Activity Name	Driver	Pre Review M-H/Yr	Post Review Est M-H/Yr	Est Potential Realiscable M-H/Yr Savings	Est Cost Savings @$50/hr	Pre Review Frequency	Suggested Frequency	Bin Location	Resource Organization
Contamination survey inclosure/ Glovebloxes not in use	None	364	0	364	$18,200	Semi-annually	N/A	Cancellation	Radiation Protection
Contamination Survey upon receipt of rad materials	None	0	0	0	$0	As required	N/A	Cancellation	Radiation Protection
A/S - Posting areas with potential > 10% DAC	10CFR835	2080	0	2080	$104,000	As required	N/A	Cancellation	Radiation Protection
A/S - Use of respirators where potential for > 10% DAC	10CFR835 RCM Art 555	2080	0	2080	$104,000	As required	N/A	Cancellation	Radiation Protection
Gamma Survey Prior to and upon completion of the work involving rad material	None	0	0	0	$0	As required	N/A	Cancellation	Radiation Protection
Rad survey upon receipt of rad materials	None	0	0	0	$0	As required	N/A	Cancellation	Radiation Protection
Gamma Survey- Upon initial entry after a source has been retracted into its shield.	None	8	0	8	$400	As required	N/A	Cancellation	Radiation Protection
Gamma surveys in routinely occupied areas outside RBA's, but within facility	None	24	0	24	$1,200	Semi-annually	N/A	Cancellation	Radiation Protection
A/S When Vacuum Cleaner Is Used Within an RBA	None	0	0	0	$0	As required	N/A	Cancellation	Radiation Protection
A/S Perform Air Pattern Survey (Smoke Test)	None	192	0	192	$9,600	As required	N/A	Cancellation	Radiation Protection
Contamination survey in RCPM area of responsibility - 10% of office or storage areas not in	None	8	0	8	$400	Annually	N/A	Cancellation	Radiation Protection
Contamination surveys around penetrations of tanks containing liquid.	None	32	0	32	$1,600	Semi-annually	N/A	Cancellation	Radiation Protection
Contamination survey - On outside of ventilation exhaust screens located inside the RBA	None	26	0	26	$1,300	Weekly	N/A	Cancellation	Radiation Protection
Subtotal		**4,814**	**0**	**4,814**	**$240,700**				
RCRA Supervisor refresher training	RCRA	48	24	24	$1,200	All qualified	All qualified employees	Deferral or freq change	Environmental Compliance
Asbestos Inspections	HSP 9.09	240	80	160	$8,000	Monthly	Quarterly	Deferral or freq change	Industrial Hygiene
Emerg. Generator, EG-1 Battery Surveillance	OSR	144	48	96	$4,800	Monthly	Quarterly	Deferral or freq change	MTCE
Magnahelics Reading (Gloveboxes)	OSR	1460	208	1252	$62,600	Daily	Weekly (in service gloveboxes)	Deferral or freq change	Production Operations
A/S - Air flow verifications, in downdraft tables, hoods, and gloveboxes	DOE Order 6430.1A	192	32	160	$8,000	Monthly	Semi-annually	Deferral or freq change	Radiation Protection
Contamination survey in vicinity of criticality drain sample connections.	10CFR835	96	48	48	$2,400	Monthly	Bi-monthly	Deferral or freq change	Radiation Protection
Contamination surveys in eating area in building containing RBA	10CFR835	365	52	313	$15,650	Daily	Weekly	Deferral or freq change	Radiation Protection
Contamination surveys at contamination control point, change areas, and step off pads in	10CFR835 RCM Art 554.1c	6570	2190	4380	$219,000	Shiftly	Daily	Deferral or freq change	Radiation Protection
Gamma survey at the boundary of temporary radiation areas	10CFR835 RCM Art 552	0	0	0	$0	Weekly	Monthly	Deferral or freq change	Radiation Protection
Gamma survey on potentially contam. ducts, piping, hoses outside facility	10CFR835 RCM Art 552	0	0	0	$0	Monthly	Quarterly	Deferral or freq change	Radiation Protection
Gamma survey at installed temporary shielding	10CFR835 RCM Art 314.3/6	0	0	0	$0	Monthly	Quarterly	Deferral or freq change	Radiation Protection
