

June 2, 2025

Colonel Jeffrey M. Marshall Commander, 97 AMW/CC 100 Inez Blvd, Bldg 1 Altus AFB, Oklahoma 73523

Re: Proposed Class 2 Permit Modification Altus AFB, OK9571824045, RCRA Permit No. 9571824045-CA

Dear Colonel Marshall:

On May 14, 2025, the Land Protection Division of the Department of Environmental Quality ("DEQ") received the above-referenced correspondence dated April 21, 2025, from Altus Air Force Base ("Altus AFB"). The correspondence requests to modify the groundwater performance monitoring program in the Altus AFB Resource Conservation and Recovery Act ("RCRA") Corrective Action Permit referenced above. In accordance with 40 C.F.R. § 270.42(b), this is a Class 2 Permit modification request requiring public notice and a public meeting. Altus AFB published the required notice in the Altus Times on May 16, 2025, on which date a 60-day public comment period commenced, and a public meeting is scheduled for June 3, 2025, at the Altus Public Library.

DEQ has reviewed the Class 2 Permit modification request and has the following comments:

- 1. Altus AFB references Permit Provisions I.3.b and I.4 in the modification request; however, the above referenced RCRA Permit (issued April 20, 2023) does not contain a Permit Provision I.3.b or I.4. It is also indicated that these Provisions were included as Attachment 1. The modification request did not include an Attachment 1. Please clarify which Permit Conditions Altus AFB is referring to and provide the appropriate attachments.
- 2. Altus AFB references an Attachment 2 (RCRA); however, Attachment 2 was not included. Please include the appropriate attachment with the permit modification request.
- 3. Altus AFB states that Attachment 3 (AAFB Performance Monitoring Program) and Attachment 4 (AAFB Performance Monitoring Program Tables and Figures) are being modified. Please clarify whether Altus AFB is referring to Attachments 3 and 4 of the modification request, or Attachments 3 and 4 of the RCRA Permit. Please note that RCRA Permit Attachments 3 and 4 are the "Final Administrative Order/Response to Comments" and "Inspection Requirements," respectively. Permit Attachment 1 "Corrective Measures Implementation Work Plan" and Permit Attachment 2 -" Sampling and Analysis Plan" tables will need to be updated to account for the monitoring well changes.

Colonel Marshall Page 2

Please provide the above requested attachments, information, and clarification within thirty (30) days of your receipt of this letter. If you have any questions, please contact Brigette Haley of my staff at 405-702-5104 or Brigette.haley@deq.ok.gov.

Sincerely, Hillary Young, P.E.

Chief Engineer Land Protection Division

HY: bh

cc: Michael Ruhl, Environmental Restoration Project Manager, Altus AFB



DEPARTMENT OF THE AIR FORCE 97TH AIR MOBILITY WING (AETC) ALTUS AIR FORCE BASE OKLAHOMA

27 June 2025

Michael Ruhl, GS-12 AFCEC/CZOW 401 L. Avenue, Bldg 358 Altus AFB, OK 73522-5138

Ms. Hillary Young Chief Engineer Land Protection Division Oklahoma Department of Environmental Quality P.O. Box 1677 Oklahoma City, OK 73101-1677

JUN 30 2025 LAND PROTECTION DIVISION DEPT. OF ENVIRON. OLTY

RE: Class II Permit Modification Request Altus AFB, OK9571824045, RCRA Permit No. 9571824045-CA

Dear Ms. Young,

My apologies for the confusion regarding the proposed Class II Permit Modification request. In response to your comments from your June 2nd, 2025 correspondence, please see my clarification on each of the three points of confusion below:

1. and 2. The paragraphs on our original modification request letter should have stated the following:

In accordance with the April 20, 2023 Altus AFB Resource Conservation and Recovery Act Corrective Action Permit Provisions III.J.2.b and III.J.2.c.iv, Altus AFB is requesting the Oklahoma Department of Environmental Quality (ODEQ) to review the proposed modifications provided in Attachment 1- Corrective Measures Implementation Work Plan; Tables 3.2, 3.3, 3.4, 3.5 and Figures 3.1, 3.3, 3.4, 3.5 and Attachment 2- Performance Monitoring Sampling and Analysis Plan; Tables 4, 5, 6, 7.

3. Altus AFB has included updated proposed permit modifications for the Corrective Measures Implementation Work Plan; Tables 3.2, 3.3, 3.4, 3.5 and Figures 3.1, 3.2, 3.4, 3.5 (Attachment 1) and Performance Monitoring Sampling and Analysis Plan; Tables 4, 5, 6, 7 (Attachment 2) to coincide with those respective sections of the 2023 Altus AFB Resource Conservation and Recovery Act Corrective Action Permit to this mailing. If you have any questions or comments, please feel free to contact me at 580-481-7346 or via email at <u>michael.ruhl.2@us.af.mil.</u>

