

**GW - 114**

**APPROVALS**

**YEAR(S)**

**2013**

## Hansen, Edward J., EMNRD

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Wednesday, September 18, 2013 1:52 PM  
**To:** 'Virgilio Cocianni'  
**Cc:** VonGonten, Glenn, EMNRD; Strunk Jr, Jim (JStrunkJr@dow.com); Cathy Barnett (Cathy.Barnett@CH2M.com); Jennifer.Laggan@CH2M.com; Jeffrey.Minchak@CH2M.com  
**Subject:** Discharge Permit (GW-114) Work Plan (GW Monitoring Program) Amendment Approval - Schlumberger Oilfield Services Facility - Artesia

**RE: Work Plan Amendment  
for the Schlumberger Oilfield Services'  
Schlumberger Oilfield Services Facility - Artesia  
507 E. Richey Ave., Artesia, New Mexico  
Discharge Permit (GW-114) Work Plan (GW Monitoring Program) Amendment Approval**

Dear Mr. Cocianni:

The Oil Conservation Division (OCD) has received the Work Plan Amendment for the Schlumberger Oilfield Services Facility - Artesia, dated September 17, 2013. The proposed amendment, submitted for the above-referenced site, indicates that the Schlumberger Oilfield Services (Schlumberger) is substantially complying with the requirements of 20.6.2 NMAC [Water Quality Control Commission (WQCC) Regulations]. Therefore, the OCD conditionally approves the amendment to the work plan:

Schlumberger shall continue to monitoring ground water at MW-1 and MW-20 at least annually.

Schlumberger may discontinue monitoring ground water at MW-19.

Schlumberger shall use a cement grout with 1% to 3% bentonite and a 3-foot cap of cement to the surface when plugging the monitoring wells.

Schlumberger shall submit to OCD a plugging report within 180 days.

Please be advised that OCD approval of this amendment 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.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, August 22, 2013 4:44 PM  
**To:** cocianni-v@slb.com  
**Cc:** VonGonten, Glenn, EMNRD; 'Strunk Jr, Jim (JStrunkJr@dow.com)'; 'Cathy Barnett (Cathy.Barnett@CH2M.com)'; 'Jeffrey.Minchak@CH2M.com'  
**Subject:** Discharge Permit (GW-114) Work Plan (GW Remediation Program) Amendment Approval - Schlumberger Oilfield Services Facility - Artesia

**RE: Work Plan Amendment  
for the Schlumberger Oilfield Services'  
Schlumberger Oilfield Services Facility - Artesia  
507 E. Richey Ave., Artesia, New Mexico  
Discharge Permit (GW-114) Work Plan (GW Remediation Program) Amendment Approval**

Dear Mr. Cocianni:

The Oil Conservation Division (OCD) has received the Work Plan Amendment for the Schlumberger Oilfield Services Facility - Artesia, dated August 15, 2013. The proposed amendment, submitted for the above-referenced site, indicates that the Schlumberger Oilfield Services (Schlumberger) is substantially complying with the requirements of 20.6.2 NMAC [Water Quality Control Commission (WQCC) Regulations]. Therefore, the OCD conditionally approves the amendment to the work plan:

Schlumberger shall provide to the OCD for approval a demonstration that the WQCC standards for Manganese (0.2 mg/L) or Sulfate (600.0 mg/L) will not be exceeded in ground water at the site prior to initiation of the ISCO treatment. Also, Schlumberger must monitor for Manganese or Sulfate in ground water depending on the ISCO substrate used for the treatment.

If any other substrate other than permanganate or persulfate is proposed to be used, Schlumberger must obtain OCD approval prior to such use.

Please be advised that OCD approval of this amendment 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.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

## **Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, August 22, 2013 4:39 PM  
**To:** cocianni-v@slb.com  
**Cc:** VonGonten, Glenn, EMNRD; 'Strunk Jr, Jim (JStrunkJr@dow.com)'; 'Cathy Barnett (Cathy.Barnett@CH2M.com)'; 'Jeffrey.Minchak@CH2M.com'  
**Subject:** Discharge Permit (GW-114) Work Plan (Soil Investigation and Soil Vapor Extraction System Closure) Amendment Approval - Schlumberger Oilfield Services Facility - Artesia

