

NPDES PERMIT NO. OK0044768
STATEMENT OF BASIS

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

I. APPLICANT:

Centurion Pipeline – Cushing Terminal
740546 South 3520 Road
Cushing, OK 74023

II. ISSUING OFFICE:

U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

III. PREPARED BY:

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IV. DATE PREPARED:

February 25, 2009

V. PERMIT ACTION:

It is proposed that the facility be issued a first-time National Pollutant Discharge Elimination System (NPDES) permit for a 5-year term in accordance with regulations contained in 40 Code of Federal Regulations (CFR) 122.46(a).

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of February 20, 2009.

VI. FINAL DETERMINATION: The public notice describes the procedures for the formulation of final determinations.

VI. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code 4612, Crude Petroleum Pipeline, the applicant proposes to construct a crude oil terminal and tank storage facility southeast of Cushing, Oklahoma. The tank storage facility will enable Centurion to exchange crude oil with several other pipeline companies as well as store crude oil for future transport.

The untreated water will be used to test the integrity of the pipeline from Texas through the Cushing Terminal in Oklahoma. The new pipeline will be hydrostatically tested to ensure that it is capable of safely operating at the design pressure. The source water will be withdrawn from an on-site groundwater well and will contact only clean, new pipe. The discharge water will not be treated with biocides or other additives. A small volume of water treated with biocides will be sent through the pipeline to prevent corrosion. The treated water will be discharged separately to a vacuum truck and disposed/treated at an off-site facility. The non-treated discharge water and the treated water will be kept separate during the entire process to eliminate cross-contamination of the non-treated water.

VIII. DISCHARGE LOCATION

As described in the application, the facility is located at 740546 South 3520 Road, Cushing, Lincoln County, Oklahoma. Wastewater discharges from the facility flows into an unnamed tributary of Wildhorse Creek. This creek flows into Eucheek Creek. Water body ID of Wildhorse creek is OK620900010320.

The discharge point showing outfall number, discharge coordinates: latitude and longitude, county, average flow rate in millions gallons per day (MGD), receiving water, and the waterbody identification number are shown in the following table:

Outfall Reference Number	Discharge Coordinates Latitude Deg° Min' Sec'' Longitude Deg° Min' Sec''	County	Average Flow MGD	Receiving Water	Waterbody ID #
001	35° 56' 2" N -96° 44' 21" W	Lincoln	0.5	Unnamed tributary of wildhorse creek which flows into Eucheek creek	OK620900010320

IX. STREAM STANDARDS

The general criteria and numerical criteria which make up the stream standards are provided in the Oklahoma Water Quality Standards (Title 785, Chapter 45) promulgated by the Oklahoma Water Resources Board including all amendments which are effective as of July 1, 2007.

X. DISCHARGE DESCRIPTION

This will be a new facility and no discharge has occurred. Therefore, no effluent data are available. The discharge from Outfalls 001 is into unnamed tributary of wildhorse creek which flows into Eucheek creek. The designated uses for wildhorse creek are Emergency water supply (EWS), warm water aquatic community (WWAC) & Primary Body Contact.

XI. TENTATIVE DETERMINATION:

The Environmental Protection Agency (EPA) has made a tentative determination, after consultation with the Oklahoma Department of Environmental Quality, (ODEQ) to issue a first – time permit to the applicant for the activities described.

XII. DRAFT PERMIT RATIONALE

The proposed effluent limitations for those pollutants proposed to be limited are based on regulations promulgated at 40 CFR 122.44. The draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a), on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

A. REASON FOR PERMIT ISSUANCE

It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR 122.46(a).

An NPDES Application for a Permit to Discharge (Form 1 & 2D) was received October 29, 2008, and was deemed administratively complete on December 9, 2008.

B. OPERATION AND REPORTING

The permittee must submit Discharge Monitoring Report's (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit or termination of the permit, to report on all limitations and monitoring requirements in the permit.

C. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR 122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines (ELG's) where applicable, on BPJ in the absence of guidelines, or on a combination of the two. There are no published ELG's for this type of activity. Permit limits are proposed based on BPJ. Since hydrostatic test water discharges are batch discharges of short term duration, limits in this Permit will be expressed in terms of daily maximum concentrations rather than in terms of mass limitations, as allowed by 40 CFR 122.45(e) and (f). Limitations for Oil & Grease, total suspended solids (TSS), and pH are proposed in the permit. The proposed limitations for TSS are 45 mg/l maximum, and Oil & Grease is 15 mg/l maximum. The draft permit will not propose mass limits since the flow is variable and intermittent. Concentration limits will be protective of the stream uses.

D. WATER QUALITY SCREENING

1. General Comments

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at

40 CFR 122.44(d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. If the discharge poses the reasonable potential to cause an in-stream violation of narrative standards, the permit must contain prohibitions to protect that standard.

The narrative and numerical stream standards are provided in Oklahoma's Water Quality Standards, (OWQS), as amended (OAC 785:45), and implementation criteria contained in OACs 785:46 and 252:690, promulgated by the Oklahoma Water Resources Board (OWRB), effective as of July 1, 2007, and Department of Environmental Quality (DEQ), respectively. This is to ensure that no point-source will be allowed to discharge any wastewater which: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

2. Reasonable Potential

EPA develops draft permits to comply with State WQS, and for consistency, attempts to follow OWQS, OWQS implementation criteria in OAC 785:46 and OAC 252:690, and the Continuing Planning Process (CPP) document where appropriate. However, EPA is bound by the State's WQS, not State guidance, including the OWQS implementation, in determining permit decisions. EPA performs its own technical and legal review for permit issuance, to assure compliance with all applicable State and Federal requirements, including State WQS, and makes its determination based on that review.

In the Reasonable Potential (RP) screening process, the 95th percentile effluent concentration, or estimate thereof if the effluent data set is not sufficiently large to determine it directly, is used to compute an instream concentration according to the regulatory mixing zone equations defined in OAC 785:46. The computed instream concentrations are then compared with the applicable criteria to determine whether RP is exhibited. If RP is exhibited, in accordance with 40 CFR 122.44(d)(1)(vi) and OAC 252:690, a wasteload allocation and criterion long term average is computed for each applicable criterion. Water quality-based permit limitations are calculated for each pollutant exhibiting RP for all applicable criteria. The most stringent of the resulting monthly average permit limitations is established in the draft permit for each pollutant requiring such limitations.

The applicant proposes to draw water from an on-site water well. This new construction pipeline is intended to allow the facility to exchange crude oil with other pipeline companies and store crude oil for future transport. The discharge water will not be treated with biocides or other additives. A small volume of water treated with biocides will be sent through the pipeline to prevent corrosion. The treated water will be discharged separately to a vacuum truck and disposed/treated at an off-site facility. As a result, no contaminants are expected to be present in the hydrostatic test water discharge at amounts that would pose a reasonable potential to exceed State WQS.

Intake credits for TSS are not allowed since the discharge water are drawn from an onsite well and discharged to an unnamed tributary of wildhorse creek which flows into Euchee creek.

3. Reasonable Potential-Calculations

a. pH

The daily minimum and daily maximum permit limits of 6.0 standard units to 9.0 standard units on hydrostatic test general permits developed by other EPA Regions and States. OAC 785:45-1-12(f)(3) states, "pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." The water quality-based daily minimum pH limit of 6.5 is more stringent than the technology-based daily minimum pH limit of 6.0 standard units. As a result, the Oklahoma Water Quality Based limits of 6.5 standard units to 9.0 standard units are established in the proposed permit.

b. Narrative Limitations

1. Aesthetic Standards

OWQS, OAC 785:45-5-12(f) (4)(A) states that all waters having the designated beneficial use of any subcategory of fish and wildlife propagation shall be maintained free of oil and grease to prevent a visible sheen of oil or globules of oil or grease on or in the water. According to OWQS, OAC 785:45-5-12(f)(4)(B) which states that narrative protection for aesthetic standards will propose that surface waters shall be maintained so that oil, grease, or related residue will not produce a visible film or globules of grease on the surface or coat the banks or bottoms of the watercourse; or which cause deleterious effects to the biota. A narrative condition prohibiting the discharge of any visible sheen of oil or globules of oil or grease will be included in the proposed permit. In addition, the technology-based limit of 15 mg/l for Oil and Grease should assure that the narrative criterion is maintained.

2. Public and Private Water Supplies (OAC 785:45-5-10)

Test water being discharged from hydrostatic testing should not contain substances listed in Raw Water Numerical Criteria (785:45-5-10(1)) and Water Column Criteria to protect for the consumption of fish, flesh and water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria.

3. Emergency Public and Private Water Supplies (OAC 785:45-5-11)

This provision states that (a) during emergencies, those waters designated Emergency Public and Private Water Supplies may be put to use and (b) Each emergency will be handled on a case-by-case basis.

4. Fish and Wildlife Propagation (OAC 785:45-5-12)

Test water being discharged from hydrostatic testing should not contain substances listed in Toxic Substances (785:45-5-12(f)(6)) and Water Column Criteria to protect for the consumption of fish, flesh and water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria.

5. Primary Body Contact Recreation (OAC 785:45-5-16)

Hydrostatic test wastewater should not contain coliform bacteria, Escherichia coli, and Enterococci at significant levels.

E. TECHNOLOGY BASED VERSUS WATER QUALITY STANDARDS BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at 40 CFR122.44(l)(2)(ii), 122.44(d), and 130.32(b)(6), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR122.44(a), on the results of or on State Water Quality Standards and requirements pursuant to 40 CFR122.44(d), or on the results of an established and EPA approved Total Maximum Daily Load (TMDL), whichever are more stringent. These limitations are also found in TX0127540, and TX0127515, NPDES Permits that were recently issued for a similar type of discharge.

Numerical water quality based limitations have been placed in the permit for pH. Narrative standards for oil, grease, or related residue have been placed in the proposed permit. A technology-based limit of 15 mg/l for Oil and Grease should assure that the narrative criterion is maintained.

F. WHOLE EFFLUENT TOXICITY LIMITATIONS

There are no chemical specific limitations in the draft permit and the applicant has stated that the discharge water will not be treated with biocides or other additives. There does not appear that the discharge will have a potential for toxicity. The draft permit does not propose any biomonitoring of the hydrostatic test water.

G. FINAL EFFLUENT LIMITATIONS

See the draft permit for limitations.

H. MONITORING FREQUENCY

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity 40 CFR 122.48(b) and to assure compliance with permit limitations 40 CFR 122.44(i)(1). The monitoring frequencies are based on BPJ, taking into account the nature of the discharge.

For ALL outfalls, monitoring for flow, TSS, Oil & Grease, and pH shall be daily by grab sample, when discharging.

XIII. IMPAIRED WATER - 303(d) LIST AND TMDL

The receiving stream for Outfall 001, unnamed tributary of Wildhorse Creek (OK620900010320) is not on the Oklahoma 2008 303(d) list of impaired waters. Therefore, no additional requirements beyond the previously described technology-based or water quality-based effluent limitations and monitoring requirements, are established in the proposed permit.

XIV. ANTIDegradation

The Oklahoma Water Quality Standards, Antidegradation, OAC 785:45:3-1, sets forth the requirements to protect designated uses through implementation of the State WQS, OAC 785:46,

Subchapter 13. There are no antidegradation restrictions listed in Appendix A of the OWQS for all the receiving waters to which the facility proposes to discharge (see Discharge Description in Section X). As a result, no special requirements beyond Tier 1 protection (maintenance and protection of designated uses, as herein described) are necessary as described in OAC 785:46, Subchapter 13, implementation of the state's antidegradation policy.

The limitations and monitoring requirements set forth in the proposed permit are developed from the State WQS and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The proposed permit requirements are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.

XV. ANTIBACKSLIDING

The proposed permit is a first-time issuance.

XVI. ENDANGERED SPECIES

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, <http://www.fws.gov/southwest/es/EndangeredSpecies/lists/ListSpecies.cfm>, one specie in Coal County and three species in Atoka County are listed as Endangered or Threatened. American burying beetle is the only specie listed in both Counties, with Bald eagle (*Haliaeetus leucocephalus*) and Piping Plover (*Charadrius melodus*) listed in Atoka County. Based on the following discussion, EPA has determined that the issuance of this permit will have no effect on these federally listed threatened or endangered species.

American Peregrine Falcon

On August 25, 1999, the American peregrine falcon was removed from the List of Endangered and Threatened Wildlife and Plants (64 FR 46541) due to its recovery.

Bald Eagle

On August 9, 2007, the bald eagle was removed from the federal list of threatened and endangered species. After nearly disappearing from most of the United States decades ago, the bald eagle is now flourishing across the nation and no longer needs the protection of the Endangered Species Act.

PIPING PLOVER (*Charadrius melodus*)

A small plover has wings approximately 117 mm; tail 51 mm; weight 46-64 g (average 55 g); length averages about 17-18 cm. Inland birds have more complete breast band than Atlantic coast birds. The nonbreeding plovers lose the dark bands. In Laguna Madre, Texas, non-breeding home ranges were larger in winter than in fall or spring. The breeding season begins when the adults reach the breeding grounds in mid- to late-April or in mid-May in northern parts of the range. The adult males arrive earliest, select beach habitats, and defend established territories against other males. When adult females arrive at the breeding grounds several weeks later, the males conduct elaborate courtship rituals including aerial displays of circles and figure eights, whistling song, posturing with spread tail and wings, and rapid drumming of feet. The plovers defend territory during breeding

season and at some winter sites. Nesting territory may or may not contain the foraging area. Home range during the breeding season generally is confined to the vicinity of the nest. Plovers are usually found in sandy beaches, especially where scattered grass tufts are present, and sparsely vegetated shores and islands of shallow lakes, ponds, rivers, and impoundments.

Food consists of worms, fly larvae, beetles, crustaceans, mollusks, and other invertebrates. The plovers prefer open shoreline areas, and vegetated beaches are avoided. It also eats various small invertebrates. It obtains food from surface of substrate, or occasionally probes into sand or mud.

Destruction of habitat, disturbance and increased predation rates due to elevated predator densities in piping plover habitat are described as the main reasons for this species' endangered status and continue to be the primary threats to its recovery. The remaining populations, whether on the breeding or wintering grounds, mostly inhabit public or undeveloped beaches. These populations are vulnerable to predation and disturbance.

Research of available material finds that the primary cause for the population decreases leading to threatened or endangered status for these species is destruction of habitat. Issuance of the permit will have no effect on this species, as none of the aforementioned listed activities is authorized by this permitting action.

Based on information available, EPA believes that the issuance of Permit No. OK0044768 will have no effect on the federally listed species or will it adversely modify designated critical habitats.

XVII. CERTIFICATION

The permit is in the process of certification by the Oklahoma Department of Environmental quality following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVIII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION

NPDES Application for Permit to Discharge, Form 1 & 2D, received October 29, 2008, and was deemed administratively complete on December 9, 2008.

A. REFERENCES

"Implementation of the Oklahoma Water Quality Standards," Oklahoma Water Resources Board, Title 785, Chapter 46, effective as of July 1, 2007

Oklahoma Water Quality Standards, (Title 785, Chapter 45) promulgated by the Oklahoma Water Resources Board including all amendments which are effective as of July 1, 2007.

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/ListSpecies.cfm>

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, and 136

D. MISCELLANEOUS CORRESPONDENCE

E-mails from Merz Allison, Worley Parsons, Infrastructure & Environment, to Maria Okpala, EPA, 2/24/09 & 1/06/09, on additional facility information, status of Centurion Pipeline Permit application, and permit application submittal.

E-mail from Esrar Ismat, ODEQ, to Maria Okpala, EPA, 2/24/09, on facility's discharge description.