

Public Notice Beginning Date: **February 8, 2013**

Public Notice Ending Date: **March 11, 2013**

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
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

Spectrum Preferred Meats, Inc.
6194 West Pines Road
Mt. Morris, IL 61054

Name and Address of Facility:

Spectrum Preferred Meats, Inc.
6194 West Pines Road
Mt. Morris, IL 61054
(Ogle 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 Jaime Rabins at 217/782-0610.

The applicant is engaged in the operation of a pork slaughtering and processing facility (SIC 2011). Waste water is generated from lowering carcasses into boiling water referred to as scalding water and cleaning the following areas: hog pen, kill, evisceration pen, carcasses, meat processing, and production facility at the end of each day. Plant operation results in an average discharge of 0.04 MGD of hog pen wash water, kill area wash water, scalding water, evisceration pen wash water, post-evisceration carcass wash water, meat area processing wash water and post production clean-up water from outfall 001.

Wastewaters are collected in a common sewer and treated using an on-site treatment system consisting of screening, an anaerobic lagoon, a secondary anaerobic lagoon, final clarification, an aerated polishing lagoon and ultra-violet disinfection.

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Unnamed tributary of Pine Creek	41E 59' 15"	North	89E 27' 00"	West	General Use	Not Rated

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

The stream segment receiving the discharge from outfall 001 is not on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List as it has not been assessed. The receiving water has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001 Hog Pen Wash Water, Kill Area Wash Water, Scalding Water, Evisceration Pen Wash Water, Post-evisceration Carcass Wash Water, Meat Area Processing Wash Water, and Post Production Clean-up Water (DAF = 0.04 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L			REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM		
Flow							
pH							35 IAC 302.204
BOD ₅	3.3	6.7	35 IAC 309.143	10	20		35 IAC 304.120(c)
Total Suspended Solids	4	8	35 IAC 309.143	12	24		35 IAC 304.120(c)
Oil and Grease	5	10	35 IAC 309.143	15	30		35 IAC 304.124
Total Nitrogen				134	194		40 CFR 423.13
Chloride					500		35 IAC 302.208
Fecal Coliform							40 CFR 423.13
Dissolved Oxygen							40 CFR 122.44(l)
Ammonia (as N)				Weekly Avg.	Monthly Avg.	Daily Max	
Mar-May/Sep-Oct				3.8	1.5	4.7	35 IAC 302.212
Jun-Aug				3.5	1.4	6.9	35 IAC 302.212
Nov-Feb					4.0	8.0	40 CFR 423.13

Load Limit Calculations:

- Load limit calculations for the following pollutant parameters were based on an average flow of 0.04 MGD and using the formula of average (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅, TSS, and Oil and Grease.
- Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory

Production Rate

Simple Slaughterhouse

282,000 pounds per day, 70 million pounds per year

BOD₅, TSS, and Oil and Grease were limited using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

$$\begin{aligned}\text{TSS avg.} &= 0.20 \frac{\text{lbs}}{1000 \text{ lbs LWK}} \times 300,000 \text{ lbs LWK} = 56 \frac{\text{lbs}}{\text{day}} \\ \text{TSS max.} &= 0.40 \frac{\text{lbs}}{1000 \text{ lbs LWK}} \times 300,000 \text{ lbs LWK} = 113 \frac{\text{lbs}}{\text{day}}\end{aligned}$$

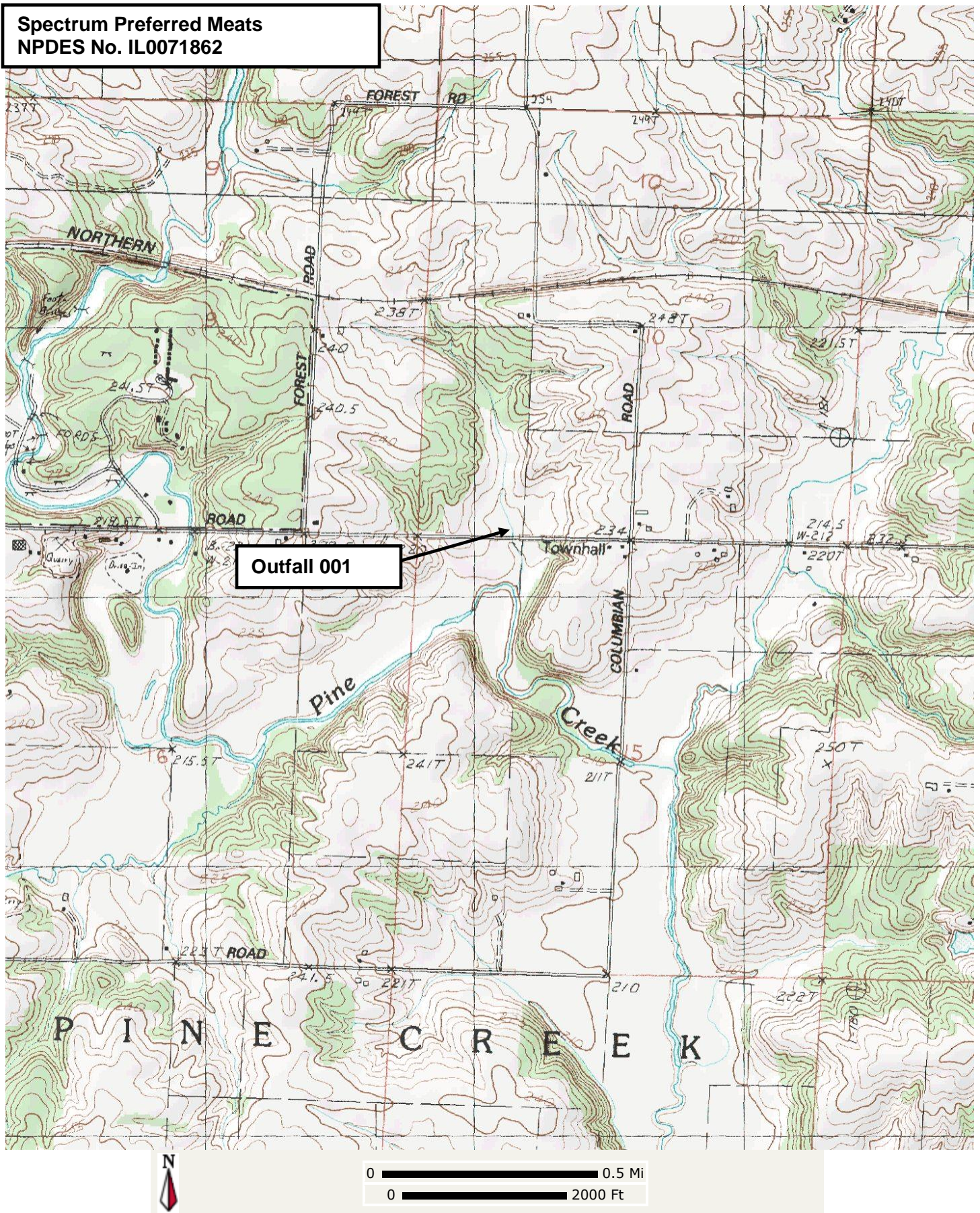
The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

