

## 4. LESSONS LEARNED

As a pilot project, Region 3's land use/reuse assessment incurred several challenges and lessons learned as the process evolved and data was collected and analyzed. Below are some of the lessons learned from both the data collection process and implementation of the land use assessment, as well as those associated with the results of the data collected. Considering all the challenges encountered during the project development, data collection, and data analysis, Region 3 met the overall goals initially outlined for this land use assessment. The Region was successful in collecting quantifiable cross-program information to establish a baseline for measuring progress in returning cleanup sites to use and to communicate revitalization accomplishments for its cleanup programs.

### 4.1 Data Collection Lessons

#### *A One Cleanup approach to collecting site information on reuse is possible*

Designing a common assessment form under the One Cleanup Program<sup>3</sup> approach was a challenge. The Superfund, RCRA Corrective Action and Federal Facility's programs have different languages, types of sites and regulatory constraints. However, generally the same process and goals apply and differences between the programs can be resolved, if individuals focus on the big picture. For example, Superfund wanted to track the SURE database's "Restored Reuse" land use category. This is the situation where the use of the property is temporarily halted during cleanup and the same use is resumed after the site is cleaned up. However, the RCRA and Federal Facilities programs did not want to include this use category as an option, since it has no applicability to their sites. To overcome this issue, Superfund tracked Restored Reuse as a subset of the Continued Use category.

The most notable program difference was the way in which total property acres was collected for the Federal Facility's data set. The assessment form included instructions on how to establish total site acres for both RCRA sites and Superfund sites, but not specifically for Federal Facilities. This led to varying interpretations by Federal Facilities project managers on how to calculate total acres for the site. Generally speaking, project managers in RCRA Corrective Action overseeing a Federal Facility determined total property acres based on the facility boundary, since the entire facility is subject to corrective action and evaluated, while many Superfund project managers counted only the acres at the Federal Facility that were investigated or cleaned up. As a result, there is some uncertainty in the accuracy of the acres in the Federal Facility data set. However, the information is still valuable in providing an estimate of the quantity of land being addressed and the types of uses occurring at these sites.

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<sup>3</sup>The One Cleanup Program (<http://www.epa.gov/oswer/onecleanupprogram/>) Promotes coordination among EPA programs, states, tribal, local and other federal agency programs, and stakeholders. These efforts are designed to lead to more consistent and efficient cleanups, clearer and more accessible information about cleanups, and better cross-program performance measures.

***An accurate inventory of sites needs to be identified prior to data collection***

All sites included in the data collection effort should be identified by program and EPA identification number prior to initiation of data collection. Significant time was spent resolving site names, identification numbers, and program lead for filling out the form. Also, data analysis should not begin until all data are collected and verified through a comprehensive quality assurance process.

***Data collection form requires minimal time commitment by project managers***

Most project managers felt the form was fairly easy to use and self-explanatory. On average, staff reported that the form took 10-45 minutes to fill out per site. Generally, the first form took the longest, because project managers had to review the definitions, and subsequent forms went more quickly. Those sites with more than one land use took more time to complete than sites with only one use. In addition some forms took more time because project managers were recently assigned due to routine staff turnover. However, in general, the vast majority of project managers met the deadline for completing the forms.

***Training is necessary to collect uniform results across programs***

Although training sessions were held for project managers, some either missed the training sessions or interpreted the instructions differently due to the subjective nature of the form, creating difficulties in interpreting the information for data analysis. As a result of the different interpretations, significant time was spent verifying information with project managers and correcting data as needed. Most questions related to different potential use scenarios. For example, issues arose regarding how to classify research and development operations and areas dedicated to long term remedy implementation, such as pump houses. Some staff felt landfills should be considered a specific type of use in that they serve a valuable function for the long term management of waste. Consequently, potential uncertainties exist in the data because the process introduced concepts that were unfamiliar to many of the project managers filling out the forms.

***Electronic reporting would be faster and reduce errors***

It would have been preferable to enter the information electronically directly into a database. However, at the start of the project, Region 3 did not have the resources to develop an electronic format for reporting the information. Therefore, Region 3 opted to use handwritten assessment forms and a Microsoft Excel spreadsheet to compile the data so that it would be housed in one location for cross-program analysis. Once the project managers filled out the forms, the information was then transferred to a spreadsheet increasing the risk of transcription error (typos). The spreadsheet is large and cumbersome to use, making data analyses time-consuming, and reports are difficult to generate. Given the complexity of the spreadsheet, project managers cannot confirm or update their site specific information in the spreadsheet. If this information continues to be collected on a long term basis, it will be easier to manage the information in a database format. This would allow project managers to enter the data directly into the database and make analysis faster and easier. For the Superfund program, it may be possible and more expedient to use CERCLIS which already contains some information on site reuse, but then the ability to analyze results on a cross-program basis would be lost.

