

1R - 425-03

APPROVALS

YEAR(S):

2013

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Thursday, September 05, 2013 5:25 PM
To: Hack Conder (hconder@riceswd.com)
Cc: Leking, Geoffrey R, EMNRD; Katie Jones <kjones@riceswd.com> (kjones@riceswd.com);
Laura Pena (lpena@riceswd.com)
Subject: Corrective Action Plan Addendum (1R425-03) Approval - ROC Vacuum K-35-1 Boot Site

**RE: Corrective Action Plan (CAP) Addendum for the Rice Operating Company's
Vacuum K-35-1 Boot Site
Unit Letter K, Section 35, T17S, R35E, NMPM, Lea County, New Mexico
Corrective Action Plan Addendum (1R425-03) Approval**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received the Corrective Action Plan Addendum for the Vacuum K-35-1 Boot Site, dated September 4, 2013, and has conducted a review of the addendum. The addendum indicates that Rice Operating Company (ROC) has met the requirements of 19.15.29 NMAC (Rule 29; formerly, Rule 116) for a remediation plan. Therefore, the OCD hereby conditionally approves the Corrective Action Plan Addendum as proposed for above-referenced site in accordance with 19.15.29 NMAC:

ROC must submit to the OCD an annual report of the corrective actions by April 1st of each respective year.

Please be advised that OCD approval of this addendum does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

Hansen, Edward J., EMNRD

From: Katie Jones <kjones@riceswd.com>
Sent: Wednesday, September 04, 2013 3:29 PM
To: Hansen, Edward J., EMNRD
Cc: Hack Conder; Laura Pena
Subject: ROC - Vacuum K-35-1 (1R425-03) Groundwater Recovery Notification
Attachments: ROC - Vacuum K-35-1 (1R425-03) MW Sampling.pdf

Mr. Hansen,

ROC has been monitoring MW-2, MW-3, and MW-4 semi-annually, according to NMOCD's response to the September 2011 Termination Request. Chloride concentrations in MW-4 have shown a slight increase in chloride concentration from 380 mg/L in June and August 2011 to 650 mg/L in May 2013. Chloride concentrations up-gradient of the site have also increased to 280 mg/L in May 2013. Concentrations down gradient have remained low, staying around 36 mg/L. A plat showing the monitoring well locations along with the recent chloride concentrations is attached. Based on this increase in MW-4, ROC will begin pumping from the existing recovery well (RW-1) and will begin sampling all the wells (MW-1, MW-2, MW-3, MW-4, and RW-1) on a semi-annual (twice a year) basis. An annual report summarizing the monitoring well sampling and groundwater recovery will be submitted to the NMOCD by April 1st. If you have any questions or require any additional information, please contact Hack Conder at (575)631-6432.

Thank you.

Katie Jones
Environmental Project Manager
RICE *Operating Company*

Monitor Well Sampling Data

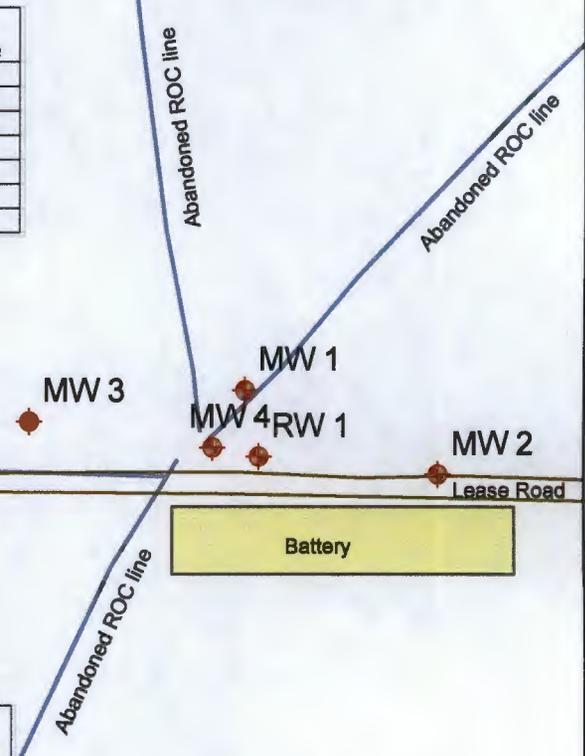
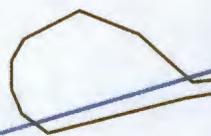
MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
1	57.24	2/16/2011	800	1750	<0.001	<0.001	<0.001	<0.003	68
1	57.15	6/1/2011	396	965	<0.001	<0.001	<0.001	<0.003	69.4
1	57.21	8/30/2011	352	888	<0.001	<0.001	<0.001	<0.003	75.7
1	57.19	12/1/2011	1100	2310	<0.001	<0.001	<0.001	<0.003	76.3

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
2	57.44	2/16/2011	32	407	<0.001	<0.001	<0.001	<0.003	57
2	57.38	6/1/2011	32	383	<0.001	<0.001	<0.001	<0.003	61.6
2	57.41	8/30/2011	32	362	<0.001	<0.001	<0.001	<0.003	59.2
2	57.51	12/1/2011	40	391	<0.001	<0.001	<0.001	<0.003	70.3
2	57.74	5/29/2012	36	434	XX	XX	XX	XX	65.7
2	57.92	11/15/2012	36	389	XX	XX	XX	XX	60.5
2	57.9	5/28/2013	36	424	XX	XX	XX	XX	66.1

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
3	59.24	2/16/2011	128	522	<0.001	<0.001	<0.001	<0.003	63.7
3	59.12	6/1/2011	148	539	<0.001	<0.001	<0.001	<0.003	91.1
3	59.19	8/30/2011	156	560	<0.001	<0.001	<0.001	<0.003	91.7
3	59.2	12/1/2011	176	595	<0.001	<0.001	<0.001	<0.003	92.4
3	59.55	5/29/2012	204	676	XX	XX	XX	XX	71.9
3	59.63	11/15/2012	252	742	XX	XX	XX	XX	91.2
3	59.68	5/28/2013	280	823	XX	XX	XX	XX	81.7

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
4	59.15	2/16/2011	680	1600	<0.001	<0.001	<0.001	<0.003	72
4	59.19	6/1/2011	380	941	<0.001	<0.001	<0.001	<0.003	69.1
4	59.35	8/30/2011	380	908	<0.001	<0.001	<0.001	<0.003	71.8
4	59.32	12/1/2011	700	1470	<0.001	<0.001	<0.001	<0.003	78.3
4	59.64	5/29/2012	610	1560	XX	XX	XX	XX	81.5
4	59.72	11/15/2012	690	1660	XX	XX	XX	XX	80.6
4	59.83	5/28/2013	650	1550	XX	XX	XX	XX	71

RW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
1	59.15	2/16/2011	750	1670	<0.001	<0.001	<0.001	<0.003	71.3
1	59.19	6/1/2011	476	1130	<0.001	<0.001	<0.001	<0.003	60.5
1	59.35	8/30/2011	490	1090	<0.001	<0.001	<0.001	<0.003	63.1
1	59.32	12/1/2011	XX	XX	XX	XX	XX	XX	XX



VACUUM
K-35-1 boot
 Legals: UL/K Sec. 35
 T-17-S R-35-E
 Case #: 1R425-03

Drawing date: 7/31/13
 Drafted by: LS

Vacuum K-35-1

