

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

## PUBLIC NOTICE

September 25, 2015

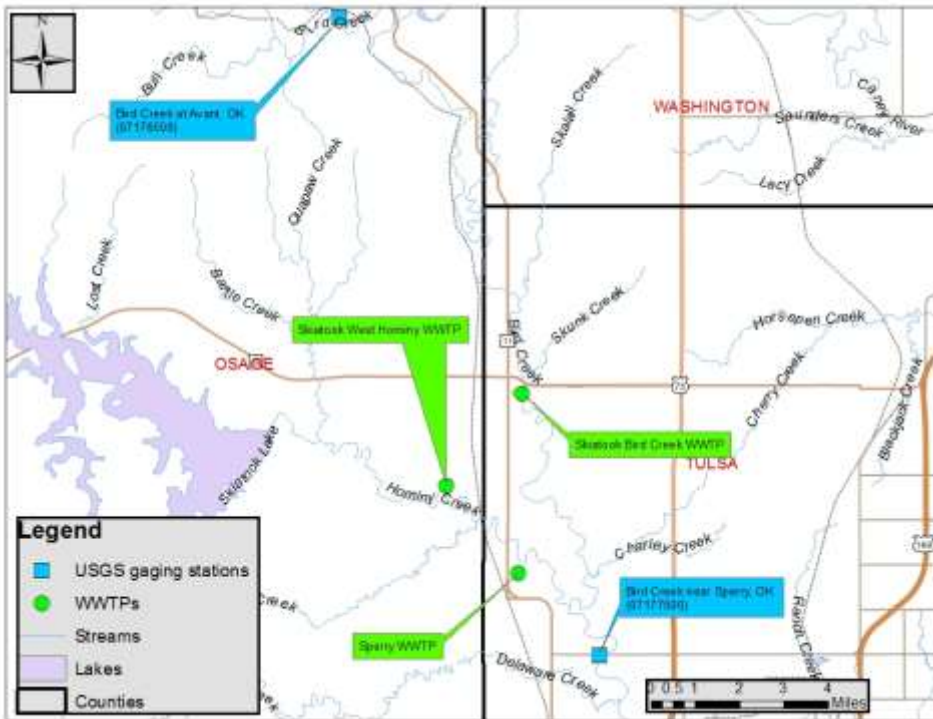
### REQUEST FOR PUBLIC COMMENT ON A PROPOSED MODIFICATION TO OKLAHOMA'S WATER QUALITY MANAGEMENT PLAN FOR THE CITY OF SKIATOOK

Public Comment Period Begins: September 25, 2015

Public Comment Period Ends: **November 9, 2015**

**Permitee:** The City of Skiatook, Skiatook West Hominy Wastewater Treatment Plant (WWTP), P.O. Box 399, Skiatook, Oklahoma 74070. [Facility Legal Description: SW¼, NE¼, Section 33, Township 22 North, Range 12 East, I.M.]

**Receiving waters and location:** [Hominy Creek](#) (OK121300040010\_00) (Latitude: 36° 19' 57" North; Longitude: 96° 01' 03" West).



The City of Skiatook presently has two separate WWTPs, one discharging to [Bird Creek](#) (permit # OK0028118) and the other (Skiatook West) to Hominy Creek (permit # OK0040461). The city's engineering study in 2012 recommended discontinuation of the Bird Creek WWTP and diverting all wastewater flows to an upgraded plant on [Hominy Creek](#). Based upon the anticipated population increases for Skiatook by 2040 in the engineering study, the city requested modeling for a new wasteload allocation (WLA) of 2.5 MGD daily design flow to Hominy Creek. Since the Town of Sperry also discharges to Hominy Creek (permit # OK0033464)

about 5 river miles downstream, [the Indian Nations Council of Governments \(INCOG\)](#) included Sperry discharge in the model. In the model, two design flows for Sperry were simulated for dissolved oxygen (DO) depletion. The results for Skiatook with Sperry's both design flows [0.132 MGD with current limits and 0.25 MGD with proposed limits] showed that DO standards are not violated in any season with the proposed WLA.

Lower Hominy Creek has perennial flow which is regulated by the upstream Lake Skiatook reservoir releases maintained by the US Corps of Engineers as part of the original design plans for Skiatook Lake construction to protect downstream water quality of Hominy Creek and Bird Creek. The USGS flow gage on Bird Creek at 86th Street North near Sperry (07177500), approximately 2.4 river miles downstream of the confluence with Hominy Creek, provides the daily determinations of minimum

seasonal flows that must be maintained by the Corps of Engineers and which are used for all modeling within the Tulsa area of lower Hominy Creek, lower Bird Creek and the Verdigris River. There is also perennial flow in Bird Creek upstream of the Hominy Creek confluence as measured by the USGS gage at Avant (07176500). Therefore, seasonal headwater flows were calculated subtracting the combined future design flows of Skiatook and Sperry and 7Q2 seasonal flows at the Avant gage from Agreement flows.

[LAQUAL](#) is a one-dimensional, steady-state, mass balance, Streeter-Phelps model. INCOG used the LAQUAL desktop water quality model to determine the stream's maximum assimilative capacity during various seasons under seasonal regulatory flow conditions. The concentrations of BOD<sub>5</sub> and NH<sub>3</sub>-N of the point sources are increased at the same rate until the predicted instream DO reaches the DO criteria. The resultant mass loading represents the maximum assimilative capacity of the stream for DO-demanding substances. The margin of safety (MOS) was set at 20% of maximum assimilative capacity.

The following changes are recommended for in the Oklahoma Water Quality Management Plan (208 Plan).