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Michael Ruhl, GS-12

Restoration Project Manager AFCEC/CZOW

3 Attachments:

- 1. Attachment 1- Corrective Measures Implementation Work Plan; Tables 3.2, 3.3, 3.4, 3.5 and Figures 3.1, 3.3, 3.4, 3.5
- 2. Attachment 2- Performance Monitoring Sampling and Analysis Plan; Tables 4, 5, 6, 7

cc: USEPA Region 6

254932 CD____ #c____ c/o_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

AIRMEN - MISSION - CULTURE

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
000I17-MW3	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
MW3D	SS017	Lower	Body	C-6 (i)	Annual	No Change	
MW3S	SS017	Upper	Body	C-6 (i)	Annual	No Change	
WL066	SS017	Lower	Body	C-6 (i)	Annual	No Change	
WL072	SS018	Lower	Body	A-5 (g)	Annual	Change to Triennial	
WL073	SS018	Upper	Body	A-5 (g)	Annual	Change to Triennial	
WL078	SS017	Lower	Body	B-5 (g)	Annual	No Change	
WL079	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL080	SS017	Lower	Body*	B-5 (g)	Annual	No Change	
WL081	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL082	SS017	Lower	Body	B-5 (h)	Annual	No Change	
WL083	SS017	Upper	Body	B-5 (h)	Annual	No Change	
WL086	SS017	Lower	Body	B-6 (i)	Triennial	No Change	
WL087	SS017	Upper	Body	B-6 (i)	Triennial	No Change	
WL090	SS017	Lower	Body	B-6 (i)	Annual	No Change	
WL091	SS017	Upper	Body	B-6 (i)	Annual	No Change	
WL094	SS017	Lower	Body	B-6 (j)	Annual	No Change	
WL095	SS017	Upper	Body	B-6 (j)	Annual	No Change	
WL132R	SS017	Upper	Body	B-5 (e)	Annual	No Change	
WL138	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL139	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL158	SS017	Upper	Body*	B-6 (j)	Annual	No Change	
WL159	SS017	Lower	Body*	B-6 (j)	Annual	No Change	
WL178	SS022	Upper	Body	B-4 (a)	Annual	Change to Triennial	SS022
WL191	SS018	Lower	Body	A-5 (e)	Annual	No Change	SS018
WL193	SS018	Upper	Body	A-5 (e)	Annual	Change to Triennial	SS018
WL289	SS022	Upper	Body	B-4 (b)	Annual	Change to Triennial	
WL303	SS022	Lower	Body*	B-4 (b)	Annual	No Change	
WL318	SS017	Lower	Body	B-5 (g)	Annual	No Change	
WL319	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL383	SS017	Lower	Body	B-5 (f)	Annual	No Change	
WL384	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL386	SS022	Lower	Body	B-5 (e)	Triennial	Remove from Permit	
WL387	SS017	Lower	Body	B-5 (f)	Triennial	No Change	

Table 4 - Monitoring Well Network for Groundwater Management Unit 1

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Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL388	SS017	Upper	Body	B-5 (f)	Triennial	No Change	
WL413	SS022	Upper	Body	B-4 (d)	Triennial	No Change	
WL424	SS022	Upper	Body	B-4 (b)	Annual	No Change	
WL430	SS022	Upper	Body	B-4 (c)	Triennial	Remove from Permit	
WL461	SS022	Lower	Body	B-4 (b)	Annual	No Change	
WL466	SS022	Lower	Body	B-4 (d)	Triennial	No Change	
WL467	SS022	Upper	Body	B-4 (d)	Triennial	No Change	
WL468	SS022	Lower	Body	B-4 (d)	Triennial	No Change	
WL469	SS022	Upper	Body	B-5 (e)	Triennial	Remove from Permit	
WL481	SS017	Upper	Body	B-6 (j)	Annual	No Change	
WL482	SS017	Lower	Body	B-6 (j)	Annual	No Change	
WL485	SS017	Lower	Body	B-6 (i)	Annual	No Change	
WL486	SS017	Lower	Body*	C-6 (j)	Annual	No Change	
WL487	SS017	Upper	Body	C-6 (j)	Annual	No Change	
WL503	SS022	Lower	Body	A-4 (d)	Triennial	No Change	
WL504	SS022	Upper	Body	A-4 (d)	Triennial	Remove from Permit	
WL507	SS022	Upper	Body*	B-4 (b)	Annual	No Change	
WL519	SS017	Lower	Body	B-5 (f)	Annual	No Change	
WL535	SS018	Upper	Body	A-5 (g)	Triennial	No Change	
WL536	SS018	Lower	Body	A-5 (g)	Triennial	No Change	
WL543	SS017	Upper	Body	B-5 (g)	Annual	Change to Triennial	
WL544	SS017	Lower	Body	B-5 (g)	Annual	Change to Triennial	
WL552	SS022	Upper	Body	A-4 (c)	Triennial	Remove from Permit	
WL553	SS022	Lower	Body	A-4 (c)	Triennial	Remove from Permit	
WL555	SS022	Lower	Body*	B-4 (b)	Annual	No Change	
WL556	SS022	Lower	Body	B-4 (c)	Annual	Change to Triennial	
WL559	SS022	Lower	Body	B-4 (c)	Triennial	No Change	
WL571	SS018	Upper	Body	A-5 (f)	Annual	No Change	
WL572	SS018	Lower	Body	A-5 (f)	Annual	No Change	H
WL595	SS018	Upper	Body	A-5 (f)	Triennial	No Change	
WL596	SS018	Lower	Body	A-5 (f)	Triennial	No Change	
WL599	SS023	Lower	Body	C-5 (h)	Annual	No Change	
WL629	SS023	Upper	Body	B-5 (f)	Triennial	No Change	
WL630	SS023	Lower	Body	B-5 (f)	Triennial	No Change	