**RE: Work Plan Amendment  
for the Schlumberger Oilfield Services'  
Schlumberger Oilfield Services Facility - Artesia  
507 E. Richey Ave., Artesia, New Mexico  
Discharge Permit (GW-114) Work Plan (Soil Investigation and Soil Vapor Extraction System Closure)  
Amendment Approval**

Dear Mr. Cocianni:

The Oil Conservation Division (OCD) has received the Work Plan Amendment for the Schlumberger Oilfield Services Facility - Artesia, dated August 15, 2013. The proposed amendment, submitted for the above-referenced site, indicates that the Schlumberger Oilfield Services (Schlumberger) is substantially complying with the requirements of 20.6.2 NMAC [Water Quality Control Commission (WQCC) Regulations]. Therefore, the OCD conditionally approves the amendment to the work plan:

Schlumberger shall submit to the OCD for approval a soil investigation report and soil remediation plan prior to the Soil Vapor Extraction System Closure.

Please be advised that OCD approval of this amendment 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.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

## Hansen, Edward J., EMNRD

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Monday, July 15, 2013 2:54 PM  
**To:** 'Virgilio Cocianni'  
**Cc:** VonGonten, Glenn, EMNRD; Strunk Jr, Jim (JStrunkJr@dow.com); Cathy Barnett (Cathy.Barnett@CH2M.com); Jeffrey.Minchak@CH2M.com  
**Subject:** Discharge Permit (GW-114) Work Plan Amendment Approval - Schlumberger Oilfield Services Facility - Artesia

**RE: Work Plan Amendment  
for the Schlumberger Oilfield Services'  
Schlumberger Oilfield Services Facility - Artesia  
507 E. Richey Ave., Artesia, New Mexico  
Discharge Permit (GW-114) Work Plan Amendment Approval**

Dear Mr. Cocianni:

The New Mexico Oil Conservation Division (OCD) has received the Work Plan Amendment for the Schlumberger Oilfield Services Facility - Artesia, dated July 9, 2013. The proposed amendment, submitted for the above-referenced site, indicates that the Schlumberger Oilfield Services (Schlumberger) is substantially complying with the requirements of 20.6.2 NMAC [Water Quality Control Commission (WQCC) Regulations]. Therefore, the OCD conditionally approves the amendment to the work plan:

Schlumberger shall continue to submit an annual report to the OCD by April 1 of the following year.

Please be advised that OCD approval of this amendment 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.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

P.S.: The OCD has reviewed the Meeting Minutes of June 18, 2013. The OCD has two amendments to the meeting minutes:

- 1) The groundwater remediation for the site (including any investigation or source control) will continue under the discharge permit; i.e., the WQCC regulations, 20.6.2 NMAC (*not NMAC 19.15.29 as stated in the minutes*).
- 2) The discharge permit fee for remediation will be \$2,600 (*not \$2,400 as stated in the minutes*).

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**From:** Virgilio Cocianni [<mailto:cocianni-v@slb.com>]  
**Sent:** Tuesday, July 09, 2013 6:44 AM  
**To:** Hansen, Edward J., EMNRD; VonGonten, Glenn, EMNRD

**Cc:** Strunk Jr, Jim ([JStrunkJr@dow.com](mailto:JStrunkJr@dow.com)); Cathy Barnett ([Cathy.Barnett@CH2M.com](mailto:Cathy.Barnett@CH2M.com)); [Jeffrey.Minchak@CH2M.com](mailto:Jeffrey.Minchak@CH2M.com)  
**Subject:** Artesia Meeting Notes

Good morning, Ed and Glenn.

Please find attached the minutes of the meeting we held in your offices on June 18<sup>th</sup>. Forgive us for the delay in getting these minutes to you. If you have any concerns about the content, please let me know.

As we discussed during the meeting, STC and Dow formally request to cease the quarterly reporting requirement and to continue only with the annual report. With your approval, the Second Quarter Monitoring Results report that you are about to receive will be the last quarterly report.

Have a wonderful week.

Best regards,

Vic.

Vic Cocianni  
Schlumberger Remediation Manager  
Phone: +1-281-285-4747

"Courage doesn't always roar. Sometimes courage is the little voice at the end of the day that says I'll try again tomorrow." Mary Ann Radmacher.  
(Please continue to be patient with me, She is still making me).

