LOUDOUN WATER

PO Box 4000 | 44865 Loudoun Water Way | Ashburn, VA 20146
TEL 571.291.7700 | FAX 571.223.2910

WWW.LOUDOUNWATER.ORG

VA DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN
AUG 18 2010
REGIONAL OFFICE
WOODBRIDGE, VA

August 16, 2010

Ms. Anna Westernik
Environmental Specialist II
Commonwealth of Virginia
Department of Environmental Quality
13901 Crown Court
Woodbridge, VA 22193-1453

RE: Reissuance of VPDES Permit Application No. VA0090573
Beacon Hill Water Treatment Plant

Dear Ms. Westernik:

Please find enclosed Loudoun Water's submission for reapplication for the referenced permit.

Should you have any questions, please feel free to contact me.

Sincerely,

Todd A. Danielson, P.E., BCEE
Manager of Community Systems

Enclosure

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Todd Danielson

Owner: Loudoun Water

Applicant's Address: PO Box 4000

Ashburn VA 20146

Agent's Telephone Number: 571-291-7835

Authorizing Agent: _____
Signature

VPDES Permit No. VA0061280
VICA STP

Please return to:

Anna Westernik
VA-DEQ, NRO
13901 Crown Court
Woodbridge, VA 22193-1453
Fax: (703)583-3821

Please print or type in the unshaded areas only
(fill–in areas are spaced for elite type, i.e., 12 char. /inch).

Form Approv OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F D

LABEL ITEMS

I. EPA I.D. NUMBER
III. FACILITY NAME
V. FACILITY MAILING ADDRESS
VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill–in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill–in area*(s)* below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold–faced terms**.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP Beacon Hill Water Treatment Plant

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*		
2 Dale Hammes, General Manager	571	291	7700

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 P.O. Box 4000

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Ashburn	VA	20146

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 17132 Winning Colors Place

B. COUNTY NAME: Loudoun

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Leesburg	VA	20175	

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
4941	N/A
(specify) ~~Sewage System~~ Water Treatment Plant	(specify) N/A

C. THIRD	D. FOURTH
N/A	N/A
(specify) N/A	(specify) N/A

VIII. OPERATOR INFORMATION

A. NAME: Loudoun County Sanitation Authority

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box; if "Other", specify.)*
F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC *(other than federal or state)*, O = OTHER *(specify)*: M

D. PHONE *(area code & no.)*: A 571 291 7835

E. STREET OR P.O. BOX: P.O. Box 4000

F. CITY OR TOWN: Ashburn | G. STATE: VA | H. ZIP CODE: 20146

IX. INDIAN LAND
Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*: 9 N VA0090573	D. PSD *(Air Emissions from Proposed Sources)*: 9 P N/A
B. UIC *(Underground Injection of Fluids)*: 9 U N/A	E. OTHER *(specify)*: 9 N/A (specify)
C. RCRA *(Hazardous Wastes)*: 9 R N/A	E. OTHER *(specify)*: 9 N/A (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

The Loudoun County Sanitation Authority is a public body politic and corporate created under the provisions of the Virginia Water and Sewer Authorities Act for the purpose of providing public water and sewer to unincorporated areas within Loudoun County, Virginia. The Beacon Hill Water Treatment Plant is owned and operated by the LCSA, and it treats backwash flow from the Beacon Hill Water Treatment Facility.

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Dale Hammes, General Manager	Dale G. Hammes	8/16/10

COMMENTS FOR OFFICIAL USE ONLY

C

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Loudoun County Sanitation Authority
   Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Y / N

3. **Provide the tax map parcel number for the land where the discharge is located.**
   PIN 268-17-0561
4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 0

5. **What is the design average effluent flow of this facility?** <0.0080 MGD
   For industrial facilities, provide the max. 30-day average production level, include units:
   <0.0010 MGD

   In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / N
   If "Yes", please identify the other flow tiers (in MGD) or production levels: _____
   Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. **Nature of operations generating wastewater:**
   Backwash from the 2 Greensand Filters

