



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
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CHICAGO, IL 60604-3590

SEP 05 2017

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: Data Management and Communication at Residential Properties

FROM: Margaret M. Guerriero
for Acting Director
Superfund Division

A handwritten signature in black ink, appearing to read "Margaret M. Guerriero".

TO: Superfund Division

In his December 19, 2016 memo "Data Management within the Remedial Program", Acting Division Director Douglas Ballotti established expectations and goals for the Superfund program regarding the management of electronic data and the communication of results to affected communities. This memo provides additional details regarding the expectations for communicating residential sample results and the resources currently available to aid in those efforts. This memo is primarily focused on data related to the sampling of residential properties and public areas, however, site teams should consider similar communication priorities when dealing with data from other types of sites where community concerns may be heightened.

First and foremost, Region 5 Superfund Division (R5 SFD) is committed to communicating immediately with the residents/owners as soon as information is available, particularly in situations that may present an immediate endangerment (e.g. exceedances of removal management levels or acute health hazard criteria). Further, R5 SFD is committed to communicating all results from residential sampling efforts back to the resident/owners, and sensitive populations who may be living in and using the properties, as soon as validated results are received from the laboratory. Delivering results as soon as possible is especially important when dealing with residential vapor intrusion, mercury, drinking water and residential soils.

Meeting this commitment requires efforts from Remedial Project Managers (RPMs), On-Scene Coordinators (OSCs), toxicologists, contractors and Community Involvement Coordinators (CICs) to monitor data production, quickly evaluate the results, and develop a message to the resident/owner. It also requires close coordination with the Agency for Toxic Substances and Disease Registry (ATSDR), public health departments and local partner agencies from the beginning of the project. RPMs, OSCs and CICs need to address the issue of data communication in the enforcement and planning phases. They also need to actively monitor the flow of data from sample collection through data processing. Such monitoring enables early communications with the resident/owner on results status and minimizes potential stresses they may feel as they anxiously wait for results. In setting these expectations we recognize that every site in the Superfund Program presents unique challenges associated with data communication,

and site teams need to use their best judgment to determine when and how to communicate with the community.

Enforcement Lead

The discussion below is largely geared toward fund-lead work; however, a major portion of the SFD workload is conducted as enforcement lead, which should meet the same goals as fund-lead work. Having data analysis and validation largely out of EPA's direct control adds a level of complexity to the communication and management of data at residential projects. In many cases Potentially Responsible Parties (PRPs) may be hesitant or unwilling to pay for expedited analytic services, or to share information with the Agency or the resident/owner until it has been validated and reviewed. We recognize that the current model Administrative Orders and Consent Decrees may not specifically address the issues discussed below. R5 SFD will work with Office of Regional Counsel (ORC) and others on language to add to future agreements to require expedited data generation and validation and to facilitate the early communication of data at residential projects. In the interim, RPM/OSCs should engage their PRPs in discussions on the issue and do their best to get commitments from them on, at a minimum, timely communication of results that might pose an immediate endangerment. The team should consider negotiating language into site work plans to address this issue when language isn't included in the governing enforcement document. In cases where PRPs are unwilling to cooperate on this issue, RPMs and OSCs may want to consider taking split samples to generate data for early communications with residents.

Data Management Plans and Early Screening

The RPM/OSC must work closely with their laboratory and/or contractor to ensure data is screened as early as possible to determine if any parameters exceed removal management levels, other health based levels, or otherwise indicate a situation that poses an immediate endangerment. As discussed below in the section "Release of Data: Validated versus Unvalidated Data," site teams should not release unvalidated data to the public, but when an immediate endangerment is indicated the site team shall release information on the results to the resident/owner as soon as it is available. Coordination on messaging regarding the results should occur as early as possible with the Office of Public Affairs, CICs, ATSDR, and public health agencies. Discussions must take place early in the planning process regarding data sharing agreements to ensure those partners will have access to the data and can fully engage in the discussions. RPMs and OSCs should ensure that all data is submitted in Regional Electronic Data Deliverable (EDD) format¹ and uploaded into a database and screened against appropriate standards as they are received from the laboratory. If possible, the database should be capable of sending automated reports for those results that exceed specified screening levels. If not, other arrangements should be made to ensure the data is screened and reported as it is received. EQUIS and SCRIBE databases are available for these purposes and SFD will work on providing additional training to staff on these systems.

The site team should discuss during work planning stages which data management tools to apply to a site should and incorporate those decisions into site work plans and/or data management

¹ EDD Format - <https://www.epa.gov/superfund/region-5-superfund-electronic-data-submission>

plans. The conversations should consider tools available through EPA, its contractors or laboratories and consider which tools have worked at other similar sites. For example, for a large complex residential soil site the site team may want to consider a tool such as the Data Viewer developed and deployed for the East Chicago and Flint responses. The work plan/data management plan should discuss who will screen the data, what screening levels to use, how the results of the screening are communicated to the OSC/RPM, and potential steps that may be taken should levels exceed the screening levels. The plans should include a process for the development, communication and implementation of interim measures that might be taken by residents and/or the Agency to mitigate threats while data is finalized or until final cleanup strategies are implemented.

