



Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2017 To March, 2018

Permit No. ILR40 0190

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: CITY OF FAIRVIEW HEIGHTS Mailing Address 1: 10025 BUNKUM ROAD

Mailing Address 2: _____ County: St. Clair

City: FAIRVIEW HEIGHTS State: IL Zip: 62208 Telephone: 618-489-2021

Contact Person: CHRIS VOLKMAN Email Address: _____
(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

ILLINOIS DEPARTMENT OF TRANSPORTATION ST. CLAIR COUNTY
CANTEEN TOWNSHIP & CASEYVILLE TOWNSHIP ST. CLAIR TOWNSHIP

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- | | | | |
|--|--------------------------|---|--------------------------|
| 1. Public Education and Outreach | <input type="checkbox"/> | 4. Construction Site Runoff Control | <input type="checkbox"/> |
| 2. Public Participation/Involvement | <input type="checkbox"/> | 5. Post-Construction Runoff Control | <input type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination | <input type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping | <input type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature:

CHRIS VOLKMAN, P.E.

Printed Name:

5/8/18

Date:

CITY ENGINEER

Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

ADMINISTRATIVE REVISIONS TO THE NOTICE OF INTENT

Revisions to the original Notice of Intent (NOI) are reflected below.

MS4 Operator Mailing Address: Yes _____ No X

Persons Responsible: Yes _____ No X

Name: _____

Title: _____

Telephone Number: _____

Area of Responsibility: _____

Introduction

In 2003, St. Clair County (County), Illinois and its communities created a Co-Permittee Group to join forces in complying with the National Pollutant Discharge Elimination System (NPDES) for Municipal Separate Storm Sewer Systems (MS4) Phase II requirements. As stated in the original 2003 Notice of Intent (NOI), the County and the Co-Permittee communities were to pool resources and work together to comply with the commitments made within the NOI for the benefit of all within the County.

The Co-Permittee Group was active during this reporting period. Significant progress was made sharing Best Management Practices (BMPs) for document retention, operation procedures, and maintenance activities.

Best Management Practice (BMP) Summary of 2017-2018 Activities

In 2003, each member of the Co-Permittee Group submitted a NOI in compliance with the first 5-year cycle. In 2008, a NOI was submitted in compliance with the next 5-year cycle, as written in the first MS4 permit. The 2009 NOI was submitted in compliance with additional requirements in the second MS4 permit. In 2013, a new NOI was submitted for the next 5-year cycle and was in place starting in March 2014. As stated in the 2003, 2008, 2009, and 2013 NOIs, each Co-Permittee Member identified certain activities to comply with the Phase II requirements. Below is an abbreviated summary of the BMPs that were written in the NOI for each of the minimum control measures.

March 2017-February 2018:

- 1) **A.1-** Stormwater brochures for businesses, homeowners, children, and green infrastructures were to be promoted and displayed by each community in a public place.
- 2) **A.4-** St. Clair County sponsored a booth at the County Fair and/or Earth Day and distributed the stormwater and green infrastructure brochures.
- 3) **A.5-** St. Clair County posted newsletters on the County Health Department website during school months. Co-Permittee Members distributed educational materials to schools in their communities. The amount of material distributed was to be tracked by the communities.
- 4) **B.3-** The Co-Permittee Group met three (3) times to review upcoming permit requirements, notice of intent, review stormwater management program, operations training, and to develop and submit the Annual Report.
- 5) **B.5-** Co-Permittee Members solicited and encouraged public assistance in monitoring the community's storm water system. Public inquiries and complaints were responded to and recorded.
- 6) **B.6-** St. Clair County continued to promote programs related to stormwater activities and recycling programs. The community tracked its participation.

- 7) **C.1-** Co-Permittee Members updated any new or revised storm sewers and performed stream observations at bridge inspections.
- 8) **C.5-** A survey of previously installed stencils was to be performed as well as replacing or placing any that needed inlet stencils.
- 9) **C.6-** Communication brochures were distributed to the community. Co-Permittee Members discussed any known illicit discharge ordinance compliance issues in the communities.
- 10) **C.9-** Co-Permittee Members developed brochures addressing specific storm water ordinance prohibited activities and distributed with educational brochures.
- 11) **D.1, E.2, E.4-** Community stormwater ordinances were to be updated, if needed, and require a SWPPP on site plans disturbing more than one acre.
- 12) **D.2, F.1-** The Co-Permittee held an Operations Training class. Topics included a review of the Best Management Practices, Good Housekeeping, and a review of some of the public awareness BMPs other communities use.
- 13) **D.5-** St. Clair County continued to maintain a stormwater hotline number to address public concerns related to stormwater issues. County tracked and reported the number of calls.
- 14) **F.6-** Communities reviewed operating procedures and BMPs and modified if necessary.

The following pages highlight changes made to the BMPs from the NOI, BMP status, and activities planned for the next reporting year. Additional information is also provided from the County and each Community.

