residue and soil sample	0						1	Y	
9	121-T16	2 x 14,000 gal	774	Inspect, residue and soil sample	100						1	Y	
9	121-T18	1 x unk gal	776	Inspect, residue samples	100						1	Y	
9	121-T19	2 x 1,000 gal	779	Inspect	100						1	Y	
9	121-T20	2 x 800 gal	779	Inspect	100						1	Y	
9	121-T21	1 x 250 gal	886	Inspect, residue and soil sample	100						0	Y	
9	121-T22	2 x 250 gal	886	Inspect, residue and soil sample	100						0	Y	
9	121-T23	1 x 6,000 gal	865	Inspect	100						0	Y	
9	121-T27	1 x 500 gal	886	Soil sample	0						0	Y	

PA=Asphalt, PC=Concrete, OHE=Overhead Electrical, OHP=Overhead Pipe, P=Pipe, C=Columns, T=Tanks, EQ=Other Equip, WP=Well points, F=Fence, RR=Railroad Tracks, NI=Non-Intrusive 0=Out Protected Area, 1=In Protected Area, 2=In Exclusion Area

OU	IHSS #	DIMENSION	BLDG. #	% ACCESSIBILITY	BLDG %	IHSS OBSTRUCTED BY PERM. STRUCTURE?	POTENTIAL RECONTAMI-NATION DURING D&D?	AFFECTED BY UTILITIES (Y, ?)	PHYSICAL LOCATION ACCESSIBLE?	ANY ADDED VALUE FOR REMOVING BEFORE D&D?	SECURITY ACCESS	MEET SELECT CRITERIA	REMEDIAL ACTION CATEGORY
9	121-T28	2 x 1,000 gal	889	Inspect, residue samples	100						0	Y	
9	121-T29	1 x 200,000 gal	779	Inspect, residue and soil sample	0						1	Y	
9	121-T36	1 x 500 gal	771	Inspect, residue samples	100						1	Y	
9	121-T37	1 x 500 gal	771	Inspect, residue samples	100						1	Y	
9	121-T38	1 x 1,000 gal	779	Inspect, residue samples	100						1	Y	
9	800-1200 PAC	120	881		0						0	Y	
9	121-P02	452	123	Inaccessible - under 123	100			Y			0	N	T, RI/FS
9	121-P08	135	881	Questionable - close to 881	22						0	N	
9	121-P17	1,130	559	Questionable - close to 559	88						1	N	
9	121-P18	150	707	Questionable - close to 559	89						1	N	
9	121-P20	499	774	Questionable - close to 777, 778	5						1	N	
9	121-P22	1,205	771	Inaccessible - 771 UBC	9?						1	N	
9	121-P30	667	777	Inaccessible - under 777	9C						1	N	
9	121-P31	167	774	Inaccessible - under 771	100						1	N	
9	121-P32	907	777		87						1	N	
9	121-P33	140	774	Inaccessible - under 771	100						1	N	
9	121-P51	170	778	Inaccessible - under 778	100						1	N	
9	121-P52	280	443	Inaccessible - under 443	100						1	N	
9	121-P53	78	881	Questionable - close to 881	17						0	N	
9	121-P54	138	881	Inaccessible - under 881	0						0	N	
9	121-P55	158	881	Questionable - close to 881	53						0	N	
9	121-T02	1 x 3,000 gal	441	Inaccessible - under 441	100						0	N	
9	121-T05	2 x 4,000 gal	444	Active	100						0	N	
9	121-T07	2 x 2,000 gal	559	Active	100						0	N	
9	121-T11	2 x 2,000 gal	707	Active	100						1	N	
9	121-T12	NA		Not valid location							1	N	
9	121-T15	2 x 7,500 gal	774	Under 774	100						NA	N	
9	121-T17	4 x 6,000 gal	774	Under 774	100						1	N	
9	121-T24	7 x 2,700 gal	887	Active	100						1	N	
9	121-T25	2 x 750 gal	883	Active	100						0	N	
9	121-T26	3 x 750 gal	883	Active	100						0	N	
9	121-T30	1 x 23,000 gal	707	Active	100						0	N	
9	121-T31	NA		Invalid location	NA						1	N	
9	121-T32	1 x 132,000 gal	887	Active	100						NA	N	
9	121-T33	NA		Invalid location	NA						0	N	
9	121-T34	NA		Invalid location	NA						NA	N	
9	121-T35	NA		Invalid location	NA						NA	N	
9	121-T39	4 x 250 gal	881	Already removed and cleaned	100						NA	N	
9	San. Sewer	vast			varies						0	N	
9	UBC-123	150 x 180			100						both	N	varies
9	UBC-442	130 x 80			100						0		
9	UBC-444	420 x 300			100						0		
9	UBC-559	230 x 160			100						0		
9	UBC-707	300 x 460			100						1		
9	UBC-771	360 x 300			100						1		
9	UBC-774	150 x 140			100						1		
9	UBC-776	250 x 360			100						1		
9	UBC-779	210 x 220			100						1		
9	UBC-881	240 x 400			100						1		
9	UBC-883	210 x 250			100						0		
9	UBC-887	20 x 60			100						0		
											0		