Dissolved oxygen limits were kept at previous levels to prevent backsliding in accordance with 40 CFR 122.44(l).

The following explain the conditions of the proposed permit:

The special conditions clarify flow, pH, monitoring location, discharge monitoring reports, water treatment additives, operator requirements, re-opener, and biomonitoring.

Spectrum Preferred Meats
NPDES No. IL0071862



NPDES Permit No. IL0071862

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

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:

Facility Name and Address:

Spectrum Preferred Meats, Inc.
6194 West Pines Road
Mt. Morris, IL 61054

Spectrum Preferred Meats, Inc.
6194 West Pines Road
Mt. Morris, IL 61054
(Ogle County)

Discharge Number and Name:

Receiving Waters:

001 Hog Pen Wash Water, Kill Area Wash Water, Scalding Water,
Evisceration Pen Wash Water, Post-Evisceration Carcass
Wash Water, Meat Area Processing Wash Water, and Post
Production Clean-up Water

Unnamed Tributary of Pine 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.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:JAR:10011901.dlk

Effluent Limitations and Monitoring

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

Outfall: 001 Hog Pen Wash Water, Kill Area Wash Water, Scalding Water, Evisceration Pen Wash Water, Post-Evisceration Carcass Wash Water, Meat Area Processing Wash Water, and Post Production Clean-up Water (DAF = 0.04 MGD)

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l				
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)	See Special Condition 1					1/Month	
pH	See Special Condition 2					1/Month	Grab
BOD ₅	3.3	6.7	10	20		1/Month	Grab
Total Suspended Solids	4	8	12	24		1/Month	Grab
Oil and Grease	5	10	15	30		1/Month	Grab
Total Nitrogen			134	194		1/Month	Grab
Chloride				500		1/Month	Grab
Fecal Coliform	See Special Condition 7					1/Month	Grab
Dissolved Oxygen	See Special Condition 8					1/Month	Grab
Ammonia (as N)			Weekly Avg.	Monthly Avg.	Daily Max		
Mar-May/Sep-Oct			3.8	1.5	4.7	1/Month	Grab
Jun-Aug			3.5	1.4	6.9		
Nov-Feb				4.0	8.0		

Dissolved Oxygen shall be reported on the DMR as minimum.

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 value on the monthly 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. 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 4. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) 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 may choose to submit electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/edmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using eDMRs 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
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 5. 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 the Standard Conditions -- Attachment H.

SPECIAL CONDITION 6. 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 7. The daily maximum fecal coliform count shall not exceed 400 per 100 ml.

SPECIAL CONDITION 8. Dissolved oxygen shall not be less than 6.0 mg/L during at least 16 hours of any 24 hour period, nor less than 5.0 mg/L at any time.

SPECIAL CONDITION 9. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 10. A condition of "No Exposure" as defined by 40 CFR 122.26 (g) shall be maintained at the facility.

SPECIAL CONDITION 11. The Permittee shall conduct biomonitoring of the effluent from outfall 001.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
 - a. Fish - 96 hour static LC50 Bioassay using fathead minnows (*Pimephales promelas*).
 - b. Invertebrate 48-hour static LC50 Bioassay using *Ceriodaphnia*.
2. Testing Frequency - The above tests shall be conducted twice within the first year of the permit using 24-hour composite samples

Special Conditions

unless otherwise authorized by the IEPA. Sample collection and testing must be conducted during times of normal plant operation when water treatment additives are likely to be present in the effluent.

3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory.
4. Toxicity – Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee may wish to contact the IEPA to request the discontinuance of further sampling at which time the IEPA may require the Permittee to begin the toxicity reduction evaluation and identification as outlined below.
5. Toxicity Reduction Evaluation - Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100 % effluent treatment, the IEPA may require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.