

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

January 19, 2007

RECEIVED
CLERK'S OFFICE

JAN 22 2007

STATE OF ILLINOIS
Pollution Control Board

City of Alton)
)
)
)
)
Petitioner,)
)
v.)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

IEPA – 07-07
(Provisional Variance-Water)

Re: Provisional Variance From the Dilution Ratio Requirement
Of NPDES Permit IL00227464

Dear Mayor Sandidge:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request (Attachment A) from the City of Alton (City). The Agency received a faxed request, dated January 8, 2007, from the City on January 12, 2007, and the hard copy of the same on January 18, 2007. The City needs to perform essential maintenance on the Discharge 001 outfall pipe to the Mississippi River. The City is requesting this provisional variance so that it can make the necessary repairs to this outfall sewer. Based on its review, the Agency GRANTS a provisional variance subject to the specific conditions set forth below.

Background

The City of Alton owns and operates a wastewater treatment facility located at 19 Chessen Lane, off of Broadway, in Alton, Illinois. This treatment facility consists of an activated sludge plant designed to treat 10.50 million gallons per day (MGD) design average flow and 26.25 MGD design maximum flow. Treatment units consist of mechanical fine screens, grit chambers, two primary clarifiers, five activated sludge tanks, two secondary clarifiers, and chlorination. The facility has two discharge points: Outfall 001, which discharges to the Mississippi River; and Outfall 009, an emergency high level bypass, which discharges to Wood River Creek.

The City must remove and replace a 34-foot long section of the 42" outfall sewer pipe before it can complete the repairs to the Discharge 001 outfall pipe. To facilitate removal of this pipe, the effluent from the Alton wastewater treatment plant needs to be diverted from Discharge 001 to Discharge 009.

Relief Requested

The City requests a provisional variance from NPDES permit IL0027464, Special Condition 13 (Attachment B). Special Condition 13 of the permit provides in pertinent part:

Discharge 009 is an emergency high level bypass. Discharges from this overflow, other than when the Mississippi River is at or above 25-year flood elevation and when 5:1 dilution exists in Wood River Creek, are subject to the following conditions:

* * *

(2) Bypass not exceeding limitation. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if at least a 5:1 dilution ratio is maintained in Wood River Creek and if it also is for essential maintenance to assure efficient operation. . . .

* * *

Agency Determinations

The Agency has reviewed the requested provisional variance and has concluded the following:

1. The environmental impact from the requested relief is predicted to be minimal;
2. No reasonable alternatives appear available;
3. No public water supplies should be affected;
4. No federal regulations will preclude the granting of this request; and
5. The City will face an arbitrary and unreasonable hardship if the request is not granted.

Conditions

The Agency hereby GRANTS the City of Alton a provisional variance from Special Condition 13 of NPDES Permit IL0027464 requiring the City to maintain a 5:1 dilution ratio at Discharge 009, subject to the following conditions:

- A. The provisional variance shall begin on January 30, 2007, and end no later than February 28, 2007, during which time the City does not have to meet the 5:1 dilution ratio requirement specified in NPDES permit IL0027464.
- B. The City shall operate its system to produce the best effluent possible. All other requirements of NPDES permit IL0027464 will be maintained during the variance period.
- C. The City shall notify Barb Conner of the Agency by telephone at 217/782-9720 when the repairs begin and effluent is diverted from Discharge 001 to Discharge 009 and again when repairs are complete and the effluent is diverted back to Discharge 001. Written confirmation of each notice shall be sent within five days to the following address:

Illinois Environmental Protection Agency
 Bureau of Water - Water Pollution Control
 Attention: Barb Conner
 1021 North Grand Avenue East, MC #19
 Springfield, Illinois 62794-9276

- D. The City shall sign a certificate of acceptance of this provisional variance and forward that certificate to Barb Conner at the address indicated above within one day of the date of this order. The certification should take the following form:

I (We) _____, hereby accept and agree to be bound by all terms and conditions of the provisional variance granted by the Agency in _____ dated _____.