## Hansen, Edward J., EMNRD

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**From:** Virgilio Cocianni <cocianni-v@slb.com>  
**Sent:** Tuesday, July 09, 2013 6:44 AM  
**To:** Hansen, Edward J., EMNRD; VonGonten, Glenn, EMNRD  
**Cc:** Strunk Jr, Jim (JStrunkJr@dow.com); Cathy Barnett (Cathy.Barnett@CH2M.com); Jeffrey.Minchak@CH2M.com  
**Subject:** Artesia Meeting Notes  
**Attachments:** NMOCD\_Meeting\_Minutes\_06-18-2013.pdf

Good morning, Ed and Glenn.

Please find attached the minutes of the meeting we held in your offices on June 18<sup>th</sup>. Forgive us for the delay in getting these minutes to you. If you have any concerns about the content, please let me know.

As we discussed during the meeting, STC and Dow formally request to cease the quarterly reporting requirement and to continue only with the annual report. With your approval, the Second Quarter Monitoring Results report that you are about to receive will be the last quarterly report.

Have a wonderful week.

Best regards,  
Vic.

Vic Cocianni  
Schlumberger Remediation Manager  
Phone: +1-281-285-4747

" Courage doesn't always roar. Sometimes courage is the little voice at the end of the day that says I'll try again tomorrow." Mary Ann Radmacher.  
(Please continue to be patient with me, She is still making me).

## Dowell Schlumberger Artesia, New Mexico, Site Discussion New Mexico Oil Conservation Division Offices Santa Fe, New Mexico; June 18, 2013

**ATTENDEES:** Glenn Von Gonten, New Mexico Oil Conservation District (NMOCD)  
Ed Hansen, NMOCD  
Virgilio Cocianni, Schlumberger Technology Corporation  
Cathy Barnett, CH2M HILL  
Jeff Minchak, CH2M HILL

**COPY TO:** Jim Strunk, The Dow Chemical Company

**PREPARED BY:** CH2M HILL

**DATE:** July 9, 2013

Initial introductions were made and it was understood that at the Artesia site Mr. Von Gonten is responsible for the Discharge Permit renewal and Mr. Hansen is responsible for the environmental investigation and remediation activities. Mr. Cocianni introduced himself as the point-of-contact for Schlumberger Technology Corporation (Schlumberger) and identified Jim Strunk as the point-of-contact for The Dow Chemical Company (Dow). Mr. Strunk was unable to attend the meeting.

Mr. Minchak introduced the current site status including the following:

- The site is no longer active other than the environmental investigation and remedial activities.
- A groundwater circulation and treatment system is treating the downgradient groundwater plume.
- A soil vapor extraction (SVE) system is operating at the onsite former washrack.
- Quarterly groundwater monitoring and SVE offgas sampling is performed.
- The groundwater contamination is primarily onsite with a small offsite component.
- Discharge Permit GW-114 is currently due for renewal.

### Regulatory Overview

Mr. Von Gonten gave a detailed discussion of the NMOCD regulatory program and options for the Artesia site. He compared and contrasted the NM Oil and Gas Act (OGA) and the NM Water Quality Act (WQA) and how they are applied to NMOCD-regulated sites. Sites that service the oil and gas industry are regulated under NMOCD; other commercial sites are regulated under the Groundwater Quality Bureau.

#### Oil and Gas Act

- Establishes the Oil Conservation Commission (OCC) regulations under New Mexico Administrative Code (NMAC) 19.15.2
- NMAC 19.15.29 (includes Remediation Plan for corrective action that meets the Human Health Standards for Ground Water of 10,000 mg/L TDS Concentration or Less at NMAC 20.6.2.3103)
- Part 30 (prevention and abatement of groundwater; includes Abatement Plan – not required for this site since we are following the corrective action under NMAC 19.15.29)

#### Water Quality Act

- Establishes the Water Quality Control Commission (WQCC) regulations under NMAC 20.6.2

- NMAC 20.6.2.3103 (Human Health Standards for Ground Water of 10,000 mg/L TDS Concentration or Less)
- NMAC 20.6.2.3109 (Groundwater Discharge Permit)
- NMAC 20.6.2.4101-4115 (Abatement Plan)

Mr. Von Gonten indicated that it would be easier to continue the remediation activities under the existing Discharge Permit since it allows us to use the WQCC standards (NMAC 20.6.2.3103) to attain groundwater closure. Remediation activities would continue to be performed in accordance with the approved remediation plan. Regarding costs associated with the Discharge Permit renewal, the filing fee is \$100 (same for all applications) but the permit fee for remediation is \$2,400 and not the \$1,700 required for operating oilfield service facilities. Public notice is addressed through the permitting process (every 5 years).