It is to be noted that some BMPs will continue on to the next NOI, but some will be stopped, and others added to fulfill the requirements of the permit. The 2014-2019 NOI can be found on the IEPA website.

City of Fairview Heights FOIA Officer for the reporting year:

Name: Cathy Bryant

Title: Clerks Supervisor

Telephone Number: (618) 489-2000

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached?	D. Summarize the stormwater activities you plan to undertake with an implementation schedule		
	YES	NO		YES	NO	Activity
BMP No. A.1 - Distributed Paper Materials- Informational Brochures						
Milestone For Reporting Year: Promote the availability of brochures to the residents.						
	X			X	St. Clair County has updated brochures available to all county residents in the St. Clair County Health Department.	On-going through 2018-2019 permit year.
BMP No. A.4- Community Event- Sponsor Annual Booth at St. Clair County Fair or Earth Day Festival						
Milestone For Reporting Year: St. Clair County sponsored a booth at the Earth Day Celebration.						
	X			X	St. Clair County sponsored a booth and distributed stormwater materials at the Health Department Earth Day Celebration on April 21, 2017. One hundred (100) stormwater brochures were distributed.	The 2018 Earth Day event will be in April.
BMP No. A.5- Classroom Education Material						
Milestone For Reporting Year: Communities distributed educational materials and tracked the number of brochures and other materials handed out to the schools.						
	X			X	St. Clair County posted educational newsletters on the Health Department's Website.	On-going through 2018-2019 permit year.

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached?	D. Summarize the stormwater activities you plan to undertake with an implementation schedule
	Y/N	Y/N		
BMP No. B-3- Stakeholder's Meeting- Coordinate Meetings and Annual Reports				
Milestone For Reporting Year: Co-Permittee Group met three (3) times to complete training and to develop and submit the Annual Report.				
	X	Co-Permittee Meetings were held on Feb. 28th, April 18th, and October 5th, 2017. Annual reports were provided to communities in May 2017 and submitted to IEPA before June 1st, 2017. Meeting topics included: Annual Reporting, Visual Stormwater Sampling Training, Construction Site Inspection training, and Operations Training. City representatives attended all three meetings.	X	The Village will continue to meet with the Co-Permittee Group to share BMPs and training opportunities. The Co-Permittee Group has planned three compliance/training activities for 2018.
BMP No. B-5- Volunteer Monitoring- Solicit and Encourage Public Assistance in Monitoring the Community's Stormwater System & Stormwater Hotline				
Milestone For Reporting Year: Community will work to involve more public assistance in reporting stormwater issues.				
	X	The County updated brochures and its website with the County contact information for the reporting of stormwater issues. Any calls or emails will be recorded and addressed.	X	The community will continue to respond to and record all public complaints of illicit discharge and/or dumping and storm water issues.
BMP No. B.6- Program Coordination- Participate in programs targeted at public awareness, including: Inlet Stenciling and Recycling				
Milestone for Reporting Year: St. Clair County continued to promote programs related to stormwater activities. Communities tracked participation.				
	X	County will continue to promote programs related to stormwater activities and recycling. Multiple media outlets will be used to communicate with municipalities.	X	County will continue to promote programs related to stormwater activities. Multiple media outlets will be used to communicate with municipalities.

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached? If attached information, describe.	D. Summarize the stormwater activities you plan to undertake with an implementation schedule	
	YFS	NO		Activity	Schedule
BMP No. B.7- Other Public Involvement - the community will provide a public meeting annually for public input into for the MS4 program					
Milestone for Reporting Year: The communities will provide a public meeting annually for the MS4 program.					
	X		Review of Other Public Involvement - See page 11	X	Community will continue to hold a public meeting to solicit public input regarding the adequacy of the MS4 program.
					On-going through 2018-2019 permit year.
BMP No. C.1- Storm Sewer Map Preparation					
Milestone for Reporting Year: Co-Permittee member communities reviewed outfall maps and conducted stream observations annually at bridge inspections.					
	X		Co-Permittee communities reviewed their outfall maps for completeness and updated them if necessary. Fairview Heights currently has 100% of outfall locations and names of receiving waters mapped. The storm sewer system map was updated August 2017.	X	Communities will begin to update their storm system maps to include modifications to the system.
					On-going through 2018-2019 permit year.
BMPs No. C.2, C.9- Regulatory Control Program- Ordinance language for illicit discharge/public notification					
Milestone for Reporting Year: Communication brochures were distributed to the community.					
	X		St. Clair County distributed brochures at the Earth Day event and has them available at the City Hall. The City did not require updates to ordinances over the reporting year.	X	This BMP will not continue into the next NOI.
BMP No. C.5- Inlet Stenciling					
Milestone for Reporting Year: Survey condition of inlet stencils.					
	X		Fairview Heights assessed the condition of the stencils. Currently 98% of the inlets are marked. The community currently has 150 stencils in stock.	X	Communities will survey samples of stencils previously installed, replace ones that need to be replaced, and assure all new inlets are installed with stencils.
					On-going through 2018-2019 permit year.

