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2.7.1.1 Identification of Contaminants of Concern

Contaminants of concern (COCs) are those chemicals identified in the risk assessment that pose a significant current or future risk, and are sometimes referred to as risk-drivers. The process of identifying COCs for human health began with the identification of contaminants of potential concern (COPCs). In accordance with EPA Region I guidance, COPCs are identified as compounds detected at concentrations greater than Region IX risk-based preliminary remediation goals (PRGs). Exceeding a PRG suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate (EPA 1999). Infrequently detected compounds and essential nutrients were not retained as COPCs. For organic compounds, background concentrations are not used in the process of selecting COPCs; although after risks have been quantified, background concentrations are considered in the process of selecting COCs.

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, ideno(1,2,3-cd)pyrene, C11-C22 aromatic hydrocarbons, and arsenic were identified as COPCs in FS-2 soil. Of the seven COPCs, only benzo(a)pyrene and arsenic could be considered possible COCs for FS-2 soil because human health risks were well below acceptable levels for the five COPCs. Because different receptor types could be exposed to site soil in different ways, the risks were calculated separately for soils 0 to 2 ft bgs, 0 to 10 ft bgs, and 0 to 20 ft bgs. The risk calculations utilized the 95 percent upper confidence limit (UCL) of the detected concentrations for the exposure point concentration, which were calculated separately for each depth range (Tables 2-1, 2-2, and 2-3).

The SWOU RI investigated and evaluated groundwater quality beneath and downgradient from the southwest portion of the cantonment area. In an area larger than 7 square miles, the SWOU RI evaluated historical data for groundwater beneath known and suspected potential source areas (including AOC FS-2) and investigated groundwater quality beneath known and suspected detached groundwater plumes. The SWOU RI specifically included sampling eight shallow wells to evaluate the potential risks associated with FS-2 groundwater. Table 2-4 shows the occurrence, distribution and selection of COPCs for

the FS-2 groundwater data from which arsenic was identified as a COPC, but not a COC. Throughout the entire SWOU area, arsenic was detected in seven out of 112 dissolved fraction (filtered) samples and in five out of 106 total fraction samples. No discernable pattern was identified by the distribution of the detected arsenic. However, the following observations were noted in the SWOU RI:

- The three highest detections were more than a mile away from any other detections. The distribution of arsenic is irregular and not particular to any VOC plume(s).
- The highest detection (11.1 µg/L) was within the FS-13 plume.
- The second highest detection (7.5 µg/L) was downgradient of FS-2.
- All wells with detectable concentrations of arsenic were located north of Route 151, suggesting that if arsenic is related to past waste practices, it has not migrated far from the base.

When remedial action objectives were developed for the SWOU plumes and COCs were identified on a plume-specific basis, arsenic was not retained as a COC for SWOU groundwater. Arsenic is not considered a COC for FS-2 groundwater. With no COCs or discernable plumes associated with FS-2 groundwater, it is concluded that there are no unacceptable risks to human health associated with future residential exposure to FS-2 groundwater and that remedial action is not warranted.

2.7.1.2 Exposure Assessment

Future land use of FS-2 has not been determined. Based on MMR's historical use as a military base, it is unlikely that the site would be used for residential or commercial/industrial purposes. A more likely future use is open space or recreational (e.g., if the golf course was expanded). Therefore, people who might access the FS-2 site under current land use conditions would likely include trespassers and/or recreational visitors. The current and future risks posed to a future adolescent trespasser by inhalation, dermal contact, and ingestion of COPCs in FS-2 soils 0 to 2 ft bgs were quantified in the risk assessment. According to the conceptual site exposure model, it was assumed that no current exposure exists to site workers or residents.

Any future development of the site would necessitate construction and/or utility workers accessing the site. In the absence of a specific future use development plan, the human health risk assessment incorporates the assumption that the future site use will be residential to provide a conservative assessment of risks associated with unrestricted future uses. Under this land use, it is assumed the residential dwellings could be constructed anywhere within the site boundaries. The risks posed to a future adult construction worker by inhalation, dermal contact, and ingestion of site COPCs in FS-2 soils 0 to 20 ft bgs were quantified in the risk assessment. Risks were also quantified for future child and adult residents who may similarly be exposed to FS-2 soils 0 to 10 ft bgs. Tables 2-5, 2-6, 2-7, 2-8, and 2-9 present the route-specific exposure assumptions for these receptors.

