



THE DEPARTMENT OF DEFENSE  
AND  
THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY



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**Subject:** Recommendations from the Department of Defense and the Environmental Protection Agency Goal Harmonization Workgroup

The Department of Defense (DoD) and the Environmental Protection Agency (EPA) established a joint metrics Workgroup to address inconsistencies between EPA's and DoD's reporting of cleanup progress at Federal National Priorities List (NPL) installations. The main goal of the Workgroup is to communicate a clearer and more consistent picture of actual cleanup progress at NPL installations to Congress, the Office of Management and Budget, and the general public. The attached report is a summary of progress on the Workgroup's activities.

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Attachment



# RECOMMENDATIONS RESULTING FROM DOD/EPA GOAL HARMONIZATION WORKGROUP

*December 14, 2011*

FINAL

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# PART I

The purpose of this document is to provide a progress report on the activities of the Department of Defense (DoD)/ Environmental Protection Agency (EPA) Goal Harmonization Workgroup. Part I describes the formation, mission, and activities of the Workgroup.

## Introduction

The genesis for the DoD/EPA Goal Harmonization Workgroup was leadership interest in better harmonizing EPA and DoD planning and reporting activities. The EPA's Federal Facilities Restoration and Reuse Office (FFRRO) has established performance measures which are dependent on work conducted by other Federal agencies. DoD bases its internal program goals and performance metrics on reducing potential risks to human health and the environment. It is critical that the agencies have a successful partnership because EPA and DoD measure progress differently. Goal harmonization is also important because DoD and EPA need to communicate progress to stakeholders clearly and consistently. Inconsistencies in communicating progress can lead to potential disputes, increased cleanup costs, and delays in completing work because DoD, EPA, and other stakeholders may have a different understanding of the status of cleanup activities at National Priorities List (NPL) installations.

***The Workgroup established the following goals:***

- *Develop a common "language" between EPA and DoD to promote consistent, integrated communication and reporting.*
- *Identify common elements of performance measures used to track environmental cleanup progress from the Agencies' databases and utilize commonalities for tracking and reporting cleanup progress.*
- *Collaborate in Workplanning/target setting efforts to identify greater efficiencies.*

### **What Does It Mean to “Harmonize”?**

In 2009, EPA and DoD began discussing how to better coordinate planning and priority setting. The Workgroup sought to develop a consistent, transparent approach to synchronize the performance measures currently used to indicate progress in the cleanup program. The Workgroup is accomplishing this by using existing data from EPA and DoD databases to align various cleanup metrics.

### **Database Differences**

The Workgroup has devoted significant effort toward analyzing the content of the information systems EPA and DoD utilize. EPA uses the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and DoD uses the Knowledge-Based Corporate Reporting System (KBCRS). CERCLIS is used by EPA to track progress throughout the cleanup. KBCRS is used to track and report on cleanup progress; the system contains data the Office of the Secretary of Defense (OSD) uses to perform its oversight role of the DoD Components’ cleanup programs.

There are significant differences between the systems, including how the data are entered into the systems and the frequency with which data are updated:

- Information in CERCLIS is updated by Remedial Project Managers (RPMs) or Information Management Coordinators in each EPA Region as site conditions change and cleanup actions occur.
- Information in KBCRS is uploaded from the DoD Components’ information systems, which the DoD Components update as site conditions change and cleanup actions occur. KBCRS is updated twice per year.

Another difference between the systems is that KBCRS site data includes an NPL “flag”, while CERCLIS did not have such an indicator. The KBCRS NPL “flag” allows DoD to track progress at its NPL and non-NPL sites separately if necessary; however, DoD reports on the progress at all of its sites, regardless of NPL status. Because some of the NPL “flags” in KBCRS were out of date, the Workgroup defined a process for the DoD Components to update the flags consistently and accurately. In addition, EPA added an NPL “flag” in CERCLIS for its operable units (OUs), which will allow the agency to distinguish between NPL and non-NPL OUs. Through these efforts, EPA and DoD will be able to track progress more consistently.