   ____% of flow from domestic connections/sources
   Number of private residences to be served by the treatment works:

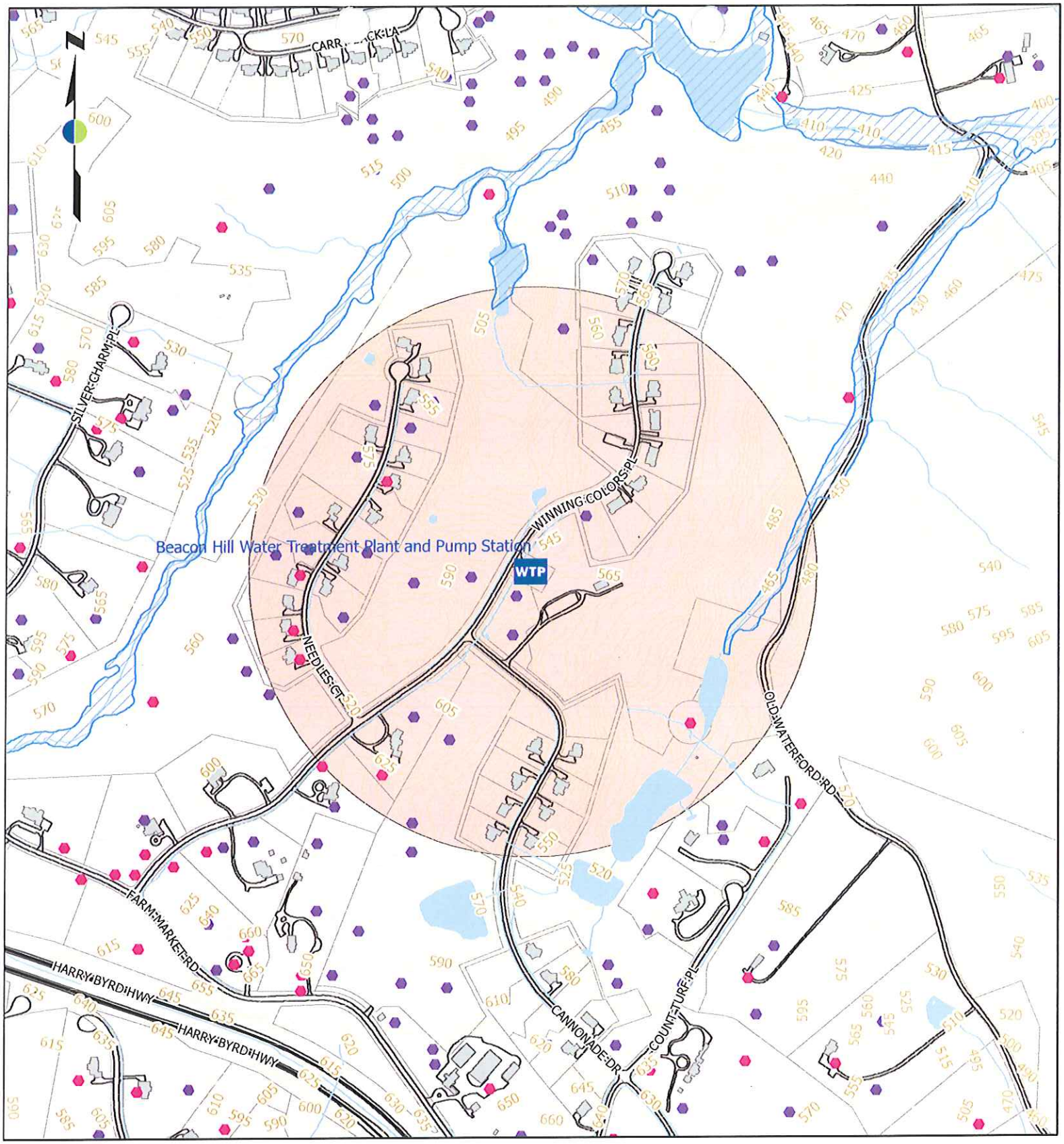
   100% of flow from non-domestic connections/sources

7. **Mode of discharge:** ____Continuous __X__Intermittent ____Seasonal
   Describe frequency and duration of intermittent or seasonal discharges: Approximately once per month

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**
   __ Permanent stream, never dry
   __ Intermittent stream, usually flowing, sometimes dry (Clark's Run)
   __ Ephemeral stream, wet-weather flow, often dry
   __ Effluent-dependent stream, usually or always dry without effluent flow
   X Lake or pond at or below the discharge point Overflow goes to Limestone Branch, UT
   __ Other: _____

9. **Approval Date(s):**
   O & M Manual March 15, 2002 **Sludge/Solids Management Plan** March 15, 2002

   Have there been any changes in your operations or procedures since the above approval dates? Y / N



These data are confidential and may not be copied or distributed without Loudoun Water's permission. Water and wastewater data are the property of Loudoun Water. Base map data are the property of Loudoun County Office of Mapping and Geographic Information (all rights reserved).

These data and all maps thereby derived are considered best available information and are provided "as-is" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use.

Prepared by the Loudoun Water GIS Department; please report errors and updates to: GISSupport@loudounwater.org.

