Site Assessment Matrix

Site:	Shoalwater Bay Training Area (0219)
State/Territory:	QLD
Date completed:	16/10/2024
Reports reviewed (including Obj ref):	2023 ASMTI Facilities Project Shoal Water Bay Training Area Preliminary Contaminated Land Investigation (BS35070717) 2018 AECOM Stage 1 PSI - SWBTA (BR1142405) 2019 AECOM Stage 2 DSI - SWBTA (BS6675084) 2020 SWBTA RWQM Annual Report (BS17579070) 2021 SWBTA RWQM Annual Report (BS27887719) 2022 SWBTA RWQM Annual Report (BS38751710)
GEMS extract date:	10/10/2024
Esdat date range:	Soil (17 Dec 2019 to 24 Jan 2023) Water (13 May 2020 to 29 Aug 2024)

Step 1:	**PFAS Source**
Is there a known or suspected primary or secondary PFAS source on the base or off base?	No suspected source (2)
Maximum concentration of Sum of PFAS in soil on base?	<LOR to 1 mg/kg Sum of PFAS (2)
Maximum concentration of Sum of PFAS in groundwater on base?	<LOR to 0.07 µg/L Sum of PFAS (2)
Maximum concentration of Sum of PFAS in surface water on base?	>0.07 to 2 µg/L Sum of PFAS (3)
Score for Step One	*Score of 48 out of 88*
Comment (e.g. what is the source, what are the max concentrations, context notes, depth to groundwater):	PFAS was not analysed as part of the RWQMP - No PFAS data available in the 2020,2021 and 2022 reports. PFAS not reported above LOR for soil samples (collected from Precinct C). Esdat data showed that no PFAS detected above LOR in GW samples. PFAS (PFBA) of 0.09 µg/L detected in SW sample (SW102) however subsequent sampling (3 days to 7 months later) did not detect any PFAS at SW102. It is noted in the PSI that were no known areas of firefighting training that have occurred at the Property. However, various armed forces may have historically brought aqueous film forming foam (AFFF) containing PFAS onto the Property. No evidence that AFFF was used at the Property Surface water analysis done by DESI (2011-2017) found PFAS in soil (sum of PFAS = 0.0003 - 0.0008 mg/kg) and surface water (PFOS+ PFHxS = 0.03 - 0.04 µg/L) at creeks downstream of Williamson and Samuel Hill Airfields .

Step 2:	**PFAS Migration**
Is PFAS migrating off the base?	No off-site migration (1)
Maximum concentration of Sum of PFAS groundwater at base boundary?	No data required (1)
Maximum concentration of Sum of PFAS in surface water at base boundary?	> 2 µg/L Sum of PFAS or no data available (4)
Maximum concentration of Sum of PFAS in groundwater off base?	No data required (1)
Maximum concentration of Sum of PFAS in surface water off base?	<LOR to 0.07 µg/L Sum of PFAS (2)
Score for Step 2	*Score of 58 out of 136*

Comment (e.g. where is migration off-site occurring, what is the max concentration at the boundary or off-base, context notes):	GW flow direction is inferred to be from south west to north east. 11 GW bores within Precinct B (newly acquired land) that are used for water supply. Surface water analysis done by DESI (2011-2017) found PFAS in soil (sum of PFAS = 0.0003 - 0.0008 mg/kg) and surface water (PFOS+ PFHxS = 0.03 - 0.04 µg/L) at creeks downstream of Williamson and Samuel Hill Airfields

Step 3:	PFAS Receptors
Source-Pathway-Receptor (S-P-R) linkages (on and off-base)	S-P-R linkage unlikely and/or low risk (2)
Receptor Sensitivity - Human Health (on and off-base)	Unlikely presence of sensitive receptors (2)
Receptor Sensitivity - Ecological (on and off-base)	Unlikely presence of sensitive receptors (2)
Score for Step 3	*Score of 48 out of 96*
Comment (e.g. what is the S-P-R linkage, why is the receptor considered to be sensitive, context notes):	Few cattle yards and dips within and surrounding the SWBTA. Potential likelyhood of unknown receptors for risk to human health if SPR is complete. Shorter Chain PFAS are unlikely to accumulate in Cattle. No exceedances observed from the data (PFOS,PFHxS and PFOA)

Step 4:	Other Factors
Completeness of Investigation	Very few PFAS data gaps or no/very limited additional sampling needed (1)
Stakeholder Interest (base, Regulators, Community etc)	Medium (3)
CRAT Factors (capability, delivery of services, financial, legislative, reputation, safety and security)	Low (2)
Off-site access	Sufficient accessible land available to sample required locations (1)
Score for Step 4	*Score of 50 out of 104*
Comment (e.g. what are the data gaps, who are the stakeholders and what are their concerns, duty to notify regulator, what are the access issues including private land, context notes):	Medium stakeholder interest from Agriculture (Cattle Farmers) and QLD regulators. CRAT was done as part of RCIP investigation. PFAS was not identified as one of the CoPC for the CSRs.

	Outcome
Cumulative score of Steps 1 to 4	*Score of 204 out of 424*
Level range for Steps 1 to 4	0 - < 212
Propose the outcome most likely to meet the identified needs	*Business as Usual. Advise DCARM, DELM, DEHPD and base personnel if required*
Comment (e.g. knowledge of other programs or contamination and potential opportunities):	No ongoing monitoring requirement under RWQM.
Completed by	s47F
Reviewed and Approved (signature by APS)	s47F (21/10/24)

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