 Petitioner

 Authorized Agent

 Title

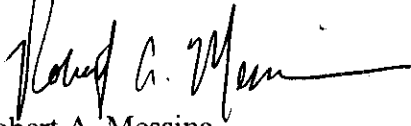
 Date

The City shall continue to monitor and maintain compliance with all other parameters and conditions specified in its NPDES Permit No. IL0027464.

Conclusion

The Agency grants this provisional variance in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert A. Messina", with a long horizontal flourish extending to the right.

Robert A. Messina
Chief Legal Counsel

c: Marcia Willhite
Barb Conner
Vera Herst

CITY OF ALTON, ILLINOIS



DEPARTMENT OF PUBLIC WORKS
ALTON, ILLINOIS 62002
618-463-3530

January 8, 2007

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, IL 62706

Attn: Barb Conner

Re: City of Alton

Dear Ms. Conner:

We are writing as a follow-up to our correspondence to you dated December 19, 2006 in which we requested approval to use Discharge 009-Secondary Outfall to Wood River Creek while we perform "essential maintenance" to the 42" plant outfall sewer to the Mississippi River. The Agency's verbal response to that letter was that the City would need to formally request a Provisional Variance.

The purpose of this letter is to request a Provisional Variance from the Agency to discharge treated plant effluent through permitted Discharge 009 when the Mississippi River is below the 25 year flood elevation and when dilution in Wood River Creek is less than 5:1.

In accordance with Title 35, Subtitle A, Chapter II, Part 180, Subpart B, Section 180.202 b), Descriptions and justifications for the Variance are:

- 1) Variance is being requested from NPDES Permit No. IL0027464, Special Condition 13. The variance would allow the Alton Wastewater Treatment Plant to discharge to Wood River Creek through Discharge 009 when the dilution ratio is less than 5:1 and the Mississippi River is below the 25 year flood elevation. All other requirements of NPDES Permit No. IL0027464.
- 2) The activity that will be performed during this variance is the removal and replacement a section of the City's 40 year old 42" outfall sewer that normally routes the plant discharge to the Mississippi River. This maintenance activity is located approximately 1,000 feet downstream of Discharge 009 on the west bank of Wood River Creek. Distance from Discharge 009 to the Mississippi River is 4,700 feet. The creek is bordered on both banks by the Wood River Drainage and Levee District's Levees. No residences or businesses are located in the area between the levees.

Ms. Barb Conner
January 8, 2007
Page 2

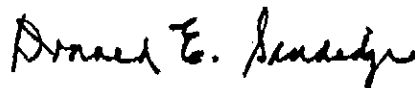
- 3) The removal section of 42" outfall sewer is 34 feet long and is welded steel pipe. The pipe has corroded and is no longer structurally sound. The proposed replacement pipe will be 42" ductile iron pipe, 34 feet long, with flanged connections.
- 4) The attached exhibit A consists of DMR's for the same time period in 2003, 2004, 2005 and 2006, showing that the tested values do not exceed permitted values. The receiving waterway is Wood River Creek, a constantly flowing waterway which drains approximately 122 square miles.
- 5) Not applicable - Variance is not associated with potable water.
- 6) It is not anticipated that any adverse environmental impacts will be produced by the granting of this variance. The same effluent is discharged to the Mississippi River 4,700 feet downstream of the 009 location, and no businesses or residences are located within this distance.
- 7) Compliance with the act will cause a hardship by requiring the City to rent extremely large pumps and discharge piping which will pump the plant effluent of 8 to 15 MGD from the Discharge 009 structure to a manhole downstream of the maintenance location. These pumps will require around-the-clock operators to man the pumps and be available should problems occur. Obtaining pumps and piping of this size would be extremely difficult.
- 8) The proposed timetable for this maintenance operation is one week and the discharge through 009 would be February 11-17, 2007. After the maintenance is completed, full compliance with NPDES Permit IL0027464 will be met.
- 9) Alternate methods of compliance would be to have the City perform bypass pumping, which is deemed to be too costly. Likewise, the Contractor could bid the bypass pumping, which would be even more costly. Another method would be to postpone the maintenance until the flow in Wood River Creek was great enough to provide 5:1 dilution and the Mississippi River was above the 25 year flood elevation. Postponement could be long enough that the 42" welded steel pipe fails on its own. At that point, the City would be notifying the IEPA of an Emergency Application and the plant will be discharging to Wood River Creek at this location. The final and most reasonable method is to apply for a Provisional Variance.
- 10) While it is anticipated that this variance will be necessary for one week (February 11-17), the variance request is for 30 days (January 30 - February 28). In case any unusual circumstances arise. The work will be completed as quickly as possible.
- 11) We have not requested and therefore have not been granted any provisional variances within the past calendar year (2006).

