Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

Pat Quinn, Governor
Marc Miller, Director

LAKE MICHIGAN WATER ALLOCATION – APPLICATION FOR PERMIT

Office of Water Resources, Michael A. Bilandic Building, 160 N. LaSalle Street, Suite S-700, Chicago, Illinois 60601
Office: 312/793-3123 **Fax: 312/793-5968**

Completing this Application for Permit for a Lake Michigan Water allocation is required under Illinois law (615 ILCS 50/5) and is the first step in the Department's Lake Michigan water allocation process. All water demand/usage amounts should be shown in units of million gallons per day (mgd). Our water year begins October 1 and ends on September 30. Do not include any water which is sold or transferred to any other water distribution system unless expressly indicated otherwise in this application. Please complete/answer all of the questions in this application form. The completed application can be submitted to the Illinois Department of Natural Resources, Office of Water Resources, Michael A. Bilandic Building, 160 N. LaSalle Street, Suite S-700, Chicago, Illinois 60601.

SECTION I – GENERAL INFORMATION

Name, address, phone number and email of applicant:

_____

_____

_____

_____

_____

Names, address, phone number and email of the contact person for the applicant:

_____

_____

_____

_____

_____

Authorized Official
Name: _____
Title: _____

Date _____
Subscribed and sworn to before me this
_____day of_____, 20

_____
Notary Public

(Seal)

SECTION II – REQUESTED LAKE MICHIGAN WATER ALLOCATION

The applicant applies for a permit to use Lake Michigan Water in the following amounts for the years listed below (all requests should extend out to the year 2030):

Water Year	Amount (mgd)	Water Year	Amount (mgd)

SECTION III – HISTORIC WATER USE

A. HISTORIC WATER USE BREAKDOWN

List the total historic water usage (mgd) for at least 10 consecutive prior years (if available) from the date of the application and the contribution of each water source to that total. All amounts should be in million gallons per day (mgd).

Water Year	Total Water Use	Lake Michigan	Deep Aquifer	Shallow Aquifer	Other

B. TYPE OF HISTORIC WATER USE

Based on Total Historic Water Usage figures tabulated in Section III A, indicate the type of historic water usage (mgd) as shown below. If the data is estimated, indicate with an asterisk (*). Population should reflect census figures when applicable. Data should be shown for a minimum of 10 years prior to the date of the application.

Water Year	Residential Water Use	Commercial Water Use	Manufacturing Water Use	Population

SECTION IV – PROJECTED WATER DEMAND

A. PROJECTED TOTAL WATER DEMAND BREAKDOWN

List the projected water demand (mgd) and projected contribution (mgd) of each water source to the total water demand out to the year 2030.

Water Year	Total Demand	Lake Michigan	Deep Aquifer	Shallow Aquifer	Other Source

B. TYPE OF PROJECTED WATER DEMAND

Based on Projected Total Water Demand tabulated in Section IV A, indicate the type of projected water demand (mgd) as shown below out to the year 2030.

Water Year	Residential Water Use	Commercial Water Use	Manufacturing Water Use	Population

SECTION V – BREAKDOWN OF LATEST ANNUAL WATER USE **WATER YEAR** _____

Enter the amount of water pumped and utilized for each item shown below. All amounts entered in this section must be in units of million gallons per day (MGD) rounded off to 3 decimal places to the right of the decimal. Conversion calculations are provided for your use in Section VII to convert other commonly used units to MGD.

A. Pumpage Data

Water bought or received from the following distribution systems:

_____ _____

1.	Lake Michigan Pumpage	MGD
2.	Shallow Aquifer Pumpage	MGD
3.	Deep Aquifer Pumpage	MGD
4.	Total Pumpage (Add lines 1-3)	MGD
5.	Water Treatment Use	MGD
6.	Gross Annual Pumpage (subtract line 5 from line 4)	MGD

Water sold or provided to any other distribution systems (enter the name of each system and the amount sold or provided to that system on lines 7-12). If additional lines are required, attach an additional sheet listing each system and amount.

