

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5th STREET
KANSAS CITY, KANSAS 66101

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ENVIRONMENTAL PROTECTION
AGENCY-REGION VII
REGIONAL HEARING CLERK

IN THE MATTER OF)
The City of Broken Bow, Nebraska)
)
)
NPDES Permit No. NE0027260)
)
)
Proceedings under Section 309(a)(3))
of the Clean Water Act, 33 U.S.C.)
§ 1319(a)(3))
_____)

Docket No: CWA-07-2009-0077

FINDINGS OF VIOLATION
AND ORDER FOR COMPLIANCE

I. Statutory Authority

1. The following FINDINGS OF VIOLATION are made and ORDER FOR COMPLIANCE is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA"), by Section 309(a)(3) of the Clean Water Act ("CWA" or the "Act"), 33 U.S.C. § 1319(a)(3). As an element of this ORDER, provision of information is required pursuant to the authority of Section 308 of the CWA, 33 U.S.C. § 1318. These authorities have been delegated by the Administrator to the Regional Administrator, EPA Region 7, and further delegated to the Director, Water, Wetlands and Pesticides Division, EPA Region 7

II. Factual Background

2. The City of Broken Bow ("the City"), Nebraska is a "person" as defined by Section 502(5) of the Act, 33 U.S.C. § 1362(5), that owns and operates Publicly Owned Treatment Facility ("POTW") for the treatment of both domestic and industrial wastewater.

3. The POTW consists of a four cell stabilization pond, or lagoon system, with two cells providing primary treatment, and two providing finishing or secondary treatment. The POTW was constructed in 1972, with a designed average flow of 660,000 gallons per day ("gpd"), and a maximum design flow of 1,080,000 gpd.

4. The POTW is a "point source" that discharges "pollutants" to Mud Creek, which is a "navigable water," as these terms are defined by Section 502 of the Act, 33 U.S.C. § 1362. The City's discharge of pollutants from its POTW requires a permit issued pursuant to Section 402 of the CWA, 33 U.S.C. § 1342. Mud Creek is 303(d) listed for atrazine and aesthetic impairment.

5. Section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants except in compliance with, inter alia, Section 307 of the CWA, 33 U.S.C. § 1317, and permits issued under the authority of Section 402 of the CWA, 33 U.S.C. § 1342. Section 402 of the CWA provides that pollutants may be discharged only in accordance with the terms of a National Pollutant Discharge Elimination System ("NPDES") permit issued pursuant to that Section. Section 307 of the CWA, in pertinent part, authorizes the EPA to establish pretreatment standards for introduction of pollutants into publicly owned treatment works.

6. EPA approved the State of Nebraska's NPDES permit program under 33 U.S.C. § 1342(b), in June 1974. EPA approved the State's Pretreatment program under 33 U.S.C. § 1342(b), in September 1984. EPA maintains concurrent enforcement authority with authorized state NPDES programs for violations of the CWA.

7. In 2005, the City submitted an application for renewal of its NPDES permit to the Nebraska Department of Environmental Quality ("NDEQ"). This application identifies the Beckton Dickinson Company as a significant industrial user of the POTW for treatment of its wastewater, with an estimated daily discharge to the POTW of 400,000 gpd. In November 2008, Becton-Dickinson submitted a pretreatment permit application to NDEQ that states the company discharges 266,800 gpd to the POTW.

The City's 2006 NPDES Permit

8. On or about January 1, 2006, the NDEQ issued NPDES Permit No. NE0027260 ("2006 permit") to the City's POTW, pursuant to Section 402 of the Act, 33 U.S.C. § 1342.

9. The 2006 permit contains final effluent limitations and other requirements for Broken Bow's POTW. Included are narrative compliance requirements, monitoring requirements, and express numeric concentration limits on (among other things), carbonaceous biological oxygen demand (5-day) ("CBOD₅"), total suspended solids ("TSS"), ammonia, whole effluent toxicity ("WET") and fecal coliform. The 2006 NPDES permit's narrative conditions prohibit, among other things, discharges containing pollutants at concentrations or levels producing objectionable colors in receiving waters.

10. As required by the 2006 permit, the City submits Discharge Monitoring Reports ("DMRs") to NDEQ that set forth monitoring results obtained from the POTW during each quarterly reporting period.

Inspections and Notices of Violation Issued by NDEQ

11. The City was issued Notices of Violation ("NOVs") by NDEQ on May 22, 2007, February 14, 2008, July 1, 2008, and January 8, 2009, which cite, in pertinent part, the City's failure to submit the requirements of a compliance schedule to upgrade the POTW.

