Records

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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BRUCE RAUNER, GOVERNOR ALEC MESSINA, DIRECTOR
217/782-0610

December 14, 2018

Brendan McLaughlin
President
Cress Creek Homeowners Association
1425 Calcutta Lane
Naperville, IL 60563

Re: Naperville – Springbrook Water Reclamation Center Response to Comments
NPDES Permit No. IL0034061

The Agency appreciates the comments from the Cress Creek Homeowners Association (CCHOA) dated November 19, 2016 in regards to the referenced draft NPDES permit.

The CCHOA expressed their concerns with the proposed NPDES and grouped those concerns in three major categories as follows: major capacity constraints in the system, serious infiltration and inflow (I/I) problems in the sewerage system, and the repeated discharge of millions of gallons of untreated sewage to the DuPage River. In addition CCHOA suggested edits to the NPDES Permit. Responses to the proposed edits are provided in Attachment A.

The Agency consulted with the City of Naperville and USEPA in order to address the additional CCHOA concerns. In addition, USEPA performed a system wide program inspection in 2015. To address current and future capacity constraints and I/I management within the collection system, the Agency revised the Capacity, Management, Operations, and Maintenance Plan (CMOM) requirements (Special Condition 18) in the final NPDES Permit. Furthermore, the Agency included additional I/I reporting and implementation schedule reporting requirements to the permit. Those revisions are identified in the final permit and Attachment A.

The City of Naperville provided the following response on January 17, 2017 to the major sewer capacity constraints and I/I issues.

"The City of Naperville evaluates system capacity using the capacity design criteria as outlined by the USEPA and Illinois EPA. Under dry and most wet weather conditions, we see no evidence of capacity issues.

The City of Naperville's sanitary sewer collection system has sufficient capacity to convey reasonably anticipated (wet and dry weather) flows to the treatment works.

Flow data supports the City of Naperville's position that there exists sufficient major sewer capacity in the conveyance system and treatment works. The below table shows population and recorded average daily flow. Recent flows are approximately the same as they were over 23 years ago, despite the growth of the community, adding over 62,000 people and associated commercial development that supports the community.

Table 1.

Year	Population Served Per Census Data (includes City of Warrenville)	Average Daily Flow (in million gallons per day)
1990	85,351	16.47
1991		16.51
1992**	92,885	15.99
1993		20.10
1994	100,442	18.27
1995		18.97
1996**	109,100	20.61
1997		21.92
1998		24.99
1999		23.40
2000	128,358	22.05
2001		21.76
2002**		22.92
2003		21.57
2004		22.45
2005	140,000	20.96
2006		22.34
2007		22.20
2008		23.34
2009	157,494	23.60
2010	157,651	21.36
2011		21.59
2012	159,711	18.31
2013		19.68
2014		19.40
2015	162,610	18.17
2016		19.42
**Denotes Plant Expansion		

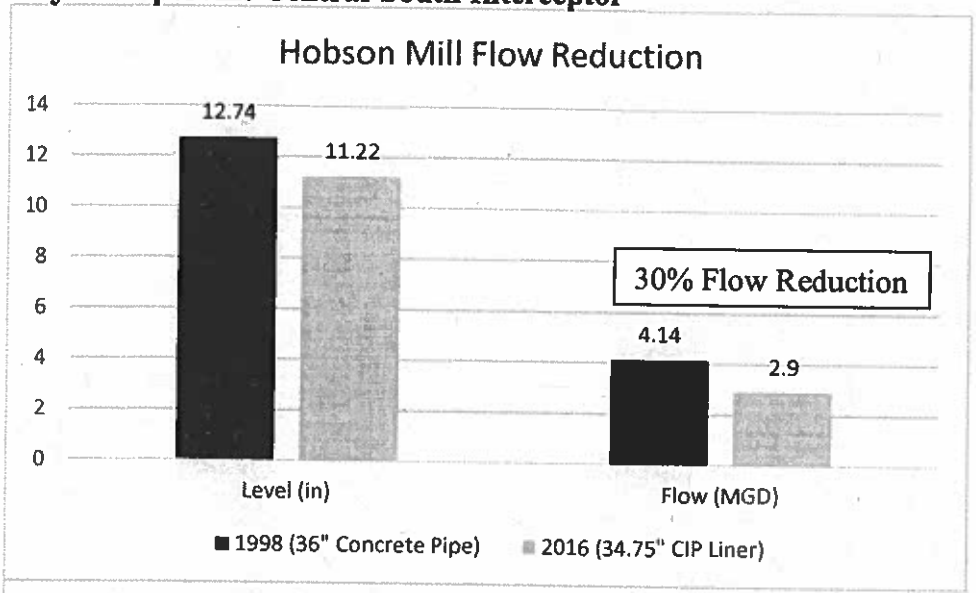
The City of Naperville has been able to grow and maintain capacity using sound engineering and planning as well as proactive maintenance and asset replacement.

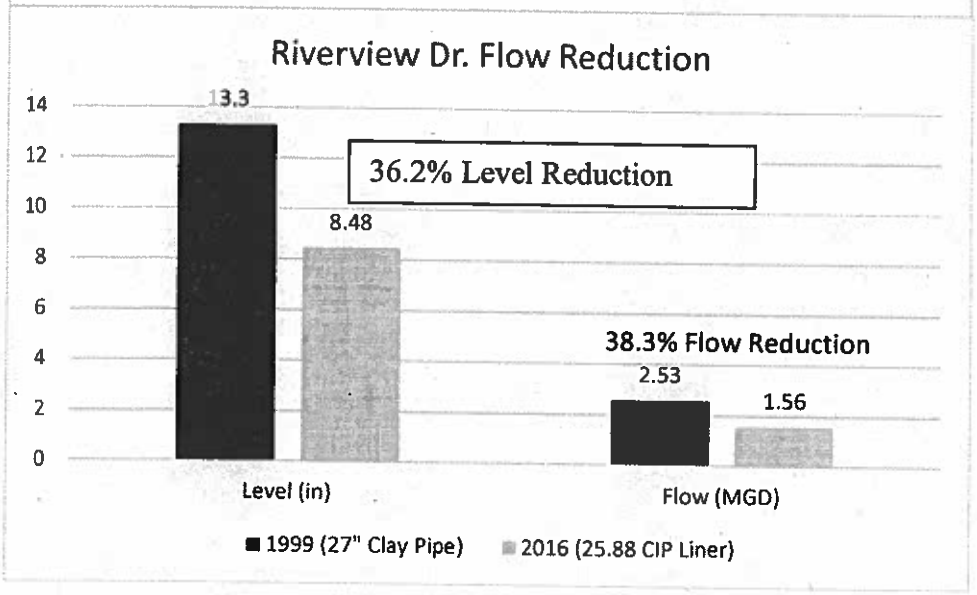
New development and the associated connected load is evaluated against system (conveyance and treatment) capacity and permitted through the Illinois EPA. Sometimes, as in the case of the noted Atwater Subdivision, the development configuration requires the relocation of existing facilities.

This was indeed the situation with the Atwater Development which relocated a reach of trunk sewer out of a floodplain. The relocation of the sewer upgraded the pipe materials and improved the system integrity, reducing wet weather I and I. Four months of flow and precipitation records from the sewer basin that includes the Atwater Subdivision (59 days prior to the development and 59 days post development) show a decrease in flow of over 10%. This is significant when factoring in precipitation during the same time periods. Pre development precipitation was 3.68 inches and post was 7.09 inches. The data suggests the improvements made as part of the Atwater Development and the added connected flow have not been detrimental to system capacity as cited by the CCHOA. Furthermore, the flow data show an improved condition of decreased daily flow, despite the additional connections and approximately twice the precipitation.

