

**GW - \_\_028\_\_**

**MEETINGS**

**(2)**

## Chavez, Carl J, EMNRD

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**Subject:** Groundwater monitoring - Navajo Refinery  
**Location:** Teleconference Call- Arcadis will provide teleconference phone in number  
  
**Start:** Fri 3/7/2014 10:30 AM  
**End:** Fri 3/7/2014 11:30 AM  
  
**Recurrence:** (none)  
  
**Meeting Status:** Meeting organizer  
  
**Organizer:** Chavez, Carl J, EMNRD  
**Required Attendees:** 'Krueger, Pamela'; Cobrain, Dave, NMENV  
**Optional Attendees:** Robert Combs; Holder, Mike (Michael.Holder@hollyfrontier.com); Turner, Maisha; VonGonten, Glenn, EMNRD; Tsinnajinnie, Leona, NMENV

The New Mexico Oil Conservation Division (OCD) requests the following from the operator subsequent to this morning's meeting:

- 1) Provide OCD and NMED (state agencies) with the status on ground water "Background" determination within 14 days of receipt of this message.
- 2) Within 60-days (or by COB May 7, 2014) of this message, provide an analysis of the ground water in comparison with WQCC water quality standards and background as determined by the operator from MWs within the vicinity of the surface impoundments and Pecos River. If the greater of the WQCC water quality standards and/or "Background" is exceeded, the operator shall propose a remedy (ies) based on the analysis to the state agencies.
- 3) The above could be completed with the submittal of the Surface Impoundments Closure Report submitted to the NMED with copy to the OCD.

Please contact Carl Chavez at (505) 476-3490 if you have questions. Thank you.

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Thanks Carl. We can use the following for the call:

Phone: 855-201-9213  
Code: 785-794-7754

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**From:** Krueger, Pamela [<mailto:pam.krueger@arcadis-us.com>]  
**Sent:** Wednesday, March 05, 2014 2:35 PM  
**To:** Chavez, Carl J, EMNRD  
**Cc:** Robert Combs; Holder, Mike ([Michael.Holder@hollyfrontier.com](mailto:Michael.Holder@hollyfrontier.com)); Turner, Maisha; VonGonten, Glenn, EMNRD; Tsinnajinnie, Leona, NMENV  
**Subject:** RE: Groundwater monitoring - Navajo Refinery

Carl – Would it be possible to schedule a brief conference call to clarify your response, preferably on Friday 3/7/14?

**Pamela R. Krueger** | Senior Project Manager | [pam.krueger@arcadis-us.com](mailto:pam.krueger@arcadis-us.com)

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**From:** Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]  
**Sent:** Wednesday, March 05, 2014 11:01 AM  
**To:** Krueger, Pamela  
**Cc:** Robert Combs; Turner, Maisha; VonGonten, Glenn, EMNRD; Tsinnajinnie, Leona, NMENV  
**Subject:** RE: Groundwater monitoring - Navajo Refinery

Pam:

Good morning. The New Mexico Oil Conservation Division (OCD) has determined that it will not approve the monitoring change requested below.

Thank you.

**Carl J. Chavez, CHMM**

New Mexico Energy, Minerals & Natural Resources Department  
Oil Conservation Division, Environmental Bureau  
1220 South St. Francis Drive, Santa Fe, New Mexico 87505  
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**From:** Krueger, Pamela [<mailto:pam.krueger@arcadis-us.com>]  
**Sent:** Friday, February 21, 2014 4:09 PM  
**To:** Chavez, Carl J, EMNRD  
**Cc:** Robert Combs; Turner, Maisha  
**Subject:** Groundwater monitoring - Navajo Refinery

Carl – On January 29, 2014, the NMED HWB approved Navajo’s 2013 Facility-Wide Groundwater Monitoring Program (2013 FWGMWP), with modifications (see attached). In Section 5.3.2 of the 2013 FWGMWP, Navajo proposed to reduce the sampling frequency from semiannually to annually for 35 monitoring wells and from annually to biennially on 2 monitoring wells. Navajo also proposed to drop one irrigation well from the monitoring program, since the well is out of service and is not owned by Navajo.

NMED HWB approved the request for some of the monitoring wells, denied the request for other monitoring wells, and deferred to OCD on 3 of the monitoring wells. The requested changes and NMED HWB’s responses are summarized below. Navajo respectfully requests that OCD provide concurrence or comment on the requested changes no later than March 7, 2014 so that these changes may be incorporated into the spring 2014 monitoring event.

Navajo proposes to reduce the frequency of sample collection from semiannually to annually for the following wells for the reasons given in parentheses:

- KWB-9 (no COC impacts, beyond sentinel wells, landowner currently denying access)

*NMED concurred*

- MW-8 (no hydrocarbon impacts, declining arsenic concentrations, in cluster of wells on semiannual monitoring list)  
*NMED concurred*
- MW-18 (stable to declining COC trends, not in sentinel location)  
*NMED concurred*
- MW-22A (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-23 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-28 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-41 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED concurred*
- MW-42 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED concurred*
- MW-43 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-49 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-61 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-62 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-66 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-71 (in cluster of wells and beyond dissolved phase plume)  
*NMED concurred*
- MW-72 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED concurred*
- MW-73 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED concurred*
- MW-74 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-75 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-76 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-77 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-79 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-83 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-84 (stable COC concentrations interior to plume, not in sentinel location)  
*NMED denied – must remain at semiannual frequency*
- MW-93 (stable COC concentrations interior to plume, not in sentinel location)

*NMED denied – must remain at seminannual frequency*

- MW-98 (stable COC concentrations interior to plume, not in sentinel location)

*NMED denied – must remain at seminannual frequency*

- MW-101 (stable COC concentrations interior to plume, not in sentinel location)

*NMED denied – must remain at seminannual frequency*

- MW-104 (stable COC concentrations interior to plume, not in sentinel location)

*NMED denied – must remain at seminannual frequency*

- MW-106 (stable COC concentrations interior to plume, not in sentinel location)

*NMED denied – must remain at seminannual frequency*

- NP-1 (stable to declining COC concentrations, downgradient of sentinel well)

*NMED denied – must remain at seminannual frequency*

- OCD-1R (stable COC concentrations outside and up- to cross-gradient of plume)

*NMED denied – must remain at seminannual frequency*

- OCD-2A (stable COC concentrations outside and up- to cross-gradient of plume)

*NMED concurred, but deferred to OCD approval of same*

- OCD-3 (stable COC concentrations outside and up- to cross-gradient of plume)

*NMED concurred, but deferred to OCD approval of same*

- OCD-4 (stable COC concentrations outside and up- to cross-gradient of plume)

*NMED concurred, but deferred to OCD approval of same*

- RA-1227 (no COC impacts, beyond sentinel wells, landowner currently denying access)

*NMED concurred*

- RA-3156 (no COC impacts, beyond sentinel wells, landowner currently denying access)

*NMED concurred*

Navajo proposes to reduce the frequency of sample collection from annually to biennially for the following wells:

- NP-5 (no COC impacts, cross-gradient outside of plume, not in sentinel location)

*NMED concurred*

- NP-6 (in cluster of wells and beyond dissolved phase plume)

*NMED concurred*

Navajo does not own irrigation well RA-314 and the well owner has removed the pump and electrical service to this well. As a result, Navajo does not have access to the well to collect a sample and the well is being dropped from the monitoring program.

*NMED concurred*

**Pamela R. Krueger** | Senior Project Manager | [pam.krueger@arcadis-us.com](mailto:pam.krueger@arcadis-us.com)

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