Ms. Barb Conner
January 8, 2007
Page 3

- 12) Our NPDES permit was issued on October 31, 2005 and expires on December 31, 2010. We are currently in good standing and have no violations with regard to this permit.
- 13) We have no knowledge of activities or matters currently before the Board of which we are a party.

We trust that this information is sufficient for your review and approval of this Provisional Variance request. If questions arise, please contact us.

Sincerely,



Donald E. Sandidge, Mayor

Cc: Sheppard, Morgan & Schwaab

RECEIVED

JAN 18 2007

CITY OF ALTON, ILLINOIS



IEPA

DEPARTMENT OF PUBLIC WORKS
ALTON, ILLINOIS 62002
618-463-3530

January 8, 2007

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, IL 62706

Attn: Barb Conner

Re: City of Alton

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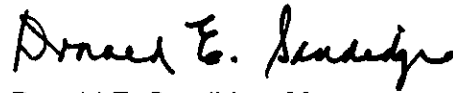
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- 3) The removal section of 42" outfall sewer is 34 feet long and is welded steel pipe. The pipe has corroded and is no longer structurally sound. The proposed replacement pipe will be 42" ductile iron pipe, 34 feet long, with flanged connections.
- 4) The attached exhibit A consists of DMR's for the same time period in 2003, 2004, 2005 and 2006, showing that the tested values do not exceed permitted values. The receiving waterway is Wood River Creek, a constantly flowing waterway which drains approximately 122 square miles.
- 5) Not applicable – Variance is not associated with potable water.
- 6) It is not anticipated that any adverse environmental impacts will be produced by the granting of this variance. The same effluent is discharged to the Mississippi River 4,700 feet downstream of the 009 location, and no businesses or residences are located within this distance.
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- 12) Our NPDES permit was issued on October 31, 2005 and expires on December 31, 2010. We are currently in good standing and have no violations with regard to this permit.
- 13) We have no knowledge of activities or matters currently before the Board of which we are a party.

We trust that this information is sufficient for your review and approval of this Provisional Variance request. If questions arise, please contact us.

Sincerely,



Donald E. Sandidge, Mayor

Cc: Sheppard, Morgan & Schwaab

NPDES Permit No. IL0027464

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: December 31, 2010

Issue Date: October 31, 2005

Effective Date: January 1, 2006

Name and Address of Permittee:

City of Alton
101 East Third Street
Alton, Illinois 62002

Facility Name and Address:

City of Alton STP
19 Chessen Lane
Alton, Illinois
(Madison County)

Receiving Waters: Mississippi River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, 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:ELN:05050402.daa

NPDES Permit No. IL0027464

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 10.50 MGD (design maximum flow (DMF) of 26.25 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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

Parameter	LOAD LIMITS lbs/day			CONCENTRATION LIMITS MG/L			Sample Frequency	Sample Type	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum			
Flow (MGD)							Continuous		
CBOD ₅ **	1751 (4378)	3503 (8757)		20	40		2 days/week	Composite	
Suspended Solids	2189 (5473)	3941 (9852)		25	45		2 days/week	Composite	
pH	Shall be in the range of 6 to 9 Standard Units						2 days/week	Grab	
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						2 days/week	Grab	
Chlorine Residual***							0.75	2 days/week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***See Special Condition 8.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as daily maximum.

pH shall be reported on the DMR as a minimum and a maximum.

