

# Region 4, Superfund Division

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# Superfund

At A Glance



The Region 4 Superfund Program serves the more than 50-million citizens of the eight southeastern states; the largest and fastest growing Region in the country. Region 4 encompasses many irreplaceable natural resources, including: the Great Smokey Mountains; Mississippi River; Florida Keys; Okefenokee Swamp; 1/3 of the wetlands and coastline in the lower 48 states; and, estuaries providing habitat for 98% of the nations' commercial marine fisheries.

With the support of our states, tribes and communities, the Superfund program in Region 4 has identified more than 7,000 hazardous waste sites. Of these, 258 private and federal facility sites are being managed through the Region's Superfund Remedial Program, including 215 on



the National Priorities List (NPL), which have been or are being cleaned up under EPA's authority. Region 4 aggressively pursues enforcement through the "polluter pays" principle, and, as a result, the majority of our Superfund cleanups are potentially responsible party lead. Region 4's Superfund Emergency Response Program responds to more than 100 environmental emergencies each year, in addition to taking a lead role in Homeland Security.

The Region 4 Superfund Division is organized into a Front Office and six Branches. The Front Office includes the Division Director, his staff, and the Office of Superfund Public Affairs and Outreach. The largest Branch is the Emergency Response and Removal Branch (ERRB) which has three Sections. The Remedial Program is organized into three Branches and eight Sections. The Superfund Enforcement and Information Management Branch consists of two Sections, and the Superfund Support Branch also has two Sections. The Region 4 Superfund Division currently has 193 employees; the majority in scientific and engineering disciplines.

## **Emergency Response and Removal Program**

The Emergency Response and Removal Branch (ERRB) is responsible for implementation of program function in two distinct areas: 1) Homeland Security; and 2) emergency response, removal, and spill prevention activities associated with releases of hazardous substances and oil spills. The Strategic Plan activities which ERRB contributes for the Region are Goal 3: Preserve and Restore the Land, Objective 3.2; Restore Land; Sub-Objective 3.2.1: Prepare for and Respond to Accidental and Intentional Releases. EPA's Superfund Emergency Response Program's top priorities are:



- Readiness to respond 24 hours-a-day to a release incident wherever they occur;
- Response with whatever resources are required to eliminate immediate dangers to the public and the environment;
- Community relations that can be used to inform the public about a release, response activities, and the substances involved; and
- Prepare for potential incident responses for Homeland Security.



Region 4 is a national leader in emergency response and preparedness. The Emergency Response program maintains a "Culture of Response" based on its active participation in a number of programs including: emergency response; oil and Superfund removal actions; and, responses to major natural disasters.

The Region 4 ERRB includes 32 On-Scene Coordinators (OSCs) and support personnel including a dedicated emergency response team of 8 OSCs. Our response capabilities are significantly enhanced through an outpost

program by which we have permanently stationed OSCs in Alabama, Florida, Kentucky, North Carolina, and Tennessee. Our outpost OSCs cultivate and maintain close ties with our state and local counterparts and are able to rapidly respond to emergencies within their respective states.

Historically, Region 4 carries out more emergency response actions than any other EPA region. ERRB completed 177 emergency responses in 2008 to address releases of either hazardous substances or oil. Eighty of these response actions were to address releases of hazardous substances and 97 were oil spill responses.

EPA Region 4 is consistently among the top EPA regions in the number of removal actions completed. Of the 80 hazardous substance emergencies that ERRB responded to in FY08, 40 were CERCLA Fund-lead, 32 were conducted as emergencies by the responsible parties and 8 were conducted as time critical responses through a negotiated enforcement document. Additionally, Region 4 is currently evaluating and conducting activity-based sampling at up to 22 vermiculite sites in the Southeast, more than any other EPA region.

