

0/17/03

CAFB

Documentation of Environmental Indicator Determination

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: Cannon Air Force Base
Facility Address: 100 S. DL Ingram Blvd Suite 108
Cannon AFB, New Mexico 88103-5214
Facility EPA ID No.: EPA ID No. NM7572124454

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC), been considered in this EI determination?

- YES If yes - check here and continue with #2 below. (See Attached CAFB CA750 Support Table)
If no - re-evaluate existing data, or
If data are not available, skip to #8 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EIs developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EIs are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRAs). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated groundwater and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determination status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is groundwater known or reasonably suspected to be "contaminated" above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

- If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.
NO If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."
If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): NO GROUND WATER CONTAMINATION PRESENTLY DETECTED AT CONCENTRATIONS THAT EXCEED NEW MEXICO'S GROUND WATER PROTECTION STANDARDS. SEE ATTACHED CAFB CA750 SUPPORT DOCUMENT FOR REFERENCES.

Footnotes:

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"² as defined by the monitoring locations designated at the time of this determination)?

_____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"².

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"²) - skip to #8 and enter "NO" status code, after providing an explanation.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): _____

² "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface water bodies.

_____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): _____

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be "**insignificant**" (i.e., the maximum concentration³ of each contaminant discharging into surface water is less than 10 times the appropriate groundwater "level," and there are no other conditions (e.g., the nature or number of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments or eco-systems at these concentrations)?

_____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration³ of key contaminants discharged above their

groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgment/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments or eco-system.

_____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration³ of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations³ greater than 100 times the appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s): _____

³ As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented⁴)?

_____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR 2) providing or referencing an interim-assessment,⁵ appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialist(s), including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

_____ If no - (the discharge of "contaminated" groundwater cannot be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments and/or eco-systems.

_____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s): _____

⁴ Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

⁵ The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

_____ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

_____ If no - enter "NO" status code in #8.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s): _____

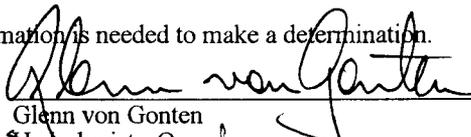
8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

YE YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Cannon AFB facility, EPA ID No. EPA ID No. NM7572124454 located at Curry County, New Mexico. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater." This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

_____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

_____ IN - More information is needed to make a determination.

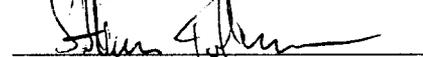
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Locations where References may be found:

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CANNON AFB CA750 SUPPORT DOCUMENT
EPA ID No. NM7572124454

CA 750 Q2: Is ground water known or reasonably suspected to be “contaminated” above appropriately protective “levels” (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

SWMU 1: OWS 119: UST (375-gallon) used to recover oily wash generated by aircraft maintenance operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 2: Recovered Tank 108: UST (2000-gallon) used to collect recovered diesel fuel from SWMU 3.

- SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.

Refs: 114

SWMU 3: OWS 108: UST (500 gallon) used to recover diesel fuel from washdown operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 4: Recovered Tank 121: UST (2000 gallon) used to collect recovered diesel fuel from SWMU 5.

- SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.

Refs: 114

SWMU 5: OWS 121: UST (500 gallon) used to recover diesel fuel from washdown operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 6: POL Tank 129: UST (2000 gallon) used to collect recovered diesel fuel from SWMU 7.

- SWMU 6 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 6.

Refs: 114

SWMU 7: OWS 129: UST (500 gallon) used to recover diesel fuel from washdown operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 7.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 8: OWS 165: UST (600 gallon) used to recover Mirachem from aircraft cleaning operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 8.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 9: Aircraft Washrack Drain system: This unit is a concrete washrack used in aircraft cleaning operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 9.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 10: POL Tank 170: UST (2000 gallon) used to collect recovered diesel fuel from SWMU 11.

- SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.

Refs: 114

SWMU 11: OWS 170: UST (500 gallon) used to recover diesel fuel from washdown operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 11.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 16: OWS 680: UST (500 gallon) used to recover washdown from aircraft cleaning operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 16.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 31: AGE Maintenance Shop Pad: This SWMU is a concrete apron (25 ft by 500 ft) which is exposed to washdown water and spilled oil and lubricants.

- Ground water was not investigated because the depth to ground water is greater than 250 feet.

Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 32a: OWS 186 (#1): UST (600 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 32a.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 33b: OWS 186 (#2): UST (600 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 32b.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 34: AGE Drainage Ditch: Unlined drainage ditch (12 ft by 1 ft by 1200 ft) which receives runoff from SWMU 31.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 33.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 36: AOC 36 Auto Body Shop/Building 214 Parking Lot.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 36.

Refs: 114

SWMU 38: OWS 194: UST (200 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 38.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 39: OWS 195: UST (200 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 39.

Refs: 25, 34, 36, 42, 51, 65, 73, 81, 95, 117

SWMU 46: OWS 196: UST (200 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater

than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 46.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 47: OWS 494: UST (unknown capacity).

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 47.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 48a: Underground Waste Oil Tank: UST (20,000 gallon) which was used from 1941 to 1985 to store waste oils, spent solvents, paint thinners, recovered fuels, engine oil, PD-680 (Type II), hydraulic fluid, and Turco cold stripper was removed in 1988 and covered with asphalt.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 48a.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 48b: Above Ground Overflow Capacity Tank: AST (2000 gallon) which provided overflow capacity for the adjacent UST (SWMU 48a). This SWMU was active from 1941 to 1985 and was removed in 1992. Site is covered with asphalt.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 48b.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 49: Inactive POL Storage Tank 4028a: UST (20,000 gallon) which held used oil. Inactive since 1985.

- SWMU 49 does not exist and is apparently a duplicate of SWMU 48a.

Refs: 114

SWMU 50: Inactive POL Storage Tank 4028b UST: (20,000 gallon) which held used oil.

- SWMU 50 does not exist and is apparently a duplicate of SWMU 48a.

Refs: 114

SWMU 51: OWS 375: Tank of unknown capacity and history.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 51.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 55: Lead Acid Battery Accumulation Point: Storage area for batteries. Site is covered with asphalt.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being

transported significantly in a vertical direction beneath SWMU 55.

Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 57: OWS 379: UST (5000 gallon) which is used to recover oil from washdown operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 57.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 61: OWS 5077a UST: (760 gallon) which is used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 61.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 62: OWS 5077b UST: (760 gallon) which is used to recover washdown material.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 62.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 63: OWS 5077c UST: (1,675 gallon) used to recover washdown materials.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 63.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 70: OWS and Leach Field 326: UST (20,000 gallon) which is used to recover oily material prior to discharge to a leaching field.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 70.

- Bioventing system in place for residual soil contamination source reduction.

Refs: 17, 27, 35, 37, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 71: Recovered JP-4 Fuel Tank 390: UST (2000 gallon) which is used to collect recovered JP-4 from SWMU 72.

- SWMU 71 was removed in April 1991 and replaced with a 2,000-gallon steel OWS enclosed in a concrete vault. Soil samples were analyzed for BTEX and TPH, but were not detected.

- SWMU 71 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 71.

Refs: 114

SWMU 72: OWS 390: UST (2000 gallon) which is used to recover waste JP-4.
• SWMU 72 does not exist and is apparently a duplicate of SWMU 71.
Refs: 114

SWMU 74: Landfill 1: Inactive 4 acre landfill which when in operation, received domestic solid wastes and shop wastes including oils and solvents, paint strippers and thinners, paint, pesticide containers, cans, and drums. Operations ceased at this Landfill in 1946.
• Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 74.
Refs: 23, 63, 67, 74, 83, 97

SWMU 75: Sanitary Sewage Lift Station Overflow Pit: Unlined surface impoundment (100 ft by 600 ft by 3 ft) and when in use, served to contain sewage overflow.
• SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.
Refs: 114

SWMU 76: Sludge Weathering Pit: Unlined, shallow surface impoundment (25 ft by 25 ft) used to weather fuel tank sludges. Inactive since 1980.
• Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 76.
Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 77: Civil Engineering Container Storage Area: Container storage area (100 ft by 200 ft) which was used to store 55-gallon drums; waste materials stored in drums are unknown. Presently Implementing Corrective Measures.
• Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 77.
Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 78: Fire Department Training Area 1: Unlined open burning area (100 ft in diameter) used during fire fighting training exercises; inactive since 1968.
• Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 78.
Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 79: UST (2000 gallon) used to collect and store recovered JP-4.
• SWMU 79 cannot be located or does not exist.
Refs: 114

SWMU 81: Solvent Disposal Site: Inactive surface impoundment believed to have been used to dispose of TCE.