PA=Asphalt, PC=Concrete, OHE=Overhead Electrical, OHP=Overhead Pipe, P=Pipe, C=Columns, T=Tanks, EQ=Other Equip, WP=Well points, F=Fence, RR=Railroad Tracks, NI=Non-Intrusive 0=Out Protected Area, 1=In Protected Area, 2=In Exclusion Area

OU	IHSS #	DIMENSION	BLDG. #s	% ACCESSIBILITY	BLDG. %	IHSS OBSTRUCTED BY PERM. STRUCTURE?	POTENTIAL RECONTAMINATION DURING D&D?	AFFECTED BY UTILITIES (Y/N)	PHYSICAL LOCATION ACCESSIBLE?	ANY ADDED VALUE FOR REMOVING BEFORE D&D?	SECURITY ACCEPT	MEET SELECT CRITERIA	REMEDIAL ACTION CATEGORY
10	129	55 x 20		P, OHP, OHE, EQ	0						0	Y	T/D&D
10	170	1,000 x 250			0						0	Y	PEA
10	175	40 x 40			0						1	Y	PEA
10	177	60 x 20	885	OHE, 80%PA	100						0	Y	T/D&D
10	181	30 x 20			0						0	Y	PEA
10	182	40 x 45	453	100%PA	20						2	Y	PEA
10	208	20 x 25		40%PA, 30%PC	0						2	Y	PEA
10	210	30 x 30		No picture	0						1	Y	PEA
10	214	400 x 500		100%PA, OHE, OHP, F, EQ	0						1	Y	T/D&D
10	174A	10 x 10			0						0	Y	PEA
10	174B	5 x 5			0						0	Y	PEA
10	176	300 x 400	964		6						1	N	PEA
10	205	35 x 30	460	80%PC, 20%PA, EQ, T, Partly In Bldg.	50						2	N	PEA
10	206	35 x 10		OHE, EQ, F	0						1	N	T/D&D
10	207	10 x 10		100%PC	0						2	N	PEA
10	213	450 x 300		100%PA, OHE, EQ	0						0	N	T/D&D
12	116.1	100 x 50	448	40%PA, OHP, EQ, OHE	20			N			2	Y	PEA
12	116.2	40 x 30		100%PA, OHP, OHE	0			N			2	Y	PEA
12	120.1	60 x 90	668	10%PC, OHE, OHP, EQ, C, Stored materials	30			N			664 area	Y	PEA
12	120.2	45 x 150	664	80%PA, 10%PC, F, RR	5			N			2 - part	Y	PEA
12	136.1	50 x 75	460	100%PA, Underground Electric Manhole	25			N			2	Y	PEA
12	136.2	35 x 185		F, RR	0			N			2 - part	Y	PEA
12	189	80 x 190	NI only	10%T, EQ, RR, 3%PC, OHE, OHP, Limited Scope	0			N			2 - part	Y	NFA
12	147.2	75 x 130	NI only	F, EQ, OHE	15							N	PEA
12	157.2	750 x 600	444, 447	OHE, OHP, EQ, C	65						2	N	PEA
12	187	665 x 25	NI only, 443	50%PA, F, OHP, OHE, T, EQ	25			N			2 - part	N	NFA
12	147.1	Transferred to Operable Unit 9											
13	117.2	160 x 510		100%PA, F, EQ	0						0	Y	T/D&D
13	117.3	170 x 270		30%PC, 70%PA, F, 15%T	0						0	Y	PEA
13	128	90 x 75	335	25%PA	10						0	Y	PEA
13	134	100 x 190		80%PA	0						0	Y	T, RI/FS
13	152	180 x 300		30%T, F	0						0	Y	PEA
13	171	210 x 60	335	OHE, EQ	15						0	Y	PEA
13	117.1	320 x 300	223, 549	10%PA, OHE, F, P	20						0	N	T/D&D
13	148	100 x 190	123	100%PA	90						0	N	T/D&D
13	157.1	200 x 520		PA, PC, OHE, OHP, F, Central Avenue Ditch	0						0	N	T, RI/FS
13	158	200 x 275	551	100%PA, OHE, F	30						0	N	PEA
13	186	40 x 650	552, 549	OHE, EQ	5						0	N	T, RI/FS
13	169	NO FURTHER ACTION									0		NFA
13	190	NO FURTHER ACTION									0		NFA
13	191	NO FURTHER ACTION									0		NFA
14	156.1	370 x 180		100%PA, OHP, F	0						0	Y	T, RI/FS
14	160	280 x 375	668	100%PA, P	5						0	Y	T, RI/FS
14	164.1	40 x 75		100%PA, OHE, OHP	0						0	Y	T, RI/FS
14	131	10 x 50	776	100%PA, OHP, T, EQ	20						1	N	T/D&D
14	161	150 x 180	664	90%PA	50						664 Area	N	T/D&D
14	162	50 x 1,400	771, 776	90%PA, OHP, OHE	20						1 - part	N	T/D&D
14	164.2	250 x 250	886	5%PC, EQ	40						0	N	T/D&D
14	164.3	250 x 100	884	90%PC, OHP, OHE	15						0	N	PEA