0 600 1,200 2,400 Feet

1 inch = 600 feet

WTP Treatment Plant
Well
Sewage Disposal System
100 Yr Floodplain
5 Ft Contours
1/4 Mile Buffer

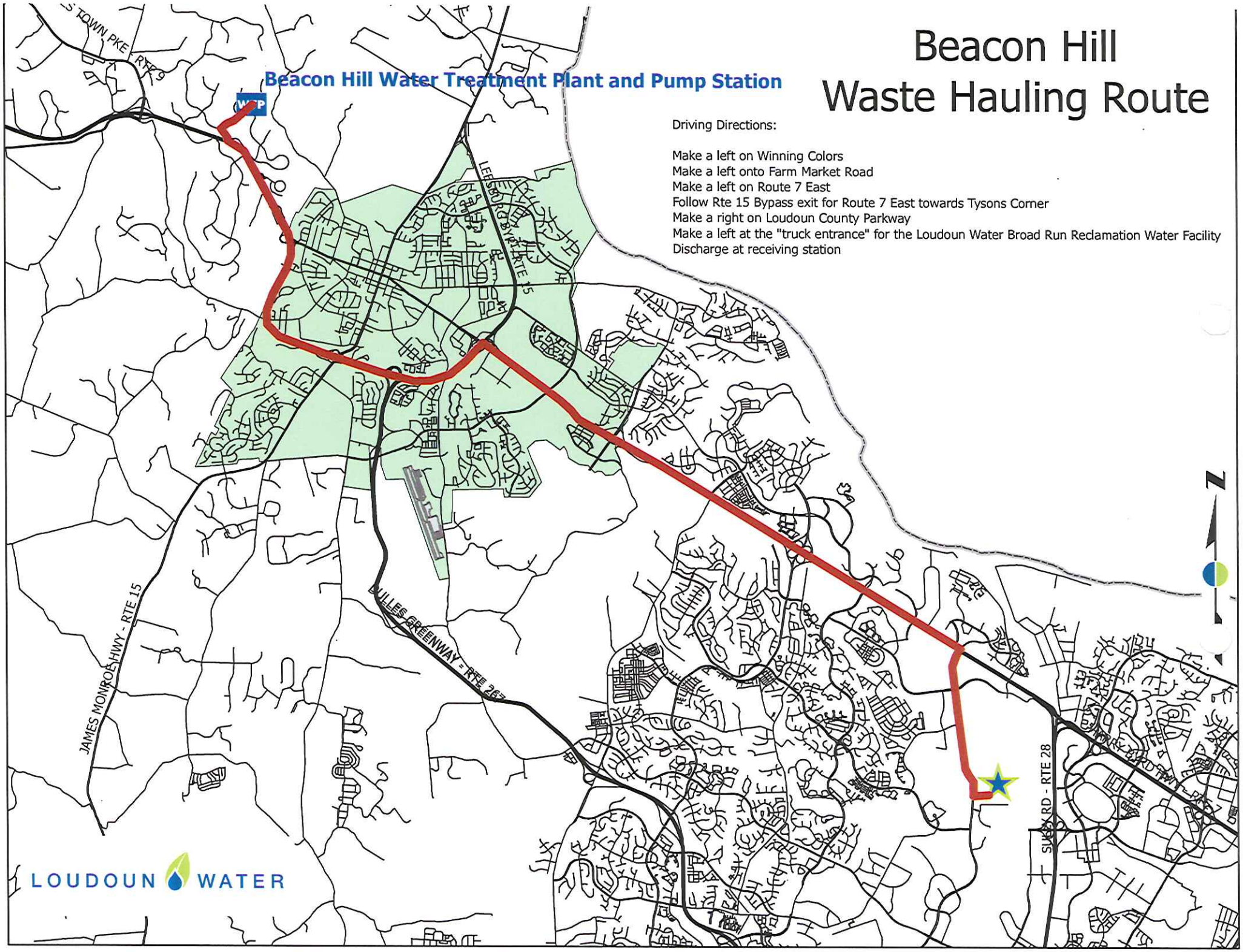
LOUDOUN WATER

Beacon Hill
April 2010

Beacon Hill
Waste Hauling Route

Driving Directions:

Make a left on Winning Colors
Make a left onto Farm Market Road
Make a left on Route 7 East
Follow Rte 15 Bypass exit for Route 7 East towards Tysons Corner
Make a right on Loudoun County Parkway
Make a left at the "truck entrance" for the Loudoun Water Broad Run Reclamation Water Facility
Discharge at receiving station



Print Form

Please print or type in the unshaded areas only.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*

Form Approved
OMB No. 2040-0086
Approval expires 5-31-92

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER *(list)*	B. LATITUDE 1. DEG.	2. MIN.	3. SEC.	C. LONGITUDE 1. DEG.	2. MIN.	3. SEC.	D. RECEIVING WATER *(name)*
	39	08'	32"	77	25'	23"	Limestone Branch, UT

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined *(e.g., for certain mining activities)*, provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. *(list)*	2. OPERATION(S) CONTRIBUTING FLOW a. OPERATION *(list)*	b. AVERAGE FLOW *(include units)*	3. TREATMENT a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	Backwash of filters going into a holding tank for settling	.0063 mgd	Settling tank chlorine from backwash water and dechlorination		