Region 4 has one of the most aggressive oil spill prevention and removal programs in the nation. Oil spill response accounts for more than 50% of the emergency response actions within the Region, and about one-third of ERRB payroll is funded via the Oil Pollution Act. For FY09, the program is committed to 40 FRP inspections, the largest inspection commitment of any EPA Region. Within EPA-Region 4, thousands of abandoned and leaking oil well sites



have been identified as currently or potentially impacting waterways. To address these threats, Region 4 has implemented an ambitious abandoned oil well program under which leaking oil wells are identified, prioritized, and properly plugged in an efficient and cost-effective manner. A total of 54 oil wells in Kentucky were properly plugged and closed in 2008. As of mid-May, 62 oil wells have been plugged in FY09. The Region 4 abandoned oil well program has been recognized by the U.S. Coast Guard National Pollution Funds Center (NPFC) as a model in efficiency and cost effectiveness.



Region 4 is the Lead Region for Homeland Security and, in conjunction with other Regions and Headquarters, has developed a joint planning framework to enhance our preparedness. We have also implemented a catastrophic hurricane planning initiative with FEMA and the States of Florida and North Carolina. Region 4 has developed and/or participated in a number of catastrophic event exercises in the past 2 years highlighted by SONs07, Operation Dry Hydrant, and several Incident Management Team exercises (with Response Support Corps participation).

The Region has been activated by FEMA under Stafford Act authority more than any other Region in the nation. We have responded to 10 hurricanes and tropical storms since 2003. Some of these storms were among the most severe and damaging hurricanes of the past 20 years, including Hugo, Andrew, Francis, Floyd, Ivan and Katrina. Hurricanes have impacted the coastal areas of Florida, South Carolina, North Carolina, Mississippi and Alabama, as well as severe flooding which has affected the inland areas of Georgia, South Carolina, North Carolina, and Alabama.

## Response Program Status

Thus far in FY09, ERRB has received 2,937 notifications from the National Response Center (NRC) for either hazardous substance or oil spill incidents. A total of 44 hazardous substance responses have been completed and 94 completed oil spill responses, which includes 62 abandoned oil well removal actions. The current GPRA targets for R4 are a significant contribution to the national goals in many of the program areas. The targets for FY09 and the fiscal year-to-date accomplishments are:



GPRA/PART MEASURES	REGIONAL TARGET	ACCOMPLISHED	NATIONAL ANNUAL GOAL
By 2011, achieve and maintain at least 95 percent of the maximum score on readiness evaluation criteria in each Region	2007 Baseline	98%	N/A
Superfund-lead removal actions (completions)	28	19	195
Voluntary removal actions overseen by EPA, (completions)	28	25	125
Hazardous Sub/Oil spill reports	Report	2,937	N/A
Inspections and drills at FRP facilities	40	37	250
Number of SPCC inspections completed	Report	79	NA

## **Remedial Program**

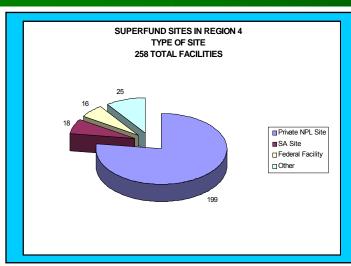
The Region 4 Superfund Remedial Program supports EPA's Strategic Plan for Goal 3: Preserve and Restore the Land, Objective 3.2; Restore Land; Sub-Objective 3.2.2; Cleanup and Revitalize Contaminated Land.

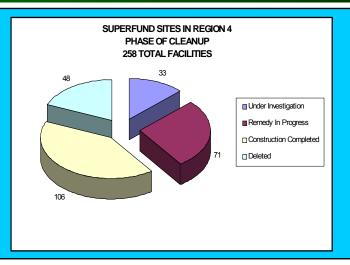
The Remedial Program is responsible for all aspects of Superfund site management from site assessment through deletion. The Remedial Program can be divided into four consecutive phases of cleanup: pre-remedial (discovery through site assessment decision); investigation (remedial investigation through record of decision); remedy implementation (remedial design through construction completion); and, post-construction (operation and maintenance through deletion).

The Region 4 Superfund Remedial Program has 258 sites under management throughout the eight States of Region 4. The State of Florida has the most sites with 85, and the State of Mississippi has the fewest with 7. The Remedial Program has made significant progress in site cleanup over the past 25-years with 11.8% under investigation, 27.8% remedy in progress, 41.6% construction completed, and 18.8% deleted. Sites in the earlier phases of the remedial pipeline are a combination of more recently added sites and the most complex and most difficult sites.