PA=Asphalt, PC=Concrete, OHE=Overhead Electrical, OHP=Overhead Pipe, P=Pipe, C=Columns, T=Tanks, EQ=Other Equip, WP=Well points, F=Fence, RR=Railroad Tracks, NI=Non-Intrusive 0=Out Protected Area, 1=In Protected Area, 2=In Exclusion Area

**** DRAFT ****

PROCESS FOR DETERMINING THE REMEDIATION CATEGORY OF IHSSs

INTRODUCTION

A process has been developed to evaluate all IHSSs against the same criteria for the purpose of providing guidance for selecting the appropriate remediation category of each IHSS. Three general remediation categories have been established: Limited Further Action; Potential Early Action; and RI/FS or Transition/Decontamination and Decommissioning. This evaluation method is a first cut screening process only and will not lead to the selection of the most appropriate remediation alternative for each IHSS. After determination of which remediation category each IHSS belongs in, the remedy selection process can proceed.

BACKGROUND

The Draft Analysis of the Potential for Redirection of the Rocky Flats Environmental Restoration Program prepared by the Strategic Planning Initiative, Review, and Implementation Team (SPIRIT), October 1993 drafted an effort to classify IHSS into different remediation action categories in order to accelerate action and in doing so reduce risk, eliminate sources of contamination, stop the spread of potential contamination, accelerate records of decision (RODs), and expedite any further required remediation. Four categories were identified: 1) No Further Action; 2) Potential Early Action; 3) Traditional RI/FS; and 4) Transition/Decontamination and Decommissioning. The SPIRIT report provides a detailed discussion of the categories. The determination for categorizing each IHSS was made by SPIRIT members after discussion with the EG&G OU managers who have knowledge of data availability and current status of each IHSS. Preliminary lists of the IHSS categorization are provided in the SPIRIT report. Further review and refinement of the concepts that contribute to IHSS categorization have germinated into the process described in this document.

