Superfund Program – Resource Analysis and Special Account Charging

Superfund 101

The Superfund Program plays a vital role in protecting human health and the environment. The Superfund program responds to the release and potential release of hazardous wastes and cleans up sites in the Rocky Mountains and Plains. Superfund activities include both short-term and emergency cleanups as well as long-term remedial actions at National Priorities List (NPL) and Superfund Alternative Approach sites.

The Remedial Program oversees long-term cleanup of the most complex contaminated sites. The Denver and Helena offices work closely with many partners – state, local and tribal governments, businesses, non-governmental organizations, communities and individuals – to ensure the protection of human health and the environment at these sites. While states are key partners in the program, the Superfund Program is a non-delegable, direct implementation program. Superfund also plays a role at Federal Facilities like the Department of Energy and Department of Defense sites.

From start to finish, the Superfund process requires resources from many of the Region's Offices and Programs. Specifically: EPR-SR/MOO, EPR-S, EPR-AR, EPR-ER, TMS-FMP, TMS-GAP, OCPI, ENF-L and ENF-T.

Superfund Cleanup Process

Preliminary Assessment/Site Inspection (PA/SI)

The investigation of site conditions.

National Priorities List (NPL) Site Listing Process

The NPL is a list of the country's most seriously contaminated sites.

Remedial Investigation/Feasibility Study (RI/FS)

An evaluation of the nature and extent of contamination at the site and an evaluation of potential treatment technologies.

Record of Decision (ROD)

A summary of cleanup alternatives and the proposed/selected remedy.

Remedial Design (RD)

The preparation of plans and specifications for the selected site remedy.

Remedial Action (RA)

The implementation/construction of the selected remedy.

Post Construction

The long-term monitoring and protection of the remedy. Specifically: Long-Term Response Actions (LTRA), Operations and Maintenance (O&M), Institutional Controls (ICs), Five Year Reviews, and Remedy Optimization.

Community Involvement

CERCLA, as implemented by the NCP, requires specific community involvement activities at certain points throughout the Superfund process.

Superfund Office/Program Roles and Responsibilities

Site Assessment Program (EPR-AR) - PA/SI and NPL Listing

The Site Assessment Program works with states and tribes to assess and prioritize Hazardous waste sites for cleanup. In conjunction with states and affected tribes, the program evaluates sites to determine whether they qualify for listing on the NPL. Site Assessment Managers evaluate sites for potential threats to public health and the environment. If it is determined that another program could better address site conditions, Site Assessment Managers direct sites to different programs, such as the Superfund Emergency Response program, the Resource Conservation and Recovery Act (RCRA) program or state voluntary cleanup programs.

Supporting Offices/Programs: EPR-SR/MOO, EPR-S, EPR-ER, TMS-FMP, TMS-GAP, OCPI, ENF-L and ENF-T.

Superfund Remedial Program (EPR-SR/MOO) – PA/SI, RI/FS, ROD, RD, RA and Post Construction

The Remedial Program is a multi-media, community-centered program. It is responsible for investigating contaminated sites, selecting appropriate remedies, conducting clean ups and ensuring the long-term protectiveness of the remedy. Remedial Program staff manage multi-discipline, cross-regional teams and along with OCPI staff are the most visible government presence in the impacted communities.

Supporting Offices/Programs: EPR-S, EPR-ER, EPR-AR, TMS-FMP, TMS-GAP, OCPI, ENF-L and ENF-T.

Emergency Response and Preparedness (EPR-ER) – Removal Actions and RA

The Superfund Emergency Response Program responds rapidly to releases of hazardous substances and oil to protect human health and the environment. Emergencies range from small-scale spills to large events requiring prompt action and evacuation of nearby populations. Removal staff work with local, state and tribal responders to investigate and clean up environmental contamination.

Supporting Offices/Programs: EPR-SR/MOO, EPR-S, EPR-AR, OCPI, TMS-GAP, TMS-FMP, ENF-L and ENF-T

Support Program (EPR-S) - PA/SI, RI/FS, RD, RA, ROD, Removal Actions and Post Construction

The Support Program provides: 1) internal science and toxicology expertise in the form of Human Health and Ecological Risk Assessment, Chemistry and Hydrogeology support; 2) budget/financial management; State, tribal and community grant and contract management; and 3) data systems support (data management, analytic/laboratory services, GIS support, and records management).