**Skiatook WWTP**

- Average Daily Design Effluent Flow (Qe): 2.5 MGD
- Summer (Jun – Oct): 15 mg/L CBOD<sub>5</sub> and 8 mg/L NH<sub>3</sub>-N at 5 mg/L DO.
- Spring (Apr – May): 17 mg/L CBOD<sub>5</sub> and 8 mg/L NH<sub>3</sub>-N at 6 mg/L DO.
- Winter (Nov – Mar): Secondary Limits (25 mg/L CBOD<sub>5</sub> and 12 mg/L NH<sub>3</sub>-N at 2 mg/L DO).

The comment period will be open for 45 days. If you have any concerns regarding these proposed limits, **please submit your comments in writing by the end of the workday on November 9, 2015** to:

**Soojung Lim**  
**Water Quality Division; Oklahoma DEQ**  
**P.O. Box 1677; Oklahoma City, OK 73101-1677**  
**(405) 702-8197**  
**E-mail: [Water.Comments@deq.ok.gov](mailto:Water.Comments@deq.ok.gov)**

You may also request a public meeting in writing. If there is a significant degree of public interest, DEQ will schedule a public meeting. After evaluating comments received and making any necessary changes, the WLA will be submitted to the U.S. Environmental Protection Agency (EPA) for final approval.

FACILITY 208: SKIATOOK BIRD CREEK (Close)		CITY/TOWN: SKIATOOK	
FACILITY LEGAL LOCATION:	R12E T22N S25 SW/NW/NW	COUNTY:	TULSA
POD LOCATION:	R12E T22N S25 SW/NW/NW	SEGMENT:	121300
POD LATITUDE:	36° 21' 46.924" N	POD LONGITUDE:	95° 59' 07.210" W
NPDES #:	OK0028118	FACILITY ID #:	S-21304
CURRENT TREATMENT PROCESS:	Aerated Lagoon		
PRESENT AVG. DAILY FLOW (MGD):	0.58	2010 CENSUS POPULATION:	
DESIGN AVG. DAILY FLOW (MGD):	0.35 0	YEAR 2030 PROJECTED POPULATION:	
RECEIVING STREAM:	Bird Creek (OK121300020010_10)		
STREAM CLASS:	Perennial	7-day 2-year low flow in MGD (7Q2):	0.65
DMA:	The City of Skiatook / Skiatook Public Works Authority	DMA STATUS:	Approved

WASTELOAD ALLOCATION	SECONDARY
RECOMMENDED TREATMENT ALTERNATIVES	
A)	
EPA APPROVAL DATE:	7/8/1992
RECORD LAST UPDATED:	9/23/2015

<b>FACILITY 208:</b>	<b>SKIATOOK WEST HOMINY CREEK</b>	<b>CITY/TOWN:</b>	<b>SKIATOOK</b>
FACILITY LEGAL LOCATION:	S33 T22N R12E W/NE	COUNTY:	OSAGE
POD LOCATION:	S33 T22N R12E SW SE SE	SEGMENT:	121300
POD LATITUDE:	36° 19' 57.329" N	POD LONGITUDE:	96° 01' 03.370" W
NPDES #:	OK0040461	FACILITY ID #:	S-21325
CURRENT TREATMENT PROCESS:	Aerated Lagoon		
PRESENT AVG. DAILY FLOW (MGD):	<del>0.393</del> 0.973	2010 CENSUS POPULATION:	7,397
DESIGN AVG. DAILY FLOW (MGD):	<del>0.9</del> 2.5	YEAR 2040 PROJECTED POPULATION:	9,610
RECEIVING STREAM:	Hominy Creek (OK121300040010_00)		
STREAM CLASS:	Perennial	7-day 2-year low flow in MGD (7Q2):	33.6
DMA:	The City of Skiatook / Skiatook Public Works Authority	DMA STATUS:	Approved
WASTELOAD ALLOCATION	<b>SECONDARY</b> Spring (Apr - May): 17 mg/L CBOD <sub>5</sub> and 8 mg/L NH <sub>3</sub> -N at 6 mg/L DO Summer (Jun - Oct): 15 mg/L CBOD <sub>5</sub> and 8 mg/L NH <sub>3</sub> -N at 5 mg/L DO Winter (Nov - Mar): Secondary Limits (25 mg/L CBOD <sub>5</sub> and 12 mg/L NH <sub>3</sub> -N at 2 mg/L DO)		
RECOMMENDED TREATMENT ALTERNATIVES			
A)	Total Retention		
B)	Land Application		
C)			
EPA APPROVAL DATE:			5/4/1999
RECORD LAST UPDATED:			9/23/2015



You are receiving this notice because you are either on DEQ's list to receive all public notices about proposed Waste Load Allocations or you are located downstream in an affected watershed. If you are receiving this notice in error, are getting multiple notices, or do not want to receive future notices, please let us know. In addition to notices about changes in 208 Plans for facilities, the DEQ's TMDL, Modeling, 208, & 303(d) Section sends out public notices about proposed changes in the Integrated Report, proposed TMDLs, 404 projects, 401 Certification requests, and proposed changes in the CPP.

If you would like to receive any or all of these public notices via e-mail, please send your e-mail address to [Water.Comments@deq.ok.gov](mailto:Water.Comments@deq.ok.gov). Also, please let us know if you want to receive notices for the entire State or just for your watershed. **By receiving PDF public notices via e-mail, you will help save money and the environment by reducing the amount of paper we use to mail them.** In addition to helping the environment, you will be able to click on helpful FYI hyperlinks.



**Note to newspapers:** This notice is for informational purposes only. **Do not publish in the legal section or as a legal notice.**