## Terminology Differences

EPA and DoD use different terminology in their respective cleanup programs. Generally, a DoD “installation” is analogous to an EPA “site.” Also, an EPA “OU” is generally analogous to a DoD “site”. The difference in the use of the term “site” is important to recognize when discussing

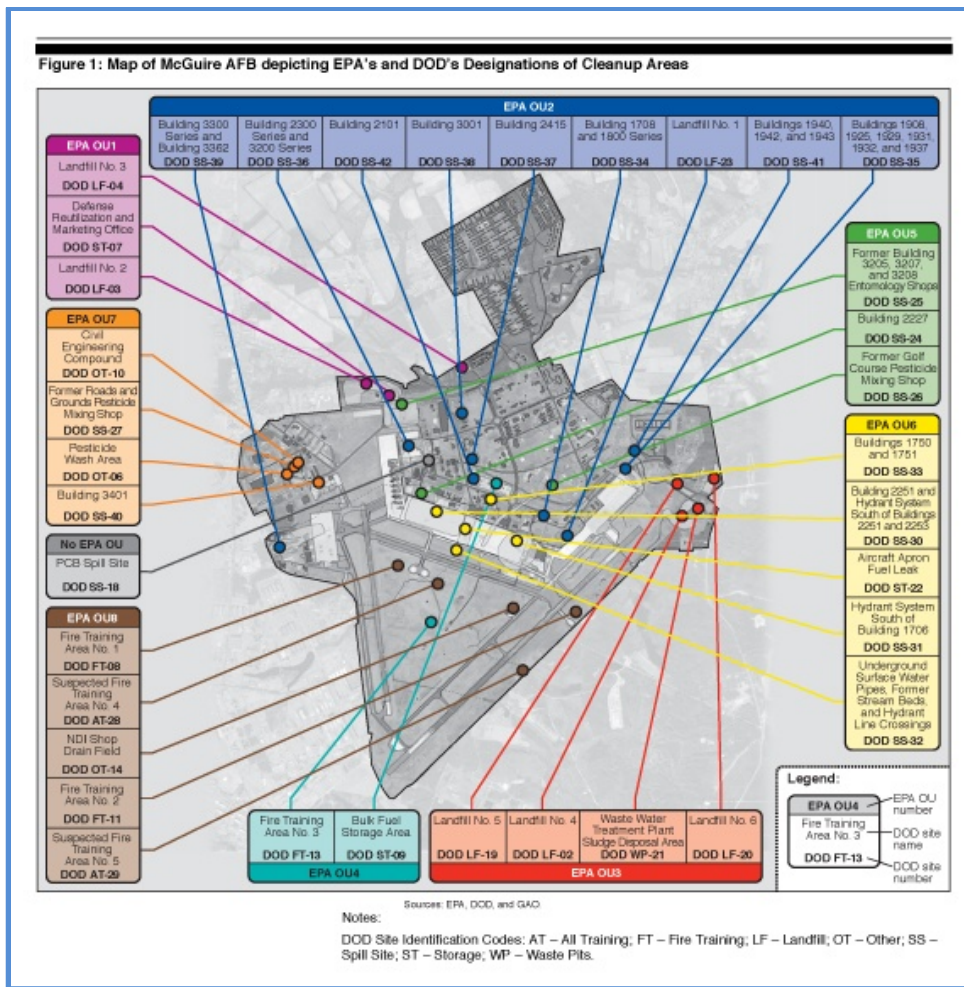
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*“...[OUs] which may represent the type of action to be taken, such as the removal of drums and tanks from the surface of an installation; the geographic boundaries of the contamination; or the medium that is contaminated, such as groundwater. DOD divides installations into smaller geographic areas of contamination called “sites.” These sites are typically scoped narrowly to allow for targeting work on actions that can be accomplished efficiently—for example, a building or waste disposal area where a potential or actual release of hazardous substances, pollutants, or contaminants may have occurred may be considered a “site,” while adjacent buildings with similar operations are considered as separate sites. DOD’s sites are sometimes smaller than EPA’s OUs; therefore there may be multiple DOD sites in one EPA OU”.<sup>1</sup>*

