

NPDES Permit No. IL0046779  
Notice No. 25020601.docx

Public Notice Beginning Date: April 22, 2025

Public Notice Ending Date: May 22, 2025

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency  
Bureau of Water  
Division of Water Pollution Control  
Permit Section  
2520 West Iles Avenue  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

Elwood Energy, LLC  
24391 South Patterson Road  
Elwood, IL 60421

Name and Address of Facility:

Elwood Energy, LLC  
24391 South Patterson Road  
Elwood, IL 60421  
(Will County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Mark E. Liska at 217/782-0610.

The applicant is engaged in generating electricity from simple cycle combustion turbine generator units (SIC 4911). Plant operation results in an average discharge of 0.0062 MGD of evaporative cooling water and stormwater runoff from outfall 001, 0.0064 MGD of evaporative cooling water and stormwater runoff from outfall 002, 0.007 MGD of evaporative cooling water and stormwater runoff from outfall 003, 0.0067 MGD of evaporative cooling water and stormwater runoff from outfall 004, 500 GPD of treated sanitary from internal outfall A05, and an intermittent discharge evaporative cooling water, treated sanitary (A05), and stormwater runoff from outfall 005.

Application is made for the existing discharges which are located in Will County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Storm Sewer Tributary to Unnamed Tributary to Cedar Creek	41° 26' 26" North	88° 7' 23" West	General Use	Not Rated
002	Storm Sewer Tributary to Unnamed Tributary to Cedar Creek	41° 26' 26" North	88° 7' 23" West	General Use	Not Rated
003	Storm Sewer Tributary to Unnamed Tributary to Cedar Creek	41° 26' 26" North	88° 7' 23" West	General Use	Not Rated
004	Storm Sewer Tributary to Unnamed Tributary to Cedar Creek	41° 26' 26" North	88° 7' 23" West	General Use	Not Rated
005	Unnamed Tributary to Cedar Creek	41° 26' 53" North	88° 7' 5" West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment IL\_GD receiving the discharge from outfalls 001 – 005 is not on the draft 2024 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of the Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The discharges from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day		REGULATION	CONCENTRATION		REGULATION
	DAF (DMF)			LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall 001:</u>						
Flow (MGD)						35 IAC 309.146
pH				6.5 – 9.0		35 IAC 302.204
Temperature				Monitor Only		35 IAC 309.146
<u>Outfall 002:</u>						
Flow (MGD)						35 IAC 309.146
pH				6.5 – 9.0		35 IAC 302.204
Temperature				Monitor Only		35 IAC 309.146
<u>Outfall 003:</u>						
Flow (MGD)						35 IAC 309.146
pH				6.5 – 9.0		35 IAC 302.204
Temperature				Monitor Only		35 IAC 309.146

PARAMETER	LOAD LIMITS lbs/day		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	DAF (DMF)					
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall 004:</u>						
Flow (MGD)						35 IAC 309.146
pH				6.5 – 9.0		35 IAC 302.204
Temperature				Monitor Only		35 IAC 309.146
<u>Outfall A05:</u>						
Flow (MGD)						35 IAC 309.146
BOD <sub>5</sub>	0.13	0.25	35 IAC 304.120(a)	30	60	35 IAC 304.120(a)
Total Suspended Solids	0.13	0.25	35 IAC 304.120(a)	30	60	35 IAC 304.120(a)
Fecal Coliform				Monitor Only		35 IAC 309.146
Ammonia				Monitor Only		35 IAC 309.146
<u>Outfall 005:</u>						
Flow (MGD)						35 IAC 309.146
pH				6.5 – 9.0		35 IAC 302.204

## Load Limit Calculations:

- A. Load limit calculations for the following pollutant parameters were based on a design maximum flow of 0.0005 MGD and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD<sub>5</sub> and Total Suspended Solids.

The following explain the conditions of the proposed permit:

The Special Conditions clarify flow, pH, monitoring location, and discharge monitoring report submission.

Facility uses simple cycle combustion and not steam, so they are not subject to steam electric generation rules in 40 CFR 423.

Facility is a peaker unit which generally runs during the summer months when the ambient temperature is above 60F. Outfalls 001-004 discharge evaporative cooling water from units 1-4. Outfall 005 is the discharge from a retention pond which receives evaporative cooling water from units 5-9 and treated sanitary.

In the previous permit, chloride and sulfate were monitored on a 2/year basis at every outfall. A water quality assessment found that, based on the analyses of the results, there is no potential to exceed the water quality limit for chloride or sulfate and any of the outfalls. Because of this, chloride and sulfate monitoring has been dropped from the permit at every outfall.

The mechanical sewage treatment plant consists of a flow equalization chamber, an aeration chamber, a settling chamber, a sand filter and a chlorinator. The treated water is dechlorinated and discharges to the retention pond with a high residence time and high mixing which makes total residual chlorine and ammonia limits unnecessary.