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached? If attached information, describe.	D. Summarize the stormwater activities you plan to undertake with an implementation schedule	
	YES	NO		Activity	Schedule
BMP No. C.6- Program Evaluation and Assessment					
Milestone for Reporting Year: Perform illicit discharge detection and elimination in the Community's stormwater system.					
	X		Communities will perform stream observations during their annual bridge inspections and take appropriate action if any illicit discharge is found.	X	On-going through 2018-2019 permit year.
BMP No. C.9- Public Notification					
Milestone for Reporting Year: Community will update ordinance brochure.					
	X		Brochures will be updated to address specific stormwater ordinance prohibited activities and distributed with brochures addressed in BMP A1.	X	Ordinance brochures will be updated and distributed to the community throughout years 2015-2019 Brochure to be updated in 2018-2019 reporting year.
BMPs No. D.1, E.2, and E.4- Site Plan and Pre-Construction Review Procedures					
Milestone for Reporting Year: Update stormwater ordinance.					
	X		Stormwater ordinance updates were not required this reporting year.	X	This BMP will not continue into the next NOI.
BMP No. D.1- Regulatory Control Program					
Milestone for Reporting Year: Require SWPPP on all site plans disturbing more than one acre of land inside the Community.					
	X		The community will require SWPPP on sites disturbing over 1 acre and enforce ordinance provisions.	X	The community will continue to require SWPPP on sites disturbing over 1 acre and verify the proper use of sediment and erosion control techniques. On-going through 2018-2019 permit year.

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached? If attached information, describe.	D. Summarize the stormwater activities you plan to undertake with an implementation schedule	
	YES	NO		Activity	Schedule
BMP No. D.2- Erosion and Sediment Control BMPs					
Milestone for Reporting Year: Community will participate in BMP training during Annual Operations Training.					
	X			X	On-going through 2018-2019 permit year.
BMP No. D.5- Stormwater Hotline					
Milestone for Reporting Year: County continued to maintain a stormwater hotline number to address public concerns related to stormwater issues. County tracked and reported the number of calls.					
	X			X	On-going through 2018-2019 permit year.
BMPs No. D.6 and E.5- Training for Construction Site Inspectors					
Milestone for Reporting Year: Inspector training was provided this year.					
	X			X	On-going through 2018-2019 permit year.
BMP No. E.2- Regulatory Control Program					
Milestone for Reporting Year: Enforce Stormwater Ordinance.					
	X			X	On-going through 2018-2019 permit year.

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

A. Changes to Best Management- Were there any changes to the BMPs?	B. The status of compliance with the permit, the appropriateness of the BMP and progress towards achieving reduction of discharged pollutants to the MEP, and identified measurable goals for each of the minimum control measures.		C. Provide results of information collected and analyzed, including monitoring data. Information attached? If attached information, describe.	D. Summarize the stormwater activities you plan to undertake with an implementation schedule	
	YES	NO		Activity	Schedule
BMP No. E.4- Pre-Construction Review of BMP Designs					
Milestone for Reporting Year: Review post construction BMPs.					
	X			X	On-going through 2018-2019 permit year.
The community will require and review SWPPPs on site plans disturbing more than one (1) acre of land.					
BMP No. F.1- Employee Training Program					
Milestone for Reporting Year: The Co-Permittee held an Operations Training class.					
	X			X	On-going through 2018-2019 permit year.
Training focused on a review of the Best Management Practices, Good Housekeeping, and the Storm Water Management Plan. The City of Fairview Heights attended operations training. Green infrastructure ideas and practices were discussed at other Co-Permittee meetings and in monthly newsletters distributed to community representatives.					
BMP No. F.6- Other Municipal Operations Controls- Standard Operating Procedures					
Milestone for Reporting Year: Communities reviewed operating procedures and BMPs and modified if necessary.					
	X			X	On-going through 2018-2019 permit year.
Stormwater operation procedures for the street department were reviewed and modified in April 2017.					
Operation procedures are reviewed annually. Co-Permittee meetings will include reference to review and update requirements.					