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ YES *(complete the following table)* ☐ NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY a. DAYS PER WEEK *(specify average)*	3. FREQUENCY b. MONTHS PER YEAR *(specify average)*	4. FLOW a. FLOW RATE *(in mgd)* 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE *(in mgd)* 2. MAXIMUM DAILY	4. FLOW b. TOTAL VOLUME *(specify with units)* 1. LONG TERM AVERAGE	4. FLOW b. TOTAL VOLUME *(specify with units)* 2. MAXIMUM DAILY	4. FLOW c. DURATION *(in days)*
001	Backwash water for filters	once per 4 weeks	12	.0063 mgd	.008 mgd	N/A	N/A	1 day for approx. 2 hours a month

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ YES *(complete Item III-B)* ☐ NO *(to to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ YES *(complete Item III-C)* ☒ NO *(go to Section IV)*

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	2. AFFECTED OUTFALLS *(list outfall numbers)*
	N/A		

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES *(complete the following table)* ☒ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. NO.	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE a. REQUIRED	4. FINAL COMPLIANCE DATE b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affect your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUE ON PAGE 3

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding — Complete one set of tables for each outfall — Annotate the outfall number in the space provided. NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Iron Manganese Color Residual chlorine is present, but wastewater is dechlorinated before discharge.	Backwash water is coming from iron and manganese removal filters. 5/12/10 Iron= .80 mg/l 5/13/10 Iron= 1.5 mg/l 5/14/10 Iron= .26 mg/l 5/12/10 Manganese= 56 mg/l 5/13/10 Manganese= .10 mg/l 5/14/10 Manganese= 17.1 mg/l		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES *(list all such pollutants below)* ☒ NO *(go to Item VI-B)*

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES *(identify the test(s) and describe their purposes below)* ☒ NO *(go to Section VIII)*

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ YES *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ NO *(go to Section IX)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code & no.)*	D. POLLUTANTS ANALYZED *(list)*

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE *(type or print)*	B. PHONE NO. *(area code & no.)*
Dale C. Hammes, General Manager	703-771-1095
C. SIGNATURE Dale C Hammes	D. DATE SIGNED 8/16/10

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets *(use the same format)* instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

OUTFALL NO.

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

See Attachment

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)												
e. Ammonia (as N)												
f. Flow	VALUE		VALUE		VALUE					VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X' a. BELIEVED PRESENT	b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual														
c. Color														
d. Fecal Coliform														
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (as N)														

CONTINUE ON REVERSE

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease														
i. Phosphorus (as P), Total (7723-14-0)														
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO_4) (14808-79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO_3) (14265-45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)														
p. Barium, Total (7440-39-3)														
q. Boron, Total (7440-42-8)														
r. Cobalt, Total (7440-48-4)														
s. Iron, Total (7439-89-6)														
t. Magnesium, Total (7439-95-4)														
u. Molybdenum, Total (7439-98-7)														
v. Manganese, Total (7439-96-5)														
w. Tin, Total (7440-31-5)														
x. Titanium, Total (7440-32-6)														

N/A

CONTINUE ON PAGE V-3

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table *(all 7 pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)															
2M. Arsenic, Total (7440-38-2)															
3M. Beryllium, Total, 7440-41-7)															
4M. Cadmium, Total (7440-43-9)															
5M. Chromium, Total (7440-47-3)															
6M. Copper, Total (7440-50-8)															
7M. Lead, Total (7439-92-1)															
8M. Mercury, Total (7439-97-6)															
9M. Nickel, Total (7440-02-0)															
10M. Selenium, Total (7782-49-2)															
11M. Silver, Total (7440-22-4)															
12M. Thallium, Total (7440-28-0)															
13M. Zinc, Total (7440-66-6)															
14M. Cyanide, Total (57-12-5)															
15M. Phenols, Total															
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)				DESCRIBE RESULTS											

N/A

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)															
2V. Acrylonitrile (107-13-1)															
3V. Benzene (71-43-2)															
4V. Bis (Chloromethyl) Ether (542-88-1)															
5V. Bromoform (75-25-2)															
6V. Carbon Tetrachloride (56-23-5)															
7V. Chlorobenzene (108-90-7)															
8V. Chlorodibromomethane (124-48-1)															
9V. Chloroethane (75-00-3)															
10V. 2-Chloroethylvinyl Ether (110-75-8)															
11V. Chloroform (67-66-3)															
12V. Dichlorobromomethane (75-27-4)															
13V. Dichlorodifluoromethane (75-71-8)															
14V. 1,1-Dichloroethane (75-34-3)															
15V. 1,2-Dichloroethane (107-06-2)															
16V. 1,1-Dichloroethylene (75-35-4)															
17V. 1,2-Dichloropropane (78-87-5)															
18V. 1,3-Dichloropropylene (542-75-6)															
19V. Ethylbenzene (100-41-4)															
20V. Methyl Bromide (74-83-9)															
21V. Methyl Chloride (74-87-3)															