# **EPA Region 4**





#### Site Assessment

The Region 4 Superfund Site Assessment Section continues to add new sites to the Remedial Program. Based on the past several years, new sites are being added to the NPL at about the same rate as sites are deleted from the NPL in Region 4. Sites targeted for proposal to the NPL include:

## September 2009

Kerr-McGee, FL Kerr-McGee, NC J.J. Seiffert, FL

## **March 2010**

Red Panther, MS Ellis Rd./American Electric, FL Sanford Dry Cleaner, FL Smokey Mountain Smelter, TN Wright Chemical, NC

## Private Remedial

The vast majority of Superfund sites managed through the Region 4 private Remedial Program are on the NPL. The Region also created the Superfund Alternative (SA), formerly NPL Equivalent, approach, and manages sites in conformance with the 2002 Headquarters guidance on Superfund Alternative (SA) sites, as well as having SA sites that pre-date the Headquarters guidance. Additionally, there are a few sites that have been proposed, but not finalized, to the NPL under management. Region 4 is aggressively pursuing all options to expedite cleanup of sites. The average tenure of a Region 4 Superfund site in the remedial pipeline is 11.7 years,  $\pm$  4.4 years, from listing on the NPL to deletion. The number of years in the pipeline has increased through time, as would be expected, but the number of sites deleted also has decreased since 2000 indicating that this trend is not solely due to the passage of time.

The benefits of the SA approach vary depending on the circumstances at the site. A key benefit is the resource savings of not formally proposing and listing a site on the NPL. Other



# **EPA Region 4**

benefits may include a community's good will at not having the site listed on the NPL, a PRP's willingness to negotiate a good-faith agreement, and the opportunity to start cleanup work more quickly. Region 4 has 31 "Regionally Identified" sites using the SA approach, 16 of which meet the current OECA requirements for SA. Four sites will likely never meet the OECA requirements, for example the Former Spellman Engineering site.

Because there was no viable Potentially Responsible Party, the Former Spellman Engineering site did not meet Headquarters criteria for a Superfund Alternative Site. However, the City of Orlando agreed to enter into EPA's first Contiguous Property Owner Agreement to conduct the estimated \$12.9 million remedy in exchange for EPA's agreement to use its enforcement discretion not to list the Site on the NPL. In addition to saving federal remedial action funds, this approach addresses the desire of the City and



the community not to have an NPL listed site within their City and increases the potential for site redevelopment while achieving the same level of cleanup as if it were a listed site.

The Superfund Remedial Program is helping communities all over the Southeast realize significant revitalization and redevelopment opportunities by cleaning up Superfund sites and facilitating their reuse through Region 4's Superfund Redevelopment Initiative (SRI). This initiative addresses barriers to reuse that have left many Superfund sites underutilized following cleanup. Reuse of these sites allows communities to regain lost landscapes as valuable green space, add recreational amenities, or create jobs and increase local revenues through use as commercial property. The Region 4 Superfund Remedial Program has led the nation in developing innovative approaches to facilitate reuse and redevelopment of Superfund sites, including:



- Prospective Purchaser Inquiry service
- Region 4 SRI website
- Site Fact Sheets highlighting redevelopment successes and opportunities
- "Top Ten Questions" for prospective purchasers
- Excellence in Site Reuse Award



The Cascade Park Gasification site in downtown Tallahassee, Florida was the first recipient of the Excellence in Site Reuse Award. The cleanup of this formerly blighted property is returning park land and recreational space to the heart of the State capital. The Mayor, City Council members, Florida Department of Environmental Protection, and representatives of state and federal elected officials all attended the award ceremony.

The Superfund Remedial Program also has established a Post Construction Completion (PCC) Team to bring together Institutional Controls (ICs), Five-Year Reviews (FYRs), and Site Reuse issues associated with post-construction sites. The PCC Team provides a forum for team members and Remedial Project Managers to discuss complex issues associated with post-construction sites, and develop strategies to achieve Site-wide Ready for Anticipated Use.