COMMUNITY NAME: City of Fairview Heights

PERMIT #: ILR400190

IEPA Annual Report for Stormwater Discharges from MS4 Communities- Period: March 2017 through February 2018

ADDITIONAL INFORMATION

<p><u>BMP A.5</u></p>	<p><u>Classroom Educational Materials</u></p> <p>The County has taken steps to educate school children on the severity of stormwater pollution. The St. Clair County Health Department issues a newsletter each month and it is posted on the St. Clair County Health Department's website. The newsletter consists of articles for students with a wide range of pollution topics, including stormwater. The newsletter also lists upcoming recycling events and schools that have won past recycling contests.</p>
<p><u>BMP B.6</u></p>	<p><u>Community Events - Recycling Programs</u></p> <p>Throughout the year, St. Clair County sponsored community events that potentially could positively impact stormwater quality. These activities include telephone book recycling and an ongoing "Clean Sweep" program. Telephone book recycling was sponsored by Illinois American Water. The county website also has a brochure listing recycling sites for over 29 different materials.</p> <p>Fairview Heights provides Christmas tree recycling for its community members.</p>
<p><u>BMP B.7</u></p>	<p><u>Other Public Involvement</u></p> <p>St. Clair County held a public meeting to provide for public input regarding the adequacy of the MS4 program. The public is encouraged to assist in monitoring the community's storm water system by reporting illegal dumping and discharge or storm water issues either directly to the City or through the County. The St. Clair County storm water hotline number is posted on its website and is provided in educational brochures.</p>
<p><u>BMP C.5</u></p>	<p><u>Illicit Source Removal Procedures</u></p> <p>The St. Clair County Highway Department sponsors an Adopt-a-Highway Program throughout the County. By sponsoring this program, St. Clair County is eliminating a significant source of stormwater pollution by keeping trash out of streams and keeping road ditches clear of debris for storm events.</p>

ADDITIONAL COMMUNITY ACTIVITIES

(Make additional copies of form, as necessary)

Community Name: City of Fairview Heights

Permit #: ILR400190

List any additional community-sponsored activities performed between March 2017 and February 2018 not listed in *Notice of Intent (NOI)* submittal, but which addresses one of the six minimum control measures:

One 40-cubic yard dumpster was used by the City for trash retrieved from road ditches and waterways. The dumpster was emptied 10 times during the reporting year.

Fifty-five (55) catch basins were cleaned since March 2017.

Street sweeping was performed for 1076 hours and collected approximately 108,000 pounds of debris.

A total of 5 miles were graded along Kadelec, Elvira, Belle, Pleasant Ridge, Holy Cross, Old Bunkum Road, Baldus, and Lea. The BMPs used included straw mats, riprap, and hydroseeding. Five miles of ditches were cleaned removing one truckload of trash and one truckload of limbs.

The City of Fairview Heights Public Works sponsored three city-wide bulk trash pickups during the year, collecting twenty-six 40-cubic yard dumpsters of waste. The City also provides year-round recycling through Phoenix Recycling, including Christmas trees.

Fairview Heights cleaned 0.5 miles of Ogles Creek over three days gathering one truckload of trash and one truckload of limbs.

The City is developing a process to assess the water quality impacts of flood management projects affecting the municipality.

Circle which minimum control measure addressed:

- | | |
|---|--|
| 1. Public Education and Outreach | 4. Construction Site Runoff Control |
| ② Public Participation/Involvement | 5. Post-Construction Runoff Control |
| ③ Illicit Discharge Detection & Elimination | ⑥ Pollution Prevention/Good Housekeeping |

C. Information Collected and Analyzed during 2017-2018 Reporting Year

The NPDES permit effective March 1, 2016, requires MS4 permittees serving populations under 25,000 persons to conduct visual observations of storm water discharge. The City of Fairview Heights began storm water sampling during the first quarter of 2017. The City is using a Standard Visual Monitoring Form to document discharge color, clarity, oil sheen, odor, floating solids, suspended solids, vegetation conditions, settled solids, foam, and damage to the outfall structure. The standard form is used to ensure systematic collection, reduce error, and provide continuity between observations. Visual observation training was provided through the MS4 Co-Permittee Group.

Fairview Heights will initially take visual samples quarterly at each location within 48 hours of a ¼ inch or greater rainfall event in a 24-hour period. If a sample cannot be taken during the quarter, an explanation will be provided. The storm water monitoring program will help evaluate the effectiveness of BMPs implemented to reduce pollutant loadings and water quality impacts. When trends in the data are identified, BMPs can be adjusted accordingly.

The Quarterly Visual Monitoring form and information collected are attached. The sampling outfall location for the first half of the upcoming reporting year will be:

- Ogles Creek near Richmond Drive

Fairview Heights joined the St. Clair County laboratory sampling partnership during the second half of the reporting year and, therefore, also has laboratory sampling results attached.

