



healthAIR - Industrial Hygiene Services cleanWATER - Consulting & Testing Services safeEARTH - Hazardous Waste & Recycling Services

June 8, 2018

Mr. Kyle Scripter Supervisor of Maintenance Waverly Community Schools 3809 West Saint Joseph Lansing, Michigan 48917 kscripter@waverlyk12.net

RE: Project # AE180001 WavCS

Total Maximum Daily Load (TMDL) Sampling Report Transportation & Maintenance Center

Dear Mr. Scripter:

Arch Environmental Group, Inc. recently conducted a round of TMDL Wet Weather Sampling at discharge point WTM-01.CB.DP at the Transportation & Maintenance Center on May 3, 2018, in accordance with the applicable NPDES Permit requirements. TMDL sampling is used to determine the level of specific pollutants in the stormwater system by collecting samples from 50% of the district's stormwater outfalls/discharge points during a representative wet weather event. The sampling results are then evaluated to determine if a particular point source needs to be addressed to reduce the pollutant load of the receiving waters. A report regarding the findings of this round of TMDL Sampling is attached.

If you have questions regarding this report, please feel free to contact please feel free to contact the cleanWATER team at (248) 426-0165.

Sincerely,

Arch Environmental Group, Inc. Environmental Services

Lessen M Pufetti

Jessica Perfetti

Certified Industrial Site Stormwater Operator, I-14671

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- 2.0 TMDL Sampling Procedures
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## Attachments:

TMDL Screening Inspection Log Storm Sewer System Site Map Analytical Results & Chain of Custody Dry Weather Screening Report



#### 1.0 / Project Summary

Arch Environmental Group, Inc. (AEG) recently conducted a round of Total Maximum Daily Load (TMDL) Sampling for E. coli at discharge location WTM-01.CB.DP at the Transportation & Maintenance Center on May 3, 2018, in accordance with the applicable National Pollutant Discharge Elimination System (NPDES) Permit requirements.

A TMDL describes the process used to determine how much of a pollutant a lake or stream can assimilate and sets pollutant reduction targets for that water body. NPDES Municipal Separate Storm Sewer System (MS4) permits require regulated public entities located within urbanized areas that discharge storm water to an MS4 which leads to a water body designated with a TMDL, to demonstrate progress toward meeting Water Quality Standards (WQS). If the TMDL was written for E. coli or Total Phosphorus (TP), the MS4 permits further require permittees to collect representative samples of storm water discharges from their points of discharge to MS4s which lead to the impacted water bodies. Based on a review of the sampling results, Stormwater Best Management Practices (BMP) implementation will be reviewed and BMPs may be updated to ensure progress toward achieving TMDL pollutant load reductions.

The receiving water body of Waverly Community Schools is the Grand River. The Grand River has been designated with a TMDL of E. coli. Further details on the TMDL listed can be found in the document "Total Maximum Daily Load for E. coli for the Grand River Kent County." Some examples of potential sources of E. coli in waterways include fecal material from livestock, humans, wildlife, waterfowl such as geese, and sanitary systems.

## 2.0 / TMDL Sampling Procedures

Applicable TMDL sampling was conducted with guidance from the "Storm Water Sampling Guidance for Total Phosphorus & E. coli." Sampling was conducted at designated outfalls/discharge points after a dry period of approximately 72 hours and during a rain event of approximately .25 inches or more. Please see the attached TMDL Screening Inspection Log(s) for specific rainfall amounts. Sampling was conducted on May 3, 2018 and the last significant rain event was on April 15, 2018. The weather history for the rain event is available upon request.

When a dip-cup or similar sampling device was needed to collect the sample, a blank sample was collected to ensure no contamination was coming from the sampling device. The blank collected during this round of TMDL sampling came back at zero (0) CFU indicating that the sampling device used was not contaminated. The lab results of the blank sample are attached. Furthermore, all sampling devices were decontaminated with bleach water and distilled water between each sampling location according to the protocol laid out in the "Storm Water Sampling Guidance for Total Phosphorus & E. coli." Each location sampled was analyzed for pH and temperature while onsite and the sampled outfall/discharge point (OF/DP) was inspected for color, odor, and abnormal vegetative growth. The collected samples were delivered to an external laboratory for analysis.

