FY 2019 DEP ARC

Appendix B

Causes of Increases in Cleanup Estimates

Appendix to Section VI, *FY 2019 Funding for Environmental Restoration Activities and Reasons for Increases in Cost Estimates Since FY 2018*.

This Appendix explains an increase of 10 percent or more in an installation's or property's projected cost estimate over the prior year estimate.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maryland	Army	ABERDEEN PROVING GROUND	123,311	133,934	2,996	13,619	11%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
New York	Army	AFRC FORT WADSWORTH	0	148	55	203	N/A	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Massachusetts	Army	ARMY RESEARCH LABORATORY-WATERTOWN	1,601	2,658	603	1,660	104%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Kentucky	Army	BLUE GRASS ARMY DEPOT	1,711	2,747	199	1,235	72%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Missouri	Army	CAMP CROWDER	217	214	231	228	105%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
New Jersey	Army	CAMP PEDRICKTOWN	623	255	584	216	35%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Oregon	Army	CLACKAMAS/CAMP WITHYCOMBE	267	1,172	222	1,127	422%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
New Hampshire	Army	COLD REGIONS RESEARCH AND ENGINEERING LABORATORY	13,163	39,382	1,455	27,674	210%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Nebraska	Army	CORNHUSKER ARMY AMMUNITION PLANT	25,591	27,246	5,035	6,690	26%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.

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California	Army	DEFENSE DIST DEPOT SAN JOAQUIN, SHARPE FACILITY	49,621	58,145	4,819	13,343	27%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Michigan	Army	DETROIT ARSENAL	359	766	97	504	140%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Massachusetts	Army	DEVENS RESERVE TRAINING FACILITY	47,430	100,970	8,516	62,056	131%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
Virginia	Army	FORT A P HILL	112	38	304	230	205%	New Site.
Georgia	Army	FORT BENNING	27,268	28,194	1,856	2,782	10%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 4) New Site. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Puerto Rico	Army	FORT BUCHANAN	11,880	12,607	524	1,251	11%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.

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Colorado	Army	FORT CARSON	11,111	19,205	1,049	9,143	82%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Arkansas	Army	FORT CHAFFEE	1,101	1,159	47	105	10%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Maryland	Army	FORT DETRICK	6,682	7,346	3,223	3,887	58%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
New York	Army	FORT DRUM	4,271	9,898	1,744	7,371	173%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Georgia	Army	FORT GORDON	2,066	5,563	561	4,059	196%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 4) New Site. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Alaska	Army	FORT GREELY	12,408	13,683	816	2,091	17%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
New York	Army	FORT HAMILTON	925	907	488	470	51%	Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Arizona	Army	FORT HUACHUCA	1,592	2,085	2,892	3,385	213%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
South Carolina	Army	FORT JACKSON	17,096	47,492	6,236	36,632	214%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 4) New Site. 5) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 6) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Kansas	Army	FORT LEAVENWORTH	1,863	1,844	497	478	26%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Army	FORT LEE	976	1,795	187	1,006	103%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) New Site.

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Missouri	Army	FORT LEONARD WOOD	30,033	36,848	282	7,097	24%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement). 4) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 5) New Site. 6) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 7) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Alabama	Army	FORT MCCLELLAN	6,478	49,521	770	43,813	676%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Alabama	Army	FORT MCCLELLAN ARNG	3,220	5,653	197	2,630	82%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Army	FORT MONROE	8,421	11,788	1,264	4,631	55%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Army	FORT ORD	265,317	301,722	9,575	45,980	17%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Army	FORT PICKETT ARNG MTC	458	457	864	863	188%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Louisiana	Army	FORT POLK	6,612	7,388	1,087	1,863	28%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Maryland	Army	FORT RITCHIE	5,106	5,542	137	573	11%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Illinois	Army	FORT SHERIDAN	7,088	8,167	39	1,118	16%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.

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Alaska	Army	FORT WAINWRIGHT	47,597	69,461	1,974	23,838	50%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 5) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
New Mexico	Army	FORT WINGATE DEPOT ACTIVITY	100,719	138,503	8,665	46,449	46%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alaska	Army	HAINES PIPELINE	21,501	23,733	580	2,812	13%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Iowa	Army	IOWA ARMY AMMUNITION PLANT	65,403	75,479	2,031	12,107	19%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Ohio	Army	JFHQ OH ARNG	13,769	14,040	4,279	4,550	33%	Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Rhode Island	Army	JFHQ RI ARNG	56	8,401	11	8,356	14895%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).