N/A

CONTINUE ON PAGE V-5

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (If available)		c. LONG TERM AVRG. VALUE (If available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)															
23V. 1,1,2,2-Tetrachloroethane (79-34-5)															
24V. Tetrachloroethylene (127-18-4)															
25V. Toluene (108-88-3)															
26V. 1,2-Trans-Dichloroethylene (156-60-5)															
27V. 1,1,1-Trichloroethane (71-55-6)															
28V. 1,1,2-Trichloroethane (79-00-5)															
29V. Trichloroethylene (79-01-6)															
30V. Trichlorofluoromethane (75-69-4)															
31V. Vinyl Chloride (75-01-4)															
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)											N/A				
2A. 2,4-Dichlorophenol (120-83-2)															
3A. 2,4-Dimethylphenol (105-67-9)															
4A. 4,6-Dinitro-O-Cresol (534-52-1)															
5A. 2,4-Dinitrophenol (51-28-5)															
6A. 2-Nitrophenol (88-75-5)															
7A. 4-Nitrophenol (100-02-7)															
8A. P-Chloro-M-Cresol (59-50-7)															
9A. Pentachlorophenol (87-86-5)															
10A. Phenol (108-95-2)															
11A. 2,4,6-Trichlorophenol (88-06-2)															

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)															
2B. Acenaphtylene (208-96-8)															
3B. Anthracene (120-12-7)															
4B. Benzidine (92-87-5)															
5B. Benzo *(a)* Anthracene (56-55-3)															
6B. Benzo *(a)* Pyrene (50-32-8)															
7B. 3,4-Benzo-fluoranthene (205-99-2)															
8B. Benzo *(ghi)* Perylene (191-24-2)															
9B. Benzo *(k)* Fluoranthene (207-08-9)															
10B. Bis *(2-Chloro-ethoxy)* Methane (111-91-1)															
11B. Bis *(2-Chloro-ethyl)* Ether (111-44-4)															
12B. Bis *(2-Chloroiso-propyl)* Ether (102-60-1)															
13B. Bis *(2-Ethyl-hexyl)* Phthalate (117-81-7)															
14B. 4-Bromo-phenyl Phenyl Ether (101-55-3)															
15B. Butyl Benzyl Phthalate (85-68-7)															
16B. 2-Chloro-naphthalene (91-58-7)															
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)															
18B. Chrysene (218-01-9)															
19B. Dibenzo *(a,h)* Anthracene (53-70-3)															
20B. 1,2-Dichloro-benzene (95-50-1)															
21B. 1,3-Dichloro-benzene (541-73-1)															

N/A

CONTINUE ON PAGE V-7

EPA I.D. NUMBER (copy from Item I of Form 1)	OUTFALL NUMBER

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)															
23B. 3,3'-Dichlorobenzidine (91-94-1)															
24B. Diethyl Phthalate (84-66-2)															
25B. Dimethyl Phthalate (131-11-3)															
26B. Di-N-Butyl Phthalate (84-74-2)															
27B. 2,4-Dinitrotoluene (121-14-2)															
28B. 2,6-Dinitrotoluene (606-20-2)															
29B. Di-N-Octyl Phthalate (117-84-0)															
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)															
31B. Fluoranthene (206-44-0)															
32B. Fluorene (86-73-7)															
33B. Hexachlorobenzene (118-74-1)															
34B. Hexachlorobutadiene (87-68-3)															
35B. Hexachlorocyclopentadiene (77-47-4)															
36B. Hexachloroethane (67-72-1)															
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)															
38B. Isophorone (78-59-1)															
39B. Naphthalene (91-20-3)															
40B. Nitrobenzene (98-95-3)															
41B. N-Nitrosodimethylamine (62-75-9)															
42B. N-Nitrosodi-N-Propylamine (621-64-7)															

N/A

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS *(continued)*															
43B. N-Nitrosodiphenylamine (86-30-6)															
44B. Phenanthrene (85-01-8)															
45B. Pyrene (129-00-0)															
46B. 1,2,4-Trichlorobenzene (120-82-1)															
GC/MS FRACTION — PESTICIDES															
1P. Aldrin (309-00-2)															
2P. α-BHC (319-84-6)															
3P. β-BHC (319-85-7)															
4P. γ-BHC (58-89-9)															
5P. δ-BHC (319-86-8)															
6P. Chlordane (57-74-9)															
7P. 4,4'-DDT (50-29-3)															
8P. 4,4'-DDE (72-55-9)															
9P. 4,4'-DDD (72-54-8)															
10P. Dieldrin (60-57-1)															
11P. α-Endosulfan (115-29-7)															
12P. β-Endosulfan (115-29-7)															
13P. Endosulfan Sulfate (1031-07-8)															
14P. Endrin (72-20-8)															
15P. Endrin Aldehyde (7421-93-4)															
16P. Heptachlor (76-44-8)															

