

Raynes, Scott

From: DiSalvo, Rick
Sent: Friday, September 11, 2009 10:51 AM
To: 'Carl.spreng@state.co.us'
Cc: Surovchak, Scott; Kaiser, Linda; Boylan, John; Darr, Bob
Subject: Draft CR 2009-04 ETPTS media changeout and minor piping changes
Attachments: RFLMA CR 2009-04 DRAFT 091109.DOC

Carl, here is the Draft CR for your review, comment as needed and approval.

As we discussed at our meeting yesterday, we are not sure when the approved CR can be posted to our website, due to DOE required reviews for public release of documents to the website that we were made aware of this week.

We are working our way through the logistics to get the reviews for posting accomplished as quickly as possible. However, this may not be completed before we intend to begin the project on Monday, Sept. 21.

As we discussed, this CR is intended to document the outcome of consultation regarding the planned media changeout work. You agreed that the work could proceed prior to web posting, as this routine media changeout work is included in the remedy, and this is not a modification that would require posting as the means for public notice of a modification of RFLMA or change of the remedy.

Thanks

**ROCKY FLATS SITE
REGULATORY CONTACT RECORD**

Purpose: Replace East Trenches Plume Treatment System (ETPTS) media and make minor changes to the piping configuration.

Contact Record Approval Date:

Site Contact(s)/Affiliation(s): Scott Surovchak, U.S. Department of Energy (DOE); John Boylan, S.M. Stoller (Stoller); Rick DiSalvo, Stoller

Regulatory Contact(s)/Affiliation(s): Carl Spreng, Colorado Department of Public Health and Environment (CDPHE)

Discussion: A routine maintenance activity to remove the ETPTS spent treatment media (zero valent iron [ZVI] filings) and replace it with new ZVI media is scheduled for late September through October 2009. The last ETPTS media replacement was performed in 2005. The work proposed for 2009 was discussed at a consultation meeting with DOE, CDPHE, and Stoller staff on September 10, 2009.

The PVC piping in the two treatment cells will also be removed with the media (it is, by design, sacrificial). New PVC piping will be installed as part of the media replacement, but the piping configuration will be changed slightly to allow easier field operational alignment to provide either up flow or down flow of water through the media. Although the system plumbing was improved in 2006 to allow both of these flow configurations, the currently proposed upgrades will make these adjustments easier to effect and will eliminate subsurface valves that have proved problematic in some cases. The flexibility to switch the flow directions based on treatment system monitoring results allows flow characteristics to be optimized within the media as conditions warrant.

As part of this minor change to the piping configuration, a new concrete vault (approximately 6 feet wide by 7 feet long and 6 feet deep) will be installed between the two treatment cells to house the terminal ends of the piping from the cells. Removable piping sections with watertight couplings will be used within this vault to connect the pipes supporting each treatment cell to establish the desired flow configuration. Designing these pipes to be easily removable will facilitate potential maintenance needs, such as unclogging pipes. The influent lines will pass through the new vault before entering the treatment cells, and the effluent lines will pass through the new vault before flow is routed to the existing effluent manhole.

The work will include excavation to approximately 6 to 8 feet below ground surface to install the vault and piping. This excavation work will exceed the 3-foot depth limit specified by Rocky Flats Legacy Management Agreement (RFLMA) institutional control (IC) 2 (RFLMA, Attachment 2, Table 4, Control 2); thus, the procedures require preapproval.

Furthermore, IC 3 (RFLMA, Attachment 2, Table 4, Control 3) stipulates that soil disturbance must be in accordance with the CDPHE-approved Erosion Control Plan and that the soil surface must be restored to the preexisting grade after any soil-disturbance activity has occurred.

The objective of the ICs is to maintain the current depth to subsurface contamination or contaminated structures. These ICs also result in achieving compliance with the CDPHE risk management policy of ensuring that residual risks to the site user are at or below 1×10^{-6} . As discussed below, the proposed work achieves the risk management policy goal.

Excavation will be reduced to the extent feasible, and soils will be returned to approximately the preexisting grade. Excess soils from the excavation after the new vault is installed will be used in the immediate area to reduce the potential for ponding and enhance drainage away from the treatment cells and associated vaults, and any leftover soil will be spread in areas where additional soils may be used to facilitate revegetation. The best management practices in the *Erosion Control Plan for Rocky Flats Property Central Operable Unit, DOE-LM/1497-2007* (July 2007) will also be implemented to provide erosion controls for the construction area so that run-on and runoff will be minimized.

The ETPTS is expected to be shut down for several weeks to accomplish the work. Water within the treatment cells at the start of the project will be pumped out through the ETPTS effluent manhole. Water from precipitation in the excavation that may impact the construction work, or that accumulates in the treatment cells during the work, will be pumped to the ground in the area northwest of the excavation area. If water that collects in the ETPTS collection trench needs to be managed to reduce the levels in the trench, it will be transferred to the Mound Site Plume Treatment System.

CDPHE has requested that the following information related to ICs be included in contact records for soil excavation:

1) Provide information about any remaining subsurface structures in the vicinity so that the minimum cover assumption will not be violated (or state that there are none if that is the case).

The work is at the ETPTS. Except for ETPTS-related components, there are no other subsurface structures in the immediate vicinity.

2) Provide information about any former IHSSs/PACs [Individual Hazardous Substance Sites/Potential Areas of Concern] or other known soil or ground water contamination in the vicinity (or state that there is no known contamination).

The East Trenches Plume is upgradient of the ETPTS. There are no former IHSSs or PACs in the vicinity of the excavation area.

3) Resurvey any new surface established in subsurface soil, unless sufficient existing data is available to characterize the surface (or state that the excavated soil will be replaced and the original contours restored).

When completed, the surrounding soil will be generally consistent with the existing grade, with some very minor improvements to facilitate drainage and prevent ponding at the treatment cells. The new vault will protrude above the surface by about 1 foot.

Closeout of Contact Record: This contact record will be closed when the work is completed and post-construction revegetation and erosion controls are in place.

Resolution: Carl Spreng, CDPHE, approved this contact record.

Contact Record Prepared By: John Boylan and Rick DiSalvo

Distribution:

Carl Spreng, CDPHE

Scott Surovchak, DOE

Linda Kaiser, Stoller

Rocky Flats Contact Record

File