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Utah	Army	JFHQ UT ARNG	22	1,319	26	1,323	5894%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Vermont	Army	JFHQ VT ARNG	763	1,261	95	593	78%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Army	JOINT BASE MYER-HENDERSON HALL	70	220	297	447	635%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Hawaii	Army	KUNIA FIELD STATION	576	717	50	191	33%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
South Carolina	Army	LEESBURG TRAINING SITE	270	267	54	51	19%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Pennsylvania	Army	LETTERKENNY ARMY DEPOT	5,270	5,313	545	588	11%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 5) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Rhode Island	Army	LINCOLN AMSA 68	113	879	30	796	703%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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Louisiana	Army	LOUISIANA ARMY AMMUNITION PLANT	2,421	2,671	2,574	2,824	117%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Hawaii	Army	MAKUA MILITARY RESERVATION	771	942	58	229	30%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Oklahoma	Army	MCALESTER ARMY AMMUNITION PLANT	4,687	6,766	280	2,359	50%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Army	NATIONAL TRAINING CENTER AND FORT IRWIN	9,510	37,183	1,405	29,078	306%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Arizona	Army	PAPAGO MILITARY RESERVATION	171	2,143	108	2,080	1214%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
New Jersey	Army	PICATINNY ARSENAL	120,809	138,894	2,323	20,408	17%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Arkansas	Army	PINE BLUFF ARSENAL	32,628	31,459	9,197	8,028	25%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.

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Hawaii	Army	POHAKULOA TRAINING AREA	14,971	34,920	88	20,037	134%	1) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Army	PRESIDIO OF MONTEREY	1,760	1,607	990	838	48%	Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Ohio	Army	RAVENNA ARMY AMMUNITION PLANT	28,403	34,057	4,453	10,107	36%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 6) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Army	RIVERBANK ARMY AMMUNITION PLANT	15,265	23,842	1,447	10,024	66%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Illinois	Army	ROCK ISLAND ARSENAL	10,761	10,450	1,678	1,367	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
California	Army	SACRAMENTO ARMY DEPOT	2,710	6,238	726	4,254	157%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.

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New Jersey	Army	SIEVERS-SANDBERG USARC	52	168	40	156	300%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Missouri	Army	ST LOUIS ORDNANCE PLANT	5,379	5,553	535	709	13%	Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Kansas	Army	SUNFLOWER ARMY AMMUNITION PLANT	32,383	50,854	15,889	34,360	106%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Pennsylvania	Army	TOBYHANNA ARMY DEPOT	6,543	11,871	324	5,652	86%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Utah	Army	TOOELE ARMY DEPOT SOUTH	57,758	110,801	145	53,189	92%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Hawaii	Army	TRIPLER ARMY MEDICAL CENTER	815	940	266	391	48%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Army	TS AFRC LOS ALAMITOS	9,363	14,791	553	5,981	64%	1) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Oregon	Army	UMATILLA CHEMICAL DEPOT	69,634	52,905	31,571	14,842	21%	1) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
New York	Army	WATERVLIET ARSENAL	4,007	4,164	329	486	12%	New Site.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Missouri	Army	WELDON SPRING TRAINING AREA	2,768	2,748	468	448	16%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
New York	Army	WEST POINT MIL RESERVATION	52,622	64,632	878	12,888	24%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
New Mexico	Army	WHITE SANDS MISSILE RANGE	3,041	2,910	503	372	12%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Washington	Army	YAKIMA TRAINING CENTER	1,929	2,342	32	445	23%	1) New Site. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Arizona	Army	YUMA PROVING GROUND	7,145	15,719	784	9,358	131%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 5) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
West Virginia	Navy	ALLEGANY BALLISTICS LAB	38,412	57,705	8,217	27,510	72%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maryland	Navy	ANNAPOLIS NSWC DET BAY HEAD ANNEX	258	410	67	219	85%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
California	Navy	AZUSA NCCOSC MORRIS DAM FACILITY	1,648	2,411	2,247	3,010	183%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
New York	Navy	BETHPAGE NWIRP	356,380	485,878	14,195	143,693	40%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Hawaii	Navy	CAMP H.M. SMITH OAHU	1,433	1,990	81	638	45%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
California	Navy	CAMP PENDLETON MCB	50,698	46,157	10,831	6,290	12%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Alaska	Navy	CAPE PRINCE WALES NCCOSC	1,866	2,976	19	1,129	61%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maryland	Navy	CARDEROCK NSWC	205	217	134	146	71%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
South Carolina	Navy	CHARLESTON FISC	2,237	4,638	610	3,011	135%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
South Carolina	Navy	CHARLESTON NS	5,123	7,471	423	2,771	54%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Texas	Navy	CHASE FIELD NAS	0	4,492	999	5,491	N/A	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
North Carolina	Navy	CHERRY POINT MCAS	75,127	83,246	3,887	12,006	16%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Maryland	Navy	CHESAPEAKE BAY DET NRL	2,516	2,735	423	642	25%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Virginia	Navy	CHESAPEAKE NSGA NWEST	962	739	688	465	48%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Navy	CHINA LAKE NAWS	117,842	126,720	4,165	13,043	11%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Navy	CONCORD NWS	61,655	64,547	5,178	8,070	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Navy	CRANEY ISLAND FISC	6,606	7,076	423	893	14%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective).
Texas	Navy	DALLAS NAS	18,470	23,078	730	5,338	29%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
Virginia	Navy	DAM NECK FCTC	3,048	8,984	36	5,972	196%	1) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 2) New Site.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Navy	EL CENTRO NAF	24,239	28,172	369	4,302	18%	1) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 2) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Navy	FALLBROOK NOC PAC DIV DET	24,988	23,738	3,981	2,731	11%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Texas	Navy	FT WORTH TX NAS JRB	8,386	8,781	793	1,188	14%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Guam	Navy	GUAM NSRF	165	14,248	5	14,088	8526%	New Site.
Guam	Navy	GUAMI COMNAVMARIANAS	2,151	1,911	691	451	21%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Mississippi	Navy	GULFPORT NCBC	18,776	14,466	6,716	2,406	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Navy	IMPERIAL BEACH OLF	13,417	14,834	1,395	2,812	21%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Hawaii	Navy	KANEOHE BAY MCB	13,800	15,081	125	1,406	10%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Florida	Navy	KEY WEST NAS	49,651	55,089	5,050	10,488	21%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Washington	Navy	KEYPORT NUWC	20,154	24,094	2,117	6,057	30%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Georgia	Navy	KINGS BAY NSB	3,387	3,820	21	454	13%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
California	Navy	LEMOORE NAS	23,761	26,220	260	2,719	11%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Pennsylvania	Navy	MECHANICSBURG SPCC	4,288	4,216	1,071	999	23%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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Mississippi	Navy	MERIDIAN NAS	6,295	11,837	1,289	6,831	109%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Louisiana	Navy	NEW ORLEANS NAS	1,092	3,322	1,584	3,814	349%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site.
Rhode Island	Navy	NEWPORT NETC	67,290	71,099	7,508	11,317	17%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Virginia	Navy	NORFOLK COMNAVBASE	32,202	41,276	2,575	11,649	36%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.

