

Responses to Questions from Jan. 14, 2015 RCRA Corrective Action Inspection Training Webinar

Questions Answered During the Webinar

Question: Since this is an intro course do you anticipate offering follow up/advanced version of this course in the near future?

Zena Aldridge (privately): Probably not in the near future, we hope to offer this beginning version again later this year.

Question: Are any of the evaluations listed on slide 8, the CAC, GME or OAM required by EPA? If so what is the required frequency?

Zena Aldridge (privately): CACs are not required. GMEs & OAMs are discussed in the RCRA Compliance Monitoring Strategy.

Follow-up Answer: See pages 17 -18 and 2 of RCRA Compliance Monitoring Strategy at <http://www2.epa.gov/sites/production/files/2013-11/documents/rcracms.pdf>.

Question: Hi Penny/Tammie - Could you talk a little bit about applicability of CA - specifically 264.101(d)? read this to mean that CA only applies at TSD facilities.

Zena Aldridge (privately): Yes, CA applies only to TSD facilities.

Follow-up Answer: 4 CFR Section 264.101 applies to permitted facilities and RCRA Section 3008(h) applies to facilities that have, had, or should have had interim status (see RCR Section 3008(h) guidance at: <http://www2.epa.gov/enforcement/guidance-interpreting-rcra-section-3008h>). States or EPA may use other enforcement authorities to compel investigation or cleanup at other types of facilities. For example, RCRA Section 700 can be used to require investigation or cleanup and applies to a broader group (e.g., handlers of solid or hazardous waste). See RCRA Section 7003 guidance at <http://www2.epa.gov/enforcement/guidance-use-administrative-orders-under-rcra-section-7003>.

Question: Is the CAMU a permanent unit?

Zena Aldridge (privately): CAMUs can be temporary or permanent units. See reference on notes page 1 for more info.

Question: Has the facility in Arkansas that Ms. Hynum mentioned achieved the CA725 and CA750 Environmental Indicators?

Zena Aldridge (privately): [Tammie answered verbally to all.] The site in AR is not a GPRA listed site; therefore CA 725 and CA750 codes are not required to be achieved.

Question: Is a public meeting required during the CMS public comment period or is it evaluated on a case by case basis?

Zena Aldridge (privately): Yes, public meeting is required for the CMS.

Follow-up Answer: The applicability of requirements for public participation during corrective action will depend on the authority used to implement corrective action. The regulations don't include public participation requirements specific to the stages of the corrective action process (e.g., CMS, remedy selection, remedy completion, etc.). However, public participation may be required through applicable permitting and permit modification processes, or where a facility is subject to corrective action through an alternate authority in lieu of post-closure permit under 4 CFR sections 264.90 and 265.121xxx. In

addition to regulatory requirements, guidance on public participation in the corrective action process can be found in chapter 4 of the RCRA public participation manual that is referenced below.

Zena Aldridge (privately): For info. about public meetings in Corrective Action, see chapter 4 of the RCR public participation manual at:

<http://www.epa.gov/wastes/hazard/tsd/permit/pubpart/manual.htm>.

Question: The picture on the slide 5 is very interesting. What is it showing?

Zena Aldridge (privately): Good question -- let me check.

Zena Aldridge (privately): Mike Beedle says it is a problem at a landfill that took in waste that reacted with water.

Question: Can you clarify how unauthorized states, ie. NJ, would comply with RCRA CA?

[Verbal answer to all]: EPA regions are responsible for CA activity in unauthorized states. Such states have varying degrees of involvement in CA activities.

Phil Page: Ask Mike if he would take a sample of the dead animal for chemical analysis.

[Verbal answer to all]: It depends.

