

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
PUBLIC NOTICE OF INTENT TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION
SYSTEM (WPDES) PERMIT No. WI-0042765-07-0

Permittee: Wisconsin Public Service Corp Weston 3 & 4 , PO Box 19002, Green Bay, WI 54307-9002

Facility Where Discharge Occurs: Wisconsin Public Service Corp Weston 3 & 4, 2501 Morrison Avenue,
Rothschild, WI

Source Water and Discharge Location: The upper Wisconsin River in Marathon County. The wastewater intake and
wastewater outfalls are located in the SE ¼ of Section 34, T28N, R7E and the NE ¼ of Section 3, T27N, R7E.

Brief Description of Existing Facilities: The WPS Weston coal fired, steam electric power generation facilities are
located on the eastern shore of the Wisconsin River near Rothschild, about 7 miles south of Wausau, Wisconsin.
Currently, WPDES permit WI-0042765-07 authorizes wastewater discharges from WPS Weston units 3&4, and WI-
0003131-06 covers wastewater discharges from Weston units 1&2. Weston units 1 & 2 have completely separate
water intake structures, wastewater treatment facilities and wastewater discharge outfalls from Weston units 3&4.
WPDES permit WI-0003131-6 for wastewater discharges from Weston units 1 & 2 was reissued in 2006.

WPS Weston 3 & 4 are steam electric power units with a power output rating of 365 MW and 595 MW,
respectively. Wet cooling towers are used to reduce the temperature of the Weston 3&4 condenser cooling waters.
At maximum load, the Weston units 3&4 would take in 12.5 million gallons per day (MGD) of Wisconsin River
water. At maximum load, approximately 11 MGD of the intake water would not be returned to the river. The vast
majority of this water would be changed into water vapor and transferred into the air from the condenser water
cooling towers and the flue gas desulfurization system. The cooling towers greatly reduce the river water intake
volume and the discharge of heat into the Wisconsin River. A river water intake clarification system, added in 2008,
has allowed the water recycle rate to be increased in the cooling towers. This has resulted in a higher thermal
efficiency for unit 4 and a lower cooling tower blowdown rate for both Weston 3 and 4.

The discharge rate for the Weston 3&4 wastewater outfall (002) is approximately 1.3 million gallons per day
(MGD). The discharge from this outfall is approximately 55% cooling tower blowdown, 32% treated bottom ash
sluice water, and 13% treated low volume process wastewaters. Sealed equalization ponds are used to capture
bottom ash sluice wastewater, coal pile runoff, metal cleaning wastewaters, and regeneration wastewater from
deionization of the boiler make-up well water. These "low volume" wastewaters are treated by sedimentation,
coagulation, precipitation, neutralization and sand filtering prior to discharge. After treatment, the low volume
wastewaters are mixed with the cooling tower blowdown and then discharged to the Wisconsin River through outfall
002. Weston units 3&4 also have relatively small volumes of river water discharged from de-icing and backwashing
of the river intake screens. The sanitary wastewater from the Weston facility is conveyed through Village of
Kronenwetter sanitary sewers to the Rib Mountain Sanitary District wastewater treatment plant.

Permit Drafter: Jeffrey Brauer, DNR, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, (608) 267-7643,
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Basin Engineer: Eric Donaldson, DNR, 5301 Rib Mountain Drive, Wausau, WI 54401, (715) 359-5866,
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The Department has tentatively decided that the above specified WPDES permit should be reissued.

Proposed Mercury Variance: The Department has determined that a water quality-based effluent limitation
(WQBEL) of 7.6 ng/L for mercury is needed to protect wildlife and human health in the above-named receiving
water. The permittee has submitted an application for an alternative mercury effluent limitation (AMEL). The
application included a pollutant minimization program (PMP) plan for mercury as required under s. NR 106.145(8),
Wis. Adm. Code. The Department concludes that the permittee has qualified for a variance based on the
information submitted, information on file and the findings provided in s. NR 106.145(1), Wis. Adm. Code. The
Department and the permittee have mutually agreed upon an AMEL of 11 ng/L, expressed as a daily maximum,
continued influent and effluent monitoring, and permit language requiring implementation of the PMP. The
Department proposes to grant the AMEL, which represents a variance to the water quality standard used to derive
the WQBEL, as provided for under s. NR 106.145(6), Wis. Adm. Code. The designated use of the receiving water
will not change as a result of the variance.

Persons wishing to comment on or object to the proposed permit action, or to request a public hearing, may write to
the Department of Natural Resources at the permit drafter's address. All comments or suggestions received no later
than 30 days after the publication date of this public notice will be considered along with other information on file in
making a final decision regarding the permit. Anyone providing comments in response to this public notice will
receive a notification of the Department's final decision when the permit is issued. Where designated as a
reviewable surface water discharge permit, the U.S. Environmental Protection Agency is allowed up to 90 days to

submit comments or objections regarding this permit determination. If no comments are received on the proposed permit from anyone, including U.S. EPA, the permit will be issued as proposed.

The Department may schedule a public informational hearing if requested by any person and shall schedule a public informational hearing if a petition requesting a hearing is received from 5 or more persons or if response to this notice indicates significant public interest pursuant to s. 283.49, Stats. Requests for a public informational hearing shall state the following: the name and address of the person(s) requesting the hearing; the interest in the proposed permit of the person(s) requesting the hearing; the reasons for the request; and the issues proposed to be considered at the hearing.

Information on file for this permit action, including the draft permit and fact sheet (if required), may be inspected and copied at the permit drafter's or basin engineer's office, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call the permit drafter or basin engineer for directions to their office location, if necessary. Information on this permit action may also be obtained by calling the permit drafter at (608) 267-7643 or by writing to the Department. Reasonable costs (usually 20 cents per page) will be charged for copies of information in the file other than the public notice and fact sheet. Permit information is also available on the internet at: <http://dnr.wi.gov/org/water/wm/ww>. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

PUBLISHING NEWSPAPER: Wausau Daily Herald, PO Box 1286, Wausau, Wisconsin, 54402-1286
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