Supporting Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, TMS-FMP, TMS-GAP, OCPI, ENF-L and ENF-T

Community Involvement (OCPI-PAI) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD, Removal Actions and Post Construction

Superfund requires community involvement support to ensure early and often community involvement at sites. Community outreach and engagement are core components of the Superfund commitment to safe, healthy communities and environmental protection. The PAI Program provides community involvement and outreach expertise including community education about the site, community outreach assessment and planning, identification of key stakeholders, conflict resolution, technical support services and grants to communities, Community and Technical Advisory Group support, and media, local, State and Congressional relations. Supporting Offices/Programs: EPR-SR/MOO, EPR-S, EPR-AR, EPR-ER, TMS-GAP, ENF-L and ENF-T

Legal Enforcement (ENF-L) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD and Post Construction

Superfund involves federal administrative and judicial CERCLA matters against potentially responsible parties. Superfund requires legal and policy support to ensure regulatory compliance in the region's cleanup activities. Superfund responsibilities include the preparation/issuance of administrative orders; preparation of judicial referrals; administrative and judicial litigation with attendant hearings; preparation of consent orders and decrees; and counseling involving NCP compliance, FOIA and Confidential Business Information issues.

Supported Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, TMS-FMP, TMS-GAP, OCPI and ENF-T

Technical Enforcement (ENF-T) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD and Post Construction

The cornerstone of Superfund is the unique legal authority which compels the Agency to ensure, to the extent possible, those responsible for creating Superfund sites to either cleanup the site themselves or to reimburse EPA for costs incurred for cleanup. The Superfund program seeks to identify those responsible (the potentially responsible parties or PRPs), recover EPA response costs, manage large volumes of data collected from PRPs, lead complex and often sensitive investigations and/or interviews, investigate past practices and relationships at Superfund sites, and testify as an EPA fact witness in enforcement actions.

Supported Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, EPR-S, TMS-FMP, TMS-GAP, OCPI and ENF-L.

Technical Management Services – Grant and Audit Procurements (TMS-GAP) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD and Post Construction

Superfund contract and grant support is on-going at the majority of the region's superfund sites. Examples include: START IV, risk assessment, Rocky Mountain Arsenal, and ERRS IV contracts and approximately 40 cooperative agreements.

Supported Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, EPR-S, TMS-FMP, TMS-QA, OCPI, ENF-T and ENF-L.

Technical Management Services – Financial Management Program (TMS-FMP) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD and Post Construction

The Superfund program expends between $50M and $100M annually through contracts, grants and interagency agency agreements. A very high percentage of the fund expended are settlement funds from responsible parties requiring extensive cost recovery, enforcement cost documentation and cash receivable tracking and management.

Supported Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, EPR-S, TMS-GAP, TMS-QA, OCPI, ENF-T and ENF-L.

Technical Management Services – Quality Assurance Program (TMS-QA) - PA/SI, NPL Listing, RI/FS, RD, RA, ROD and Post Construction

The overarching goal of the Agency's Quality System is to ensure environmental data used to support Agency decision-making are of appropriate quality, quantity, and usability: reproducibility; traceability; have scientific integrity; and defensible in a court of law. The National Contingency Plan details specific quality assurance requirements for Superfund.

Supported Offices/Programs: EPR-SR/MOO, EPR-AR, EPR-ER, EPR-S, TMS-GAP, TMS-FMP, OCPI, ENF-T and ENF-L.

Superfund Workload and Prioritization

The Denver and Montana Offices currently manage approximately 90 NPL and NPL-equivalent Superfund sites. The Superfund workload across each Office/Program includes proposed sites, newly listed sites, NPL-equivalent sites (or Superfund Alternative), RI/FS/RD/RA sites, post construction sites, and sites returning to the forefront due to new contaminants or remedy related issues.

