

# STATE OF ALASKA

**SARAH PALIN, GOVERNOR**

**DEPT. OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION AND RESPONSE  
CONTAMINATED SITES PROGRAM**

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File No. 2100.26.211

February 22, 2008

Mr. Dexter Smith  
Rockford Corporation  
P.O. Box 111706  
Anchorage, AK 995011

RE: "Monitor Well Decommissioning Rockford Corporation LUST at 101 E. 92<sup>nd</sup> Ave., Anchorage, AK" Letter Report; Site Closure  
File # L55.38, Event ID# 1321, Reckey # 92270022302

Dear Mr. Smith:

The Contaminated Sites Program (CSP) within the Department of Environmental Conservation (DEC) has reviewed your consultant Montauk Environmental Engineering's (Montauk) document titled "Monitor Well Decommissioning Rockford Corporation LUST at 101 E. 92<sup>nd</sup> Ave., Anchorage, AK" letter report dated January 3, 2008. The report was received by CSP on that date via e-mail from Montauk. The report satisfies our request in my December 17, 2007 e-mail to Mr. Cliff Elsmann of Montauk regarding outstanding issues remaining at the site. The letter report documents the proper decommissioning of the existing three monitor wells on site. DEC has reviewed the file, including the 2008 letter report and the below information, and has determined that the site meets applicable soil and groundwater cleanup levels in 18 AAC 75.341 and 18 AAC 75.345, respectively, as referred to in 18 AAC 78.

## Background

### *Findings Prior to 2002*

According to other reports in the DEC file ("Toklat UST Closures" dated April 20, 1993 by Quest Environmental), the property was contaminated because of release(s) of petroleum (primarily diesel) from the regulated underground storage tanks (USTs) onsite. Two 5,000 gal. USTs were excavated and removed on August 6, 1992 with one having contained diesel and the other unleaded gasoline. Soil was excavated to an area 25 ft. long by 20 ft. wide and 9 ft. in depth. Confirmation samples from the bottom of the pit below where the tanks and dispenser were located ranged up to 337 mg/kg DRO (using EPA 8100 modified), up to 7.15 mg/kg GRO (using EPA 8015 modified), 0.408 mg/kg total BTEX, and benzene up to 0.026 mg/kg. Groundwater was detected at about 6 ft. below ground surface (BGS). Approximately 11 cu. yds. of contaminated soil was excavated, stockpiled and disposed of at the Municipality of Anchorage's Hiland Road landfill facility. On September 26, 1992, a collection gallery was installed by Rockford Corp. near the spill's center to a depth of 10 ft. BGS.

On November 2, 1993, four test borings were advanced to nine feet depth and within 30 ft. of the perimeter of the tank excavation ("Report of Continuing Site Assessment" dated February 25, 1994 by Quest). Two samples were collected from each boring and analyzed in the laboratory. DRO and GRO samples were under current 18 AAC 78 regulation Method 2 applicable cleanup levels (i.e., < 250 mg/kg). However, benzene was detected in two of the eight samples, and both were from Boring #1 (6 ft. BGS and at 9 ft. BGS) and exceed current Method 2 applicable cleanup levels (i.e., the two exceedances were 0.163 mg/kg and 0.153 mg/kg, respectively) using EPA Method 8020.

Three monitoring wells were installed at the site in early November 1993 and were subsequently sampled for DRO, GRO and BTEX. The wells were surveyed on February 7, 1994 and showed that groundwater flowed to the northwest towards a marshy area located about 80 ft. from the former UST and off property north of the property line. DRO exceeded the current 18 AAC 78 Table C cleanup level of 1.5 mg/kg at MW-3 the down-gradient well in the northwest corner of the property (it measured 1.7 mg/L DRO).

A January 13, 1995 submittal in response to a DEC April 8, 1994 letter noted that a drinking well that had been located within 500 ft. of the UST closure was properly abandoned and the facility was now connected to the Municipality of Anchorage public water system; all contaminated soil had been properly disposed of; the collection gallery was installed but no water samples had yet been extracted or any suspected contaminated water generated; the site was contaminated with DRO and proposed further groundwater monitoring. The submittal also theorized that natural attenuation may be working to decrease the contaminant levels at the site.

#### *Findings from the 2002 Investigation*

The November 12, 2003 Montauk report states that one soil sample was collected on October 23, 2002 from a bore hole advanced in the area of Boring #1, which was advanced in November 1993. The laboratory analysis showed that GRO, BTEX constituents, and DRO were non detect. The laboratory practical quantification level (PQL) for the DRO sample of 45.7 mg/kg was well below the applicable Method 2 cleanup level, i.e., 250 mg/kg for DRO.

The report states that the three monitoring wells were sampled on October 23, 2002. DRO was detected above the 1.5 mg/L Table C level in only MW-1 where it measured 1.69 mg/L. DRO was also detected in MW-2 at 0.6 mg/L and in MW-3 at 0.963 mg/L. BTEX constituents were detected only in MW-3 where benzene (0.00264 mg/L), ethylbenzene (0.00212 mg/L) and P&M xylene (0.00218 mg/L) were measured, but all concentrations were below their applicable Table C regulatory levels.

