

## 2. DATA ANALYSIS

### 2.1 Data Analysis Approach

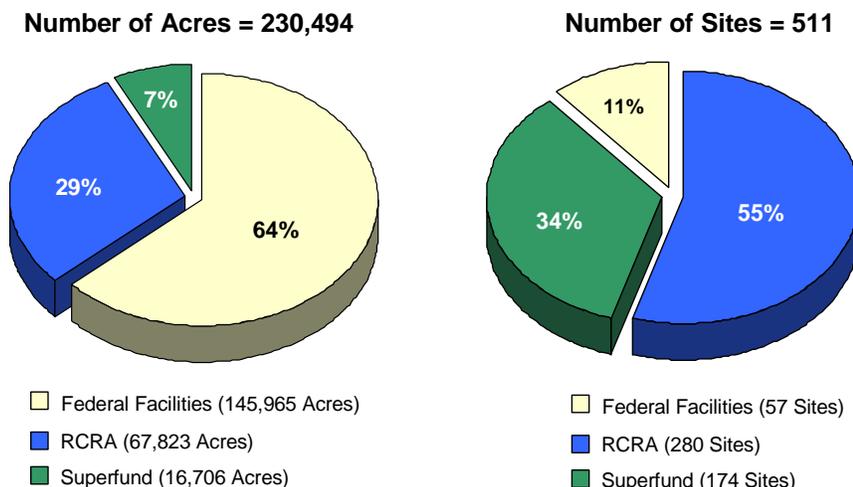
Prior to starting the data analysis, the data entered on the assessment forms was proofed to confirm its accuracy. Data input and quality assurance took approximately two months to finalize. Contractor support, provided by OSWER, was used to compile the results of the information collected. A graduate student intern working in Region 3's Land Revitalization program conducted additional analysis. Results of the data analysis are provided in Chapter 3 of this report. More detailed discussion of how certain parts of the analysis were performed can be found in Appendix C.

Land use information was collected on a total of 511 properties. The full data set was broken into three groups for analysis:

- Superfund NPL sites (non-Federal Facilities) – 174 sites
- RCRA Corrective Action facilities (non-Federal Facilities) – 280 sites
- Federal Facilities – 57 sites

Of the 57 Federal Facilities, nine are being addressed by the RCRA Corrective Action program and the rest through the Superfund program. Federal Facilities were analyzed separately because they have unique use/reuse aspects and are larger in size which tends to bias the results of data analysis. For example, most are active military installations which are thousands of acres in size. Therefore, the acreage of a single large Federal Facility could exceed the total acreage of all the non-military facilities in the RCRA Corrective Action or Superfund programs. The Federal Facility category includes Federally-owned installations, including those on the NPL and non-NPL which are being addressed under Superfund or RCRA authority. For this analysis, the Superfund NPL data set specifically excludes any Federally-owned facility, even though some Federal Facilities may also be on the NPL. The RCRA Corrective Action data set also excludes any Federal Facilities, even though some of these sites are part of the Region's 2008 GPRA baseline. See Figure 2-1 representing the three data sets analyzed and Appendix B for site location maps.

Figure 2-1: Region 3 Hazardous Waste Cleanup Sites Site Distribution by Program



## 2.2 Data Factors Analyzed

Region 3 focused on the following key aspects of the data collected for analysis.

### 2.2.1 Current Land Use

The data for Current Land Use was analyzed both by number of sites occurring in each Current Land Use category and by total acres occurring in each category. For analysis purposes, sites with more than one land use occurring on the property (e.g., some acres reused and some acres vacant) were listed as “multiple uses” to avoid double counting when reporting information by number of sites. This multiple use category captures 117 sites that reported more than one Current Land Use occurring at the site.

One objective for this comprehensive land use assessment was to identify the sites or portions of sites which have no current use/vacant. The vacant land data was analyzed to provide information on how much land is potentially available for reuse—either now or in the future—and where these areas are located. In addition, project managers identified any vacant areas that are not recommended for reuse because the remedy does not support reuse or reuse may damage the remedy. From this assessment, Region 3 compiled information of all hazardous waste sites that are vacant or have vacant parcels. For these parcels, the Region has information on: the size of the vacant areas; the acres of the property which managed waste (e.g., former landfills); whether the vacant areas are not recommended for reuse and why; and the site cleanup status. Appendix B contains maps showing the geographic location and relative size of the vacant areas.

### **2.2.2 Type of Use**

Because many sites had more than one Type of Use, this data was only analyzed by total number of acres, not by site. Type of Use was analyzed for two groups of sites. One group included sites in Continued Use, Reused, and Planned Reuse. The other group included just the Reused and Planned Reuse sites. By comparing the two groups, the Region gained information on trends in how sites are being converted to new uses.

Region 3 also reviewed those sites reporting acres of enhanced ecological use (i.e., property where proactive measures were implemented to create, restore, protect, or enhance a habitat). Region 3 is interested in identifying the extent to which environmental enhancements are occurring on cleanup sites. In addition, Region 3's Superfund program is exploring the development of environmental indicators, such as wetlands or habitat created at Superfund sites.

### **2.2.3 Cleanup and Reuse Connection**

Cleanup status was recorded to evaluate the relationship between the cleanup process and property reuse. More specifically, the workgroup wanted to answer two questions. First, whether there were phases in the cleanup process where a plan for reuse was more likely to be initiated. Second, whether site reuse is typically integrated into the investigation and cleanup as opposed to being initiated after site-wide final cleanup goals are met. To achieve this objective, the Region analyzed the current cleanup status for the Planned Reuse sites, because this category of sites provides the best estimate of the cleanup status at the time when reuse was initiated. Although this subset of sites is not expected to represent the entire population of sites undergoing reuse, adequate information was available to draw some preliminary conclusions on the relationship between site-wide cleanup activities and reuse.

### **2.2.4 Agency Effort Beyond Cleanup to Facilitate Use/Reuse**

Agency effort was only analyzed by site, not by acres, because this information was not collected for parcels. Region 3 analyzed the number of sites in which project managers were involved in facilitating reuse. The Region also summarized the types of tools being used to facilitate reuse and the frequency in which particular tools were used within each cleanup program.

### **2.2.5 Economic and Environmental Benefits**

Benefits information was analyzed by site, not by acres. Region 3 analyzed both the total number of sites reporting benefits information and summed up any quantifiable data provided.