E. Reliance on Government Entities for Permit Obligations

Co-Permittee cooperation with County

F. List of Construction Projects during 2017-2018 Reporting Year

The City had the following public construction projects during the reporting year:

ILR10 – Y826

- Removed oil & chip roadway with drainage ditches and constructed a paved street with curb and storm sewers (09/06/2017 - 011/21/2017)
- Disturbed 1.5 acres

Quarterly Visual Monitoring Form

Fill out a separate form for each sample collected (one form per outfall)

Facility	Ogles Creek		Permit ILR40 -	
Sampler's Name (please print)	Chris Volkman		Qualifying Rain Event	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Outfall ID. (refer to site map)		Outfall Description (ex: ditch, grassed swale, concrete pipe)	Rip rap lined channel	
Quarter/Year	1/17	Date/Time Collected	3/28/17 / 11:00 am	Date/Time Examined
				3/29/17 / 11:00 am
Est. Time of Rainfall Start		Rainfall Amount	Runoff Source	<input type="checkbox"/> Snowmelt <input type="checkbox"/> Rainfall
Parameter	Parameter Description		Parameter Characteristics	
Color	Does the stormwater appear to have any color? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Clear)		<input type="checkbox"/> Yellow <input type="checkbox"/> Red <input type="checkbox"/> Other _____	<input type="checkbox"/> Brown <input type="checkbox"/> Gray
Clarity	Is the stormwater clear? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Opaque <input type="checkbox"/> Suspended Solids <input type="checkbox"/> Other _____	<input type="checkbox"/> Milky/Cloudy
Oil Sheen	Can you see a rainbow effect or sheen on the water surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Floating Oil Globules <input type="checkbox"/> Rainbow Sheen <input type="checkbox"/> Other _____	
Odor	Does the sample have an odor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Chemical <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Other _____	<input type="checkbox"/> Musty <input type="checkbox"/> Sewage
Floating Solids	Is there anything on the surface of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Suds <input type="checkbox"/> Sewage <input type="checkbox"/> Other _____	<input type="checkbox"/> Garbage <input type="checkbox"/> Oily Film
Suspended Solids	Is there anything suspended in the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description:	
Damage to Outfall Structure	Is there any damage to the outfall structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Concrete Cracking <input type="checkbox"/> Corrosion <input type="checkbox"/> Other _____	<input type="checkbox"/> Peeling Paint
Vegetation Conditions	Describe plant growth around the stormwater discharge location using the check boxes.		<input type="checkbox"/> Inhibited Growth <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Other _____	<input type="checkbox"/> Excessive
WAIT 30 MINUTES				
Settled Solids	Is there something settled on the bottom of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description (note type, size, & material):	
Foam	Is there foam or material forming on the top of the sample surface? <input type="checkbox"/> Yes <input type="checkbox"/> No		Description (shake bottle gently, is there foam?)	
Detail any concerns, corrective actions taken, and any other indicators of pollution present in the sample.				
Sampler's Signature and Date			3/28/17	

Quarterly Visual Monitoring Form

Fill out a separate form for each sample collected (one form per outfall)

Facility	Ogles Creek		Permit ILR40 -	0190
Sampler's Name (please print)	Chris Volkman		Qualifying Rain Event	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Outfall ID. (refer to site map)		Outfall Description (ex: ditch, grassed swale, concrete pipe)	Riprap channel	
Quarter/ Year	2/17	Date/Time Collected	6/20/17 / 1:30 pm	Date/Time Examined
Est. Time of Rainfall Start		Rainfall Amount	Runoff Source	<input type="checkbox"/> Snowmelt <input type="checkbox"/> Rainfall
Parameter	Parameter Description		Parameter Characteristics	
Color	Does the stormwater appear to have any color? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Clear)		<input type="checkbox"/> Yellow <input type="checkbox"/> Red <input type="checkbox"/> Other	<input type="checkbox"/> Brown <input type="checkbox"/> Gray
Clarity	Is the stormwater clear? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Opaque <input type="checkbox"/> Suspended Solids <input type="checkbox"/> Other	<input type="checkbox"/> Milky/Cloudy
Oil Sheen	Can you see a rainbow effect or sheen on the water surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Floating Oil Globules <input type="checkbox"/> Rainbow Sheen <input type="checkbox"/> Other	
Odor	Does the sample have an odor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Chemical <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Other	<input type="checkbox"/> Musty <input type="checkbox"/> Sewage
Floating Solids	Is there anything on the surface of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Suds <input type="checkbox"/> Sewage <input type="checkbox"/> Other	<input type="checkbox"/> Garbage <input type="checkbox"/> Oily Film
Suspended Solids	Is there anything suspended in the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description:	
Damage to Outfall Structure	Is there any damage to the outfall structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Concrete Cracking <input type="checkbox"/> Corrosion <input type="checkbox"/> Other	<input type="checkbox"/> Peeling Paint
Vegetation Conditions	Describe plant growth around the stormwater discharge location using the check boxes.		<input type="checkbox"/> Inhibited Growth <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Other	<input type="checkbox"/> Excessive
WAIT 30 MINUTES				
Settled Solids	Is there something settled on the bottom of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description (note type, size, & material):	
Foam	Is there foam or material forming on the top of the sample surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description (shake bottle gently, is there foam?)	
Detail any concerns, corrective actions taken, and any other indicators of pollution present in the sample.				
Sampler's Signature and Date	 6/20/17			

