



KOCH NITROGEN COMPANY

April 28, 2006

Via Certified Mail No 7005 0390 0006 6702 1695

Return Receipt Requested

Director, RCRA Corrective Action & Permits Branch (2 copies)
Air, RCRA and Toxics Division
U.S. Environmental Protection Agency Region VII
901 North Fifth Street
Kansas City, Kansas 66101

**RE: Koch Nitrogen Company – Dodge City, Kansas
EPA ID No. KSD044625010
Quarterly Progress Report for First Quarter 2006**

Ladies/Gentlemen:

In accordance with Section C.13 of the above referenced Permit, Koch Nitrogen Company (KNC) hereby submits the enclosed original and duplicate of the Quarterly Progress Report for the first quarter of 2006.

Beginning in 2005, KDHE and KNC agreed to the Semiannual Groundwater Monitoring Report along with the Quarterly Progress Report that was due by the end of April of each year, in accordance with Section IV.E of the Permit. As noted in KNC's letter of March 6, 2006, KDHE has requested that this report be submitted on an annual basis. As also noted in that letter, based on discussions with Mr. Everett Spellman of KDHE, KNC submitted the 2005 report in advance of that date to facilitate early review by the agencies. Please consider the report submitted on March 6 to be a component of the quarterly report attached.

If you have any questions about the attachments, please do not hesitate to contact AnnieLaurie Burke at (620) 227-8631, ext. 350.

Sincerely,

Gary J. LeRock
Plant Manager

424316



RCRA RECORDS

RECEIVED

MAY 01 2006
ARTD/RCAP

cc: Andrea Stone, U.S. Environmental Protection Agency – Region VII, Kansas City, KS
Kansas Department of Health and Environment, Bureau of Waste Management, Topeka, KS
Stephen B. Ellingson, KMS Wichita, KS
Bruce Ainsworth, KNC Dodge City, KS
AnnieLaurie Burke, KNC Dodge City, KS

QUARTERLY PROGRESS REPORT
1ST QUARTER 2006

DODGE CITY NITROGEN PLAN
KOCH NITROGEN COMPANY

EPA ID NO. KSD044625010

APRIL 28, 2006

CERTIFICATION STATEMENT

In accordance with Sections B.2.b and B.22 of the Part II Permit, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

By:



Gary J. LeRock
Plant Manager

A description of the work completed (Part II Permit Section C.13.a):

This Quarterly Report covers activities in the First quarter of 2006.

In this quarter, KNC has completed the following activities:

- Finalized long-term property access agreement with landowner on Facility's south boundary.
- Received approval from EPA on January 26 for the Sampling and Analysis Plan (SAP) and the Background Assessment Plan; submitted 15-day notice for start of field work to EPA on February 3.
- Began field investigation activities on February 22.
- Completed soil background assessment and submitted the report to EPA on March 31.
- Selected contractors for analytical services, backup analytical services, geophysical services, rotosonic drilling and direct -push technology (DPT) drilling.
- Completed SAP investigation of shallow soils in SWMUs 1, 2, 3, and 12.

Summaries of all findings, including summaries of laboratory data (Part II Permit Section C.13.b):

As presented in the soil background assessment report, the background concentration limits for chromium and nitrate + nitrite as N (NO₂+NO₃ as N) were proposed as follows:

Analyte	Soil Interval, inches	Background, mg/kg
Chromium, total	0 - 6	19.6
	6 -24	20.1
NO ₂ +NO ₃ as N	0 - 6	25.6
	6 -24	6.4

Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems (Part II Permit Section C.13.c):

As discussed with Andrea Stone and Randy Rohrman of EPA by telephone and e-mail, no problems in completing the work have been encountered. However, some procedures described in the SAP have required revision due to field conditions and other factors. These include:

- Addition of sample locations at SWMUs 1 and 2 due to field observations;
- Substitution of certain analytical methods more appropriate to the sample matrices, while maintaining the required quantitation limits;
- Revision of the well completion method for the Dakota well in the vicinity of SWMU 4 to ensure that it can be extended to a depth of 500 feet.^[a1]
- Revision and expansion of geophysical surveys at SWMU 5, SWMU 6, SWMU 7, SWMU 17, SWMU 21, and SWMU 22.

Projected work for the next quarter (Part II Permit Section C.13.d):

In the next quarter, KNC expects to conduct the following work under Part II of the permit:

- Complete geophysical survey of SWMU 5, SWMU 6, SWMU 7, SWMU 17, SWMU 21, and SWMU 22.
- Sample soils at additional locations in SWMU 2 and complete soil sampling at SWMUs
- Verify background groundwater values by resampling of the background wells
- Initiate Rotasonic and DPT sampling on remaining SWMUs;
- Initiate construction of the Dakota Well in the vicinity of SWMU 4.