12. NDEQ's February 14, 2008, NOV cited the City for the following violations of its 2006 NPDES permit:

- violation of the limit for WET, and for the failure to conduct follow-up testing for the significant noncompliance;
- violation of the requirement to monitor for CBOD₍₅₎ during the month of June 2007;
- violation of the requirement to monitor for the presence of TSS during the month of June 2007; and
- violation of the 2006 permit's limits for monthly average and daily maximum for fecal coliform in the months of July, August, and September 2007.

13. On April 9, 2008, NDEQ conducted an inspection of the POTW in response to a complaint that water downstream of the POTW was "very green" from Litchfield to Ravena, Nebraska. NDEQ's inspectors documented and photographed bright green water in Mud Creek from the POTW for a distance of 34 "straight-line" miles. NDEQ sampled the POTW's discharge and found pH of 9.47 (S.U.).

14. On April 30, 2008, NDEQ re-inspected the POTW. During this inspection, bright green discoloration was confirmed in discharges from the POTW into Mud Creek. Mud Creek was observed to be discolored from the POTW to the South Loup River, a distance of 45 straight line miles from the POTW.

15. The findings of NDEQ's April 2008 inspection were transmitted to the City in an NOV dated July 1, 2008. The July 1, 2008 NOV required the City to conduct weekly testing of nitrogen and phosphorus in the effluent from the POTW.

16. On November 10, 2008 (after the EPA inspection described below), NDEQ again inspected the POTW and found two active discharge points, although the facility was permitted for only one (Outfall 001). NDEQ's inspection report states that effluent from one outfall had "a green color. The receiving stream was being discolored by the discharge. Facility not meeting ammonia limitations...[and] BOD limits." NDEQ's November 2008 inspection also found that the City was not conducting weekly testing of nitrogen and phosphorus, as directed by NDEQ in its July 1, 2008, NOV.

EPA's Inspection of the POTW

17. On or about July 7-10, 2008, EPA performed an on-site inspection of the City's POTW. During this inspection, EPA performed sampling of the POTW's influent and effluent and conducted a review of available documentation of the POTW's operation. EPA's inspection identified numerous operational deficiencies at the POTW and violations of the City's 2006 permit.

18. At the time of EPA's inspection there were no sludge disposal records available for review, but based on the sludge depth within the POTW's treatment lagoons, it appeared that

sludge had never been removed or disposed of since the POTW was constructed in 1972. The effect of accumulated sludge in a lagoon treatment system is both reduced treatment capacity and inefficiency of treatment (e.g. blue green algae).

19. Both primary cells of the POTW are designed to be operated with aeration, however, on the day of EPA's inspection, aerators were not working, and monitoring of dissolved oxygen ("D.O.") was not being performed by the POTW staff. EPA's inspector observed blue green algae scum floating in the lagoon treatment cells.

20. The POTW is hydraulically overloaded, and based on accumulated sludges with the lagoons does not appear to allow for adequate retention and treatment time of wastewater. Blue green algae, high pH in the POTW's effluent, and green discolored effluent are each often caused by inadequate retention and treatment of wastewater.

21. At the close of EPA's inspection, EPA issued the City a Notice of Potential Violation ("NOPV") for numerous violations of its 2006 permit. On July 16, 2008, the City provided a response to EPA's NOPV. A full copy of a report documenting EPA's inspection was submitted to NDEQ and the City of Broken Bow on or about September 8, 2008.

III. Findings of Violation

22. EPA's inspection of the POTW, and subsequent review of available information has documented the following violations by the City of the 2006 permit, and correspondingly, Sections 301 and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 1:

Violation of Compliance Schedule for Ammonia

23. Part II of the 2006 permit (Compliance Schedule for Meeting Final Ammonia Limits) sets forth a compliance schedule for the City to upgrade the POTW to meet final permit limits for ammonia. This schedule of compliance is set forth below:

- January 1, 2006, Permit effective.
- January 1, 2007, Design and specifications due for plant upgrades.
- January 1, 2008, Initiation of construction upgrades due.
- January 1, 2009, Completion of plant upgrades due.
- January 1, 2010, Final limits for ammonia in effect and shall apply to discharge.

24. To date, the City has failed to meet the required compliance timelines for commencement and completion of plant upgrades, as set forth in Part II of its 2006 permit.

25. The City's failures to meet the compliance schedule for upgrades (required to meet final ammonia limits), are each violations of the 2006 permit, and is a violation of Sections

301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA

Count 2:

Discharge from an unpermitted Outfall

26. Part I (A) of the 2006 Permit (Outfall 001 - Discharge to Receiving Stream Requirements) designates a single approved outfall for the the City's POTW discharge to Mud Creek, referenced as Outfall 001. The exact location of the permitted outfall (001) is designated by GPS positioning that has been recorded with NDEQ.

