

Appendix C:

Outfall Inspections

Stormwater runoff enters storm drains and catch basins. Trash settles to the bottom, while runoff water is piped away. This trash is regularly cleaned out by Ardsley Highway Department. Pipes from the storm drains and catch basins form a runoff conveyance network which leads to larger outfall pipes that empty directly into local water bodies. Outfall pipes are inspected on a routine basis to check for illicit discharges such as paint, motor or cooking oil and sanitary sewage waste. NYSDEC requires that 20% of the outfall pipe system be inspected yearly, which means that a minimum of 11 sites in Ardsley must be inspected each year. Once all of the outfalls are inspected, the cycle begins again and continues on a permanent basis.

NYSDEC Inspection sheets:

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:

Outfall ID:

Today's date:

Time (Military):

Investigators:

Form completed by:

Temperature (°F):

Rainfall (in.): Last 24 hours:

Last 48 hours:

Latitude:

Longitude:

GPS Unit:

GPS LMK #:

Camera:

Photo #s:

Land Use in Drainage Area (Check all that apply):

☐ Industrial

☐ Ultra-Urban Residential

☐ Suburban Residential

☐ Commercial

☐ Open Space

☐ Institutional

Other: _____

Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION

MATERIAL

SHAPE

DIMENSIONS (IN.)

SUBMERGED

☐ Closed Pipe

☐ RCP

☐ CMP

☐ PVC

☐ HDPE

☐ Steel

☐ Other: _____

☐ Circular

☐ Elliptical

☐ Box

☐ Other: _____

☐ Single

☐ Double

☐ Triple

☐ Other: _____

Diameter/Dimensions: _____

In Water:

☐ No

☐ Partially

☐ Fully

With Sediment:

☐ No

☐ Partially

☐ Fully

☐ Open drainage

☐ Concrete

☐ Earthen

☐ rip-rap

☐ Other: _____

☐ Trapezoid

☐ Parabolic

☐ Other: _____

Depth: _____

Top Width: _____

Bottom Width: _____

☐ In Stream

(applicable when collecting samples)

Flow Present?

☐ Yes

☐ No

If No, Skip to Section 5

Flow Description (if present)

☐ Trickle

☐ Moderate

☐ Substantial

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS

PARAMETER

RESULT

UNIT

EQUIPMENT

☐ Flow #1

Volume

Time to fill

Flow depth

Flow width

Measured length

Time of travel

Sec

in

ft, in

ft, in

S

Bottle

Tape measure

Tape measure

Tape measure

Stop watch

☐ Flow #2

Temperature

pH

Ammonia

°F

pH Units

mg/L

Thermometer

Test strip/Probe

Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR

CHECK if Present

DESCRIPTION

RELATIVE SEVERITY INDEX (1-3)

Odor

☐

☐ Sewage

☐ Rancid/sour

☐ Sulfide

☐ Other:

☐ Petroleum/gas

☐ Red

☐ Other:

☐ 1 - Faint

☐ 2 - Easily detected

☐ 3 - Noticeable from a distance

Color

☐

☐ Clear

☐ Green

☐ Brown

☐ Orange

☐ Gray

☐ Red

☐ Yellow

☐ Other:

☐ 1 - Faint colors in sample bottle

☐ 2 - Clearly visible in sample bottle

☐ 3 - Clearly visible in outfall flow

Turbidity

☐

See severity

☐ 1 - Slight cloudiness

☐ 2 - Cloudy

☐ 3 - Opaque

Floatables -Does Not Include Trash!!

☐

☐ Sewage (Toilet Paper, etc.)

☐ Petroleum (oil sheen)

☐ Other:

☐ 1 - Few/slight; origin not obvious

☐ 2 - Some; indications of origin (e.g., possible suds or oil sheen)

☐ 3 - Same; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No (If No, Skip to Section 6)

INDICATOR

CHECK if Present

DESCRIPTION

COMMENTS

Outfall Damage

☐

☐ Spalling, Cracking or Chipping

☐ Corrosion

☐ Peeling Paint

Deposits/Status

☐

☐ Only

☐ Flow Line

☐ Paint

☐ Other:

Abnormal Vegetation

☐

☐ Excessive

☐ Inhibited

Poor pool quality

☐

☐ Odors

☐ Colors

☐ Floatables

☐ Oil Sheen

☐ Suds

☐ Excessive Algae

☐ Other:

Pipe benthic growth

☐

☐ Brown

☐ Orange

☐ Green

☐ Other:

Section 6: Overall Outfall Characterization

☐ Unlikely

☐ Potential (presence of two or more indicators)

☐ Suspect (one or more indicators with a severity of 3)

☐ Obvious

Section 7: Data Collection

1. Sample for the lab?

☐ Yes

☐ No

2. If yes, collected from:

☐ Flow

☐ Pool

3. Intermittent flow trap set?

☐ Yes

☐ No

If Yes, type:

☐ OBM

☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

“Stormwater Year” begins on March 10th and ends on March 9th every year. After the completion of Outfall Mapping, the Outfall Testing Cycle began in March 2007. Complete Outfall Testing Sheets with photos are published online at <http://www.ardsleyvillage.com/stormwater-project/pages/stormwater-management-program-annual-reports> every year as part of each Stormwater Management Annual Report. The Testing Schedule and results are presented in the following table. “NEG” indicates absence of illicit discharges, while “POS” indicates a suspected illicit discharge. In the case of a “POS” finding, actions taken are detailed in the last row of the table.

