



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7

11201 Renner Boulevard
Lenexa, Kansas 66219

APR 23 2013

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Article Number: 7012 1640 0001 7091 8450

Mr. Michael J. Sherbak II
Plant Manager
Koch Nitrogen Company, Dodge City Plant
11559 U.S. Highway 50
P.O. Box 1337
Dodge City, Kansas 67801-1337

RE: Comments on KNC's draft Groundwater Sampling and Analysis Plan dated September, 2012
Koch Nitrogen Company Dodge City Plant
EPA I.D. #KSD044625010

Dear Mr. Sherbak:

The U.S. Environmental Protection Agency Region 7 is in receipt of Koch Nitrogen Company, LLC (KNC's) draft Groundwater Sampling and Analysis Plan (GWSAP) dated September, 2012.

The EPA has reviewed this document and offers the enclosed comments. Please submit responses to the EPA's comments and revise the document and resubmit within thirty (30) calendar days of certified receipt of this letter.

If you have any questions, please contact me by phone at (913) 551-7662 or by email at stone.andrear@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Andrea R. Stone".

Andrea R. Stone
Environmental Scientist/Project Manager
Air and Waste Management Division
Waste Remediation and Permitting Branch

Enclosure

cc: Everett Spellman, KDHE (w/encl.)
Elise Stucky-Gregg, KNC (w/encl.)
Cory Zellers, KNC (w/encl.)



ENCLOSURE

Project Manager Comments:

1. Page 3, Section 2.0 Objectives and Scope, 1st Paragraph, next to the last sentence: The sentence reads, "The procedures in this revised SAP are in general compliance with the RCRA Ground Water Monitoring Technical Enforcement Guidance Document (USEPA, 1986)." There is additional guidance titled, "RCRA Ground-Water Monitoring: Draft Technical Guidance," dated November 1992. Ensure that the procedures in the revised SAP are in compliance with both documents. Please revise and cite the additional guidance.
2. Page 6, Section 3.2.1 Recovery Well Sampling, last Sentence: The sentence reads, "Maintenance will be performed within an appropriate time scope and the well will sampled within 30 days of the start of the semi-annual event." There is a typographical error in this sentence. Insert the word "be" between "will" and "sampled," so the sentence reads, "... and the well will be sampled within..."
3. Page 7, Section 3.2.2, Low-flow Sampling, first full sentence at the top of Page 7: This sentence states that, "Every 2 years, KNC will confirm the program ID calibration at each well." Please explain KNC's rationale for choosing a two (2) year timeframe for confirming the program ID calibration at each well. Provide the rationale in KNC's responses to the EPA's comments and revise this section as appropriate.
4. Page 7, Section 3.2.2, Low-flow Sampling, third full sentence on this page: The sentence reads, "If flow is insufficient for low-flow purging, an alternative sampling method will be implemented." Is the "alternative sampling method" referring to the next section, which discusses using no-purge (e.g. Hydrasleeve.)? If so, please add after alternative sampling method "discussed in Section 3.2.3 below" or some such similar language. If not, please add additional detail to this paragraph to describe what "alternative sampling method will be implemented" if the flow is insufficient for low-flow purging.
5. Page 7, Section 3.2.3, Low Yield Monitoring Well Sampling: This section discusses using the "no-purge (e.g. Hydrasleeve)" and states that the standard operating procedures for the Hydrasleeve are in Appendix C. The appendices were not included with the Draft GWSAP.

In that same section, there is a sentence that reads, "Once a sample has been obtained from a well, a new no-purge sampler will be attached to the calibrated tether and left to equilibrate for the following semi-annual event." What is the rationale for leaving the no-purge sampler tethered for 6 months? The EPA has concerns that this will allow VOCs to volatilize and will not be an accurate representation of the groundwater. Has KNC considered using passive diffusion bag samplers to collect the groundwater samples? These can be installed in the wells approximately two (2) weeks prior to the sampling event and allowed to equilibrate. Please provide KNC's rationale, in the responses to the EPA's comments, for leaving the no-purge samplers attached to a calibrated tether and allowing it to equilibrate for 6 months prior to sampling, and revise this section as appropriate.

6. Section 3.5, Decontamination, Page 9: In this section it discusses that the decontamination water will be disposed of in accordance with Facility procedures. It goes on to state that all purge and waste waters will be disposed in the facility waste water treatment system in accordance with facility protocols.

The Facility procedures are again mentioned when discussing how the disposable equipment, including tubing, personal protective equipment (PPE), and any other material not for re-use will be disposed of. Please include a brief description in this section to describe what is meant by “Facility procedures and “facility protocols” or attach the “Facility procedures” and “facility protocols” to this work plan as an appendix.