27. Standard Condition D(6) of the 2006 permit requires that any facility expansion, production, or process modification be reported by the City to NDEQ at least 180 days prior to the change.

28. At some unknown time, the City plugged the permitted Outfall 001, and a second unpermitted outfall was constructed by the City for discharges from the POTW. However, the City failed to submit an application to NDEQ for this modification or for the closure of Outfall 001, in violation of Standard Condition D(6) of the 2006 permit.

29. During EPA's inspection, both the second unpermitted outfall and the permitted outfall (Outfall 001) were observed to be discharging continuously; with Outfall 001 discharging an estimated additional 100,000 gpd, and the remaining effluent discharging from the unpermitted outfall.

30. All discharges from the unpermitted outfall at the POTW, are not authorized by the 2006 permit, and accordingly, are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 3:

Discharge of toxic, noxious and discolored effluent

31. Part V(C) of the 2006 permit (Other Requirements and Conditions Narrative Limits) prohibits discharges that contain pollutants at concentrations or levels that produce objectionable films, colors, turbidity, deposits, or noxious odors in the receiving stream or waterway.

32. Appendix A, Part A.6 (General Conditions) states that the "permittee shall not discharge pollutants to waters of the state that cause a violation of the standards established in NDEQ Titles 117, 118, or 119. All discharges to surface water of the state shall be free of toxic (acute or chronic) substances which alone or in combination with other substances, create conditions unsuitable for aquatic life outside the supporting mixing zone."

33. NDEQ Title, 117, Chapter 4, Section 003.01A establishes a general water quality standard for aquatic life of pH between 6.5 and 9.0 (S.U.). NDEQ Title 117, Chapter 4, Section 005 states “waters shall be free from human-induced pollution which causes: (1) noxious odors; (2) floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and (3) the occurrence of undesirable or nuisance aquatic life (e.g., algal blooms)...”

34. On or about June 3, 2003, NDEQ conducted an inspection and observed bright green color effluent discharging from the POTW. During NDEQ’s April and November, 2008 inspections, bright green discharges from the POTW were observed and documented. NDEQ’s April 2008 inspections documented bright green discoloration in Mud Creek for as much as 45 miles downstream from the POTW.

35. During NDEQ’s April 2008 inspection, NDEQ sampled the POTW’s discharge and found pH of 9.47 (S.U.). At two downstream points beyond the “mixing zone” from the point of discharge, NDEQ detected a pH in Mud Creek of 9.22 (S.U.). NDEQ’s inspection report states “given these high pH levels, even a slight increase in total ammonia concentrations (i.e. <.05 mg/l) measured would have resulted in a standards violation and create conditions toxic to aquatic life.”

36. EPA’s July 2008 inspection also documented bright green discharges from the POTW into Mud Creek.

37. The City has discharged effluent from the POTW with an objectionable bright green color and elevated pH (at a minimum on the dates of the described in the referenced NDEQ and EPA inspections), in violation of Parts V(C) and Appendix A, Part A.6 of the 2006 permit, and Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 4:
Violations of Numeric Limits for
CBOD₍₅₎, TSS, fecal coliform, cadmium and Whole Effluent Toxicity

38. Part I(A) of the 2006 permit (Outfall 001 - Discharge to Receiving Stream Requirements) sets forth numeric limits for both mass and concentration for CBOD₍₅₎, and TSS for discharges from permitted Outfall 001.

39. The City’s discharges from the POTW violated the 2006 permit’s limits for CBOD₍₅₎ during the months of March 2006, April 2007, August 2007, February 2008, March 2008, April 2008, May 2008, July 2008, August 2008, December 2008, January 2009, March 2009 and April 2009. Discharges from the POTW violated the 2006 permit’s limits for TSS during the months of April 2008, July 2008, and March 2009.

40. Part I(B) of the 2006 permit sets forth limits for pH for the discharge of effluent from Outfall 001. The permit sets forth limits for pH in of 6.5 (S.U.) daily minimum and 9.0

daily maximum for discharges from Outfall 001.

41. The City's discharges from the POTW violated the 2006 permit's limits for pH in the months of April 2006, May 2006, June 2006, September 2006, October 2006, April 2008 (NDEQ monitored the POTW's discharge at pH of 9.47 (S.U.)), May 2008, June 2008 and July 2008 (EPA's inspection documented discharges of 9.03 and 9.20 S.U.).

42. Part I(E) of the 2006 permit sets forth limits for daily maximum and monthly averages for fecal coliform for discharges from Outfall 001.

