MEMORANDUM

SUBJECT: Transmittal of Model Geospatial Data and Electronic Submission of Deliverables Language for Inclusion in CERCLA Statements of Work

FROM: Cyndy Mackey, Director
       Office of Site Remediation Enforcement

       Robin H. Richardson, Acting Director
       Office of Superfund Remediation and Technology Innovation

TO: Regional Counsels, Regions 1-10
    Superfund National Policy Managers, Regions 1-10

The Office of Site Remediation and Enforcement (OSRE), the Office of Superfund Remediation and Technology Innovation (OSRTI), the Office of Environmental Information (OEI), the Geographic Information System (GIS) Workgroup, and the Department of Justice, have developed model geospatial data language for inclusion in Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly referred to as Superfund) statement of work (SOW) documents. The routine and consistent collection of geospatial data can be used for improved data analysis in support of the Office of Enforcement and Compliance Assurance’s Next Generation Compliance Initiative. The model language also requires electronic submission of deliverables. Regions should start using the attached model geospatial data and electronic submission of deliverables language when developing CERCLA statements of work.

Considerable effort and cost goes into data management and GIS support at Superfund sites. The majority of that effort occurs at the site level, and a standardized method for Regions to share Superfund geographic data is needed. By requiring potentially responsible parties (PRPs) to provide geographic data that describes site-related elements in a standardized format, EPA will:

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1 This language is recommended for CERCLA judicial and administrative settlements and unilateral administrative orders (UAO) that provide for performance of response action and may be included in the settlement/UAO itself or in the attached statement of work. Other programs may be interested in including similar language in settlement documents.
• increase efficiency for Superfund specific tasks and allow data to be aggregated across regions to create national data layers that can be used by all EPA programs via EPA’s GeoPlatform;
• help fulfill national Freedom of Information Act requests;
• reduce costs of data management; and
• allow for routine data sharing with other agencies and partners.

Advantages of Geospatial Data to Superfund

Many Superfund site cleanups result in data that describe various geographic elements of the site. For example: site, operable unit, ownership, and institutional control (IC) boundaries; locations of equipment (e.g., monitoring wells, treatment plants); physical elements such as landfills, mines, water features, roads, buildings, drains, tunnels; and sampling information describing contaminant location. All of this data is useful in the investigation, cleanup, and post-construction completion phases of site cleanup. Currently, the site-level data are not standardized and therefore are more costly to manage and more difficult to share or integrate with other efforts than standardized data. Most Superfund sites are represented in the Superfund Enterprise Management System (SEMS) by a single latitude/longitude point, which may be located anywhere at the site. In general, having geographic data standardized and available for multiple applications throughout a site’s cleanup cycle and for interaction with data from other data sets (e.g., local tax-parcel boundaries for ownership information, Clean Water Act data on contaminants that may impact Superfund sediment cleanups, Bureau of Fish and Wildlife data on local threatened or endangered species, etc.) will allow EPA to better share data across programs and Regions and with other agencies and States.

Specific advantages to having geospatial data available to the Superfund program include:

• Facilitating discussions with stakeholders regarding nature and extent of contamination at a site, remediation methods proposed, etc.

• Creating consistent and reproducible methods for determining populations affected, acres ready for re-use, and other site/program metrics that currently are not consistent or reproducible nation-wide.

• Supporting: partial deletion decisions, explicit tracking of institutional controls, FOIA responses, and the five-year review process.

EPA’s GeoPlatform (http://intranet.epa.gov/geoplatform/)

Collecting geographic-based data will support the larger EPA effort to build an efficient and transparent GeoPlatform. The GeoPlatform creates a national standardized method to upload geographic-based information, enables data management at the national and regional levels, helps the Regions to supervise and coordinate activities, and allows for public access to geographic-based environmental information in their area. GIS data and the GeoPlatform have the potential to support a variety of Superfund activities, including: remedial investigations, feasibility studies, remedial designs, remedial actions, PRP identification, IC implementation and monitoring, access issues, site reuse, environmental justice concerns, operation and maintenance,
five-year reviews, listing/deletion (partial and whole), ready for reuse determinations, community engagement, and general program transparency.