The Superfund program is a non-delegable program. The CERCLA statute obligates EPA to address the risk of exposures to the public and the environment. The program has successfully completed cleanup work at various sites across the region and has reduced efforts at non-NPL and lower priority sites. De-listed sites often require on-going attention due to waste left in place, new contaminants and statutory five year reviews. Despite completing work at sites and program efficiencies, the workload across each Superfund Office/Program continues to grow. Specifically, the workload continues to grow due to:

a. New NPL listings and initial remedial work at future (non-NPL) sites (e.g. Colorado Smelter, Columbia Falls Aluminum, Upper Animas). These sites require significant staff and extramural resources.
b. Increased Agency guidance on early and often community involvement at sites, the national Community Engagement Initiative, and critical IG reports on community outreach, increased in national community involvement services to communities and increased local interest.
c. A national suite of Superfund contracts (Remedial Acquisition Framework) are transferring to the region from Headquarters. The new suite of contracts will be enormously work intensive for RPMs (task order administration and construction field oversight) and contract staff (competing work at the task order level).
d. Maintaining the accuracy of websites and other social media along with new national requirements.

e. The increased focus on post construction work and new problems at old sites. Sites like Eagle Mine, Lowry Landfill, Chemical Sales, Lincoln Park, Uravan are reemerging and require significant time and attention.
f. Ensuring long-term protection of the remedy through institutional controls and Operation and Maintenance. These stewardship requirements also require working with communities on the re-use and redevelopment aspects of cleaned up sites.

Office/Program Vulnerabilities

Each Office/Program is experiencing the impact of additional Superfund work, reductions in staff, and reductions in appropriated funds and the growing importance and dependence upon enforcement settlements with potential responsible parties (PRPs).

Legal Enforcement - CERLCA attorneys handle cases including everything from site assessment, removal, remedial, post construction and cost recovery. These matters are currently divided up among 8 full time and one part time CERCLA staff attorneys. As of January 31, 2015, there are 199 active CERCLA cases in LEP. Eighty of these matters are currently unassigned and are addressed on a triage basis.

Technical Enforcement – Currently staff handle 270 active sites, including 44 large and complex National Priorities List (NPL) sites and support approximately 100 emergency response removal actions per year. Enforcement specialists are currently responsible for approximately 50 cases per person.

EPR-SR/MOO/MT Office – Currently 22 RPMs in the Denver office managing 69 Superfund sites (3.1 sites/RPM). Of the 22 RPMs, 4 are entirely consumed by the Libby Asbestos site. Consequently the remaining 18 RPMs manage on average 3.8 sites, up from 3.2 in FY13. The Montana Office manages approximately 20 sites with a similar, site to RPM ratio.

In order to help address the workload issue, the Montana Office has been given permission to hire one RPM. In the Denver Office, the region's resident mining engineer, an EPR-S staff member, is managing sites to reduce the EPR-SR/MOO workload.

The Superfund Program is dependent upon ENF-L and ENF-T to seek out potentially responsible parties (PRPs) and negotiate settlements to reduce the burden on appropriated funds. Reductions in available appropriated funds and reduced staff has impacted the pace of investigations and clean ups at sites without existing special accounts (settlement funds). For example, the program currently has approximately $4M of unfunded work. Specific examples include:

1) Chemical Sales NPL Site, Denver, CO: This is an old site with a new problem, a 1,4 dioxane plume that was overlooked and has now come to the fore. The dioxane plume is well off site and PWS wells for the South Adams County Water and Sanitation District are picking up hits of 1,4 dioxane above the State's groundwater standard. We need to commence a new RI/FS to determine the extent of the plume that will likely lead to additional RA. (unfunded need is $500K)
2) Colorado Smelter NPL Site, Pueblo, CO: This is a new NPL site in the economically distressed town of Pueblo. The site is located in an EJ community. The listing has led HUD and local lenders to suspend issuing new mortgages. We have committed to move expeditiously to sample residential properties for lead contamination from historic smelting. (unfunded need is $800K)

3) Gilt Edge Mine NPL Site, near Lead, SD: Abandoned heap leach gold mine in the Black Hills at the headwaters of the Belle Fourche River which serves tens of thousands of downstream water users. (unfunded need is $500K).

Additionally, the region anticipates presenting 6 new remedial action sites (construction ready projects) to the Headquarters' Priority Panel in late 2015. These sites will likely sit unaddressed until funds and staff become available.

EPR-S - EPR-S currently has one FTE managing 38 cooperative agreements, 12 Superfund State Contracts (SSCs), and 4 of the 15 Superfund Program's interagency agreements (IAs).