43. The City's discharges from the POTW violated the 2006 permit's limit for fecal coliform in the months of June 2006, July 2007, August 2007, May 2008, and September 2008. An NOV was issued by NDEQ February 14, 2008, in part, for the failure of The City to meet monthly average and daily maximum limitations for fecal coliform in the months of July, August, and September 2007.

44. Part I(F) of the 2006 permit sets forth monitoring requirements for several metals (including cadmium, chromium, copper, lead, nickel, and zinc) for discharges from Outfall 001.

45. The City's DMR for September 2006 documents levels of cadmium in the POTW's discharge of 8.14 mg/l, in violation of the water quality standards for cadmium.

46. Part I(F) of the 2006 permit Sets forth a limit for whole effluent toxicity (WET) of 1.0 toxicity units (1.0 T.U.) for discharges from Outfall 001. The permit requires that final effluent, be sampled and monitored with a 24-hour composite sample once in the term of the NPDES permit.

47. The City's WET test for 2007 was in violation of the limits for toxicity set forth in the 2006 permit. The permit requires that follow-up monitoring be performed within 4 weeks of such a violation, and the City failed to perform the required followup monitoring (NDEQ's February 14, 2008 NOV, cited the City for the failure to meet the toxicity limit of the permit and for the failure to conduct the required follow-up testing).

48. Part V(B) of the 2006 permit (Other Requirements and Conditions Requirements for the Removal of CBOD₍₅₎) requires the 30-day average percent removal of CBOD₍₅₎ by the WWTF not be less than 85%. This removal efficiency is calculated based on a comparison of the loadings of CBOD₍₅₎ in the influent and effluent of the POTW.

49. Utilizing the City's data on the levels of CBOD₍₅₎ in the POTW's influent and effluent, the calculated removal efficiency for CBOD₍₅₎ in 2006 was 70%; in 2007 was 69%; and in 2008 equaled 69%, each year being in violation of the 2006 permit's requirement for a 85% removal of CBOD₍₅₎.

50. The City's violations of the effluent limits described above, are each violations the 2006 permit, and as such, are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C.

§ 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 5:

Failure to Properly Monitor flow influent to POTW

51. Part III of the 2006 permit (Influent Requirements) requires that influent flow be monitored annually and reported within a tolerance of +/- 10% of actual influent, and that flow samples be taken at the headworks of the wastewater treatment facility (prior to the treatment system).

52. Prior to April 2008, the City simply reported influent flow as the maximum design flow for the POTW of 1.08 million gallons per day (MGD), without actual measurement of flows into the POTW, in violation of Part III of the 2006 permit.

53. In April 2008, the City installed a flow measurement device (Pulsar Ultra3) just before the final lift station into the WWTF. The City's flow data for between May 1, 2008 and June 9, 2008, documents for this period the volume of daily influent ranged between 1.109 and 1.612 million gpd (MGD), (including periods without reported rain).

54. The calculated average influent to the POTW for the May and June 2008 equaled 1,300,000 gpd. The basis of design for maximum influent to the POTW is 1,080,000 gpd. This data documents that influent to the POTW was regularly above the POTW's maximum design criteria, and that the WWTF is regularly hydraulically overloaded. Further, Becton Dickinson reports in their permit application to discharging 266,800 gpd to the POTW. The 2000 Census data estimated that Broken Bow has a population of 2,195. Using a standard population equivalent of 100 gallons of discharge per person per day, the POTW would receive an estimated 219,500 gpd of domestic sewage, for a total influent of 486,300 gpd from known sources (266,800 gpd plus 219,500 gpd). This calculation leaves an average of 813,700 gpd (1,300,000 minus 486,300 gpd) unaccounted for in the known sources of the POTW's influent.

55. A comparison of the POTW's influent data for May and June 2008 to rainfall events during this period, documents that with rainfall in excess of 1 inch, an average increase of influent to the POTW of 300,000 gpd occurred. This indicates that the POTW collection system may have infiltration and inflow problems that contribute to the hydraulic overloading of the POTW.

56. The City's failure to properly monitor influent to the POTW is a violation the 2006 permit, and as such, is a violation of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 6:
Unpermitted discharges from POTW Collection system

57. Appendix A – Part D.3 (Reporting Requirements) requires the City to report any SSOs to NDEQ within 24 hours of becoming aware of the event.

58. The City has reported to NDEQ discharges of untreated wastewater from pump stations within the City's wastewater collection system, also known as sanitary sewer overflows ("SSOs") on the following dates:

- a. On or about August 7, 2008, a dry weather discharge of 10,000 gallons;
- b. On or about August 20, 2008, a dry weather discharge of 10,000 gallons; and
- c. On or about October 23, 2008, a discharge of 8,000 gallons (due to a power failure at lift station due to heavy snow).

59. During EPA's inspection, a representative of the City stated to EPA's inspector that citizen's complaints of SSO (illegal discharges) were not always logged or reported.

60. All SSO discharges from the POTW are not authorized by the 2006 permit, and all unreported SSOs are in violation of Appendix A, Part D.3 of the 2006 permit, and are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 7:
**Failure to properly measure volume of effluent
And report compliance with Mass limits**

61. Part I(A) of the 2006 permit (Outfall 001 - Discharge to Receiving Stream Requirements) requires the volume of final effluent from the POTW be monitored daily and reported within a tolerance of +/- 10% of actual flows.

62. The City's response to EPA's July 2008 NOV states "The City is now taking and documenting daily effluent measurements." However, on DMRs submitted to NDEQ through April 2009, the City has consistently reported the volume of discharges from the POTW as low as between 310,000 and 410,000 gpd. In contrast, influent flow reports (May-June 2008) document that average influent flow to the POTW is 1,300,000 gpd (ranging between 1,109,000 and 1,612,000 gpd).

63. Using a conservative standard engineering evaporation value (for western Nebraska), EPA's inspector estimated an evaporation rate of 91,000 gpd from the lagoon system, leaving a calculated average volume of discharges from the POTW of 1,209,000 gpd. Based on a comparison of the average volume of influent to the POTW to the reported value discharged from the POTW, the reported volume of discharge from the POTW has been systematically under reported, and not monitored and reported within the tolerance of +/- 10% of actual discharges to Mud Creek, as required by Part I(A) of the 2006 permit.

64. EPA's July 2008 inspection and NDEQ's November 2008 inspection documented that discharges were occurring both from permitted Outfall 001 and second, unpermitted outfall. However, the City was only performing compliance monitoring at the location of the second unpermitted outfall.

65. The City's ongoing failure to accurately report the volume of discharges from the POTW has also necessarily resulted in misreporting the City's compliance with the 2006 permit's mass limits for pollutants discharged into Mud Creek because compliance with such mass limits is calculated by multiplying the concentration of a specific pollutant times the volume of effluent. Using the calculated volume of average discharges from the POTW (1,209,000 gpd) to determine compliance during the term of the 2006 permit, the City has been in continuous non-compliance with mass limits for BOD and TSS.

66. The City's failure to properly measure discharge volume and to calculate compliance with mass limits of the 2006 permit based on actual volume of discharges, are violations of the permit, and as such, are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 8:

**Failure to properly conduct monitoring/sampling
in compliance with the requirements of the 2006 permit**

67. Part III of the 2006 permit (Influent Requirements) requires that influent monitoring samples for CBOD₍₅₎ and TSS be taken as 24-hour composite samples and reported annually, and that a grab sample for influent pH be taken and reported annually.

68. EPA's inspector was told by the City that influent sampling has been taken at a splitter manhole located at the northwest portion of the POTW since 1972. EPA's inspector documented that this sampling location (manhole) receives only a small portion of the wastewater loading into the facility, and therefore, any samples taken at this location are not representative of loadings to the POTW.

69. Part I(F) of the 2006 permit (Requirements for Metals and Toxicity) requires the discharges from Outfall 001, be sampled as a 24-hour composite sample on an annual basis.

70. EPA's inspector observed and documented that metals sampling events have been drawn as grab samples, and not as a representative 24-hour composite sample as required by the 2006 permit.

71. Appendix A, Part (C)(3) of the 2006 permit (Test Procedures) requires that required monitoring shall conform to the methods adopted in the NDEQ Title 119, Chapter 21 006, which in turn incorporates the sampling and monitoring protocols of 40 CFR 136. NDEQ Title 119, Chapter 21 006 and 40 CFR 136 require that each field measurement or sample device be properly maintained and calibrated prior to each sample measurement.

72. EPA's inspection documented that the D.O. meter was improperly maintained (a dry probe) and was being stored improperly. During the EPA inspection, EPA observed that the pH meter calibration solutions were either expired or missing.

73. Appendix A, Part (C)(5) of the 2006 permit (Retention of Records) requires the retention of records of all monitoring activities for a period of at least three years as set forth in NDEQ Title 119, Chapter 14 001.02. The permit requires that each field measurement or sample device be calibrated prior to each sample measurement and a record of that calibration and all maintenance of the sample device must be retained for the specified time period.

74. During EPA's inspection, a representative of the City stated that none of the required records had ever been kept of the required calibration or maintenance of measurement devices.

75. The City's failure to conduct proper monitoring/sampling and failure to keep required records of monitoring activities at the POTW are violations of the 2006 permit, and as such, are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

Count 9:

**Failure to properly operate POTW
And mitigate conditions causing violations of 2006 permit**

76. Appendix A, Part E.1 of the 2006 permit (Operation and Maintenance) requires the City to, "at all times, maintain in good working order and operate as efficiently as possible any facilities or systems of control installed by the permittee in order to achieve compliance with the terms and conditions of this permit... [including] but not limited to, effective performance based on designed facility removals, effective management, adequate operator staffing and training, adequate laboratory and process controls, and adequate funding which reflects proper user fee schedules."

77. Appendix A, Part A.3 of the 2006 permit (General Conditions) requires the City to "take all reasonable steps to minimize, prevent, or correct, and adverse impact to the environment resulting from non-compliance with this permit..."

78. The City has failed to properly operate the POTW and/or mitigate known conditions causing violations of the 2006 permit; including, but not limited to the following:

- a. Failure to properly remove biosolids (sludges) to allow for proper detention time and treatment in the POTW's lagoon;
- b. Failure to properly measure influent and effluent from the POTW;
- c. Failure to maintain and properly operate aerators in the POTW; and
- d. Failure to prevent algae growth which caused discolored effluent and elevated pH in the discharge from the POTW.

79. The City's failure to properly operate the POTW and/or to take actions to mitigate documented ongoing violations of the 2006 permit, are violations of conditions of the 2006 permit, and as such, are violations of Sections 301(a) and 402 of the CWA, 33 U.S.C. § 1311(a) and § 1342, and the implementing regulations of the CWA.

IV. Order for Compliance and Request for Information

Based on the foregoing Findings of Violation, and pursuant to the authority of Sections 308 and 309(a)(3) of the Act, 33 U.S.C. §§ 1318 and 1319(a)(3), the City of Broken Bow, Nebraska, is hereby ORDERED to take the following actions and to provide the following information:

80. Immediately upon receipt of this Order, the City shall cease discharge from unpermitted discharge locations at the POTW, and shall only discharge from the permitted location of Outfall 001. Thereafter, all compliance monitoring required on effluent from the POTW shall be performed on discharges from Outfall 001, unless written authorization for discharge from another location is obtained from NDEQ through a permit modification.

81. Immediately upon receipt of this Order, the City shall fully and properly comply with all monitoring requirements of the 2006 permit (and as incorporated by reference 40 C.F.R. Part 136), including but not limited to the requirement for the proper daily measurement of the volume of effluent discharged. In addition to the monitoring required by the 2006 permit, the City shall perform the following:

- a. Each day, the City shall monitor and record the total volume of influent to the POTW;
- b. Within fifteen (15) days of receipt of this Order, the City shall perform a WET test on the effluent from the POTW. If the WET test fails the 2006 permit's limits for WET (See, Section I.F of the 2006 permit), within thirty (30) days after receiving the WET test results, the City shall perform, and provide EPA a copy of a toxicity indicator evaluation (TIE) study to determine the cause of the toxicity; and
- c. Within fifteen (15) days of completion of the construction and startup period of the upgrade to the POTW required by Section II of the 2006 permit, according to the schedule approved by EPA pursuant to Paragraph 82, below, the City shall perform a WET test on the effluent from the POTW. If the WET test fails the 2006 permit's limits for WET (See, Section I.F of the 2006 permit), within thirty (30) days after receiving the WET test results, the City shall perform, and provide EPA a copy of a TIE study to determine the cause of the toxicity; and

82. Within fifteen (15) days of receipt of this Order, the City shall submit to EPA and NDEQ, for EPA review and approval, a written proposed schedule for commencing and completing the upgrade to the POTW required to achieve compliance with the final ammonia

limits set forth in Section II of the 2006 Permit. The City shall also submit to EPA a copy of all design plans that have been developed for the planned upgrade for the POTW, required to achieve compliance with the final ammonia limits.

83. At the time of EPA's inspection, there were no biosolids (sludge) disposal records available for review. Within fifteen (15) days of receipt of this Order, the City shall submit to EPA and NDEQ a Biosolids (Sludge) Evaluation Report, for EPA review and approval, that contains the following information:

- a. Copies of all sludge disposal records in its possession for the POTW;
- b. A statement of whether or not biosolids have ever been removed from the POTW's lagoons, and the estimated dates of all such removals;
- c. A measurement of the current depth of accumulated biosolids (sludge) within each lagoon cell;
- d. An analysis of whether or not the removal and disposal of biosolids (sludges) from the POTW's lagoons system is required for proper operation of the upgraded POTW; and
- e. A proposed schedule for the testing (for metals), removal and proper disposal of biosolids (sludges) from the POTW's lagoons system.