PROCESS

An objective, reproducible, defensible, and justifiable method of IHSS categorization and ranking was sought in order to fully achieve the goals outlined by the SPIRIT report. First, by categorizing each IHSS into remediation groups, the determination for further remediation can be made more efficiently. For example, by knowing one IHSS will require additional data-gathering efforts and another IHSS has sufficient data for remediation alternative selection, the process of taking action on both IHSSs is streamlined; different groups of remediation specialists can look at appropriate IHSSs rather than all IHSSs. Second, within each category, IHSSs will be numerically ranked to enable focus on IHSSs that can be remediated more quickly than others within that same category. The process will further provide a side-by-side presentation of all IHSSs regardless of the category to allow comparison of different criteria.

Sixteen criteria have been identified as being important factors in the evaluation to determine the path of IHSS remediation actions. The evaluation factors are as follows and described in greater detail below.

1) Exposure Potential
2) Current Environmental Quality
3) Representativeness of Data
4) Potential for Contaminant Migration
5) Environmental Impact
6) Waste Generation
7) Ease of Waste Disposal
8) Implementability
9) Flexibility
10) Technology
11) Design/ Implementation Schedule
12) Worker Safety

13) Work Force
14) Achieves Final Resolution
15) Public and Agency Acceptability
16) Other Factors

The first four factors pertain to the current status of each IHSS and are risk-related. Factors 5 through 15 pertain to the efficacy of each IHSS through the implementation of a remediation action, even through the remediation action has not yet been determined. These are remediation-related. The last factor is a miscellaneous category which permits influence from other factors not necessarily pertinent to all IHSSs.

Each IHSS is evaluated against each of the 16 factors and given a score from 1 through 5 for each factor. Low scores indicate that the IHSS has poor attributes in that factor that will prevent or discourage the accelerated remediation action to proceed. High scores indicate that the IHSS has beneficial attributes that will expedite a remediation action. Because the first four factors pertain to the current status of the IHSS, they are considered very important and weigh more heavily in the determination of the final score. The sum of the score given to each of the first four factors is multiplied by the sum of the scores given to each of the remaining factors. The scores are multiplied in order to numerically separate the influence of the first four factors from the remaining factors.

A Total Score will be calculated for each IHSS. Three groups will emerge from the calculation of the Total Scores: very high scores; medium scores, and very low scores. In general, very high scores will indicate Limited Further Action; medium scores will indicate Potential Early Action; very low scores will indicate either continuance with normal RI/FS programs or deference until decontamination and decommissioning of adjacent buildings. Within each category, the IHSSs will be ranked according to score. High scores within each group will indicate favorable conditions for expedited action; low scores will indicate unfavorable conditions for expedited action. Each of the IHSSs within the three general categories will then be examined more closely to determine the next step in the remediation process. For example, the Limited Further Action would be divided into No Further Action and Limited Further Action Necessary to become No Further Action, based on score and process knowledge. IHSSs that score in intermediate zones between the categories will be reviewed for determination of proper placement for remediation actions.

A Preliminary IHSS Evaluation Matrix has been drafted which will serve as the mechanism for scoring each of the 177 IHSSs. The assignment of a score will be made by a SPIRIT subcommittee and the OU managers. A statement will be made after each evaluation factor to justify the score given. In this manner, if inaccurate assumptions were initially made or an outside influence alters previous assumptions, all reasons for the score are provided and adjustments to the original score could be made. Finally, summary matrices will be compiled to allow for the scores of all IHSSs to be compared side-by-side, sorted by IHSS number and IHSS score.

DESCRIPTIONS OF EVALUATION FACTORS

1. Exposure Potential

Exposure Potential is the non-quantified potential for unprotected human exposure posed by the known compounds in the IHSS, their concentrations, and their stability (mobility). It is a relative score based on current knowledge and condition of each IHSS. For example, IHSS 112, the 903 Pad, has a relatively high exposure potential to a worker who crosses the pad unprotected; conversely, IHSS 209, the Surface Disturbance in the southeast buffer zone has a relatively low exposure potential to those who may trespassed unprotected. It may at first seem contradictory; in order to be considered for NFA, an IHSS must have a low exposure potential, but by giving a low score in this factor, the overall score for the IHSS would be lowered, reducing the opportunity for this IHSS to result in accelerated remediation action. In a

perfectly clean site destined for NFA classification, this score would indeed be low; however, all other scores will be very high. Because there are many categories, this one low score will not be weighed heavily enough to preclude a very high overall score.