Spatial Boundary Data and External Audiences

One historic concern in using geographic based data to describe Superfund site boundaries is that site boundaries can change and consequently there is potential for misunderstanding of the elasticity of a Superfund site boundary by stakeholders and the public. Superfund site boundaries are subject to change as more information on the nature and extent of the contamination is collected and as contaminants move or are remediated. A Superfund site is described by “where contaminants come to be located,” and contaminants can migrate during the course of a site investigation and cleanup. So while site and operable unit boundaries are developed at a specific time, they are also re-evaluated and updated as needed throughout the site’s cleanup cycle. Therefore, the attached model geospatial data language includes the statement that “Spatial data submitted by [Respondents/Settling Defendants] does not, and is not intended to, define the boundaries of the Site.”

Contacts / Disclaimer

We appreciate the thoughtful input provided by the Regions, other EPA offices, and the National GIS workgroup in developing this model language. As we move forward with implementing collection and use of this data, we anticipate that modifications may be needed to reflect changing circumstances and lessons learned, and we will continue to work collaboratively to enhance and refine these plans.

We encourage you to keep us informed of your experiences in implementing this model geospatial data language, including what is working and what needs modification. Please send feedback to Chip Love, OSRTI (love.chip@epa.gov) or Nancy Browne, OSRE (browne.nancy@epa.gov).

This memorandum and its attachment are intended as guidance for EPA employees. It is not a rule and it does not create any legal obligations. The extent to which EPA will apply it in a particular case will depend on the facts of the case.

Attachment

cc: Superfund Regional Counsel Branch Chiefs, EPA Regions I-X  
Superfund Remedial Branch Chiefs, EPA Regions I-X  
Barnes Johnson, Director, OSWER/ORCR  
David Lloyd, Director, OSWER/OBLR

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2 Some Regions are already using Superfund site boundary information and the GeoPlatform. Region 1 uses site boundary information on the GeoPlatform and has developed maps displaying Superfund National Priority List (NPL) sites boundaries and activity and use limitation (AUL) boundaries (parallel to IC’s). Region 2 uses a map service on GeoPlatform which compares 2008 NPL contamination boundaries to Final NPL Sites of 2012 and Region 2 township boundaries. Region 8 actively manages acquisition and development of NPL Site, operating unit (OU) and IC boundaries. Region 8 NPL Site boundaries are published on the EPA GeoPlatform.
ATTACHMENT
Model Language

Model Geospatial Data and Electronic Submission of Deliverables Language for CERCLA Statements of Work (SOW)

1. General Requirements for Deliverables

   (a) As provided in [¶__] of the [Order/Settlement Agreement/Consent Decree], all deliverables under this SOW must be in writing unless otherwise specified.

   [NOTE: If paper copies of specific deliverables (in addition to large exhibits) are needed, the paragraph below should be edited accordingly.]

   (b) All deliverables must be submitted by the deadlines in the [Removal] [Remedial Design or Remedial Action] [name of other response or corrective action to be performed] Schedule [, as applicable]. [Respondents/Settling Defendants] shall submit all deliverables to EPA in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5” by 11”, [Respondents/Settling Defendants] shall also provide EPA with paper copies of such exhibits.

2. Technical Specifications for Deliverables

   [NOTE: The information in this paragraph is consistent with the EPA National Geospatial Data Policy 2008, which is under review and may be revised at any time. The case team should check http://www.epa.gov/geospatial/policies.html for the latest guidance on the policy and associated EPA and CERCLA procedures and technical specifications, including standards and quality assurance for GIS deliverables.]

   (a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. [Specify the EDD format that the Region uses.] Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

   (b) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (a) in the ESRI File Geodatabase format [or insert Regionally-preferred spatial file format]; and (b) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.
(c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult http://www.epa.gov/geospatial/policies.html for any further available guidance on attribute identification and naming.

(d) Spatial data submitted by [Respondents/Settling Defendants] does not, and is not intended to, define the boundaries of the Site.