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California	Navy	NORTH ISLAND NAS	86,875	86,304	13,038	12,467	14%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Virginia	Navy	OCEANA NAS	170,551	202,835	12,941	45,225	27%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 4) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 5) New Site. 6) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 7) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 8) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Hawaii	Navy	PEARL HARBOR NSB	503	751	46	294	58%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).

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Hawaii	Navy	PEARL HARBOR NSY	5,772	6,453	200	881	15%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Florida	Navy	PENSACOLA NAS	58,793	58,188	8,351	7,746	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement). 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Florida	Navy	PENSACOLA NTTC CORRY STATION	4,280	6,220	1,778	3,718	87%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Navy	POINT BARROW NARL	31,495	32,177	3,466	4,148	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Washington	Navy	PORT HADLOCK NOC PAC DIV DET	3,579	4,094	203	718	20%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

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Washington	Navy	PUGET SOUND FISC MANCHESTER	3,321	3,516	595	790	24%	Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC.
Puerto Rico	Navy	ROOSEVELT ROADS CAMP GARCIA	11,876	10,305	3,160	1,589	13%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
California	Navy	SAN DIEGO NCCOSC	8,826	20,913	2,951	15,038	170%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Navy	SAN DIEGO NISE WEST	916	3,938	550	3,572	390%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Florida	Navy	SAUFLEY FIELD NAS	7,524	7,580	2,811	2,867	38%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Massachusetts	Navy	SOUTH WEYMOUTH NAS	48,836	49,773	4,906	5,843	12%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Virginia	Navy	ST JULIEN'S CREEK ANNEX	14,263	15,405	567	1,709	12%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Navy	TREASURE ISLAND NS	14,455	34,598	4,950	25,093	174%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
California	Navy	TREASURE ISLAND NS HUNTERS PT ANNEX	222,585	249,880	71,265	98,560	44%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Navy	TUSTIN MCAS	14,821	14,622	1,716	1,517	10%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
District of Columbia	Navy	WASHINGTON DC NAVOBSY	520	1,089	301	870	167%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site.
District of Columbia	Navy	WASHINGTON NRL	1,004	1,183	353	532	53%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Washington	Navy	WHIDBEY ISLAND NAS	91,754	94,696	14,691	17,633	19%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Florida	Navy	WHITING FIELD NAS	21,226	25,602	1,084	5,460	26%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Texas	Air Force	AIR FORCE PLANT 4	49,414	72,190	1,610	24,386	49%	1) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 2) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Arizona	Air Force	AIR FORCE PLANT 44	43,869	46,022	3,035	5,188	12%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
New York	Air Force	AIR FORCE PLANT 59	625	684	41	100	16%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Georgia	Air Force	AIR FORCE PLANT 6	157,199	199,045	7,202	49,048	31%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	BARTER ISLAND	5,556	7,477	747	2,668	48%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Vermont	Air Force	BURLINGTON INTERNATIONAL AIRPORT	0	1,410	93	1,503	N/A	Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Alaska	Air Force	CAMPION AIR FORCE STATION	22,352	24,045	3,141	4,834	22%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
New Mexico	Air Force	CANNON	35,498	75,074	3,385	42,961	121%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 5) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Alaska	Air Force	CAPE NEWENHAM LONG RANGE RADAR SITE	11,461	13,482	480	2,501	22%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	CAPE ROMANZOF LONG RANGE RADAR SITE	36,364	40,052	694	4,382	12%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Air Force	CASTLE	68,870	76,781	926	8,837	13%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Illinois	Air Force	CHANUTE	51,937	57,059	443	5,565	11%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	CHENA RIVER	319	379	16	76	24%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Minnesota	Air Force	DULUTH INTERNATIONAL AIRPORT	0	2,424	94	2,518	N/A	Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC.
Alaska	Air Force	EARECKSON AIR FORCE BASE	111,156	121,379	3,981	14,204	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Florida	Air Force	EGLIN	51,749	62,944	1,939	13,134	25%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 4) New Site. 5) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
South Dakota	Air Force	ELLSWORTH AIR FORCE BASE	45,435	92,937	4,280	51,782	114%	1) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 2) Standards or Regulations – DoD Policy or Directive – A change in DoD policy or directive that redefines the costs included in the CTC. 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 4) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Washington	Air Force	FAIRCHILD AIR FORCE BASE	50,667	100,449	4,643	54,425	107%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Wisconsin	Air Force	GEN B MITCHELL	8,922	10,333	144	1,555	17%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