N/A

CONTINUE ON PAGE V-9

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION — PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)															
18P. PCB-1242 (53469-21-9)															
19P. PCB-1254 (11097-69-1)															
20P. PCB-1221 (11104-28-2)															
21P. PCB-1232 (11141-16-5)															
22P. PCB-1248 (12672-29-6)															
23P. PCB-1260 (11096-82-5)															
24P. PCB-1016 (12674-11-2)															
25P. Toxaphene (8001-35-2)															

N/A

MARTEL

Sensible Scientific Solutions

Certificate of Analysis

Wednesday, September 24, 2008

Prepared expressly for:

Loudoun County Sanitation Authority
16316 Limestone Court

Leesburg, VA 20177

Attention: Marnie Mix

FINAL

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NOV 1 2010
DEQ-NRO

Report for Lab No: 57841.
Samples Picked up by Martel.
P.O. Number: 20050144
Project Identification: Beacon Hill WTP - Sample Analysis Collected on 9/3/08.

MARTEL NO. 57841 000001 Entry Point — CLIENT SAMPLE IDENTIFICATION — Sample Date/Time 09/03/2008 11:02

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Nitrate-Nitrite Nitrogen	<0.02	mg/l	SM 4500N03-H	0.02	09/19/2008 12:30 GS

MARTEL NO. 57841 000002 Entry Point — CLIENT SAMPLE IDENTIFICATION — Sample Date/Time 09/03/2008 11:09

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Volatile Organic Compounds	Results	Follow	EPA 524.2		09/09/2008 06:57 CJD
					/ /
Benzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Bromobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Bromochloromethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Bromodichloromethane	0.7	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Bromoform	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Bromomethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
n-Butylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
sec-Butylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
tert-Butylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Carbon tetrachloride	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Chlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Chloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Chloromethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Chloroform	0.5	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
2-Chlorotoluene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
4-Chlorotoluene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Dibromochloromethane	0.7	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Dibromomethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2-Dichlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,3-Dichlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,4-Dichlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Dichlorodifluoromethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1-Dichloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2-Dichloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD

MARTEL NO. 57841 000002 Entry Point

CLIENT SAMPLE IDENTIFICATION

Sample Date/Time 09/03/2008 11:09

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
1,1-Dichloroethene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
cis-1,2-Dichloroethene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
trans-1,2-Dichloroethene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2-Dichloropropane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,3-Dichloropropane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
2,2-Dichloropropane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1-Dichloropropene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
cis-1,3-Dichloropropene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
trans-1,3-Dichloropropene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Ethylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Hexachlorobutadiene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Isopropylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
4-Isopropyltoluene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Dichloromethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Methyl-t-butyl ether	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Naphthalene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
n-Propylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Styrene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1,1,2-Tetrachloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1,2,2-Tetrachloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Tetrachloroethene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Toluene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2,3-Trichlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2,4-Trichlorobenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1,1-Trichloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,1,2-Trichloroethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Trichloroethene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Trichlorofluoromethane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2,3-Trichloropropane	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,2,4-Trimethylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
1,3,5-Trimethylbenzene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Vinyl chloride	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Ortho-Xylenes	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
(m+p)-Xylene	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
Xylene, Total	ND	ug/l	EPA 524	0.5	09/09/2008 06:57 CJD
					/ /
Surrogate Spike					/ /
					/ /
1,2-Dichlorobenzene-d4	88	%	EPA 524		09/09/2008 06:57 CJD
4-Bromofluorobenzene	91	%	EPA 524		09/09/2008 06:57 CJD
					/ /

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MARTEL NO. 57841 000003 Entry Point — CLIENT SAMPLE IDENTIFICATION — Sample Date/Time 09/03/2008 11:01

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Cyanide (total)	<0.005	mg/l	SM 4500CN-E	0.005	09/09/2008 09:30 CB

MARTEL NO. 57841 000004 Entry Point — CLIENT SAMPLE IDENTIFICATION — Sample Date/Time 09/03/2008 11:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Fluoride	0.22	mg/l	SM 4500FC	0.1	09/08/2008 11:30 KA
Total Dissolved Solids	220	mg/l	SM 2540C	5	09/05/2008 13:15 TB
Color, by Taylor Color Comparator	<5	chloroplas	EPA 110.2	1	09/04/2008 15:00 TB
Chloride	17	mg/l	SM 4500-CL-E	1	09/10/2008 10:15 GS
Sulfate	21	mg/l	EPA 300.0	0.5	09/22/2008 12:15 TB
Hydrogen Sulfide	<0.1	mg/l	EPA 15		09/16/2008 08:00 KA
Bicarbonates (as CaCO3)	130	mg/l	SM 2320B	1	09/10/2008 11:45 TB
Hardness (total) (calc)	200	mg/l	SM 2340B	1	09/08/2008 14:51 KA
Conductance (Specific)	370	umhos/cm	EPA 120.1	1	09/11/2008 14:55 MA
pH	7.64		EPA 150.1		09/04/2008 08:50 KM
Sulfide	<0.1	mg/l	SM 4500S-D	0.1	09/09/2008 15:17 KA