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cleanup progress. Inconsistencies between EPA’s and DoD’s designation of cleanup areas are illustrated in Figure 1. EPA divides sites/DoD installations into numbered OUs:

The differences in terminology create some challenges when discussing cleanup. For example, KBCRS and CERCLIS do not readily depict the same number of DoD NPL facilities because in some cases, DoD installations are listed on the Superfund NPL multiple times (e.g., two different listings for one DoD installation); in other cases, multiple DoD installations are included in one Superfund NPL listing. The Workgroup identified 12 EPA sites/DoD installations where the relationship between EPA site and DoD installation is not one to one. To resolve this issue, the Workgroup researched data for all the EPA sites/DoD installations, including Federal Register notices and Listing Packages, and determined that there are 141 DoD NPL facilities.



**Figure 1. Map of McGuire AFB Depicting EPA's and DoD's Designations of Cleanup Areas<sup>1</sup>**

The Workgroup designated one of the EPA sites/DoD installations listed on the NPL multiple times, Aberdeen Proving Ground (Army), as a pilot installation for performing an in-depth crosswalk of EPA OUs/DoD sites. This effort required that the EPA RPM and Army RPM collaborate to identify the DoD sites associated with each EPA OU. Because of their familiarity with the EPA site/DoD installation and its history, the RPMs were able to crosswalk data between CERCLIS and KBCRS with minimal effort. The study demonstrated the value of early collaboration between EPA and DoD RPMs to minimize confusion when reporting number of sites and OUs and demonstrating progress.

<sup>1</sup> GAO Report GAO-10-348, page 16 <http://www.gao.gov/new.items/d10348.pdf>

### Performance Measure Differences

It is important to recognize that EPA and DoD do not have any identical reporting measures. The Workgroup was responsible for harmonizing measures that are not consistent across the agencies. As noted in Table 1, only one of FFRRO's four main measures has a common DoD metric.

**Table 1: Comparison of EPA and DoD Performance Measures**

EPA	DoD
Construction Complete	Last Remedy in Place
Human Exposure Under Control	N/A
Groundwater Migration Under Control	N/A
Sitewide Ready for Anticipated Use	N/A
N/A	Response Complete

The Workgroup concluded that EPA's "Construction Complete" (CC) is analogous to DoD's "Last Remedy in Place" (LRIP). EPA's CC has been a high-level reporting measure for many years. DoD's LRIP is a measure used to identify when the last remedy is in place at an installation. Based on the official definitions from the respective organizations, the Workgroup determined that the essential elements of both milestones are equivalent. Both CC and LRIP require the constructed remedy to operate effectively for a particular period of time. EPA refers to this period as Operational and Functional, and DoD refers to it as Remedial Action Operation (RAO) (as opposed to EPA's definition of RAO, Remedial Action Objectives, yet another example of acronym and definitional differences). EPA and DoD do not require that EPA sites/DoD installations achieve the remedial objectives (i.e., response complete for DoD) to declare CC or LRIP.

DoD does not have a measure corresponding to EPA's Environmental Indicator (EI) measures for Human Exposure (HE) and Groundwater Migration (GM). In an effort to facilitate coordination and to gain a greater understanding of EPA's reporting requirements, EPA and DoD agreed to perform an EI pilot study at 10 EPA sites/DoD installations. DoD RPMs reviewed EPA's EI guidance and completed the worksheets which are used to select an EI status. These worksheets are available in EPA's EI guidance<sup>2</sup>. The results of this study demonstrated that an understanding of EPA's guidance and direct collaboration on the EI worksheets between EPA and DoD RPMs can lead to more accurate and a better understanding of EI status