2.7.1.3 Toxicity Assessment

Table 2-10 provides non-carcinogenic toxicity information that is relevant to the COPCs for FS-2 soils. Two of the COPCs have toxicity data indicating their potential for adverse non-carcinogenic health effects in humans. The chronic toxicity data available for oral exposure to both arsenic and C11-C22 aromatics were used to develop oral reference doses (RfDs). Dermal RfDs for both arsenic and C11-C22 aromatics were derived from the oral RfDs. No oral or dermal RfDs were available for EPHs or the five semivolatile COPCs. However, using surrogate dose-response values from similarly structured PAHs to quantify hazard index (HI) values, the risk assessment concluded that the absence of published RfDs for the five semivolatile COPCs does not represent an uncertainty that has a large bearing on the risk assessment. No inhalation reference concentrations were available for any of the COPCs except for C11-C22 aromatics. However, since the dust inhalation exposures are associated with very low COPC exposures, inhalation doses, if calculated, would be orders of magnitude lower than oral and dermal doses. Consequently, even if inhalation toxicity data were available, the results of the risk assessment would not likely change.

Table 2-11 provides carcinogenic risk information for the COPCs for FS-2 soils. Oral and inhalation cancer slope factors were available for the five SVOCs that are probable human carcinogens and for the human carcinogen arsenic. The dermal cancer slope factors were derived from the oral cancer slope factors. No cancer slope factor was available for EPHs, and C11-C22 aromatics are not classifiable as a human carcinogen.

2.7.1.4 Risk Characterization

The potential for noncarcinogenic effects is evaluated by comparing an exposure level over a specified period of time with an RfD derived for a similar exposure period. An RfD represents a level that an individual may be exposed to that is not expected to cause any deleterious effect. The ratio of exposure to toxicity is called a hazard quotient (HQ). An HQ greater than 1 indicates that a receptor's dose of a single contaminant is less than the RfD and that toxic noncarcinogenic effects from that chemical are unlikely. The HI is generated by adding the HQs for all COPCs that affect the same target organ within a medium or across all media to which a given individual may be exposed. As previously mentioned, the maximum HI for COPCs in FS-2 soils was 0.2, indicating that, based on the sum of all HQs from different contaminants and exposure routes, toxic noncarcinogenic effects from FS-2 soils are unlikely.

For possible exposure to each medium, carcinogenic risk estimates for known or probable human carcinogens are calculated by multiplying the cancer slope factor (CSF) or UR of the chemical by the lifetime average daily dose (LADD) or lifetime average daily exposure concentration (LAEC), respectively. The product of these two values is an estimate of the excess lifetime cancer risk (ELCR), which is defined as the excess probability that an individual will develop cancer over a lifetime due to exposure to the COPC. This incremental lifetime risk is over and above what is considered an individual's background chances of developing cancer. In the United States, approximately one in three people develop cancer during their lifetime (American Cancer Society 1997).

The ELCR for each chemical in each medium is calculated as follows:

$$ELCR_i = LADD_i \times CSF_i$$

Where:

$ELCR_i$ = Excess lifetime cancer risk associated with the exposure to chemical in each exposure route for the relevant medium.

$LADD_i$ = Lifetime average daily dose of substance i in each medium received by the theoretical individual.

CSF_i = Cancer slope factor for substance i in the appropriate medium.

The ELCR (a unitless value usually expressed in scientific notation) is compared to acceptable risk ranges for risk management decisions. The EPA risk range for site-related exposures is 1E-04 to 1E-06, and the DEP risk management threshold is 1E-05. Cancer risks calculated for the future construction worker resulted in a maximum ELCR of 5E-07, which is not considered an unacceptable risk by the EPA and DEP. Cancer risks to the current/future trespasser and future residents from exposure to FS-2 soils are summarized in Table 2-12.

In comparison to the oral and dermal exposure pathways, inhalation of FS-2 site contaminants is insignificant. Inhalation risks were several orders of magnitude below risk management criteria.

The ELCR for the current/future trespasser is 2E-06, below the DEP risk threshold, and near the lower end of the EPA target range. The maximum ELCRs were calculated as 6E-06 and 1E-05 for future adult and child residential receptors, respectively. The combined maximum risk for a lifetime exposure (combined child and adult exposure) is 2E-05, which exceeds the DEP risk limit and is within the EPA target risk range.