California	Air Force	GEORGE	72,789	97,659	1,663	26,533	36%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Massachusetts	Air Force	HANSCOM	34,905	41,030	829	6,954	20%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Utah	Air Force	HILL AIR FORCE BASE	368,723	443,560	5,809	80,646	22%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alaska	Air Force	JBER-ELMENDORF	294,203	335,898	5,118	46,813	16%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 4) Technology – Change to a different or improved cleanup technology (e.g., monitored natural attenuation did not work so active remediation is needed, technology was ineffective). 5) New Site. 6) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 7) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 8) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Alaska	Air Force	JBER-RICHARDSON	58,839	94,746	4,691	40,598	69%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
New Jersey	Air Force	JBMDL-DIX	18,470	21,571	2,326	5,427	29%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 5) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Texas	Air Force	JBSA-CAMP BULLIS	9,785	15,587	1,072	6,874	70%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
Johnston Atoll	Air Force	JOHNSTON ATOLL	15,667	20,946	201	5,480	35%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	KING SALMON	59,759	55,989	14,624	10,854	18%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Texas	Air Force	LAUGHLIN	32,464	36,119	560	4,215	13%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maine	Air Force	LORING	31,773	36,560	390	5,177	16%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Washington	Air Force	MAKAH AIR FORCE STATION	3,665	18,464	204	15,003	409%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alabama	Air Force	MAXWELL	30,439	34,688	1,033	5,282	17%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Air Force	MCCLELLAN	112,594	162,005	6,580	55,991	50%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Kansas	Air Force	MCCONNELL AIR FORCE BASE	32,467	35,249	6,979	9,761	30%	1) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model. 3) Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method. 4) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
North Dakota	Air Force	MINOT	18,193	51,646	2,147	35,600	196%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) New Site. 4) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Georgia	Air Force	MOODY AIR FORCE BASE	59,555	64,634	798	5,877	10%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Idaho	Air Force	MOUNTAIN HOME AIR FORCE BASE	44,580	46,547	4,928	6,895	15%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alaska	Air Force	MURPHY DOME	4,445	6,612	274	2,441	55%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
South Carolina	Air Force	MYRTLE BEACH	22,052	30,741	699	9,388	43%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site.
New Hampshire	Air Force	NEW BOSTON	5,773	4,729	1,939	895	15%	Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval).
New York	Air Force	NIAGARA FALLS	9,892	10,608	517	1,233	12%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alaska	Air Force	NIKOLSKI RADIO RELAY STATION	14,949	16,586	388	2,025	14%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Illinois	Air Force	OHARE	24,685	29,146	130	4,591	19%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
New Hampshire	Air Force	PEASE	171,206	188,737	5,192	22,723	13%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
New York	Air Force	PLATTSBURGH	77,550	111,712	1,301	35,463	46%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	POINT LAY	18,470	26,945	1,315	9,790	53%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Alaska	Air Force	PORT HEIDEN RADIO RELAY STATION	39,909	36,401	9,024	5,516	14%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Texas	Air Force	REESE	199,649	398,104	12,815	211,270	106%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Missouri	Air Force	RICHARDS-GEBAUR	11,286	12,673	144	1,531	14%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Ohio	Air Force	RICKENBACKER	7,275	10,472	210	3,407	47%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) New Site.
Georgia	Air Force	ROBINS	82,680	105,132	1,207	23,659	29%	1) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 2) Standards or Regulations – Regulator-driven Change – A change in the project as a result of negotiations with the regulator (e.g., new requirement imposed by the regulator that increases project scope, delay in regulatory document review or approval). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Air Force	SAN DIEGO SPACE SURVEILLANCE FIELD STATN	897	752	262	117	13%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Alaska	Air Force	SPARREVOHN AIR FORCE STATION	5,035	5,772	80	817	16%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Oklahoma	Air Force	TINKER	91,660	104,452	1,374	14,166	15%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
California	Air Force	TRAVIS AIR FORCE BASE	116,202	132,325	2,431	18,554	16%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling). 3) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
California	Air Force	TULELAKE OTHB RADAR SITE	108	105	125	122	113%	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Colorado	Air Force	USAF ACADEMY	12,881	19,568	166	6,853	53%	Cost Estimate Change Unrelated to Change in Scope – Change in contract or contract method.