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL678	SS018	Lower	Body	A-5 (g)	Annual	Change to Triennial	
WL679	SS018	Upper	Body	A-5 (g)	Annual	Change to Triennial	
WL680	SS018	Lower	Body	A-5 (g)	Annual	No Change	
WL681	SS018	Upper	Body	A-5 (g)	Annual	No Change	
WL704	SS023	Upper	Body	C-6 (i)	Annual	Change to Triennial	
WL705	SS023	Lower	Body*	C-6 (i)	Annual	No Change	
WL725	SS023	Upper	Body	C-5 (f)	Annual	No Change	
WL726	SS023	Lower	Body*	C-5 (f)	Annual	No Change	
WL782	SS017	Lower Intermediate	Body	B-5 (g)	Annual	No Change	
WL785	SS018	Upper Intermediate	Body	A-5 (g)	Annual	No Change	
WL786	SS017	Upper Intermediate	Body	B-6 (i)	Annual	No Change	
WL789	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
WL790	SS017	Upper Intermediate	Body	B-5 (f)	Annual	No Change	
WL792	SS017	Upper Intermediate	Body	B-5 (f)	Triennial	No Change	
WL795	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
WL797	SS018	Upper Intermediate	Body	A-5 (g)	Annual	No Change	
WL801	SS017	Upper Intermediate	Body	B-5 (h)	Annual	No Change	
WL802	SS017	Lower Intermediate	Body	B-6 (i)	Annual	No Change	
WL803	SS017	Upper Intermediate	Body	B-6 (i)	Annual	No Change	
WL805	SS017	Upper Intermediate	Body*	B-6 (j)	Annual	No Change	
WL860	SS023	Upper Intermediate	Body	C-5 (f)	Annual	No Change	
WL494	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL495	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL787	SS017	Upper Intermediate	POC	C-7 (m)	Semiannual	No Change	
WL818	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL819	SS017	Upper Intermediate	POC*	C-6 (l)	Semiannual	No Change	
WL820	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL852	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL853	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL854	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL855	SS017	Lower	POC	C-6 (1)	Semiannual	No Change	
WL856	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL857	SS017	Upper	POC	C-6 (1)	Semiannual	No Change	

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL858	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL190	SS018	Upper	Sentinel	A-5 (e)	Annual	No Change	SS018
WL488	SS017	Lower	Sentinel	C-6 (k)	Annual	No Change	
WL489	SS017	Upper	Sentinel	C-6 (k)	Annual	No Change	
WL490	SS017	Lower	Sentinel*	C-6 (k)	Annual	No Change	
WL491	SS017	Upper	Sentinel*	C-6 (k)	Annual	No Change	
WL492	SS017	Lower	Sentinel	B-6 (j)	Annual	No Change	
WL493	SS017	Upper	Sentinel	B-6 (j)	Annual	No Change	
WL498	SS018	Upper	Sentinel	A-5 (e)	Annual	Change to Triennial	SS018
WL499	SS018	Lower	Sentinel	A-5 (e)	Annual	No Change	SS018
WL533	SS018	Upper	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL534	SS018	Lower	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL676	SS018	Lower	Sentinel	A-5 (h)	Annual	Remove from Permit	
WL677 -	SS018	Upper	Sentinel	A-5 (h)	Annual	Remove from Permit	
WL682	SS018	Lower	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL683	SS018	Upper	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL845	SS017	Upper Intermediate	Sentinel	B-5 (h)	Annual	No Change	
WL846	SS017	Lower	Sentinel	B-5 (h)	Annual	No Change	
WL847	SS017	Upper	Sentinel	B-5 (h)	Annual	No Change	
WL848	SS017	Upper Intermediate	Sentinel	B-6 (j)	Annual	No Change	
WL849	SS017	Upper Intermediate	Sentinel	B-6 (k)	Annual	No Change	
WL850	SS017	Lower	Sentinel	B-6 (k)	Annual	No Change	
WL851	SS017	Upper	Sentinel	B-6 (k)	Annual	No Change	
WL859	SS023	Upper Intermediate	Sentinel	C-6 (i)	Annual	Change to Triennial	
WL187	SS018	Upper	Source*	A-5 (e)	Annual	No Change	SS018
WL189	SS018	Lower	Source*	A-5 (e)	Annual	No Change	SS018
WL337	SS023	Upper	Source	B-5 (e)	Annual	No Change	
WL349	SS022	Upper	Source	B-4 (a)	Annual	Remove from Permit	SS022
WL377	SS017	Upper	Source*	B-5 (e)	Annual	No Change	
WL378	SS017	Lower	Source*	B-5 (e)	Annual	No Change	
WL400	SS022	Upper	Source	B-4 (a)	Annual	Change to Triennial	SS022
WL460	SS022	Lower	Source	B-4 (b)	Annual	Change to Triennial	
WL478	SS023	Lower	Source	B-5 (e)	Annual	No Change	
WL511	SS022	Upper	Source*	B-4 (b)	Annual	No Change	

