KOCH

KOCH NITROGEN COMPANY

September 27, 2004

Via Certified Mail No. 7003 2260 0005 5497 9760
Return Receipt Requested

Ms. Andrea Stone
RCRA Corrective Action & Permits Branch
Air, RCRA, & Toxics Division
U.S. Environmental Protection Agency - Region VII
901 North Fifth Street
Kansas City, Kansas 66101

RE: Additional Information Requested for SWMUs 23, 24, 25, 26
Koch Nitrogen Company, Dodge City, Kansas
EPA ID No. KSD044625010

Dear Ms. Stone:

By letter of May 21, 2004, the U.S. Environmental Protection Agency (EPA) requested of Koch Nitrogen Company (KNC) additional information on Solid Waste Management Units (SWMU) 23, 24, 25 and 26. For each unit, EPA specifically requested information set out in 40 CFR 270.14(d)(1)(ii-v) [40 CFR 270.14(d)(1)(ii) – type of unit; 40 CFR 270.14(d)(1)(iii) – general dimensions and structural description; 40 CFR 270.14(d)(1)(iv) – period of operation; 40 CFR 270.14(d)(1)(v) – wastes managed, to the extent available].

The relevant SWMUs are southeast of the cooling tower for the ammonia plant (See Attachment 1). The four concrete structures identified as SWMU 23, SWMU 24, SWMU 25, and SWMU 26 are a part of the current process water system for the Dodge City plant with disposal of the process water from this system to one or both of the two permitted injection wells regulated under state Permits No. KS-01-057-001 and No. KS-01-057-002.

The current plant process water system neutralizes any corrosive liquid streams with a goal of maintaining a near neutral pH, settles any sediment, and equalizes flow prior to disposal in the injection wells. The contents of each tank will vary depending on valve configuration and pump circulation and each of the four SWMUs is, therefore, in the current process water system configuration, able to receive any of the existing process water streams depending on operational needs.

The requested SWMU information is attached to this letter (See Attachment 2). If you have any questions about the information provided, please contact Katrina Krier at (620) 227-8631, extension 120.

P.O. Box 2219 ▪ Wichita, Kansas 67201-2219 ▪ 316/828-5500 ▪ FAX 316/828-4084

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.