Chlorine Residual shall be reported on DMR as daily maximum.

NPDES Permit No. IL0027464

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 009 Secondary Treatment Outfall to Wood River Creek (See Special Condition 13)

Discharge from this outfall is prohibited except when: 1.) River stage on the Mississippi River is at or above the 25 year flood elevation and the dilution ratio in Wood River Creek is at least 500% of the flow discharged; or, 2.) the requirements of Special Condition 13 are fully complied with.

Load limits computed based on a design average flow (DAF) of 10.50 MGD (design maximum flow (DMF) of 26.25 MGD).

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

Parameter	LOAD LIMITS lbs/day			CONCENTRATION LIMITS MG/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
Dilution Ratio	Shall not be less than 500%						Daily When Discharging	
CBOD ₅ **	1751 (4378)	3503 (8757)		20	40		Daily When Discharging	Composite
Suspended Solids	2189 (5473)	3941 (9852)		25	45		Daily When Discharging	Composite
pH	Shall be in the range of 6 to 9 Standard Units						Daily When Discharging	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						Daily When Discharging	Grab
Chlorine Residual***						0.75	Daily When Discharging	Grab
Ammonia Nitrogen as (N)								
March-May/Sept.-Oct.	455 (1138)	1147 (2868)	1314 (3284)	5.2	13.1	15.0	Daily When Discharging	Composite
June-August	298 (744)	744 (1861)	1314 (3284)	3.4	8.5	15.0	Daily When Discharging	Composite
Nov.-Feb.	1112 (2780)		1314 (3284)	12.7		15.0	Daily When Discharging	Composite

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***See Special Condition 8.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as daily maximum.

pH shall be reported on the DMR as a minimum and a maximum.

Chlorine Residual shall be reported on DMR as daily maximum.

Dilution Ratio shall be calculated every day that discharge from this outfall occurs and shall be reported on the DMR as a minimum. For this calculation, Wood River Creek flow shall be measured upstream so as not be impacted by on Mississippi River back water.

Report the number of days of discharge in the comments section of the DMR.

NPDES Permit No. IL0027464

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD ₅	2 days/week	Composite
Suspended Solids	2 days/week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

NPDES Permit No. IL0027464

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

SPECIAL CONDITION 5. 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.

SPECIAL CONDITION 6. 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 7. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 8. Fecal Coliform limits for Discharge Numbers 001 and 009 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 9. The Permittee shall monitor the effluent and report concentrations (in mg/L) of the following listed parameters eighteen (18) months prior to the expiration date and again at twelve (12) months prior to the expiration date. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum detection limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum detection limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab) (using USEPA Method 1631 or equivalent)	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

NPDES Permit No. IL0027464

Special Conditions

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.

SPECIAL CONDITION 10. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD₅, CBOD₅, Suspended Solids, pH and Dissolved Oxygen due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 5 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

SPECIAL CONDITION 11. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 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 using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
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. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
4. Toxicity Reduction Evaluation - Should the results of the biomonitoring program identify toxicity, the IEPA may require 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.

SPECIAL CONDITION 13. Discharge Number 009 is an emergency high level bypass. Discharges from this overflow, other than when the Mississippi River is at or above 25-year flood elevation and when 5:1 dilution exists in Wood River Creek, are subject to the following conditions:

- (1) Definitions

NPDES Permit No. IL0027464

Special Conditions

- (i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (2) Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if at least a 5:1 dilution ratio is maintained in Wood River Creek and if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (3) and (4) of this section.
- (3) Notice
- (i) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (ii) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Standard Condition 12(e) of this Permit (24-hour notice).
- (4) Prohibition of bypass. Bypass is prohibited, and the IEPA may take enforcement action against a Permittee for bypass, unless:
- (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The Permittee submitted notices as required under Standard Condition 12(e) of this Permit.
- (5) Emergency Bypass when discharging, shall be monitored daily by grab sample for BOD₅ and Suspended Solids. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which bypassing occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD₅ and Suspended Solids discharged in the concentration daily maximum column.

