STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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May 10, 2010

3 CES/CEANV
Attn: Mike McCrum
6326 Arctic Warrior Drive
Elmendorf AFB, AK 99506-3240

Re: 2009 Annual Report Monitoring of Compliance Program Sites, Elmendorf Air Force Base (EAFB) dated March 2010

Dear Mr. McCrum:

The Alaska Department of Environmental Conservation (ADEC) has received the document for review and comment on April 15, 2010. ADEC has the following comments on the document.

3.3 ST401 Conclusions and Recommendations Page 3-3
ADEC concurs with the recommendations for ST401: to collect soil samples from this site in 2015 (if funding is available), to determine if all vadose zone soil has been remediated to below cleanup levels. Until soil samples are collected, the in-source well 401WL-02 and the downgradient well 401WL-03 should continue to be sampled annually for gasoline range organics (GRO), diesel range organics (DRO), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds.

4.3 ST402 Conclusions and Recommendations Page 4-3
ADEC concurs with the recommendations for ST402 to continue groundwater sampling both the in-source monitoring well 402WL-02 and downgradient well 402MW-DG annually for GRO, DRO, residual range organics (RRO), BTEX compounds and volatile organic compounds (VOCs). Once groundwater contaminant concentrations are below cleanup levels, soil samples should be collected to determine if all vadose zone soil has been remediated.

5.3 ST403 Conclusions and Recommendations Page 5-4
ADEC concurs with the recommendations for ST403 to continue annual monitoring for DRO and VOCs from wells 403MW-IN and OU5KMW-03. Once groundwater contaminant concentrations are below cleanup levels, soil samples should be collected to determine if all vadose zone soil has been remediated.

6.3 ST407 Conclusions and Recommendations Page 6-3
ADEC concurs with the recommendation for ST407 to be given a cleanup complete designation. In accordance with 18 AAC 75.380, after reviewing the monitoring report

submitted under this section, ADEC has determined that ST407 (CS DB Hazard ID 2032) has been adequately characterized under 18 AAC 75.335 and has achieved the applicable requirements under the site cleanup rules This will serve as ADEC's written determination that the cleanup is complete, subject to a future ADEC determination that the cleanup is not protective of human health, safety, or welfare, or of the environment.

7.3 ST410 Conclusions and Recommendations Page 7-3
ADEC concurs with the recommendations that soil samples be collected again from ST410 in 2013 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 410MW-IN should continue for GRO, DRO and BTEX compounds.

8.3 ST422 Conclusions and Recommendations Page 8-3
ADEC concurs with the recommendations for ST422 to install a new well in a more directly downgradient location of the in-source well, than the current downgradient well. Monitoring wells 422MW-IN and 59WL-35 (or new downgradient well) should continue to be sampled annually for GRO, DRO, and BTEX compounds. Once groundwater contaminant concentrations are below cleanup levels for two consecutive years, soil samples should be collected to determine if all vadose zone soil has been remediated.

9.3 ST424 Conclusions and Recommendations Page 9-3
Due to DRO contamination exceeding the cleanup level in the smear zone at three locations, with a maximum concentration of 4,120 mg/kg, ADEC will grant a cleanup complete with institutional controls status at ST424. In accordance with 18 AAC 75.380, after reviewing the monitoring report submitted under this section, ADEC has determined that ST424 (CS DB Hazard ID 23716) has been adequately characterized under 18 AAC 75.335 and has achieved the applicable requirements under the site cleanup rules This will serve as ADEC's written determination that the cleanup is complete with institutional controls for the residual soil contamination present at the site. This decision is subject to a future ADEC determination that the cleanup and applicable institutional controls are not protective of human health, safety, or welfare, or of the environment. ADEC will, as necessary to ensure protection of human health, safety, or welfare, or of the environment, require the Air Force to conduct additional actions that meet the requirements of the site cleanup rules.

10.3 ST426 Conclusions and Recommendations Page 10-3
ADEC concurs with the recommendations to continue to sample in-source well 44-785-WL-01 annually for DRO at ST426.

12.3 ST507 Conclusions and Recommendations Pages 12-5
ADEC concurs with the recommendations for ST507 to continue monitoring free product annually at monitoring well 43WL-11. As long as free product is present, this well should not be sampled for contaminants. Once free product is no longer present, well 43WL-11 should again be monitored for DRO, GRO, and BTEX compounds annually. The downgradient well 43WL-02 should continue to be monitored for DRO, GRO, and BTEX compounds annually. ADEC also concurs with the recommendation to not install a passive recovery system in well

43WL-11 unless free product levels increase to levels that are technically practicable[1] to recover free product.

13.3 ST509 Conclusions and Recommendations Page 13-3
ADEC concurs with the recommendations that soil samples be collected again from ST509 in 2015 (if funding is available) to determine if contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 509MW-IN should continue for GRO, DRO and BTEX compounds.