The CCHOA also notes capacity issues with the Central South Interceptor Sewer. Recent flow information from the Central South Interceptor Sewer shows a much different picture than what the CCHOA has claimed.

City of Naperville Central-South Interceptor





The Hobson Mill and Riverview Drive flow measurements of the Central South Interceptor Sewer between 1998 and 2016 show a decrease in flow of almost 40%. This data does not indicate that capacity problems are present in this interceptor sewer.

The foundation of the issues raised by the CCHOA is the information contained in old Sanitary Sewer Evaluation Survey (SSES) studies. As noted, the information from these reports is almost 30 years old making the information obsolete. Furthermore, citing flow data from these outdated reports without accounting for the rehabilitation efforts over the past 28 years makes their assertions inaccurate as the improvements have shown to be effective in reducing I and I and SSO's. For example, 97% of the Central South Interceptor Sewer and structures have been rehabilitated. Additionally most of the collection system connected to the Central South Sewer has also been rehabilitated. The I and I reduction work completed over the years has improved capacity during wet weather events.

The City commissioned the SSES studies and analysis early on to develop the rehabilitation plans implemented and in place for over 30 years. The Utility uses SSES reports in conjunction with recent flow monitoring data,

capacity analysis, inspection reports and maintenance activities to develop and maintain a rehabilitation plan for most utility assets, including system piping and pump stations. The rehabilitation plan is updated and re-prioritized annually and presented to the City Council and community through the City's budget approval process. The budget process is open to the public with multiple public meetings and public hearing opportunities for the public to provide input, as well as opportunities for the public to email or call staff and elected officials. This year's Utility budget (2016-2017) was recently approved with no comments being received from the public.

Currently, the City of Naperville invests over $3 million annually to rehabilitate small diameter and large diameter sewers, pump stations, manholes and service lines, with additional money to replace and upgrade treatment facilities. In addition to the rehabilitation efforts, the City has ongoing and proactive maintenance programs to ensure the systems operate efficiently and effectively. Our maintenance programs and rehabilitation efforts are documented in our Capacity, Operations, Management and Maintenance Program (CMOM).

Since 2011, utility rates have funded 100% of the rehabilitation program. Coincidently, since 2011 flows to the treatment works have also reduced dramatically.

To date, over 101 miles of the approximate 240 miles (42%) of clay sewer in Naperville's sanitary collection system have been rehabilitated, with most of the rehabilitation occurring since 2001. The remaining 300 miles of sewer in the system represent sewer that is in good condition or is constructed of superior materials when compared to clay tile, such as iron or PVC. Through inspection, the iron and PVC piping systems will not need rehabilitation in the immediate future.

Continued rehabilitation work should also produce similar results of declining flows, improved wet weather resiliency and reduced frequency of SSOs and basement backups.

The Cress Creek Home Owners Association (CCHOA) cites several rain events as indication of I and I issues which contributed to sanitary sewer overflows and evidence of capacity issues. The rain events noted by the CCHOA included only the precipitation on the day of the SSO. However, all of the weather events leading to the SSO were severe and should not be considered typical or common rainfall events in capacity discussions. The precipitation data shown below denotes the duration and total precipitation of the rain events.

Dates	Rainfall (inches)*	SSO's	Comments
7/17 -18/1996	9.25	264	100+ year storm recurrence interval
2/26-27/1997	1.1	142	Significant rainfall on frozen ground and melting snowpack
8/4-7/1998	5.61	62	
10/10-16/2001	5.37	195	5.32 inches of precipitation between 10/11-14
9/3-16/2008	10.89	21	7.29 inches of precipitation between 9/13-15
12-2008	7.76	2	Precipitation recorded 22 of 31 days. 3.41 inches of precipitation between 12/24-28
4/15-19/2013	7.63	147	7.18 inches of precipitation between 4/18-19

*precipitation recorded by NOAA over 24 hour periods

As shown, the storm events leading to SSO's were significant. Many of the storms noted occurred over several days. Also, all of the storm events noted by the CCHOA created regional flooding and in some instances flooding was so severe and widespread that the Governor of the State of Illinois moved to declare the

affected counties disaster areas. In April of 2013, 11 northeast Illinois counties were declared Federal disaster areas. Naperville was included in the disaster area.

Brown and Caldwell's Technical Memorandum of the North Pump Station Collection Basin Evaluation (Section: Conclusions and Recommendations, pgs. 23 and 24 of 44; and also referenced by the CCHOA) correctly states:

> *"When significant weather events cause sanitary sewer overflows and basement backups, it is typical to ask what could be done to prevent these outcomes in the future. This report evaluates the underlying causes for the sewer backups and overflows and concludes that the sewers tributary to the North Pump Station and the station itself appear to have been designed and constructed, in accordance with IEPA standards, with adequate capacity for peak flow conditions under most circumstances. The flows experienced in April 2013 were certainly in excess of the system capacity in this area, but it appears that the system functioned as designed. This report further concludes that the "hydrologic conditions" experienced at the peak of the 2013 storm events were extreme, as a result of significant rainfall on ground that was saturated by prior snowmelt and lesser rain events. Nearby stream flow monitoring records can be used to gauge the severity of this event and indicate that this was the second worst event in nearly 30 years.*
>
> *When imposed on a susceptible sewer system, events of this magnitude are rarely contained without sewer overflow or basement backups. It is rare for a sewer system owner to attempt to construct sewer capacity to prevent an overflow in an event of this magnitude as there are several challenges for doing so. First, it may be difficult to exactly determine what the peak flows were in such an event, and without a reasonable estimate of peak flow, sewer capacity improvements cannot be designed and constructed. Second, the points of entry for the extraneous flow are likely very difficult to correct because of the widespread "footprint" for an event such as April 2013. Studies have shown that sewer infiltration is migratory, such that closing off one entry point may likely move the same flow to another entry point. Short of completely rebuilding the sewer system, significant wet weather flow reduction in such an event is very difficult and extremely expensive."*

The Brown and Caldwell report also notes the importance and need to consider antecedent ground moisture conditions and groundwater elevations when determining the severity of a storm event. These parameters should also be considered in determining what is reasonable and expected of a sanitary sewer system's ability to withstand the building hydrostatic forces of those events. As all systems leak to some degree, the larger storm events create hydrostatic forces that cause small leaks to leak more. It should be expected that severe weather events that cause regional flooding, increase the likelihood of SSO's and basement backups.

The CCHOA has provided information to the IEPA highlighting the City of Naperville efforts over many years to investigate and reduce I and I. The information depicts the evolution of the various programs and efforts to seek out and eliminate I and I and SSO's. The information also shows the City of Naperville's work to create programs and fund efforts to replace and/or rehabilitate aging assets to improve reliability. As part of our efforts to investigate sources of I and I, after all notable rainfall events, staff conducts damage assessments and investigates customer claims of sanitary sewer backups.

After the April 2013 storm, staff found a number of system facilities damaged by the storm. All of the facilities damaged were promptly repaired and placed back in service, operating procedures were reviewed and amended accordingly, additional facilities were added to monitor system flows and enhance wet weather performance.

The after action and damage assessments, repairs, modifications and changes to operating procedures should have been viewed by the CCHOA (and conveyed to the IEPA) as a best management practice, and not an

assessment of existing system conditions, poor operational procedures or oversight.