SPECIAL CONDITION 14. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 23 for a period of at least five (5) years from the date of this Permit.

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If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
 Bureau of Water
 Compliance Assurance Section
 Mail Code #19
 1021 North Grand Avenue East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

SPECIAL CONDITION 15.

AUTHORIZATION OF
 COMBINED SEWER AND TREATMENT PLANT DISCHARGES

The IEPA has determined that at least a portion of the collection system consists of combined sewers. References to the collection system and the sewer system refer only to those parts of the system which are owned and operated by the Permittee unless otherwise indicated. The Permittee is authorized to discharge from the overflow(s)/bypass(es) listed below provided the diversion structure is located on a combined sewer and the following terms and conditions are met:

<u>Discharge Number</u>	<u>Location</u>	<u>Receiving Water</u>
002	Shields Valley	Mississippi River (through impoundment area)
003	Central Avenue	Mississippi River (through impoundment area)
004	Piasa Street	Mississippi River (Pool of Lock & Dam #26)
005	Summit Street	Mississippi River (Pool of Lock & Dam #26)
006	Bluff Street	Mississippi River (Pool of Lock & Dam #26)
007	Turner Street	Mississippi River (Pool of Lock & Dam #26)

Treatment Requirements

1. All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution and the violation of applicable water quality standards. Sufficient treatment shall consist of the following:
 - a. Treatment as described in PCB R82-7 and dated May 19, 1988 shall be provided. The terms and conditions of this Board Order are hereby incorporated by reference as if fully set forth herein; and,
 - b. Any additional treatment, necessary to comply with applicable water quality standards and the federal Clean Water Act, including any amendments made by the Wet Weather Water Quality Act of 2000.
2. All CSO discharges authorized by this Permit shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 Ill. Adm. Code 302.203 and to prevent depression of oxygen levels below the applicable water quality standards.
3. Overflows during dry weather are prohibited. Dry weather overflows shall be reported to the IEPA pursuant to Standard Condition 12(e) of this Permit (24 hour notice).
4. The collection system shall be operated to optimize transport of wastewater flows and to minimize CSO discharges.
5. The treatment system shall be operated to maximize treatment of wastewater flows.

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Special ConditionsNine Minimum Controls

6. The Permittee shall comply with the nine minimum controls contained in the National CSO Control Policy published in the Federal Register on April 19, 1994. The nine minimum controls are:
- a. Proper operation and maintenance programs for the sewer system and the CSOs (Compliance with this Item shall be met through the requirements imposed by Paragraph 8 of this Special Condition);
 - b. Maximum use of the collection system for storage (Compliance with this Item shall be met through the requirements imposed by Paragraphs 1, 4, and 8 of this Special Condition);
 - c. Review and modification of pretreatment requirements to assure CSO impacts are minimized (Compliance with this Item shall be met through the requirements imposed by Paragraph 9 of this Special Condition);
 - d. Maximization of flow to the POTW for treatment (Compliance with this Item shall be met through the requirements imposed by Paragraphs 4, 5, and 8 of this Special Condition);
 - e. Prohibition of CSOs during dry weather (Compliance with this Item shall be met through the requirements imposed by Paragraph 3 of this Special Condition);
 - f. Control of solids and floatable materials in CSOs (Compliance with this Item shall be met through the requirements imposed by Paragraphs 2 and 8 of this Special Condition);
 - g. Pollution prevention programs which focus on source control activities (Compliance with this Item shall be met through the requirements imposed by Paragraph 6 of this Special Condition, **See Below**);
 - h. Public notification to ensure that citizens receive adequate information regarding CSO occurrences and CSO impacts (Compliance with this Item shall be met through Paragraphs 7 and 12 of this Special Condition); and,
 - i. Monitoring to characterize impacts and efficiency of CSO controls (Compliance with this Item shall be met through the requirements imposed by Paragraphs 10 and 11 of this Special Condition).

