## **Corrective Action Framework Guide**

## **Introduction**

In an effort to enhance the efficiency of the RCRA Corrective Action Program, the Lean process improvement system was used to analyze the RCRA Facility Investigation (RFI) phase of Corrective Action cleanups. The Lean process refers to a collection of principles and methods that focus on the systematic identification and elimination of non-value added activity involved in producing a product or delivering a service to customers.

EPA believes that applying a Lean type approach could potentially help clarify the goals and expectations of an RFI early on, thereby reducing redundancies and expediting the investigation process. Therefore, EPA has developed tools for regulators and facilities wishing to draw upon the results of the RFI Lean analysis at their own facilities – this Corrective Action Framework Guide (CAF Guide), a model Corrective Action Framework Meeting Agenda (CAF Meeting Agenda) and a model Corrective Action Framework Template (CAF Template).<sup>1</sup> In this CAF Guide, EPA discusses how it envisions a Lean approach to RFIs could operate, focusing on key steps and considerations that are important to realizing the full benefits of taking a Lean approach. This paradigm focuses primarily on producing a Corrective Action Framework (CAF). A CAF is generally intended to summarize the goals and expectations for the RFI which are discussed during an initial meeting known as a Corrective Action Framework Meeting (CAF Meeting).

The CAF Guide, Meeting Agenda, and Template can be used to facilitate an RFI Lean process at facilities where Regional and State staff believe that applying a Lean approach would be beneficial. These 3 documents may be valuable tools used to potentially reduce redundancies and expedite the review and approval of RFI documentation.

## **CAF Meeting**

Under EPA's RFI Lean concept, the CAF Meeting is an initial meeting between the regulatory authority (EPA and/or State) and facility representatives to identify and clarify expectations concerning the RFI phase of the Corrective Action process. This meeting would bring the representatives together early in the process for a robust discussion of the investigation scope,

<sup>&</sup>lt;sup>1</sup> This document and the attachments are intended to provide guidance to EPA personnel on implementing the RCRA Subtitle C program. As indicated by the use of non-mandatory language such as "guidance," "recommend," "may," "should," and "can," it identifies policies and provides recommendations and does not impose any legally binding requirements. This document and the attachments are not a rule or regulation, may not apply to a particular situation based upon the circumstances, do not change or substitute for any law, regulation, or any other legally binding requirement and are not legally enforceable. While EPA has made every effort to ensure the accuracy of the discussion in these documents, the obligations of the regulated community are determined by statutes, regulations or other legally binding requirements. In the event of a conflict between the discussion in these documents and any statute or regulation, these documents would not be controlling. In addition, under RCRA, States may apply to EPA for, and receive from EPA, authorization of a state program to operate in lieu of the federal RCRA hazardous waste program. These state programs may be broader in scope or more stringent than EPA's RCRA regulations, and requirements can vary from State to State. Members of the regulated community are encouraged to contact their State agencies for the requirements that apply to them.

conceptual site model, potential interim measures, and other elements of the RFI process. More than one CAF Meeting may be needed to achieve useful outcomes. CAF Meeting outcomes may include:

- A common understanding of the roles and responsibilities for the regulatory authority (EPA and/or State) and facility;
- A common understanding of the CAF process/ CAF Meeting objectives;
- A common understanding of the facility's physical setting and constraints;
- A common understanding of current conditions and conceptual site model (including data gaps);
- Discussion and identification of goals and expectations for the regulatory authority (EPA and/or State) and facility including identifying methods to address any differences;
- A common understanding of planned Interim Measures and/or a process to address Interim Measures that may be needed;
- A common understanding of RFI Workplan tasks with the goal of creating an approvable document with no revisions; and
- A finalized summary of the CAF Meeting and schedule of deliverables (e.g., RFI workplan).

It is often most useful for the CAF Meeting to be held at the facility. This allows all participants, which may include risk assessors, hydrogeologists, and other technical experts, to more accurately develop and confirm the initial conceptual site model (e.g., surrounding land uses, migration pathways), and more easily identify physical and/or institutional constraints (e.g., operating facility) that could affect the investigation process. Depending on the complexity of the facility, the meeting may also need to be scheduled over the course of multiple days.

Also important for producing successful outcomes is for meeting participants to make efforts to ensure that the relevant documents are available for review prior to and during the meeting. The CAF Meeting Agenda identifies some documents for possible exchange. While EPA expects that often the regulatory authority (EPA and/or State) and facility will already have the same documentation, careful planning can help identify the most recent revisions to documents or documents missing entirely. Advance discussions between the participants can also help identify other relevant information.

## **Corrective Action Framework (CAF)**

As discussed, a CAF can be a useful tool to clarify the goals and expectations for the RFI. However, it is important to note that the CAF itself is not a legally binding document and does not create new legal obligations or limit or expand obligations under any federal, state, tribal or local law. The CAF is also not a substitute for a permit or order. The CAF may only alter legal obligations when it is explicitly incorporated or referenced in a new permit (or order, for interim status facilities) or through a permit or order modification (or order modification for interim status facilities). Thus (unless so incorporated or referenced) the obligations in a permit or order would control over any conflicting CAF provisions. Therefore, to maximize the usefulness of the CAF, parties should be careful to either work within the scope of any existing obligations contained in any permit(s) and/or order(s) when developing their CAF, or to modify the permit consistent with the requirement in 40CFR sections 270 and 124.

A central premise of EPA's RFI Lean concept is much of the CAF development work will occur during and immediately after the CAF meeting, thus, the drafting party (which could be either the regulatory authority or facility representatives) should be identified during the CAF meeting, and continue to closely coordinate with all participants. With respect to timing, participants can generally expect that more complicated facilities will typically require more time to finish the CAF.

The CAF documents the information discussed in the CAF Meeting and any other appropriate information. A CAF may include discussions of: the conceptual site model; the scope of the investigation; any identified data gaps (including uncertainties and unknowns); the schedule for deliverables (e.g., RFI workplan), and any dispute elevation process the parties identify during the CAF meeting. It is crucial that community engagement steps are considered in conjunction with development of the CAF. At a minimum, community engagement will be a part of permit issuance or modification, and is recommended by EPA at equivalent steps of the order process. The CAF Template provides additional suggestions.

Finally, under this approach the CAF would be treated as a living document with its goals and expectations subject to change, because the RFI process may uncover new information. Changes may be documented through either addenda or complete redrafts. Addenda may be the most practical option when minor changes, such as changes regarding how information is exchanged or the investigation schedule for a particular group of SWMUs. The CAF might be redrafted entirely when investigation activities uncover large potentially scope-changing information (e.g., a new source of contamination or new exposure pathway). It is important that when a CAF is redrafted older versions are retained as appendices for reference.