Quarterly Visual Monitoring Form

Fill out a separate form for each sample collected (one form per outfall)

Facility	Ogles Creek		Permit ILR40 -	0190	
Sampler's Name (please print)			Qualifying Rain Event	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Outfall ID. (refer to site map)			Outfall Description (ex: ditch, grassed swale, concrete pipe)	Riprap channel	
Quarter/ Year	3/17	Date/Time Collected	9/15/17 9:00am	Date/Time Examined	9/15/17/ 9:00am
Est. Time of Rainfall Start		Rainfall Amount		Runoff Source	<input type="checkbox"/> Snowmelt <input type="checkbox"/> Rainfall
Parameter	Parameter Description		Parameter Characteristics		
Color	Does the stormwater appear to have any color? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Clear)		<input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Red <input type="checkbox"/> Gray <input type="checkbox"/> Other _____		
Clarity	Is the stormwater clear? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Opaque <input type="checkbox"/> Milky/Cloudy <input type="checkbox"/> Suspended Solids <input type="checkbox"/> Other _____		
Oil Sheen	Can you see a rainbow effect or sheen on the water surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Floating Oil Globules <input type="checkbox"/> Rainbow Sheen <input type="checkbox"/> Other _____		
Odor	Does the sample have an odor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Chemical <input type="checkbox"/> Musty <input type="checkbox"/> Rotten Eggs <input type="checkbox"/> Sewage <input type="checkbox"/> Other _____		
Floating Solids	Is there anything on the surface of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Suds <input type="checkbox"/> Garbage <input type="checkbox"/> Sewage <input type="checkbox"/> Oily Film <input type="checkbox"/> Other _____		
Suspended Solids	Is there anything suspended in the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description:		
Damage to Outfall Structure	Is there any damage to the outfall structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Concrete Cracking <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Other _____		
Vegetation Conditions	Describe plant growth around the stormwater discharge location using the check boxes.		<input type="checkbox"/> Inhibited Growth <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Excessive <input type="checkbox"/> Other _____		
WAIT 30 MINUTES					
Settled Solids	Is there something settled on the bottom of the sample? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description (note type, size, & material):		
Foam	Is there foam or material forming on the top of the sample surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Description (shake bottle gently, is there foam?):		
Detail any concerns, corrective actions taken, and any other indicators of pollution present in the sample.					
Sampler's Signature and Date	 9/15/17				

July 21, 2017

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069

WorkOrder: 17070879

Dear Jennifer Gerwitz:

TEKLAB, INC received 2 samples on 7/17/2017 12:18:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17070879

Client Project: NPDES/15-3069

Report Date: 21-Jul-17

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended

Client: RJN Group

Work Order: 17070879

Client Project: NPDES/15-3069

Report Date: 21-Jul-17

Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| E - Value above quantitation range | H - Holding times exceeded |
| I - Associated internal standard was outside method criteria | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit | R - RPD outside accepted recovery limits |
| S - Spike Recovery outside recovery limits | T - TIC(Tentatively identified compound) |
| X - Value exceeds Maximum Contaminant Level | |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17070879

Client Project: NPDES/15-3069

Report Date: 21-Jul-17

Cooler Receipt Temp: 4.22 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email jhriley@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17070879

Client Project: NPDES/15-3069

Report Date: 21-Jul-17

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2018	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2018	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2018	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2018	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2018	Collinsville
Arkansas	ADEQ	88-0966		3/14/2018	Collinsville
Illinois	IDPH	17584		5/31/2017	Collinsville
Indiana	ISDH	C-IL-06		1/31/2018	Collinsville
Kentucky	KDEP	98006		12/31/2017	Collinsville
Kentucky	UST	0073		1/31/2018	Collinsville
Louisiana	LDPH	LA170027		12/31/2017	Collinsville
Missouri	MDNR	930		1/31/2018	Collinsville
Missouri	MDNR	00930		5/31/2017	Collinsville
Oklahoma	ODEQ	9978		8/31/2017	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
 Client Project: NPDES/15-3069
 Lab ID: 17070879-001
 Matrix: AQUEOUS

Work Order: 17070879
 Report Date: 21-Jul-17

Client Sample ID: Upstream
 Collection Date: 07/17/2017 10:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 18TH ED. 9222 D MEMBRANE FILTER								
Fecal Coliform		10		720	CFU/100ml	10	07/17/2017 13:53	R235315
EPA 1664A								
Hexane Extractable Material	NELAP	6		< 6	mg/L	1	07/19/2017 11:40	R235399
EPA 600 351.2 R2.0, 353.2 R2.0								
Nitrogen, Total		0.05		0.80	mg/L	1	07/21/2017 0:00	R235478
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.050		0.105	mg/L	1	07/18/2017 11:31	132257
STANDARD METHODS 2540 D								
Total Suspended Solids	NELAP	6		< 6	mg/L	1	07/18/2017 12:53	R235331
STANDARD METHODS 4500-CL E (TOTAL)								
Chloride	NELAP	25		89	mg/L	5	07/17/2017 17:23	R235314