<sup>2</sup> [http://www.epa.gov/superfund/accomp/ei/pdfs/final\\_ei\\_guidance\\_march\\_2008.pdf](http://www.epa.gov/superfund/accomp/ei/pdfs/final_ei_guidance_march_2008.pdf)



determinations. To ensure continuous dialogue and communication, EPA has also given DoD an opportunity to informally review and comment on EPA's EI measures

As suggested in an internal EPA document titled, "Best Practice; Workplanning and Program Planning" dated April 27, 2010, the EPA Regions have been encouraged to collaborate with DoD RPMs in regard to site management plan development, updates, and tracking. In addition, OSD issued a memorandum in May 2010 requesting that the DoD Components work with the EPA RPMs to develop a crosswalk between DoD's sites and EPA's OUs on NPL installations. These efforts are similar in that both organizations see the benefit in EPA site-/DoD installation-level coordination. EPA and DoD recognize that these are important steps in establishing reasonable expectations of site cleanup progress and milestone achievements, to reassure stakeholders.

## Integrated Cleanup Initiative

After the harmonization effort began, EPA established the Integrated Cleanup Initiative (ICI), <http://www.epa.gov/oswer/integratedcleanup.htm>, as a three-year strategy to identify and implement improvements to the Agency's hazardous waste cleanup programs. The Initiative is intended to identify and implement opportunities to integrate and leverage EPA's cleanup authorities to accelerate cleanups, address a greater number of contaminated sites, and put these sites back into productive use while protecting human health and the environment. A number of the ICI actions directly relate to the Workgroup's activities, including:

- Action 22 – EPA/DoD Goal Harmonization Project
- Action 23 – Improve communication with other Federal agencies on measuring cleanup performance
- Action 24 – FFRRO Regional target performance and statistical data analysis

## Current Status of the ICI Actions

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### *Action 22: EPA/DoD Goal Harmonization Project*

#### **Accomplishments include:**

- DoD/EPA Reduction of data variations between CERCLIS and KBCRS
- DoD/EPA Agreement on the equivalency of CC and LRIP
- “Best Practices” guidance developed for EPA RPMs
- DoD/EPA Pilot study to compare EPA and DoD system data
- DoD/EPA Pilot study to provide consistent EI status at EPA sites/DoD installations

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### *Action 23: Improve communication with other Federal agencies on measuring cleanup performance*

#### **Accomplishments include:**

- EPA sent letters to all thirteen responsible Federal agencies in July 2010, in an effort to coordinate future planning accomplishment at NPL facilities:  
[http://www.epa.gov/fedfac/documents/2010\\_epa\\_letters\\_re\\_remediation\\_and\\_measur.pdf](http://www.epa.gov/fedfac/documents/2010_epa_letters_re_remediation_and_measur.pdf)
- EPA sent follow-up letters to all of the DoD Components in March 2011, which summarized the data planning coordination efforts:  
[http://www.epa.gov/fedfac/documents/2011\\_epa\\_letters\\_re\\_remediation\\_and\\_measur.pdf](http://www.epa.gov/fedfac/documents/2011_epa_letters_re_remediation_and_measur.pdf)

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## Action 24: FFRRO regional target performance and statistical data analysis

*FFRRO tracks performance in accomplishing the following eight measures:*

- *Remedial Investigation / Feasibility Study Starts (RI/FS Starts)*
- *Decision Documents (DDs)*
- *Final Records of Decision (Final RODs)*
- *Remedial Action Starts (RA Starts)*
- *Remedial Action Project Completions (RA Project Comps)*
- *Construction Completions (CCs)*
- *Sitewide Ready for Anticipated Use (SWRAUs)*
- *Five-Year Reviews (FYRs)*

### **Accomplishments include:**

- FFRRO provided the Regions with a set of tools (e.g., best practices guides, training webinar) to assist with setting targets for site cleanups.
- FFRRO also completed a series of statistical analyses and issued a final report on regional and Federal agency performance in meeting their targets. The final report is available at: [http://www.epa.gov/fedfac/pdf/federal\\_facilities\\_program\\_performance\\_final.pdf](http://www.epa.gov/fedfac/pdf/federal_facilities_program_performance_final.pdf)

In this report, FFRRO conducted an extensive analysis of how well EPA's Regions have met their annual performance targets. This analysis was based on evaluating performance data from the past seven fiscal years, as well as explanations for missed targets FFRRO solicited from the Regions. This analysis allowed FFRRO to assess the effectiveness of each Region and DoD Component in meeting the annual targets for each measure, and identified the reasons for EPA's missed targets. FFRRO intends to update this analysis each fiscal year to track trends. The following figures present some of the results from this analysis.