Oklahoma	Air Force	VANCE	20,840	45,353	1,421	25,934	124%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Missouri	Air Force	WHITEMAN AIR FORCE BASE	9,172	11,847	307	2,982	33%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Arizona	Air Force	WILLIAMS	39,478	58,410	1,040	19,972	51%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Michigan	Air Force	WURTSMITH	217,743	237,967	5,749	25,973	12%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Maryland	DLA	CURTIS BAY	2,387	3,914	132	1,659	70%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Pennsylvania	DLA	DD SUSQUEHANNA, NEW CUMBERLAND FAC.	811	1,201	30	420	52%	Cost Estimate Change Unrelated to Change in Scope – Actual contract cost for prior or ongoing work is greater than the prior estimate. This additional cost may also be caused by changes in schedule.
New Hampshire	DLA	DLA ENERGY	0	300	137	437	N/A	Cost Estimate Change Unrelated to Change in Scope – Change in cost estimating methodology or model.
Pennsylvania	DLA	DSC PHILADELPHIA	45,429	53,480	3,473	11,524	25%	Project Scope – Added requirements due to other site-level project change (e.g., newly discovered contaminants, increased physical dimensions of the cleanup, additional risk pathway such as vapor intrusion (that is required and initiated by DoD), change in future property reuse, site reopened to address additional risk, additional sampling).
Maine	FUDS	AF RADAR TRACKING STATION	5,000	6,847	242	2,089	42%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	AIR FORCE PLANT 15 (NAA)	70	74	36	40	56%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Florida	FUDS	AIR-TO-GROUND GUN RANGE PINELLAS	118	96	47	25	21%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alaska	FUDS	AMAKNAK	10,769	18,757	571	8,559	79%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wisconsin	FUDS	ANTIGO AIR FORCE STATION	3,007	4,765	82	1,840	61%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Guam	FUDS	AREA 101	11,151	20,106	2,754	11,709	105%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	ATKA AF AUX FLD	35,768	57,177	73	21,482	60%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	ATTU ISL MIL SITES	183,556	207,093	25	23,562	13%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
American Samoa	FUDS	AUA FUEL FARM	7,820	13,148	2,452	7,780	99%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Georgia	FUDS	AUGUSTA ARSENAL DEPOT	31	146	5	120	393%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	BEALE AFB TITAN 1-A	5,387	14,367	301	9,281	172%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Virgin Islands of the U.S.	FUDS	BENEDICT FIELD	2,865	3,970	63	1,168	41%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Idaho	FUDS	BOISE ARMY BARRACKS	10,015	17,491	82	7,558	75%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Missouri	FUDS	BOWLING GREEN GF ANX	0	382	400	782	N/A	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Colorado	FUDS	BUCKLEY FIELD	3,261	47,660	250	44,649	1369%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Virginia	FUDS	BUCKROE BEACH	668	996	35	363	54%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alaska	FUDS	BURMA ROAD	20,825	41,874	7	21,056	101%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
North Carolina	FUDS	BUXTON NAVAL FACILITY	227	2,035	82	1,890	831%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Oregon	FUDS	CAMP ADAIR/ADAIR AFS	15,154	55,363	37	40,246	266%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Texas	FUDS	CAMP BOWIE	18,561	43,992	334	25,765	139%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Kentucky	FUDS	CAMP BRECKINRIDGE	24,806	77,873	1,892	54,959	222%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Colorado	FUDS	CAMP HALE	121,304	140,181	161	19,039	16%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Texas	FUDS	CAMP HOWZE (FELDERHOFF)	92,599	215,474	141	123,016	133%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Puerto Rico	FUDS	CAMP O'REILLY	1,995	2,205	90	300	15%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
California	FUDS	CAMP SAN LUIS OBISPO	37,324	43,391	2,655	8,722	23%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Georgia	FUDS	CAMP WHEELER	29,959	294,589	5,307	269,937	901%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Mississippi	FUDS	CAMP/FT MCCAIN	458	1,776	991	2,309	504%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Massachusetts	FUDS	CAPE POGE LITTLE NECK BOMB TARGET SITE	653	2,338	562	2,247	344%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Maine	FUDS	CHARLESTON AFS	0	6,940	1,306	8,246	N/A	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
North Carolina	FUDS	CHARLOTTE NAV AMM DEPO	3,872	5,016	105	1,249	32%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Virginia	FUDS	CHOPAWAMSIC TROOP TRAINING SITE	24,288	51,031	108	26,851	111%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Utah	FUDS	CLEARFIELD NAVAL SUPPLY DEPOT	186	36	175	25	14%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
South Carolina	FUDS	CONWAY BMB&GUNRY RNG	15,931	49,692	150	33,911	213%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
North Carolina	FUDS	COROLLA NAVAL TARGET	1,463	4,728	5	3,270	224%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Florida	FUDS	CORRY ST USN TECH TRAINING	1,352	5,322	57	4,028	298%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