MARTEL NO. 57841 000005 Entry Point — CLIENT SAMPLE IDENTIFICATION — Sample Date/Time 09/03/2008 11:04

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Aluminum	<0.005	mg/l	EPA 200.8	0.005	09/10/2008 11:43 BHF
Antimony	<0.005	mg/l	EPA 200.8	0.005	09/10/2008 11:43 BHF
Arsenic	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Barium	0.29	mg/l	EPA 200.8	0.005	09/10/2008 11:43 BHF
Beryllium	<0.0005	mg/l	EPA 200.8	0.0005	09/10/2008 11:43 BHF
Cadmium	<0.0005	mg/l	EPA 200.8	0.0005	09/10/2008 11:43 BHF
Chromium	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Copper	0.007	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Iron	<0.05	mg/l	EPA 200.7	0.05	09/10/2008 09:51 AC
Lead	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Magnesium	16	mg/l	EPA 200.7	0.1	09/10/2008 13:22 AC
Manganese	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Mercury	<0.005	mg/l	EPA 245.1	0.005	09/05/2008 15:40 SCN
Nickel	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Selenium	<0.005	mg/l	EPA 200.8	0.005	09/10/2008 11:43 BHF
Sodium	11	mg/l	EPA 200.7	0.5	09/10/2008 13:22 AC
Titanium	<0.002	mg/l	EPA 200.8	0.002	09/10/2008 11:43 BHF
Potassium	5.1	mg/l	EPA 200.7	0.05	09/10/2008 13:22 AC
Silver	<0.001	mg/l	EPA 200.8	0.001	09/10/2008 11:43 BHF
Zinc	0.0207	mg/l	EPA 200.8	0.01	09/10/2008 11:43 BHF

MARTEL

Sensible Scientific Solutions

Martel Laboratories *JDS* **Inc.**
1025 Cromwell Bridge Road - Baltimore, Maryland 21286
PH 410-825-7790 FAX 410-821-1054 EMAIL: vk@martellabs.com

LCSA

All Procedures used are in accordance with the following methods:

"Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983. "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992. "Determination of trace elements in waters and wastes by inductively coupled plasma - Mass Spectrometry ", EPA 200.8, U.S. EPA Cincinnati, 1994. "Methods for the Determination of Organic Compounds in Drinking Water", EPA 600/4-88/039, U.S. EPA Cincinnati, December 1988.

QC _____

Date 9/24/5

Approved Amber J Andyshak

Date 9/24/08

MARTEL CHAIN OF CUSTODY/SAMPLE INFORMATION FORM

57841

Martel Laboratories JDS Inc. * 1025 Cromwell Bridge Road * Baltimore, MD 21286 * 410-825-7790 * 410-821-1054

MARTEL Log # **Client Code:**
Client Name: Loudoun Water
Phone/Fax: 703-777-6577 / 703-777-1407
Client Address: 16316 Limestone Court Leesburg, VA. 20176
Invoice Address: PO Box 4000, Ashburn, VA 20146

Samplers:
Project Name/# Beacon Hill WTP
PWSID # 610 7037
Contract/PO Number:
Sample Turnaround Time: 20 days

Station No. Sample ID	Station Location	Matrix	Container Description/ Preservation Status	Potentially Hazardous?	No. of Containers	Date	Time	Analyses Required/Comments
	Entry Point	DW	950 ml Plastic with H2SO4	NO	1	09/03/2008	(1102)	Nitrate/Nitrite
	Entry Point	DW	2, 40 ml Glass VOA Vials with NASO4 filled 1/2 way then preserved with HCL	NO	2	09/03/2008	(1106 & 1109)	VOC's
	Entry Point	DW	500 ml Plastic with NaOH	NO	1	09/03/2008	(1101)	Cyanide
	Entry Point	DW	950 ml Plastic with no pres	NO	1	09/03/2008	(1100)	Inorganics: Fluoride, Total Dissolved Solids, Color, Chloride, Sulfates, Hydrogen Sulfide, Bicarbonate Alkalinity, Calcium Hardness, Total Hardness (as CaCO3), Conductivity, Corrosion Index
	Entry Point	DW	950 ml Plastic with HNO3	NO	1	09/03/2008	(1104)	Metals: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Fe, Pb, Mg, Mn, Hg, Ni, Se, Na, Ti, K, Ag, and Zn.
	Trip Blank	W	2, 40 ml Glass VOA Vials with HCL	NO	2	9/4/08	1015	VOC's

Transferred by:	Received by:	Date:	Time:
[signature]	[signature]	09/03/08	1235
[signature]	[signature]	9-4	10:40