Although the ELCR for the residential scenario of exposure to soils 0 to 10 ft bgs (2E-05) is above the Massachusetts Contingency Plan (MCP) risk limit (1E-05), the risks were calculated using methods consistent with EPA Region I risk assessment guidance for Superfund, as opposed to DEP guidance for disposal site risk characterization. Although

EPA Superfund risk assessment methods and DEP Method 3 risk characterization methods are fundamentally very similar, there are a few details concerning exposure input parameters that differ between the two methods. Those that have the largest bearing on the risk assessment outcome are as follows:

	EPA Region I	DEP
Exposure Point Concentration	95% UCL	Arithmetic Mean
Soil Ingestion Rate – Child	200 mg/day	100 mg/day
Soil Ingestion Rate – Adult	100 mg/day	50 mg/day
Averaging Time – Cancer	70 Years	75 Years

If the default soil ingestion rates used in a DEP Method 3 risk characterization were applied to estimate risks for the residential scenario (soils 0 to 10 ft bgs) evaluated in this risk assessment, the ingestion risk estimates would decrease by half. As shown in the comparison below, the use of the DEP default soil ingestion rates in the residential soils 0 to 10 ft bgs scenario results in cumulative cancer risk estimates that do not exceed the MCP cumulative receptor risk limit of 1E-05. Had the other DEP default input parameters listed above also been used (i.e., arithmetic mean concentration rather than 95 percent UCL as the exposure point concentration, and averaging time of 75 years rather than 70 years), the risks would be lower than those presented below.

Receptor / Pathway (Soils 0–10 ft bgs)	ELCR	
	EPA Parameters [a]	DEP Parameters [b]
Child – Ingestion	9E-06	4E-06
Child – Dermal	3E-06	3E-06
Child – Inhalation	2E-10	2E-10
Child - TOTAL	1E-05	7E-06
Adult – Ingestion	4E-06	2E-06
Adult – Dermal	2E-06	2E-06
Adult – Inhalation	6E-10	6E-10

Receptor / Pathway (Soils 0–10 ft bgs)	ELCR	
	EPA Parameters [a]	DEP Parameters [b]
Adult - TOTAL	6E-06	4E-06
Resident - TOTAL	2E-05	1E-05

[a] Risks were calculated using EPA Region 1 default exposure parameters. These values were calculated in the baseline risk assessment and are presented in Table 2-12.

[b] All risks presented were calculated using the EPA input parameters/methods. However, soil ingestion risks were multiplied by factors of 100/200 (child) and 50/100 (adult) to reflect recalculated risks using the DEP default soil ingestion rates.

This evaluation demonstrates that soils at FS-2 do not pose cancer risks in excess of the MCP cumulative receptor risk limit of 1E-05. Moreover, the arithmetic mean concentrations of all COPCs in soils 0 to 10 ft bgs are below their respective MCP Method 1 standards (S-1/GW-1 standards). This further indicates that the site poses a "Condition of No Significant Risk" in accordance with the MCP. Therefore, no further remedial action is warranted for site soils.

2.7.1.5 Uncertainty Analysis

Because risk assessments rely not just on measured or certain facts, but also on assumptions and estimates, risk assessments have historically used highly conservative assumptions in the place of unavailable data, with the net result often being a substantial overestimation of potential risks. Common areas of uncertainty include the frequency, duration, and magnitude of possible exposure, the chemical-specific toxicity values, the one-size-fits-all exposure factors (e.g., body weight and ventilation rates), and possible synergistic or antagonistic chemical interactions. This section summarizes how assumptions made in the face of uncertainty may have affected the results and conclusions of the assessment.

The standard of care for environmental risk assessments for addressing many of the common areas of uncertainty is to use upper-bound (90^{th} or 95^{th} percentile) estimates of input values, such as exposure parameters and toxicity values. Some intake variables may not be at their individual maximum values, but when considered in combination with other variables, will result in estimates of the reasonable maximum exposure (RME).

According to EPA (1989), the RME is intended to represent the highest exposure that is reasonably expected to occur at a site. Thus, the RME will tend to overestimate potential exposures for the majority of the population.