1 = The IHSS currently poses a low exposure potential
5 = The IHSS currently poses a high exposure potential

2. Current Environmental Quality

This factor addresses the current level of environmental quality due to the impact of the IHSS. For example, the hillside north of the solar ponds (IHSS 101) has been noticeably impacted by the releases of contamination to the environment by the solar ponds; the poor environmental quality due to the impact by the IHSS would result in accelerated action to remedy the condition and this IHSS would be given a relatively high score. Conversely, IHSS 215, a tank inside Building 771 has had no releases to the environment, has not adversely impacted environmental quality, and so would score low. As in the first factor, a low score in this factor would not necessarily cause the IHSS to have deferred remediation action. If all other factors were equal, an IHSS that has rendered the environment to be of poor quality would be remediated sooner than one that has not adversely impacted the environment.

1 = satisfactory environmental quality
5 = poor environmental quality

3. Representativeness of Data

Data exist for all IHSSs. These data will be evaluated for representativeness of the site conditions. Representativeness includes quality and quantity of existing data, whether the data have been validated, and process knowledge leading toward knowledge of site characterization including nature and extent of contamination. A low score would indicate deferment of action until additional data are gathered and a high score would indicate acceleration of an action because sufficient data already exist.

1 = Need further data-gathering efforts
5 = Sufficient validated data for decision

4. Potential for Contaminant Migration

During the time between the initial evaluation and the implementation of an action, contaminant migration may cause one or more of the other categories and factors to change, such as exposure potential, area of concern, environmental quality, and receptors. A high score would indicate that the action should be accelerated in order to try and mitigate the potential for migration. As an example, IHSS 108 (Trench T-1) has a greater potential for contaminant migration than IHSS 187 (Acid Leak) because these is a potential source of contamination in the ground and would therefore be slated for accelerated remediation. Other factors, however, may ultimately give IHSS 187 a higher overall score.

1 = Low potential for migration
5 = High potential for migration

5. Environmental Impact

This factor examines the status of environmental impact due to the implementation of an action (e.g. wetlands encroachment, air emissions, worker exposure). This differs from factor two which addresses current environmental conditions as opposed to the environmental conditions that would arise from some action being taken. If the environment improves because of the implementation of an action, then a high

score would be given to provide an accelerated schedule for implementation. A low score, or deferment of implementation, would be likely if the action would adversely impact the environment.

1 = Significant adverse environmental impact
3 = Very little, if any, environmental impact
5 = Favorable environmental impact

6. Waste Generation

The implementation of an action may involve the origination of waste or investigation-derived material (IDM). The volume of waste generated through implementation of an action, without regard to the type of waste, is a factor in the scoring of each IHSS. The type of waste (liquid, solid, TRU mixed, sanitary) is independent of the volume of waste because the scores are relative. The generation of low volumes of waste, or better yet, no waste at all, would be cause to accelerate remediation actions; whereas, the generation of high volumes of waste would be a deterrent to accelerated remediation actions. The scoring of this category would be speculative in some cases because the remediation technology is not yet known. Nonetheless, information that currently exists provides sufficient guidance to determine whether there will be a relatively high or relatively low volume of waste generated. For example, even though the extent of contamination is not known for IHSS 122 (Tank beneath Building 441), it can be estimated that the volume of contaminated soil is less than that of IHSS 121 (OPWL) which has pipelines all over the plant included coming through IHSS 122. The ranges of waste volumes provided below are arbitrary and may be altered once the evaluation process is executed.

1 = A high volume of waste or IDM will be generated through implementing an action (>10 yd^3)
3 = A medium volume of waste or IDM will be generated through implementing an action (6 to 10 yd^3)
5 = A low volume of waste or IDM will be generated through implementing an action (≤ 5 yd^3)

7. Ease of Waste Disposal

Regardless of the volume of waste generated, regulatory disposal requirements are consideration for whether to implement an accelerated action. Issues such as type of waste to be disposed of and the availability of on-site interim waste storage capacity affect the evaluation score. As with the waste volume factor, sufficient information may not yet be known to definitively score this factor. However, information is available regarding all IHSSs to at least estimate the type of waste that could possibly be in the IHSS. For example, the likelihood of IHSS 174 producing radioactive waste is extremely low because of barriers to that type of material being stored in that area. Therefore, as a first cut screening tool, radioactive, mixed, or TRU mixed categories should not be considered. This assumption should be stated on the evaluation form. If the assumption proves to be incorrect, at least the reasoning behind the score is known. An IHSS which will result in the generation of waste that can neither be stored or shipped should be deferred over an IHSS that produces waste that can be shipped or stored.

