

**REPORT OF INDUSTRIAL STORMWATER  
COMPLIANCE EVALUATION INSPECTION**

**AT  
Siouxland Concrete Co  
200 E 48<sup>th</sup> Street  
South Sioux City, NE 68776  
Facility Registry Service ID: 110017761849  
National Pollutant Discharge Elimination System Permit: ISW-202200481**

**November 5, 2024**

**by U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 7: Enforcement and Compliance Assurance Division**

**INTRODUCTION**

At the request of the Water Branch of the Enforcement and Compliance Assurance Division in Region 7 I inspected Siouxland Concrete Co in South Sioux City, Nebraska, for a compliance evaluation of applicable industrial stormwater regulations. Section 308(a) of the Federal Water Pollution Control Act authorizes the inspection. I conducted this inspection following the procedures described here and following applicable Environmental Protection Agency Region 7 standard operating procedures. This narrative report presents the findings of my inspection.

**PARTICIPANTS**

**Siouxland Concrete Co:**

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## INSPECTION PROCEDURES

I, Caitlin Dix, the EPA Region 7 lead inspector, arrived at Siouxland Concrete Co at 200 E 48th Street in South Sioux City, Nebraska, about 8:00 a.m. on November 5, 2024, for an unannounced inspection. I presented my inspector credentials to Michelle Sanchez, the plant foreperson. I told Michelle Sanchez that this was an evaluation inspection by the EPA Region 7 to determine compliance with the NPDES industrial stormwater permit as authorized by Clean Water Act Section 308 and implementing regulations. This report is based on information collected by me, the EPA Region 7 inspector, including digital images, physical evidence, measurements, statements made by facility representatives, and documents shown or sent to the EPA Region 7 inspector by facility representatives during or after the on-site inspection. Information gathered before and after the inspection from a review of the EPA, state, and public records may be included in this report.

Before the inspection, I reviewed facility background information including the:

- EPA's Enforcement and Compliance History Online.
- Nebraska Department of Environment and Energy permitted facilities search and map portal.
- Relevant maps and aerial images like The National Map by the U.S. Geological Survey.
- Waterbody report using How's My Waterway by the U.S. Environmental Protection Agency.

During the opening conference I met with plant foreperson Michelle Sanchez in her office. Mr. Concepcion Ortiz, operations manager, joined the opening conference part of the way through. Michelle Sanchez and Mr. Ortiz answered my questions about the site and industrial activities and went with me during a walkthrough of the facility.

I described the Confidential Business Information Notice for Information Collected During the Inspection and the Small Business Resource Information Sheet during the opening conference. I emailed both forms to Michelle Sanchez on November 5. Michelle Sanchez did not claim any confidential business information during the opening conference, on-site walkthrough, or closing conference of the inspection. As of the writing of this report and more than 10 days after the inspection date I have not received notice the business considers information collected during the inspection as confidential.

During the visual inspection I documented my findings and observations by taking pictures and taking notes using Smart Tools, a digital tool for field inspectors. I included digital images taken during the inspection in attachment 1.

I summarized areas of concern I saw during the visual inspection with Michelle Sanchez and Thomas Silknitter, the environmental specialist for the company, during the closing conference on November 5. I issued a Notice of Preliminary Findings to the facility during the closing conference for two observations I made during the onsite inspection. I included this notice in the inspection report as attachment 2. During the inspection I asked the facility to send documents to the EPA, including:

- Stormwater pollution prevention plan.
- Records the facility must keep under permit part 5.4 like records of employee training, inspection reports, and corrective action documentation.

The facility uses a web-based compliance system for inspections and recordkeeping. Michelle Sanchez showed me reports on the computer screen during the onsite inspection as examples. Mr. Silknitter emailed me the stormwater pollution prevention plan and records on November 13. I filed the reports the facility sent me in the Water Branch file sharing software. I included the stormwater pollution prevention plan in this report as attachment 3 and the records the facility sent me as attachment 4.

## **FACILITY DESCRIPTION**

### **Facility Location**

The facility is 12.6 acres in size and about 1.3 miles west of the Missouri River in South Sioux City, Nebraska. The EPA's How's My Waterway shows the assessment unit identifier for this section of Missouri River is IA 06-WEM-1722 and this section of the river is impaired for aquatic life and primary contact recreation in Iowa's 2024 assessment. Impairments include flow regime modification, stream modification, and pathogen *Escherichia coli bacteria* (E. coli). Of note, this section of the Missouri River alternates with assessment unit identifier NE-MT1-10000 which Nebraska lists as impaired for public drinking water supply and recreation. The impairment causes in the 2022 Nebraska Water Quality Integrated Report included arsenic and sulfate for public drinking water supply and E.coli for recreation. I did not see any Total Maximum Daily Loads for assessment unit identifier NE-MT1-10000 or IA 06-WEM-1722.