In the months immediately following the April 2013 event the following activities were completed:

- Inspected over 800 sanitary sewer manholes along the river, streams and low lying areas of the system.
- Repaired 77 manhole upper structures and replaced frames and lids
- Installed 422 manhole inserts to reduce leaks through the frame and lids
- Televised 56,176 lineal feet of sanitary sewer in the Cress Creek Subdivision.
- Televised 9,434 lineal feet in the Brush Hill Subdivision (tributary to the North Sanitary Pump Station)
- Installed 5 temporary flow monitoring/measuring devices in the Cress Creek Subdivision as a pre-lining metric.
- Offered the 75% Sanitary Sewer Backflow Prevention Program to 338 customers, making 13 reimbursement payments to individuals installing devices.
- Advanced the lining of the sanitary sewer system and manholes in the Cress Creek Subdivision (this did not affect the lining program planned for 2013).

Since 2013, the following work was completed in the Cress Creek subdivision

	Total	Total Rehabilitated	Remaining
Sanitary sewer main	75,499	69,790	5,709*
Sanitary manholes	375	366	9
Sanitary service laterals (grouted).	1,223	144	1,109

*Remaining footage is either ductile iron pipe or PVC pipe and in good condition.

Recent flow meter data from Cress Creek shows an improving condition from 2013 to 2015. For example, the June 2015 wastewater flow from the Cress Creek Subdivision was 0.32 MGD lower than the June 2013 flows, despite an additional 2.2 inches of precipitation and a 4.3 foot rise in the groundwater elevation to approximately 5.8' over the crown of the sanitary sewer. During this time period, there were no known SSO's or sanitary sewer related basement backups.

The Utility plans to continue to improve and rehabilitate the sanitary sewer system. All future work will be prioritized and programmed factoring asset criticality, condition assessments and maintenance history.

The CCHOA is understandably concerned about basement flooding. Cress Creek is located in a low lying area adjacent to the West Branch of the DuPage River and at the bottom of a large watershed. Complicating matters, the Cress Creek area has high ground water and very porous soils. Due to the factors noted, basements in the Cress Creek area have an elevated risk of sustaining water related damage.

All basements, not just basements in the Cress Creek development, have an inherent risk of sustaining water damage. Water related basement damage can be caused by sump pump failures (including mechanical failures and power outages), overland flooding though window wells, and intrusion through foundation cracks and/or sanitary sewer backups.

It is important for homeowners to recognize the potential risks associated with basement flooding and take the necessary actions to mitigate the risks to match their risk tolerance. There are a number of commercially available pumps and generators homeowners can purchase to help them dewater their basements and provide emergency power during an outage.

There are also a number of plumbing devices and/or plumbing modifications a homeowner can undertake to minimize future risk of a sanitary sewer backup.

To help homeowners protect their property from a sanitary sewer backup, in 1981 the Utility initiated the backflow prevention device reimbursement program. Since 1981, 343 residents have participated in the program citywide, with 64 of the residents located in Cress Creek. Since 2013, the City has offered the program to 426 customers with 95 devices installed. Thirty-eight (38) devices installed after April 2013 were put in the homes of residents in the Cress Creek Subdivision.

The program is active today, reimbursing homeowners 75% of the cost for installing a sanitary sewer backflow prevention device or modifications to the home's plumbing to prevent a sanitary sewer backup. This program was advertised extensively in 2013 and is still being promoted.

In 2013, staff interviewed over 300 customers and conducted on-site inspections of those who had called the City citing a basement flooding/basement backup complaint. Through the interviews and inspections, staff was able to confirm 147 homes citywide having a loss stemming from a sanitary sewer basement backup. Of the 147 affected homes, 36 homes were located in the Cress Creek Subdivision. Many other homes sustained water damage as a result of sump pump failures or other causes."

The CMOM condition has been revised to ensure the City of Naperville continues its efforts to address potential flow constraints and diminish I/I flows into the system.

We hope this will address your comments. Thank you for participating in the NPDES permitting process. Enclosed for your information is a copy of the Final NPDES Permit.

Should you have questions or comments regarding the above, please contact Jaime Rabins at 217/782-0610.

Sincerely,

Amy L. Dragovich

Amy L. Dragovich, P.E.
Manager, Permit Section
Division of Water Pollution Control

ALD:JAR:16060601

Attachments: Final Permit
Attachment A
Fats, Oil and Grease Inspection Results

cc: Records Unit
Des Plaines Region
USEPA (via e-mail)

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

In response to your recommended changes to selected Special Conditions of the Naperville Permit the Agency offers the following responses.

Note: 1. Existing language in the permit is in regular Times New Roman in italics.
2. Language recommended by CCHOA to be removed is shown by a strikethrough (~~example~~).
3. Recommended new language by CCHOA for the permit is shown in **bold black.**
4. Only Special Conditions with recommended modifications are shown below.

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 and 303. **See Special Condition 12 below. In the event there are any discharges from Outfalls 002 and 003, the Permittee shall monitor and assess whether water quality standards are being violated. A report shall be submitted to IEPA with that assessment after each discharge.**

Response from IEPA: The City of Naperville is required to monitor the flow from Outfall 002 and 003 if a prohibited discharge occurs. The prohibited discharge(s) is subject to reporting requirements in Attachment H Standards Conditions Section 12. Any discharge(s) that occur is considered a violation of the permit. Special Condition 5 has not been modified; however, Special Condition 12 has been revised to reference reporting requirements in the Standard Conditions of Attachment H.

SPECIAL CONDITION 7. Consistent with permit modification procedures in 40 CFR 122.62 and 63, 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.*~~ **to meet applicable Illinois Part 370 Recommended Standards for Sewage Works. The schedule for developing an Infiltration and Inflow Control Program to achieve Illinois I&I Standards is as follows:**

ITEM	COMPLETION DATE
A. Develop a complete inventory of the sewer system identifying all areas that have excessive infiltration and inflow that are above Illinois standards.	**12 months from the effective date of this permit.**
B. Develop and submit to IEPA an Infiltration and Inflow Control Program to achieve Illinois standards by a date certain. The Program should be made available for the general public for review.	**18 months from the effective date of this permit.**
C. The Permittee shall respond to any IEPA review letters within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.	
D. The Permittee shall modify the Infiltration and Inflow Control Program to incorporate any comments that it receives from IEPA and shall implement the modified	

Program within 3 months of approval.

E. The Infiltration and Inflow Control Program shall be fully implemented.	**6 months of the date of approval**
F. Submit annual reports assessing progress in implementing the Infiltration and Inflow Control program.	**March 1st of each year.**

Response from IEPA: The System Evaluation Plan required in Special Condition 18 as part of the Capacity, Management, Operations, and Maintenance (CMOM) plan duplicates the suggested edits of Special Condition 7. In addition to what is outlined in Special Condition 18, the USEPA guidance for CMOM and Asset Management specifies the procedures to develop an I/I sewer system assessment. The Agency agrees that once I/I projects are identified in the CMOM, the City of Naperville must provide a timeframe and expected benefits of plan projects in annual progress reports. The following language has been added to the permit:

The permittee shall implement the I/I evaluation reduction projects identified in the final Capacity, Management, Operations, and Maintenance (CMOM) plan. An implementation schedule that details the projects, projected completion dates and expected results of project completion shall be submitted to the Agency within eighteen (18) months of the effective date of this permit.

Annual progress reports shall be submitted to the IEPA beginning twenty-four (24) months from the effective date of this permit until implementation projects are complete. Any additions, modification of projects, or projected completion dates may be submitted in annual reports. Implementation schedule, progress reports, and all pertinent information to Inflow and Infiltration reduction efforts shall be submitted to the following address. Modification to projected completion dates may be submitted in annual reports.