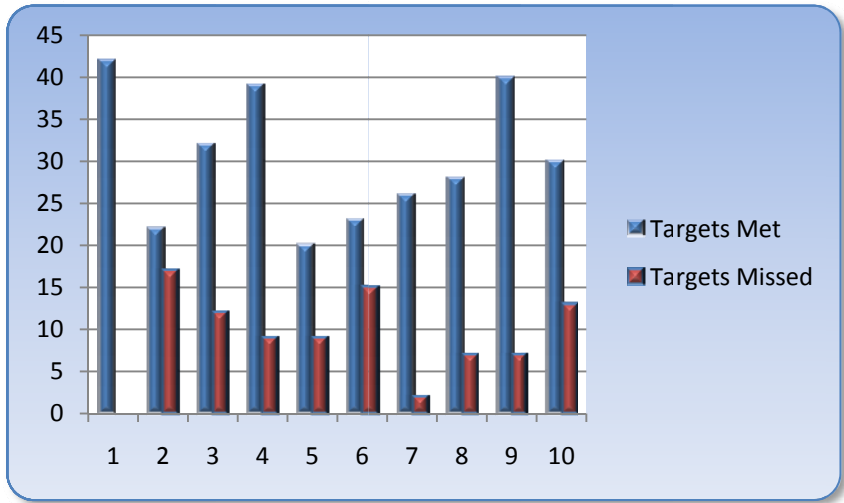
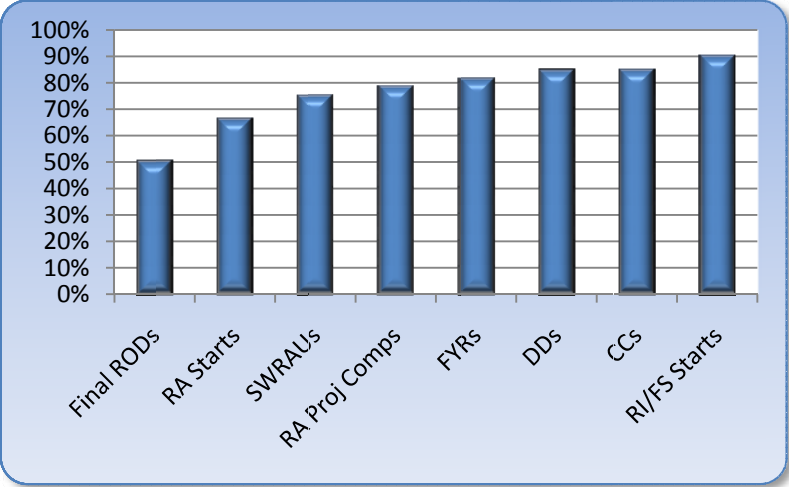


Figure 2 (left) shows the number of targets for site cleanups met and missed by EPA Regions 1-10 (Fiscal Year 2005-2011). As discussed in this report, EPA and DoD have been working on decreasing the number of targets missed.

**Figure 2. Number of NPL Targets Met/Missed by Region (2005-2011)**

Figure 3 (right) shows the percentage of targets for site cleanups which EPA met from FY 2005-2011. The targets are displayed according to measure.



