

NPDES Permit No. IL0079332
Notice No. 11081901.bwc

Public Notice Beginning Date: **April 27, 2012**

Public Notice Ending Date: **May 29, 2012**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft New 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:
Jo-Carroll Energy, Inc. (NFP)
793 U.S. Route 20 West
P.O. Box 390
Elizabeth, Illinois 61028

Name and Address of Facility:
Jo-Carroll Energy, Inc. (NFP)
Sand Prairie Station
4341 Sand Ridge Road
Thomson, Illinois 61285
(Carroll 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 Brian Cox at 217/782-0610.

This facility is a proposed 20 MW (gross) cogeneration facility producing electricity and steam for sale using a biomass-fired bubbling fluidized bed (BFB) boiler, a selective non-catalytic reduction (SNCR) system utilizing aqueous ammonia, and a steam turbine generator (SIC 4911). The biomass fuel will generally consist of chipped wood waste, but may consist of a 90% Wood/10% Corn Stover/Switchgrass blend. The facility also employs the use of a wet surface air cooler (WSAC) steam condensing system and a WSAC auxiliary cooling system. Makeup water will be drawn from on-site wells and treated at the facility for plant use. The makeup water is treated on site prior to plant use. Waste water is generated from the WSAC blowdown, the makeup water treatment waste, sanitary wastewater, and stormwater runoff. Plant operation will result in an average discharge of 0.086 MGD of WSAC blowdown, makeup water treatment waste, treated sanitary wastewater and stormwater runoff from outfall 001, 0.004 MGD of sanitary wastewater from outfall A01, and an intermittent discharge of stormwater runoff from outfall 002. The WSAC blowdown also contains the following recycled waste streams: demineralizer reject, boiler blowdown, and miscellaneous plant use water including equipment cleaning water and plant floor drains.

4302 N. Main St., Rockford, IL 61103 (815)987-7760
595 S. State, Elgin, IL 60123 (847)608-3131
2125 S. First St., Champaign, IL 61820 (217)278-5800
2009 Mall St., Collinsville, IL 62234 (618)346-5120

9511 Harrison St., Des Plaines, IL 60016 (847)294-4000
5407 N. University St., Arbor 113, Peoria, IL 61614 (309)693-5462
2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200
100 W. Randolph, Suite 11-300, Chicago, IL 60601 (312)814-6026

All floor drain waste streams will be treated with an oil water separator prior to being recycled to the WSAC.

All sanitary wastewater will be treated in an on-site package sewage treatment plant prior to discharge to the process wastewater pond.

All process wastewater will be sent to the process wastewater pond prior to discharge. The process wastewater pond liner will be constructed of a 2 ft thick compacted clay layer, covered by a 60 mil HDPE geomembrane and 5 inches of nominal reinforced concrete.

All stormwater associated with industrial activity will be directed to the stormwater retention pond. The stormwater retention pond liner will be constructed of a 2 ft thick compacted clay layer, covered with a geotextile fabric and 6 inches of seeded topsoil.

This facility will not have a surface water intake structure as all of the facility's source water will be obtained from on-site wells. Therefore, a 316(b) demonstration is not required. Additionally, this facility will employ the use of a wet surface air cooler which discharges its blowdown to a process wastewater pond. The pond will have a controlled overflow discharge to the Mississippi River via an approximately mile long pipe. The discharge is expected to meet the existing temperature standards of Title 35 Ill. Adm. Code 303.331 at the point of discharge. Therefore, alternate temperature limits are not believed to be necessary and a 316(a) thermal demonstration is not required.