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

SPECIAL CONDITION 9. The Pretreatment Compliance Schedule listed in Special Condition 9 should be removed and a new Special Condition titled "Pretreatment Compliance Schedule" should be added. The language below in bold should be in that new Special Condition.

Pretreatment Compliance Schedule

Schedule for Implementing the POTW Pretreatment Program

Under the authority of Sections 307(b) and 402(b)(8) of the Clean Water Act, and implementing regulations 40 CFR 403, the Permittee may be required to develop a Pretreatment Program. This program shall enable the Permittee to detect and enforce against violations of Pretreatment Standards promulgated under Sections 307(b) and 307(c) of the Clean Water Act, prohibitive discharge standards as set forth in 40 CFR § 403.5, and state and local limits.

Pursuant to 40 CFR 403.3(c) the U.S. EPA, Region 5 is the Approval Authority in Illinois. The Permittee shall submit a copy of each activity below to the USEPA, Region 5 with a copy to IEPA.

The schedule for the development of this Pretreatment Program is as follows:

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

ITEM	*COMPLETION DATE*
A. *Develop an industrial user inventory pursuant to 40 CFR § 403.8(f)(2)(i-iii), including identification of industrial users and the character and volume of pollutants contributed to the publicly owned treatment works (POTW) by the industrial users. The inventory shall include a list of all industrial users (IUs) discharging to the Permittee that are subject to categorical pretreatment standards under 40 CFR § 403.6 and 40 CFR Chapter I, Subchapter N, or would otherwise be considered significant under 40 CFR § 403.3(t).*	*12 months from the effective date of this Permit*
B. *Submit a proposed Pretreatment Program consistent with 40 CFR §§ 403.8 and 403.9(f). The proposed Pretreatment Program shall contain the following elements:*	*12 months from the date of notification by the Approval Authority that development of a Pretreatment Program is necessary*

1. *A statement from an official representative of the Permittee or their legal counsel regarding the adequacy of the Permittee's legal authority to carry out the pretreatment program;*
2. *A sewer use ordinance or other authorities to be relied upon by the POTW for administration of the Pretreatment Program;*
3. *An Enforcement Response Plan (with monitoring and inspection program procedures);*
4. *Local limitations developed pursuant to 40 CFR 403.5(c) and USEPA guidance* **with special emphasis on control of fats, oils and grease**;
5. *A description of the Permittee's organization (including organization charts) which will administer the Pretreatment Program; and*
6. *A description of funding levels and manpower resources available to implement the Pretreatment Program.*

C. The proposed Pretreatment Program shall be made available for review by the general public.

D. The Permittee shall respond to any USEPA or IEPA review letters within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.

E. The Permittee shall modify the Pretreatment Program to incorporate any comments that it receives from USEPA and/or IEPA and shall implement the modified plan within 3 months of approval.

F. The Pretreatment Program shall be fully implemented within six (6) months of the date of approval.

Upon approval by the Regional Administrator of the Pretreatment Program, this Permit will be modified or, alternatively, upon request, revoked and reissued to incorporate the conditions of that Pretreatment Program.

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

a. *Upon approval by the Regional Administrator, this Permit may be modified to eliminate the requirement to develop a Pretreatment Program should further developments during the preparation of the program warrant its discontinuance.* ***Notwithstanding the elimination of the requirement to develop a full Pretreatment Program the Permittee shall be required to develop and implement a program, including an Enforcement Response Plan, to control the discharge of fats, oils and grease to its collection system within 6 months from the notification by the Regional Administrator of the Pretreatment Program of the discontinuance of the need to develop a full Pretreatment Program.***

All items in the schedule shall be sent to USEPA (electronically if possible to r5npdes@epa.gov) and IEPA. All mailed items shall be sent to the following addresses:

United States Environmental Protection Agency
Region 5
NPDES Programs Branch
77 West Jackson Boulevard
Chicago, Illinois 60604-3950
Attention: NPDES Programs Branch WN-16J

Response from IEPA: USEPA is the designated permitting authority for the Pretreatment Program. Special Condition 9 is language approved by the USEPA. The pretreatment program regulations have a public notification/participation requisite when a pretreatment program is required. The Agency has consulted with the City of Naperville in regards to its management practices to control the discharge of fats, oils and grease (FOG) to its collection system. On January 18th, 2017 the City of Naperville performed FOG samples throughout the collection system in areas known for facilities that produce FOG. The results showed levels below the Water Environment Federation published Manual of Practice (MOP) recommended 100 mg/L maximum limit for oil and grease. A copy of the inspection results is attached. The City also offered the following response.

Response from Naperville: "The City has an ordinance addressing fats, oils and grease, as well as ordinances relating to high strength and other waste. Additionally, the Utility's CMOM program includes maintenance activities which have been developed to maintain capacity and reduce the likelihood of a sewer blockage and sanitary sewer overflows due to FOG. All sewers in the collection system are scheduled to be cleaned at least once every five years. There are a number of locations where preventive maintenance (PM) activities are needed more frequently to maintain sewer performance. The PMs are broken out into activities (i.e. flushing/cleaning and root sawing), and frequency (i.e. monthly, every other month, quarterly and annually). In a sanitary collection system of over 540 miles of pipe there are only 48 PMs. Of the noted 48 PMs, 23 are for the removal of accumulated grease, 18 are for low flow or slope conditions where solids accumulate and 8 are for both the removal of accumulated grease and solids due to low flow or slope conditions."

SPECIAL CONDITION 12. Discharges from Outfall 002 (South Operations Center @ 1800 S. Washington Street), and Outfall 003 (Water Service Center 1200 W. Ogden Avenue) are emergency high level bypasses from the wet weather flow storage lagoons to the West Branch of DuPage River. Discharges from these outfalls are prohibited. The permittee shall keep valves discharging to the lagoons closed unless the lagoons are needed for wet weather relief for the sewer system, or if needed for temporary storage in order to perform maintenance and repairs or for an emergency situation. If valves are opened for any reason, the Permittee shall maintain continuous electronic monitors capable of detecting all discharges from each prohibited discharge outfall or implement an approved monitoring plan, and report any such discharges covered by this prohibition under the related reporting and notification provisions of this permit. **In the event there are any discharges from Outfalls 002 and 003, the Permittee shall monitor and assess whether water quality standards are being violated. Within 45 days of any discharge a report shall be submitted to IEPA and be presented to the**

general public with that assessment. The Permittee shall respond to any IEPA review letter within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.

If there is a discharge from Outfall 002 or Outfall 003 for any reason the Permittee shall prepare and implement a plan to identify, evaluate, and select feasible alternatives to prevent and eliminate discharges from the wet weather flow facilities or provide an analysis demonstrating that no feasible alternative exists which is consistent with 40 CFR. § 122.41 (m)(4). The plan shall consider all feasible alternatives to prevent and eliminate such discharges including, individually and in combination, the elimination of excessive infiltration and/or inflow into the upstream collection systems, improved operational measures, and/or increasing the capacity and effectiveness of the wastewater treatment plant and sewer system. Evaluation of the financial feasibility of each alternative evaluated shall be completed consistent with the EPA Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development (832-B-97 -004). A Final Analysis Report identifying any feasible alternatives for reducing and eliminating such discharges shall be submitted within two (2) years from the effective date of this permit to the Illinois EPA to the below address for approval with a copy provided to EPA, at the address below. The Final Analysis Report must also include an alternative(s) selection and a project implementation schedule with project completion dates that are as expeditious as possible, and provide an estimate of the expected results of project completion.