South Carolina	FUDS	CP CROFT	9,195	180,603	388	171,796	1868%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alabama	FUDS	CRAIG AFB	448	557	62	171	38%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Texas	FUDS	CUDDIHY FIELD	1,257	1,688	11	442	35%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Puerto Rico	FUDS	CULEBRA PUERTO RICO	87,544	103,526	4,796	20,778	24%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	D-Q UNIVERSITY	2,224	2,860	142	778	35%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	DRY CANYON ARTILLERY RANGE	9,948	37,505	74	27,631	278%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Florida	FUDS	ELLYSON FIELD	42	31	39	28	67%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Ohio	FUDS	ERIE ARMY DEPOT	412	494	1	83	20%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Wyoming	FUDS	FE WAR AFB AF FAC S-6	1,529	2,605	55	1,131	74%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Wyoming	FUDS	FE WAR AFB AF FAC SITE 5	1,193	4,250	94	3,151	264%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wyoming	FUDS	FE WARREN AFB FAC SITE 1	25,293	27,906	66	2,679	11%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Colorado	FUDS	FE WARREN AFB FAC SITE 12	1,301	3,123	75	1,898	146%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wyoming	FUDS	FE WARREN AFB FAC SITE 3	48,571	104,940	164	56,533	116%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wyoming	FUDS	FE WARREN AFB FAC SITE 7	0	85	7	92	N/A	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nebraska	FUDS	FE WARREN AFB FAC SITE 8	1,308	4,318	91	3,101	237%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Minnesota	FUDS	FINLAND AFS Z-69	2,032	2,437	470	875	43%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Kansas	FUDS	FORBES AFB ATLAS S-09	1,118	1,041	538	461	41%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Michigan	FUDS	FORT CUSTER REC/INDUSTRIAL AREAS	15,099	17,949	634	3,484	23%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wyoming	FUDS	FORT FRANCIS E. WARREN TAR & MANEUVER RGE	724	5,004	91	4,371	604%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Delaware	FUDS	FORT MILES MILITARY RESERVATION	18,072	26,644	35	8,607	48%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Florida	FUDS	FORT PICKENS	24,368	28,797	221	4,650	19%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	FORT ROUSSEAU, SITKA	14,000	22,056	262	8,319	59%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Florida	FUDS	FORT TAYLOR	15,150	18,662	109	3,621	24%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	FORT TIDBALL/LONG ISLAND	422	420	50	48	11%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Washington	FUDS	FORT WARD-BAINBRIDGE ISLAND AAA BATTERY 7	0	286	12	298	N/A	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Pennsylvania	FUDS	FRANKFORD ARSENAL	1,175	1,226	116	167	14%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alabama	FUDS	GADSDEN ORDNANCE PLANT	31	146	4	119	390%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Georgia	FUDS	GLYNCO NAS	133	244	56	167	126%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
California	FUDS	GOLDEN GATE NATIONAL RECREATION AREA	358	318	182	142	40%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Minnesota	FUDS	GOPHER ORD PLT ROSEMOUNT	66	42	68	44	66%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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Rhode Island	FUDS	GOULD ISLAND NUSC	1,789	1,799	2,094	2,104	118%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	HAINES FAIRBANKS PIPELINE	13,957	15,307	731	2,081	15%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	HAMILTON ARMY AIRFIELD	3,198	28,929	1,115	26,846	840%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	HAMMER FIELD	298	409	308	419	141%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Louisiana	FUDS	HAMMOND BOMBING RANGE	3,837	10,969	31	7,163	187%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Mississippi	FUDS	HANCOCK CO. BOMBING & GUNNERY RANGE	432	1,898	655	2,121	490%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Alaska	FUDS	HOONAH RRS	74	220	100	246	330%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Northern Mariana Islands	FUDS	HOSPITAL DUMP SITE	1,825	2,172	123	470	26%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Illinois	FUDS	IL ORDNANCE PLANT (CRAB ORCHARD)	2,808	3,349	206	747	27%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Kentucky	FUDS	KENTUCKY ORDNANCE WORKS	3,078	3,568	53	543	18%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Michigan	FUDS	KINCHELOE AIR FORCE BASE	14,137	15,392	1,438	2,693	19%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Arizona	FUDS	KINGMAN G TO G GUNNERY RANGE	1,620	8,127	148	6,655	411%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
New Mexico	FUDS	KIRTLAND AFB DEM BOMB RGE	1,311	1,451	113	253	19%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Northern Mariana Islands	FUDS	KOBLER NAVAL SUPPLY CENTER	11,859	12,025	3,100	3,266	28%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
New York	FUDS	LAKE ONTARIO ORDNANCE WORKS	351	318	654	621	177%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Texas	FUDS	LAREDO AFB	314	327	49	62	20%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Florida	FUDS	LEE FIELD	1,742	5,632	264	4,154	238%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nebraska	FUDS	LINCOLN AFB AF FAC S-1	705	2,149	63	1,507	214%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nebraska	FUDS	LINCOLN AFB AF FAC S-10	5,843	8,236	843	3,236	55%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nebraska	FUDS	LINCOLN AFB AF FAC S-7	9,189	8,034	2,633	1,478	16%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nebraska	FUDS	LINCOLN AFB AF FAC S-9	1,967	3,976	60	2,069	105%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
New York	FUDS	LOCKPORT AFS	3,688	3,941	178	431	12%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Guam	FUDS	LONFIT PLANNING PROJECT	33,319	54,520	384	21,585	65%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).