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Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL512	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL515	SS023	Upper	Source	B-5 (e)	Annual	No Change	
WL516	SS023	Lower	Source	B-5 (e)	Annual	No Change	
WL583	SS022	Upper	Source	B-4 (a)	Annual	No Change	SS022
WL607	SS017	Upper	Source	B-5 (f)	Annual	No Change	
WL608	SS017	Lower	Source	B-5 (f)	Annual	No Change	
WL611	SS022	Upper	Source	B-4 (b)	Annual	No Change	
WL612	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL617	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL618	SS022	Upper	Source*	B-4 (b)	Annual	No Change	
WL619	SS022	Upper	Source	B-4 (b)	Annual	No Change	
WL759	SS018	Upper	Source*	A-5 (e)	Annual	No Change	
WL760	SS018	Lower	Source*	A-5 (e)	Annual	No Change	
WL778	SS018	Upper	Source*	A-5 (e)	Annual	No Change	
WL779	SS018	Lower	Source*	A-5 (e)	Annual	No Change	
WL791	SS018	Upper Intermediate	Source*	B-5 (e)	Annual	No Change	
WL872†	SS017	Upper Intermediate	not Permit	C-7 (n)	Semiannual	Change to Annual	
WL873†	SS017	Lower	not Permit	C-7 (n)	Semiannual	Change to Annual	
RV064††	SS017	Surface Water	POC	C-6 (l)	Semiannual	No Change	
RV065††	SS017	Surface Water	not Permit	C-7 (n)	Semiannual	No Change	

NOTES:

a - Performance monitoring wells that are also used for RA-O sampling are denoted by an *. These wells may change as needed to reflect assessment of remedy performance.

b - Denotes frequency for performance monitoring only. Wells also utilized for RA-O may be sampled more frequently as required by specific remedies. NA = not applicable.

†-Locations added to monitor the toe of the plume south of POC location WL787, not currently Permit wells

†† - Surface water sampling locations not included in the 2023 RCRA permit tables but specified for sampling in the text

Semiannual Sampling Frequency Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency Proposed to be removed from the Permit

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization	Reassigned Site
WL234	SS013	Upper	Body	C-2	Triennial	No Change	SS013
WL240	AOC 2 C-5/SS013	Upper	Source	B-3	Annual	No Change	
WL241	AOC 2 C-5/SS013	Lower	Source	B-3	Annual	No Change	
WL242	AOC 2 C-5/SS013	Upper	Body	C-3	Triennial	Remove from Permit	
WL539	AOC 2 C-5/SS013	Lower	Body	C-3	Triennial	Remove from Permit	
WL581	AOC 2 C-5/SS013	Upper	Body	B-3	Triennial	No Change	
WL582	AOC 2 C-5/SS013	Lower	Body	B-3	Triennial	No Change	
WL755	AOC 2 C-5/SS013	Lower	Body	B-3	Annual	No Change	
WL757	AOC 2 C-5/SS013	Lower	Body	B-3	Triennial	No Change	
WL763	SS013	Lower	Body	B-2	Triennial	No Change	SS013
WL766	SS013	Lower	Body	C-2	Triennial	No Change	SS013

Table 5 Monitoring Well Network for Groundwater Management Unit 2



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Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency Proposed to be removed from the Permit

Table 6 Monitoring Well Network for Groundwater Management Unit 3

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization
WL708	SS024	Upper	Source	D-4	Annual	No Change
WL709	SS024	Lower	Source	D-4	Annual	No Change
WL720	SS024	Upper	Source	D-4	Triennial	No Change
WL721	SS024	Lower	Source	D-4	Triennial	No Change
WL729	SS024	Upper	Body	D-4	Annual	No Change
WL730	SS024	Lower	Body	D-4	Annual	No Change
WL751	SS024	Upper	Sentinel	D-4	Triennial	No Change
WL752	SS024	Lower	Sentinel	D-4	Triennial	No Change
WL753	SS024	Upper	Sentinel	D-4	Annual	No Change
WL754	SS024	Lower	Sentinel	D-4	Annual	No Change



Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency

Table 7 Monitoring Well Network for Groundwater Management

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Unit 4

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization	Reassigned Site
OU-1-01	SWMU 7/LF004	Upper	Source	E-2	Annual	Change to Triennial	
OU-1-06	SWMU 7/LF004	Lower	Body	E-2	Annual	No Change	
WL015	SWMU 7/LF004	Upper	Source	D-1	Annual	No Change	SWMU 7/LF004
WL021	SWMU 7/LF004	Upper	Body	E-1	Triennial	No Change	
WL060	SWMU 7/LF004	Upper	POC	F-2	Semiannual	No Change	
WL061	SWMU 7/LF004	Lower	POC	F-3	Semiannual	No Change	
WL062	SWMU 7/LF004	Upper	POC	F-3	Semiannual	No Change	
WL068	SWMU 7/LF004	Upper	Body	D-2	Annual	No Change	SWMU 7/LF004
WL110	SWMU 7/LF004	Lower	Source	D-1	Annual	No Change	SWMU 7/LF004
WL123	SWMU 7/LF004	Lower	Body	D-2	Annual	Change to Triennial	SWMU 7/LF004
WL249	SWMU 7/LF004	Lower	Source	E-2	Annual	No Change	
WL250	SWMU 7/LF004	Upper	Source	E-2	Annual	No Change	
WL253	SWMU 8/LF014	Upper	Body	E-2	Annual	No Change	
WL254	SWMU 8/LF014	Lower	Body	E-2	Annual	No Change	
WL272	SWMU 7/LF004	Lower	Body	E-2	Annual	Change to Triennial	
WL276	SWMU 7/LF004	Upper	Sentinel	F-2	Triennial	No Change	
WL279	SWMU 7/LF004	Lower	Sentinel	F-3	Triennial	No Change	
WL280	SWMU 7/LF004	Upper	Sentinel	F-3	Triennial	No Change	
WL359*	SWMU 8/LF014	Upper	Body	E-2	Annual	No Change	
WL453	SWMU 7/LF004	Upper	Body	E-2	Annual	No Change	
WL454	SWMU 7/LF004	Lower	Body	E-2	Annual	Change to Triennial	
WL455	SWMU 7/LF004	Upper	Body	E-2	Annual	Change to Triennial	
WL458	SWMU 7/LF004	Lower	POC	F-2	Semiannual	No Change	
WL459	SWMU 7/LF004	Upper	POC	F-2	Semiannual	No Change	
WL527	SWMU 7/LF004	Upper	Body	E-2	Triennial	No Change	
WL528	SWMU 7/LF004	Lower	Body	E-2	Triennial	No Change	
WL566	SWMU 7/LF004	Lower	Source	E-2	Annual	No Change	
WL590	SWMU 7/LF004	Upper	Body	E-2	Triennial	No Change	
WL591	SWMU 7/LF004	Lower	Body	E-2	Triennial	No Change	
WL812	SWMU 7/LF004	Upper Intermediate	Body	E-2	Annual	No Change	
WL814	SWMU 7/LF004	Upper Intermediate	POC	F-3	Semiannual	No Change	

Table 7 Monitoring Well Network for Groundwater Management Unit 4

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization	Reassigned Site
WL816	SWMU 7/LF004	Upper Intermediate	POC	F-3	Semiannual	No Change	
RV015	SWMU 7/LF004	Surface Water	POC	F-3	Semiannual	No Change	

Semiannial S Annual Samp Triennial (Ev

Semiannial Sampling Frequency Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency

Well ID	Site	Screen Interval	Туре ^а	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
000117-MW3	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
MW3D	SS017	Lower	Body	C-6 (i)	Annual	No Change	
MW3S	SS017	Upper	Body	C-6 (i)	Annual	No Change	
WL066	SS017	Lower	Body	C-6 (i)	Annual	No Change	
WL072	SS018	Lower	Body	A-5 (g)	Annual	Change to Triennial	
WL073	SS018	Upper	Body	A-5 (g)	Annual	Change to Triennial	
WL078	SS017	Lower	Body	B-5 (g)	Annual	No Change	
WL079	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL080	SS017	Lower	Body*	B-5 (g)	Annual	No Change	
WL081	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL082	SS017	Lower	Body	B-5 (h)	Annual	No Change	
WL083	SS017	Upper	Body	B-5 (h)	Annual	No Change	
WL086	SS017	Lower	Body	B-6 (i)	Triennial	No Change	
WL087	SS017	Upper	Body	B-6 (i)	Triennial	No Change	
WL090	SS017	Lower	Body	B-6 (i)	Annual	No Change	
WL091	SS017	Upper	Body	B-6 (i)	Annual	No Change	
WL094	SS017	Lower	Body	B-6 (j)	Annual	No Change	1
WL095	SS017	Upper	Body	B-6 (j)	Annual	No Change	1
WL132R	SS017	Upper	Body	B-5 (e)	Annual	No Change	1
WL138	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL139	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL158	SS017	Upper	Body*	B-6 (j)	Annual	No Change	
WL159	SS017	Lower	Body*	B-6 (j)	Annual	No Change	
WL178	SS022	Upper	Body	B-4 (a)	Annual	Change to Triennial	SS022
WL191	SS018	Lower	Body	A-5 (e)	Annual	No Change	SS018
WL193	SS018	Upper	Body	A-5 (e)	Annual	Change to Triennial	SS018
WL289	SS022	Upper	Body	B-4 (b)	Annual	Change to Triennial	
WL303	SS022	Lower	Body*	B-4 (b)	Annual	No Change	
WL318	SS017	Lower	Body	B-5 (g)	Annual	No Change	
WL319	SS017	Upper	Body	B-5 (g)	Annual	No Change	
WL383	SS017	Lower	Body	B-5 (f)	Annual	No Change	
WL384	SS017	Upper	Body	B-5 (f)	Annual	No Change	
WL386	SS022	Lower	Body	B-5 (e)	Triennial	Remove from Permit	
WL387	SS017	Lower	Body	B-5 (f)	Triennial	No Change	