Gamma survey on tanks with liquids	N/A	16	4	12	$600	Quarterly	Annually	Deferral or freq change	Radiation Protection
Subtotal		**9,131**	**2,686**	**6,445**	**$322,250**				
Initial RCRA Training - 40hr RCRA	RCRA	70	40	30	$1,500	New employees	New employees	Further eval needed	Environmental Compliance
RCRA inspection of storage and treatment tanks	RCRA Part B Permit	5800	826	4974	$248,700	Daily	Weekly	Further eval needed	Environmental Compliance
Recording and reporting the consumption of Diesel Fuel for emergency generators	Clean Air Permit	60	10	50	$2,500	Monthly	Semi-annually	Further eval needed	Environmental Compliance
RCRA inspection of ancillary tanks (OVHE)	RCRA Permit; PADG-94-00283; CO 93-04-23-1	730	104	626	$31,300	Daily	Weekly	Further eval needed	Environmental Compliance
Inspection of PCB Storage Areas	40CFR761	24	12	12	$600	Monthly	Monthly - reduced scope	Further eval needed	Environmental Compliance
Tank surveillance in 247	40CFR125.104	6	3	3	$150	Monthly	Bi-monthly	Further eval needed	Environmental Compliance
RCRA ceiling tile inspection	RCRA Permit; PADC-94-00283; 6.1-c	144	72	72	$3,600	Monthly	Bi-monthly	Further eval needed	Environmental Compliance
RCRA Management of glovebox	RCRA Permit 6-CCR-1007-3; 262.34	208	104	104	$5,200	Bi-weekly	Monthly	Further eval needed	Environmental Compliance
Flow Test Plenum	DOE Order 5480.7A, NFPA	0	0	0	$0	Semi-annually		Further eval needed	Fire System Services
Safety Shower Inspection	Manufacturers Recommendation and ANSI STD	1064	241	823	$40,150	Weekly	Monthly	Further eval needed	Industrial Hygiene
Whitney Punch - Check Oily Hoses	Historical Failure	12	12	0	$0	Monthly	As required	Further eval needed	MTCE
Inspect Outside Building Lights	Historical Failure	240	160	80	$4,000	Monthly	Bi-monthly	Further eval needed	MTCE
Whitney Punch - Change Oil	Historical Failure	2	1	1	$50	Annually	Bi-annually	Further eval needed	MTCE
Glovebox Alarm Panel Watch	COOPCIGR	160	0	160	$8,000	Yearly	N/A	Further eval needed	Production Operations
Minimum Combustible Loading Inspections	LIUQD 771-95-088B-BAV Rev 2	416	208	208	$10,400	Weekly	Weekly	Further eval needed	Production Operations
Bldg 771/774 Transfer Line RCRA Inspection	RCRA Part B Permit	96	32	64	$3,200	Monthly	Quarterly	Further eval needed	Production Operations
Glovebox Scale Pans Through Checks	OSR	48	48	0	$0	Monthly	Monthly	Further eval needed	Production Operations
Criticality Drain Overflow Checks	Nuclear Criticality Safety	288	257	31	$1,550	Monthly	Monthly (in service gloveboxes	Further eval needed	Production Operations
GBD-11 Alarm Panel Fire Watch	OSR 7.4.4.3	960	854	106	$5,300	Yearly	Yearly	Further eval needed	Production Operations
Tank RCRA Inspections	RCRA Part B Permit	5840	832	5008	$250,400	Daily	Weekly	Further eval needed	Production Operations
RCRA Inspections, Gloveboxs, Non-nuclear	RCRA Part B Permit	416	0	416	$20,800	Weekly	N/A (following cleanout)	Further eval needed	Production Operations
Nuclear Criticality Assessment	DOE Order 5480.24; ANSI STD B.1, 8.19	480	428	52	$2,600	Monthly	Monthly (in service gloveboxes	Further eval needed	Production Operations
A/S - Prior to depositing of an airborne rad area	10CFR835 RCM Art. 555.1	1040	520	520	$26,000	As required	As required	Further eval needed	Radiation Protection
Contamination survey during initial entry into a CA	10CFR835 RCM Art. 554.1.c	0	0	0	$0	As required	As required	Further eval needed	Radiation Protection
Contamination survey prior to and following work with RAM (welding, grinding, cleaning	10CFR835 ALARA Program Plan	0	0	0	$0	As required	As required	Further eval needed	Radiation Protection