14.3 ST510 Conclusions and Recommendations Page 14-3
ADEC concurs with the recommendations for sampling monitoring well SP7/10-01 annually for DRO, GRO, and BTEX compounds at ST510.

15.3 ST516 Conclusions and Recommendations Pages 15-3 and 15-4
ADEC concurs with the recommendations that soil samples be collected again from ST516 in 2015 (if funding is available) to determine if contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 516MW-IN should continue for GRO, DRO, RRO, BTEX compounds, metals and VOCs.

16.3 ST526 Conclusions and Recommendations Page 16-4
ADEC concurs with the recommendation to continue to monitor well 526MW-IN annually for VOCs at ST526.

17.3 ST529 Conclusions and Recommendations Page 17-3
ADEC concurs with the recommendations that soil samples be collected again from ST529 in 2017 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 529MW-IN should continue for DRO.

18.3 ST532 Conclusions and Recommendations Page 18-3
ADEC concurs with the recommendations that soil samples be collected again from ST532 in 2017 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 532MW-IN should continue for DRO.

19.3 ST533 Conclusions and Recommendations Page 19-3
ADEC concurs with the recommendations that soil samples be collected at ST533 again in 2013 to determine if DRO concentrations have been remediated to below cleanup levels.

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[1] 18 AAC 75.990 (93) "practicable" means capable of being designed, constructed, and implemented in a reliable and cost-effective manner, taking into consideration existing technology, site location, and logistics in light of overall project purposes; "practicable" does not include an alternative if the incremental cost of the alternative is substantial and disproportionate to the incremental degree of protection provided by the alternative as compared to another lower cost alternative.

20.3 ST534 Conclusions and Recommendations Page 20-3
ADEC concurs with the recommendations soil samples be collected again (from the location where contaminated soil was discovered in 2007) at ST534 in 2017 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, it is recommended that annual groundwater monitoring for DRO continue at well 534MW-IN to track possible migration of contaminants from the soil to groundwater.

21.3 ST538 Conclusions and Recommendations Page 21-4
ADEC concurs with the recommendations that soil samples be collected again from ST538 in 2015 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, well 538WL-02 should continue to be monitored annually for GRO, DRO, BTEX compounds, and VOCs.

22.3 ST600 Conclusions and Recommendations Page 22-4
ADEC concurs with the recommendations at ST600 that soil sampling be collected again in 2013 to determine if contaminant concentrations have been remediated to below cleanup levels. Annual sampling of DRO from well 703MW-IN should also continue.

24.3 ST703 Conclusions and Recommendations Page 24-4
ADEC concurs with the recommendations that soil sampling be collected again from ST703 in 2013 to determine if contaminant concentrations have been remediated to below cleanup levels. Annual sampling of DRO from well 703MW-IN should also continue.

25.3 SS704 Conclusions and Recommendations Pages 25-3 and 25-4
ADEC concurs with the recommendations at SS704 to continue annual monitoring for GRO, DRO, and BTEX compounds from wells SP7/10-01, SP7/10-04, and W-4.

26.3 ST805/806 Conclusions and Recommendations Page 26-3
ADEC concurs with the recommendations for ST805/806 that soil samples be collected again in 2013 to determine if contaminant concentrations have been remediated to below cleanup levels. Annual groundwater sampling for DRO should continue at the in-source well 805WL-01.

27.3 Building 16716 Conclusions and Recommendations Page 27-3
ADEC concurs with the recommendations that soil samples be collected again from the Building 16716 site in 2015 (if funding is available) to determine if vadose zone soil contaminant concentrations have been remediated to below cleanup levels. Until soil samples are collected, annual groundwater monitoring at well 16716MW-IN should continue for DRO.

28.3 South Apron Spill Conclusions and Recommendations Page 28-3
ADEC concurs with the recommendations for the South Apron Spill site that soil samples be collected in 2013 (if funding is available) to determine if soil at this site no longer has contaminants above cleanup levels. Until soil samples are collected, annual groundwater monitoring at the downgradient well SAWM-02 should continue for GRO, DRO, and BTEX compounds.

29.3 Taxiway-N Conclusions and Recommendations Page 29-4
ADEC concurs with the recommendations for the Taxiway-N site that annual groundwater monitoring should continue at the two wells found to have DRO concentrations above cleanup levels in 2009. Groundwater monitoring wells TWNMW-40 and 48 should continue to be sampled for DRO.

30.3 WRHFF Conclusions and Recommendations Pages 30-3 and 30-4
ADEC concurs with the recommendations for the WRHFF site that soil samples be collected in 2015 (if funding is available) to determine if all vadose zone soil has been remediated to below cleanup levels. Until soil samples are collected, monitoring well WRHFF-01 should continue to be sampled annually for DRO, GRO, and BTEX compounds.

Sincerely,

Louis Howard
Environmental Program Specialist
Federal Facilities Environmental
Restoration