The primary uncertainties in the risk assessment are identified below:

- Given the current and probable future land use, the selection of frequent and long-term exposure of workers and residents adds conservatism to the assessment.
- Conservative assumptions (e.g., trespasser accessing the FS-2 site four times per week for 11 years) were built into the exposure parameters.
- The exposure point concentrations were calculated from an environmental investigation focused on characterizing the most likely contaminated soils. Additional conservatism results from assuming that future residents would be exposed to contaminants in soils from 0 to 10 ft bgs.
- Cancer slope factors and non-cancer RfDs were not available for all of the COPCs, so some potential contributions to total human health risks could not be quantified, although the risk assessment concluded that for the COPCs and pathways of concern, this contributes little uncertainty to the overall assessment.
- Although the FS-2 groundwater data collected as part of the SWOU RI were used in the SWOU baseline risk assessment, the risks specific to FS-2 groundwater were not calculated separately because the only COPC retained for consideration (arsenic) was present in just one sample, and these risks were not attributed to the FS-2 site.

Overall, given the extensive investigation at the site and the application of conservative risk assessment methods and assumptions, the results and conclusions of the risk assessment represent a sound, defensible characterization of potential current and future risks to human health.

2.7.2 Summary of Ecological Risk Assessment

The baseline ecological risk assessment (ERA) for the FS-2 study area was completed to provide a screening-level evaluation of potential risks that contaminants of potential ecological concern (COPECs) in surface soil may pose to ecological receptors at the site. The following subsections summarize the baseline ecological risk assessment conducted as part of the FS-2 supplemental RI. This summary focuses primarily on exposure pathways, environmental media, and contaminants of potential concern that contributed

to potential unacceptable site risks. A complete description of the methods and results of the ecological risk assessment is presented in Section 7.2 of the *Final Fuel Spill-2 Supplemental Remedial Investigation Report* (AFCEE 2001b).

2.7.2.1 Identification of Chemicals of Potential Ecological Concern

For the selection of COPECs, supplemental RI data collected from a depth of 0 to 2 ft bgs were evaluated (Table 2-13). Maximum concentrations of detected compounds were compared to relevant soil benchmarks (Table 2-14). These screening values for soils are based on toxicological benchmarks for plants and earthworms developed by Efroymson and others (1997a, 1997b), and calculated PRGs for wildlife (Sample et al. 1996). Benchmarks for the three types of organisms (wildlife, plants and soil invertebrates) were compared by Efroymson and others (1997a), and the lowest value available was selected as the PRG. The comparison indicates that concentrations of chromium, lead, mercury, selenium, vanadium, zinc and manganese exceed the respective PRGs.

Additional compounds were selected as COPECs if no screening levels were available and the compounds were likely to be associated with historical releases (i.e., PAHs and VPHs/EPHs as petroleum constituents) at the site.

COPECs for ecological receptors are summarized in Table 2-14.

2.7.2.2 Exposure Assessment

The available habitat at the FS-2 study area provides potential forage and cover for a number of small mammals and birds, including robins, mockingbirds, and small mammals such as mice and voles. The site may also provide habitat for the eastern box turtle, a state-listed species known to inhabit the MMR area, and the upland sandpiper, which is considered an endangered species according to the Commonwealth of Massachusetts. The forested habitat adjacent to the site may provide cover for a variety of terrestrial receptors, including mammals and small birds. Passerine songbirds and other avian receptors may forage in grassed portions of this site.

No rare plant species, as listed by the Massachusetts Natural Heritage and Endangered Species Program, have been observed at the FS-2 study area. The eastern box turtle (*Terrapena carolina carolina*), a state-listed species of special concern, has been observed nearby and may utilize the open areas for nesting sites. The following terrestrial wildlife receptors, representing a range of taxonomic groups and trophic levels, were used to evaluate risk from surface soil contamination in the FS-2 study area ERA:

- White-footed mouse (granivorous/omnivorous small mammal)
- American robin (omnivorous small bird; year-round resident)
- Upland sandpiper (insectivorous migratory bird)
- Box turtle (omnivorous reptile)
- Short-tailed shrew (vermivorous small mammal).

The white-footed mouse and robin could potentially use the limited habitat at the FS-2 study area. The short-tailed shrew was included to represent vermivorous (worm-eating) small mammals that could potentially forage at the site. The shrew typically inhabits forested areas, and may inhabit the forested areas surrounding the site; it could potentially forage in the open grass areas of the site. Although the endangered upland sandpiper is not known to inhabit the study area, it was included in this ERA to represent species of insectivorous or omnivorous birds that may periodically inhabit the FS-2 study area. The box turtle was included because it is a species of special concern that could inhabit the site. (The closest observance of a box turtle was 2,000 feet away from the FS-2 study area; this was documented in 1997.)