The average precipitation for the area is about 30 inches per year according to the National Centers for Environmental Information U.S. Climate Normals Quick Access. This facility can expect storm events of around 2.4 inches in 24 hours every year, 2.8 inches in 24 hours every two years and 4.17 inches in 24 hours every 10 years according to the NOAA Atlas 14 precipitation frequency estimates. The size and duration of expected storm events should be considered when selecting, designing, installing, and implementing proper controls to reduce pollutants in discharges associated with industrial activities at this facility.

The U.S. Fish and Wildlife Service species profile for Pallid Sturgeon show this section of the Missouri River as habitat range for this federally and state designated endangered species. The Nebraska Game and Parks Commission threatened and endangered species 2024 feature service shows the facility is in the current range of state-designated species such as endangered Sturgeon Chub and threatened Lake Sturgeon. Under the permit, State Resource Waters 'Class A' surface waters are outstanding State or National resource, such as waters within national or state parks, national forests or wildlife refuges, and waters of exceptional recreational or ecological significance. Waters which provide a unique habitat for federally designated endangered or threatened species and rivers designated under the Wild and Scenic Rivers Act are also included. The permit says the existing quality of these Class A surface waters must be maintained and protected.

## **Facility Operations**

Siouxland Concrete makes ready-mix concrete. Michelle Sanchez told me that Siouxland Concrete has been in operation about 20 years, and they employ about 20 to 25 people at this facility.

## **Regulatory History**

Federal regulations at 40 CFR 122.26(a)(1)(ii) require stormwater discharges associated with specific categories of industrial activity to be covered under National Pollutant Discharge Elimination System permits unless otherwise excluded. Under 40 CFR 122.26(b)(14)(ii) facilities in industry group 327 Concrete, Gypsum, and Plaster Products are engaging in industrial activity applicable to the National Pollutant Discharge Elimination System. The EPA authorized the State of Nebraska to issue National Pollutant Discharge Elimination System permits for all facilities outside tribal lands in Nebraska.

Nebraska Department of Environment and Energy received a Notice of Intent form on August 8, 2022, from Siouxland Concrete Co at 200 E 48<sup>th</sup> Street in South Sioux City, Nebraska. I included the Notice of Intent in this report as attachment 5. As of August 9, 2022, Siouxland Concrete Co may discharge stormwater under the terms and conditions of the NPDES Industrial Storm Water General Permit NER920000. The facility's authorization number is ISW-202200481 and I included the authorization letter and permit in this report as Attachment 6. This permit and the authorization to discharge expires at midnight, on March 31, 2027. Authorization under this permit is valid until a new industrial stormwater general permit is issued by the Nebraska Department of Environment and Energy.

Under this Nebraska Department of Environment and Energy general permit this facility is under sector E.2. This sector has additional technology-based effluent limits under permit part 8.E.

I used the Nebraska map portal at [deqmaps.nebraska.gov](https://deqmaps.nebraska.gov) to review the compliance history for the facility. The available documents included the Notice of Intent and the Authorization described in the earlier paragraph and applications and site maps from 2011 and 2016. I did not see any records of inspection by the Nebraska Department of Environment and Energy to evaluate the facility's compliance with the industrial stormwater permit. Based on available information I reviewed, the Environmental Protection Agency has not previously inspected this facility to evaluate compliance with the Clean Water Act.

## **FINDINGS AND OBSERVATIONS**

I noted the following observations during the visual inspection and record review.

I accessed weather measurements recorded at the Sioux City Airport using the integrated surface database hosted by the National Centers for Environmental Information. This weather station reports 0.16 inches of rain on November 5. Recent rain events before the inspection include 0.16 inches of rain on November 4, 0.03 inches of rain on November 3 and 0.49 inches

of rain on November 1. This weather station is about 3 miles from the facility and these rain measurements may not accurately represent the amount of rain received at this facility. The U.S. Drought Monitor shows the broad scale conditions for the area as experiencing severe drought on November 5. Most of the rain that day was before I arrived at the inspection site. During the inspection, the conditions were cloudy with some light precipitation. Moisture was accumulating on the surface of my equipment but there was not enough rain to generate runoff during the site walkthrough.