Contamination survey of areas adjacent to the contam. filter plenums when occupied	10CFR835 RCM Art. 554	1065	52	1043	$52,150	Shiftly	Weekly	Further eval needed	Radiation Protection
Gamma survey on operating HEPA vent systems	10CFR835 Art. 552.1.D	78	18	60	$3,000	Weekly	Monthly	Further eval needed	Radiation Protection
Contamination surveys on portable downdraft units and rad vacuums.	10CFR835 RCM Art. 554.4	96	16	80	$4,000	Monthly	Semi-annually	Further eval needed	Radiation Protection
Contamination surveys in office areas located within the RBA	10CFR835 RCM Art. 554.1.D	365	52	313	$15,650	Daily	Weekly	Further eval needed	Radiation Protection
Emer Diesel Gen Availability	OSR	99	99	0	$0	Annually		Further eval needed	Utilities
Subtotal		**33,817**	**5,051**	**14,816**	**$740,800**				
Measurement of DP across HEPA	ANSI-N510-1989	0	0	0	$0	Every 18 months	Every 18 months	No further eval needed	Environmental Compliance
PCB/TSCA Reporting	40CFR761	4	4	0	$0	Annually	Annually	No further eval needed	Environmental Compliance
Stratospheric Ozone Protection	5-CCR-1001-19	192	192	0	$0	Semi-annually	Semi-annually	No further eval needed	Environmental Compliance
Visible emissions testing of the diesels	Air Permit #913E1349	4	4	0	$0	Annually	Annually	No further eval needed	Environmental Compliance
RCRA Management of container storage areas	RCRA Permit 6-CCR-1007-3	104	104	0	$0	Weekly	Weekly	No further eval needed	Environmental Compliance
RCRA Management of satellite storage accumulation areas	RCRA Permit 6-CCR-1007-3, 262.34	312	312	0	$0	Weekly	Weekly	No further eval needed	Environmental Compliance
RCRA management of 90 day accumulation areas	CO Code of Federal 6. CCR-1007-2, 262.34	104	104	0	$0	Weekly	Weekly	No further eval needed	Environmental Compliance
Waste Environmental Management System	RCRA Permit 91-09-30-01 CDPHE	1372	1372	0	$0	Monthly	Monthly	No further eval needed	Environmental Compliance
TSCA Inspection of waste overpacks	40CFR761	8	8	0	$0	Quarterly	Quarterly	No further eval needed	Environmental Compliance
Chemical Inventory	40CFR302,355,370; 29CFR1910	160	160	0	$0	Annually	Annually	No further eval needed	Environmental Compliance
RCRA Idle Equipment	RCRA	12	12	0	$0	Bi-monthly	Bi-monthly	No further eval needed	Environmental Compliance
Sprinkler System 2" Drain Inspection Test	DOE Order 5480.7A, NFPA	108	108	0	$0	Quarterly	N/A	No further eval needed	Fire System Services
Glovebox Overheat Detection	DOE Order 5480.7A, NFPA	1000	1000	0	$0	Monthly	N/A	No further eval needed	Fire System Services
Filter Plenum Heat Detection System	DOE Order 5480.7A, NFPA	864	864	0	$0	Quarterly	N/A	No further eval needed	Fire System Services
Test Dry Chemical in Contamination Control Cell	DOE Order 5480.7A, NFPA	6	6	0	$0	Annually	N/A	No further eval needed	Fire System Services
Visually Inspect Contamination Control Cell	DOE Order 5480.7A, NFPA	6	6	0	$0	Semi-annually	N/A	No further eval needed	Fire System Services
Visual Verification of Fire Phones and Bldg Bells	DOE Order 5480.7A, NFPA	30	30	0	$0	Semi-annually	N/A	No further eval needed	Fire System Services
Verification of Fire Phones and Bldg Bells Operability	DOE Order 5480.7A, NFPA	27	27	0	$0	Annually	N/A	No further eval needed	Fire System Services
Sprinkler Valve Lineup	DOE Order 5480.7A, NFPA	96	96	0	$0	Monthly	N/A	No further eval needed	Fire System Services
Visual Inspection of Fire Alarm Panels	DOE Order 5480.7A, NFPA	2	2	0	$0	Monthly	N/A	No further eval needed	Fire System Services
Fire Extinguisher Inspections	DOE Order 5480.7A, NFPA	54	54	0	$0	Annually	N/A	No further eval needed	Fire System Services
Annual Hazard and Deficiency Assessment	BFO/HSP 1.06	80	80	0	$0	Yearly	N/A	No further eval needed	Industrial Hygiene