A pollution prevention plan (PPP) shall be developed by the Permittee unless one has already been prepared for this collection system. Any previously-prepared PPP shall be reviewed, and revised if necessary, by the Permittee to address the items contained in Chapter 8 of the U.S. EPA guidance document, Combined Sewer Overflows, Guidance For Nine Minimum Controls, and any items contained in previously-sent review documents from the IEPA concerning the PPP. Combined Sewer Overflows, Guidance For Nine Minimum Controls is available on line at <http://www.epa.gov/npdes/pubs/owm0030.pdf>. The PPP (or revised PPP) shall be presented to the general public at a public information meeting conducted by the Permittee within nine (9) months of the effective date of this Permit. The Permittee shall submit documentation that the pollution prevention plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Pollution Prevention Plan Certification" one (1) with original signatures. This certification form is available online at <http://www.epa.state.il.us/water/permits/waste-water/forms/cso-pol-prev.pdf>. Following the public meeting, the Permittee shall implement the pollution prevention plan within one (1) year and shall maintain a current pollution prevention plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The pollution prevention plan shall be submitted to the IEPA upon written request.

Sensitive Area Considerations

7. Pursuant to Section II.C.3 of the federal CSO Control Policy of 1994, sensitive areas are any water likely to be impacted by a CSO discharge which meet one or more of the following criteria: (1) designated as an Outstanding National Resource Water; (2) found to contain shellfish beds; (3) found to contain threatened or endangered aquatic species or their habitat; (4) used for primary contact recreation; or, (5) within the protection area for a drinking water intake structure.

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The IEPA has tentatively determined that none of the outfalls listed in this Special Condition discharge to sensitive areas. However, if information becomes available that causes the IEPA to reverse this determination, the IEPA will notify the Permittee in writing. Within three (3) months of the date of notification, or such other date contained in the notification letter, the Permittee shall submit two (2) copies of either a schedule to relocate, control, or treat discharges from these outfalls. If none of these options are possible, the Permittee shall submit adequate justification at that time as to why these options are not possible. Such justification shall be in accordance with Section II.C.3 of the National CSO Control Policy.

Operational and Maintenance Plans

8. The IEPA reviewed and conditionally accepted a CSO operational and maintenance plan "CSO O&M plan" on August 1, 1997 prepared for this sewerage system. The Permittee shall review and revise, if needed, the CSO O&M plan to reflect system changes.

The CSO O&M plan shall be presented to the general public at a public information meeting conducted by the Permittee within nine (9) months of the effective date of this Permit. The Permittee shall submit documentation that the CSO O&M plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Operational Plan Checklist and Certification", one (1) with original signatures. Copies of the "CSO Operational Plan Checklist and Certification" are available online at <http://www.epa.state.il.us/water/permits/waste-water/forms/cso-checklist.pdf>. Following the public meeting, the Permittee shall implement the CSO O&M plan within one (1) year and shall maintain a current CSO O&M plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The CSO O&M plan shall be submitted to the IEPA upon written request.

The objectives of the CSO O&M plan are to reduce the total loading of pollutants and floatables entering the receiving stream and to ensure that the Permittee ultimately achieves compliance with water quality standards. These plans, tailored to the local governments's collection and waste treatment systems, shall include mechanisms and specific procedures where applicable to ensure:

- a. Collection system inspection on a scheduled basis;
- b. Sewer, catch basin, and regulator cleaning and maintenance on a scheduled basis;
- c. Inspections are made and preventive maintenance is performed on all pump/lift stations;
- d. Collection system replacement, where necessary;
- e. Detection and elimination of illegal connections;
- f. Detection, prevention, and elimination of dry weather overflows;
- g. The collection system is operated to maximize storage capacity and the combined sewer portions of the collection system are operated to delay storm entry into the system; and,
- h. The treatment and collection systems are operated to maximize treatment.

