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**RUST Rust Environment & Infrastructure Inc.**

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August 19, 1996

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RE: Area Closures Under SRMP  
Former ANC Oakland Facility

Dear Sirs:

Rust Environment & Infrastructure (Rust) has completed the 21st round of quarterly groundwater monitoring at the subject site. This is the fourth round of sampling conducted following approval and implementation of the Sitewide Risk Management Plan (SRMP) in October, 1995. This letter serves as a transmittal of groundwater analytical results from this round of sampling and provides a summary of groundwater quality that has been analyzed since the SRMP was initiated. Based on the results of this past year of monitoring (4 quarterly sampling events), and in conjunction with pre-SRMP historical data, Rust believes that a modification to future SRMP sampling and analytical requirements is now warranted, in accordance with Section 5.4 of the approved SRMP.

The following sections provide discussions of groundwater quality trends for the areas at the site. Recommendations for future groundwater monitoring under the SRMP are provided. A complete SRMP groundwater monitoring report for this latest quarter of monitoring, including the results of Area 3 groundwater mound monitoring, will be submitted to you following the measurement and review of groundwater elevations in September 1996.

Attached Tables 1 through 5 provide a summary of analytical results from the July round of groundwater sampling and also include the results of the previous three rounds, conducted in October 1995, January 1996 and April 1996. Detailed laboratory analytical reports of the results obtained from this quarterly monitoring event will be provided in the September quarterly report. A discussion of analytical results from each area of the site is provided below.



## Area 2 (Table 1)

The concentration of TPHd in upgradient well MW-13 has consistently fluctuated between 200 µg/l and 390 µg/l over the last year. This range is well below the applicable SRMP-Containment Concentration (SRMP-CC) of 500 µg/l. These results are consistent with the first year of data and, in fact, in some instances show a slight improvement over the first year of data (April, 1991 to February, 1992) when the concentration ranged from 180 µg/l to 500 µg/l. Monitoring well TW-1R was installed in the backfill of the Area 2 excavation after soil remediation was completed. The TPHd concentration in this well exceeded SRMP-CC during the first three rounds of monitoring. However, the concentration in this well has steadily decreased over the last three rounds and during this last round the concentration (300 µg/l) was below the SRMP-CC. This trend indicates that a limited volume of contaminants was mobilized from the soil during remediation (excavation) activities which resulted in slightly elevated levels during the early rounds of sampling. However, the recent decreasing trend indicates contaminants are no longer leaching into groundwater and that the levels of any residual petroleum hydrocarbons are naturally attenuating. The TPHd concentration in down gradient well SRMP-1, originally conceived as the Area 2 containment point, has been consistently well below the SRMP-CC during all four quarters of monitoring. The latest (July 9, 1996) concentration (67 µg/l) was the lowest it has been since the well was installed. This further substantiates that contaminant attenuation is occurring in Area 2.

BTEX compounds have been essentially undetected in all three Area 2 wells over the past year. A slight concentration of xylenes (0.62 µg/l) was detected in well TW-1R in January, 1996. This was the only time xylenes have been detected in Area 2 and they were not detected during the last two rounds of sampling and are therefore considered insignificant.

The analysis of filtered samples for lead and zinc revealed analytical results that are consistent with historical data. An elevated zinc concentration, ranging from 3.3 to 5.4 mg/l over the last year in well MW-13, persists on the upgradient side of this area. The level continues to fluctuate at or just below the SRMP-CC of 5 mg/l. A very slight concentration of zinc was detected in TW-1R (0.036 mg/l) and SRMP-1 (0.02 mg/l) during the last round. However, zinc concentrations at down gradient locations are considered insignificant and indicate that there is little, if any, transport in groundwater of this metal. The only detected concentration of lead during the past year was 0.014 mg/l in upgradient well MW-13 during the last round. This level is well below the SRMP-CC of 50 mg/l and considered insignificant.