## 3.0 / TMDL Sampling Results

## TMDL Benchmark Standards for E. coli:

E. coli: The WQS for E. coli is the maximum amount of E. coli that is allowable in surface waters of the state. These standards are known as total body contact and partial body contact standards. Total body contact is a more conservative standard used during the summer to protect swimmers during total body contact and has the daily maximum of 300 CFU per 100 milliliters (mL). This applies to the warmer months



<sup>1</sup> Storm Water Sampling Guidance for Total Phosphorus & E. coli. November 24, 2009. DEQ

of May 1<sup>st</sup> -October 31<sup>st</sup> and is the standard being used in this report. Partial body contact is the daily maximum of 1,000 CFU per 100 mL and applies to the waterways year-round. <sup>2</sup>

Structure ID: WTM-01.CB.DP	Structure Type: Catch Basin	Location: Northeast of building near entrance
		on pavement.

At the time of the sampling, clear water flow was noted, and WTM-01.CB.DP was free of odors and abnormal vegetative growth. AEG collected a grab sample from WTM-01.CB.DP and the sample was screened for temperature and pH in the field. An E. coli grab sample was delivered to an external laboratory for analysis. Results from the sampling are summarized below. A more detailed TMDL Screening Inspection Log is also attached at the end of the report.

Parameter:	Results:	TMDL Benchmark Standard:	Units:
рН	8.1	6.5 - 9	pH Units
Temperature	20.2	N/A	Celsius
E. coli	579.4	300	CFU per 100mL

The sample results for WTM-01.CB.DP did not identify elevated levels of pH above the TMDL Benchmark Standards. However, the highlighted value in the table above indicates that for outfall location WTM-01.CB.DP, the reported levels for E. coli (579.4 CFU) are above the Michigan Public Health Department standards for Total Body Contact (E. coli >300 CFU), but below the standards for Partial Body Contact (E. coli > 1,000 CFU).

#### 4.0 / Conclusion

AEG did not identify any elevated levels of pH above the TMDL Benchmark Standards for discharge location WTM-01.CB.DP sampled at the Transportation & Maintenance Center on May 3, 2018. However, AEG did identify elevated levels of E. coli above the TMDL Benchmark Standards for discharge location WTM-01.CB.DP. Sampled flow in WTM-01.CB.DP was from upstream stormwater basins and the surrounding pavement. Geese and other wildlife feces are likely the contributor to the slightly elevated E. coli levels. There are no signs of an illicit connection.

Arch Environmental Group, Inc. recommends that the elevated location WTM-01.CB.DP be re-assessed each permit cycle to ascertain whether greater or reduced potential for E. coli TMDL contribution has occurred. Geese, gulls and ducks are speculated to be a major bacterial source in urban areas, particularly where large populations congregate. E. coli (*Escherichia Coli*) is a sub-group of the fecal coliform group and can be used as an indicator of fecal contamination.<sup>3</sup> Elevated levels of E. coli typically occur at sites which have leaking sanitary sewer systems, failed septic systems, or populations of wild or domesticated animals. E. coli originating from birds, raccoons and other wildlife may be present in large numbers in stormwater runoff. In an effort to determine the cause of the benchmark exceedance of E. coli, Arch Environmental Group reviewed the layout of the school storm water system as well as past tracer dye studies from 2013. Based on this investigation, sanitary sewer contamination from the Transportation & Maintenance Center is not suspected. The most recent Dry Weather Screening inspection conducted on October 3, 2017 at the Transportation & Maintenance Center did not identify any signs of an illicit connection at this facility. The Dry Weather Screening report is attached. The source is likely natural sources, such as the presence of wild animals from the stormwater runoff of the surrounding pavement.