The Permittee shall submit the analysis described above in accordance with the following schedule:

Progress Report-	**6 months from the first unauthorized discharge**
Interim Report on System Characterization and Financial Capability Analysis FCA.)-	**12 months from the first unauthorized discharge**
Interim Report of Evaluation of Alternatives and Potential Measures to Reduce and Eliminate Discharges; and updated FCA-	**18 months from the first unauthorized discharge**
Final Analysis Report-	**24 months from the first unauthorized discharge**

The No Feasible Alternatives Final Analysis Report shall be made available for public review and comment.

The Permittee shall submit the No Feasible Alternatives Final Analysis Report, including a summary and response to all public comments received, to IEPA for review and approval within six (6) months of the date of the first unauthorized discharge.

The Permittee shall respond to any IEPA review letter within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.

The No Feasible Alternatives Analysis plan of action shall be implemented within six (6) months of the date of IEPA approval.

All reports shall be submitted to Illinois EPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

A copy of the Final Report shall be provided to EPA at the following address:
US Environmental Protection Agency
Region 5, Water Division
77 West Jackson Blvd
Chicago, Illinois 60604-3590
Attention: NPDES Programs Branch (WN-16J)"

Response from IEPA: Any discharge(s) that occur is considered a violation of the permit because it is prohibited. The IEPA and USEPA agreed to strictly prohibit the discharge because the discharge does not receive secondary treatment.

Special Condition 12 has been revised to reference the reporting requirements in the Standard Conditions of Attachment H.

City of Naperville Response: As indicated by the CCHOA and the NDPES permit, the City of Naperville maintains and operates two (2) wet weather storage facilities (lagoons). These facilities are remnants of old treatment works that were operated prior to the commissioning of the Springbrook Water Reclamation Center. These facilities are typically dry and put into use only during extreme weather events. The lagoons are used to offload excess wastewater from the system, storing the wastewater and draining it back to the system when the system has sufficient capacity. Again, the lagoons are put into use on rare occasions.

On rare occasions, the lagoons may overflow to the West Branch of the DuPage River. This occurred once in over 8 years (April 2013). When overflows occur, the flow is immediately reported to the Illinois EPA, the flow is sampled and results are documented on the Discharge Monitoring Reports (eDMR) under outfalls 002 and 003. The emergency operation plan in our CMOM program details the lagoon operations, sampling and reporting procedures. Again, over the past 8+ years the lagoons overflowed once during an extreme wet weather event (April 2013 where 7.63 inches of precipitation was recorded). Lagoon overflows are not common or typical and have been mischaracterized by the CCHOA.

The lagoons are an effective tool in managing wet weather flows and when employed, reduce the likelihood of basement backups. In rare cases, such as the weather event in April 2013, the sanitary sewer collection system was overwhelmed by floodwaters. Sanitary sewer flows were directed to the lagoons to relieve the collection system and prevent basement backups. However, the duration, intensity and resulting regional flooding of the storm resulted in continued diversion of the sanitary sewer flows to the wet weather lagoons causing the lagoons to overflow to the West Branch of the DuPage River. The discharges were reported to the IEPA and sample results submitted. The City has added additional sampling of the West Branch of the DuPage River to its procedures.

Staff cannot stress enough that the lagoons are emergency facilities, permitted with the IEPA for the purpose of preventing basement backups and SSOs. The IEPA has acknowledged that there may be occasions when the lagoons could discharge flows to the DuPage River, and the IEPA has reviewed the procedures on how staff is to report the overflows.

The CCHOA contends that the lagoon facilities are not large enough to contain all the flow from an extreme

weather event and that the lagoons need to be larger and/or additional treatment needs to be constructed. We disagree. The lagoons are adequate for their purpose and frequency of use. As these facilities are seldom used, staff feels it is better to spend (human and financial) resources in addressing the root cause of the I and I by improving overall system condition. The I and I reduction projects and programs have shown to be effective in decreasing wet weather I and I, thereby reducing the need for the lagoons.

The City of Naperville's position is there is sufficient collection system capacity. This was confirmed by Brown and Caldwell in their Technical Memorandum of the North Pump Station Collection Basin Evaluation (Section 4.1.4 Summary, p. 14 of 44; and also referenced by the CCHOA) was:

> *"Based on our review, the North Pump Station, influent sewers, NOC Storage Lagoon, and sewers downstream of the pump station appear to have the capacity to convey the peak design flows per the IEPA Criteria. In addition, the North Pump Station's operating firm capacity meets the permitted firm capacity. Additionally, the City appears to be operating the North Pump Station and NOC storage lagoon per their published procedures that are outlined in the City's WD&C Procedure – 2. This is consistent with IEPA's guidance for providing an outlet for a high-level wet well overflow for sewage pumping stations during possible periods of extensive power outages, mandatory power reductions, or uncontrollable emergency conditions."*

Additionally, the large capacity of the lagoons (4 million gallons and 6 million gallons) allow the lagoons to act as settling basins when in use. Our records revealed no evidence of floatable objects being discharged to the DuPage River or deposited along its banks. The CCHOA's statements of floatable sewer materials being discharged to the river are not supported.

*SPECIAL CONDITION 17. The Permittee shall notify the IEPA in writing once ~~the~~ **any** treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:*

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Response from IEPA: The Agency has made the recommended modification.

SPECIAL CONDITION 18. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by this permit, Section 301(a) of the Clean Water Act, and by Ill. Adm. Code 306.304. As part of the process to ultimately achieve compliance through the elimination of and mitigating any adverse impacts of any such overflows, the Permittee shall (A) identify and report to IEPA all SSOs that do occur. ~~and (B) develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible.~~ *The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the*

flow for which they are designed.

The CMOM plan implementation schedule.

A. The Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly complying fully with USEPA guidance including the "Checklist for Conducting Evaluations of Wastewater Collection System Capacity, Management, Operation, and Maintenance (CMOM) Programs" contained in USEPA's "Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems".

B. The CMOM plan shall be made available for review by the general public.

C. The Permittee shall respond to any IEPA review letter within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.

D. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan within 6 months of approval.

E. The CMOM plan shall be fully implemented within six (6) months of the date of IEPA approval.

The CMOM plan shall include **but not be limited to** *the following elements:*
A. Measures and Activities:

1. *A complete map and system inventory for the collection system owned and operated by the Permittee;*
2. *Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;*
3. *Documentation of unplanned maintenance;*
4. *An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions ~~and immediately upstream of~~* **at** *locations where overflows and backups occur or are likely to occur; use flow monitoring and~~/or~~* **a complete** *sewer hydraulic modeling~~,~~; ~~as necessary~~;*
5. *Identification and prioritization of structural deficiencies* **and capacity constraints** *in the system owned and operated by the Permittee;* **and an action plan to correct the structural deficiencies and capacity constraints.**
6. *Include preventative maintenance programs to prevent and/or eliminate collection system blockages from roots or grease, and prevent corrosion or negative effects of hydrogen sulfide which may be generated within* **the** *collection system.*
7. *Operational control, including documented system control procedures, scheduled inspections and testing; list of scheduled frequency of cleaning (and televising as necessary) of sewers;*
8. *The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and*
9. *Asset Management shall include but is not limited to the following elements:*

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

a. *Asset Inventory and State of the Asset;*
b. *Level of Service;*
c. *Critical Asset Identification;*
d. *Life Cycle Cost; and*
e. *Long-Term Funding Strategy.*