Higher trophic level organisms such as predatory birds or mammals were not selected as ecological receptors for this ERA because of the limited availability of suitable habitat, and the small size and linear shape of the site relative to the foraging range and habits of these animals. Because they forage over relatively large areas, they are unlikely to obtain a significant portion of their prey from the FS-2 site, and therefore, their exposures are presumed to be negligible.

The contaminated medium of potential ecological concern at this site is surface soil. Plants, terrestrial invertebrates, and several representative terrestrial wildlife species were selected for evaluation in this ERA.

Because plants and terrestrial invertebrates were assumed to be in direct contact with or ingesting surface soil, the exposure evaluation for plants and invertebrates was based on representative statistical concentrations (e.g., maximum detected concentration, average detected concentration) to the COPECs. These exposure point concentrations are presented in Table 2-15.

Terrestrial wildlife receptors were assumed to be exposed via incidental ingestion of surface soils, and via ingestion of prey items that have bioaccumulated contaminants in their tissues. Dermal exposures were not quantitatively evaluated but are assumed to be negligible due to the presence of fur, feathers, or a chitinous exoskeleton.

The maximum detected concentration of COPECs was used as the worst-case exposure point concentration to evaluate direct exposure via incidental ingestion. The maximum concentration was also used to estimate exposures via the food chain using bioaccumulation factors.

Species-specific ecological exposure parameters, used to estimate potential dietary exposure to surface soil contaminants at the FS-2 study area are presented in Table 2-16. Total body doses were calculated using the bioaccumulation and uptake factors for invertebrates, plants, mammals, and birds are presented in Table 2-17.

2.7.2.3 Ecological Effects Assessment

The primary COPECs are PAHs and several inorganics. PAHs and the majority of the inorganic COPECs may bioaccumulate in plants or terrestrial invertebrates, but they are unlikely to biomagnify up the food chain. Mercury is one COPEC, however, that is known to biomagnify. Benchmarks used to evaluate risks to receptor groups are described below.

Plants and Terrestrial Invertebrates

Effects to plants and terrestrial invertebrates were evaluated using data compiled by Oak Ridge National Laboratory (ORNL) — toxicological benchmarks for terrestrial plants (Efroymson et al. 1997a) and soil and litter invertebrates and heterotrophic processes (Efroymson et al. 1997b).

Terrestrial Wildlife

The PAHs and inorganics identified at the study area can cause various effects to terrestrial wildlife receptors, including reproductive effects, systemic effects (e.g., liver, kidney, and neurological disorders), and tumors including cancer.

NOAELs (no observed adverse effect levels) for most COPECs could be obtained from the available literature. When a NOAEL could not be identified, the LOAEL (lowest observed adverse effect level) (if available) was adjusted to an NOAEL by applying an uncertainty factor of 10. Benchmarks were then adjusted for each receptor (both avian and mammalian).

2.7.2.4 Ecological Risk Characterization

Ecological risk characterization combines the results of the exposure and effects assessments, to characterize the risk to ecological receptors from exposure to COPECs. A simple comparison of concentrations with benchmarks was completed for plants and invertebrates. An HQ method was used to quantify potential risks to wildlife receptors. This method compares maximum exposure point concentrations with appropriate toxicity values to calculate an HQ; HQs were summed for each receptor to calculate an HI. If an HI exceeds 1, then the potential may exist for adverse ecological effects to receptors, and the ecological significance of the HQs comprising the HI is evaluated. Adverse effects to ecological receptors are not automatically presumed when an HQ or HI exceeds 1; however, as the magnitude of the exceedance increases, the probability of adverse effects also increases.

Naturally occurring or background concentrations of COPECs are also considered in interpreting risk calculations. Chemical concentrations that are within the range of naturally occurring background levels are generally not considered to pose an unacceptable ecological risk and are unlikely to warrant a remedial response.