Lockout/Tagout Review	29 CFR 1910 part 147	416	416	0	$0	Monthly	N/A	No further eval needed	Industrial Hygiene
Senior Supervisory Watch	Operations Order	108	108	0	$0	As needed	N/A	No further eval needed	Industrial Hygiene
Annual Confined Space Audit	29 CFR 1910 part 146	24	24	0	$0	Yearly	N/A	No further eval needed	Industrial Hygiene
3PS Load Test and Verify Output Voltage	OSR	36	36	0	$0	Annually	N/A	No further eval needed	MTCE
Load Test Elevator	OSHA	36	36	0	$0	Semi-annually	N/A	No further eval needed	MTCE
Check Emergency Exit Lights	NFPA	288	288	0	$0	Monthly	N/A	No further eval needed	MTCE
Inter resistance check of batteries and connectors	IEEE	96	96	0	$0	Quarterly	N/A	No further eval needed	MTCE
Roll-up Fire Door Test	NFPA	12	12	0	$0	Annually	N/A	No further eval needed	MTCE
Anti-freeze loops	NFPA	30	30	0	$0	Annually	N/A	No further eval needed	MTCE
EGEN Spec. Gravity each battery cell	OSR	144	144	0	$0	Quarterly	N/A	No further eval needed	MTCE
3PS - Verify Battery Voltage Surveillance	OSR	96	96	0	$0	Monthly	N/A	No further eval needed	MTCE
Minimum Combustible Loading	Operations Order	104	104	0	$0	Weekly	N/A	No further eval needed	MTCE
Rm 176 Roving Fire Watch	OSR	168	168	0	$0	Hourly	N/A	No further eval needed	Production Operations
RCRA Inspection Nuclear (Gloveboxs)	RCRA Part B Permit	108	108	0	$0	Bi-monthly	N/A	No further eval needed	Production Operations
Glovebox Criticality Drain Fill	Glovebox Design Technical Manual	416	416	0	$0	Bi-weekly	N/A	No further eval needed	Production Operations
Fire Safety Inspection	NFPA/OSHA	60	60	0	$0	Monthly	N/A	No further eval needed	Production Operations
Contamination survey as part of RWP requirements	10CFR835 RCM RWP	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Cont. survey prior to transfer of equip/material from one RBA to another	10CFR835 RCM Art. 423.2	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Cont. survey prior to transfer of equip. from HCA >CA, or CA>clean area	10CFR835 RCM Table 2.2	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Cont. survey on outside of bags containing contam eulp. prior to moving from hi to low	10CFR835 RCM Table 2.2	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey in vaults containing SNM	10CFR835	6	6	0	$0	Monthly	Monthly	No further eval needed	Radiation Protection
Contamination survey when breaching a contamination/potentially contaminated system	10CFR835 RCM RWP	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey in HRA's	10CFR835 RCM Art. 552	39	39	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination surveys in vaults containing SNM	10CFR835 RCM Art. 554.1.G	26	26	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination surveys in occupied CA's and adjacent areas	10CFR835 RCM Art. 554.1.G&H	52	52	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination surveys in occupied HCA's and adjacent areas	10CFR835 RCM Art. 554.1.G&H	52	52	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination surveys in areas where RAM is handled or stored	10CFR835 RCM Art. 554.1.G	26	26	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination surveys in decon rooms and facilities	10CFR835 RCM Art. 554.1.G	39	39	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination survey on the outside of rad sources.	10CFR835, DOE Order N441.1	16	16	0	$0	Semi-annually	Semi-annually	No further eval needed	Radiation Protection
Contamination survey following a leak or spill	10CFR835 RCM Art. 554.1.J	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey in areas where RAM is handled and stored	10CFR835 RCM Art. 552	0	0	0	$0	Monthly	Monthly	No further eval needed	Radiation Protection