B. Design and Performance Provisions:

1. *Monitor the effectiveness of CMOM;*
2. *Upgrade the elements of the CMOM plan as necessary; and*
3. *Maintain a summary of CMOM activities* **readily available for public inspection.**

C. Overflow Response Plan:

1. **Develop, implement and submit to the IEPA an Overflow Response Plan. The Plan shall include but is not limited to the following elements:**
   a. *Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;*
   b. *Respond to each overflow or back-up ~~to determine additional actions such as clean up~~* **providing necessary assistance in any clean up required;**
   c. *Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan;*
   d. *Identify the cause of the overflow or basement backup, ~~and document to files~~; and*
   e. *Identify* **and implement** *actions or remediation efforts to reduce risk of reoccurrence of these overflows or basement backups in the future, ~~and document to files~~;* **and report to IEPA how the cause of the overflow or basement backup will be corrected;**
2. **The Overflow Response Plan shall be made available for review by the general public.**
3. **The Permittee shall respond to any IEPA review letter within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.**
4. **The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan within 6 months of approval.**
5. **The Plan shall be fully implemented within six (6) months of the date of IEPA approval.**

D. System Evaluation Plan:

1. *Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;*
2. *Evaluate plans to reduce I/I and eliminate SSOs;*
3. *Evaluate the effectiveness and performance in efforts to reduce excessive I/I in the collection system;*
4. *Special provisions for Pump Stations and force mains and other unique system components; and*
5. **Establish** *~~C~~construction plans and schedules for correction* **to meet IEPA I/I standards.**

E. Reporting and Monitoring Requirements:

1. *Program for SSO detection and reporting; and*
2. *Program for tracking and reporting basement back-ups, including general public complaints.*

F. Third Party Notice Plan:

1. *Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;*

2. *Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;*
3. *Identifies who shall receive the notification;*
4. *Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;*
5. *Includes a description of the lines of communication; and*
6. *Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.*

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses.

http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf
http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems_assetmanagement_bestpratices.pdf

Response from IEPA: The Agency has reviewed all suggested additions and the following edits will be made to the Special Condition.

The CMOM plan implementation schedule.

1. **The Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly complying with this Special Condition; ~~fully with USEPA guidance including the "Checklist for Conducting Evaluations of Wastewater Collection System Capacity, Management, Operation, and Maintenance (CMOM) Programs" contained in USEPA's "Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems".~~**

2. **The CMOM plan shall be made available for review by the general public~~.~~;**

3. **The Permittee shall respond to any IEPA review letter within ~~ninety (90) days of date of~~** the timeframe designated by the **initial review letter~~and within thirty (30) days of any subsequent review letter(s), if any.~~; and**

4. **The Plan shall be fully implemented** as soon as possible or within a timeframe designated by the IEPA. **~~within six (6) months of the date of IEPA approval.~~**

The CMOM plan shall include **but not be limited to** *the following elements:*

A. Measures and Activities

5. *Identification and prioritization of structural deficiencies* **and capacity constraints** *in the system owned and operated by the Permittee*; **and an action plan to correct the structural deficiencies and capacity constraints.**

C. **Develop, implement and submit to the IEPA an Overflow Response Plan. The Plan shall include but is not limited to the following elements:**

5. *Identify actions or remediation efforts to reduce risk of reoccurrence of these overflows or basement*

backups in the future, document to files, ***and report as required in Standard Conditions Attachment H.***

The Agency will review the Overflow Response Plan and CMOM as one submittal and no additional timeline or implementation schedule is required.

SPECIAL CONDITION 19. *DuPage River/Salt Creek and Lower DuPage River Watershed Coalition Special Requirements*

6.

a. Within ~~24~~ ***eighteen (18)*** *months of the effective date of this permit, the Permittee shall* **develop a draft** *of ~~finalize~~ the written Phosphorus Discharge Optimization Evaluation Plan ~~and submit it to IEPA~~* **and make it available for public review and comment.** *The plan shall include a schedule for implementing all of the evaluated optimization measures that can practically be implemented and include a report that explains the basis for rejecting any measure that was deemed impractical. The schedule for implementing all practical measures shall be no longer than 36 months after the effective date of this permit.*

b. The Permittee shall submit the draft Phosphorus Discharge Optimization Plan, including a summary and response to all public comments received, to IEPA for review and approval within twenty four (24) months of the effective date of this permit.

c. The Permittee shall respond to an IEPA review letter within ninety (90) days of the date of an initial review letter and within thirty (30) days of any subsequent review letter(s), if any.

d. *The Permittee shall implement the measures set forth in the* ***approved*** *Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in that Plan. The Permittee shall modify the Plan to address any comments that it receives from IEPA and shall implement the modified plan in accordance with the schedule* therein.

e. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 24 months from the effective date of the permit.

7. The Permittee shall, within 24 months of the effective date of this permit, complete a feasibility study that evaluates the timeframe, and construction and O & M costs of reducing phosphorus levels in its discharge to a level consistently meeting a limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L utilizing a range of treatment technologies including, but not necessarily limited to, biological phosphorus removal, chemical precipitation, or a combination of the two. The study shall evaluate the construction and O & M costs of the different treatment technologies for these limits on a monthly, seasonal, and annual average basis. For each technology and each phosphorus discharge level evaluated, the study shall also evaluate the amount by which the Permittee's typical household annual sewer rates would increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. **The Permittee shall make the feasibility study available for public review and comment.** *Within 24 months of the effective date of this Permit, the Permittee shall submit to the Agency and the DRSCW/LDRWC a written report summarizing the results of the study* **including a summary and response to all public comments received. The permit may be modified to include requirements for the Permittee to effectively control sources of phosphorous.**

8. Total phosphorus in the effluent in the existing plant shall be limited as follows:

a. If the Permittee will use chemical precipitation to achieve the limit, the effluent limitation shall be 1.0 mg/L on a monthly average basis, effective ~~10~~ **6** *years after the effective date of this permit unless the*

Attachment A: Response to Recommended Changes to Selected Special Conditions of Naperville NPDES Permit No. IL0034061 by CCHOA

Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within ~~10~~ 6 years of the effective date of this permit.

b. *If the Permittee will primarily use biological phosphorus removal to achieve the limit, the effluent limitation shall be 1.0 mg/L monthly average to be effective ~~11~~ 7 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within ~~11~~ 7 years of the effective date of this permit.*

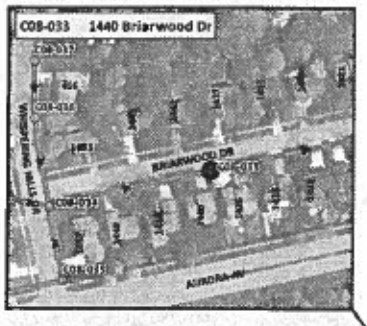
Response from IEPA: The Agency has reviewed all suggested additions and the following edits will be made to the Special Condition.

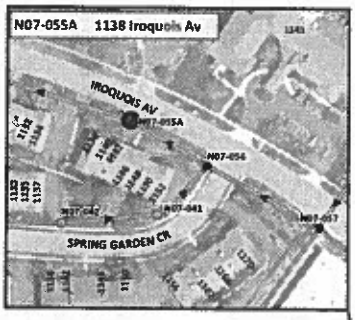
6. **The Permittee shall respond to any IEPA review letter within ~~ninety (90) days of date of~~** the timeframe designated by the **~~initial~~ review letter~~ and within thirty (30) days of any subsequent review letter(s), if any.~~**

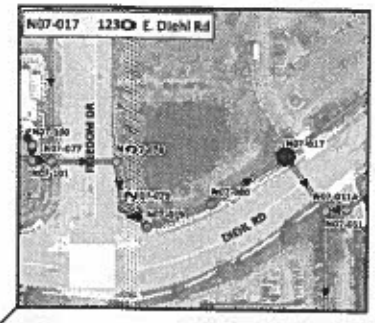
The DuPage River/Salt Creek and Lower DuPage River Watershed Coalition Special Requirement includes the agreed upon language developed between the coalition, environmental groups, USEPA and IEPA.