The American Recovery and Reinvestment Act is supporting 6 Superfund fund-lead remedial actions (3 new starts/3 ongoing) in Region 4. This includes 1 site in the State of North Carolina, 2 in the State of Georgia, and 3 in the State of Florida. The total value of these projects is \$31 M which is expected to create at least 200 jobs in the first 12-months. The ARRA funding will significantly accelerate cleanup at these sites, and will result in bringing human exposure under control at 1 site, groundwater migration under control at 2 sites, construction completion at 2 sites, and site wide ready for anticipated use at 2 sites.

## Federal Facilities

The Federal Facilities Branch (FFB) works closely with states and other federal agencies to provide oversight, technical support, regulatory guidance, and assistance in the cleanup of 19 NPL and 11 Base Realignment and Closure sites at Department of Defense (DOD) military bases and Department of Energy (DOE) nuclear reactor, processing, and research centers in the Region. FFB oversees highly complex remedial and removal cleanup work at three major DOE complexes: the Savannah River Site (SRS); the Oak Ridge Reservation (ORR) Site; and, the Paducah Gaseous Diffusion Plant Site (Paducah). The environmental management budget for these DOE facilities ranges from \$100 M to \$1 B annually. The three DOE sites will receive a total of \$2.4 billion in ARRA funding which represents about 40% of the ARRA funds that DOE will receive nationally for environmental management. This will create thousands of jobs as a result of the funds. This will substantially increase our workload at the sites and require additional hiring of contract support and staff to meet the schedules and milestones. The Region has requested funds from DOE for our increased work load and DOE is receptive to our request.

FFB oversees environmental cleanups resulting from past improper hazardous materials/waste handling and disposal operations at Department of Defense (DoD)



installations. These installations include Air Force, Army, and Navy/Marine facilities. In addition, oversight of hazardous waste cleanups takes place at non-military federal facilities such as the National Aeronautics and Space Administration's (NASA) Marshall Space Flight Center in Huntsville, AL. The Federal Facility cleanup program tracks and reports targets and measures separately from the private Remedial Program, as tabulated.

GPRA Measures	FY08 Goal	FY08 Achieved	FY09 lGoal
RI/FS Starts	12	14	4
Decision Documents	12	12	8
Final ROD (NAS Cecil Field)	1	1	0
RA Starts	14	15	9
RA Completions	12	12	8
Construction Completions (NAS Cecil Field)	1	0	1
Five-vear Reviews	4	4	2

Region 4 FFB created the Tiered Partnering approach for cleanup in the Southeast. This is a 14-year alliance among federal, state and military installations and major commands established at three tiers: Tier I. installation/ RPM level; Tier II, state level/ Section Chief: and Tier III,

regional level/Branch Chief. The tiered partnership fosters cooperative relationships among members and empowers teams at all levels to more effectively remediate DOD hazardous substance release sites. Participants at each level contribute authorities, expertise and resources to provide installations with a complete set of cleanup tools. In Region 4, restoration partnering is driven by a simple shared goal: provide for the quickest and most cost-effective cleanup. Successful environmental cleanups on military installations require teamwork among the installations, regulators, service providers, contractors and community members. Partnering has transformed the installation cleanup program from insecure funding and controversial decisions, and focused efforts to share information, solve problems and expedite cleanup. This is the only regional cleanup partnership of its kind in the nation.

Where partnering has not been successful, the Region has taken necessary enforcement to resolve issues with federal facilities. Examples: Milan Formal Ground Water Dispute. In August 2008, Region 4 initiated a formal dispute with the Army concerning the adequacy of ground water data and cleanup alternatives for ground water contamination



at the 22,000 acre ammunition production and storage facility. The dispute was resolved in December 2008.