**Siouxland Concrete makes ready-mix concrete for sale. Stormwater runoff from this facility is stormwater related to manufacturing, processing, and raw materials storage areas at an industrial plant.**

I saw industrial activities as described under industry 3273 of the standard industrial classification which includes mixing concrete for distribution in its unhardened state to purchasers. Stormwater runoff from Siouxland Concrete is stormwater directly related to manufacturing, processing and raw materials storage areas at an industrial plant as described in 40 CFR 122.26(b)(14)(ii). I saw industrial activities at this site as described under 40 CFR 122.26(b)(14) such as:

- Industrial plant yard.
- Immediate access roads used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
- Material handling sites, including storage, loading and unloading, transportation or conveyance of raw material, intermediate product, final product, byproduct or waste product.
- Refuse sites.
- Sites used for the application or disposal of process wastewaters defined at part 401 of this chapter.
- Sites used for the storage and maintenance of material handling equipment.
- Sites used for residual treatment, storage, or disposal.
- Shipping and receiving areas.
- Manufacturing buildings.
- Storage areas for raw materials, and intermediate and finished products.
- Areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater.

**Industrial stormwater discharges from Siouxland Concrete would flow to the Missouri River.**

I used the U.S. Geological Survey 3DEP elevation layers and the National Map, and I saw that the land slopes towards the Missouri River. This facility is in an area served by the South Sioux City municipal separate storm sewer system including pipes, ditches, or gullies. The stormwater conveyance drains to the Missouri River.

I followed stormwater drainage from the north side of the facility into the municipal separate storm sewer system. The stormwater team for the South Sioux City municipal separate storm sewer system said the inlets on E 48<sup>th</sup> Street, like the inlet in image 62, drain to a ditch along C

Avenue. On the south side of the facility, I saw that the land slopes to the east and south. I saw that the vegetated buffer and ditch between the south side of the facility and the agricultural field to the south extends to C Avenue. I show where the buffer meets C Avenue in image 63. I followed the ditches along C Avenue south to the intersection of Pine Street and C Avenue. The ditch on the west side of C Avenue slopes south except in areas where there is no ditch and the ground is at grade with the street surface like in image 64. From the intersection the drainage path further slopes to the south and east.

Based on the expected storm events at this facility, runoff from some storm events infiltrates in retention basins, ditches, and swales on the facility. The native soils are sandy loam with moderately low runoff according to the USDA's Web Soil Survey. I saw that most of the site is either concrete pavement or gravel pavement. These groundcovers are hard surfaces that prevent or significantly hinder infiltration of stormwater on site and are surfaces with high runoff coefficients. As an example, of the amount of runoff from some and not all of the impervious surfaces at this site, there is about 7 acres of paved surfaces and buildings and an annually expected rainfall event of 2.4 inches in 24 hours may generate about 5.5 million cubic feet or 41 million gallons of runoff from 7 acres of impervious surfaces. An annually expected rainfall event of 1.22 inches in 1 hour may generate about 2.8 million cubic feet or 21 million gallons of runoff from 7 acres of impervious surfaces. In most of my quick calculations using estimated depths based on the infiltration basins I saw on site, the acreage needed to capture the runoff from annually expected events exceeds the total acreage of the site or over half of the facility acreage. I used the National Stormwater Calculator to estimate runoff from about 12-acres. My inputs included 100% of the site being treated by infiltration basins designed for the 10-year, 24-hour event or about 4 inches of rain. The National Stormwater Calculator results report on the site's hydrologic response to a long-term period of historical hourly rainfall and the results show routine runoff events from the site. I do not know the actual design storm event used to determine control sizing like design volume, depth, and berm height; I used estimates based on my site observations.

The facility says that stormwater runoff does not leave the facility and that their infiltration basins provide sufficient storage volume and time for captured runoff to evaporate or infiltrate the native soil below. Based on my professional knowledge and the stormwater controls I saw during my on-site inspection, this facility does not have infrastructure, like grassed swales and infiltration basins, with a design size large enough to capture all industrial stormwater runoff from routine rainfall events. I do not know the design size of these controls or the expected overflow event—the facility does not include this information in their stormwater pollution prevention plan. The facility did not submit information on how it determined industrial stormwater would not leave this site.

I saw several locations at the perimeter of the facility where stormwater would flow off the property and into drainage channels during some storm events. This includes on the south side of the property where stormwater may flow into a vegetated buffer and ditch between the facility and agricultural land to the south, like in areas shown in images 16-19, 21-25, and 27. This includes areas on the east side where stormwater may flow from the swale to the neighboring property like in images 29, 37, and 39-43. I saw on the north side of the property

locations where stormwater may leave the facility like the entrance and exit driveways like in images 56 and 59, and from the north side of the grassed swale in image 2. In general, swales and ditches surrounding the facility collect stormwater. I saw that the berms on the downhill side of the swales are not at a height to prevent all stormwater runoff from leaving the site, like in image 2, 16, 23, 41, and 42. I saw that the height of the ground at the base of the fence was not higher than the berms on the uphill side of the swales on the inside of the facility and stormwater would runoff away from the property. Based on my professional knowledge, these infiltration basins and grassed swales are not designed to impound all industrial stormwater runoff from this site and these controls could overflow in annually expected rain events.