In summary, SRMP groundwater monitoring conducted in Area 2 over the past year demonstrates that any residual groundwater impacts are being contained: the concentrations in the containment monitoring point (well SRMP-1) have consistently been well below all applicable SRMP-CC's. In addition, the decreasing trend in TPHd concentrations in the source area well (TW-1R) indicate that any residual petroleum hydrocarbons in groundwater are naturally attenuating. Based on this, there is no need to continue groundwater monitoring in Area 2. Therefore, Rust recommends that groundwater monitoring be discontinued in Area 2, and that Alameda County Department of Environmental Health (ACDEH) and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) consider that area closed.

#### **Area 4 (Table 3)**

The concentration of TPH as diesel at well SRMP-3 (76 µg/l) decreased in the latest sample to its lowest level since SRMP monitoring began. TPH as diesel was not detected in wells MW-9R and MW-14R. No other target compounds (BTEX or TPH as gasoline) were detected from Area 4 wells during this round of monitoring.

The concentrations of target compounds in all three Area 4 wells have been either non-detect or detected at concentrations well below the applicable SRMP-CC's during each quarterly monitoring event over the past year. This demonstrates that any residual impacted groundwater is being contained and that this area does not pose a threat to the environment. Based on this, Rust recommends that groundwater monitoring be discontinued in Area 4, and that ACDEH and SFBRWQCB consider that area closed.

#### **RCRA Area (Table 4)**

Analytical results from the sample from well SRMP-4 were consistent with the three previous rounds of data. The concentration of tetrachloroethene, which is not a compound associated with the former RCRA Storage Facilities, was 7.7 µg/l. TPH as mineral spirits, TPH as diesel and lead were not detected. Zinc was detected at a low concentration (0.027 mg/l), consistent with previous results.

Although the concentration of tetrachloroethene continues to persist at or just very slightly above the applicable containment concentration of 5 µg/l, this does not appear to be of much significance. We point out that historical analytical results from a former nearby monitoring well, MW-11, contained low concentrations (3 to 5 µg/l) of tetrachloroethene for four continuous quarters between April, 1991 and February, 1992, when that well was being monitored. Considering that tetrachloroethene was not detected in any soil samples collected beneath the former RCRA storage areas, it appears that its presence at consistently low concentrations in groundwater samples from SRMP-4 and MW-11 reflects a low level background condition.

The analytical results from the past year of monitoring in the RCRA Area demonstrate that the former storage facilities had little, if any impact on groundwater quality. Based on this, Rust recommends that groundwater monitoring be discontinued at well SRMP-4, and that ACDEH and SFBRWQCB consider the RCRA Area closed.

#### **Former Acetone UST Area (Table 5)**

Acetone was not detected in well SRMP-2 for the second consecutive monitoring event. Acetone was detected during the first two quarters of sampling (51 µg/l and 75 µg/l, respectively). However, the prompt dissipation during the last two rounds of sampling indicates that any contaminants that may remain in soil are not leaching into groundwater and that concentrations of contaminants that were in groundwater have completely attenuated. Based on this data, Rust recommends that groundwater monitoring be discontinued in this area, and that ACDEH and SFBRWQCB consider this area closed..

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### Area 3 (Table 2)

Analytical results from Area 3 wells monitored are consistent with historical data. However, at this time there is no proposal to modify future groundwater monitoring requirements in Area 3. Monthly mound height and quarterly groundwater quality monitoring will be continued. It was demonstrated in the previous SRMP report, dated June 13, 1996, that TPH as mineral spirits is present in Area 3, upgradient of the former Building 12 area. Based on this, in the absence of any objections from ACDEH and SFBRWQRust will discontinue future reference to Building 12; quarterly monitoring reports will present groundwater analytical results from well MW-1R under "Area 3 monitoring"; and, Area 3 groundwater samples will no longer be analyzed for TPH as mineral spirits.