Follow-up answer: If you are not prepared to sample an animal, no. There are potentially federal and state laws governing the possession of wildlife, dead or alive, depending on the species. You may need special licensing before taking an animal or part of an animal for lab analysis. For example, there are laws that govern the possession of bald eagle feathers and migratory birds. If you have prepared to sample an animal, including the proper licensing, and the lab is prepared to receive it including storage and disposal, yes. If you know beforehand that there is the potential for dead animals, for example at an oily waste management pond, special coordination with Fish and Wildlife Services is warranted.

Questions Answered After the Webinar

Question: Could you describe a current conditions report?

Answer: It is a report that is often done at the beginning of the RFI phase. See pages 19 – 22 of chapter III, Section (“Description of Current Conditions”) on pages 19 – 22 of the RCRA Corrective Action Plan at http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/gen_ca/rcracap.pdf.

Question: What is the relationship between Corrective Action and superfund and registry sites?

Answer: Generally, owners and operators of RCR treatment, storage and disposal (TSD) facilities are subject to Corrective Action. Under limited circumstances (e.g., when the owner/operator is unable to pay for cleanup), TSD facilities may be referred to the Superfund program. This is a formal transfer process, and should be distinguished from situations where some cleanup at a TSD is done under Superfund. For a description of the Corrective Action, Superfund and EPA’s other cleanup programs, including Superfund’s computerized list of potential hazardous substance release sites, see <http://www2.epa.gov/cleanups/basic-information-about-cleanups#superfund>.

Question: What is your experience w/ the use of permits vs. orders to implement CA? Pros/cons?

Answer: In discussing the use of permits and RCR Section 3008(h) orders on page 19453 of the May 1, 1996 Advanced Notice of Proposed Rulemaking for Corrective Action (61 FR 1943 at <http://www.gpo.gov/fdsys/pkg/FR-1996-05-01/pdf/96-9707.pdf>), EPA stated, “As a matter of EPA

policy, the substantive Corrective Action requirements and public participation requirements imposed under either mechanism are generally the same.” Under 40 CFR Section 264.101 (or state equivalent in states that are authorized for Corrective Action), Corrective Action requirements must be included in the permit unless Corrective Action is completed prior to issuance of the permit per section 264.101(b). EPA and states have more discretion in using order authorities at interim status facilities. For example, EPA may issue a RCRA Section 3008(h) order to require Corrective Action at interim status facilities.

Question: Also, how are the facilities identified/recommended for Corrective Action?

Answer: As stated on notes page 5 of the training module, the Corrective Action program is focused on the nearly 4,000 RCRA facilities in the 2020 Corrective Action Universe. However, additional facilities may be identified for Corrective Action (e.g., clean closed facilities, non-notifiers). The EPA regions and states use a variety of approaches and factors (e.g., risk, regulatory/permitting status, availability of staff) to identify and prioritize facilities for Corrective Action.

Question: How are facilities prioritized for inspections?

Answer: The RCRA Compliance Monitoring Strategy (see <http://www2.epa.gov/sites/production/files/2013-11/documents/rcracms.pdf>) provides guidance to EPA and authorized states about RCRA compliance monitoring, including inspections. Corrective Action inspections are not required and are not addressed in the RCRA Compliance Monitoring Strategy (CMS). However, the CMS encourages “programmatic coordination to promote facility compliance with corrective action requirements” (see footnote 16 on page 9). The EPA regions and states use a variety of approaches and factors to prioritize sites for Corrective Action inspections.

Question: Are you required to go with a buddy for safety reasons?

Answer: No, typically CA sites are at active/operating facilities. Thus, when a walk through is being conducted as part of the CA Inspection, there are a minimum of one facility representative present.

Question: Is there a generic checklist that can be used to develop your own inspection checklist?

Related Question: Is there a generic CA checklist that EPA has developed that can be shared with states?

Answer: There is no checklist for Corrective Action inspections for the national Corrective Action program, but some EPA regions and states have developed their own checklists. EPA’s Office of Site Remediation Enforcement will consider issuing a generic checklist for Corrective Action inspections or sharing examples with EPA regions and states.