<sup>&</sup>lt;sup>3</sup> Sources of E. coli In Surface Water" - Great Lakes Water Institute, University of Wisconsin, Milwaukee <a href="http://www.glwi.uwm.edu/research/genomics/ecoli/sources">http://www.glwi.uwm.edu/research/genomics/ecoli/sources</a> of ecoli in water.php



<sup>&</sup>lt;sup>2</sup> "Michigan's E. Coli Water Quality Standard Guidance" May, 2016. MDEQ

#### 5.0 / Best Management Practices to Reduce TMDL Pollutant Loads

The WavCS Stormwater Management Plan (SWMP) identifies and defines the districts BMPs to comply with the Six Minimum Measures that are the front line in the nationwide effort to reducing polluted stormwater discharges to our lake, rivers and streams. The Michigan Department of Environmental Quality (MDEQ) recognizes that having a Stormwater Management Plan in place built around the Six Minimum Measures specified in the NPDES General Jurisdictional Permit have the potential to significantly contribute to the reduction of TMDL Pollutants in the surface waters of the state. A link to the districts current SWMP can be found on the districts website at <a href="http://www.waverlycommunityschools.net/our-district/storm-water-management/">http://www.waverlycommunityschools.net/our-district/storm-water-management/</a>. The Six Minimum Measures are listed below:

- Public Education and Outreach Program (PEP)
- Public Involvement and Participation Program (PIP)
- Illicit Discharge Elimination Program (IDEP)
- Post Construction Stormwater Management Program
- Construction Site Stormwater Runoff Control Program
- Pollution Prevention/Good Housekeeping Program for NPS faculty and staff.

The following is a list of prioritized TMDL best management practices from the districts SWMP that WavCS should continue to implement in order to improve water quality impairments associated with the E. coli TMDL of the Grand River. Prioritization of BMPs is based on WavCS targeted TMDL pollutants. Priority is given to BMPs that reduce E. coli loads.

#### E. COLI

- 1. WavCS will use its website to provide the public with information regarding pet waste (SEMCOG links/ GLRC). Additionally, GLRC posters are placed at various school buildings.
- 2. WavCS will prohibit illicit discharges, inspect and monitor suspected illicit discharges, and enforce elimination of the illicit discharges and connections.
- 3. WavCS has reviewed all facilities for cross-connections between the sanitary and storm sewer systems.
- 4. WavCS will conduct hand sweeping in the parking lots/roadways monthly.
- 5. WavCS has established programs for soil erosion and sediment control from new or redevelopment construction. Such developments require permits and inspections for practices to keep exposed soils on site or controlled from runoff.
- 6. WavCS has implemented routine visual inspections of stormwater structural controls.
- WavCS will remove excessive sediments from structural sediment removal systems to maintain the maximum designed performance. Sediments will be disposed of offsite in accordance with Parts 115 or 121.

## **ALL TMDLs**

- 1. WavCS will continue to use its website to provide the public information regarding local TMDL issues (phosphorous, E. coli, biota and dissolved oxygen TMDL Best Management Practice).
- 2. WavCS will continue to educate staff, faculty, and students using various venues including educational materials developed by the various watershed groups specifically related to these issues on the stormwater management webpage.



- 3. The district passed a post-construction stormwater board resolution to require implementation of the stormwater standards for construction.
- 4. Adequately maintains vegetation around stormwater facilities, ditches, and ponds.
- 5. Provide training to applicable staff and confirm training from contractors including restrictions on the use of phosphorous containing fertilizers, soaps, cleaners and other chemicals that could impact the separate storm drain system.

WavCS strives to be good stewards of the land within their jurisdiction and to use appropriate Best Management Practices (BMPs) to contribute to the improvement of water quality. WavCS is committed to practicing sound stormwater management practices; including observance and adherence to all local, state, and federal stormwater statutes, rules, and regulations.

Attachments: TMDL Screening Inspection Log

Storm Sewer System Site Map Analytical Results & Chain of Custody Dry Weather Screening Report