Sewer Use Ordinances

9. The Permittee, within six (6) months of the effective date of this Permit, shall review and where necessary, modify its existing sewer use ordinance to ensure it contains provisions addressing the conditions below. If no ordinance exists, such ordinance shall be developed and implemented within six (6) months from the effective date of this Permit. Upon completion of the review of the sewer use ordinance(s), the Permittee shall submit two (2) copies of a completed "Certification of Sewer Use Ordinance Review", one (1) with original signatures. Copies of the certification form can be obtained on line at <http://www.epa.state.il.us/water/permits/waste-water/forms/sewer-use.pdf>. The Permittee shall submit copies of the sewer use ordinance(s) to the IEPA upon written request. Sewer use ordinances are to contain specific provisions to:

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- a. Prohibit introduction of new inflow sources to the sanitary sewer system;
- b. Require that new construction tributary to the combined sewer system be designed to minimize and/or delay inflow contribution to the combined sewer system;
- c. Require that inflow sources on the combined sewer system be connected to a storm sewer, within a reasonable period of time, if a storm sewer becomes available;
- d. Provide that any new building domestic waste connection shall be distinct from the building inflow connection, to facilitate disconnection if a storm sewer becomes available;
- e. Assure that CSO impacts from non-domestic sources are minimized by determining which non-domestic discharges, if any, are tributary to CSOs and reviewing, and, if necessary, modifying the sewer use ordinance to control pollutants in these discharges; and,
- f. Assure that the owners of all publicly owned systems with combined sewers tributary to the Permittee's collection system have procedures in place adequate to ensure that the objectives, mechanisms, and specific procedures given in Paragraph 8 of this Special Condition are achieved.

The Permittee shall enforce the applicable sewer use ordinances.

Long-Term Control Planning and Compliance with Water Quality Standards

10. a. Pursuant to Section 301 of the federal Clean Water Act, 33 U.S.C. § 1311 and 40 CFR § 122.4, discharges from the CSOs, including the outfalls listed in this Special Condition and any other outfall listed as a "Treated Combined Sewage Outfall", shall not cause or contribute to violations of applicable water quality standards or cause use impairment in the receiving waters. In addition, discharges from CSOs shall comply with all applicable parts of 35 Ill. Adm. Code 306.305(a), (b), (c), and (d).
- b. The Permittee shall develop a Long-Term CSO Control Plan (LTCP) for assuring that the discharges from the CSOs (treated or untreated) authorized in this Permit comply with Paragraph 10.a above and all applicable standards, including water quality standards. Two (2) copies of the LTCP shall be submitted to the IEPA within twenty-four (24) months of the effective date of this Permit. The LTCP shall contain all applicable elements of Paragraph 10.c below including a schedule for implementation and provisions for re-evaluating compliance with applicable standards and regulations after implementation. The LTCP shall be:
 1. Consistent with Section II.C.4.a.i of the Policy; or,
 2. Consistent with either Section II.C.4.a.ii, Section II.C.4.a.iii, or Section II.C.4.b of the Policy and be accompanied by data sufficient to demonstrate that the LTCP, when completely implemented, will be sufficient to meet water quality standards.
- c. Pursuant to the Policy, the required components of the LTCP include the following:
 1. Characterization, monitoring, and modeling of the Combined Sewer System (CSS);
 2. Consideration of Sensitive Areas;
 3. Evaluation of alternatives;
 4. Cost/Performance considerations;
 5. Revised CSO Operational Plan;
 6. Maximizing treatment at the treatment plant;
 7. Implementation schedule;
 8. Post-Construction compliance monitoring program; and
 9. Public participation.

Following submittal of the LTCP, the Permittee shall respond to any initial IEPA review letter in writing within ninety (90) days of the date of such a review letter, and within thirty (30) days of any subsequent review letter(s), if any. Implementation of the LTCP shall be as indicated by IEPA in writing or other enforceable mechanism.

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Monitoring, Reporting and Notification Requirements

- 11. The Permittee shall monitor the frequency of discharge (number of discharges per month) and estimate the duration (in hours) of each discharge from each outfall listed in this Special Condition. Estimates of storm duration and total rainfall shall be provided for each storm event.

For frequency reporting, all discharges from the same storm, or occurring within 24 hours, shall be reported as one. The date that a discharge commences shall be recorded for each outfall. Reports shall be in the form specified by the IEPA and on forms provided by the IEPA. These forms shall be submitted to the IEPA monthly with the DMRs and covering the same reporting period as the DMRs. Parameters (other than flow frequency), if required in this Permit, shall be sampled and reported as indicated in the transmittal letter for such report forms.