Application is made for the new discharge(s) which are located in Carroll 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	Mississippi River	41° 59' 44" North	90° 07' 48" West	General Use	Not Rated
002	Unnamed tributary to Johnson Creek	41° 59' 32" North	90° 06' 25" West	General Use	Not Rated

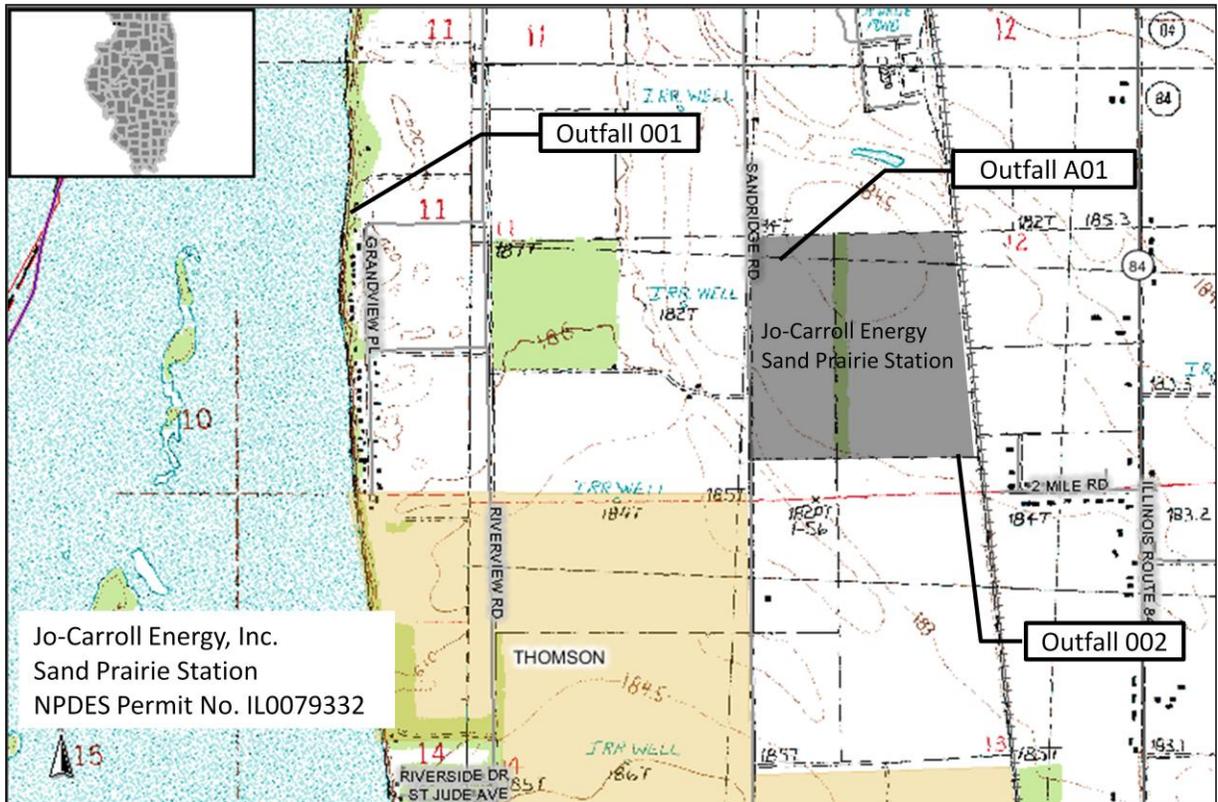
To assist you further in identifying the location of the discharge please see the attached map.

The stream segment, IL_MI receiving the flow from the unnamed tributary receiving the discharge from outfall(s) 002 is not on the draft 2010 303(d) list of impaired waters.

The stream segment, M-12 receiving the discharge from outfall(s) 001 is on the draft 2010 303(d) list of impaired waters, and is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