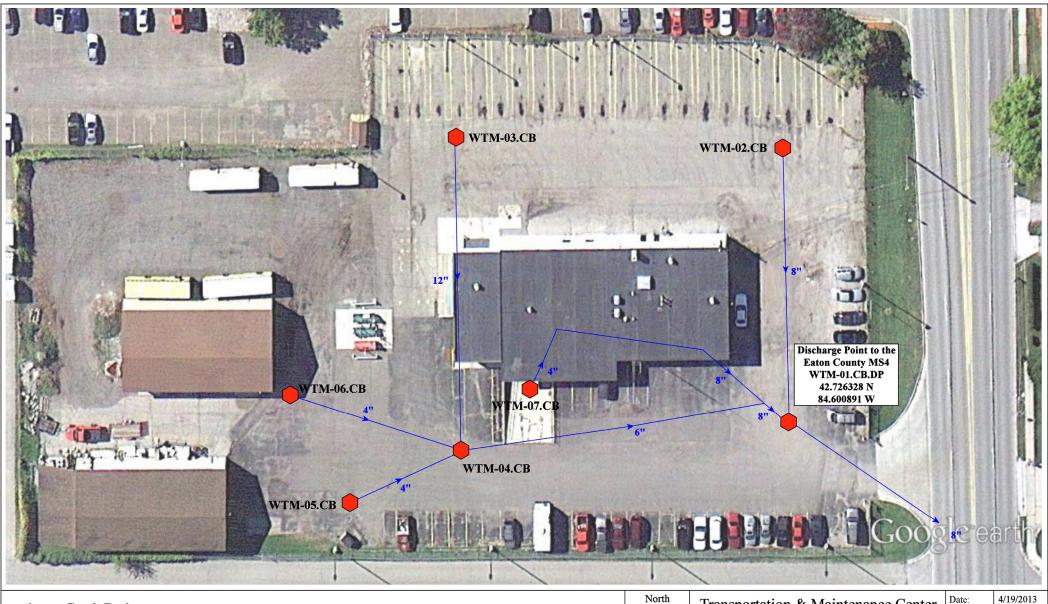
cc: AE180001 project file



# **TMDL Screening Inspection Log**

Building:	Transportation	and Maintenar	nce		Client:	: Wa	verly Community	Schools			
Samplers:	Amanda Peterson	Alec St	ec Staber Date				5/3/2018				
			Inspection Type:				TMDL Sampling				
_		•					-				
Structure Information:											
ID Number:	WTM-01.CB.DP	Structure Type	Catch Basin			Lat:	42.726328 N	Long: 84.600891 W			
Туре:	Discharge Point	Location:	Northeast of b	ouilding near en	trance on pavemer	nt.		•			
Outfall Dimensions	8"	1									
Observations:											
Standing Water Charac	teristics	Flow	Characteristic	<u>s</u>							
Standing \	Water: Yes	Flo	ow Observed:	Yes, Trickle							
	Color: Clear	Sc	ource of Flow:	Inlet pipe							
	Odor: No	Vel	locity of Flow:	Trickle							
	Suds: No	]	Color of Flow:	Clear							
Sta	aining: No		Flow Odor	No							
Oil S	heen: No		_			_					
Se	ewage: No	<u>Addi</u>	tional Comme	nts:							
Bacterial S	Sheen: No			-		o upstream basins and		_			
	Algae: No	I .			•		• ,	li levels. In 2013, the floor			
S	Slimes: No		is in the bus wa nwater system		nanic bay were dye	e traced and confirme	d that they are not i	llicitly connected to the			
Abnormal Gr	owth: No	31011	iiwatei systeini	•							
Sample ID And Informa			Lab Analysis:	Results:	TMDL Threshold:	Units:	Photo ID:				
Sam	ple ID: WTM-01.CB.DP.TM	IDL	pH:	8.1	6.5 - 9	pH units	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (				
Time Coll	lected: 1:35		Temperature:		,	Celsius					
Last Rain	Event: > 72 Hours		E. coli:	579.4	300	CFU per 100mL	6				
	eather: Overcast		Total Phospho	orus: N/A	N/A	ug/L	Control of the contro				
Screening Location	* *		Other:				3 11	2			
Total Rainfall (Ir	nches): .57		Other:								
			Other:				4				
Outfall Characteriza	ation: Unlikely										
Sample sent t	to Lab: Yes							Minn ?			





= Catch Basin

Transportation & Maintenance Center	Date:	4/19/2013
•	Drawn by:	JOF
Waverly Community Schools	Reviewed:	CMC
COTTO AMATER	Page #:	1 of 1
environmental group clean WATER	Scale:	Not to Scale

ty Schools	Reviewed
	Page #:
cleanWATER	Scale:



2105 Pless Drive Brighton, Michigan 48114 Phone (810)229-7575 Fax (810)229-8650 E-mail bai-brighton@sbcglobal.net

May 04, 2018

Arch Environmental Group 37720 Interchange Dr. Farmington Hills, MI 48335

Subject: Transportation&Maintenance Blg. TMDL

AE180001 Wav CS

Dear Ms. Koloski:

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 05/03/2018 for the above mentioned project. NELAP/TNI Accredited Analysis and MDEQ Drinking Water Certified Analysis will be identified in their respective reporting formats. Hard copies can be supplied at your request for a fee of \$20.00 per copy.