## Attaining Closure

NMOCD indicated that 8 consecutive quarters of groundwater analytical results below WQCC standards are required to obtain closure of the groundwater concern. The WQCC standards are not the same as EPA Maximum Contaminant Levels (MCLs), and the standards for the primary site chemicals of concern, including PCE and TCE, are higher than MCLs.

For closure of soil concerns, NMOCD indicated there are no specific soil standards, rather the regulations are designed to ensure protection of groundwater. "Dirt work" is conducted under NMAC 19.15.29 and should include the following:

- Delineate soil impacts
- Complete a risk-based closure – does not mean health risk-based closure, but rather using a common-sense approach to what can safely and technically be removed via excavation.
- Document the soil condition so that we are sure that the soil is no longer creating groundwater contamination.

Once we are satisfied that no risk remains, we will petition the NMOCD for closure of the soil. Mr. Cocianni indicated that a review of the existing soils data and possibly a limited number of soil borings at each historical source area would be performed to pursue closure of the soil concern at the Artesia facility.

The group discussed the potential to pump groundwater harder to contain the chlorinated ethene plume and treat more water with the activated carbon. There is likely a water rights issue should the water not be returned into the ground (i.e., if used for spray irrigation or disposed of offsite, it would be a consumptive use of the groundwater and would require appropriate water rights and State Engineers Office approval of the diversion). NMOCD can approve a material to be injected into the groundwater.

## Modifications to Site Activities

Modifications to the Discharge Permit will be required to implement significant changes to the remediation activities, however, ours will be amendments as the investigation and remediation activities will continue to address the petroleum hydrocarbons and the chlorinated ethenes. No public notice or participation will be required.

We discussed changes to the quarterly reports and agreed that we could discontinue quarterly reporting and go with an annual summary report. This must be administratively requested. Email requests to NMOCD are encouraged. Separate requests (one per email) are requested for tracking and response purposes. Also, Mr. Hansen requested hard copy deliverables for reports and plans so that he can review them in a timely manner.

Quarterly groundwater monitoring will continue in the near term (i.e., July) until a revised monitoring strategy has been formally requested and approved.

## Follow-Up

Following the discussion with Mr. Von Gonten (he left for another appointment), the meeting concluded with a discussion with Mr. Hansen regarding the path forward, deliverables and schedule. The following are the action items from the meeting:

1. Quarterly Monitoring Report – due in July
2. Discharge Permit renewal application – due within 30 days
3. Work Plan Amendments and proposed schedule for submittal is as follows:
  - SVE system decommissioning – August
  - Groundwater system modifications – August
  - Quarterly monitoring revisions - September
4. Meeting minutes and request to change reporting monitoring network – as soon as ready

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, March 21, 2013 5:53 PM  
**To:** Du'Bois Ferguson <DFerguson3@slb.com> (DFerguson3@slb.com)  
**Cc:** Bratcher, Mike, EMNRD; 'JMBarber@dow.com'; Rick Deuell <rdeuell@qwest.net> (rdeuell@qwest.net)  
**Subject:** Discharge Permit (GW-114) Recommendations (2012) Approval - Schlumberger Oilfield Services Facility - Artesia

**RE: "2012 Annual Report"  
for the Schlumberger Oilfield Services'  
Schlumberger Oilfield Services Facility - Artesia  
507 E. Richey Ave., Artesia, New Mexico  
Discharge Permit (GW-114) Recommendations Approval**

Dear Mr. Ferguson:

The New Mexico Oil Conservation Division (OCD) has received the 2012 Annual Report for the Schlumberger Oilfield Services Facility - Artesia, dated January 18, 2013, and has conducted a review of the report. The report, submitted for the above-referenced site, indicates that the Schlumberger Oilfield Services (Schlumberger) is substantially complying with the requirements of 20.6.2 NMAC [Water Quality Control Commission (WQCC) Regulations]. Therefore, the OCD conditionally concurs with the recommendations as specified in the report with following exceptions:

Schlumberger shall continue to monitor MW-12 on a quarterly basis.

Please be advised that OCD concurrence with this report 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.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau