

**PUBLIC NOTICED PRAIRIE du CHIEN WWTF
PERMIT INFORMATION FORM**

GENERAL INFORMATION		
Permit Number: WI-0020257-08	FID: 612006560	
Permittee Name and Address: City of Prairie du Chien, PO Box 324, Prairie du Chien, WI 53821		
Facility Name and Address: Prairie du Chien Wastewater Treatment Facility, 400 West Lockwood St., Prairie du Chien, WI 53821		
Receiving Waters: unnamed channel east of the East Channel of the Mississippi River in the Rush Creek Watershed of the Bad Axe – La Crosse River Basin in Crawford County		
Flows:	2.0 MGD Annual Average Design 1.08 MGD Actual Annual Average (2009)	
Stream Classification: Warmwater Sportfish, Non-public Water Supply		Q(7,10): 160 cfs
Discharge Type: Continuous		

FACILITY DESCRIPTION

Facility Description: The Prairie du Chien Wastewater Treatment Facility treats domestic wastewater from the City of Prairie du Chien, including two trailer parks and the towns of Bridgeport & Prairie du Chien, as well as industrial wastewater from 3M Company, Associate Milk Producers Inc. (AMPI) Bridgeport, and Prairie Industries. The annual average design flow of the plant is 2.0 million gallons per day (MGD). The annual average flow in 2009 was 1.08 MGD. Preliminary treatment (for removal of large rags, debris, roots and sand) consists of a manual bar screen, two rotó-mat screens, an aerated grit chamber and a grit de-classifier. Effluent is then treated via an activated sludge system via contact stabilization tanks, as well as addition of aluminum sulfate for phosphorous removal, followed by final clarification. Effluent is disinfected seasonally (May-Sept) using chlorine gas injection, and then dechlorinated via addition of sulfur dioxide, prior to discharge to the Mississippi River. Sludge is thickened on a gravity belt thickener, digested and then land applied on Department approved sites. Planned major operational changes include ultraviolet disinfection. Changes in permit requirements proposed for this issuance include 1) the addition of an alternate mercury effluent limit with an associated pollution management plan and compliance schedule for mercury, 2) addition of 4,4'-DDE quarterly effluent monitoring, 3) addition of chlordane quarterly effluent monitoring, and 4) the removal of ammonia effluent monitoring.
Publishing Newspaper: Courier-Press, PO Box 149, Prairie du Chien, WI 53821-0149
Are there any general permits that should be rolled into this specific permit? None
Significant Industrial Loading? Yes from 3M, AMPI Bridgeport, and Prairie Industries

SUBSTANTIAL COMPLIANCE DETERMINATION

	Compliance	Comments
Discharge Limits	Yes	
Sampling/testing requirements	Yes	
Groundwater standards	N/A	
Reporting requirements	Yes	
Compliance schedules	Yes	
Other:	N/A	
Enforcement considerations	None	
In substantial compliance? Yes	Name: Julia A. Stephenson	Date: 02/032010

Flow	MGD	Continuous	
BOD₅	mg/L	Weekly	24 hr fl prop comp
Suspended Solids	mg/L	Weekly	24 hr fl prop comp
pH	s.u.	Weekly	Grab
Explanation of influent changes from previous permit: None			

PROPOSED PERMIT MONITORING AND LIMITATIONS – INPLANT

Sample Number: 102	Sample Location: The field blank shall be collected using standard handling procedures every day that mercury samples are collected at influent and effluent.		
PARAMETER	UNIT	SAMPLE FREQ.	SAMPLE TYPE
Mercury¹	ng/L	Quarterly	Blank
¹ Mercury monitoring shall be conducted at the same time as mercury monitoring at the influent and effluent sample points. The samples also should be collected at the same time as samples are collected for effluent WET tests in the scheduled quarters.			
Explanation of changes from previous permit: None			

PROPOSED PERMIT MONITORING AND LIMITATIONS – EFFLUENT

Outfall Location: east bank of the east channel of the Mississippi River approximately 300 ft. south of the Lockwood St. boat landing. NW ¼, NW ¼, Section 7, T6N, R6W, Town of Prairie du Chien, Crawford County. GPS data: N43° 01.800', W91° 08.897', Alt. 664'			
Outfall No: 001	Sample Description: Representative effluent composite samples shall be collected at the sampling trough prior to entering the chlorine contact tank, before the flow transducer. Representative effluent grab samples shall be collected at the sampling trough to the Parshall flume, after disinfection.		
PARAMETER	LIMITATION	SAMPLE FREQ	SAMPLE TYPE
BOD₅	45 mg/L Weekly Ave, 30 mg/L Monthly Ave	Daily	24hr fl prop comp

limitation, a pollutant minimization program (PMP) compliance schedule, [as agreed between the DNR and permittee – 106.145(6)2], is included in the proposed permit in accordance with NR 106.145(7). The Mercury Pollutant Minimization Program was submitted on **October 23, 2009** and was reviewed and approved by **Mark Harings on January 19, 2010**. Quarterly monitoring for influent and effluent and requirement for field blanks shall be continued. The proposed alternative limit of 4.6 ng/L daily maximum is a variance level that is determined by WI Admin Code which uses the 1-day P99 of the mercury data collected. After the permit has undergone the public notice process, the alternative mercury limit will be sent to EPA for final approval. For additional information, see the Department's web site at <http://www.dnr.state.wi.us/org/water/wm/ww/mercury/mercury.htm> and the attached WQBEL document.

The permittee is one of the municipal wastewater facilities participating in the Mercury Green Tier Charter – a voluntary program to develop and implement community mercury reduction programs in order to reduce mercury discharged into their sanitary sewer systems. The participating municipalities work collectively, assisted by Department staff and the Municipal Environmental Group (MEG). As part of the Mercury Green Tier Charter, the permittee has started implementing an approved PMP plan, which will be continued in this permit.

BIOMONITORING REQUIREMENTS

Is biomonitoring required at this outfall? Yes. Annual acute and chronic WET testing is required with a recommended dilution series of 100%, 30%, 10%, 3%, 1%.	IWC= 7%	Primary Control Water Location: Mississippi River
Q _s :Q _e : 51.7:1	Discussion of existing biomonitoring data: Passed all WET tests conducted during current permit term.	
If the stream class at the discharge point is other than Full Fish and Aquatic Life (FFAL), how far down stream is the next Fish and Aquatic Life stream? Mississippi River is FFAL		

DISINFECTION

Is disinfection required for this discharge? Yes, Seasonally May-Sept.	Type of disinfection: Chlorination via chlorine gas injection followed by dechlorination with addition of sulfur dioxide
Discussion: Permittee is intending on switching their dechlorination method to UV light. In that event the permittee will no longer be required to monitor for chlorine and the limits will no longer apply.	

SLUDGE REQUIREMENTS

All sludge management requirements were determined ch. NR 204, Wis. Adm. Code

Outfall No: 002	Sample Description: Representative sludge samples shall be collected annually at the outfall from the sludge storage tanks and monitored for Lists 1, 2, 3 & 4 annually and once for PCBs in 2011.				
Sludge # (3 digits)	Sludge Class (A or B)	Liquid or Cake	Pathogen Reduction Method	Vector Attraction Reduction Method	Reuse Option
002	B	Liquid	Fecal Coliform	Injection	Land Application
Sludge Management Adequate? Yes					
Sludge Storage Required? 180 days already provided on-site (capacity > 1,000,000)					
Radium Requirements: Is radium-226 present in the water supply at a level greater than 2 pCi/L? No					