A/S - In area where annual intake >40 DAC-Hrs	10CFR835 RCM Art 555.2	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey for initial entry into an HRA.	10CFR835 RCM 552.1.C	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey prior to and following temporary shielding installation	10CFR835 RCM	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey when operating a rad-generating device	10CFR835 RCM 552.3	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey periodically during work with RAM as specified in RWP	10CFR835 RCM	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma surveys in routinely occupied areas of the RBA and RA's	10CFR835 RCM Art. 552	39	39	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
Contamination survey to detect fixed contamination that may have become removable over	10CFR835	96	96	0	$0	Monthly, Quarterly	Monthly, Quarterly	No further eval needed	Radiation Protection
Contamination survey at contamination control points, change areas, and step off pads in	10CFR835 RCM Art. 554.1.c	0	0	0	$0	Daily	N/A	No further eval needed	Radiation Protection
A/S - Prior to removing Respiratory Protection	10CFR835 RCM Art. 555	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Contamination survey in routinely occupied RBA's	10CFR835 RCM Art 554.1.F	52	52	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
A/S - When breaching an unknown or contaminated system o/s a primary containment	10CFR835 RCM Art 555.1	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Gamma survey at boundary of HRA's and VHRA's	10CFR835 RCM App. 3B	26	26	0	$0	Weekly	Weekly	No further eval needed	Radiation Protection
A/S - In area where airborne activity can fluctuate due to work activity.	10CFR835 RCM RWP	0	0	0	$0	As required	As required	No further eval needed	Radiation Protection
Building 771 Control room watch	DOE O 5480.19	8760	8760	0	$0	Shiftly	N/A	No further eval needed	Utilities
Emer Diesel Load Test	OSR	960	960	0	$0	Monthly	N/A	No further eval needed	Utilities
Rotate Zone Axial Fans	OSR	72	72	0	$0	Monthly	N/A	No further eval needed	Utilities
Fan Operability - Acuate Controls	OSR	1600	1600	0	$0	Annually	N/A	No further eval needed	Utilities
Building 771 Inside and Outside Rounds	DOE O 5480.19	17520	17520	0	$0	Shiftly	N/A	No further eval needed	Utilities
Subtotal		**30068**	**30068**	**0**	**$0**				
TOTAL		**69,830**	**43,755**	**26,075**	**$1,303,750**				

(See note 1) (See note 2)

Note 1: The 69,830 man-hours represents the number of man-hours associated with all of the evaluated activities for which the team was able to ascertain the number of man-hours expended on an activity.(i.e., 27 tasks had 0 in the Pre-Reviewed Man-hours column). Had the man-hours for these tasks been accounted for, the 69,830 man-hours column would have been significantly greater and most likely closer to the estimated 91,000 man-hours as shown on Attachment 1. Additionally, because of the latter, the "Estimated Potential Resources Savings in M-Hrs/Yr" column could have also been significantly greater.

Note 2: The $50/hr was quoted by the facility as a figure they are allowed to take credit for when labor savings are identified by the facility. The team was informed by the facility that the $50/hr average rate was the direct "burdened" cost of maintaining an employee (cost of pension, payroll taxes, insurance, sick leave, training, etc.). Based on the "Estimated Potential Resources Savings in M-Hrs/Yr" the potential annual savings is approximately $1.3M out of about $4.5M (see Attachment 1) in annual S&M activities reviewed.