3/10/2007 – 3/9/2008					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ14	7/6/2007	NEG	AZ34	11/1/2007	NEG
AZ6	7/19/2007	NEG	AZ40	11/8/2007	NEG
AZ44	8/30/2007	NEG	AZ57	1/3/2008	NEG
AZ33	9/20/2007	NEG	AZ49	1/17/2008	NEG
AZ32	9/27/2007	NEG	AZ30	1/31/2008	NEG
AZ27	10/4/2007	NEG	AZ38	2/7/2008	NEG
AZ1	10/18/2007	NEG	AZ16	3/3/2008	NEG
OF183	10/25/2007	NEG			
Actions: None					

3/10/2008 – 3/9/2009					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ35	3/10/2008	NEG	AZ39	1/6/2009	NEG
AZ17	3/17/2008	NEG	AZ28	1/9/2009	NEG
AZ31	3/24/2008	NEG	AZ42	1/20/2009	NEG
AZ55	5/16/2008	NEG	AZ56	1/30/2009	NEG
AZ51	7/7/2008	NEG	A41	2/13/2009	NEG
AZ3	10/17/2008	POS			
AZ46	10/24/2008	NEG			
AZ43	12/5/2008	NEG			
Actions: AZ3/POS: Ammonia detected at Auto Body shop – decayed rat body in catch basin – citation letter sent by SMO - carcass removed and cleaned by property owner – outfall NEG following cleaning					

3/10/2009 – 3/9/2010					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
Az29	3/20/2009	NEG	AZ25	1/10/2010	NEG
AZ1	4/17/2009	NEG	AZ37	1/22/2010	NEG
AZ19	4/24/2009	NEG	AZ5	1/29/2010	NEG
AZ47	6/12/2009	NEG	AZ23	2/5/2010	NEG
Az12	11/6/2009	NEG			
AZ48	11/20/2009	NEG			
AZ50	11/20/2009	NEG			
AZ54	11/28/2009	NEG			
Actions: None					

3/10/2010 – 3/9/2011

Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ52	3/17/2010	NEG	AZ20	12/2/2010	NEG
AZ8	4/9/2010	NEG	AZ22	12/2/2010	NEG
AZ36	4/23/2010	NEG	AZ15	12/9/2010	NEG
AZ24	5/4/2010	NEG	AZ7	12/16/2010	NEG
AZ18	10/12/2012	NEG	AZ13	1/6/2011	NEG
AZ45	10/21/2010	NEG	AZ4	1/13/2011	NEG
AZ9	11/18/2010	NEG	AZ53	1/20/2011	NEG
AZ11	11/18/2010	NEG			

Actions: None

3/10/2011 – 3/9/2012

Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
OF30	3/17/2011	NEG	AZ25	10/31/2011	NEG
AZ21	4/7/2011	NEG	AZ29	11/7/2011	NEG
AZ47	4/14/2011	NEG	AZ32	1/9/2012	NEG
AZ16	5/5/2011	NEG	AZ28	1/30/2012	NEG
AZ38	5/12/2011	NEG	AZ42	2/6/2012	NEG
AZ33	5/24/2011	NEG	AZ34	2/13/2012	NEG
AZ14	6/2/2011	NEG	AZ19	2/27/2012	NEG
AZ52	6/15/2011	NEG	AZ35	3/5/2012	NEG

Actions: None

3/10/2012 – 3/9/2013

Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
OF183	3/12/2012	NEG	AZ57	11/12/2012	NEG
AZ6	5/7/2012	NEG	AZ51	11/19/2012	NEG
AZ44	6/14/2012	NEG	AZ49	11/26/2012	NEG
AZ31	9/11/2012	NEG	AZ46	12/3/2012	NEG
AZ30	9/17/2012	NEG	AZ55	12/10/2012	NEG
AZ40	9/20/2012	NEG	AZ17	12/17/2012	NEG
AZ23	10/22/2012	NEG	AZ39	1/17/2013	NEG
AZ3	10/22/2012	NEG	AZ27	3/5/2013	NEG

Actions: None

3/10/2013 – 3/9/2014					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ41	3/11/2013	NEG	AZ53	8/21/2013	NEG
AZ48	3/18/2013	NEG	AZ54	8/21/2013	NEG
AZ50	3/18/2013	NEG	AZ56	12/2/2013	NEG
AZ43	4/8/2013	NEG	AZ21	12/16/2013	NEG
AZ1	4/15/2013	NEG	AZ12	1/13/2014	NEG
AZ9	5/13/2013	NEG	AZ5	1/27/2014	NEG
AZ11	5/13/2018	NEG			
AZ23	5/20/2018	NEG			
Actions: None					

