STATE OF MINNESOTA

Minnesota Pollution Control Agency

Municipal Division

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS) Permit MN0022080

PERMITTEE:	City of Grand Rapids
FACILITY NAME:	Grand Rapids Wastewater Treatment Plant
RECEIVING WATER:	Mississippi River (Class 2B, 3C, 4A, 4B, 5, 6 water)

CITY:	Grand Rapids	**COUNTY:**	Itasca
ISSUANCE DATE:		**EXPIRATION DATE:**	

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to operate a disposal system at the facility named above and to discharge from this facility to the receiving water named above, in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with Minnesota and US statutes and rules, including Minn. Stat. chs. 115 and 116, Minn. R. chs. 7001, 7049, 7050, 7053, 7060, 7090, and the US Clean Water Act.

This permit is effective on the issuance date identified above, and supersedes the previous permit that was issued for this facility on May 30, 2008. This permit expires at midnight on the expiration date identified above.

Signature: _____

Paul C. Scheirer *for* The Minnesota Pollution Control Agency
Supervisor, Northeast/Northwest Regional Unit
Detroit Lakes Office
Municipal Division

Submit DMRs to:
Attention: Discharge Monitoring Reports
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Submit Other WQ Reports to:
Attention: WQ Submittals Center
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Questions on this permit?

- For DMR and other permit reporting issues, contact: Jennifer Satnik, 651-757-2692.
- For specific permit requirements or permit compliance status, contact: Craig Weingart, MPCA – Duluth Office.
- General permit or NPDES program questions, contact: MPCA, 651-282-6143 or 800-657-3938.

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Facility Description

The Grand Rapids Wastewater Treatment Facility (Facility) is located at SE 1/4 of Section 27, Township 55 North, Range 25 West, Grand Rapids, Itasca County, Minnesota. This is a Class A Facility.

Major components of the Facility include:
1 Collection with gravity and/or Pressure Sewer
2 Fine Screens (Industrial – Preliminary Treatment)
1 Chemical Addition for pH Adjustment (Industrial – Primary Treatment)
2 Pre-aeration units - less than two hours detention time (Industrial – Primary Treatment)
2 Primary Clarifiers (Industrial – Primary Treatment)
1 Fine Screen (Domestic – Primary Treatment)
2 Activated Sludge Treatment Units - contact stabilization, conventional, step feed
3 Secondary Clarifiers
1 Chlorination unit
4 Polishing Ponds without aeration (1 acre each)
2 Screw Presses, Gravity Belt
1 Landfill - Biosolids Disposal

The Grand Rapids wastewater treatment system is composed of a network of collection and interceptor sewers that conveys industrial, commercial, and domestic wastewater to the Facility near Grand Rapids, Minnesota. Approximately 80 percent of the influent flow consists of industrial process wastewater from UPM-Kymmene – Blandin Paper Company (UPM – Blandin). The remaining influent flow is primarily domestic wastewater from the cities of Grand Rapids, Cohasset, and La Prairie, and from adjacent unincorporated areas. The total permitted average wet weather design flow (AWWDF) for the Facility is 15.2 million gallons per day (mgd) (13.25 mgd industrial and 1.95 mgd municipal).

This Facility consists of lift stations and force mains for the conveyance of industrial and domestic wastewater, a preliminary treatment segment for treatment of influent industrial wastewater, a primary treatment segment for separate treatment and conveyance of industrial and domestic wastewater, and a secondary treatment segment for treatment and discharge of combined domestic and industrial wastewater.

The preliminary treatment segment provides pumping and screening of industrial wastewater. It consists of a Parkson aquifer traveling water screen with a duplicate standby unit, four pumps, and a 6,000-foot, 30-inch diameter force main to the primary treatment segment.

The industrial wastewater primary treatment segment receives the pre-treated industrial process wastewater from UPM – Blandin and consists of a pH neutralization system, dual diffused air flocculation tanks, two 120-foot diameter primary clarifiers with a 14-foot sidewater depth, a primary sludge pump building containing four progressive cavity pumps, a solids dewatering building, and a nutrient addition system. Nutrients are added to the primary clarifier effluent. This segment of the Facility is designed to remove 85 percent of the total suspended solids (TSS) and 20 percent of the five-day biochemical oxygen demand (BOD_5) of the design flow of 13.25 mgd containing 107,000 pounds of TSS and 42,000 pounds of BOD_5.

secondary clarifier and pumping modifications by Marathon Engineers (approved by the MPCA on February 26, 2002); and in plans and specifications for the “Wastewater Treatment Improvement Project” designed by Advanced Engineering and Environmental Services, Inc. (April 2009).

The location of the Facility is shown on the "Topographic Map of Permitted Facility" (page 7).

The location of designated monitoring stations is specified on the "Summary of Stations" (page 10).

Those portions of the Mississippi River from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981, were designated as Outstanding Resource Value Waters (ORVW) on November 5, 1984. The discharge is located between designated ORVW reaches. In accordance with MPCA rules regarding nondegradation for ORVWs, nondegradation review is required for any new or expanded discharge where any change results in an increased mass loading of one or more pollutants (Minn. R. 7050.0180). The design average wet weather flow of this Facility as of November 5, 1984, and associated mass loading are the baseline design flow and mass loading. This baseline flow and mass loading will be used to determine whether nondegradation review is required for any change in the discharge. The discharge may also be subject to nondegradation review in accordance with Minn. R. 7050.0185, Nondegradation for all waters.

This permit also complies with Minn. R. 7053.0275 regarding anti-backsliding.

Any point source discharger of sewage, industrial, or other wastes for which a NPDES permit has been issued by the MPCA that contains effluent limits more stringent than those that would be established by Minn. R. 7053.0215 to 7053.0265 shall continue to meet the effluent limits established by the permit, unless the Permittee establishes that less stringent effluent limits are allowable pursuant to federal law, under section 402(o) of the Clean Water Act, United States Code, title 33, section 1342.