- SWMU 81 cannot be located or does not exist.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 82: Landfill 2: Unlined, inactive Landfill (4 acres) which received domestic and industrial solid waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticide containers, cans, and drums.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 82.

Refs: 20, 23, 63

SWMU 83: Concrete sump (7 feet by 8 inches by 5 inches).

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 83.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 85: Stormwater Collection Point: Playa used as surface impoundment (9 acres) used to receive stormwater runoff and fuel spills.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 9, 63, 114

SWMU 86: Engine Test Cell: Enclosed tank (50 ft by 10 ft by 20 ft tall) used to collect washdown material. Part of SD-11, which includes SWMUs 86-90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 66, 74, 77, 100, 109, 112, 116

SWMU 87: Former Overflow Pit: Unlined surface impoundment (6-8 ft in diameter) which collected wash water. Part of SD-11, which includes SWMUs 86-90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 66, 74, 77, 100, 109, 112, 116

SWMU 88: Former Leaching Field: Leaching field (10,000 SF) that received washdown wastewaters from SWMU 86. Part of SD-11, which includes SWMUs 86-90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 66, 74, 77, 100, 109, 112, 116

SWMU 89: Evaporation Pond: Concrete impoundment (60 ft by 60 ft) used to evaporate washwater. Part of SD-11, which includes SWMUs 86-90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 66, 74, 77, 100, 109, 112, 116

SWMU 90: OWS 5114: UST (100 gallon) used to recover JP-4 fuel. Part of SD-11, which includes SWMUs 86-90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 85.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 66, 74, 77, 100, 109, 112, 116

SWMU 91: Recovered Fuel Tank 5114: AST (5000 gallon) used to collect recovered JP-4 from SWMU 90.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 91.

Refs: 114

SWMU 92: OWS 5120: UST (100 gallon) used to recover washdown material.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 92.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 93: OWS 5121: UST (100 gallon) used to recover washdown materials.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 93.

Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 94: OWS 5144: UST (100 gallon) used to recover washdown materials.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 94.

Refs: 17, 27, 35, 38, 40, 51, 65, 73, 81, 95, 117

SWMU 95: NE Stormwater Drainage Area. Open field which receives water from SWMUs 38, 39, & 46 and runoff water from the runways and storm water drains.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being

transported significantly in a vertical direction beneath SWMU 95.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 96: Old Entomology Rinse Area. Open pit (3 ft by 3 ft by 2 ft deep) which received decon rinse waters from pesticide sprayers and containers.

- Analysis of ground water for pesticides and PCBs indicated no impact. Barium, chromium, copper, lead, vanadium, and zinc were detected at concentrations less than the corresponding MCLs.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 97: Landfill 25: Concrete rubble pile.

- Chromium and nickel exceed the MCLs at SWMU 97 in 1997 only. The source of the problem was a stainless steel screen in the well which is being attacked by ground water leading to the release of dissolved metals in this well. The problematic well was plugged and abandoned in 2001 and replaced with a new well.

- Long term ground water monitoring program indicates that there has been no release to ground water from SWMU 97.

Refs: 26, 33, 48, 53, 59, 70, 102, 103, 122, 127

SWMU 98: Sanitary Sewage Line: Sewer used to collect sanitary and industrial wastewater.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 98.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 101: Wastewater Treatment System - Lagoons: Two unlined wastewater treatment unit (WWTU) surface impoundments (32 acres). Presently Implementing Corrective Measures.

- A long term ground water monitoring program indicates that there has been no release to ground water from SWMU 101.
- The concentration of nitrate has historically exceeded the Maximum Contaminant Levels (MCLs) until SWMU 101 was closed in 1998. Nitrate concentrations dropped below the MCLs in 1999.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 119, 126, 129

SWMU 102: Wastewater Treatment Effluent Discharge Pipe: Discharge pipe from wastewater treatment unit.

- A long term ground water monitoring program indicates that there has been no release to ground water from SWMU 102.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 103: Wastewater Playa Lake: Natural land depression (13 acres) which receives stormwater discharge and waste solvents from SWMU 9.

- The ground water beneath SWMU 103 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 103.

Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 104: Landfill 4: Inactive, unlined Landfill (7 acres) which received domestic and industrial sold waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticides, cans, and drums.

- Long term ground water monitoring program indicates that there has been no release to ground water from SWMU 104.