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL388	SS017	Upper	Body	B-5 (f)	Triennial	No Change	
WL413	SS022	Upper	Body	B-4 (d)	Triennial	No Change	
WL424	SS022	Upper	Body	B-4 (b)	Annual	No Change	
WL430	SS022	Upper	Body	B-4 (c)	Triennial	Remove from Permit	
WL461	SS022	Lower	Body	B-4 (b)	Annual	No Change	
WL466	SS022	Lower	Body	B-4 (d)	Triennial	No Change	
WL467	SS022	Upper	Body	B-4 (d)	Triennial	No Change	
WL468	SS022	Lower	Body	B-4 (d)	Triennial	No Change	
WL469	SS022	Upper	Body	B-5 (e)	Triennial	Remove from Permit	
WL481	SS017	Upper	Body	B-6 (j)	Annual	No Change	
WL482	SS017	Lower	Body	B-6 (j)	Annual	No Change	
WL485	SS017	Lower	Body	B-6 (i)	Annual	No Change	
WL486	SS017	Lower	Body*	C-6 (j)	Annual	No Change	
WL487	SS017	Upper	Body	C-6 (j)	Annual	No Change	
WL503	SS022	Lower	Body	A-4 (d)	Triennial	No Change	
WL504	SS022	Upper	Body	A-4 (d)	Triennial	Remove from Permit	
WL507	SS022	Upper	Body*	B-4 (b)	Annual	No Change	
WL519	SS017	Lower	Body	B-5 (f)	Annual	No Change	
WL535	SS018	Upper	Body	A-5 (g)	Triennial	No Change	
WL536	SS018	Lower	Body	A-5 (g)	Triennial	No Change	
WL543	SS017	Upper	Body	B-5 (g)	Annual	Change to Triennial	
WL544	SS017	Lower	Body	B-5 (g)	Annual	Change to Triennial	
WL552	SS022	Upper	Body	A-4 (c)	Triennial	Remove from Permit	
WL553	SS022	Lower	Body	A-4 (c)	Triennial	Remove from Permit	
WL555	SS022	Lower	Body*	B-4 (b)	Annual	No Change	
WL556	SS022	Lower	Body	B-4 (c)	Annual	Change to Triennial	
WL559	SS022	Lower	Body	B-4 (c)	Triennial	No Change	
WL571	SS018	Upper	Body	A-5 (f)	Annual	No Change	
WL572	SS018	Lower	Body	A-5 (f)	Annual	No Change	
WL595	SS018	Upper	Body	A-5 (f)	Triennial	No Change	
WL596	SS018	Lower	Body	A-5 (f)	Triennial	No Change	
WL599	SS023	Lower	Body	C-5 (h)	Annual	No Change	
WL629	SS023	Upper	Body	B-5 (f)	Triennial	No Change	
WL630	SS023	Lower	Body	B-5 (f)	Triennial	No Change	

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Well ID	Site	Screen Interval	Туре ^а	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL678	SS018	Lower	Body	A-5 (g)	Annual	Change to Triennial	
WL679	SS018	Upper	Body	A-5 (g)	Annual	Change to Triennial	
WL680	SS018	Lower	Body	A-5 (g)	Annual	No Change	
WL681	SS018	Upper	Body	A-5 (g)	Annual	No Change	
WL704	SS023	Upper	Body	C-6 (i)	Annual	Change to Triennial	
WL705	SS023	Lower	Body*	C-6 (i)	Annual	No Change	
WL725	SS023	Upper	Body	C-5 (f)	Annual	No Change	
WL726	SS023	Lower	Body*	C-5 (f)	Annual	No Change	
WL782	SS017	Lower Intermediate	Body	B-5 (g)	Annual	No Change	
WL785	SS018	Upper Intermediate	Body	A-5 (g)	Annual	No Change	
WL786	SS017	Upper Intermediate	Body	B-6 (i)	Annual	No Change	
WL789	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
WL790	SS017	Upper Intermediate	Body	B-5 (f)	Annual	No Change	
WL792	SS017	Upper Intermediate	Body	B-5 (f)	Triennial	No Change	
WL795	SS017	Upper Intermediate	Body*	B-5 (g)	Annual	No Change	
WL797	SS018	Upper Intermediate	Body	A-5 (g)	Annual	No Change	
WL801	SS017	Upper Intermediate	Body	B-5 (h)	Annual	No Change	
WL802	SS017	Lower Intermediate	Body	B-6 (i)	Annual	No Change	
WL803	SS017	Upper Intermediate	Body	B-6 (i)	Annual	No Change	
WL805	SS017	Upper Intermediate	Body*	B-6 (j)	Annual	No Change	
WL860	SS023	Upper Intermediate	Body	C-5 (f)	Annual	No Change	
WL494	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL495	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL787	SS017	Upper Intermediate	POC	C-7 (m)	Semiannual	No Change	
WL818	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL819	SS017	Upper Intermediate	POC*	C-6 (l)	Semiannual	No Change	
WL820	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL852	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL853	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL854	SS017	Upper Intermediate	POC	C-6 (l)	Semiannual	No Change	
WL855	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL856	SS017	Lower	POC	C-6 (l)	Semiannual	No Change	
WL857	SS017	Upper	POC	C-6 (l)	Semiannual	No Change	