Sincerely yours,

Larry Angell

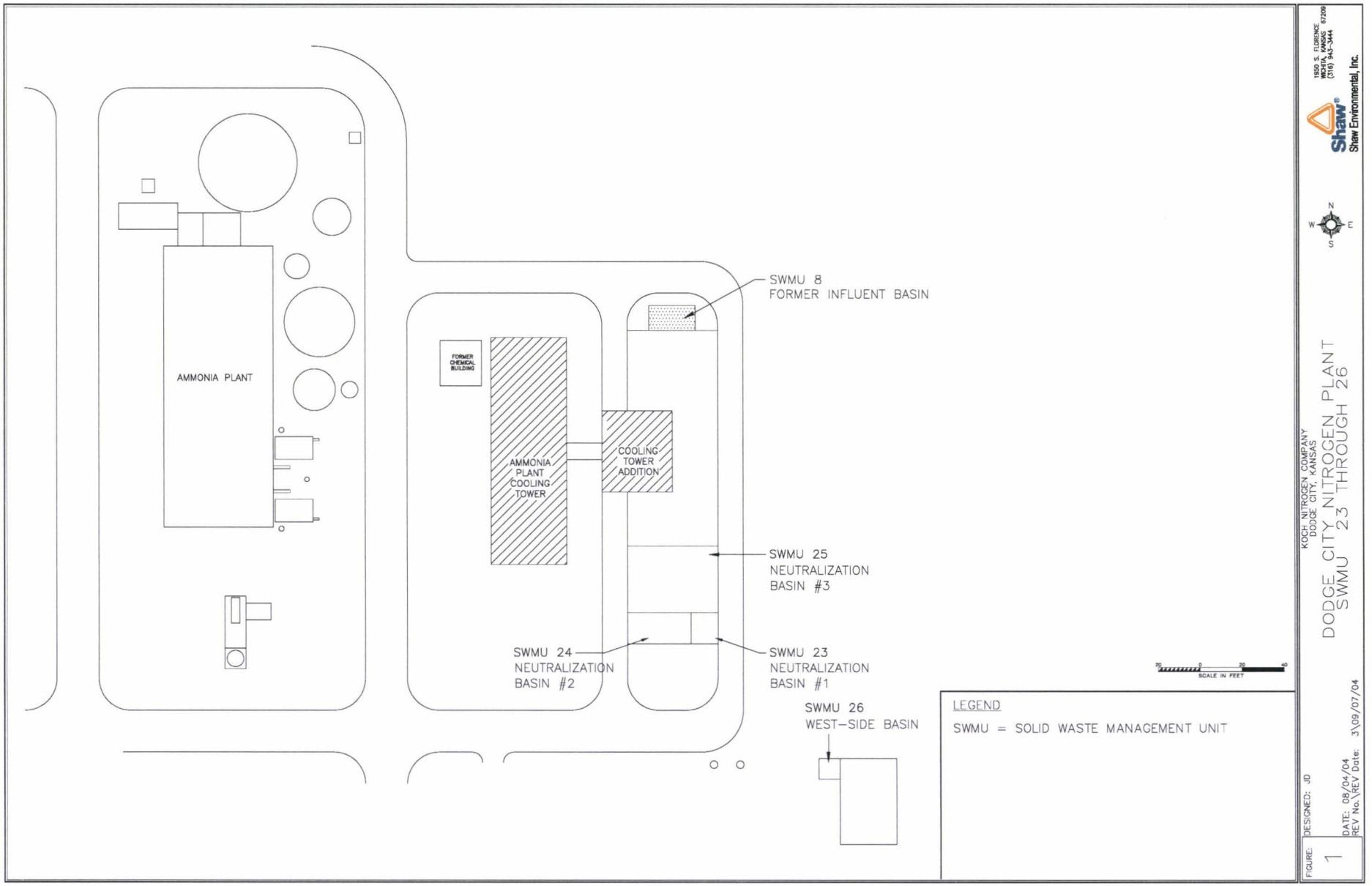
Larry Angell
Vice President

Attachments

cc: Katrina Krier, Koch Nitrogen Company, Dodge City, Kansas
Mr. Stephen B. Ellingson, Ph.D., Koch Mineral Services, Wichita, Kansas

Mostafa Kamal and Katherine Dunn
Kansas Department of Health and Environment
Hazardous Waste Permits Section
Bureau of Waste Management
1000 SW Jackson
Topeka, Kansas 66612
Certified Mail No. 7003 2260 0005 5497 9777
Return Receipt Requested

Attachment 1
SWMU 23, 24, 25, 26 Diagram
September 27, 2004


AMMONIA PLANT
FORMER CHEMICAL BUILDING
AMMONIA PLANT COOLING TOWER
COOLING TOWER ADDITION
SWMU 8
FORMER INFLUENT BASIN
SWMU 25
NEUTRALIZATION
BASIN #3
SWMU 24
NEUTRALIZATION
BASIN #2
SWMU 23
NEUTRALIZATION
BASIN #1
SWMU 26
WEST-SIDE BASIN
SCALE IN FEET
LEGEND
SWMU = SOLID WASTE MANAGEMENT UNIT
KOCH NITROGEN COMPANY
DODGE CITY, KANSAS
DODGE CITY NITROGEN PLANT
SWMU 23 THROUGH 26
Shaw Environmental, Inc.
1950 S. FLORENCE
WICHITA, KANSAS 67209
(316) 945-5444
FIGURE: 1
DESIGNED: JD
DATE: 08/04/04
REV No.\REV Date: 3\09/07/04

Attachment 2
Information on SWMUs 23, 24, 25 and 26
September 27, 2004

SWMU 23

Designation of type of unit

SWMU 23 is a tank.

General dimensions and structural description

The approximate dimensions of SWMU 23 are as follows: 10 feet 6 inches deep by 12 feet 8 and 1/2 inches in length by 10 feet in width. It is constructed of concrete and the base is 1 foot thick. The south wall is 1 foot 4 inches thick and the north, south and east walls are 1 foot thick.

When the unit was operated

Records indicate that SWMU 23 was constructed in 1967 and began operation in 1968. This tank continues in operation at this time.

Specification of all wastes that have been managed at the unit, to the extent available

Records indicate that SWMU 23 was originally designed and used to collect decanted water from the former Chromium Destruction Unit (CDU) asphalt troughs (these troughs are also referred to elsewhere as detention basins) and served this function from 1968 to 1991, when the former CDU was taken out of operation. The former CDU process reduced hexavalent chromium in the water prior to flow into SWMU 23. However, because of the technology available at the time and the complexity of the process, it is reasonable to assume that at times the CDU did not function properly and higher levels of chromium likely entered SWMU 23. These waste streams likely contained hazardous waste on the basis of elevated chromium levels.