1 = Cannot store or ship waste generated through implementation of an action (e.g. TRU Mixed)
3 = Can store or ship waste generated through implementation of an action (e.g straight radioactive or straight hazardous)
5 = No waste will be generated through the implementation of an action

8. Implementability

The implementability of an action influences the prioritization of whether that action should be done at an accelerated schedule or not. Issues hindering implementation of an action may be non-negotiable, such as necessitating encroachment into and beneath the perimeter security zone, or negotiable, such as the use of a portion of the IHSS by another group who will be inconvenienced by the implementation of an action.

It could be felt that all issues are in some way negotiable, clearly though, some are definitely more negotiable than others. This factor specifically does not deal with technology availability (Factor 10). Examples include a low score for IHSS 123.1 (Valve Vault 7) because of its proximity beneath the PSZ, a median score for IHSS 174 because negotiations with the groups using the area could be staged, and a high score for IHSS 188 because there are no physical impediments to implementing an action.

1 = Non-negotiable impediments to implementing an action
3 = Negotiable impediments to implementing an action
5 = No impediments to implementing an action

9. Flexibility

Regardless of which remediation action is proposed for an IHSS, it would be more favorable to effecting and accelerated action if it had the ability to be flexible. Flexibility could include such issues as field changes, last minute changes, changes to different site conditions between the time of design and the time of implementation. It could also incorporate regulatory issues, IWCP, Health and Safety Plans, and other RFP operating requirements. Even though the remediation action will not be defined for this evaluation, it can be estimated whether the IHSS will be relatively complex or simple to remediate and therefore whether the action will have a high or low degree of flexibility.

1 = Inability to alter selected action in response to changes
5 = Ability to alter selected action in response to changes

10. Technology

Technology, which is often combined with implementability, is an issue affecting whether there should be an accelerated schedule for remediation action. Issues pertaining to technology such as the need to use high technology, e.g., soil vapor extraction, rather than low technology, e.g., soil removal, are included in this factor. Experience of the specialists scoring the IHSS will provide guidance for this category. For example, IHSS 217 Building 881 Cyanide Bench Scale Treatment, Unit 32) can be remediated based on the RCRA closure plan written for the unit and would therefore receive a high score: IHSS 111.1 - 111.8 (East Trenches) would receive low scores because of the need for feasibility and treatability studies.

1 = Technology not available, technology is long-lead
5 = Technology exists and designs can be "pulled off the shelf"

11. Design/Implementation Schedule

The total estimated time to both design and implement an action is factored into the overall score. The schedule would include several issues including complexity of an action, equipment lead time, construction and startup time, and acquisition of regulatory permits. It is clear that IHSS 101 would receive a low score because of difficulties arising from all of these issues, whereas a high score would be given to IHSS 191 (Hydrogen Peroxide Spill) for which the remediation action took place at the time of the release to the environment in 1981. The time limit suggested below is arbitrary and may be modified.

1 = Long schedule necessary to design and implement action (>90 calendar days)
5 = Short schedule necessary to design and implement action (<90 calendar days)

12. Worker Safety

Because of DOE's dedication to the protection of human health and the environment, the anticipated safety of the workers during implementation of the action is an evaluation factor. If the implementation

of any action would expose the workers to relatively unsafe conditions, such as the case of IHSS 112 (903 Pad), it would receive a low score, i.e., no need to expedite the remediation action. If the implementation will not expose the workers to unsafe conditions, as in IHSS 156.2 (Soil Dump Area), it would receive a high score toward accelerated remediation.