84. Within thirty (30) days of receipt of this Order, the City shall submit to EPA and NDEQ, a written Compliance Evaluation Report that contains the following information:

- a. Documentation of a new sample location that will be used for taking influent samples to POTW that is capable of getting representative samples of all influent;
- b. Documentation of the installation of equipment that will measure the full volume of all effluent from the POTW;
- c. The results of an evaluation by a licensed wastewater engineer describing the cause of the discrepancy between monitored influent and effluent to the POTW;
- d. If the discrepancy between monitored influent and effluent to the POTW is found to be attributable to known sources of wastewater, the City shall identify such sources, and provide an estimate of the average daily volume of wastewater directed to the POTW from each such source;
- e. The results of an evaluation by a licensed wastewater engineer that provides a detailed explanation of the cause of the following violations of the 2006 permit and/or conditions in the effluent discharged from the POTW:
 - (i) the green discoloration of Mud Creek;
 - (ii) of pH violations;
 - (iii) of fecal coliform, CBOD₅ and TSS violations;
 - (iv) presence of cadmium and chromium in effluent, as detected in 2006 and 2007; and
 - (v) the 2007 WET violation (and any WET violation detected pursuant to Paragraph 81.b, above).

- f. The results of an evaluation by a licensed wastewater engineer that determines whether the design for the planned upgrades to the POTW to achieve compliance with the ammonia limits of Section II of the 2006 permit will be capable of correcting the following conditions or violations:
 - (i) the hydraulic overloading of the POTW;
 - (ii) the volume and characteristics of wastewater from industries that use the POTW for treatment of their wastewater;
 - (iii) the green discoloration of Mud Creek;
 - (iv) the pH violation;
 - (v) of fecal coliform, CBOD₍₅₎ and TSS violations;
 - (vi) the impact of cadmium and chromium discharges on the receiving stream; and
 - (vii) the 2007 WET violation (and any other WET violation detected pursuant to Paragraph 81.b, above).
- g. If EPA determines that the information submitted pursuant to Paragraph 84.f, above, demonstrates that any work in addition to the approved current design for the planned upgrades to the POTW is required to achieve compliance with the 2006 permit, EPA in consultation with NDEQ, may request that the City provide a detailed proposal and schedule for the performance of such additional work to EPA and NDEQ. EPA, after consultation with NDEQ, reserves the right to require such additional work if EPA determines it is necessary to achieve compliance with the 2006 permit.

85. Within thirty (30) days of receipt of this Order, the City shall provide EPA with fully legible copies of the following documents:

- a. All records of communication with Becton Dickinson regarding the company's loadings to POTW;
- b. All city records, memos, discussing and/or describing the compliance status of POTW and impact of discharges from any industrial user on the POTW;
- c. All final design documents and design memorandum for planned upgrades to POTW;
- d. All local ordinances regulating industries using POTW for the treatment of their wastewater;
- e. All billing records to any industrial user of the POTW (including Becton Dickinson) for water usage as well as any surcharges;
- f. All DMRs for the POTW for the last five years;
- g. All documentation of sampling undertaken for compliance with 2006 permit during the pendency of the permit, including lab sheets, correspondence with labs, calibration logs, sample reports, chain of custody forms, etc.;
- h. All WWTF personnel certification and training records for the last five years; and
- i. All phone and written records of citizen complaints in reference to the wastewater treatment and collection system, and maintenance records for the collection system.

86. The City shall submit to EPA and NDEQ a monthly Compliance Report (due by the 28th day of each month) that provides copies of all monitoring and sampling information conducted pursuant to the POTW's 2006 NPDES permit and this Order in the prior calendar month (see Paragraph 81, above). The monthly Compliance Report to EPA shall also include a copy of the City's DMR, the original of which is submitted to NDEQ. The monthly Compliance Report shall also include a detailed description of all work performed during the prior calendar month pursuant to the 2006 permit and this Order, including all upgrades and maintenance performed at the POTW (for example, biosolids removal or other lagoon maintenance). This reporting obligation shall terminate 12 months after completion of the upgrade required by Section II of the 2006 permit and any additional work required by Paragraph 84.g, unless the City is notified in writing by EPA that the reporting requirement has been extended. Any such notification by EPA shall specify the period for additional reporting and shall not require further amendment to this Order.

