

JBCC Optimized Remediation Contract (ORC) Overview

JBCCCT Meeting - 09 April 2025

Definitions

- RACR = Remedial Action Completion Report
- RC = Response Complete meaning regulatory closure of a site through issuance of a RACR
- SC = Site Closeout is DoD term referring to achievement of unlimited use/unrestricted exposure (UU/UE) which has been documented in a RACR, infrastructure has been removed/abandoned, and no additional restoration funds will be expended at the site
- LTM = Long Term Management meaning environmental monitoring/maintenance prior to achieving RC/SC to maintain protectiveness (e.g., landfill cap maintenance and inspections)
- RA-O = Remedial Action – Operations meaning implementation of a remedy to achieve remedial action objectives prior to achieving RC
- RIP = Remedy in Place meaning designation that a final remedial action has been constructed, is functional, and is operating as planned
- PO = Performance Objective meaning a contractually required endpoint or requirement under the ORC

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ORC Overview

- The Joint Base Cape Cod (JBCC) Optimized Remediation Contract (ORC) is a performance-based contract and the follow-on to the Performance Based Remediation (PBR) contract
- Ten (10) Year Period of Performance (POP) (Sept 2024 – Sept 2034)
- Includes 16 Installation Restoration Program (IRP) Groundwater Sites and 1 Military Munitions Response Program (MMRP) Site
- The EA/Jacobs Team was selected for the ORC and will provide continuity with the PBR contract and ongoing Per- and Polyfluoroalkyl Substances (PFAS) Task Orders

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AF Site Number	JBCC Common Site Name	Contamination	ORC Performance Objective (PO)	Remedial Strategy and Notable Actions
SD005	Storm Drain-5 (SD-5)	Legacy	Site Closure (SC) in Five (5) Years	Complete Three-Step Process, Remedial Action Completion Report (RACR) achieving Response Complete (RC), remove/abandon infrastructure achieving SC
SS016	Chemical Spill-4 (CS-4)	Legacy	SC in Five (5) Years	Complete Three-Step Process, RACR achieving RC, remove/abandon infrastructure achieving SC
SS043	Fuel Spill-13 (FS-13)	Legacy	SC in Six (6) Years	Complete Three-Step Process, RACR achieving RC, remove/abandon infrastructure achieving SC
SS077	CS-19	Legacy	SC in Six (6) Years	Continue with Monitored Natural Attenuation (MNA)/Land Use Control (LUC) remedy, complete Three-Step Process, RACR achieving RC/SC (abandon infrastructure not included in ORC)
SS079	FS-28	Legacy	SC in Five (5) Years	Continue with MNA/LUCs, complete Three-Step Process, RACR achieving RC, remove/abandon infrastructure achieving SC
SS081	CS-21	Legacy	SC in Seven (7) Years	Shut down last operating extraction well, MNA/LUCs, complete Three-Step Process, RACR achieving RC, remove/abandon infrastructure achieving SC

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AF Site Number	JBCC Common Site Name	Contamination	ORC Performance Objective (PO)	Remedial Strategy and Notable Actions
SS022	CS-10	Legacy	Remedial Action – Operation (RA-O) with Optimization	Continue with pump and treat (P&T)/MNA/LUC remedy with optimizations to reduce life-cycle costs (LCCs); remove bituminous coated corrugated pipe at CS-10 Source Area
SS042	FS-12	Legacy	RA-O with Optimization	Shutdown P&T system transitioning remedy to MNA/LUCs, initiate Three-Step Process
FT 056	Fire Training Area-2 (FTA-2)	Legacy	RA-O with Optimization	Continue with MNA/LUC remedy, address Five-Year Review recommendation addressing updated petroleum Remedial Goals (RGs) and soil evaluation in an Explanation of Significant Difference (ESD)
SS040/SS041	Petroleum Fuel Storage Area (PFSA)	Legacy	RA-O with Optimization	Continue with MNA/LUCs, address Five-Year Review recommendation addressing updated petroleum RGs in ESD; abandon/demolish old Soil Vapor Extraction (SVE) system
LF006/LF006P-Sub	Landfill - 1 (LF-1)	Legacy and PFAS	RA-O with Optimization	Continue with P&T/MNA/LUC remedy for Legacy Contaminants of Concern (COCs); implement PFAS/1,4-Dioxane remedy upon finalization of ESD