In summary, the results of the last round of quarterly groundwater monitoring are generally consistent with previous data for the site. The results indicate that compliance with containment concentrations at the containment monitoring points is being maintained. The data further indicate that Area 2, Area 4, the RCRA Area, and the Former Acetone UST Area pose no significant threat to the environment. Based on these results, Rust recommends that groundwater monitoring be discontinued in these four areas of the site; that Alameda County and the Regional Board grant closure in these areas and approve the closure of the monitoring wells in each of the closed areas. At this time, Rust proposes no changes to the SRMP groundwater monitoring requirements in Area 3. Monthly mound height and quarterly groundwater quality monitoring in Area 3 will be continued.

If you require any additional information, please contact me at 518-437-8373.

Sincerely,



Edward W. Alusow  
Senior Project Manager

### Attachments

cc: R. Rivetna, ANC  
P. Cafferty, Esq., Munger, Tolles  
J. Kessler, HSA  
R. Williams, KMART  
D. Bruegel, Esq., Dickinson, Wright  
R. Creps, PES

**TABLE 1**  
**AMERICAN NATIONAL CAN COMPANY**  
**FORMER OAKLAND, CALIFORNIA, FACILITY**

Summary of Quarterly Ground Water Analytical Results - Area 2

ANALYSIS	6-Oct-95			3-Jan-96			4-Apr-96			9-Jul-96		
	MW-13	TW-1R	SRMP-1	MW-13	TW-1R	SRMP-1	MW-13	TW-1R	SRMP-1	MW-13	TW-1R	SRMP-1
<b><i>TPH as Gasoline</i></b> (EPA Method 8015 Mod)(ug/l)	nd	--	--	--	--	--	--	--	--	nd	nd	nd
<b>BTEX</b> (EPA Method 8020)(ug/l)												
Benzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Xylenes	nd	nd	nd	nd	0.62	nd	nd	nd	nd	nd	nd	nd
<b><i>TPH as Diesel</i></b> (EPA Method 8015 Mod)(ug/l)	340	1100	87	390	1800	150	200	610	150	330	300	67
<b><i>Metals (Unfiltered)</i></b> (EPA Method 6010)(mg/l)												
Lead	3.8	nd	nd	--	--	--	--	--	--	--	--	--
Zinc	16	0.79	0.081	--	--	--	--	--	--	--	--	--
Lead (re-sampled)	0.88	--	--	--	--	--	--	--	--	--	--	--
Zinc (re-sampled)	11	--	--	--	--	--	--	--	--	--	--	--
<b><i>Metals (Filtered)</i></b> (EPA Method 6010)(mg/l)												
Lead	nd	--	--	nd	nd	nd	nd	nd	nd	0.014	nd	nd
Zinc	3.3	--	--	5.1	nd	0.019	4.8	nd	nd	5.4	0.036	0.02

**NOTES:**

--: Indicates compound was not analyzed for.

nd: Indicates compound was not detected at the instrument detection limit.