The invoice for this project will be emailed separately. If you have any questions concerning the data or invoice, please don't hesitate to contact our office. We welcome your comments and suggestions to improve our quality systems. Please reference Brighton Analytical, L.L.C. Project ID 50441 when calling or emailing. We thank you for this opportunity to partner with you on this project and hope to work with you again in the future.

Sincerely, Brighton Analytical, L.L.C.









## **Brighton Analytical LLC**

2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net MDNRE Certified #9404 NELAC Accredited #176507

Sample Date: 5/3/2018 Submit Date: 5/3/2018 Report Date: 5/4/2018 To: Arch Environmental Group 37720 Interchange Dr.

Farmington Hills, MI 48335

BA Report Number:

50441

Project Name:

Transportation&Maintenance Blg. TMDL

BA Sample ID: **CH04662** 

**Parameters** 

Project Number: AE180001 Wav CS

Units

TIETOUUT WAY CO

DL

Sample ID: WTM-01.CB.DP.TMDL

Analysis Analyst Date

Microbiological Analysis

E. coli

579.4

Result

CFU/100 ml

1

SM9223B M Well

**Method Reference** 

WT

05/03/2018

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

Released by

Date

5/4/2018

Brighton A	Brighton Analytical, L.L.C.	BA PROJECT #:	Analysis Requested/Method	PAGECOMPANY/MAII	OF /
2105 Pless Drive Brighton, MI 48114	Phone: 810-229-7575 14 Fax: 810-229-8650	ABBREVIATIONS FOR MATRIX S = Solid I. = Liquid		Arch Environmental	Mustal Group
PROJECT NAME: Transportation & Maintence	IN & Maintence Blg.	DW		, NETA	
PROJECT #: AE18 001 - WAVCS		A = Air (Tedlar Bag) F = Filter	xian	PHONE: JAC 471 - 616	03k1
FFERENT BILLIN	NG ADDRESS)	T = Tube M = Misc.	le Mis	ANOR ENGLANATION CO	no. dresp.
ed by: AP / AS	Container	Type & 0		Samples received within hold time? yes the □	time? yes Tho 🗆
(H) -	If RUSH, Z approved by:		04)	99	3720
1 Day = 2.5X Cost 2 Day = 2X Cost 3 Day = 1.5X Cost Standard 5 business days	Sample Coll.	VOH	.00	pris verifica in login? yes Headspace/bubbles in VOA's?	yes ☐ no ☐ n/a ☐
Righton ID # Sample Description	S.VOA	нрев и сгьзз, зтекігі	E. C	Sample containers and COC match?	atch? yes
1)4 GES WTM-01.CB DP. TMDL	1 5/3/18 1:35	><	L X		
2)				BILLING ADDRESS (IF REQUIRED):	REQUIRED):
3)					
4)					
5)					
(9)					
()				Drinking H <sub>2</sub> O:	g H <sub>2</sub> O:
(8)				Fax to LCHD? yes □ no Chlorinated Water Sumply?	no 🗆
(6				AN	]
10)				MCL Failure: yes □ no □	_
Special Instructions:				Client Notified (date/time/initials):	'Initials):
Please fill out i	the Chain of Custody completely a	nd review. Incorre	Please fill out the Chain of Custody completely and review. Incorrect or incomplete information will result in a	t in a "hold" on all analyses.	
Trans.  ** RELINGUISHED.BY:	RECEIVED BY:	DATE: TIME:	Trans. RELINQUISHED BY:	RECEIVED BY:	DATE: TIME:
1 Shall		5/3/8 3:45 1/18	m		
2	`		4		
		,	1		



# **Brighton Analytical LLC**

2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net MDNRE Certified #9404 NELAC Accredited #176507

Sample Date: 5/3/2018 Submit Date: 5/3/2018 Report Date: 5/4/2018 To: Arch Environmental Group 37720 Interchange Dr.