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AF Site Number	JBCC Common Site Name	Contamination	ORC Performance Objective (PO)	Remedial Strategy and Notable Actions
FT055	FTA-1/ Ashumet Valley (AV)	Legacy	RC in Six (6) Years	Continue with MNA/LUCs, complete Three-Step Process, RACR achieving RC for Legacy COCs
FT055P-Sub	FTA-1	PFAS	Remedy in Place (RIP) for Interim Remedial Action (IRA) in Ten (10) Years and RA-O with Optimization	Implement IRA per FTA-1 ESD (restart AV ETI system, extend Sandwich Road Extraction Fence), expand LUCs for PFAS
LF007	LF-2	Legacy	Long-Term Management	Implement LUCs including required landfill inspections per the approved Decision Document (DD)
TS701	Skeet Range (MMRP)	Lead	SC in Five (5) Years	Conduct soil removal addressing lead to achieve Unlimited Use/Unrestricted Exposure (UU/UE), document in RACR, achieve SC
N/A	Operations and Maintenance (O&M) and Service of Wind Turbines	Not Applicable (N/A)	O&M throughout POP	O&M and service of five (5) utility scale wind turbines

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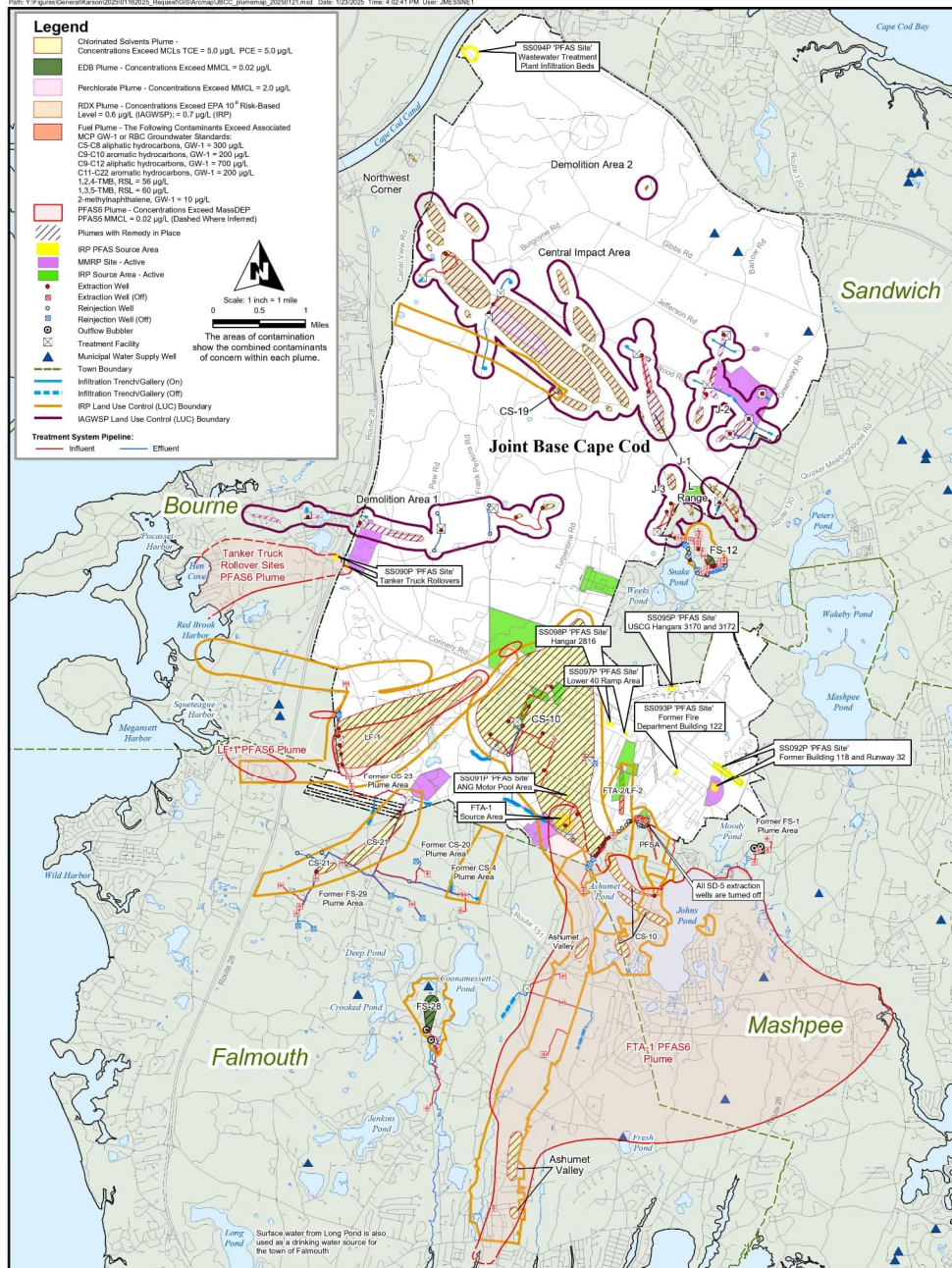
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Three-Step Process to Site Closure in all JBCC IRP Groundwater Decision Documents