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State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maine	FUDS	LOR AFB LAU AX	74	2,379	37	2,342	3145%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Colorado	FUDS	LOWRY AFB S-1 (COMPLEX 1B)	308	471	1,610	1,773	576%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Colorado	FUDS	LOWRY AFB S-1 (COMPLEX 1C)	343	1,500	103	1,260	368%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Georgia	FUDS	MACON ORDNANCE PLANT	31	146	5	120	393%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Hawaii	FUDS	MAKALAPA CRATER FORMER NAVY SALVAGE YARD	4,601	5,207	93	699	15%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Virginia	FUDS	MANASSAS AIR FORCE COMM FACILITY	7,576	9,081	78	1,583	21%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Washington	FUDS	MANCHESTER ANNEX	6,838	8,575	371	2,108	31%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
North Carolina	FUDS	MANTEO NAV AUX AIR ST	230	1,136	92	999	435%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Tennessee	FUDS	MILLINGTON ORD WORKS	39	146	2	109	282%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alabama	FUDS	MONTGOMERY AF STATION	39	146	5	112	290%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
West Virginia	FUDS	MORGANTOWN OW	20	193	1	174	851%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Massachusetts	FUDS	MOVING TAR MACH GUN RG	315	855	11	551	175%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Alaska	FUDS	MT.EDGECUMBE/SITKA NOB	301	1,131	25	855	284%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Michigan	FUDS	MUSKEGON ORD PLANT	529	454	132	57	11%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Northern Mariana Islands	FUDS	NAFTAN BOMB STORAGE	35,373	138,899	140	103,666	293%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Northern Mariana Islands	FUDS	NAFTAN ORDNANCE DISPOSAL	4,336	4,840	51	555	13%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Massachusetts	FUDS	NANTUCKET BCH	285	879	22	616	217%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Oregon	FUDS	NAV AIR STA, TONGUE POINT	7,305	8,548	2,140	3,383	46%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Rhode Island	FUDS	NAVAL AUX LANDING FIELD	8,365	8,708	4,331	4,674	56%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
California	FUDS	NAVAL AUXILIARY AIR STATION ARCATA	5,295	1,443	6,582	2,730	52%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	NAVAL AUXILIARY AIR STATION SANTA ROSA	286	775	803	1,292	453%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Nevada	FUDS	NELLIS SMALL ARMS RGE AX	36,497	50,083	217	13,803	38%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Pennsylvania	FUDS	NEW CUMBERLAND ARMY DEPOT	707	843	60	196	28%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