Farmington Hills, MI 48335

BA Report Number:

50440

Project Name:

Waverly High School TMDL Sampling

BA Sample ID: **CH04660** 

**Parameters** 

Project Number: AE180001 Wav CS

Sample ID: Blank-TMDL

Method Reference Analyst Date

Microbiological Analysis

E. coli

O

Result

CFU/100 ml

Units

1

DL

SM9223B M Well

WT

05/03/2018

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

Released by

Date

5/4/2018

labs @ Granding - too TIME: Headspace/bubbles in VOA's? yes ☐ no ☐ n/a ☐ yes ho Samples received within hold time? yes ☐ no ☐ COMPANY/MAILING ADDRESS: no 🗆 30 9778 BILLING ADDRESS (IF REQUIRED) yes 🗆 -973 DATE: Keloski yes 🗆 no Drinking H<sub>2</sub>0: Client Notified (date/time/initials): Eavironmetal Sample containers and COC match? Fax to LCHD? yes □ no □ AMT.: MCL Failure: yes □ no □ Chlorinated Water Supply? Temperature of samples °C: in a "hold" on all analyses. 3253° pHs verified in login? 8421 FAX OR EMAIL: RECEIVED BY: Arch PHONE: Analysis Requested/Method Please fill out the Chain of Custody completely and review. Incorrect or incomplete information will result RELINQUISHED BY: 110) 747 7 Trans. Sample Matrix DW = Drinking H<sub>2</sub>0 ABBREVIATIONS MEOH Preserved Y N BA-PROJECT #: = Air (Tedlar Bag) FOR MATRIX TIME: 2,4 L = Liquid F = Filter T = Tube P = Wipe S = Solid 0 = 0il M = Misc. Ouantity × STERILIZED BACTERIA GLASS, NO PRESERVATIVE 8/3/18 8 **b**KEZEKAED<sup>3</sup> **WARER** DATE: Container Type HDPE NAOH HDPE H2SO4 HDbE HNO<sup>3</sup> Phone: 810-229-7575 Brighton Analytical, L.L.C. Fax: 810-229-8650 HDbe nnbkesekaed RECEIVED BY: AOA'S (PRES) Y N N/A 09:01 81/8/ 02:01 81/6/8 Time approved by: Sample Coll. If RUSH 56600 Date PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS) Was ( WVC-03. MH. OP.TMM 1 Day = 2.5X Cost 2 Day = 2X Cost 3 Day = 1.5X Cost 4. ss days (verify with lab & specify date needed) Brighton, MI 48114 Blank - TMD1 2105 Pless Drive Sample Description and REQUESTED TURNAROUND: (circle one) Rush: 1-3 business days (verify with lab & specify AE 18000, RELINQUISHED BY: PROJECT NAME: ( NOVCOLLY Special Instructions: Standard 5 business days Sample collected by: PROJECT #: Brighton ID # الا Trans. 7 10) 3) 4 2 9 6 8 6





healthAIR - Industrial Hygiene Services cleanWATER - Consulting & Testing Services safeEARTH - Hazardous Waste & Recycling Services

October 16, 2017

Mr. Kyle Scripter Waverly Community Schools 3809 St. Joseph Street Lansing, Michigan 48917 kscripter@waverlyk12.net

RE: AEG Project # AE170001 WavCS

Dry Weather Field Screening
Transportation & Maintenance Facility

Mr. Scripter:

Arch Environmental Group, Inc. conducted a subsequent round of dry weather screening at discharge point WMT-01.CB.DP at the Transportation and Maintenance Facility on October 3, 2017, in accordance with the applicable NPDES General Permit requirements. Dry weather screening is used to detect illicit discharges into the stormwater system by inspecting the stormwater outfalls/discharge points at least 48 hours after a precipitation event. A report regarding the findings of this round of dry weather screening is attached.

If you have questions regarding this report, please feel free to contact Jenna Sendra [Office - (248) 426-0165 ext. "314"; Mobile - (734) 239-1424] or Christine Caddick [Office – (248) 426-0165 ext. "316"; Mobile - (248) 792-1775].