1 = The action will expose the workers to potentially unsafe conditions
5 = The action will not expose the workers to potentially unsafe conditions

13. Work Force

It would be favorable to the RFP if the action could be implemented by RFP personnel rather than requiring the procurement of subcontracted services. Therefore, if it is speculated that the RFP work force, which is more quickly available but limited in technical specialist, can implement the action, then a high score will be given. Many of the IHSSs that are inside building RCRA storage units can probably be remediated through using existing RFP workers and be given high scores. Conversely, IHSSs requiring large-scale environmental sampling and monitoring programs may require the procurement of an MTS subcontractor to execute a remediation action, therefore receiving a low score.

1 = Action requires separate procurement or MTS subcontractor
5 = Action can be performed by RFP work force

14. Achieves Final Resolution

Whether or not an action achieves final resolution will factor into the overall score. It should be estimated if the action will be compatible with future remediation activities and if it will attain the risk values necessary. Because the action will not be known for this preliminary screening process, this factor will be difficult to evaluate. For the most part, IHSSs will be given a median score; however, if it is known that the final resolution will push the IHSS score toward accelerated or deferred action, an appropriate high or low score will be given. For example, a remediation action for a particular IHSS may achieve the desired result for that IHSS but future actions from surrounding areas may be countereffective for the IHSS. IHSS 140 (Hazardous Disposal Area) may be easily remediated, but because it lies within the boundaries of IHSS 155 (903 Lip Area), the actions to improve IHSS 155, may be countereffective to remediating IHSS 140.

1 = May make final remediation more difficult, expensive, etc.
3 = May or may not achieve final resolution of the remediation of the IHSS
5 = Will achieve final resolution of remediation for the IHSS

15. Public and Agency Acceptability

An evaluation of the likelihood of public and agency acceptability must be considered in determining the scheduled remediation action of each IHSS. It may be that the public or the agencies may not find the remediation action acceptable. For a given IHSS, the acceptability by the public and agencies could either push the IHSS toward accelerated remediation or toward deferred.

1 = Low likelihood of public and agency acceptability
5 = High likelihood of public and agency acceptability

16. Other Factors

This final factor incorporates the judgement by experienced professionals on knowledge of each IHSS, knowledge of possible technologies, knowledge of potential risk of contaminants, evaluation of cost-

effectiveness (economies of scale, opportunities to save time and money, better-cheaper-faster, do more with less), etc, that would impact the overall score. This factor is the least objective of the preceding criteria. Although this factor may seem subjective and therefore counter to the objectiveness of this proposed method, some degree of professional judgement should be included. The numerical contribution this factor has in the overall score will not provide the final decision for the remediation action, but allows for the contribution of a criterion not included above or not pertinent to all IHSSs.

1 = extenuating circumstances that warrant postponed action
3 = no changes in the priority after application of professional judgement
5 = extenuating circumstances that warrant expedited action

NEXT STEPS

The next steps in the IHSS screening process is to refine the evaluation factors based on comments from other SPIRIT members and review from other influential contributors. The method may also be refined, based on review of the scoring mechanism, before finalization. After approval is granted for the implementation of this method, the IHSSs will be evaluated by OU managers, SPIRIT members, and other interested parties. The results will be presented in a summary document and distributed to suitable parties. Finally, the appropriate groups, or perhaps one group, will use the results to proceed with the remediation process.

Preliminary
IHSS Evaluation Matrix

IHSS No. _____ Evaluation Date _____

OU No. _____

Evaluation Factors	Score (1 through 5)	Justification
Exposure Potential		
Current Environmental Quality		
Representativeness of Data		
Potential for Contaminant Migration		
A=	0	

Environmental Impact		
Waste Generation		
Ease of Waste Disposal		
Implementability		
Flexibility		
Technology		
Design/ Implementation Schedule		
Worker Safety		
Work Force		
Achieves Final Resolution		
Public and Agency Acceptability		
Other Factors		
B=	0	

Comments:

Total Score = A x B = 0

Evaluation Summary by IHSS

Evaluation Factors	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS	IHSS
Exposure Potential														
Current Environmental Quality														
Representativeness of Data														
Potential for Contaminant Migration														
A=														
Environmental Impact														
Waste Generation														
Ease of Waste Disposal														
Implementability														
Flexibility														
Technology														
Design/ Implementation Schedule														
Worker Safety														
Work Force														
Achieves Final Resolution														
Public and Agency Acceptability														
Other Factors														
B=														
Total Score														