**The facility must use control measures to meet technology-based effluent limits under permit Part 2.**

The facility must select, design, install, and implement control measures to minimize pollutant discharges that address the selection and design considerations in part 2.1.1., meet the non-numeric effluent limits in part 2.1.2, meet limits contained in applicable effluent limitation guidelines in part 2.1.3, and meet the water quality-based effluent limitations in part 2.2.

The facility must minimize exposure under part 2.1.2.1. of the permit by either locating these industrial materials and activities inside or protecting them with storm-resistant coverings.

The facility has minimized exposures by covering some industrial materials and activities:

- The facility has covered concrete production in a storm-resistant building, like in image 1.
- The facility conducts most maintenance inside a storm-resistant building, shown on the site map in Appendix B of the stormwater pollution prevention plan and seen in the background of image 38.
- The facility stores some materials in enclosed silos or buildings, like cement stored inside the mixing building.
- The facility covers most aboveground storage tanks of vehicle and equipment fluids and their secondary containment under storm-resistant coverings, like in images 50.
- The facility uses spill and overflow protection equipment.

I saw the facility has not covered all industrial activities and materials like:

- The plant yard.
- Access roads.
- Material handling and storage sites, including aggregate storage, like in images 4, 5, 20 and 54,
- Trash dumpster, like in image 49 showing the dumpster stored with lids closed but not under cover.
- Scrap metal dumpster without lids or coverings, like in image 48.
- Disposal of and treatment of process wastewaters, shown in images 10-15.
- Storage and maintenance of material handling equipment, including material conveyors shown in images 1, 20, and 54 that are too large to fit in the maintenance building and are maintained outside.

- Sites for processing and storage of waste concrete, like in images 15, 31, 38, and 45.
- Loading and unloading areas, like in 4, 5, 20, 26, 53 and 54.
- Vehicle cleaning operations outdoors not under cover, like in 6, 10, and 56.

This is not an inclusive list of all relevant industrial activities exposed to stormwater. Some relevant activities I did not see but based on the information shared by the facility are exposed to stormwater, like the baghouses on top of the mixing buildings.

The facility must also minimize exposure by using grading, berms and curbing to prevent runoff of contaminated flows and divert run-on away from processing, and material storage areas. I saw the facility uses good stockpiling practices like storing material on concrete pads and surrounding many stockpiles with curbing that limits run-on and slows run-off from the aggregate piles. I saw the facility has collection systems for wash water from vehicle and equipment cleaning. I saw the facility uses grading, curbing, and berms to reduce runoff of contaminated flows from processing and storage areas, like around the wastewater storage ponds, facility perimeter berm, and facility perimeter swales. I saw the facility uses sediment basins and vegetated swales downstream and downslope of industrial activities. I saw the facility minimized exposure by keeping material handling equipment clean and I did not see accumulation of dust and residues on equipment. I saw the facility vehicle fueling operations were on an impervious pad but not under a roof or canopy, like in image 26.

The facility must keep clean all exposed areas that are potential sources of pollutants under part 2.1.2.2 Good Housekeeping. Sector E.2 has added good housekeeping measures under part 8.E.2.1 of the permit.

Operations manager Mr. Ortiz said there is a company-wide sweeper that comes about every three weeks. Michelle Sanchez said that the sweeper was due this week. Permit part 8.E.2. requires the facility to determine a frequency of sweeping based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week in areas where cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed and may be discharged in stormwater.

I saw the facility used other good housekeeping measures required by the permit. I saw the facility stored materials in appropriate containers like cement in enclosed silos and used oil in plainly labeled tanks with secondary containment. During the walkthrough I saw the facility kept a trash dumpster lid closed when not in use. I saw the facility was mostly free of waste and garbage. I did not see much trash or litter and of the few items of litter I did see I saw Michelle Sanchez pick up the trash during the site walkthrough.

The facility must maintain all control measures they use to achieve the effluent limits required by this permit in effective operating condition under permit section 2.1.2.3.

Overall, I saw many control measures and industrial equipment and systems that looked well maintained. I did not see leaks and stains. I saw materials and equipment stored in organized and designated locations. I saw safety practices, like yellow paint on blocks and safety cones to

increase visibility for equipment operators, that help prevent accidents that may result in pollution, like leaks and spills.