Refs: 16, 29, 31, 44, 47, 60, 63, 68, 104, 115

SWMU 105: Landfill 3: Inactive, unlined Landfill (7 acres) which received domestic and industrial sold waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticides, cans, and drums.

- Long term ground water monitoring program indicates that there has been no release to ground water from SWMU 97.

Refs: 16, 22, 29, 32, 39, 45, 47, 60, 63, 68, 115

SWMU 106: Fire Department Training Area 2: Inactive, unlined fire training area (100 ft in diameter) used during fire training exercises.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 106.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 107: Fire Department Training Area 3: Inactive, unlined fire training area (100 ft in diameter) used during fire training exercises.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 107.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63

SWMU 108: Explosive Ordinance Disposal Activities Area: Area (1800 ft in diameter) used for ammunition disposal training operations.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 25, 34, 36, 42, 52, 69, 71, 101, 113

SWMU 109: Fire Department Training Area 4: Inactive, unlined fire training area (400 ft in diameter) used during fire training exercises. Previously used as a fuel truck cleaning area. Part of FTA-4. CMS/CMI Phase.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 10, 13, 14, 19, 21, 24, 54, 58, 63, 80, 84, 87, 89, 91, 94, 108, 128

SWMU 110: Underground Waste Oil Tank 2336: UST (2000 gallon) used to store recovered JP-4 fuel for fire training exercises. Part of FTA-4. CMS/CMI Phase.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 80, 84, 87, 89, 91, 94, 108, 128

SWMU 111: Unlined Pit: Unlined pit used to collect runoff from SWMU 109. Part of FTA-4. CMI Phase

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 80, 84, 87, 89, 91, 94, 108, 128

SWMU 112: OWS 2336: UST used to recover JP-4 fuel from runoff derived during fire training exercises. Part of FTA-4. CMS/CMI Phase.

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 80, 84, 87, 89, 91, 94, 108, 128

SWMU 113: Landfill 5: Landfill (30 acres) which receives general construction debris, domestic and industrial solid waste, including waste oils and solvents, paints, paint removers, paint thinners, pesticides, cans, and drums.

- Chromium concentrations exceeded the MCL at SWMU 113 in 1995; however there have been no further exceedences.
- Barium and lead were detected at concentrations less than the corresponding MCL. Vanadium was detected at concentrations less than the corresponding USEPA Region VI MSSL.

Refs: 10, 14, 19, 21, 24, 54, 55, 63, 72, 78, 107

SWMU 124: UST 1: UST used to store diesel oil. Reported to have been filled with sand.

- SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.

Refs: 114

SWMU 125: UST 2: UST used to store diesel oil.

- SWMU 125 cannot be located; therefore, it probably never existed.

Refs: 114

SWMU 126: UST 3: UST used to store diesel oil. SWMU 126 was removed when Building 163 was demolished in accordance NMED UST regulations.

- SWMU 124 was never investigated; therefore, no data exists to demonstrate that there was a release from SWMU 124.
- SWMU 124 was removed following NMED UST regulations

Refs: 114

SWMU 127: OWS Near Tank 4095 (#1) & Leach field: UST used to recover washdown materials.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath SWMU 127.

Refs: 17, 27, 35, 38, 40, 53, 59, 70, 102, 103

SWMU 128: OWS Near Tank 4095 #2 & Leach Field: UST used to recover washdown materials.

- SWMU 128 does not exist.

Refs: 114

SWMU 129: Waste Oil Storage Facility 244: Formerly known as AOC I

- Ground water was not investigated because the depth to ground water is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath the SWMU.

Refs: 90, 123

AOC A: MOGAS Spill Site: Site of two automobile gasoline spills.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet.

Refs: 114

AOC B: JP-4 Fuel Spill Site: Site of JP-4 fuel spill.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath AOC B.

Refs: 114

AOC C: Blown Capacitor Site. Site of PCB spill.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being transported significantly in a vertical direction beneath AOC C.

- Approximately 6 gallons of oil, believed to contain PCBs, were released and spilled onto the ground. The contaminated soil was excavated, placed in 55-gallon drums, and sent for off-site disposal.

Refs: 114

DP-33: Drum Disposal Pit (not listed on Table A-1) discovered during 1991.

- Approximately 25 buried drums and approximately 610 cubic yards of impacted soils were removed and disposed of offsite.

- Ground water was not investigated because the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants are not being

transported significantly in a vertical direction beneath DP-33.

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