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
 Client Project: NPDES/15-3069
 Lab ID: 17070879-002
 Matrix: AQUEOUS

Work Order: 17070879
 Report Date: 21-Jul-17

Client Sample ID: Downstream
 Collection Date: 07/17/2017 11:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 18TH ED. 9222 D MEMBRANE FILTER								
Fecal Coliform		100		9700	CFU/100ml	100	07/17/2017 13:56	R235315
EPA 1664A								
Hexane Extractable Material	NELAP	6		< 6	mg/L	1	07/19/2017 11:40	R235399
EPA 600 351.2 R2.0, 353.2 R2.0								
Nitrogen, Total		0.05		2.10	mg/L	1	07/21/2017 0:00	R235478
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.500		0.630	mg/L	1	07/19/2017 9:43	132296
STANDARD METHODS 2540 D								
Total Suspended Solids	NELAP	6		83	mg/L	1	07/18/2017 12:53	R235331
STANDARD METHODS 4500-CL E (TOTAL)								
Chloride	NELAP	10		19	mg/L	2	07/17/2017 17:26	R235314



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17070879

Client Project: NPDES/15-3069

Report Date: 21-Jul-17

Carrier: Employee

Received By: AMD

Completed by:

On:
17-Jul-17

Kalyn Foecke
Kalyn Foecke

Reviewed by:

On:
17-Jul-17

Elizabeth A. Hurley
Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 4.22
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
<div style="border: 1px solid black; padding: 2px; font-size: small;">When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.</div>				
Water – at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>	
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	

Any No responses must be detailed below or on the COC.

The sample containers were labeled with varying collection times (within minutes of one another). Jennifer Gerwitz was notified of this error via work order summary. AMD/KF 7/17/17

CHAIN OF CUSTODY

pg. 1 of 17070879 Work order # 17070879

Client: RJN Group
Address: 2000 South 8th St.
 St. Louis, MO 63104
City / State / Zip: St. Louis, MO 63104
Contact: Jennifer Gerwitz
 jgerwitz@rjnmail.com
E-Mail: jgerwitz@rjnmail.com
Phone: (314) 588-9764
Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply Yes No
 Are these samples known to be hazardous? Yes No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. Yes No

Samples on: ICE BLUE ICE NO ICE 4.22 °C
Preserved in: LAB FIELD
Lab Notes: All samples have different times. same 7/17/17
Client Comments: Rainfall 0.25 in 7/16/17

FOR LAB USE ONLY

Project Name/Number	Sample Collector's Name	Billing Instructions	Date/Time Sampled	# and Type of Containers		INDICATE ANALYSIS REQUESTED
				H2SO4	UNP	
NPDES / 15-3069						
Results Requested <input type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)						
Lab Use Only						
17070879-002			7/17/17 10:53 AM	2	2	Chloride X Fecal Coliform X Oil and Grease X Phosphorus X Total Nitrogen X TSS X
			7/17/17 11:29 AM	2	2	Chloride X Fecal Coliform X Oil and Grease X Phosphorus X Total Nitrogen X TSS X

Relinquished By	Date/Time	Received By	Date/Time
Kevin Madden	7/17/17 12:18		
Sajid Vajjala	7/17/17 12:18	Omari Williams	7/17/17 12:18

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.



Bottle Order: 38219

Lil' Lab
CUBA

October 17, 2017

Jennifer Gerwitz
RJN Group
2000 South 8th St.
St. Louis, MO 63104
TEL: (314) 588-9764
FAX:



RE: NPDES/15-3069 SCC

WorkOrder: 17100645

Dear Jennifer Gerwitz:

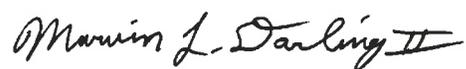
TEKLAB, INC received 2 samples on 10/11/2017 10:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Marvin L. Darling
Project Manager
(618)344-1004 ex 41
mdarling@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17100645

Client Project: NPDES/15-3069 SCC

Report Date: 17-Oct-17

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Accreditations	5
Laboratory Results	6
Receiving Check List	8
Chain of Custody	Appended



Definitions

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17100645

Client Project: NPDES/15-3069 SCC

Report Date: 17-Oct-17

Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| E - Value above quantitation range | H - Holding times exceeded |
| I - Associated internal standard was outside method criteria | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit | R - RPD outside accepted recovery limits |
| S - Spike Recovery outside recovery limits | T - TIC(Tentatively identified compound) |
| X - Value exceeds Maximum Contaminant Level | |



Case Narrative

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17100645

Client Project: NPDES/15-3069 SCC

Report Date: 17-Oct-17

Cooler Receipt Temp: 13.62 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415