<u>Pollutants</u>	<u>Impaired Use</u>
PCBs and mercury	Fish Consumption Use



Antidegradation Assessment
NPDES Permit No. IL0079332

The subject facility has applied for an NPDES permit for discharges associated with a new, wood burning co-generation power plant. The station could also be fired with a 10% corn stover or switchgrass blend. The station will supply steam to an adjacent industrial facility (Danisco) and will generate up to 20 MW of electricity that will be distributed to local customers or the grid. Wastewaters will consist of noncontact cooling water blowdown from the wet surface air cooler steam condenser and auxiliary cooler, drainage from sludge dewatering from the clarifier/softener and effluent from the on-site sewage treatment plant. Some of this waste water is reused in the plant for ash conditioning resulting in an average effluent discharge flow of 0.086 MGD. The effluent consists primarily of constituents concentrated from the ground water source through evaporation in the cooling process plus water treatment additives necessary to maintain the cooling system. The boiler will be designed to primarily fire clean wood fuel and secondarily, corn stover, a biomass fuel that can be produced from the stalk and leaves of the corn plant during the harvesting of the grain. Switchgrass may also be used as a secondary fuel. The ash from the process will be temporarily stored on site in bins pending its distribution to farmers as a soil amendment or disposal in a landfill. A pond will be used to retain stormwater and provide a holding area for re-use as process water with overflow being discharged to existing drainage swales. Process wastewater will be sent to a lined pond for holding with a small portion recycled for dust suppression and the remainder to be discharged to the Mississippi River. Overflow will travel through a pipeline approximately one mile before discharge to the Mississippi River via a bankfall outfall structure.

Identification and Characterization of the Affected Water Body.

The Mississippi River (segment M-12) has a 7Q10 flow of 13660 cfs and is a General Use water. The river is listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use. The causes given are PCBs and mercury. Aquatic life use is fully supported. The Mississippi River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating. The Mississippi River at this location is designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The IDNR WIRT system indicates that two state threatened mussels, the black sandshell and the butterfly, reside in the receiving stream where the new discharge outfall would be located.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The applicant performed chemical analysis of the well water source for the new facility. Many metals were below detection levels and were not further considered in the prediction of final effluent quality. The final effluent concentration will be controlled by the number of

cycles of concentration the cooling water (well water) will undergo. Arsenic, barium, boron, manganese, sulfate, chloride, phosphorus, and zinc will be discharged in measurable quantities. Of these, chloride, and zinc may be present in concentrations approaching the water quality standards if cycles of concentration are carried that far. Given the critical hardness of the Mississippi River of 160 mg/L, the chronic standard for zinc is 0.047 mg/L based on the corrected chronic water quality standard now before the Illinois Pollution Control Board. This hardness value was computed from hardness and flow measurements in the Mississippi River at Clinton Iowa. The chloride water quality standard is 500 mg/L. Predicted ammonia concentrations are not expected to exceed water quality standards at end-of-pipe given the likelihood for biological degradation in the holding pond. All other substances will be discharged at concentrations that meet the water quality standards. Phosphorus will be discharged at the rate of 2.28 lb/day maximum. The temperature of the effluent is expected to mirror ambient conditions given the holding pond and the long pipeline will facilitate cooling or warming of the effluent. A daily maximum permit limit for chloride of 500 mg/L and a 30 day average zinc limit of 0.047 mg/L will ensure that all water quality standards are met at end-of-pipe. No adverse impacts to aquatic life in the Mississippi River are anticipated.

The facility requires the use of water treatment additives to protect the structural integrity of their boiler, cooling towers, and reverse osmosis system. A review of the proposed treatment programs provided by Nalco, GE, and Ashland is provided below. Each of the treatment programs proposed by each vendor is suitable for use with the understanding that only one vendor will be utilized so that products are not used interchangeably amongst vendors. A TRC limit for Outfall 001 is recommended due to the proposed usage of chlorinated or brominated biocides. The proposed usage of phosphorus-based corrosion inhibitors would result in a contribution of 2.03, 0.51, and 2.28 lbs/d of phosphorus from Nalco, GE, and Ashland products respectively, which does not include source water contributions. If selected, the Ashland treatment program would include clean in place procedures for maintenance of the RO system, whereas Nalco and GE propose to clean the system offsite. Onsite cleaning of the RO system with Ashland additives would result in approximately 7 additional pounds of phosphorus per quarterly cleaning. None of the proposed treatment programs would necessitate a phosphorus effluent limit.

Nalco Water Treatment Additives

Nalco Nalclear 7763 is a flocculant composed of a proprietary polymer that would be applied into the clarifier inlet to aid in settling of precipitates. Given the affinity of the product to bind with suspended solids, the product is expected to be removed from the system as part of clarifier sludge and is not expected to be present at detectable concentrations in Outfall 001 effluent.