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL858	SS017	Lower	POC	C-6 (1)	Semiannual	No Change	
WL190	SS018	Upper	Sentinel	A-5 (e)	Annual	No Change	SS018
WL488	SS017	Lower	Sentinel	C-6 (k)	Annual	No Change	
WL489	SS017	Upper	Sentinel	C-6 (k)	Annual	No Change	
WL490	SS017	Lower	Sentinel*	C-6 (k)	Annual	No Change	
WL491	SS017	Upper	Sentinel*	C-6 (k)	Annual	No Change	
WL492	SS017	Lower	Sentinel	B-6 (j)	Annual	No Change	
WL493	SS017	Upper	Sentinel	B-6 (j)	Annual	No Change	
WL498	SS018	Upper	Sentinel	A-5 (e)	Annual	Change to Triennial	SS018
WL499	SS018	Lower	Sentinel	A-5 (e)	Annual	No Change	SS018
WL533	SS018	Upper	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL534	SS018	Lower	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL676	SS018	Lower	Sentinel	A-5 (h)	Annual	Remove from Permit	
WL677	SS018	Upper	Sentinel	A-5 (h)	Annual	Remove from Permit	
WL682	SS018	Lower	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL683	SS018	Upper	Sentinel	A-5 (h)	Annual	Change to Triennial	
WL845	SS017	Upper Intermediate	Sentinel	B-5 (h)	Annual	No Change	
WL846	SS017	Lower	Sentinel	B-5 (h)	Annual	No Change	
WL847	SS017	Upper	Sentinel	B-5 (h)	Annual	No Change	
WL848	SS017	Upper Intermediate	Sentinel	B-6 (j)	Annual	No Change	
WL849	SS017	Upper Intermediate	Sentinel	B-6 (k)	Annual	No Change	
WL850	SS017	Lower	Sentinel	B-6 (k)	Annual	No Change	
WL851	SS017	Upper	Sentinel	B-6 (k)	Annual	No Change	
WL859	SS023	Upper Intermediate	Sentinel	C-6 (i)	Annual	Change to Triennial	
WL187	SS018	Upper	Source*	A-5 (e)	Annual	No Change	SS018
WL189	SS018	Lower	Source*	A-5 (e)	Annual	No Change	SS018
WL337	SS023	Upper	Source	B-5 (e)	Annual	No Change	
WL349	SS022	Upper	Source	B-4 (a)	Annual	Remove from Permit	SS022
WL377	SS017	Upper	Source*	B-5 (e)	Annual	No Change	
WL378	SS017	Lower	Source*	B-5 (e)	Annual	No Change	
WL400	SS022	Upper	Source	B-4 (a)	Annual	Change to Triennial	SS022
WL460	SS022	Lower	Source	B-4 (b)	Annual	Change to Triennial	
WL478	SS023	Lower	Source	B-5 (e)	Annual	No Change	
WL511	SS022	Upper	Source*	B-4 (b)	Annual	No Change	

Well ID	Site	Screen Interval	Type ^a	Basewide Grid	Current Performance Monitoring Frequency ^b	Optimization	Reassigned Site
WL512	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL515	SS023	Upper	Source	B-5 (e)	Annual	No Change	
WL516	SS023	Lower	Source	B-5 (e)	Annual	No Change	
WL583	SS022	Upper	Source	B-4 (a)	Annual	No Change	SS022
WL607	SS017	Upper	Source	B-5 (f)	Annual	No Change	
WL608	SS017	Lower	Source	B-5 (f)	Annual	No Change	
WL611	SS022	Upper	Source	B-4 (b)	Annual	No Change	
WL612	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL617	SS022	Lower	Source*	B-4 (b)	Annual	No Change	
WL618	SS022	Upper	Source*	B-4 (b)	Annual	No Change	
WL619	SS022	Upper	Source	B-4 (b)	Annual	No Change	
WL759	SS018	Upper	Source*	A-5 (e)	Annual	No Change	
WL760	SS018	Lower	Source*	A-5 (e)	Annual	No Change	
WL778	SS018	Upper	Source*	A-5 (e)	Annual	No Change	
WL779	SS018	Lower	Source*	A-5 (e)	Annual	No Change	
WL791	SS018	Upper Intermediate	Source*	B-5 (e)	Annual	No Change	
WL872†	SS017	Upper Intermediate	not Permit	C-7 (n)	Semiannual	Change to Annual	
WL873†	SS017	Lower	not Permit	C-7 (n)	Semiannual	Change to Annual	
RV064††	SS017	Surface Water	POC	C-6 (l)	Semiannual	No Change	
RV065††	SS017	Surface Water	not Permit	C-7 (n)	Semiannual	No Change	

NOTES:

a - Performance monitoring wells that are also used for RA-O sampling are denoted by an *. These wells may change as needed to reflect assessment of remedy performance.

b - Denotes frequency for performance monitoring only. Wells also utilized for RA-O may be sampled more frequently as required by specific remedies. NA = not applicable.