The report further stated that the groundwater sample from MW-1 was reanalyzed for the silica gel analysis method (although it was past its recommended 14 day holding time; the sample was collected on October 23, 2002 and was analyzed on November 19, 2002 for AK102 silica gel analysis). The results of that analysis showed it was below the laboratory practical quantification level of 0.495 mg/L DRO.

The report concluded that:

- The silica gel analysis suggests that a portion perhaps up to 70% of the DRO concentration in MW-1 was due to biogenic interference and that the hypothesis is consistent with the peat saturated condition of the respective aquifer.
- The petroleum detected in MW-1 also may be due to contamination from the nearby seasonally oiled unpaved road as the groundwater is very shallow (3.55 ft. BGS).
- Soil sample 02RYS-004 collected from the spill epicenter at nine ft. BGS was collected from native soil in the saturated zone at the former Boring #1 (i.e., from the November 2, 1993 sampling event).

On December 17, 2003, DEC responded to the November 12, 2003 Montauk report that:

- Based upon previously submitted information in the “Toklat UST Closures” and “Report of Continuing Site Assessment,” and information in Montauk November 12, 2003 submittal, DRO, GRO and BTEX constituents are below current Method 2 cleanup levels.
- DEC requests further information regarding the groundwater at this site prior to it considering issuing a NFRAP letter or approval to decommission the monitoring wells at this site.
- Review of the existing information showed that only two groundwater monitoring events have occurred at this site. This is inadequate to determine whether a trend exists. In addition, there is conflicting information between the two events regarding DRO concentrations. The apparent down-gradient monitoring well MW-3 measured 1.7 mg/L DRO in 1993 and only 0.963 mg/L DRO in 2002, while MW-1 or the up-gradient well showed non detect for DRO in 1993 and 1.69 mg/L DRO in 2002. Also, it appears that the two samples in either 1994 or 2002 may have been switched as the DRO levels (1.7 mg/L and 1.69 mg/L) are comparable to each other between years.
- DEC did not agree with the conclusion within the Montauk report that the DRO detected in MW-1 was due to biogenic interference based upon the silica gel analysis performed. The chromatogram (ID 1027250001 C) for the groundwater sample from MW-1 in the report shows a diesel type chromatographic pattern. Also, the laboratory report states that “The pattern is consistent with a weathered middle distillate.” The reanalysis of the sample from MW-1 using silica gel analysis does not show the same diesel chromatographic pattern (ID 1027860001 SG) that should be present. Also, the laboratory performed a silica gel cleanup of the original sample and the analysis (ID 1027250001 SG) shows the indicative diesel chromatographic pattern. In summary, the 1.69 mg/L DRO reported for the sample is due to a contaminant pattern consistent with diesel and not with biogenic interference.
- As a result, DEC requested: 1) that another groundwater monitoring event occur and the samples be analyzed for BTEX and DRO, 2) copies of the field notes completed by Montauk from the 2002 sampling event be provided including depth to groundwater in each monitoring well; and, 3) information whether any contamination has been

detected or observed in the wetland located to the immediate south of the subject property as the result of the subject spill release.

*Findings from the 2004 Investigation*

In 2004, Montauk replaced monitoring wells (MW) #1 and #3 which were suspected to have had their integrity compromised. Montauk also sampled all three monitoring wells that showed that DRO and BTEX constituents for all wells were well under 18 AAC 75.345 Table C cleanup levels. The maximum contaminant levels were recorded at MW-3 with DRO at 0.699 mg/L (Table C level is 1.5 mg/L), benzene at 1.30 ug/L (Table C level is 5.0 ug/L), ethylbenzene at 1.65 ug/L (Table C level is 700 ug/L) and total xylenes were below detection levels. The adjacent wetland was also inspected and no evidence of petroleum contamination was evident.

*2007 and 2008 Work Activities*

In a letter report dated December 12, 2007, Montauk provided DEC with information it requested in its letter dated April 20, 2006 to address several data gaps. On December 17, 2007, Montauk provided to DEC a completed laboratory checklist as part of its December 12, 2007 submittal. Later on January 17, DEC notified Montauk that it satisfied everything requested in DEC's April 20<sup>th</sup> letter and upon a well decommissioning report, DEC would issue a closure letter. On January 3, 2008, DEC received via e-mail the Montauk letter report documenting the decommissioning of the three monitoring wells on site.

As noted above, DEC has determined that the site has met applicable cleanup levels and that no further action is necessary. Therefore, DEC considers this site as "closed" and will change its Contaminated Sites database to reflect this status.

Please note that if further information becomes available that contamination exists that may be a risk to public health or the environment, DEC may request that you perform further assessment and/or cleanup.

If you have any questions regarding this letter, please do not hesitate to contact me at 269 – 7578.

Sincerely,



Rich Sundet  
CSP Project Manager

cc Pam Post, Attorney General's Office, Anchorage  
Mike Krueger, MOA  
Toklat Corp., Anchorage  
Clifford Elsmann, Montauk Environmental Engineering, Anchorage