I saw areas of the perimeter berm that did not look well maintained. I saw evidence of pollution bypassing perimeter controls, like in image 16-18, 23, and 29, 37, 39, 41-42. I saw berms made of unstabilized loose materials, like in images 7, 16-19, 33, 35, 39, 46, and 47, as examples. Vegetation coverage of the berms was less than 70% with many berm sections barren, like in images 16-18, 33, 35, 46, and 47, as examples. I saw evidence of the berm materials being mobilized into the drainage swales, like in images 21 and 37. I saw the perimeter berm was not maintained at sufficient height to prevent runoff from routine storm events from overtopping and eroding the berms, like in images 19, 21, 22, 24, 29, 31, and 47. I saw rills and eroded areas in the berms like in images 34, 36, 41, 42, 46, and 47. I saw the perimeter berm was not maintained at sufficient height to prevent runoff from the facility like in images 41-43 as an example.

The facility uses grassed swales and infiltration basins on the perimeter of the facility, like in images 2-3, 17-19, 21-25, 27-30, and 44. I saw performance and maintenance concerns like no vegetation, exposed soils, erosion and rills, and evidence of and potential for pollutants entering the drainage system, like in images 16-18, 21, 23, 25, 29, 31, 33-37, and 41-42. Infiltration basins experience high rates of failure when treating too large a drainage area, see the EPA's infiltration basin fact sheet from December 2021 or document EPA-832-F-21-031B. In general, infiltration basins best apply to small drainage areas; less than 5 acres is ideal, but less than 10 can be acceptable under the right conditions. Grassed swales should generally treat stormwater from drainage areas smaller than 1 acre, see the EPA's grassed swales fact sheet from December 2021 or document identifier EPA-832-F-21-031P, and may fail when treating too large of a drainage area.

The perimeter swale on the east side of the facility was not vegetated and was more of an open channel or ditch, shown in images 29, 31, 33-37, and 39-43. The facility has not effectively established vegetation throughout the perimeter swales. Improper design or maintenance of grassed swales like improper slopes or not establishing vegetation may result in very little to no pollutant removal and may have very limited capacity to reduce total loadings in the long term. I saw the grassed swales on the east and north side of the facility and the infiltration basin near the concrete rubble had steep side slopes, like in images 29, 37, 38, and 43. For the grassed swales the steep slopes were more likely on the facility side of the swale or basin with the added height from berms, like in images 31, 43, and 44. For infiltration basins the side slopes should be flat enough to prevent erosion of the sides of the basin. The facility has not effectively inspected and maintained slopes for erosion and formation of rills or gullies. I saw rills and gullies in the side slopes of swale, like in images 43-44.

I saw sections of the grassed swales that looked well maintained with full vegetation coverage, healthy turf and free of waste and debris, like in images 2, 27, and 30.

The retention basin shown in image 38 does not look well maintained based on the destabilized slopes with little to no vegetation and the small tree growing in the basin. This small tree

looked to be a more than one year old and a volunteer rather than a part of original green infrastructure design.

The wastewater retention basins did not look well maintained based on the lack of free board and lack of impoundment since wastewater may runoff to the east. Stormwater mixed with process wastewater is wastewater. Image 12 shows the water surface is near the height of pavement to the east. Image 17 shows a berm section also seen in image 12 where wastewater may flow into the swale to the south. Once on the other side of the perimeter berm stormwater may drain east in the swale and south to the conveyance in the buffer between the facility and the agricultural fields. Wastewater overflow may also drain along the berm, shown in images 18-19 and 21-24, to the swales in images 25. These swales in image 25 drain to the unvegetated ditch on the east side of the property, may overflow to the conveyance to the south of the facility and may overflow at the northeast corner of the facility. Stormwater discharges that are mixed with non-stormwater discharges are not eligible for coverage under this permit, except for allowable non-stormwater discharges under part 1.1.3 or discharges authorized by a different NPDES permit. Wastewater at this site is not an allowable discharge under part 1.1.3 and this facility did not show they had an NPDES permit to discharge wastewater.

The facility must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective responses to such spills if or when they occur to minimize pollutant discharges under permit part 2.1.2.4.

Based on what I saw the facility has an aboveground storage capacity for petroleum more than 1,320 gallons, like tanks shown in images 26 and 50 in addition to the capacity of oil-containing equipment for material handling. I did not see a spill prevention, control, and countermeasures plan during the inspection. The facility did not tell me about or send a spill prevention, control, and countermeasures plan. Section 2.2. of the stormwater pollution prevention plan is about spills and leaks and plan section 3.1.4. is about spill prevention and response. I saw the facility stores the spill response kits inside the office as shown in image 57.