OPCI-PAI – Currently the program has 4.8 FTE assisting in various capacities with the approximately 90 NPL sites, as well as Emergency Response and Site Assessment sites. The Program has very limited resources to provide the necessary support needed to the Emergency Response, Remedial (including Federal Facility sites) and Site Assessment programs based on insufficient staffing resources. The Program is struggling to provide its statutorily-mandated community involvement requirements under the National Contingency Plan and CERCLA and to outreach and technical needs assistance to communities impacted by hazardous waste.

TMS – GAP – Beginning in FY16, the two national remedial action contracts, currently being managed in Headquarters by two contracting officers, will be coming to the regional contracting office. The Superfund program anticipates 3 new suites of contracts producing a minimum of 10 new contractors/vendors. The new national remedial acquisition framework (remedial program contracts) will transition to the region and exceed the Program's existing staff capabilities.

Addressing Regional Superfund Resource Needs

EPA's strategic plan for 2014 – 2018 includes the goals of protecting America's waters, cleaning up communities and advancing sustainable development and protecting human health and the environment. A vibrant Superfund program is critical to meeting these goals. Staffing levels in each CERCLA Office/Program are critically low, jeopardizing the Region's ability to conduct its Superfund responsibilities.

Superfund Program Functional Needs Assessment

On Feb. 25, 2015 Superfund Program Managers met to discuss 2015/2016 functional needs across EPR, TMS, ENF and OCPI. The following individuals attended the meeting: Bill Murray, Russ Leclerc, David Ostrander, Johanna Miller, Andrea; Madigan, Kelcey Land, Bethany Mills, Linda Himmelbauer, Paula Smith, Joe Vranka, Joe Poetter, Tony Selle, Libby Faulk, and Laura Williams.

The functional needs analysis linked the region's highest priority Superfund work to the region's immediate and near-term functional needs. Over the course of an hour, each Program discussed their functional needs and the associated resource needs. Following the meeting each Program Manager grouped each identified need/justification into one of three categories:

1) Immediate needs,
2) Near-term needs (will need attention soon), and
3) Needs that may move up in urgency due to retirement or other factors.

The Program Managers met again on March 5, 2015 to discuss the results, address questions and concerns, and discuss next steps. As a result of the meeting, the group accepted the results of the analysis and identified the following six functional needs as priorities that could be addressed above the region's Superfund FTE ceiling using special account funds (See Table 1).

1. P.O./ EPR-S – see attached Position Justification
2. Attorney/ENF-L – see attached Position Justification
3. Contracts/TMS-GAP – see attached Position Justification
4. Community Involvement Coordinator/OCPI – see attached Position Justification
5. Enforcement Specialist/ENF-T – see attached Position Justification, and
6. RPM/EPR-SR/MOO – see attached Position Justification

Special Account – Salary Charging Analysis

The Program reviewed existing special account settlements to evaluate the potential to increase regional FTE levels (above ceiling) by charging a limited number of staff salaries to existing special account settlements.

In Feb. 2015, the Superfund Remedial Program, the Superfund Support Program and the Montana Office conducted a comprehensive analysis of Region 8 NPL sites with special accounts. Denver and Helena Remedial Program Managers:

1. Identified all the sites in Region 8 with special accounts.
2. Analyzed/reviewed actual FY14 special account site charging.
    a. Twenty-Seven (27) Superfund sites were identified as sites with the potential for special account payroll charging.
    b. Actual site charging at these 27 sites totaled 21 FTE; i.e., in FY14, 21 FTE could have payroll charged all or a portion of their time to existing special accounts.
3. Reviewed the future workload at each site and determined that 10 sites had *5 years or more of intensive future work* and *available/projected of future funding*.
    a. The analysis (see below) identified 9.5 potential FTE available for special account payroll charging.
4. The region discussed this approach with OSWER managers and received their support to utilize special account funds for paying salary at the expense of funding extramural needs. The degree to which the regions choose to utilize special account funds for payroll is a regional decision.
5. The Program met with TMS staff. Financial Management/TMS-FMP management believes that it can absorb the additional workload associated with tracking special account payroll charging as long as the Program limits the number of sites being site charged. However, it is possible that TMS-FMP may need additional resources in the future.
6. Although 9.5 FTE were identified as potentially available for special account payroll charging, the workgroup agreed that an additional level of conservatism should be considered and recommends only 6 FTE be charged to special accounts (See Table 1). Note: these 6 FTE do not directly align with the potential special accounts that could be used for payroll; staffing plans would need to be adjusted accordingly.