EPA Review and Approval of Required Submittals

87. EPA will review all proposed submittals requiring EPA approval and notify the City in writing of EPA's approval, disapproval or modification of the submittal, or any part thereof. Within thirty (30) days of receipt of EPA's comments pertaining to any submittal, the City shall amend such submittal, addressing all of EPA's comments, and resubmit same to EPA. If EPA disapproves the revised submittal, it may modify and approve the same in accordance with its comments. In the event of such modification, EPA will notify the City of the modification(s). Upon receipt of EPA's approval or notice of modification(s), the City shall commence work and implement any approved submittal in accordance with the schedule and provisions contained therein. EPA approved submittals shall be deemed incorporated into and enforceable as part of this Order.

88. All documents required for submittal to EPA and NDEQ shall be hand delivered or sent by certified mail, return receipt requested, to the following:

Ms Kimberly Willis
Water Enforcement Branch
Water, Wetlands and Pesticides Division
U.S. Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101

Steve Goans, Wastewater Section, Supervisor
Nebraska Department of Environmental Quality
1200 N Street, Suite 400
The Atrium
Lincoln, Nebraska 68509-8922

89. All submissions made by Respondent to EPA and NDEQ pursuant to the requirements of this Order for Compliance shall contain the following certification signed by an authorized official, as described at 40 CFR § 122.2:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with 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 submissions of false information.

V. General Provisions

Effect of Compliance with the Terms of This Order for Compliance

90. Compliance with the terms of this Order for Compliance shall not relieve the City of liability for, or preclude EPA from initiating, an enforcement action to recover penalties for any violations of the CWA, or to seek additional injunctive relief, pursuant to Section 309 of the CWA, 33 U.S.C. § 1319.

91. The City shall comply with all other applicable laws, regulations, standards, and requirements contained in any applicable local, State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this Order.

92. This Order does not constitute a waiver or a modification of any requirements of the CWA, 33 U.S.C. § 1251, et. seq., all of which remain in full force and effect. EPA retains the right to seek any and all remedies available under Section 309 of the Act, 33 U.S.C. § 1319, for any violation cited in this Order. Issuance of this Order shall not be deemed an election by EPA to forgo any civil or criminal action to seek penalties, fines, or other appropriate relief under the Act for any violation whatsoever.

Access and Requests for Information

93. Nothing in this Order shall limit EPA's right to obtain access to, and/or to inspect the City's POTW, and/or to request additional information from the City, pursuant to the authority of Section 308 of the CWA, 33 U.S.C. § 1318, and/or any other authority.

Severability

94. If any provision or authority of this Order, or the application of this Order to the City, is held by federal judicial authority to be invalid, the application to the City of the

remainder of this Order shall remain in full force and effect and shall not be affected by such a holding.

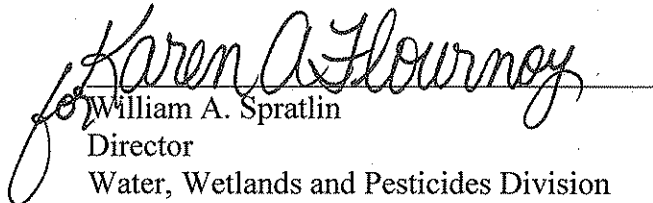
Effective Date

96. The terms of this Order shall be effective and enforceable against the City upon its receipt of an executed copy of the Order.

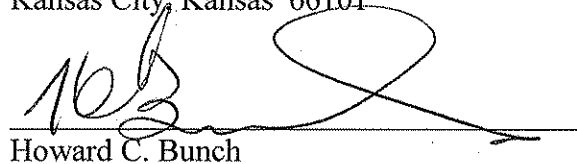
Termination

95. This Order shall remain in effect until a written notice of termination is issued by an authorized representative of the EPA. Such notice shall not be given until all of the requirements of this Order have been met.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY


for William A. Spratlin

Director
Water, Wetlands and Pesticides Division
U.S. Environmental Protection Agency
Region 7
901 North 5th Street
Kansas City, Kansas 66101



Howard C. Bunch
Senior Assistant Regional Counsel
U.S. Environmental Protection Agency
Region 7
901 North 5th Street
Kansas City, Kansas 66101

CERTIFICATE OF SERVICE

I certify that on the date noted below I hand delivered the original and one true copy of this Findings of Violation and Order for Compliance Regional Hearing Clerk, United States Environmental Protection Agency, 901 North 5th Street, Kansas City, Kansas 66101.

I further certify that on the date noted below I sent by certified mail, return receipt requested, a true and correct copy of the signed original Findings of Violation and Order for Compliance to:

The City of Broken Bow,
c/o Mayor "Mac" McMeen
314 South 10th Ave.
Broken Bow, NE 68822

Steve Goans, Wastewater Section, Supervisor
Nebraska Department of Environmental Quality
1200 N Street, Suite 400
The Atrium
Lincoln, Nebraska 68509-8922

7/2/2009
Date