The facility must minimize erosion by stabilizing exposed soils and placing flow velocity dissipation devices at discharge locations to minimize channel and streambank erosion in the immediate vicinity of discharge points under permit part 2.1.2.5. The facility must also use structural and non-structural control measures to minimize the discharge of sediment under permit part 2.1.2.5.

I saw evidence of erosion and sediment transport in stormwater in the drainage ditch on the east side of the property, like in image 29 as an example. I saw the facility uses structural and non-structural control measures to reduce the discharge of sediment like infiltration basins, grassed swales, and perimeter berms that reduce the discharge of sediment.

The facility must divert, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants in your discharges under permit part 2.1.2.6 Management of Stormwater.

I saw the facility reduces stormwater runoff using berms, grassed swales, and infiltration basins. These controls infiltrate stormwater and provide some treatment to the industrial stormwater.

I do not know the design capacity of these controls and based on my knowledge these controls do overflow during storm events. Based on my knowledge these controls may be undersized to fully contain all runoff of industrial stormwater from this facility.

The facility must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit under part 2.1.2.9 Employee Training.

The facility sent a record of annual kick-off training on April 5 and 6. The records do not show if the training covered the specific control measures to achieve the effluent limits, and monitoring, inspection, planning, reporting, and documentation requirements. The facility did not show records of any other stormwater training from previous years. The facility's stormwater pollution prevention plan does not include the content of the training and the frequency or schedule of training for employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the permit.

This facility must control discharges as necessary to meet water quality standards under permit part 2.2.

With a large enough storm event this facility would discharge and industrial stormwater would flow through conveyance ultimately to the Missouri River, which is an impaired water without an EPA-approved or established TMDL. The facility must control industrial discharges to meet water quality standards under permit part 2.2 and complete added monitoring under part 6.2.2. The facility says they do not or have not discharged stormwater during rain events.

**The facility must complete routine facility inspections, quarterly visual assessments of stormwater discharges and comprehensive site inspections under permit section 4.**

The facility must inspect the facility routinely and at least once each calendar quarter under permit part 4.1. The facility may need to inspect more often based on the types of equipment, processes, and control measures, or areas of the facility with significant activities and materials exposed to stormwater. At least once each calendar year, the facility must conduct a routine facility inspection during a period when stormwater is discharging off-site or to an on-site stormwater retention structure.

Environmental specialist Mr. Silknitter said the facility conducts routine facility inspections quarterly. The facility sent records of quarterly stormwater inspections:

- 2022-06-30\_Stormwater Inspection
- 2022-09-30\_Stormwater Inspection
- 2022-12-31\_Stormwater Inspection
- 2023-03-31\_Stormwater Inspection
- 2023-06-30\_Stormwater Inspection
- 2023-09-30\_Stormwater Inspection
- 2023-12-31\_Stormwater Inspection
- 2024-03-31\_Stormwater Inspection
- 2024-06-30\_Stormwater Inspection
- 2024-09-30\_Stormwater Inspection
- 2024-12-31\_Stormwater Inspection

Note: The dates in the inspection report filenames show the due date not the date the inspections were completed. I reviewed some of the reports and the reports do not provide much information, the main section of the report has nine generalized questions and the answer "Yes" to each question without supporting documentation.

The facility must complete quarterly visual assessments of stormwater discharges under permit part 4.2.

The facility says they do not discharge and has not completed any quarterly visual assessments of stormwater discharges.

The facility must complete annual comprehensive site inspections under permit part 4.3.

Mr. Silknitter said the facility conducts comprehensive inspections annually. The facility sent reports from annual comprehensive site inspections:

- 2021-06-18\_Comprehensive Site Inspection
- 2022-12-31\_Comprehensive Site Inspection
- 2023-12-31\_Comprehensive Site Inspection
- 2024-12-31\_Comprehensive Site Inspection

I reviewed the comprehensive site reports sent by the facility. The reports I reviewed did not provide much information or supporting documentation. As an example, environmental specialist Mr. Silknitter completed the 2024 comprehensive site inspection on November 5, the same day as the EPA inspection. The comprehensive site inspection did not find any areas of concern. The comprehensive site inspection said there was no evidence of and no potential for pollutants entering the drainage system. I saw pollutants in the drainage system, like in images 16, 17, 23, 25, 29, 31, 36-37, 39, and 41-42. The report says there are no additional control measures needed to address any conditions requiring corrective action and no required revisions to the SWPPP. I issued a Notice of Preliminary Findings on November 5 because I saw the site map did not include all stormwater conveyance. I told environmental specialist Mr. Silknitter that the site map did not include all stormwater conveyance and Mr. Silknitter signed the notice acknowledging he received a copy. I included the Notice of Preliminary Findings in this report as attachment 2. The 2023 comprehensive inspections shows that the site map needs updating to reflect current best management practices in place. The summary of changes in the stormwater pollution prevention plan on November 9, 2023, and July 19, 2024, show updates to terminology, potential pollutant table, corrective actions form, appendices, and formatting. I did not see relevant updates to the site map, like adding the stormwater conveyance installed by the facility around December 2023 or January 2024.