Nalco 3DT195 is composed of a non-hazardous proprietary formulation and would be applied at 50 mg/L into cooling tower water for scale inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 44 mg/L, which is well below toxicity estimates for the product (LC50 = 921 mg/L). Use of the product would result in a maximum phosphorus discharge of 0.18 lb/d.

Nalco 3DT185 is composed of phosphoric acid and would be applied at 14 mg/L into cooling tower water for corrosion inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 12 mg/L, which is well below toxicity estimates for the product (NOEC = 1,250 mg/L). Use of the product would result in a maximum phosphorus discharge of 1.27 lb/d.

Nalco ControlBrom CB70 is composed of sodium bromide and would be applied into the cooling tower water for use as a biocide. Sodium hypochlorite (12.5%) is also recommended for use as a cooling tower biocide by Nalco. Bromine and chlorine residuals in the cooling tower blowdown would be neutralized through the application of Nalco 7408 (sodium bisulfite).

Nalco 356 is composed of morpholine and cyclohexylamine and would be applied at 25 mg/L into the closed loop boiler system to raise the pH and provide corrosion inhibition. Product residuals would be contained in the liquid blowdown from the steam generator and would be present in Outfall 001 effluent at a maximum of 5 mg/L (worst case estimate, no degradation assumed). Neutralization of pH would occur prior to discharge at Outfall 001.

Nalco Elimin-Ox is composed carbonylhydrazide and would be applied at 80 mg/L into the closed loop boiler system to scavenge oxygen and provide corrosion inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 16 mg/L, which is well below toxicity estimates for the product (LC50 = 96 mg/L).

Nalco BT-3000 is composed of sodium tripolyphosphate and would be applied at 5.2 gpd into the closed loop boiler system for corrosion inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 100 mg/L, which is well below toxicity estimates for the product (LC50 = 3,125 mg/L). Use of the product would result in a maximum discharge of 0.58 lb/d phosphorus.

GE Water Treatment Additives

GE Polyfloc AE1115 is a flocculant composed of isoparaffinic petroleum distillates and a proprietary polymer that would be applied into the clarifier inlet to aid in settling of precipitates. Given the affinity of the product to bind with suspended solids, the product is expected to be removed from the system as part of clarifier sludge and is not expected to be present at detectable concentrations in Outfall 001 effluent.

GE GN8005 is composed of an acrylate terpolymer and would be applied at 65 mg/L into cooling tower water for scale inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 57.5 mg/L, which is well below toxicity estimates for the product (NOEC = 1,500 mg/L).

GE MS6206 is composed of tetrapotassium pyrophosphate and would be applied at 22 mg/L into cooling tower water for corrosion inhibitor. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 19.5 mg/L, which is well below toxicity estimates for the product (NOEC = 500 mg/L). Use of the product would result in a maximum phosphorus discharge of 0.21 lb/d.

GE OX909 is composed of bromine chloride and would be applied into cooling tower water for use as a biocide. GE Betz does not anticipate that sodium bisulfite will be required to reduce TRC to acceptable concentrations prior to discharge. Nonetheless, TRC limits should still be required at Outfall 001.

GE NA1324 is composed of ammonium hydroxide and monoethanolamine and would be applied at a 2 ppm residual into the closed loop boiler system to raise the pH and provide corrosion inhibition. Product residuals would be contained in the liquid blowdown from the steam generator and would be present in Outfall 001 effluent at a maximum of 0.5 mg/L (worst case estimate, no degradation assumed), pH would be neutralized prior to discharge at Outfall 001.

GE OS5607 is composed of carbonic dihydrazide and would be applied at 0.5 mg/L into the closed loop boiler system to scavenge oxygen and provide corrosion inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 0.1 mg/L, which is well below toxicity estimates for the product (LC50 = 160 mg/L).

GE HP9420 is composed of disodium phosphate and would be applied at a 10 ppm phosphate residual into the closed loop boiler system for corrosion inhibition. The product would be used interchangeably with GE HP9430 and would not be used simultaneously. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 2 mg/L, which is well below toxicity estimates for the product (NOEC = 2,100 mg/L). Use of the product would result in a discharge of 0.3 lb/d phosphorus.