**Figure 3. Percentage of NPL Targets Met by Measure (2005-2011)**

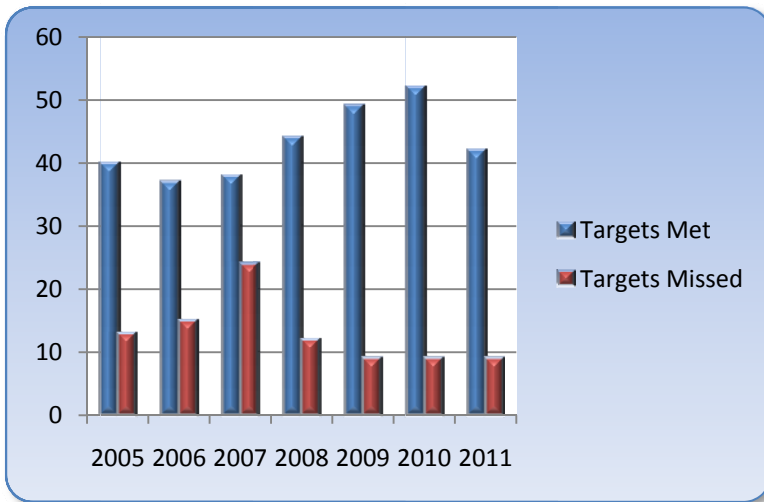
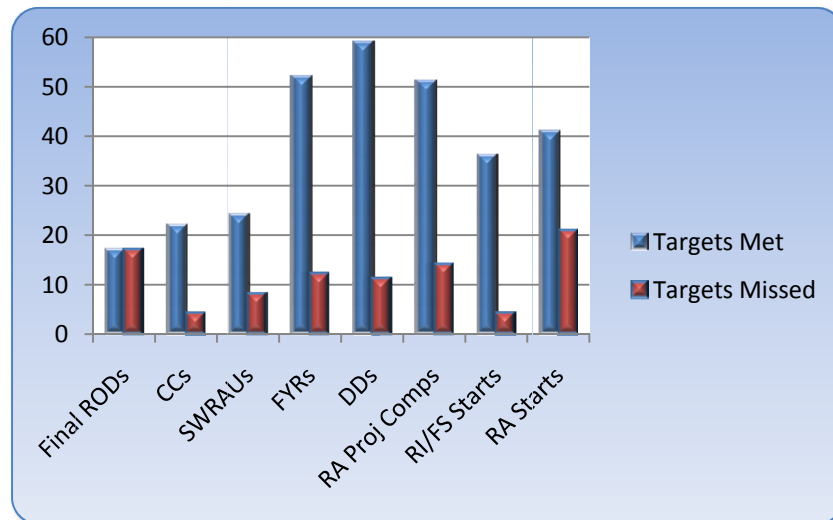


Figure 4 (left) shows the numbers of targets for site cleanups that EPA met and missed, broken down by FY. Regions have generally been successful in meeting targets.

**Figure 4. Number of NPL Targets Met and Missed, by Year (2005-2011)**

Figure 5 (below) shows the number of targets EPA met and missed (FY 2005-2011), displayed by measure. Some measures (e.g., RI/FS Starts) have shown high levels of success, while others (e.g., Final RODs) have proven challenging.



**Figure 5. Number of Targets Met/Missed by Measure (2005-2011)**

## GAO's Recommendation Related to Harmonization<sup>3</sup>

The GAO made six recommendations for Executive Action in report GAO-10-348. Specifically related to the goal harmonization effort, GAO recommended that the *“Secretary of Defense and Administrator of EPA develop a plan with schedules and milestones to identify and implement a uniform method for reporting cleanup progress at the installations and allow for transparency to Congress and the public.”* EPA’s and DoD’s joint efforts on the Goal Harmonization Workgroup have been instrumental in achieving the objective of this Executive Action. Furthermore, the Workgroup plans to continue making contributions to the cleanup program.

Additionally, GAO recommended that the *“Administrator of EPA establish a record-keeping system for DOD NPL sites, consistent across all regions, to accurately track documents submitted for review, including the status of approvals.”* EPA is implementing this tracking system in FY 2012. The system will assist with documenting EPA’s response time, and will provide a management tool to ensure that EPA returns other Federal agencies’ documents promptly with comments, to further expedite the cleanup process. The system should also assist EPA with improvements in accomplishment planning.