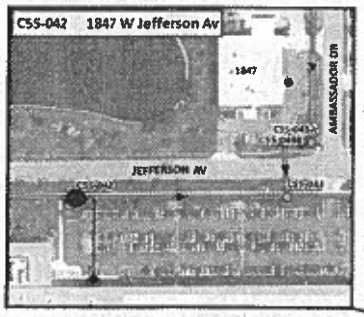
GREASE SAMPLE SITES

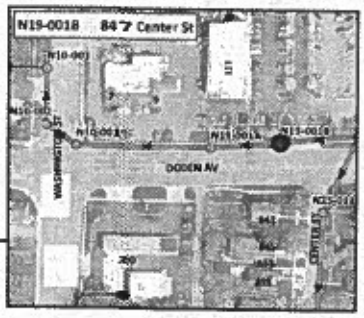
N
Not to Scale

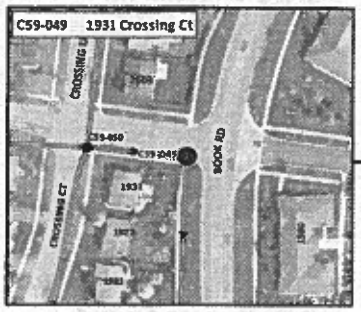


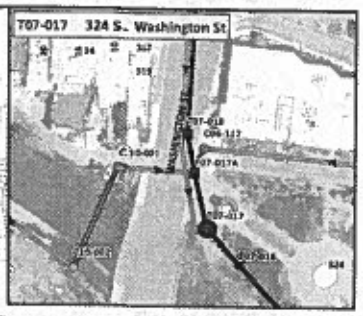


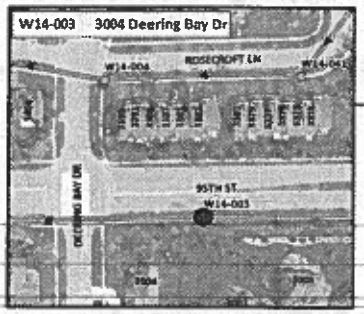


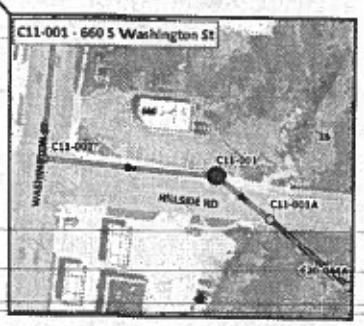


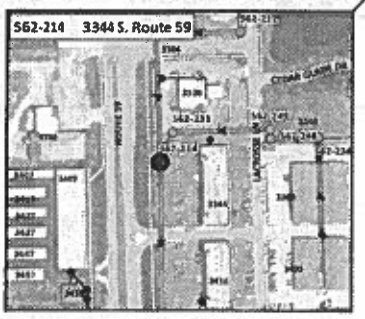


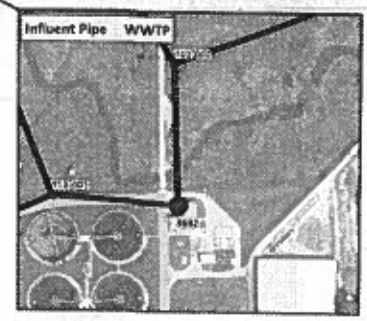


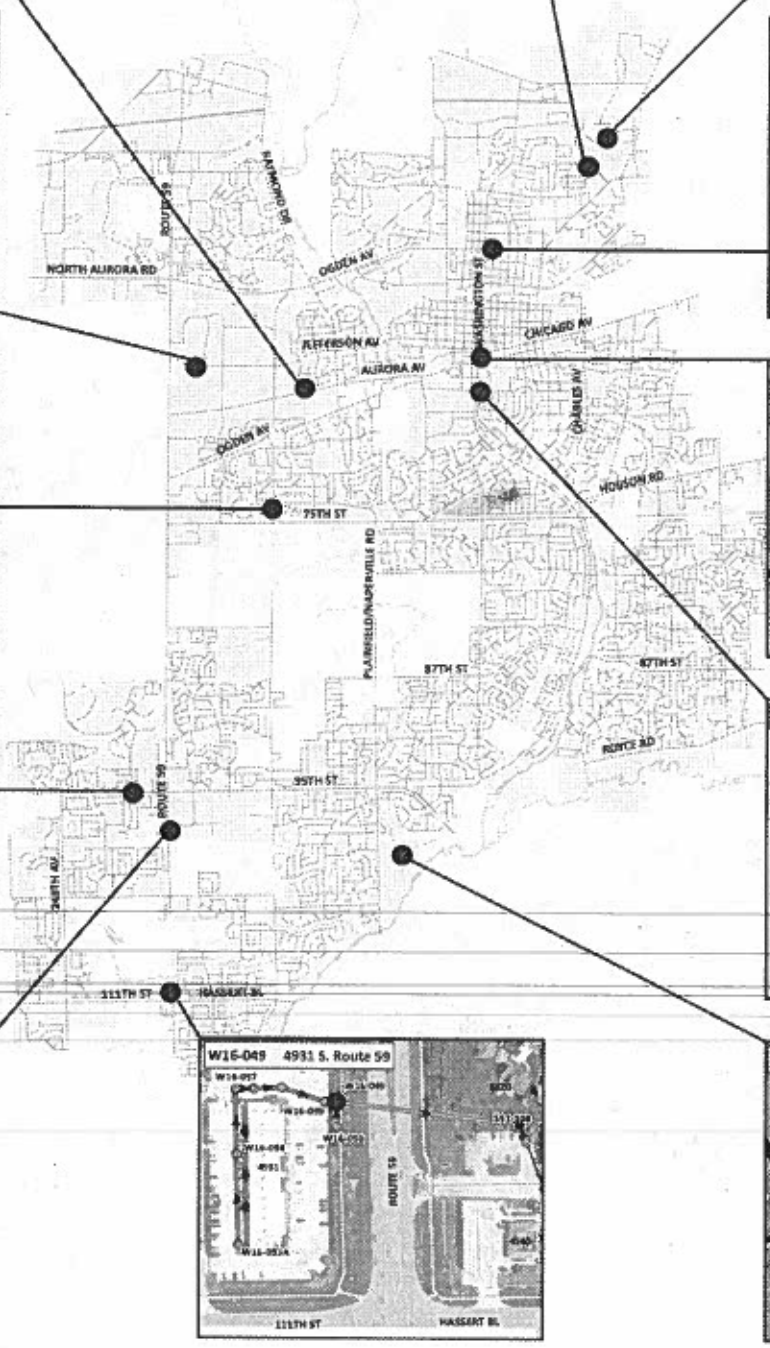












LEGEND

- Grease Sample Site

Manholes
- Collection
- Drop
- Interceptor
- Private

Gravity Main
- Collection
- Interceptor
- Siphon
- Private

DEPARTMENT OF PUBLIC UTILITIES - WATER
Collections & Pumping
December 2016

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

January 20, 2017

Mr. Joe Slevnik
NAPERVILLE, CITY OF
PO Box 3020
Naperville, IL 60566-7020

Project ID: Oil & Grease
First Environmental File ID: 17-0256
Date Received: January 18, 2017