Communication with Health Agencies

ATSDR, along with state and local health departments are crucial partners when it comes to communicating health threats posed to residents at our sites. OSCs and RPMs should initiate discussion as soon as possible with EPA toxicologists and the health agencies to determine any need for a health consultation with residents. Ideally they should be engaged in the planning stages of residential projects to ensure they have input into the data collection process. That early involvement ensures that they will be able to make a meaningful contribution to the data communication planning process. The outcome may include a decision to request a formal written health consultation, the review of individual results letters to residents, the review of summary fact sheets, or providing assistance in the communication of results to the residents and answering health questions individually or in a public forum. It is extremely important to implement data sharing agreements with these key support agencies when dealing with data from residential properties (see “Personally Identifiable Information” below).

Data Communication Strategy

At every site there are similar points within an investigation or cleanup where communication shall occur to ensure residents/owners are fully informed. The RPM/OSC shall work with their CIC to develop a data communication strategy and incorporate it into the site Community Involvement Plan (CIP), if a CIP is required. CIPs are required for all remedial sites and all removal actions lasting more than 120 days.

When interviewing residents, the CIC should ask interviewees about their preferred communication methods and get feedback on potential timeframes for receiving information from EPA. The communication strategy shall provide for the release of information within the timeframes specified in Table 1.

Table 1: Expectations for Data Communication	
	Expected Communication Timeframe
Results above levels that pose immediate health threat	Within 24 to 48 hours from EPA’s receipt of data regardless of whether the data is validated or un-validated
All validated data	Within 15 calendar days of EPA’s receipt of validated data packages

The strategy shall identify how data will be released to the resident/owner, whether by letter, phone call, email, etc, and may include a contact list of residential property owners and lessors who should receive data communications. The strategy shall also include plans for the development, communication and implementation of interim measures that might be taken by residents and/or the Agency to mitigate threats until final cleanup strategies are implemented. The data communication strategy can then be used to manage expectations within the community regarding EPA's management and release of data.

Initial Contact

Early contact with the property owner/resident is critical to establishing effective communications and expectations regarding sample results and potential actions. Initial contact may occur when EPA approaches the owner/resident to gain access to sample the property. In most cases the initial contact will be through a telephone call or face-to-face meeting, but should also include a letter or a fact sheet. In those communications the site team shall not only clearly explain the physical work that will take place on the property and the planned sampling, but also clearly explain what will happen after the sample is collected and sent to the laboratory for analysis. That discussion shall include what analyses will be performed, when we expect the results to be available and clearly explain how results will be communicated to them. The team shall commit to the resident/property owner that we will review the data as soon as it is available and we will contact them if we see anything in the results that may indicate an immediate endangerment (see "Unvalidated/Preliminary Data" below). A point of contact shall be provided should they have questions.

Entry to Property

At the time of entry to the property for sampling, the team shall reiterate the information previously provided and reaffirm when we anticipate having results available. Any changes to the sampling plan, analytical work, or data delivery date shall be explained.

Results Due

RPMs and OSCs shall actively monitor the Agency's and/or contractor's receipt of analytical results and follow-up with the resident/owner when necessary when delays are observed. If results are not available in the timeframe originally communicated to the property owner/resident the team shall notify the owner/resident of the delay, provide a revised delivery date and continue to communicate until the results do become available.

For analyses conducted by commercial laboratories under the START or ERRS contracts the OSC or RPM should be listed on the chain of custody form as one of the contacts to ensure that EPA staff receive the results upon issuance.

For analytical work through Chicago Regional Laboratory (CRL) the site team can contact the following people with questions about the progress of analytical work:

Inorganic Analyses: Gregg Mitsakopoulos, Inorganic Chemist Group Leader, (312) 353-0377
Organic Analyses: Michelle Kerr, Organic Chemist Group Leader, (312) 866-8961
Analytical Service Requests: Rob Thompson, CRL Sample Coordinator, (312) 353-9078

For analytical work through the Contract Laboratory Program (CLP) contact the following people:

Regional Sample Coordinator (RSCC):	Warren Layne (312) 886-7336
Alternate RSCC:	Alida Roberman (312) 886-7185
Region 5 CLP Project Officer:	Howard Pham (312) 353-2310

In addition, SFD is seeking changes to the analytical services requests through the CLP. Traditionally, EPA's contractor, but not necessarily the RPM/OSC received electronic data or email notifications regarding the data packages. We are changing the systems to ensure that the RPM/OSC will automatically be identified as recipients of the electronic data and/or notifications on the status of the electronic data packages. For work going through the CLP, data is posted in the CLP on-line EXES system. EXES is a system that requires an account and a password and we will be working with CLP to determine how best to make the access available to all RPMs/OSCs and provide training on the system. CRL's protocols already include copying RPMs and OSCs on communications regarding their data.