GE HP9430 is composed of trisodium phosphate and would be applied at a 10 ppm phosphate residual into the closed loop boiler system for corrosion inhibition. The product would be used interchangeably with GE HP9420 and would not be used simultaneously. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 2 mg/L, which is well below toxicity estimates for the product (LC50 = 220 mg/L). Use of the product would result in a discharge of 0.3 lb/d phosphorus.

Ashland Water Treatment Additives

Ashland Drewfloc 2300-GR is a flocculant composed of a proprietary anionic polymer that would be applied into the clarifier inlet to aid in settling of precipitates. The product would replace Drewfloc 2278, a previously proposed product which was determined to be problematic based on the listed ingredients. Given the affinity of Drewfloc 2300-GR to bind with suspended solids, the product is expected to be removed from the system as part of clarifier sludge and is not expected to be present at detectable concentrations in Outfall 001 effluent.

Ashland Biosperse 3001 is composed of sodium hypochlorite and would be used as a biocide in the greensand filter and the cooling tower water. Chlorine residuals would be neutralized through the application of Ashland Drew 6134 (sodium metabisulfite).

Ashland Ameroyal 710 is a phosphorus-based antiscalant that would be applied into the reverse osmosis system at 6 mg/L. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 1.2 mg/L, which is well below toxicity estimates for the product (LC50 = 4,000 mg/L). Use of the product would result in a discharge of 0.026 lb/d phosphorus.

Ashland Drewclean RO 67466 is a phosphorus-based alkaline cleaner that would be applied once per quarter into the reverse osmosis system at a 42 lb slug dosage. Product residuals would be diluted by the 340,000 gallon capacity pond and retained for a maximum of 6 days prior to discharge at Outfall 001. The expected discharge concentration from Outfall 001 is 14.8 mg/L, which is below toxicity estimates for the product (LC50 = 51.8 mg/L) and does not include product degradation or pH neutralization prior to discharge. Slug usage would result in phosphorus contribution of 7 lbs per quarterly application.

Ashland Drewclean 2010 is an acidic cleaner composed of a proprietary organic acid which would be applied once per quarter into the reverse osmosis system at a 42 lb slug dosage. Product residuals would be diluted by the 340,000 gallon capacity pond and retained for a maximum of 6 days prior to discharge at Outfall 001. The expected discharge concentration from Outfall 001 is 14.8 mg/L, which is below toxicity estimates for the product (LC50 = 915 mg/L) and does not include product degradation or pH neutralization prior to discharge.

Ashland Drew 11-644 is composed of an acrylic polymer and would be applied at 20 mg/L into cooling tower water for scale inhibition. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 18

mg/L, which is well below toxicity estimates for the product (LC50 = 1,691 mg/L).

Ashland Millsperse 956 is a phosphorus-based corrosion inhibitor that would be applied at 50 mg/L into the cooling tower. Based on worst case estimates (no degradation or dilution prior to outfall) the maximum effluent concentration of the product would be 44 mg/L, which is well below toxicity estimates for the product (LC50 = 1,768 mg/L). Use of the product would result in a maximum phosphorus discharge of 1.92 lb/d.

Ashland Amercor 8780 is composed of monoethanolamine and cyclohexylamine and would be applied at an 8 mg/L residual into the closed loop boiler system to raise the pH and provide corrosion inhibition. Product residuals would be contained in the liquid blowdown from the steam generator and would be present in Outfall 001 effluent at a maximum of 1.5 mg/L (worst case estimate, no degradation assumed), pH would be neutralized prior to discharge at Outfall 001.

Fate and Effect of Parameters Proposed for Increased Loading.

Ammonia discharged by this facility will decay into simpler and harmless byproducts by naturally occurring organisms in the receiving stream. Some of the nitrogen originating in the ammonia will remain in the stream in the form of nitrates or organic nitrogen. Ammonia standards will not be exceeded by this discharge. The salts and metals discharged will be indistinguishable from background Mississippi River concentrations within several feet of the outfall structure. No adverse impact will occur downstream of the outfall.