Any instances of noncompliance with Part II of this permit not otherwise required to be reported pursuant to Part II Permit Conditions B.18 (Part II Permit Section C.13.e):

To the extent that the Part II Permit includes requirements to continue implementation of the existing groundwater monitoring, recovery, and treatment system, supplemental information regarding potential instances of noncompliance are described in the attached document.

**SUPPLEMENTAL INFORMATION
SUBMITTED WITH THE
FIRST QUARTER REPORT 2006
Koch Nitrogen Company
Dodge City, Kansas
EPA ID No. KSD044625010
April 28, 2006**

Pursuant to Section I.E. 14 of the Hazardous Waste Management Facility Permit, Part I (Part I Permit), Koch Nitrogen Company (KNC) is required to “report all other instances of noncompliance not otherwise required to be reported above in Sections Permit Conditions I.E.10 through I.E.13, at the time monitoring reports are submitted.”

The following items are reported as deviations noted during the first quarter 2006, as requested by Section I.E. 14 of the Part I permit. All of these issues have been noted in previous reports, and, at the meeting of September 16, 2004, EPA and KDHE accepted the alternatives being currently used. KNC has recently submitted to KDHE a request for modifications to the Permit to clarify the acceptable use of these alternate methods.

In this document, KNC also provides a description of planned changes in operating and maintenance procedures to resolve any such issues, and schedule resolution dates. Our review continues and KNC may add to the information in this document.

1. **Private Wells.** Attachment D of the Part I Permit and the September 7, 2001 RCRA Groundwater Sampling and Analysis Plan (SAP) (page 4) identifies ten private wells that are to be sampled quarterly. As noted in the second quarter report, the plumbing at the Coker well has been disconnected and has not been sampled during 2006. KNC will coordinate with the owner to discuss the plugging and abandonment of the Coker well, since the Cokers have been connected to the City of Dodge City water system since the fall of 2004.
2. **Nitrogen Laboratory Method.** Section I.E.9.a of the Part I Permit specifies that chemical analyses must be those specified in the U.S. Environmental Protection Agency (EPA) Publication SW-846. The SAP indicates that the method to be used for nitrate plus nitrite analysis will be EPA Method 353.2. Although this method is not incorporated into SW-846, it is KNC’s understanding that this method was preferred by EPA and KDHE for measurement of these analytes. It is also KNC’s understanding that the current preferred method is Standard Methods 4500-NO3 F (most recent edition). The conflict among the permit condition, the SAP requirement, and the preference for most recent methods is being resolved by the referenced permit modification.

3. **Nitrogen Species Measured.** Section I.E.9.a and Attachment D of the Part I Permit states that the Permittee shall determine the concentrations of “nitrate” throughout the compliance period and any extension due to corrective action implementation according to the schedule set out in the SAP. There is no reference to testing for “nitrite” in the Part I Permit. However, Attachment C of the Part I Permit specifies that the Ground Water Protection Standard (GWPS) will be nitrate plus nitrite as N (See Part I Permit Attachment C). Table 2.3 of the SAP specifies that the groundwater sampling parameters should include nitrate plus nitrite.

4. **Field/Laboratory Forms.** Section IV.C.3.b of the Part I Permit provides that the Permittee will comply with the Ground Water Monitoring Plan set out in the Part B Permit Application. The Ground Water Monitoring Plan in the Part B Permit Application states that the data will be reported on Field Sampling and Laboratory Results Data Sheets (see Section E, p. E-2). In some cases alternate forms containing the same information were used. The requested permit modifications allow for format flexibility.

5. **Recovery Well Operation.** Wells TW-2 and TW-79 have been identified in the Part I Permit as recovery wells (Part I Table 1 IV.C.1.a and Attachment D). As agreed during the September 16, 2004 meeting with KDHE and EPA, these wells are not used for recovery. Well TW-2 has insufficient water to pump and therefore cannot be operated as a recovery well. Well TW-79 was listed as a recovery well in error. It is located on private property and has never been part of the recovery system. The conflict between the permit condition and the use of these wells will be resolved by the above-referenced permit modification.

6. **Alternate Field Meters.** The SAP in Section E, Appendix F of the Part B Permit Application provides that a multi-parameter water quality meter (MP20 Flow Cell) will be used during low-flow groundwater purging (See page 15 of SAP). Since that meter is no longer functional, KNC has substituted newer equipment that renders a better quality of results.