- 12. A public notification program in accordance with Section II.B.8 of the federal CSO Control Policy of 1994 shall be developed employing a process that actively informs the affected public. The program shall include at a minimum public notification of CSO occurrences and CSO impacts, with consideration given to including mass media and/or Internet notification. The Permittee shall also consider posting signs in waters likely to be impacted by CSO discharges at the point of discharge and at points where these waters are used for primary contact recreation. Provisions shall be made to include modifications of the program when necessary and notification to any additional member of the affected public. The program shall be presented to the general public at a public information meeting conducted by the Permittee. The Permittee shall conduct the public information meeting within nine (9) months of the effective date of this Permit. The Permittee shall submit documentation that the public information meeting was held, shall submit a summary of all significant issues raised by the public and the Permittee's response to each issue and shall identify any modifications to the program as a result of the public information meeting. The Permittee shall submit the public information meeting documentation to the IEPA and implement the public notification program within twelve (12) months of the effective date of this Permit. The Permittee shall submit copies of the public notification program to the IEPA upon written request.
- 13. If any of the CSO discharge points listed in this Special Condition are eliminated, or if additional CSO discharge points, not listed in this Special Condition, are discovered, the Permittee shall notify the IEPA in writing within one (1) month of the respective outfall elimination or discovery. Such notification shall be in the form of a request for the appropriate modification of this NPDES Permit.

Summary of Compliance Dates in this CSO Special Condition

- 14. The following summarizes the dates that submittals contained in this Special Condition are due at the IEPA (unless otherwise indicated):

Submission of CSO Monitoring Data (Paragraph 11)	15th of every month
Elimination of a CSO or Discovery of Additional CSO Locations (Paragraph 13)	1 month from discovery or elimination
Control (or Justification for No Control) of CSOs to Sensitive Areas (Paragraph 7)	3 months from IEPA notification
Certification of Sewer Use Ordinance Review (Paragraph 9)	6 months from the effective date of this Permit
Conduct Pollution Prevention, OMP, and PN Public Information Meeting (Paragraphs, 6, 8 and 12) No Submittal Due with this Milestone	9 months from the effective date of this Permit
Submit Pollution Prevention Certification, OMP Certification, and PN Information Meeting Summary (Paragraphs, 6, 8 and 12)	12 months from the effective date of this Permit

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Submit CSO Long-Term Control Plan (Paragraph 10)

24 months from the effective date of this Permit

All submittals listed in this Special Condition can be mailed to 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: CSO Coordinator, Compliance Assurance Section

All submittals hand carried shall be delivered to 1021 North Grand Avenue East.

Reopening and Modifying this Permit

15. The IEPA may initiate a modification for this Permit at any time to include requirements and compliance dates which have been submitted in writing by the Permittee and approved by the IEPA, or other requirements and dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Clean Water Act, or regulations promulgated under those Acts. Public Notice of such modifications and opportunity for public hearing shall be provided.

SPECIAL CONDITION 16. 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



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

(217) 782-5544

TDD: (217) 782-9143

ROD R. BIAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

RECEIVED
CLERK'S OFFICE

JAN 22 2007

STATE OF ILLINOIS
Pollution Control Board

January 19, 2007

Dorothy Gunn, Clerk
Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, IL 60601

**RE: NOTICE OF PROVISIONAL VARIANCE APPROVAL-WATER
IEPA -07-07**

Dear Ms. Gunn:

Pursuant to Subsection 37(b) of the Environmental Protection Act (415 ILCS 5/37(b)), attached is a copy of the Illinois EPA's recent approval of a request for provisional variance. As you know, the Board must maintain for public inspection copies of all provisional variances filed with it by the Illinois EPA. Please feel free to call me at the number referenced above should you have any questions.

Sincerely,

Vera Herst
Assistant Counsel
Division of Legal Counsel

Attachment