***Improvements to the Reuse Assessment Form***

The following suggestions have been made to improve the Land Use/Reuse Assessment Form:

**Section A General Information**

- Add RCRA Federal Facility as a Type of Site option to better define the data sets.

**Section B Contact Information**

- No suggestions.

**Section C Current Land Use and Type of Use**

- Provide instructions on how to determine total site acres for Federal Facilities.
- Add a box under No Current Use/Vacant to account for acres unavailable due to remedy implementation.
- Develop a way to classify wetlands because there was no clear way to report their status as a Type of Use.
- Add Open Space or Green Space as a Type of Use and provide a definition.
- Clarify research and development as Industrial Use in the definition.
- Eliminate Cleanup Status except for No Current Use/Vacant parcels because the cleanup status of property in use is not critical information and because it is difficult to correlate the programmatic cleanup measures to reuse.
- Resolve relationship between Current Land Use and the Superfund Ready for Reuse GPRA measure.

**Section D Tools Used to Support Use/Reuse**

- Connect “Tools Used to Facilitate Use” (Section D) to each “Current Land Use” (Section C) row. Tools were reported as a site-wide measure. Therefore, when a site had more than one Current Land Use, we could not distinguish which tools applied to a specific parcel. For example, if a 100-acre site reported 50 acres Reused and 50 acres Vacant, and the Tools Section reported the use of a comfort letter, it was not possible to discern whether the comfort letter applied to the reused portion, the vacant portion, or both.

**Section E Benefits of Use/Reuse**

- Only collect benefits information for sites in reuse and not continued use.

## 4.2 Data Results Lessons

### ***Reuse benefits are not easily reported under current program structures***

The assessment approach was designed to comply with the requirements of the Paperwork Reduction Act. While it may seem obvious that site owners would be the best source of information on the reuse of their property, project managers were advised not to seek information directly from the property owners in response to the form. Project managers were instructed to complete the form based on existing knowledge, any readily available information in Agency files, and publicly available information. As a result, only a limited amount of quantifiable information on the benefits of reuse (e.g., jobs created or retained, tax dollars generated) was reported. For example, several project managers knew there were jobs leveraged at sites and checked that benefit on the form, but many did not know how many jobs were leveraged. Project managers do not routinely collect this type of information because it is not relevant to the cleanup. Other methods or independent research are necessary to obtain comprehensive economic and environmental benefits associated with site reuse.

The assessment form requested project managers to report benefits information for sites in use/reuse, which included sites that are in continued use. Once the data was collected and analyzed, we realized that benefits reported for continued use sites were very sporadic and not very informative. In the future, we recommend collecting benefits information only for sites that are in reuse.

### ***Information on Superfund Ready for Reuse GPRA Reporting Measures was not successfully integrated into Region 3's assessment***

Another challenge was integrating the land use assessment with the Superfund Ready for Reuse Government Performance and Results Act measure. A separate section of the form was dedicated to reporting Ready for Reuse, based on EPA's *Guidance for Documenting and Reporting the Superfund Revitalization Performance Measures*, (OSWER 9202.1-26, November 5, 2004). This section was included to verify the information already in the CERCLIS database. After reviewing the data reported on the forms, it was apparent that the information did not correlate with the CERCLIS information. Several reasons that might explain the differences include: 1) Superfund's Ready for Reuse measure is intended to evaluate a level of protectiveness for the land use and requires the issuance of certain decision documents before a project manager can deem land "Ready." In contrast, Region 3's land use/reuse assessment only dealt with the actual use or planned use at the site. The Region chose to focus the assessment on actual land use, because the cleanup programs already have measures to track cleanup progress and Agency oversight at cleanup sites ensures that any uses, and reuses, are protective; 2) On Region 3's Land Use/Reuse Assessment Form, the instructions for the Ready for Reuse section were contained on another page of the form and were not sufficiently detailed to accurately capture the intent of Superfund's GPRA measure; 3) Training for the Superfund project managers did not focus on fully explaining the documentation requirements for the Superfund Ready for Reuse GPRA measure.

***The data collected is not perfect***

After completion of the data collection, program managers briefly reviewed the site specific information contained in the spreadsheets. Minor errors and inaccuracies in some of the data were noted, primarily for total site acres. However, the Region determined that the errors were minimal compared to the broader information collected. It was decided not to update or correct the site specific errors at this time. These errors will be corrected during subsequent assessments. The information contained in this report is indicative of the current status of land use at Region 3 cleanup sites, but is not necessarily 100 percent accurate for every site.