3/10/2014 – 3/9/2015					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ8	3/24/2014	NEG	AZ36	10/20/2014	NEG
AZ20	4/21/2014	NEG	AZ28	11/3/2014	NEG
AZ22	4/21/2014	NEG	AZ16	11/24/2014	POS
AZ7	6/24/2014	NEG	AZ33	12/11/2014	NEG
AZ4	6/24/2014	NEG	AZ47	12/8/2014	NEG
AZ18	6/26/2014	NEG	AZ14	12/16/2014	NEG
AZ24	7/11/2014	NEG	AZ52	12/22/2014	NEG
AZ2	8/15/2014	NEG	AZ29	1/5/2015	NEG
AZ45	9/8/2014	NEG	AZ38	1/14/2015	NEG
AZ15	9/29/2014	NEG	AZ25	1/22/2015	POS
AZ37	10/6/2014	NEG			
Actions: AZ16/POS: Ammonia detected in Supermarket catch basin (CB) - dumpster runoff into CB – citation letter sent by SMO - CB cleaned out - outfall NEG following cleaning AZ25/POS: pH 8.0 - concrete mix runoff from Housing Unit construction site - SMO advises re-testing upon completion of construction phase					

3/10/2015 – 3/9/2016					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ34	3/30/2015	NEG	AZ6	8/4/2015	NEG
AZ32	4/13/2015	NEG	AZ44	8/20/2015	NEG
AZ19	4/27/2015	NEG	AZ31	8/26/2015	NEG
AZ13	5/11/2015	NEG	AZ23	8/31/2015	NEG
AZ44	6/1/2015	NEG	AZ55	11/13/2015	NEG
AZ57	6/8/2015	NEG	AZ40	12/4/2015	NEG
AZ35	6/22/2015	NEG	AZ46	12/11/2015	NEG
AZ3	7/8/2015	NEG	AZ14	1/12/2016	NEG
AZ30	7/21/2015	NEG	AZ42	1/15/2016	NEG
AZ49	7/29/2015	NEG			NEG
Actions: None					

3/10/2016 – 3/9/2017					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ17	4/8/2016	NEG	AZ41	10/7/2016	NEG
AZ39	4/15/2016	NEG	AZ56	11/28/2016	NEG
AZ27	5/6/2016	NEG	AZ21	12/9/2016	NEG
AZ53	6/16/2016	NEG	AZ12	12/20/2016	NEG
AZ54	6/16/2016	NEG	AZ36	1/6/2017	NEG
AZ51	6/22/2016	NEG	AZ9	1/13/2017	NEG
AZ50	8/3/2016	NEG	AZ11	1/13/2017	NEG
AZ48	8/3/2016	NEG	AZ5	3/3/2017	NEG
Actions: None					

3/10/2017 – 3/9/2018					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ45	3/17/2017	NEG	AZ2	9/14/2017	NEG
AZ8	4/7/2017	NEG	AZ44	10/6/2017	NEG
AZ1	4/28/2017	NEG	AZ29	10/17/2017	NEG
AZ18	5/30/2017	NEG	AZ19	10/27/2017	NEG
AZ33	6/8/2017	NEG	AZ61	11/16/2017	NEG
AZ37	6/21/2017	NEG	AZ28	11/21/2017	NEG
AZ47	6/27/2017	NEG	AZ58	12/22/2017	NEG
AZ16	7/25/2017	POS	AZ59	12/22/2017	NEG
AZ7	8/1/2017	NEG	AZ60	1/9/2018	NEG
AZ16 (retest)	8/4/2017	POS	AZ38	1/19/2018	NEG
AZ20	8/8/2017	NEG	AZ40	2/6/2018	NEG
AZ22	8/8/2017	NEG	AZ46	2/20/2018	NEG
AZ15	8/15/2017	NEG	AZ42	3/6/2018	NEG
Actions: AZ16/POS (7/25/2017): Ammonia detected in Supermarket catch basin (CB) – trap for dumpster runoff needs cleaning – citation letter sent by SMO – trap for CB cleaned out AZ16/POS (retest 8/4/2017): Decreased ammonia detected in Supermarket catch basin (CB) – additional cleaning					

3/10/2018 – 3/9/2019					
Outfall ID #	Date Inspected	Result	Outfall ID #	Date Inspected	Result
AZ25	3/23/2018	NEG	AZ31	6/22/2018	NEG
AZ32	4/10/2018	NEG	AZ43	7/20/2018	NEG
AZ30	4/27/2018	NEG	AZ17	7/27/2018	NEG
AZ23	5/1/2018	NEG			
AZ34	5/15/2018	NEG			
AZ57	6/1/2018	NEG			
AZ35	6/8/2018	NEG			
AZ24	6/12/2018	NEG			
Actions: None					