†-Locations added to monitor the toe of the plume south of POC location WL787, not currently Permit wells

†† - Surface water sampling locations not included in the 2023 RCRA permit tables but specified for sampling in the text

Semiannual Sampling Frequency Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency Proposed to be removed from the Permit

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization	Reassigned Site
WL234	SS013	Upper	Body	C-2	Triennial	No Change	SS013
WL240	AOC 2 C-5/SS013	Upper	Source	B-3	Annual	No Change	
WL241	AOC 2 C-5/SS013	Lower	Source	B-3	Annual	No Change	
WL242	AOC 2 C-5/SS013	Upper	Body	C-3	Triennial	Remove from Permit	
WL539	AOC 2 C-5/SS013	Lower	Body	C-3	Triennial	Remove from Permit	
WL581	AOC 2 C-5/SS013	Upper	Body	B-3	Triennial	No Change	
WL582	AOC 2 C-5/SS013	Lower	Body	B-3	Triennial	No Change	
WL755	AOC 2 C-5/SS013	Lower	Body	B-3	Annual	No Change	
WL757	AOC 2 C-5/SS013	Lower	Body	B-3	Triennial	No Change	
WL763	SS013	Lower	Body	B-2	Triennial	No Change	SS013
WL766	SS013	Lower	Body	C-2	Triennial	No Change	SS013

Table 3.3. Monitoring Well Network for Groundwater Management Unit 2

Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency Proposed to be removed from the Permit

Table 3.4. Monitoring Well Network for Groundwater Management Unit 3

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization
WL708	SS024	Upper	Source	D-4	Annual	No Change
WL709	SS024	Lower	Source	D-4	Annual	No Change
WL720	SS024	Upper	Source	D-4	Triennial	No Change
WL721	SS024	Lower	Source	D-4	Triennial	No Change
WL729	SS024	Upper	Body	D-4	Annual	No Change
WL730	SS024	Lower	Body	D-4	Annual	No Change
WL751	SS024	Upper	Sentinel	D-4	Triennial	No Change
WL752	SS024	Lower	Sentinel	D-4	Triennial	No Change
WL753	SS024	Upper	Sentinel	D-4	Annual	No Change
WL754	SS024	Lower	Sentinel	D-4	Annual	No Change

Annual Sampling Frequency Triennial (Every 3rd Year) Sampling Frequency

Well ID	Site	Screen Interval	Туре	Basewide Grid	Current Performance Monitoring Frequency	Optimization	Reassigned Site
OU-1-01	SWMU 7/LF004	Upper	Source	E-2	Annual	Change to Triennial	
OU-1-06	SWMU 7/LF004	Lower	Body	E-2	Annual	No Change	
WL015	SWMU 7/LF004	Upper	Source	D-1	Annual	No Change	SWMU 7/LF004
WL021	SWMU 7/LF004	Upper	Body	E-1	Triennial	No Change	
WL060	SWMU 7/LF004	Upper	POC	F-2	Semiannual	No Change	
WL061	SWMU 7/LF004	Lower	POC	F-3	Semiannual	No Change	
WL062	SWMU 7/LF004	Upper	POC	F-3	Semiannual	No Change	
WL068	SWMU 7/LF004	Upper	Body	D-2	Annual	No Change	SWMU 7/LF004
WL110	SWMU 7/LF004	Lower	Source	D-1	Annual	No Change	SWMU 7/LF004
WL123	SWMU 7/LF004	Lower	Body	D-2	Annual	Change to Triennial	SWMU 7/LF004
WL249	SWMU 7/LF004	Lower	Source	E-2	Annual	No Change	
WL250	SWMU 7/LF004	Upper	Source	E-2	Annual	No Change	
WL253	SWMU 8/LF014	Upper	Body	E-2	Annual	No Change	
WL254	SWMU 8/LF014	Lower	Body	E-2	Annual	No Change	
WL272	SWMU 7/LF004	Lower	Body	E-2	Annual	Change to Triennial	
WL276	SWMU 7/LF004	Upper	Sentinel	F-2	Triennial	No Change	
WL279	SWMU 7/LF004	Lower	Sentinel	F-3	Triennial	No Change	
WL280	SWMU 7/LF004	Upper	Sentinel	F-3	Triennial	No Change	
WL359*	SWMU 8/LF014	Upper	Body	E-2	Annual	No Change	
WL453	SWMU 7/LF004	Upper	Body	E-2	Annual	No Change	
WL454	SWMU 7/LF004	Lower	Body	E-2	Annual	Change to Triennial	
WL455	SWMU 7/LF004	Upper	Body	E-2	Annual	Change to Triennial	
WL458	SWMU 7/LF004	Lower	POC	F -2	Semiannual	No Change	
WL459	SWMU 7/LF004	Upper	POC	F -2	Semiannual	No Change	
WL527	SWMU 7/LF004	Upper	Body	E-2	Triennial	No Change	
WL528	SWMU 7/LF004	Lower	Body	E-2	Triennial	No Change	
WL566	SWMU 7/LF004	Lower	Source	E-2	Annual	No Change	
WL590	SWMU 7/LF004	Upper	Body	E-2	Triennial	No Change	
WL591	SWMU 7/LF004	Lower	Body	E-2	Triennial	No Change	
WL812	SWMU 7/LF004	Upper Intermediate	Body	E-2	Annual	No Change	
WL814	SWMU 7/LF004	Upper Intermediate	POC	F-3	Semiannual	No Change	
WL816	SWMU 7/LF004	Upper Intermediate	POC	F-3	Semiannual	No Change	
RV015	SWMU 7/LF004	Surface Water	POC	F-3	Semiannual	No Change	

Table 3.5. Monitoring Well Network for Groundwater Management Unit 4