Dear Mr. Joe Slevnik:

The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 003811: effective 02/17/2016 through 02/28/2017.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Bill Mottashed
Project Manager

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Case Narrative

NAPERVILLE, CITY OF Lab File ID: **17-0256**

Project ID: **Oil & Grease** Date Received: **January 18, 2017**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The results in this report apply to the samples in the following table:

Laboratory Sample ID	Client Sample Identifier	Date/Time Collected	
17-0256-001	1230 E. Diehl Rd	1/18/2017	8:20
17-0256-002	1138 Iroquis Ave	1/18/2017	8:00
17-0256-003	847 Center St	1/18/2017	7:40
17-0256-004	1847 W Jefferson Ave	1/18/2017	9:00
17-0256-005	1440 Briarwood Dr	1/18/2017	9:15
17-0256-006	324 S Washington St	1/18/2017	10:00
17-0256-007	660 S Washington St	1/18/2017	10:30
17-0256-008	1931 Crossing Ct	1/18/2017	10:45
17-0256-009	3004 Deering Bay Dr	1/18/2017	11:00
17-0256-010	3344 S Route 59	1/18/2017	11:15
17-0256-011	4931 S Route 59	1/18/2017	11:30
17-0256-012	SWRC Influent Pipe	1/18/2017	11:50

Sample Batch Comments:

Sample acceptance criteria were met.

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Case Narrative

NAPERVILLE, CITY OF

Lab File ID: **17-0256**

Project ID: **Oil & Grease**

Date Received: **January 18, 2017**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The following is a definition of flags that may be used in this report:

Flag	Description	Flag	Description
A	Method holding time is 15 minutes from collection. Lab analysis was performed as soon as possible.		
B	Analyte was found in the method blank.		
<	Analyte not detected at or above the reporting limit.	L	LCS recovery outside control limits.
C	Sample received in an improper container for this test.	M	MS recovery outside control limits; LCS acceptable.
D	Surrogates diluted out; recovery not available.	P	Chemical preservation pH adjusted in lab.
E	Estimated result; concentration exceeds calibration range.	Q	Result was determined by a GC/MS database search.
G	Surrogate recovery outside control limits.	S	Analysis was subcontracted to another laboratory.
H	Analysis or extraction holding time exceeded.	W	Reporting limit elevated due to sample matrix.
J	Estimated result; concentration is less than routine RL but greater than MDL.	N	Analyte is not part of our NELAC accreditation or accreditation may not be available for this parameter.
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 1230 E. Diehl Rd
Sample No: 17-0256-001

Date Collected: 01/18/17
Time Collected: 8:20
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		49	3	mg/L	

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 1138 Iroquis Ave
Sample No: 17-0256-002

Date Collected: 01/18/17
Time Collected: 8:00
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		58	3	mg/L	

First Environmental Laboratories, Inc.

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client:	NAPERVILLE, CITY OF	**Date Collected:**	01/18/17
Project ID:	Oil & Grease	**Time Collected:**	7:40
Sample ID:	847 Center St	**Date Received:**	01/18/17
Sample No:	17-0256-003	**Date Reported:**	01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		12	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 1847 W Jefferson Ave
Sample No: 17-0256-004

Date Collected: 01/18/17
Time Collected: 9:00
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		23	3	mg/L	

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Analytical Report

Client:	NAPERVILLE, CITY OF	**Date Collected:**	01/18/17
Project ID:	Oil & Grease	**Time Collected:**	9:15
Sample ID:	1440 Briarwood Dr	**Date Received:**	01/18/17
Sample No:	17-0256-005	**Date Reported:**	01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		32	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 324 S Washington St
Sample No: 17-0256-006

Date Collected: 01/18/17
Time Collected: 10:00
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		40	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 660 S Washington St
Sample No: 17-0256-007

Date Collected: 01/18/17
Time Collected: 10:30
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		15	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 1931 Crossing Ct
Sample No: 17-0256-008

Date Collected: 01/18/17
Time Collected: 10:45
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		41	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 3004 Deering Bay Dr
Sample No: 17-0256-009

Date Collected: 01/18/17
Time Collected: 11:00
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		64	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 3344 S Route 59
Sample No: 17-0256-010

Date Collected: 01/18/17
Time Collected: 11:15
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		56	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: 4931 S Route 59
Sample No: 17-0256-011

Date Collected: 01/18/17
Time Collected: 11:30
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		86	3	mg/L	

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Analytical Report

Client: NAPERVILLE, CITY OF
Project ID: Oil & Grease
Sample ID: SWRC Influent Pipe
Sample No: 17-0256-012

Date Collected: 01/18/17
Time Collected: 11:50
Date Received: 01/18/17
Date Reported: 01/20/17

Analyte		Result	R.L.	Units	Flags
Oil & Grease	**Method: 1664B 2010**				
Analysis Date: 01/20/17					
Oil & Grease		28	3	mg/L	

First Environmental Laboratories, Inc.

First Environmental Laboratories
1600 Shore Road, Suite D
Naperville, Illinois 60563
Phone: (630) 778-1200 • Fax: (630) 778-1233
E-mail: firstinfo@firstenv.com
IEPA Certification #100292

CHAIN OF CUSTODY RECORD

Company Name: CITY of NAPERVILLE
Street Address: P.O. BOX 3020
City: NAPERVILLE State: IL Zip: 60566
Phone: 630-420-6125 e-mail: slevnikj@naperville.il.us
Send Report To: JOSEPH SLEVNIK
Sampled By: TERALD BRUE

Project I.D.: Oil & GREASE
P.O. #:

Matrix Codes: S = Soil W = Water O = Other

Analyses: Oil & Grease; Hold – Do Not Analyze

Date/Time Taken		Sample Description	Matrix	Oil & Grease							Hold – Do Not Analyze	Comments	Lab I.D.
01-18-17	08:20	#1 1230 E. DIEHL Rd	O	X									17-0256-001
	08:00	#2 1138 IROQUIS AV	O	X									002
	07:40	#3 847 CENTER ST.	O	X									003
	09:00	#4 1047 W. JEFFERSON AV	O	X									004
	09:15	#5 1440 BRIARWOOD DR.	O	X									005
	10:00	#6 324 S. WASHINGTON ST	O	X									006
	10:30	#7 660 S. WASHINGTON ST	O	X									007
	10:45	#8 1931 CROSSING CT	O	X									008
	11:00	#9 3004 DEERING BAY DR.	O	X									009
	11:15	#10 3344 S. Route 59	O	X									010
	11:30	#11 4931 S. Route 59	O	X									011
	11:50	#12 SWRC Influent PIPE	O	X									012

FOR LAB USE ONLY:

Cooler Temperature: 0.1-6°C Yes__ No✓ 18.6 °C
Received within 6 hrs. of collection: ✓
Ice Present: Yes✓ No__

Sample Refrigerated: Yes__ No__
Refrigerator Temperature:_____°C
5035 Vials Frozen: Yes__ No__
Freezer Temperature:_____°C

Program: ☐ TACO ☐ CCDD ☐ NPDES ☐ LUST

Notes and Special Instructions:

Relinquished By: [signature] Date/Time 01-18-17 13:50 Received By: [signature] Date/Time 1-18-17 1350
Relinquished By: Date/Time Received By: Date/Time

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