Question: How often do you have the facility sample versus taking the sample yourself (government lab)?

Answer: Most sampling for Corrective Action is conducted by facility owners/operators. EPA regions and states sometimes sample during Corrective Action inspections and may split samples with facility owners/operators.

Question: In these instances when only one EPA investigator is available, do you ask the state agency to assist?

Answer: This varies from region-to-region and state-to-state.

Question: Is EPA considering developing some inspection commitments for the authorized states on their Corrective Action facilities that have completed remedial efforts with institutional controls, CAMUs etc.? We don't have a lot of facilities that are completely done as of today. On the few facilities that are

done with institutional controls we have been periodically visiting them on a somewhat informal basis. My question was centered around whether Headquarters EPA is going to start requiring formal annual inspections with associated inspection reports. Perhaps after all of our 2020 goals are achieved this will become a possible issue to ensure things are being maintained properly.

Answer: EPA has not developed Corrective Action inspection commitments for the authorized states. If EPA considers doing so, it will raise the matter with the states.

Question: For facilities in CMI, are CAI's more analogous to OAMs and 5-year reviews more analogous to CMEs? OR are there some things that CAIs cannot answer but can only be done in a 5-year review?

Answer: Corrective Action Compliance Evaluation (CAC), Operation and Maintenance Inspection (OAM) and Groundwater Monitoring Evaluation (GME) are defined in "RCRAInfo *Nationally Defined Values for Evaluation Type*" (see <https://rcrainfo.epa.gov/> and Appendix D of the RCRA Compliance Monitoring Strategy (see <http://www2.epa.gov/sites/production/files/2013-11/documents/rcracms-appendices.pdf>). This training uses the CAC definition for Corrective Action Inspections, which is: "An evaluation of a site's compliance with the corrective action requirements of a permit or an order." Although a Corrective Action Inspection may be helpful for a 5-year review, it is likely that additional activities would be necessary (e.g., conducting research, consulting with technical experts such as hydrogeologists/engineers) to complete the review.

Question: How does the use of RCRA at a Superfund site sit with the deferral policy? Any examples?

Answer: For general information about RCRA/Superfund coordination see http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/gen_ca/coordmem.pdf. For information about the RCRA/NPL deferral policy, see <http://www.epa.gov/superfund/cleanup/postconstruction/deferralrcraffnpl.pdf>.

Regarding the case study:

Question: What are the levels in the hot spots (highest)?

Answer: Historically the highest level of TCE in groundwater was from MW-86 in the source area. Concentration was 553,000 ug/l. The highest level of TCE measured in soil, 3,300 mg/kg, was from DP-0 at depth of 18.5 to 1 feet below ground surface. Currently the highest levels of TCE in groundwater are found in wells MW-25 at 42,500 ug/l and IW-141 at 368,000 ug/l, located in the source area.

Question: What is depth to GW?

Answer: Groundwater in Area 1 (hot spot) occurs under semi-confined conditions within the saturated interval designated as the Basal Aquifer (BA). The top of the BA is found at approximately 20 feet below ground surface. Due to the semi-confined nature, depth to water levels in wells penetrating the BA is less than the depth to the top of the BA. Depths to water measured in wells penetrating the BA are approximately 1 feet below ground surface.

Question: Does the chemical oxidation treatment work in low permeability soils? If not, what are other options?

Answer: Yes, but the radius of influence is less in areas of lower permeability.

Question: What ICs were recommended for this case?

Answer: ICs in place:

1. Prohibit use of groundwater without prior consent of ADEQ

2. Only commercial or industrial use without prior ADEQ approval
3. All monitoring wells must be maintained
4. No digging in source area (Area A).
5. If building is demolished, ADEQ must give prior approval.

Question: Did AR require Financial Assurance as part of the CA process?

Answer: No, not for this site. The facility "self-disclosed" the contamination and voluntarily entered into an enforceable agreement with the Agency to conduct a site-wide investigation and remediation.