Phone (217) 698-1004

Fax (217) 698-1005

Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515

Phone (630) 324-6855

Fax

Email jhriley@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214

Phone (913) 541-1998

Fax (913) 541-1998

Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: RJN Group

Work Order: 17100645

Client Project: NPDES/15-3069 SCC

Report Date: 17-Oct-17

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2018	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2018	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2018	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2018	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2018	Collinsville
Arkansas	ADEQ	88-0966		3/14/2018	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2018	Collinsville
Kentucky	KDEP	98006		12/31/2017	Collinsville
Kentucky	UST	0073		1/31/2018	Collinsville
Louisiana	LDPH	LA170027		12/31/2017	Collinsville
Missouri	MDNR	930		1/31/2018	Collinsville
Missouri	MDNR	00930		5/31/2017	Collinsville
Oklahoma	ODEQ	9978		8/31/2018	Collinsville
Tennessee	TDEC	04905		1/31/2018	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
 Client Project: NPDES/15-3069 SCC
 Lab ID: 17100645-001
 Matrix: AQUEOUS

Work Order: 17100645
 Report Date: 17-Oct-17

Client Sample ID: Upstream
 Collection Date: 10/11/2017 9:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 18TH ED. 9222 D MEMBRANE FILTER								
Fecal Coliform		10		270	CFU/100ml	10	10/11/2017 11:02	R238770
EPA 1664A								
Hexane Extractable Material	NELAP	5		8	mg/L	1	10/12/2017 16:34	R238831
EPA 600 351.2 R2.0, 353.2 R2.0								
Nitrogen, Total		0.05		1.10	mg/L	1	10/12/2017 0:00	R238780
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.050		0.119	mg/L	1	10/12/2017 12:00	135074
STANDARD METHODS 2540 D								
Total Suspended Solids	NELAP	6		< 6	mg/L	1	10/12/2017 18:11	R238782
STANDARD METHODS 4500-CL E (TOTAL)								
Chloride	NELAP	10		56	mg/L	2	10/11/2017 17:03	R238757



Laboratory Results

<http://www.teklabinc.com/>

Client: RJN Group
 Client Project: NPDES/15-3069 SCC
 Lab ID: 17100645-002
 Matrix: AQUEOUS

Work Order: 17100645
 Report Date: 17-Oct-17

Client Sample ID: Downstream
 Collection Date: 10/11/2017 9:32

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 18TH ED. 9222 D MEMBRANE FILTER								
Fecal Coliform		100		7800	CFU/100ml	100	10/11/2017 11:03	R238770
EPA 1664A								
Hexane Extractable Material	NELAP	6		< 6	mg/L	1	10/12/2017 16:34	R238831
EPA 600 351.2 R2.0, 353.2 R2.0								
Nitrogen, Total		0.05		3.24	mg/L	1	10/12/2017 0:00	R238780
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.250		0.925	mg/L	1	10/12/2017 12:10	135074
STANDARD METHODS 2540 D								
Total Suspended Solids	NELAP	60		100	mg/L	10	10/13/2017 11:07	R238868
STANDARD METHODS 4500-CL E (TOTAL)								
Chloride	NELAP	5		22	mg/L	1	10/11/2017 17:11	R238757



Receiving Check List

<http://www.teklabinc.com/>

Client: RJN Group
Client Project: NPDES/15-3069 SCC

Work Order: 17100645
Report Date: 17-Oct-17

Carrier: Employee

Received By: KF

Completed by: *Kalyn Foecke*
On: 11-Oct-17
 Kalyn Foecke

Reviewed by: *Elizabeth A. Hurley*
On: 11-Oct-17
 Elizabeth A. Hurley

Pages to follow: Chain of custody Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 13.62
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
<i>When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.</i>				
Water – at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>	
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY

pg. 1 of 11000045 Work order # 17100045

Client: RUN Group
Address: 2000 South 8th St.
City / State / Zip: St. Louis, MO 63104
Contact: Jennifer Gerwitz
E-Mail: jgerwitz@rjnmail.com
Phone: (314) 588-9764
Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply Yes No
 Are these samples known to be hazardous? Yes No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. Yes No

Project Name/Number: NPDES/15-3069 SCC
Sample Collector's Name:

Client Comments: rainfall 0.87 in

Lab Use Only	Sample Identification	Date/Time Sampled	Billing Instructions	# and Type of Containers	INDICATE ANALYSIS REQUESTED																
					Aqueous	Chloride	Fecal Collform	Oil and Grease	Phosphorus	Total Nitrogen	TSS										
17100045-001	Upstream	10/11/17 9:05 AM	UNP	2	X	X	X	X	X	X	X										
002	Downstream	10/11/17 9:32 AM	UNP	2	X	X	X	X	X	X	X										

Relinquished By: SANJIV VAJRALA
Date/Time: 10/11/17 10:10 AM
Received By: P. K. F.
Date/Time: 10/11/17 10:00

KF 10/11/17