7. Section 3.6 Quality Assurance/Quality Control Samples, Page 9: This section does not follow the requirements of a Quality Assurance Project Plan (QAPP). Either reference the approved December 2010 QAPP in this section, or include a QAPP, for the EPA review and approval, for the work required in this work plan as an appendix in the revised GWSAP. See also Geologist Comment #5. Please revise.
8. Section 4.1 Evaluation and Response, Page 11, last sentence of the first paragraph: The last sentence reads, “...in consultation with KDHE.” Please revise to add, “and the EPA” after KDHE.

In the second paragraph of this section, it states that, “Sampling and Analysis will be performed to determine (1) whether hazardous waste and/or hazardous waste constituents have impacted and/or will impacted the groundwater; (2) the rate and extent of migration of hazardous waste and/or hazardous waste constituents in groundwater, and; (3) the concentration of hazardous waste and/or hazardous waste constituents in the groundwater.” We already know that hazardous waste and/or hazardous waste constituents have impacted the groundwater, and we have data on the rate and extent and concentration of the hazardous waste and/or hazardous waste constituents in the groundwater. Please revise this paragraph in this section.

9. Section 4.3 Statistical Analysis, Page 13, Last paragraph in this section: The last sentence reads, “If, for three consecutive quarters, the individual well data is statistically less than the groundwater protection standards, a request will be made to the KDHE to reduce the sampling frequency on that well to annual sampling.” KNC should not request a reduction in the sample frequency until a minimum of four (4) consecutive quarters of sampling results have been obtained to account for seasonal fluctuations, and the request should be made to the EPA and KDHE. Please revise.
10. Section 4.3, Annual RCRA Groundwater Monitoring Report, Page 13: This section should be 4.4, not 4.3. See also Geologist Comment #8. Please revise.

In addition, reference is made to submitting the RCRA Groundwater Monitoring Report to KDHE. This report should also be submitted to the EPA. Please revise.

Geologist Comments:

1. General Comment. It is recommended that the document not be identified as a “draft” in the title or on any of the pages. Instead, please identify the document as a *version*, using a numbering system of Koch’s choice, along with a date and an abbreviated title of the document. A header or footer with this information can be included on each page, and subsequent revisions, if needed, may be accomplished using replacement pages.

2. Page 4, Section 2.2. The text in Section 2.2 indicates that groundwater samples will be analyzed for nitrate (as N) and nitrite (as N), and that nitrate plus nitrite (as N) will be reported as the sum of the nitrate and nitrite concentrations. This is correct, as nitrate analysis and nitrite analysis are performed using separate analytical methods, with the results added to produce the nitrate plus nitrite concentration, and these results are all required since there are separate, final maximum contaminant levels (MCLs) available for nitrate, nitrite, and nitrate plus nitrite. However, in Table 3, nitrate and nitrite are listed together. Please list all three parameters in Table 3 as separate analytical parameters, with the analytical method for nitrate and the analytical method for nitrite each specified, with no analytical method for nitrate plus nitrite but a footnote explaining that nitrate and nitrite results are simply added.
3. Page 5, Section 3.1, First Paragraph, Fourth Sentence. Regarding the top of casing surveyed elevations for the wells, were the actual surveyed points on the casing tops somehow marked so the field personnel can use the surveyed point to measure the depth to water?
4. Page 8, Section 3.3. Because it is very important to ensure that groundwater samples are properly preserved as soon as possible after collection, please insert language in this section that directs the field personnel to place the samples into iced coolers as soon as possible after the samples are collected, containerized, labeled, and placed into leak proof plastic bags.
5. Page 9, Section 3.6. Koch should be aware that a site and activity specific quality assurance project plan (QAPP) must also be prepared to accompany the Sampling and Analysis Plan (SAP), and should include much of what is discussed in Section 3.6. This QAPP must be prepared in accordance with *EPA Requirements for Quality Assurance Project Plans – EPA QA/R-5 (EPA/240/B-01/003)* and reviewed and approved by the EPA.
6. Page 11, Section 4.2. Please include examples of the field forms discussed in this section.
7. Pages 12 & 13, Section 4.3. The SAP must include all proposed statistical methodologies that will be utilized including references to all such methodologies, formulas, statistical tables needed, example calculations, and decision criteria.
8. Page 13, Section 4.3 - Annual Groundwater Monitoring Report. There is a typographical error in that this section should be Section 4.4 instead of 4.3.
9. Table 1. Please include columns indicating for each well (1) whether or not it is sampled, and (2) whether or not water level measurements are taken.