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<sup>3</sup> GAO Report GAO-10-348, page 38-39 <http://www.gao.gov/new.items/d10348.pdf>

## PART II

Part II summarizes the key issues identified by the Workgroup and its subsequent recommendations. There are four recommendations from the Workgroup.

### Recommendation 1: Agree to Equivalency of EPA CC and DoD LRIP

#### Issue Statement

EPA and DoD use different definitions and language to describe the CC milestone of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. EPA uses the term CC, while DoD uses the term LRIP. Additionally, there is an inconsistency between EPA and DoD in the action taken when there is a need for additional remediation after all construction is complete or the last remedy is in place. DoD rescinds the LRIP status, while EPA does not change the CC status. Therefore, in these instances, EPA is publicly reporting that these EPA sites/DoD installations are CC even though additional construction work is occurring, while DoD does not report these EPA sites/DoD installations as LRIP.

For EPA, a CC site is a CERCLA site where physical construction of all cleanup actions is complete, including actions to address all immediate threats and to bring all long-term threats under control. Only EPA sites/DoD installations that are Final on the NPL may qualify for achieving CC. However, for DoD, the LRIP milestone is achieved when the final remedy at the installation has been constructed, is functional and operating as planned in the Remedial Design, and, in the future, will meet the remedial action objectives detailed in the Decision Document(s). LRIP applies to all DoD sites on an installation, regardless of whether they are NPL or non-NPL sites.

#### Recommendation

EPA and DoD should consider CC and LRIP to be equivalent performance measures to describe the same CERCLA milestone. For EPA sites/DoD installations on the NPL, EPA should use DoD's LRIP dates as a comparison point for ensuring that cleanup schedules and planning data are analogous and on track.

Additionally, EPA and DoD should *formally* agree that CC = LRIP and review the dates in each agencies database and revise the appropriate database so both accurately reflect the projected milestone date. EPA and DoD also need to reach consensus on how to handle EPA sites/DoD installations that require additional remediation after CC or LRIP. This is a particularly important issue when dealing with Military Munitions Response Program (MMRP) sites, since DoD has found additional contamination at some EPA sites/DoD installations that achieved CC before the MMRP began in 2001.

## Recommendation 2: Establish a Percent Construction Complete Measure

### Issue Statement

EPA considers an EPA site/DoD installation CC when physical construction is complete at the *entire* EPA site/DoD installation as a result of removal and/or remedial actions, and there is an approved Preliminary Close Out Report. The report must address construction activities for the entire EPA site/DoD installation. There is only one CC accomplishment per EPA site/DoD installation. This “all or nothing” approach does not convey incremental cleanup progress, particularly for large and complex DoD installations.

### Recommendation

The Workgroup recommends that EPA consider not reporting sitewide CCs at NPL Federal facility sites. A new measure, such as “Federal Facility Percent Construction Complete”, could provide a more accurate description of incremental site cleanup progress. DoD would endorse EPA using a measure-based estimation of percent CC, which would allow for a cleaner comparison of progress at EPA sites/DoD installations.

EPA RPMs would complete (and management would certify) a worksheet on a yearly basis using the most current information available at each EPA site/DoD installation. This worksheet will allow the RPM to determine the percentage of CC that each EPA site/DoD installation has achieved. EPA will then analyze these data and report out nationally in both a numerical and percentage fashion. For example, EPA’s target could be, “*110 of 173 Federal Facility Superfund sites are at least 75% Construction Complete.*” This measure would also allow a better assessment of the overall progress of NPL Federal facility cleanups over time. To ensure consistency across NPL reporting, EPA should consider implementing this measure at all NPL Federal facilities, not just DoD installations. At the time of this report, EPA is in the process of



working with appropriate data and stakeholders to determine the feasibility of implementing such a measure.

This potential measure will also provide more transparency to allow Congress, the Administration, and the public to track Federal agency progress in site cleanups, thereby implementing more effectively the President's Open Government Directive.

