Evaluation Summary for Potential Additional Monitoring Wells

ST012, Former Williams AFB

Location Proposed by EPA	Location Description	Primary Purpose based on Call/Discussion	AFCEC Plan	EPA Priority	AFCEC Feedback
CZ Location 1	E of CZ23 See figure (ink location)	Containment monitoring beyond CZ23	Planned for initial mobilization	High	CZ Locations 1 and 2 are related to previous benzene detections at CZ23. Extraction at CZ07 was implemented and is ongoing to address the CZ23 area.
CZ Location 2	N of CZ023, see figure (ink location)	Containment monitoring beyond CZ23 and downgradient of LSZ53 area where boring had mixed results	Planned for Assessment based on CZ23 results	Medium	See feedback for CZ location 1. Relative to location 1 this location is in a cross-gradient position relative to CZ23, and as such, AF concurs location 2 is a lower priority than location 1. **Recommend this location be medium priority only if concentrations increase again at CZ23; until then, CZ23 serves to monitor containment and installation of a well at location 2 can be deferred.**
CZ Location 3	E of CZ21 (red dot)	Earlier detection of VOC or sulfate displacement from injections	Planned for initial mobilization	High	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of benzene plume extent between detections at CZ41 and perimeter well CZ24.
CZ Location 4	E-SE of CZ09 (yellow dot)	Earlier detection of VOC or sulfate displacement from injections	Planned for initial mobilization	High	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of benzene plume extent between plume detections at CZ41 and perimeter well C02.
UWBZ Location 1	E of UWBZ09 (red circle combined location)	Containment Monitoring beyond UWBZ09	Planned for initial mobilization combined location	High	UWBZ location 1 is in an area further northward than existing perimeter well (U02), but high concentrations at this end of the 5000-ug/L contour are constrained by relatively lower concentrations at UWBZ09. This location is biased north of the flow path from the center of the 5000 ug/L contour; **AF recommends combining locations 1 and 2 between the two handwritten locations.**
UWBZ Location 2	E -NE of UWBZ12 (red circle combined location)	Earlier detection of VOC or sulfate displacement from injections	Recommend eliminating	Medium	Concur this is location as shown is lower priority as it is further from high concentration detections. However, **AF recommends combining locations 1 and 2 to a single location** as described in feedback for location 1.
UWBZ Location 3	NE of UWBZ32	Earlier detection of VOC or sulfate displacement from injections	Planned for Assessment based on EBR monitoring	Lower	Concur this location is lower priority.
UWBZ Location 4	E of UWBZ21 (ink location)	Earlier detection of VOC or sulfate displacement from injections	Planned for initial mobilization	High	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of benzene plume extent between detections at UWBZ21 and perimeter wells U02 and U38.

Location Proposed by EPA	Location Description	Primary Purpose based on Call/Discussion	AFCEC Plan	EPA Priority	AFCEC Feedback
UWBZ Location 5	E of UWBZ30 (red dot)	Containment Monitoring beyond UWBZ30	Planned for initial mobilization	High	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of benzene plume extent between detections at UWBZ30 and perimeter wells UWBZ38.
LSZ Location 1 (original red dot)	NE of LSZ44	Containment monitoring in gap between W34 and LSZ54 (Moved closer to 5 ppb line per ADEQ)	Planned for initial mobilization	High	Concur this is one of the highest priority locations. **AF prefers location as originally proposed** if goal is to define plume boundary; the 5 ug/L contour can reasonably be interpreted to be further east as it passes LSZ44, so there is risk of seeing significant detections at the ink location.
LSZ Location 2	E of LSZ29	Plume displacement, containment monitoring	Will be considered for second mobilization	Medium	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of the benzene plume margin between plume detections and three existing perimeter wells.
LSZ Location 3	Between W24 and LSZ55 (red circle)	Earlier detection of VOC or sulfate displacement from injections	Planned for initial mobilization	High	**AF prefers moving well outside the plume (east of SB18) if goal is to improve plume boundary definition**. Co-location with SB18 is expected to be within the plume. Note: revised locations are no longer co-located with UBWZ location 5.
LSZ Location 4	NE of W36 (ink location)	Earlier detection of VOC or sulfate displacement from injections	Planned for initial mobilization	High	Acknowledge EPA priority. This location is a step in for perimeter monitoring to refine definition of benzene plume extent between detections at W36 and perimeter well LSZ54.
LSZ Location 5	NE of W36	Combined with location 4	LSZ Location 4 now addresses this area	Eliminate	AF concurs with eliminating location 5 given current proposed location 4.
LSZ Location 6	S of LSZ46	discussed on call to address potential characterization gap	Planned for Assessment based on LSZ52 results	Lower	**AF proposes this location be deferred contingent on continued monitoring at LSZ52.**
LSZ Location 7	W of W30 and SB19	discussed on call to address potential characterization in area of SB19	Will be considered for second mobilization	Medium	**AF prefers location 7 be moved west** 50 – 100 to be near SB19 if objective is to define extent.

Notes:

Initial mobilization to address high priority locations. Medium and lower priorities will be revisited at a later date to confirm locations considering available monitoring data. Locations and priority will continue to be evaluated as additional site data is received.

Yellow highlight – 9 wells recommended for inclusion in first well installation mobilization. Grey highlight – 2 wells proposed for elimination.