Purpose and Social & Economic Benefits of the Proposed Activity.

The plant will generate electricity from a renewable fuel source for use by the local community and region. Approximately 26 full time positions will be created for operation and maintenance of the plant. Approximately 300 workers will be temporarily employed in the construction of the facility for about 2.5 years.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The facility generates wastewaters that stem from noncontact cooling water. As such, these wastewaters reflect the good quality well water used as source water for the plant. Evaporation will lead to the concentration of the naturally occurring constituents of the well water in the final effluent discharged to the Mississippi River. This effluent is not considered harmful to the environment and therefore the alternatives analysis reflects the fact that very little environmental benefit is gained from alternatives to discharge to surface waters.

The applicant addressed alternatives in Attachment 9 of the Jo-Carroll Energy Sand Prairie Station Proposed Biomass Facility NPDES Permit Application entitled Antidegradation Assessment Jo-Carroll Energy, Inc. (NFP) Sand Prairie Station Thomson, Illinois. A discharge to a POTW was considered, however, the Thomson sewage treatment plant does not have excess capacity to accept the wastewater nor would it significantly reduce effluent concentrations in the cooling water effluent from the power plant. Land application was also considered. The salts present in the cooling water blowdown make irrigation use of the effluent infeasible. Likewise, reuse of the effluent by a nearby industrial user is infeasible given the salt content. The only possibility is Danisco, but no need for this water exists there. Using a zero liquid discharge technology was considered, but this method is energy intensive and produces a powered salt waste product that must be landfill disposed. Creating additional environmental problems is not a favorable trade-off to surface water discharge. Deep well injection was considered, however, for a relatively benign effluent like the cooling water blowdown at this facility, deep well injection is an extreme option. Deep well injection requires permits that are usually reserved for higher strength wastewaters.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

The Illinois Department of Natural Resources terminated endangered species consultation in a March 22, 2010 letter.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by providing a renewable fuel source of electricity and jobs. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

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

Outfall: 001

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Monitor Only	
pH				Shall be in the range 6-9 s.u.		35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 125.3*
Temperature						35 IAC 303.331
Total Residual Chlorine					0.05	35 IAC 302.208 and 40 CFR 125.3
Total Zinc				0.047		35 IAC 302.208 and IPCB R2011-018
Chloride					500	35 IAC 302.208
126 Priority Pollutants				No Detectable Amounts		40 CFR 125.3**
Ammonia (as N)					Monitor Only	
Total Phosphorus (as P)					Monitor Only	
Priority Metals					Monitor Only	

*40 CFR 423.15(c) contains oil & grease limits which have been included in the permit based on best professional judgment (BPJ).

**40 CFR 423.15(j) contains priority pollutant limits which have been included in the permit based on best professional judgment (BPJ).

Outfall: A01

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Monitor Only	
Total Suspended Solids	1.1 (3.6)	2.2 (7.2)	35 IAC 304.120	30	60	35 IAC 304.120
CBOD ₅	0.9 (3.0)	1.8 (6.0)	35 IAC 304.120	25	50	35 IAC 304.120
Fecal Coliform					400 cfu/100 mL	35 IAC 304.121

Outfall: 002

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Monitor Only	
Total Suspended Solids					Monitor Only	
BOD ₅					Monitor Only	
Total Nitrogen (as N)					Monitor Only	
Total Phosphorus (as P)					Monitor Only	

A SWPPP must be maintained.

Load Limit Calculations:

- A. Load limit calculations for Outfall A01 for the following pollutant parameters were based on an average flow of 0.0043 MGD and a maximum flow of 0.0144 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): Total Suspended Solids and CBOD₅.

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

The following explain the conditions of the proposed permit:

The special conditions serve the purpose of clarifying monitoring location, submittal of discharge monitoring reports, stormwater pollution prevention plan requirements, approval of chemical additives, and the prohibition of fly ash transport water, discharge of polychlorinated biphenyl compounds, and chemical metal cleaning wastes.