SWMU 23 currently receives ammonia plant cooling water blowdown containing ortho-phosphate-based water treatment program chemicals. In the current process water treatment system, normal water treatment flow into SWMU 23 comes from SWMUs 24 and 25, but because the system is designed for complete recirculation if required by operational needs, other possible influent streams include any of the streams that are received in SWMU 26.

SWMU 24

Designation of type of unit

SWMU 24 is a tank.

General dimensions and structural description

The approximate dimensions of SWMU 24 are as follows: 10 feet 6 inches deep by 13 feet 2 and1/2 inches in length and 30 feet in width. It is constructed of concrete with a 1 foot thick floor. The east and west and north walls are 1 foot thick and the south wall is 10 inches thick.

When the unit was operated

Records indicate that SWMU 24 was constructed in 1967 and began operation in 1968. This tank continues in operation at this time.

Specification of all wastes that have been managed at the unit, to the extent available

Records indicate that SWMU 24 was initially designed to receive ammonia plant cooling tower blowdown containing hexavalent chromium prior to treatment, and to collect sediment, primarily dirt, filtered out by the ammonia cooling tower side stream filter. These waste streams likely contained hazardous waste on the basis of elevated chromium levels. This influent, although initially received by SWMU 24, was later pumped to SWMU 8 and then processed in the former CDU.

The current primary purpose of this tank is as a settling basin for sediment prior to two-step filtration and disposal into the injection wells. In 1993, the influent stream to this tank was reportedly modified to include the UAN Plant sewer (i.e., process drainage nitric acid, urea ammonia nitrate, boiler blowdown containing ortho-phosphate-based treatment chemicals), ammonia plant drainage (i.e., high pressure boiler blowdown containing ortho-phosphate-based treatment chemicals and drainage from ammonia plant vessels or from ammonia plant surface areas which could include ammonia, Methyldiethanolamine, and catalyst dust), Praxair condensate and cooling tower blowdown containing ortho-phosphate-based water treatment program chemicals, hydrogen recovery unit condensate, sulfuric acid truck drainage, utility drainage including any washdown water from cleaning spills in the utility building of acid/caustic or water treatment chemicals, and DURCO mechanical filter backwash from the wastewater treatment building. The current process water treatment system is designed for complete recirculation if required by operational needs, therefore other possible influent streams include any of the streams that are received in SWMUs 23, 25, and 26.

SWMU 25

Designation of type of unit

SWMU 25 is a tank.

General dimensions and structural description

The approximate dimensions of SWMU 25 are as follows: 12 feet deep by 30 feet in length by 40 feet in width. The floor is 9 inches thick to 1 foot 6 inches at the foundation. The basin is lined with a 60-mil HDPE liner. The walls are 1 foot thick.

When the unit was operated

Records indicate that SWMU 25 was constructed on the southern portion of the former CDU in approximately 1993. Construction of the neutralization basin required removal of an approximately 35-foot section of the southern portion of the former CDU retention basins. Operation of SWMU 25 began shortly after completion of the unit and continues today.

Specification of all wastes that have been managed at the unit, to the extent available

SWMU 25 primarily receives the liquid regeneration stream from the ion exchange water treatment system, laboratory wastewater, phase I building drainage (including spent hydrochloric acid used for Andco plate cleaning, reverse osmosis anti-scalent and cleaning chemicals), and drainage from the storage area where spent ammonia production catalyst is accumulated prior to offsite metals reclamation or disposal. The tank serves as a primary neutralization basin where acidic or basic streams and water are pumped out of the tank to achieve a near neutral pH for water destined for the disposal wells. Normal operation of the current wastewater system allows the contents of SWMU 24 to be directed to SWMU 25, but the system is designed for complete recirculation if required by operational needs, therefore other possible influent streams include any of the streams that are received in SWMUs 23 and 26.

SWMU 26

Designation of type of unit

SWMU 26 is a concrete structure that is designed to contain an accumulation of liquids.

General dimensions and structural descriptions

The approximate dimensions of SWMU 26 are as follows: 12 feet deep by 10 feet wide by 10 feet in length. The unit is constructed of cement. The floor is 1 foot 3 inches thick and the walls are 1 foot thick.

When the unit was operated

Records indicate that SWMU 26 was constructed in 1991and began operation in 1992. The unit continues in operation at this time.

Specification of all wastes that have been managed at the unit, to the extent available

SWMU 26 is currently utilized for settling purposes. The liquid streams it can receive include recovery well water, UAN cooling tower blowdown containing ortho-phosphate-based treatment chemicals and liquid streams from SWMU 23. Records indicate that SWMU 26 has never received or managed hazardous wastes.