Appendix B: Causes of Increases in Cleanup Estimates

State	DoD Component	Installation Name	FY 2018 Cost Estimate Adjusted for Inflation ($000)	FY 2019 Cost Estimate ($000)	FY 2019 Funds Obligated ($000)	Cost Estimate Change ($000)	Cost Estimate Change (Percentage)	Reason(s)
Maryland	FUDS	NIKE BA-30/31 (TOLCHESTER)	130	191	43	104	81%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
New York	FUDS	NIKE BU 34/35	97	56	1,326	1,285	1326%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Indiana	FUDS	NIKE C-32 - INDIANA DUNES	4,163	5,065	1,405	2,307	55%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Illinois	FUDS	NIKE C-80/81 - ARLINGTON	20	23	41	44	214%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Michigan	FUDS	NIKE D-97 - OAKLAND COMMUNITY COLLEGE	113	4,687	88	4,662	4117%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Maine	FUDS	NIKE LO-13	57	40	56	39	68%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Pennsylvania	FUDS	NIKE PH-75/78 (MEDIA)	163	148	80	65	40%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alaska	FUDS	NIKE SITE BAY	2,998	6,010	179	3,191	106%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Illinois	FUDS	NIKE SL-10 - MARINE	2,249	2,373	101	225	10%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Maryland	FUDS	NIKE W-44 (WALDORF)	1,038	1,413	71	446	43%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Iowa	FUDS	OFFUTT AFB AF FAC S-3	12,180	20,865	373	9,058	74%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Virginia	FUDS	OYSTER POINT STORAGE AREA	4,065	4,021	843	799	20%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).

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California	FUDS	PARKS AFB	8,334	11,125	940	3,731	45%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
South Dakota	FUDS	PINE RIDGE GUNNERY RANGE	7,070	21,000	1,041	14,971	212%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
New York	FUDS	PLATTSBURGH ATLAS S-6	107	102	52	47	44%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Ohio	FUDS	PLUM BROOK ORD WORKS	8,127	8,688	674	1,235	15%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Virginia	FUDS	PLUM TREE ISLAND RANGE	18,105	27,701	130	9,726	54%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Idaho	FUDS	POCATELLO BOMBING RANGE #3	2,421	2,996	29	604	25%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Wyoming	FUDS	POLE MOUNTAIN	25,234	115,154	57	89,977	357%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Washington	FUDS	PORT ANGELES COMBAT RANGE	1,722	3,152	264	1,694	98%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Puerto Rico	FUDS	PUERTO RICO BOMB RANGE	3,127	3,840	78	791	25%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Rhode Island	FUDS	QUARRY DISPOSAL SITE	626	1,107	98	579	92%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Rhode Island	FUDS	QUONSET POINT NAS	57,800	66,214	2,647	11,061	19%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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Michigan	FUDS	RACO AAF-HIAWATHA NF	3,717	4,808	433	1,524	41%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Florida	FUDS	RICHMOND NAS	140	247	421	528	378%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	SAN FRANCISCO NIKE BATTERY 08-09	60	32	290	262	435%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Kansas	FUDS	SCHILLING AFB	6	7	56	57	929%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Kansas	FUDS	SCHILLING AFB ATLAS S-01	1,384	2,475	173	1,264	91%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Kansas	FUDS	SCHILLING AFB ATLAS S-02	360	1,944	98	1,682	467%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Kansas	FUDS	SCHILLING AFB ATLAS S-12	1,866	2,855	100	1,089	58%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Missouri	FUDS	SEDALIA AAF RIFLE RANGE	2,900	3,839	55	994	34%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Vermont	FUDS	ST ALBANS AFS Z-14	54	52	44	42	78%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
South Carolina	FUDS	STARK GENERAL HOSP	1,324	1,724	90	490	37%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Nevada	FUDS	STEAD AFB	0	170	5	175	N/A	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alaska	FUDS	TIGALDA ISLAND	131	96	69	34	26%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).

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Massachusetts	FUDS	TISBURY GREAT POND	783	868	237	322	41%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
California	FUDS	TRAVIS AFB NIKE BATTERY 10	221	108	534	421	190%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Georgia	FUDS	TRAVIS FIELD	0	211	8	219	N/A	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Mississippi	FUDS	VAN DORN-ARMY TRNG CAMP	12,345	62,014	33	49,702	403%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).
Hawaii	FUDS	WAIKANE TRAINING AREA	3,277	4,697	78	1,498	46%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Hawaii	FUDS	WAIKOLOA MANEUVER AREA	286,575	327,591	4,316	45,332	16%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Massachusetts	FUDS	WATERTOWN ARSENAL	672	880	55	263	39%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
North Carolina	FUDS	WEEKSVILLE NAV AIR FAC	31	146	11	126	413%	Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Alaska	FUDS	YAKUTAT AFB	5,458	4,483	1,996	1,021	19%	1) Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope). 2) Standards or Regulations – Regulation Change – A broad-scale or national change in regulation that impacts multiple sites (e.g., newly promulgated or modified Applicable or Relevant and Appropriate Requirement).
Ohio	FUDS	YOUNGSTOWN MUNIC AIRPORT	4,163	4,830	41	708	17%	Project Scope – Added cleanup phases as the project progresses (e.g., feasibility study or remedial action operation added to project scope).