**TABLE 2**  
**AMERICAN NATIONAL CAN COMPANY**  
**FORMER OAKLAND, CALIFORNIA, FACILITY**

Summary of Quarterly Ground Water Analytical Results - Area 3

ANALYSIS	6-Oct-95					3-Jan-96					4/4-5/1996								3-Jan-96							
	MW-1R	MW-4	MW-6	MW-7	GW-1R	MW-1R	MW-4	MW-6	MW-7	GW-1R	MW-1R	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	GW-1R	GW-2R	MW-1R	MW-3	MW-4	MW-6	MW-7	GW-1R	
<b><i>Volatile Organics</i></b> (EPA Method 8240)(ug/l)																										
Dilution Factor	1.0	2.5	1.0	1.0	5.0	1.0	1.0	1.0	1.0	1.0	1.0	--	--	--	--	1.0	1.0	--	--	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Acetone	nd	nd	nd	nd	nd	nd	nd	nd	nd	52	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
Benzene	21	220	nd	nd	330	5.3	180	nd	nd	330	7.2	--	--	--	--	nd	nd	--	--	9.4	140	350	nd	nd	380	380
Chlorobenzene	50	32	nd	nd	nd	22	31	nd	nd	nd	24	--	--	--	--	nd	nd	--	--	31	4.9	47	nd	nd	2.4	2.4
Chloroethane	nd	nd	nd	nd	nd	nd	7.5	nd	nd	6.1	nd	--	--	--	--	nd	nd	--	--	nd	25	15	nd	nd	nd	nd
1,1-Dichloroethane	3.4	nd	5.6	nd	nd	5.6	nd	18	nd	nd	5.2	--	--	--	--	14	nd	--	--	2.7	14	nd	7.7	nd	2.9	2.9
1,2-Dichloroethane	nd	nd	nd	nd	nd	9.4	nd	nd	nd	nd	12	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	5.4	nd	nd	nd	180	5.5	nd	nd	nd	100	5.5	--	--	--	--	nd	nd	--	--	4.4	8.5	nd	nd	nd	6.6	6.6
trans-1,2-Dichloroethene	nd	nd	nd	nd	14	nd	nd	nd	nd	7.7	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	8.8	8.8
Ethylbenzene	nd	8.2	nd	nd	67	nd	5.8	nd	nd	43	nd	--	--	--	--	nd	nd	--	--	nd	2	18	nd	nd	68	68
2-Hexanone	nd	nd	nd	nd	nd	nd	nd	nd	nd	29	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	6.8	nd	nd	150	nd	6.3	nd	nd	110	nd	--	--	--	--	nd	nd	--	--	nd	7.8	7.8	nd	nd	100	100
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	nd	nd	2.5	nd	nd	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	2.5	nd	nd	nd	640	2.8	nd	nd	nd	460	5.9	--	--	--	--	nd	nd	--	--	3.0	17	nd	nd	nd	380	380
Total Xylenes	4.4	21	nd	nd	270	nd	20	nd	nd	190	3.5	--	--	--	--	nd	nd	--	--	nd	8.5	77	nd	nd	280	280
Total VOCs	86.7	288.0	5.6	nd	1651	50.6	250.6	20.5	nd	1276	63.3	--	--	--	--	14.0	nd	--	--	50.5	227.7	514.8	7.7	nd	1229	1229
<b><i>TPH as gasoline</i></b> (EPA Method 8015 Mod)(ug/l)	240	1400	nd	nd	2900	210	2000	nd	nd	3500	360	--	--	--	--	nd	nd	--	--	190	270	1500	nd	nd	3000	3000
<b><i>TPH as mineral spirits</i></b> (EPA Method 8015 Mod)(ug/l)	520	--	--	--	--	460	--	--	--	--	570	16000	1300	5200	7600	nd	190	18000	14000	--	--	--	--	--	--	--
<b><i>TPH as diesel</i></b> (EPA Method 8015 Mod)(ug/l)	2700	23000	180	500	16000	1800	15000	140	530	43000	1800	--	--	--	--	200	1200	--	--	1600	12000	11000	130	510	42000	42000
<b><i>Semi-Volatile Organics</i></b> (EPA Method 8270)(ug/l)																										
Dilution Factor	1.0	10.0	1.0	1.0	20.0	1.0	1.0	1.0	1.0	1.0	1.0	--	--	--	--	1.0	1.0	--	--	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Bis(2-chloroethyl)ether	5.8	nd	nd	nd	nd	nd	10.0	nd	nd	nd	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	17.0	nd	nd	nd	nd	9.6	17.0	nd	nd	nd	20.0	--	--	--	--	nd	nd	--	--	17	nd	17	nd	nd	11	11
1,4-Dichlorobenzene	14.0	nd	nd	nd	nd	9.9	9.4	nd	nd	nd	19.0	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	nd	nd	nd	nd	1800	nd	nd	nd	nd	1900	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	2200	2200
2-Methylnaphthalene	8.3	nd	nd	nd	nd	nd	21.0	nd	nd	nd	nd	--	--	--	--	nd	nd	--	--	nd	nd	27	nd	nd	nd	nd
2-Methylphenol	nd	nd	nd	nd	nd	nd	nd	nd	nd	64	nd	--	--	--	--	nd	nd	--	--	nd	nd	nd	nd	nd	61	61
Naphthalene	nd	nd	nd	nd	nd	nd	10.0	nd	nd	91	nd	--	--	--	--	nd	nd	--	--	nd	nd	13	nd	nd	85	85
<b><i>PCBs</i></b> (EPA Method 8080)(ug/l)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	nd	nd	--	--	nd	0.64	nd	nd	nd	nd	nd