For the past several years, EPA and DoD have been involved in a dispute regarding completion of the 13 FFAs remaining to be signed nationally. Due to Congressional hearings September 2008, and a decision from the Department of Justice on December 1, 2008, there has been movement to finalize the remaining FFAs nationwide. Three of the 13 outstanding FFAs are for Federal Facility Superfund



sites in Region 4: Tyndall Air Force Base (FL), Redstone Army Arsenal (AL), and Naval Air Station Whiting Field (FL). The FFA at Whiting Field has been signed and is out for public comment. FFAs for Tyndall and Redstone are still being negotiated and are targeted for completion in 2009.

## 2009 Remedial Program Priorities

There remain 6 Superfund sites where human exposure is not under control, and 33 Superfund sites identified as groundwater migration not under control in Region 4. A regional coordinator monitors each of these sites's progress to achieve an "under control" status, and tracks the annual GRPA commitments. EPA Region 4 Superfund Remedial Program priorities are:

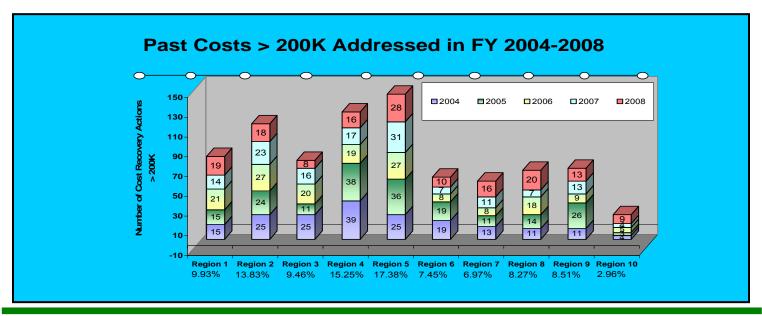
- Bring Human Exposure Under Control at all sites;
- Accelerating cleanup and achieving Construction Completion;
- Continued emphasis on Site-wide Ready for Anticipated Use and Superfund Redevelopment Initiative;
- Focus on stewardship at post-construction sites;
- Expand community involvement and outreach to all members of affected communities; and,
- Obtain Federal Facility Agreements at remaining facilities.



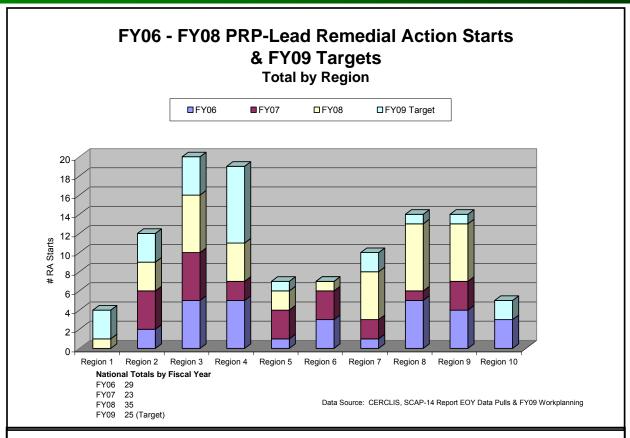
Region 4 Superfund GPRA Measure Goals						
Primary Measure	2008 Goal	Achieved	2009 Goal			
Site Assessment Conducted (Final Assessment Decision (FAD))	45	45	50			
Number of Superfund Hazardous Waste Sites with Human Exposures Under Control	1	5	1			
Number of Superfund Hazardous Waste Sites with Groundwater Migration Under Control	2	3	2			
Superfund Construction Completions	4	4	3			
Site-wide Ready for Anticipated use	3	5	4			

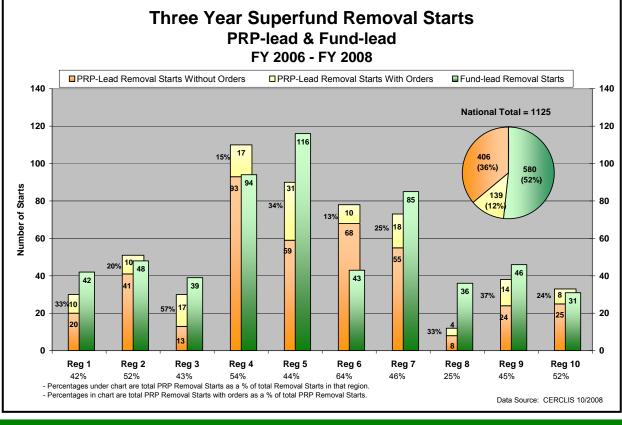
# **Enforcement and Information Management**