Step 1: Demonstrate cleanup standards have been reached throughout the plume based on a minimum of three sampling events.

Step 2: Complete residual risk assessment, if deemed necessary.

Step 3: Assess feasibility of achieving background.



Contaminant of Concern (COC)	Type of Contaminant	Risk-Based Level
TCF = trichloroethylene	solvent	MCL = 5 µg/L
MCE = perchloroethylene	solvent	MCL = 5 µg/L
COC = carbon tetrachloride	solvent	MCL = 5 µg/L
EDB = ethylene dibromide	fuel-related compound	MMGL = 0.02 µg/L
benzene	fuel-related compound	MMGL = 5 µg/L
VC = vinyl chloride	solvent	MCL = 2 µg/L
1,2,2,2-TCEA = 1,1,2,2-tetrachloroethane	solvent	MCL = 2 µg/L
1,4-DGB = 1,4-dichlorobenzene	solvent	MMGL = 5 µg/L
Mn = manganese	metal	EPA Health Advisory = 300 µg/L
thallium	metal	MCL = 2 µg/L
isolate	15 µg/L (treatment technique action level for water distribution system)	
ROX = hexachloro-1,3,5-trimino-1,3,5-triazine	fuel-related compound	MCL = 1,000 µg/L
	exhaust	HA = 2 µg/L
		GW-1 = 1 µg/L
		GW-2 = 0.6 µg/L (MAGWSPD = 0.7 µg/L (RP))
perchlorate	oxidizer	HA = 15 µg/L
		MMGL = 5 µg/L
C5-C8 aliphatic hydrocarbons	fuel-related compound	GW-1 = 300 µg/L
C9-C12 aromatic hydrocarbons	fuel-related compound	GW-1 = 200 µg/L
C9-C12 aliphatic hydrocarbons	fuel-related compound	GW-1 = 200 µg/L
C11-C22 aromatic hydrocarbons	fuel-related compound	GW-1 = 200 µg/L
2,4,6-TMB	fuel-related compound	RESL = 60 µg/L
1,3,5-TMB	fuel-related compound	RESL = 60 µg/L
2-methylthiophene	fuel-related compound	GW-1 = 1 µg/L
1,4-dioxin	solvent	RESL = 46 µg/L

**Joint Base Cape Cod
Groundwater Plume Map, and
IRP and IAGWSP LUC Areas**
Issued January 2025

Note: MCL – Maximum Contaminant Level
 MMCL – Massachusetts Maximum Contaminant Level
 FA – Federal Lifetime Health Advisory
 PFA – Per- and Polyfluoroalkyl substances
 GW-1 – State default cleanup value to be used in lieu of site-specific risk-based level
 10⁻⁴ – EPA level resulting in an excess cancer risk of one in a million
 RG – Site Specific Risk Based Remediation Goal
 RSL – Regional Screening Level