7.	_____	MGD
8.	_____	MGD
9.	_____	MGD
10.	_____	MGD
11.	_____	MGD
12.	_____	MGD
13.	Total (add lines 7-12 and any additional amounts)	MGD
14.	Net Annual Pumpage (subtract line 13 from line 5)	MGD

B. Uses

		Metered	Unmetered	Total	
15.	Residential				MGD
16.	Commercial/Manufacturing				MGD
17.	Municipal				MGD
18.	Construction				MGD
19.	Total Uses (add Total lines 15-18)				MGD
20.	Percentage of Total Uses to Net Annual Pumpage (divide line 19 by line 14 and multiply by 100)				%

C. Hydrant Uses

21.	Firefighting and Training		MGD
22.	Water Main Flushing		MGD
23.	Sewer Cleaning		MGD
24.	Street Cleaning		MGD
25.	Construction		MGD
26.	Other (attach explanation)		MGD
27.	Total Hydrant Uses (add lines 21-26)		MGD
28.	Percentage of Hydrant Uses to Net annual Pumpage (divide line 27 by line 14 and multiply by 100)		%
29.	Department Requirement for Hydrant Uses	1.0	%
30.	Excessive Hydrant Use (subtract line 29 from line 28). If the percentage is greater than 0.0, attach explanation. [See Rule 730.307(e)]		%

D. Unavoidable Leakage and Unaccounted for Flow

31. Maximum Unavoidable Leakage (Do Worksheet in Section VI; Enter amount from line 10 of the worksheet) ..... _____ MGD
32. Percentage of Maximum Unavoidable Leakage to Net Annual Pumpage (divide line 31 by line 14 and multiply by 100) ..... _____ %
33. Total Accounted for Flow (add lines 19, 27 and 31) ..... _____ MGD
34. Percentage of Total Accounted for Flow to Net Annual Pumpage (divide line 33 by line 14 and multiply by 100) ..... _____ %
35. Total Unaccounted for Flow (subtract line 33 from line 14) ..... _____ MGD
36. Percentage of Total Unaccounted for Flow to Net Annual Pumpage (divide line 35 by line 14 and multiply by 100) ..... _____ %

Please Check Your Calculations

The sum of lines 33 and 35 should equal the amount reported on line 14. If they do not equal, recheck your calculations.
The sum of lines 34 and 36 should equal approximately 100%. If not, check your calculations.

Section VI - Maximum Unavoidable Leakage Worksheet

Complete the following calculations to determine your maximum unavoidable leakage. Enter the appropriate amounts in the spaces provided.

A. Cast Iron Pipes with Lead Joints

	Age of Pipe	Miles of Pipe	Leakage Rate	Max. Unavoidable Leakage	
1.	60 yrs. or greater	_____	X 3,000 g/d/mi =	_____	g/d
2.	40-60 yrs.	_____	X 2,500 g/d/mi =	_____	g/d
3.	20-40 yrs.	_____	X 2,000 g/d/mi =	_____	g/d
4.	20 yrs. or less	_____	X 1,500 g/d/mi =	_____	g/d
B.	**All Other Types of Pipes and Joints**				
5.	60 yrs. or greater	_____	X 2,500 g/d/mi =	_____	
6.	40-60 yrs.	_____	X 2,000 g/d/mi =	_____	g/d
7.	20-40 yrs.	_____	X 1,500 g/d/mi =	_____	g/d
8.	20 yrs. or less	_____	X 1,000 g/d/mi =	_____	g/d
9.	Total Miles	_____	Total Leakage	_____	g/d
10.	Total Maximum Unavoidable Leakage, in MGD (divide Total Leakage on line 9 by 1,000,000) (Enter this amount on line 31)		.....	_____	MGD

* Leakage Rate expressed in gallons per day per mile (g/d/mi)
** Maximum Unavoidable Leakage expressed in gallons per day (g/d)

Section VII - Conversion Table

To convert cubic feet per year (cf) to (MGD) use:
cf x 7.48 ÷ 1,000,000 ÷ 365 = MGD
To convert gallons per year (g) to (MGD) use:
g ÷ 1,000,000 ÷ 365 = MGD
To convert gallons per day (g/d) to (MGD) use:
g/d ÷ 1,000,000 = MGD
To convert million gallons per year (mg) to (MGD) use:
mg ÷ 365 = MGD

SECTION VIII – ADDITIONAL INFORMATION

A. Indicate Well Data and Production for the latest 12 month period as shown below:

Well No. & Location	Depth Of Well	Capacity Gallons/minute	Total Water Production	Quality*

*****If any wells violate State standards, mark yes and include a current water quality analysis report.

B. Do any of the wells interfere with each other during simultaneous pumping? If yes, please describe.

C. What problems do you anticipate with your well supply between now and 2030?

D. If an allocation of Lake Michigan water is granted, what is the earliest date that Lake Michigan water could be used (month and year)? .... _____

E. Specify present and/or proposed point(s) of withdrawal from Lake Michigan.

F. Provide a map of your water service area. Include any projected service areas (annexations, well locations, and Lake Michigan water supply locations).

G. Specify the location of discharge after the water is used (how it is treated) and describe the route the discharge will follow to reach an identifiable stream.

H. Include with this application a copy of any approved water conservation ordinance.

I. Provide additional data and/or information you may have to further justify your water allocation on a separate sheet.