The Superfund Enforcement and Information Management Branch (SEIMB) supports the Agency's achievement of goals under the Strategic Plan for Objective 3.2: Restore Land, Subobjectives 3.2.1 (Prepare for and Respond to Accidental and Intentional Releases), 3.2.2 (Clean Up and Revitalize Contaminated Land), and 3.2.3 (Maximize Potentially Responsible Party (PRP) Participation at Superfund Sites) and Goal 5.1.3 (Achieve Environmental Protection Through Improved Compliance, Monitoring and Enforcement). SEIMB is responsible for remedial and removal enforcement activities and information and records and remedial cleanups, special accounts management, and records management. The following charts illustrate Region 4's leadership in Superfund Enforcement nationally:











Priorities specific to the Strategic plan and in support of Superfund Division statutory and programmatic responsibilities are to:

- Address cost recovery and conduct enforcement actions on sites with costs greater than \$200K before the Statute of Limitations (SOL) expires;
- Conduct PRP searches and Enforcement activities to ensure that PRPs conduct investigations and cleanups;
- Manage Division cost recovery and collection activities;
- Participate in negotiations and provide enforcement support for work and settlement of cost for cases with planned RI/FS, RD/RAs or referred to DOJ for litigation;
- Establish and maintain a comprehensive, automated consolidated records management system to store document information on each Superfund site in the inventory;
- Compile and maintain the official Administrative Record required by the NCP.
- Coordinate Division's computer hardware and software acquisitions, and Web page management;
- Establish CERCLA spill identification numbers for the NPL and non-NPL sites;
- Provide financial management support for the removal, remedial, enforcement and federal facilities programs and for cost recovery reports and documentation.
- Manage enforcement data in CERCLIS database.

Region 4 is a national leader in enforcement Goal 3 and 5 Measure targets. FY09 goals are shown below:

Primary Enforcement Measures Goals 3 & 5	FY08 Goal	FY08 Achieved	FY09 Goal
SOL Cases w/ Unaddressed Total Past Costs ≥ \$200,000	10	16	22
Settlements or enforcement actions taken before start of RA	95%	100%	95%
Financial Assurance (Bring into compliance)	10	9	1
Management of Special Accounts	90%	100%	90%
Big Case Projections; Civil Enforcement Cases with at least 1 million lbs of pollutants reduced, \$5 million of injunctive relief, or \$1 million civil penalty; or cases with a cost recovery or PRP cleanup commitment of at least \$5 million or VCMA of 1 million cubic yards.			6



# **Support Activities**

The Superfund Support Branch is comprised of two sections, the Superfund Contracts/Grants Section and the Technical Services Section. Contracts and grants supports Region 4 Superfund by placing, managing, and protecting funds used in extramural funding agreements. These agreements include contracts, grants, cooperative agreements, and interagency agreements. Scopes of these agreements range from initial site assessments to remedy implementation both for Fund-lead, Federal Facility-Lead, and Potentially Responsible Party Lead actions, and from emergency response planning and preparedness to providing technical and construction assistance in emergencies of national significance. The technical services group supports Region 4 in the fields of hydrogeology, human health and ecological risk assessment and radiological assessment. The goal of technical services is to support the programs in meeting their goals and targets, but to also ensure that the best science is used in decision making to meet those goals and targets.

## Office of Superfund Public Affairs and Outreach

In 2008, the Superfund Division centralized three significant program elements vital to the Superfund mission. These program elements are community involvement, Environmental Justice, and revitalization. The Office of Superfund Public Affairs and Outreach has responsibility for developing, implementing and directing the community relations activities as required by CERCLA and SARA in support of the Superfund Program. Working closely with the program officials, the community involvement effort will provide assistance to EPA, State and local governments in addressing community relations issues. The Office is responsible for supporting projects where communities will restore to productive use, idled, or underused industrial and commercial properties where redevelopment is complicated by real or perceived environmental contamination. The Office administers the Environmental Justice program for the Superfund Division as it directly impacts efforts to provide empowerment and leadership development to the Region 4 urban and rural centers which can result in substantive and sustainable improvements in community health and environmental quality at and around facilities and sites.