NPDES Permit No. IL0079332

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

New (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Jo-Carroll Energy, Inc. (NFP)
793 U.S. Route 20 West
P.O. Box 390
Elizabeth, Illinois 61028

Facility Name and Address:

Jo-Carroll Energy, Inc. (NFP)
Sand Prairie Station
4341 Sand Ridge Road
Thomson, Illinois 61285
(Carroll County)

Discharge Number and Name:

001 Process Wastewater Pond
A01 Sanitary Wastewater
002 Stormwater Runoff

Receiving Waters:

Mississippi River
Mississippi River via Outfall 001
Unnamed tributary to Johnson 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: BWC:11081901.bwc

NPDES Permit No. IL0079332

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(s): 001 – Process Wastewater Pond

This discharge consists of: 1. WSAC Blowdown 2. WSAC Auxiliary Cooler Blowdown 3. Water Softener Backwash 4. Stormwater Runoff 5. Discharges from Outfall A01 The following waste streams are recycled as cooling water used in the WSAC: 1. Demineralizer Reject 2. Boiler Blowdown 3. Boiler Blowdown Quench Water 4. Miscellaneous Plant Use Waste Streams 5. Stormwater	DAF:	DMF:
	0.072 MGD	0.072 MGD
	0.007 MGD	0.007 MGD
	0.004 MGD	0.009 MGD
	Intermittent	Intermittent
	0.004 MGD	0.014 MGD
	0.006 MGD	0.013 MGD
	0.009 MGD	0.016 MGD
	0.023 MGD	0.046 MGD
	0.050 MGD	0.079 MGD
	Intermittent	Intermittent

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				1/Month	Measurement
pH	See Special Condition 2				1/Month	Grab
Total Suspended Solids			15	30	1/Month	Grab
Oil and Grease			15	20	1/Month	Grab
Temperature	See Special Condition 3				1/Month	Measurement
Total Residual Chlorine*				0.05	1/Month	Grab
Total Zinc			0.047		1/Month	Grab
Chloride				500	1/Month	Grab
126 Priority Pollutants**			No Detectable Amounts**		2/Year	Calculation**
Ammonia (as N)				Monitor Only	1/Month	Grab
Total Phosphorus (as P)				Monitor Only	1/Month	Grab
Priority Metals***				Monitor Only	2/Year	Grab

*See Special Condition 9

**See Special Condition 14

***See Special Condition 15

NPDES Permit No. IL0079332

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(s): A01 – Sanitary Wastewater*
(DAF = 0.0043 MGD; DMF = 0.0144 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				1/Month	Measurement
Total Suspended Solids	1.1 (3.6)	2.2 (7.2)	30	60	1/Month	24-hr Composite
CBOD ₅	0.9 (3.0)	1.8 (6.0)	25	50	1/Month	24-hr Composite
Fecal Coliform				400 cfu/100 mL**	1/Month	Grab

*The package sewage treatment plant may also be used to treat stormwater collected from the aqueous ammonia unloading area.

** See Special Condition 10

Outfall(s): 002 – Stormwater Runoff***
(Intermittent Discharge)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1			Monitor Only	1/Quarter	Measurement
Total Suspended Solids				Monitor Only	1/Quarter	Grab***
BOD ₅				Monitor Only	1/Quarter	Grab***
Total Nitrogen (as N)				Monitor Only	1/Quarter	Grab***
Total Phosphorus (as P)				Monitor Only	1/Quarter	Grab***

***See Special Condition 16 for sampling requirements and Special Condition 19 for SWPPP requirements.

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 Reports.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

- A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more the 1.7° C (3° F).

	<u>JAN.</u>	<u>FEB.</u>	<u>MAR.</u>	<u>APR.</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG.</u>	<u>SEPT.</u>	<u>OCT.</u>	<u>NOV.</u>	<u>DEC.</u>
°F	45	45	57	68	78	85	86	86	85	75	65	52
°C	7	7	14	20	26	29	30	30	29	24	18	11

- B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).
- D. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 4. 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 5. 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 6. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 7. This permit authorizes the use of water treatment additives that were requested as part of the permit application. The uses of these additives are only approved for use in the manner described in the antidegradation assessment associated with the public notice of this permit. The use of any new additives, or change in those previously approved by the Agency, or if the permittee increases the feed rate or quantity of the additives used beyond what has been approved by the Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions – Attachment H.

Special Conditions

SPECIAL CONDITION 8. 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 9. All samples for Total Residual Chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

For the purposes of this permit, TRC means those substances which include combined and uncombined forms of both chlorine and bromine and which are expressed, by convention, as an equivalent concentration of molecular chlorine.

SPECIAL CONDITION 10. The daily maximum fecal coliform count shall not exceed 400 per 100 ml.

SPECIAL CONDITION 11. There shall be no discharge of polychlorinated biphenyl compounds (PCBs).

SPECIAL CONDITION 12. There shall be no discharge of chemical metal cleaning wastes, unless this permit has been modified to include the new waste stream. For the purpose of this permit, chemical metal cleaning wastes means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

SPECIAL CONDITION 13. There shall be no discharge of fly ash transport water.

SPECIAL CONDITION 14. The discharge of one hundred twenty-six priority pollutants (40 CFR 423, Appendix A) is prohibited in detectable amounts from cooling tower discharges if the pollutants come from cooling system maintenance chemicals. Compliance with this requirement may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable, due to the use of cooling tower maintenance chemicals, in the final discharge by the analytical methods found in 40 CFR part 136. The use of cooling system maintenance chemicals containing chromium is prohibited unless this permit has been modified to include the use and discharge of these chemicals.

SPECIAL CONDITION 15. The Permittee shall monitor the effluent from outfalls 001 for the following parameters on a semi-annual basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be reported in units of (mg/L) and submitted with the January and July Discharge Monitoring Report Forms unless otherwise specified by the Agency. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET</u> <u>CODE</u>	<u>PARAMETER</u>	<u>Minimum</u> <u>reporting limit</u>
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab not to exceed 24 hours)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (weak acid dissociable) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01059	Thallium	0.3 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

Special Conditions

SPECIAL CONDITION 16. Samples for Outfall 002 shall be collected once per quarter from the discharge resulting from a rainfall event that is greater than 0.1 inches in magnitude or equivalent snow melt and occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall or equivalent snow melt) storm event.

For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, a minimum of one grab sample may be taken and analyzed. For all other discharges, a grab sample shall be taken during the first thirty minutes of the discharge and a minimum of three sample aliquots taken in each hour of the discharge for the entire discharge or the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. The grab sample taken during the initial thirty minutes of discharge shall be analyzed separately and the remaining sample aliquots may be combined to form a single sample for analysis.

The Permittee shall record quarterly monitoring results on the March, June, September, and December DMRs each year.

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

SPECIAL CONDITION 17. If there is a proposed change to the fuel source to allow for anything other than non-contaminated wood, corn stover, or switchgrass, then written notification shall be provided to the Agency, at the address specified in Special Condition 5, to the Attention of the Permit Section. A modification to this permit may be required prior to any such change in fuel source. For the purpose of this permit, contaminated wood means wood that has non-wood materials or substances that are not naturally present in the wood and that are coating the wood, adhering to the surface of the wood, absorbed into the wood, or otherwise present in the wood. Contaminated wood includes, but is not limited to, preserved wood, painted wood, laminated wood, particle board, and oil or chemical-stained wood. Non-contaminated wood means any wood not meeting the meaning of contaminated wood.

SPECIAL CONDITION 18. Groundwater monitoring wells shall be installed and monitored in accordance to a plan approved by the Agency.

SPECIAL CONDITION 19.STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

Special Conditions

- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
 2. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations
 - vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, and access areas.
 - x. Areas under items iv and ix above may be withheld from the site for security reasons.
 3. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials.
 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
 6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

Special Conditions

1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
 - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
 - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
 - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
 - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
 - vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.

Special Conditions

- G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges - The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition.
1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
 2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.
 3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
 4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
 5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
 6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.
- K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
- L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
- M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

Special Conditions

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.
- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

- V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.