**The facility has a Stormwater Pollution Prevention Plan as required under permit part 5.**

I saw the facility sent a stormwater pollution prevention plan dated June 2022 with their application to the Nebraska Department of Environment and Energy. The facility sent the EPA a stormwater pollution prevention plan dated June 2022 during the onsite inspection. The facility sent the EPA a stormwater pollution prevention plan dated July 2024 after the onsite inspection.

I saw a stormwater pollution prevention plan that had the basic elements required by the permit like: a stormwater pollution prevention team, site description, summary of potential pollutant sources, description of control measures, schedules and procedures, documentation to support eligibility, and certification signatures.

Sector E.2 has additional SWPPP requirements under permit part 8.E.3.1, including showing on the drainage area site map the locations of: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device. The site map in the plan dated July 2024 does not show all sedimentation ponds used for the treatment of process wastewater, like the pond shown in image 55, and the areas that drain to the treatment device. The general area of the wastewater treatment system shown in images 10-15 is labeled as “Truck washout” on the site map but does not show the recycling/sedimentation ponds, clarifiers, or other devices used for the treatment of process water and does not show the areas that drain to the treatment device.

Sector E.2 has additional SWPPP requirements under permit part 8.E.3.2 Certification. For facilities producing ready-mix concrete, concrete block, brick, or similar products, the facility must include in the non-storm water discharge certification a description of measures that ensure that process wastewaters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with National Pollutant Discharge Elimination System requirements or are recycled. Under Appendix C, environmental specialist Mr. Silknitter certified that there are no non-stormwater discharges at this facility and says, “The site implements various BMPs to ensure stormwater stays onsite. Process water is used in specific locations on site to prevent unwanted drainage.” The certification does not effectively describe the measures the facility uses to make sure that process wastewater is not discharged, discharged following NPDES requirements, or recycled.

Section 3.1.9 says non-stormwater discharges not authorized by the permit have been eliminated. I saw places where process wastewaters resulting from washing may overflow and bypass controls during storm events, like the overflow path in image 12. I saw that runoff from the wash down stands in image 56 may drain to the driveway connected to E 48<sup>th</sup> Street.

I saw that the stormwater pollution prevention plan dated July 2024 did not include all required elements under permit part 5. The site map in Appendix B does not show locations of all stormwater conveyances including ditches, pipes, and swales. The site map does not show the location of all potential pollutant sources, locations used for treatment, storage and disposal of wastes, and all liquid storage tanks. I did not complete a comprehensive review of the stormwater pollution prevention plan compared to the requirements in the permit. I listed the items above as examples and the plan may need to be reviewed by the facility and evaluated for potential deficiencies.

**The facility must monitor discharge points where stormwater exits the facility or property.**

The monitoring requirements under permit part 6.0 apply to each outfall authorized by the permit. This permit includes five types of required analytical monitoring and more than one may apply to the discharge at this facility:

- Sector E.2 does not have indicator monitoring under permit part 6.2.1.
- This facility must complete benchmark monitoring of any industrial stormwater discharges under permit part 6.2.2. This permit requires subsector specific benchmarks

under 8.E.4. Sector E2 facilities must monitor for total suspended solids and the benchmark threshold is 100 mg/L.

- This facility does not have to complete annual effluent limitations guidelines monitoring under permit part 6.2.3. I did not see regulated activities that require monitoring for effluent limits based on effluent limitation guidelines like in Table 6.2 of the permit or Table 8.E-2.
- This facility must complete impaired waters monitoring of any industrial stormwater discharges under permit part 6.2.4. The permit says if the facility discharges to an impaired water the facility must monitor for all pollutants for which the waterbody is impaired and for which a standard analytical method exists in 40 CFR 136, like impairments E.coli, arsenic and sulfate, in the receiving stream, the Missouri River.
- The facility does not have added monitoring required by NDEE under permit part 6.2.5. I did not see any records of the Nebraska Department of Environment and Energy notifying this facility of additional discharge monitoring requirements.

This facility does not have a permitted discharge point because the facility says they do not discharge. The stormwater pollution prevention plan dated July 2024 says monitoring is not applicable because “There is no point source discharge from this location so no sampling is required.” Based on my professional knowledge this site would discharge industrial stormwater during storm events. I did not see any discharges while I was on site. Industrial stormwater discharges would require sampling under this permit.