Sincerely,

Arch Environmental Group, Inc. Environmental Services

Amanda Peterson

Certified Industrial Site Stormwater Operator, I-14834

Attachments: Dry Weather Screening Inspection Report

cc: AE170001 project file



# DRY WEATHER FIELD SCREENING REPORT ILLICIT DISCHARGE ELIMINATION PROGRAM

# **Transportation & Maintenance Facility**

515 Snow Rd. Lansing, MI 48917

Prepared For:

# **Waverly Community Schools**

3809 W. St. Joseph Hwy Lansing, MI 48917

Prepared By:

## Arch Environmental Group, Inc.

37720 Interchange Drive Farmington Hills, Michigan 48335

Project #: AE170001-WavCS
Project Date(s): October 3, 2017
Report Date: October 16, 2017

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- 1.0 Project Summary
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- 3.0 Summary of Dry Weather Screening Inspection
- 4.0 Conclusion

# **Appendices**

- A Dry Weather Screening Inspection Log-Outfall/Discharge Point Locations
- B Storm Sewer System Site Map



## 1.0 / Project Summary

Arch Environmental Group, Inc. conducted a subsequent round of dry weather screening at discharge point WMT-01.CB.DP at the Transportation and Maintenance Facility on October 3, 2017, in accordance with the applicable NPDES General Permit requirements. Dry weather screening is used to detect illicit discharges into the stormwater system by inspecting the stormwater outfall/discharge point (OF/DP) at least 48 hours after a precipitation event. Typically, no water flow would be present at an OF/DP after this period of time following a precipitation event. Water flow in dry weather may indicate that a substance other than stormwater is present in the stormwater system. In addition to inspecting water flow, OF/DPs are visually inspected for damage and sediment. If standing or flowing water is present, it is inspected for color, odor, and abnormal growth.

If dry weather flow is observed at the time of the inspection and the source is not obvious, the inspector who identified the discharge shall continue and conduct an upstream source investigation to determine the origin of the flow. The initial investigation includes visual and olfactory observations upstream from the OF/DP. If necessary, relevant indicator field screening or dye tracing will be conducted.

If the origin of the flow is not identified during the visual upstream investigation, a grab sample is collected from the discharge for indicator field screening analysis. Indicator monitoring/field screening is the secondary tool utilized for dry weather flow without obvious indicators such as very high turbidity, strong odors or visible discharge. Screening may include some or all of the indicator parameters:

- Temperature
- pH
- Detergents (i.e., surfactants)
- Chlorine
- Ammonia (NH<sub>3</sub>-N)
- Turbidity
- Conductivity

Indicator parameters used to assess the dry weather flow shall be determined by the visual and olfactory observations and upstream source investigation. Additional grab samples may be collected and delivered for external laboratory analysis, only if additional test parameters are required for the source investigation.

## 2.0 / Dry Weather Screening Inspection

Structure ID:	Structure Type:	Location: Northeast corner of the building, south of
WMT-01.CB.DP	Catch Basin	then fence, west of the main driveway entrance in
		the parking lot.

## **Inspection Observations at WMT-01.CB.DP**

No flow or signs of an illicit discharge were observed at this location.

# 3.0 / Summary of Dry Weather Screening Inspection

AEG did not identify flow of any kind entering or leaving WMT-01.CB.DP during the dry weather field screening investigation at Transportation & Maintenance Facility. Additionally, the visual inspection did not identify any odors, colors, or other characteristics indicative of an illicit discharge or connection.



## 4.0 / Conclusion

It is the opinion of Arch Environmental Group, Inc. that no further screening or inspection is suggested for this round of dry weather screening. Dry weather screening will be conducted once every five years to continue to monitor for illicit discharges in accordance with the NPDES Permit Illicit Discharge Elimination requirements.