## 2009 OSPAO Priorities

- Focusing greater emphasis and accountability on meeting the needs of the citizens and the stakeholders involved at potential and designated Superfund sites;
- Provide central leadership for 3 key areas of the Superfund Program;
- Continue communication with Headquarters and other Regional offices community relations, environmental justice and revitalization programs; and,
- Cross-training of staff to enable staff to work on a range of Superfund remedial and removal sites and further the Superfund Division succession planning strategy.



# **Superfund Human Capital**

In 2008, the Superfund Division completed a Strategic Workforce Planning evaluation. The goals of the evaluation were to perform a supply inventory analysis, a demand analysis, and to provide input to succession planning. At that time, the Superfund Program employed 186 staff members with an average length of federal service of 21 years, average grade of GS-13, average age of 47 years, and 61% have a Bachelor's Degree or higher educational attainment. The principal occupational series in Superfund are 1301 (General Physical Science), 819 (Environmental Engineer), and 028 (Environmental Protection Specialist); collectively representing 73% of the Division workforce. More than 91% of the Division workforce is in mission critical occupational series.

Succession planning for the Superfund Division is increasingly important. The average age of Superfund employees is above the regional average, and the occupational series with the largest number of retirement-eligible employees are also in high demand in the marketplace. The Division will have a higher than average number of managers/supervisors that are retirement-eligible over the next 3-years. There will be an ongoing need for focused recruiting, training, and employee development as the average number of years of Superfund experience by the Division employees' decreases.



# **Region 4 Superfund Initiatives and Challenges**

ARRA Remedial Action. The Private Remedial Program has 6 cleanups being accelerated by ARRA funding.

Coal Combustion Waste. Region 4 Superfund is the lead for the TVA Kingston ash response.

**DOE ARRA projects.** Providing oversight activities within a timely manner due to the complex issues at the Sites to meet ARRA requirements.

Federal Facility FFA's. Resolve ongoing disputes and complete agreements at the remaining 3 facilities.

**Federal Facility Partnering Program.** A successful management process to advance cleanup and establish ground rules for staff and management interaction.

**Project Management Workgroup.** To improve project management, update the skills and tools for the RPM, and increase the quality and quantity of program management information.

**State Cleanup Levels.** Several States in Region 4 have established simplified cleanup regulations requiring cleanups to attain ILCR =  $1 \times 10^{-6}$  and HI = 1 that may be considered ARARs, effectively eliminating Superfund's use of the risk range in setting cleanup goals and complicating the "point of departure" for action.

**Naturally Occurring Asbestos.** 125 locations (mines, prospects, and occurrences) in 4 Region 4 States requiring further evaluation.

Libby "Sister Sites" 22 vermiculite processing sites located in 7 Region 4 States.

**Vapor Intrusion Pathway** Updated national guidance and toxicity values for residential properties as well as corresponding guidance for commercial/industrial properties is needed.

**Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS)**. Water Division is addressing these "pollutants or contaminants" in Decatur, AL and Dalton, GA, supported by Superfund, and may request enforcement support through CERCLA.

Phosphate Mining/TENOROM. 28 former and active mine sites in CERCLIS in the State of Florida

**R4 Superfund Web Presence.** Significant upgrades are in process to improve public communication and information gathering.

**Cross Program.** Mentoring and cross training for staff to improve readiness, succession planning, and personal development.

**EC2/Green Remediation.** Develop regional policy and continue support of Headquarters initiatives.

**DART/EQuIS Data Management.** Deployment of a Program-wide geospatial Data Archival and Retrieval system is ongoing (Fund-lead sites are complete/PRP-lead are being piloted).

Laptop/Docking Stations. Staff computer upgrade to support COOP plans and work from remote locations.

**Response Support Corps.** The Region maintains a large and trained RSC to support large-scale response.