### Recommendation 3: Add New Human Exposure Status

#### Issue Statement

DoD does not have an Environmental Indicator reporting requirement similar to EPA's Human Exposure and Groundwater Migration measures. EPA and DoD recognize that problems occur when EPA assigns an EPA site/DoD installation a status of "Human Exposure Not Under Control" and DoD does not agree. There is no *formal* mechanism for EPA and DoD to collaborate on a specific status, however, informal collaboration is encouraged at the local RPM level.

An issue of concern to the Workgroup is when "Human Exposure Under Control" is not attained due to a member of the public disregarding or ignoring land use controls in place at the EPA site/DoD installation. There may be situations that are beyond the control of both Federal organizations. An example of this may be if the installation has placed "no fishing" signs around a contaminated water body, but a determined fisherman ignores these land use controls and fishes against his or her best interest. Similarly, in the case of contaminated groundwater, if an individual refuses to use safe water that is provided to him or her, this may also result in a "Human Exposure Not Under Control" rating. The Workgroup discussed adding a new EI status that would indicate that the government has taken all required actions within its control to limit exposure. *(Please note that the Workgroup, and these examples, are not dealing with failed land use controls, and the recommendation would only apply when land use controls have been implemented as the Decision Documents intended and are in place).*

#### Recommendation

EPA should consider an alternative EI status and adjust guidances/checklists accordingly. This status could be called "Involuntary Human Exposure Under Control." EPA should evaluate this recommendation further to determine the exact number of instances where this new status may be used and how best to implement and report the change.

EPA and DoD should continue to encourage RPMs to collaborate and share information on the disposition of EIs at NPL Federal facilities.

## **Recommendation 4: EPA Propose New GPRA Metrics**

### **Issue Statement**

FFRRO's current accomplishment measures are mostly dependent on other Federal agencies' work, priorities, and budgets. Therefore, EPA does not have direct control when it comes to meeting its targets. For example, if another Federal agency's budget is cut, it is possible that specific work EPA has targeted for accomplishment could be delayed or not completed, and EPA would miss its target.

### **Recommendation: Option A**

FFRRO should propose a new suite of publically-reported measures which evaluate its own work at Federal Superfund cleanups, while discontinuing its reporting of measure to which it lacks control in accomplishing. These new measures would be more influential in depicting EPA's direct performance and value at Federal Superfund cleanups.

### **Recommendation: Option B**

The most effective means to assure EPA meets its targets is better coordination and progress monitoring. EPA initiated the first step to achieve coordination with the issuance of the "Best Practice; Workplanning and Program Planning" document on April 27, 2010. To take full advantage of this initiative, DoD could review and modify its existing guidance as appropriate to place emphasis on strengthening the relationship between the EPA and DoD RPMs. Both agencies could provide support and oversight to ensure that the practices are implemented. Harmonization of CERCLIS with the DoD Components' information systems at the RPM level could minimize program planning data discrepancies in the future and make the cleanup program more transparent. DoD and EPA should continue supporting these specific actions:

- Including DoD representatives in EPA's Workplanning meetings (mid-year and end-of-year)

- Ensuring agreement on realistic targets and milestones
- Collaborating on program/accomplishment planning

Additionally, DoD and EPA Headquarters staff agreed upon a process for comparing planned accomplishment data twice a year, using mid-year and end-of-year data. This process should allow for a more streamlined comparison of data, enhanced communication, and increased target accuracy.

### **Recommendation: Option C**

In the spirit of collaboration, EPA and DoD could partner together to generate a root-cause analysis of missed environmental cleanup targets. As can be seen in the statistical analysis report referenced under ICI Action #23, EPA currently identifies a cause for each missed target. However, these missed target explanations could possibly be more robust and meaningful if DoD was able to add input into the root-cause explanations. This would allow for EPA and DoD to jointly identify possible patterns, behaviors, or policies which may be contributing to cleanup delays. Together, it's the hope of this Workgroup that efforts could be mobilized to mitigate the effects of these inputs.