Sites with greatest potential for Special Account Payroll Charging

Site Name	FTE *	SA Type **	Comment
Rocky Mountain Arsenal	0.50	RE	This would be in addition to current 1.0 FTE
Anaconda Smelter	1.00	CO	5 -10 years of additional work
ACM/Great Falls Refinery	0.50	RE	10 + years of additional work
Kennecott (various OUs)	1.00	RE	5 - 10 years of additional work
Silver Bow Creek	2.00	CO	10 + years of additional work
Milltown Reservoir	0.50	CO	5 + years of additional work
Gilt Edge Mine	0.75	CO	10 + years of additional work
Libby Asbestos OU3	0.75	RE	10 + years of additional work
U.S. Magnesium	1.50	RE	10 + years of additional work
Lincoln Park/Cotter	1.00	RE	5 -10 years of additional work
	9.50		

* FTE = Based on an analysis of actual charging in 2014.

These FTE are less than the actual charging and conservative estimates of potential FTE charging commitments that could be made.

** CO = Cash Out (one time cash settlement with responsible parties)

Salary dollars generally represent a small percentage of the overall cost of conducting the work. Payroll charging against special accounts is widespread in other regions and has been for many years. This approach is consistent with OSWER's emphasis on utilizing special accounts for near-term work.

** RE = Reimbursable (special accounts are replenished annually)

Salary dollars are replenished based upon previous year cost packages.

Summary and Next Steps

The Superfund Program workload centers around the 90 NPL sites managed in the Denver and Montana Offices. The workload encompasses everything from site assessment, removal, remedial, post construction, enforcement actions and cost recovery and touches EPR, OCPI, ENF, TMS and the Montana Office. The Superfund Program is dependent on its internal resources (site assessment managers, remedial project manager, project officers, enforcement specialist, attorneys, etc.) and its reliance on community, state and local government partnerships. Furthermore, the Superfund Program is reliant on its contracts, grants and interagency agreements to accomplish work and meet community expectations.

Each Superfund Program Office has strived to create efficiencies through process improvements; sharing resources; prioritizing work; reducing grant funding to states and local governments; funding contracts, grants and interagency agreements below optimum project levels; and where possible, cutting back on services.

The Superfund Program Functional Needs Assessment identified 6 critical functional needs. Specifically, project officer duties, legal and technical enforcement activities, contract officer duties, community involvement duties and remedial project management. These needs are based upon vulnerabilities with managing Superfund contracts, grants and interagency agreements (one FTE is managing over 50 contracts, grants and interagency agreements; and a new suite of contracts transitioning to the region in FY16); ensuring responsible parties conduct investigations and cleanups and/or collecting reimbursements for past and future costs (there are approximately 100 open/unassigned cases in ENF-L; enforcement specialists manage approximately 50 cases each); meeting statutory community involvement requirements (limited Federal Facility and Emergency Response support), and effectively managing current and future sites (new NPL listings and new problems at old Superfund sites.)

Based upon the Site Charging – Special Account Analysis, the Deputies Group and SLT are in a position to evaluate the results of the Functional Needs Assessment and determine if the six critical functional needs can/should be addressed above the region's FTE ceiling using special account funds. Reimbursable charging does not count against our regional Superfund ceiling. Consideration will also have to be given to what specific PRC code may be freed up if staff begin charging to special accounts. There are 12 Superfund PRC codes. We may have specific ceilings by PRC code which could limit flexibility in deploying superfund resources to certain functions (e.g. if RPM charging was freed up through use of special account funds, that PRC code should not be used for Superfund enforcement charging). Note: At least half of EPA's regional offices support staff with special account payroll. Their processes could serve as a model/starting point for Region 8.

Other things to consider if the Region decides to go forward with this recommendation (initial list)

- How will this plan work?
- What is the implementation strategy?
- Who will receive special accounts payroll and what flexibility does that give us to deploy resources across Superfund programs where they are most needed? (i.e. what PRC is freed up as a result?)
- Overhead can't be charged to special accounts so how do we factor this in to our budget planning.
- Other…