For outfall A05, BOD<sub>5</sub> and TSS fall under 35 Ill. Adm. Code 304.120(a) because they have a greater than 5:1 dilution. The discharge from outfall A05 is 500 GPD and discharges to a large stormwater pond which only discharges when full which allows for greater than 5:1 dilution.

**Elwood Energy, LLC**  
**NPDES Permit No. IL0046779**

NPDES Permit No. IL0046779

Illinois Environmental Protection Agency

Division of Water Pollution Control

2520 West Iles Avenue

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Elwood Energy, LLC  
24391 South Patterson Road  
Elwood, IL 60421

Facility Name and Address:

Elwood Energy, LLC  
24391 South Patterson Road  
Elwood, IL 60421  
(Will County)

Discharge Number and Name:

001 Evaporative Cooling Water and Stormwater Runoff  
002 Evaporative Cooling Water and Stormwater Runoff  
003 Evaporative Cooling Water and Stormwater Runoff  
004 Evaporative Cooling Water and Stormwater Runoff  
A05 Treated Sanitary  
005 Stormwater Pond

Receiving Waters:

Storm Sewer Tributary to an Unnamed Tributary to Cedar Creek  
Storm Sewer Tributary to an Unnamed Tributary to Cedar Creek  
Storm Sewer Tributary to an Unnamed Tributary to Cedar Creek  
Storm Sewer Tributary to an Unnamed Tributary to Cedar Creek  
Storm Sewer Tributary to an Unnamed Tributary to Cedar Creek  
Unnamed Tributary to Cedar Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Darin E. LeCrone, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

DEL:MEL:25020601.docx

## NPDES Permit No. IL0046779

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	<u>DAF (DMF)</u>		<u>LIMITS mg/L</u>			
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		

Outfall 001 – Evaporative Cooling Water and Stormwater Runoff\*  
(Average Flow = 0.0062 MGD)

Flow (MGD)	See Special Condition 1.				1/Month	Estimate
pH	See Special Condition 2.				1/Month*	Grab
Temperature			Monitor Only		1/Month*	Grab

\* - When discharging evaporative cooling water.

Outfall 002 – Evaporative Cooling Water and Stormwater Runoff\*  
(Average Flow = 0.0064 MGD)

Flow (MGD)	See Special Condition 1.				1/Month	Estimate
pH	See Special Condition 2.				1/Month*	Grab
Temperature			Monitor Only		1/Month*	Grab

\* - When discharging evaporative cooling water.

Outfall 003 – Evaporative Cooling Water and Stormwater Runoff\*  
(Average Flow = 0.007 MGD)

Flow (MGD)	See Special Condition 1.				1/Month	Estimate
pH	See Special Condition 2.				1/Month*	Grab
Temperature			Monitor Only		1/Month*	Grab

\* - When discharging evaporative cooling water.

## NPDES Permit No. IL0046779

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	DAF (DMF)		LIMITS mg/L			
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
<u>Outfall 004</u> – Evaporative Cooling Water and Stormwater Runoff* (Average Flow = 0.0067 MGD)						
Flow (MGD)	See Special Condition 1.				1/Month	Estimate
pH	See Special Condition 2.				1/Month*	Grab
Temperature			Monitor Only		1/Month*	Grab

\* - When discharging evaporative cooling water.

Outfall A05 – Treated Sanitary  
(DMF = 500 GPD)

Flow (MGD)	See Special Condition 1.				1/Month	Estimate
BOD <sub>5</sub>	0.13	0.25	30	60	1/Month	Grab
Total Suspended Solids	0.13	0.25	30	60	1/Month	Grab
Fecal Coliform			Monitor Only		1/Quarter	Grab
Ammonia			Monitor Only		1/Quarter	Grab

Outfall 005 – Stormwater Pond  
(Intermittent Discharge)

This discharge consists of:

1. Treated Sanitary (A05)
2. Evaporative Cooling Water\*
3. Stormwater Runoff

Flow (MGD)	See Special Condition 1.				1/Month	Estimate
pH	See Special Condition 2.				1/Month*	Grab

\* - When Discharging.

NPDES Permit No. IL0046779

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.5 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <https://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/Pages/quick-answer-guide.aspx>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attention: Compliance Assurance Section, Mail Code # 19  
2520 West Iles Avenue  
Post Office Box 19276  
Springfield, Illinois 62794-9276

SPECIAL CONDITION 4. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 5. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 6. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 7. For the purpose of this permit, this discharges from outfalls 001 – 004 are limited to evaporative cooling water and stormwater runoff, free from process and other wastewater discharges. The discharge from outfall 005 is limited to evaporative cooling water, treated sanitary wastewater and stormwater runoff. In the event that the permittee shall require the use of water treatment additives, the permittee must request a change in this permit in accordance with Standard Conditions – Attachment H.

SPECIAL CONDITION 8. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.



NPDES Permit No. IL0046779

Special Conditions