Release of Data: Validated versus Unvalidated Data

It is Agency policy to only release to the public data of known quality, i.e. validated data, so preliminary data should not be released to the community. However, EPA policy does not preclude the release of preliminary "information". While a site team shouldn't send out a report with the specific level reported in the preliminary data package, they can discuss the preliminary results in general terms of information showing levels that may pose an immediate endangerment (e.g. "Our preliminary information is showing levels significantly above the Removal Management Level"). Any discussion or release of preliminary information should make it clear that the Agency is still reviewing the data and will make final results available as soon as possible, but the Agency is discussing the information at this point out of an abundance of caution. The uncertainties associated with preliminary information should be clearly explained to the resident/owner and we should state that the results may change based upon further review. SFD is developing model language on this issue to use in letters and will provide it to staff. To be clear, a site team shall take steps to inform residents/property owners, if preliminary, or unvalidated data reflects a situation that may pose an immediate endangerment to the public. Under circumstances where preliminary data shows a potential immediate endangerment the site team should seek a prioritization of the data validation of the packages in question and take immediate emergency response action if warranted.

When validated data is received, a letter shall be sent to the resident/owner providing the results and in plain language explaining the results and providing other opportunities to discuss the results.

Preliminary Date and Validation Time Frames

Analytical and validation time frame will vary depending on numerous factors.

For emergency situations when the analyses are conducted by commercial laboratories under the START or ERRS contracts preliminary analysis results can typically be obtained within 24 hours of the lab receiving the samples and validated data within one week. During emergency situations, analyses can typically be completed within 24 hours of lab receipt of samples, if necessary, and preliminary results can be issued shortly thereafter. Longer analysis turn-around times are also available. After analysis, laboratories issue a data validation package. START data validators then review the laboratory data package, and issue a data validation report, containing the final validated data. When rush data validation is requested, the laboratory may be able to issue a validation package as quickly as within 24 hours of analysis, and START data validators can issue the final validated data report within 48 hours of receipt of the laboratory data validation package.

For analyses conducted by CRL and CLP, when analytical and validation time frames do not meet the site needs, the RPM/OSC can request preliminary, un-validated data from CRL and CLP laboratories. The standard default turnaround time for analyses through CLP is 21 days, but times as short as 7 days can be requested. That is the time from sample receipt until the data package is shipped to EPA for validation. CRL generally turns data around in 30 days. Depending on the laboratory workload, the analyte, and other factors, preliminary data can generally be available between 2 to 4 days after the laboratory's receipt of the sample. Time frames for validation vary due to validator workload and other issues, but on average, SFD data validation takes one week once the packages are received from the laboratory. Data generated by CRL is not validated by the ESAT contractor so the RPM/OSC would need to make arrangements for validation through another party. If prioritized, data packages can be validated by EPA's ESAT contractor within a day. In most cases it should not be necessary to request preliminary data, but in some cases such a request may be warranted after weighing the additional costs for preliminary data against site circumstances, e.g. data validation workload is high and it's a residential property where other data indicate potential exceedances of Removal Management Levels.

Personally Identifiable Information

The Privacy Act of 1974 establishes a Code of Fair Information Practices that governs the collection, maintenance, use, and dissemination of personally identifiable information about individuals that is maintained in systems of records by federal agencies. EPA's Privacy Policy 2151.1 establishes EPA requirements for safeguarding Personally Identifiable Information (PII) and Privacy Act information. PII is any information about an individual maintained by an agency, which can be used to distinguish, trace, or identify an individual's identity, including personal information which is linked or linkable to an individual, (e.g. name, date of birth, address). Privacy Act Information, a subset of PII, is information about an individual that is retrieved by name or other personal identifier assigned to the individual which has special requirements under the Privacy Act. PII and Privacy Act information must be protected from unauthorized access during collection, access, use, dissemination and storage.

All data collected that can be traceable to an individual name or address is considered PII. If it is stored in a data base like EQUIS or SCRIBE and can be retrieved by personal identifier, like a name or address, it is also information that must be protected under the Privacy Act of 1974. Without a data sharing agreement in place EPA staff should only share the data internally within the Agency and with ATSDR. EPA can also share the data directly with the individual property owner or occupant. A data-sharing agreement is required to share the data with other stakeholders including state partners. RPMs and OSCs should work with the site attorney and partner agencies on data-sharing agreements well in advance of the need to share un-redacted versions of the data, although data without PII or a personal identifier can always be shared. SFD is working with ORC to draft global data sharing agreements with our state partners, but until those are in place site specific agreements are necessary. In order to share the data outside of the Agency it must be stored in a system of records that is compliant with EPA's System of Records Notices² (SORN). SCRIBE and EQUIS are considered SORN compliant under the Environmental Assessments for Residential Properties (EARP) SORN. SEMS, which has a separate SORN, also allows for data sharing for certain purposes under a data sharing agreement. However, this is a currently developing issue and the site attorney should be consulted on this issue before sharing data.

Questions/Contacts

If you have any questions concerning data management and communication at residential properties feel free to contact any of the following SFD Data Management Workgroup members:

Tim Prendiville
Matt Mankowski
Leslie Patterson
Karen Kirchner
Jason Sewell
John Canar
Brian Cooper

² System of Records Notification for Environmental Assessments of Residential Properties - <https://www.federalregister.gov/documents/2016/04/21/2016-09290/privacy-act-of-1974-system-of-records>