#### **The permit requires corrective actions after triggering events.**

The permit requires corrective action under certain conditions, like:

- An unauthorized releases or discharge occurs.
- A discharge violates effluent limits.
- The facility becomes aware that control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in the permit.
- An inspection or evaluation of your facility by a NDEE official, EPA official, or local entity, finds that modifications to the control measures are necessary.
- When a visual assessment shows evidence of stormwater pollution, when routine facility inspections, quarterly visual assessments, or comprehensive site inspections find that control measures are not being properly operated and maintained.
- Whenever a visual assessment shows evidence of stormwater pollution.

Mr. Silknitter sent a corrective action report on November 13. The corrective action form did not have any relevant information like dates, description of the event that requires corrective action, and description of the corrective action.

## SUMMARY

1. Siouxland Concrete makes ready-mix concrete for sale. Stormwater runoff from this facility is stormwater related to manufacturing, processing, and raw materials storage areas at an industrial plant.
2. Industrial stormwater discharges from Siouxland Concrete would flow to South Sioux City municipal storm sewer system and the Missouri River. The facility says that they do not discharge stormwater. I saw controls that looked undersized to prevent industrial stormwater from discharging from the facility.
3. The facility must use control measures to meet technology-based effluent limits under permit Part 2.
  - a. I saw industrial activities and materials exposed to stormwater. I saw the facility minimizes exposure of some industrial activities and materials. I saw the facility has not minimized exposure of some industrial activities and materials.
  - b. I saw evidence of good housekeeping. The facility's sweeping schedule may not meet the minimum frequency required by the permit.
  - c. I saw the perimeter berms did not look well maintained. I saw grassed swales and infiltration basins that were not well maintained. I saw wastewater retention structures that did not look maintained with enough freeboard to prevent stormwater commingled with process wastewater from overflowing the structure.
  - d. I saw aboveground storage capacity for petroleum that looked to be more than 1,320 gallons, like in aboveground tanks and oil-containing equipment. The facility may need a spill prevention, controls, and countermeasures plan.
  - e. I saw evidence of erosion and exposed soils. I saw evidence of sediment transport in stormwater conveyance.
  - f. I saw the facility reduces stormwater runoff using berms, grassed swales and infiltration basins but that these controls are not sized to contain all stormwater runoff from expected rainfall events. The facility does not have to contain all stormwater runoff but the facility says that they do not discharge.
  - g. I saw a log of an employee training that may or may not have included the required training on the specific control measures to achieve the effluent limits, and monitoring, inspection, planning, reporting, and documentation requirements.
4. The facility must complete routine facility inspections, quarterly visual assessments of stormwater discharges and comprehensive site inspections under permit section 4.
  - a. The facility must inspect the facility routinely and at least once each calendar quarter under permit part 4.1. The facility sent records of quarterly stormwater inspections completed between June 2022 to December 2024.
  - b. The facility must complete quarterly visual assessments of stormwater discharges under permit part 4.2. The facility says they do not discharge and has not completed any quarterly visual assessments of stormwater discharges.
  - c. The facility must complete annual comprehensive site inspections under permit part 4.3. The facility sent reports from annual comprehensive site inspections for 2021, 2022, 2023, and 2024. The 2024 annual comprehensive site inspection

dated the same day as the EPA inspection and does not include any areas of concerns or conditions requiring corrective actions.

5. The facility has a Stormwater Pollution Prevention Plan as required under permit part 5.
  - a. I saw that the stormwater pollution prevention plan dated July 2024 did not include all required elements under permit part 5.
6. The facility must monitor discharge points where stormwater exits the facility or property. This facility does not have a permitted discharge point because the facility says they do not discharge. Any industrial discharges from this facility require visual monitoring, benchmark monitoring and impaired waters monitoring. Based on my onsite observations and professional knowledge this site would discharge industrial stormwater during storm events. I did not see any discharges while I was on site.

**CAITLIN DIX**  
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CAITLIN DIX  
Date: 2024.12.20  
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Caitlin Dix  
Physical Scientist, Water Branch  
Enforcement and Compliance Assurance  
Division

**NICOLE MORAN**  
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Date: 2024.12.20 10:08:29 -06'00'

Nicole Moran  
Acting Water Branch Supervisor  
Enforcement and Compliance Assurance  
Division

**ATTACHMENTS:**

1. Digital Image Log (67 pages)
2. Notice of Preliminary Findings (2 pages)
3. Stormwater Pollution Prevention Plan (53 pages)
4. Records sent by facility (PDF portfolio of 8 attachments with a size of 43.86 MB)
5. Notice of Intent (66 pages)
6. Notice of Authorization and Permit (173 pages)