# **APPENDIX A**

Dry Weather Screening Inspections Logs





# **Screening Inspection Log**

Building:	Transportation and	Maintenance E	Building		Client	:	Waverly Con	nmunity Sc	hools	
Inspectors:	Andrew Kelly	Ben M	lark	Date 10/3/2017						
				Inspection Type:			Dry Weather Screening			
Structure Information:		_				_		_		
ID Number:	WMT-01.CB.DP	Structure Type	Catch Basin			Lat:	42.726328	Long:	84.600891	
Туре:	Discharge Point	Location:	Northeast cor	ner of the buil	ding, sout	h of then fer	ice, west of the m	ain driveway	entrance in the	
Outfall Dimensions	8"		parking lot.							
Observations:										
Standing Water Charact	<u>eristics</u>	<u>Flow</u>	Characteristic	<u>:s</u>			<u>Maintenance</u>			
Standing W	/ater: Yes	Flo	ow Observed:	No			Cleaning:	No		
(	Color: Clear	Sc	ource of Flow:	N/A			Blockages	No		
	Odor: No	Vel	ocity of Flow:	N/A			Structural Issues	None		
	Suds: No	]	Color of Flow:	N/A		] :	Structural Trend	Stable		
Sta	ining: No		Flow Odor	N/A			Stenciling:	No		
Oil Sh	neen: No		•			_			_	
Sev	wage: No	<u>Addi</u>	tional Comme	nts:						
Bacterial S	heen: No									
ļ.	Algae: No									
SI	imes: No									
Abnormal Gro										
Sample ID And Informat			Field Analysis	: Results:	Units:	Initials:	Photo ID:			
Sample Colle	cted? No		pH:		pH units					
	ound: 3rd Round		Temperature	:	Celsius					
Last Rain E	vent: >72 Hours		Surfactants:		mg/L					
Current Wea			Ammonia:		mg/L					
Screening Location			Chlorine:		mg/L					
Other Screening Acti			Turbidity:		NTU					
Condu	ıcted:		Conductivity:		uohm/cm				644	
Outfall Characteriza	tion: Unlikely							1 400		
			Equipment Ca	alibration:			1000	63		
Sample sent to	Lab: N/A		Date:	Cal. By:						

Arch Environmental Group 37720 Interchange Drive, Farmington Hills MI 48370



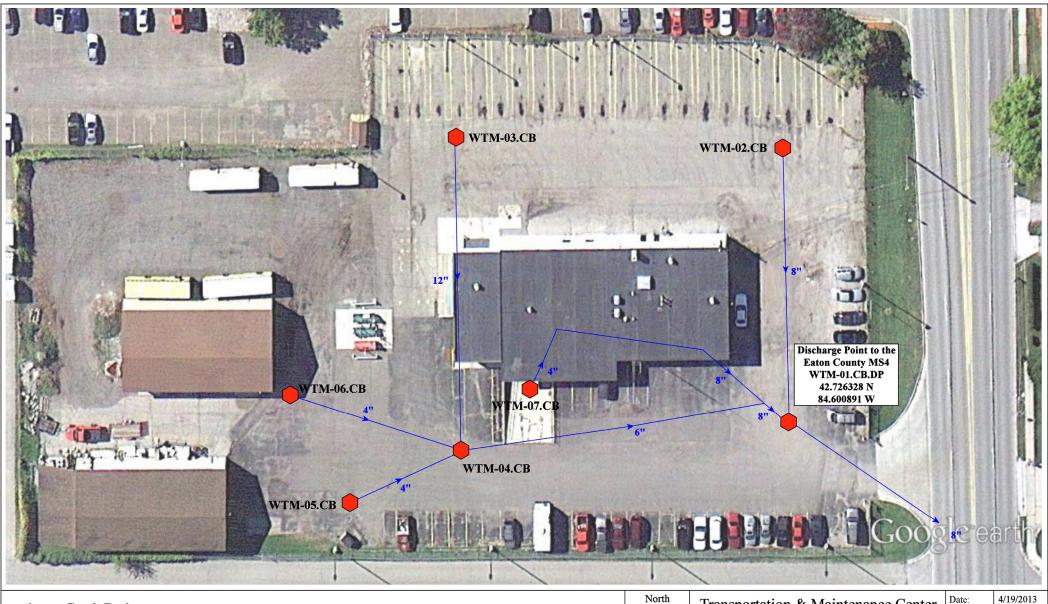
Phone: (248) 426-0135 Fax: (248) 426-0136 www.archenvgroup.com

# **APPENDIX B**

Storm Sewer System Site Map







= Catch Basin

Transportation & Maintenance Center	Date:	4/19/2013
•	Drawn by:	JOF
Waverly Community Schools	Reviewed:	CMC
(Augustian )	Page #:	1 of 1
environmental group	Scale:	Not to Scale