**NOTES:**

--: Indicates compound was not analyzed for.  
nd: Indicates compound was not detected at the instrument detection limit.

**TABLE 3**  
**AMERICAN NATIONAL CAN COMPANY**  
**FORMER OAKLAND, CALIFORNIA, FACILITY**

**Summary of Quarterly Ground Water Analytical Results - Area 4**

ANALYSIS	6-Oct-95			2-Jan-96			3-Apr-96			9-Jul-96		
	MW-9R	MW-14R	SRMP-3	MW-9R	MW-14R	SRMP-3	MW-9R	MW-14R	SRMP-3	MW-9R	MW-14R	SRMP-3
<b><i>TPH as Gasoline</i></b> (EPA Method 8015 Mod)(ug/l)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
<b><i>BTEX</i></b> (EPA Method 8020)(ug/l)												
Benzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Xylenes	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
<b><i>TPH as Diesel</i></b> (EPA Method 8015 Mod)(ug/l)	60	76	130	nd	nd	130	92	89	280	nd	nd	76
<b><i>NOTES:</i></b>												
- -: Indicates compound was not analyzed for.												
nd: Indicates compound was not detected at the instrument detection limit.												

**TABLE 4**  
**AMERICAN NATIONAL CAN COMPANY**  
**FORMER OAKLAND, CALIFORNIA, FACILITY**

**Summary of Quarterly Ground Water Analytical Results - RCRA Area**

ANALYSIS	6-Oct-95 SRMP-4	3-Jan-96 SRMP-4	3-Apr-96 SRMP-4	9-Jul-96 SRMP-4
<u><i>Volatile Organics</i></u> (EPA Method 8240)(ug/l) Dilution Factor  Tetrachloroethene	1.0	1.0	1.0	1.0
	<b>6.2</b>	<b>5.1</b>	<b>5.1</b>	<b>7.7</b>
<u><i>FUEL FINGERPRINT:</i></u> <u><i>MINERAL SPIRITS</i></u> (EPA Method 8015 Mod)(ug/l)	nd	nd	nd	nd
<u><i>TPH as Diesel</i></u> (EPA Method 8015 Mod)(ug/l)	nd	nd	<b>80</b>	nd
<u><i>Metals (Unfiltered)</i></u> (EPA Method 6010)(mg/l)  Lead Zinc	nd <b>0.13</b>	nd <b>0.011</b>	nd <b>0.013</b>	nd <b>0.027</b>
<p style="text-align: center;"><u><b>NOTES:</b></u></p> <p>--: Indicates compound was not analyzed for.            nd: Indicates compound was not detected at the instrument detection limit.</p>				



**TABLE 5**  
**AMERICAN NATIONAL CAN COMPANY**  
**FORMER OAKLAND, CALIFORNIA, FACILITY**

Summary of Quarterly Ground Water Analytical Results

Former Acetone UST Area

ANALYSIS	6-Oct-95 SRMP-2	3-Jan-96 SRMP-2	3-Apr-96 SRMP-2	9-Jul-96 SRMP-2
<i><b>Volatile Organics</b></i> (EPA Method 8240)(ug/l)				
Dilution Factor	1.0	1.0	1.0	1.0
Acetone	51	75	nd	nd
2-Butanone	nd	14	nd	nd
<p style="text-align: center;"><b><u>NOTES:</u></b></p> <p>--: Indicates compound was not analyzed for.            nd: Indicates compound was not detected at the instrument detection limit.</p>				