Risks to Plants

Table 2-18 presents a comparison of maximum detected soil concentrations with phytotoxicity benchmarks. None of the SVOCs exceed their respective benchmark values. Maximum concentrations of several inorganics (chromium, lead, selenium, and vanadium) exceed the benchmarks. With the exception of chromium, the benchmarks were exceeded by less than a factor of 10. Average concentrations (Table 2-15) for lead (20 mg/kg) and selenium (0.43 mg/kg) are below benchmarks, but average concentrations of chromium (5.9 mg/kg) and vanadium (6.1 mg/kg) exceed benchmarks. Both average and maximum concentrations of chromium and vanadium are within the range of background concentrations for these analytes (Table 2-19).

Risks to Invertebrates

Table 2-20 presents a comparison of maximum detected soil concentrations and invertebrate benchmarks. With the exception of chromium and manganese, all COPECs are below their respective benchmarks. The average concentrations of both of these inorganics are below benchmarks. Although individual invertebrates at the location where the maximum concentration was detected could potentially be adversely impacted, the limited area represented by this location and the average concentrations that represent a more likely exposure concentration suggest that invertebrate populations as a whole at the site are not likely to be adversely affected.

Risks to Terrestrial Wildlife

For terrestrial wildlife receptors (i.e., white-footed mouse, short-tailed shrew, upland sandpiper, American robin, and eastern box turtle), risks were evaluated by comparing

estimated doses with toxicity benchmarks. Table 2-21 summarizes the estimated hazard indices for each receptor, based on a comparison to both NOAEL and LOAEL benchmarks.

For the white-footed mouse and box turtle, NOAEL-based HIs are below 1, indicating that these receptors are not at risk from exposure to surface soil COPECs. An HI of 3.26 was estimated for the short-tailed shrew. The primary risk driver is selenium with a NOAEL-based HQ of 1.7; all other HQs are below 1 for this receptor. For the American robin, a NOAEL-based HI of 11.8 was estimated. The primary risk drivers for the robin are chromium, lead, selenium, and zinc.

An evaluation of HIs and HQs calculated based on LOAELs provides additional information regarding the likelihood or magnitude of potential risks. LOAELs represent the lowest effect dose reported, and therefore, estimated doses that are below LOAELs are generally considered unlikely to pose an unacceptable risk. Further evaluation of the short-tailed shrew, upland sandpiper, and American robin using LOAELs resulted in HIs below 1 for all receptors. Given that the risk drivers are inorganics that are present at levels consistent with background levels, and that the LOAEL-based HIs are all below 1, risks are not elevated above typical background conditions, and therefore, additional evaluation or remedial response is not warranted.

2.7.2.5 Ecological Risk Assessment Conclusions

The ERA evaluated potential risks to plants, invertebrates, and terrestrial wildlife receptors associated with possible exposures to COPECs in surface soil at the FS-2 study area.

Plants and Invertebrates

Although the ecological risk assessment showed that maximum concentrations of some inorganics exceeded the benchmarks for phytotoxicity and invertebrates, adverse effects to the community structure of both plants and invertebrates are unlikely due to the

concentration of the inorganics being within the range of urban background concentrations. Inorganics with maximum concentrations that exceeded plant or invertebrate benchmarks included chromium, lead, manganese, selenium, and vanadium. With the exception of selenium (detected in two samples), concentrations of all inorganics were consistent with the urban background concentrations (Table 2-19). The food source of herbivores and omnivores is not likely to be affected, due to the abundant foraging areas nearby. Therefore, no further remedial action for site soils is recommended.

Terrestrial Wildlife

HQs for four inorganic COPECs were greater than 1 for the American robin and the shrew when evaluated with NOAEL benchmarks; however, when evaluated with LOAEL benchmarks, the HQs for these inorganics were below 1. Adverse effects are not likely due to the generally low concentration of the COPECs. Inorganics with maximum concentrations that exceeded terrestrial wildlife screening values included chromium, lead, selenium, and zinc. With the exception of selenium (detected in two samples), concentrations of all inorganics were consistent with the urban background concentrations (Table 2-19). Because concentrations of the COPECs are all well within the range of urban background concentrations, risks associated with the site are negligible. Therefore, no further remedial action for site soils is recommended.

2.8 DOCUMENTATION OF SIGNIFICANT CHANGES

AFCEE prepared a Proposed Plan for AOC FS-2 (AFCEE 2001a). The Proposed Plan described AFCEE's proposal to pursue no further action at AOC FS-2. AFCEE reviewed all formal comments received during the public comment period and determined that no significant changes to the remedy, as originally identified in the Proposed Plan, were necessary.

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