Cooler Receipt Information (LAB USE ONLY)
Sufficient ice? Yes / No If No, temp = _____
Sample containers pres'd? Yes / No If No, explain: _____
Custody Seal present/intact? Yes / No LM
Initials: KM Date: 9/4

Beacon Hill Treated Water										
				Inorganics (mg/L)						
Sample Date	Location	Cyanide (mg/l)	N03+NO2 (mg/l)	Fluoride	Solids (Dissolved)	Color (cpu)chloro plas	Chloride	Sulfate	Sulfide	Calcium as Calcium Carbonate
7/16/2008	17040 Needles Court									
7/15/2008	17078 Needles Court									
7/15/2008	17092 Needles Court									
7/16/2008	17157 Needles Court									
7/15/2008	40748 Black Gold									
9/3/2008	Entry Point	<0.005	<0.02	0.22	220	<5	17	21	<0.1	130
9/23/2008	Entry Point									
7/13/2009	Entry Point		ND							
7/13/2010	301 Needles Court									

RECEIVED
OCT 26 2010
DEQ-NRO

					Rads (pCi/l)				Metals (mg/L)			
Hardness (Total)	Alkalinity	Conductance (umhos/cm)	pH	Corrison Index	Radium 226	Radium 228	Short Term Gross Alpha	Gross Beta	Aluminum	Antimony	Arsenic	Barium
200		370	7.64						<0.005	<0.005	<0.002	0.29
160	145		7.3									

Metals (mg/L)												
Beryllium	Cadmium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Sodium	Titanium
			0.033		<0.002							
			0.063		<0.002							
			0.025		<0.002							
			0.046		0.0024							
			0.048		<0.002							
<0.0005	<0.0005	<0.002	0.007	<0.05	<0.002	16	<0.002	<0.005	<0.002	<0.005	11	<0.002
	90th Percentile		**0.0555**		**0.0022**							

			TTHMs (ug/L)						
Potassium	Silver	Zinc	Bromodichloromethane	Bromoform	Chloroform	Dibromochloromethane	TTHMs	Total TTHM's	Total HAA5s
5.1	<0.001	0.0207							
								6.77	2.97

OC's (ug/L)								
Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene
ND	ND	ND	0.7	ND	ND	ND	ND	ND
ND	ND	ND	1.2	ND	ND	ND	ND	ND

Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloromethane	Chloroform	2-Chlorotoluene	4-Chlorotoluene	Dibromochloromethane
ND	ND	ND	ND	0.5	ND	ND	0.7
ND	ND	ND	ND	ND	ND	ND	1

Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

cis-1,2-Dichloroethane	trans-1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	4-Isopropyltoluene	Dichloromethane	Methyl-t-butyl ether	Naphthalene	n-Propylbenzene
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethane	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	Ortho-Xylenes
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

		Surrogate Spike (%)	
(m+p)-Xylene	Xylene, Total	1,2-Dichloro-benzene-d4	4-Bromofluoro-benzene
ND	ND	88	91
ND	ND	93	92

Westernik, Anna (DEQ)

From: Morefield, Les [lmorefield@loudounwater.org]
Sent: Tuesday, October 19, 2010 2:58 PM
To: Westernik, Anna (DEQ)
Subject: Beacon Hill-forgot this

Beacon Hill pH for 9/22/2010 was 7.2.

Les

Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 10I1371
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 10/19/2010 14:38
Ashburn, VA 20146	Project Manager: Sam Richardson	

BEACON HILL WWTP EFFLUENT

10I1371-01 (Wastewater) Sampled: 09/22/2010 00:00; Type: Composite

Microbac Laboratories, Inc., Baltimore Division

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
BOD	ND	2.0	mg/L	092410 0934	092910 1050	LCR	SM (20) 5210B	A18
COD, Total	**31**	10	mg/L	092410 0800	092410 1612	LCR	EPA410.4/HACH8000	
Ammonia as N	**0.12**	0.10	mg/L	092810 1115	092810 1314	VAS	SM(20)4500NH3-G	
Total Organic Carbon	**0.97**	0.50	mg/L	100110 0945	100110 2254	PBK	SM 5310C	
Total Suspended Solids	ND	4.0	mg/L	092710 1100	092710 1122	LCR	SM (20) 2540D	

Microbac Laboratories, Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mark B. Horan, Laboratory Director

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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 1011371
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 10/19/2010 14:38
Ashburn, VA 20146	Project Manager: Sam Richardson	

Notes and Definitions

D	Sample Diluted
A18	Sample did not meet the minimum dissolved oxygen depletion in any dilution analyzed, result is estimated.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Certifications

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- A2LA (Microbiology): 410.02
- A2LA (Environmental): 410.01
- A2LA (ELLAP): 410.01
- CPSC: 1115
- Maryland: 109
- Pennsylvania (NELAC): 68-00339
- USDA: S-53726
- Virginia: 00152

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Cooler Receipt Log

Cooler ID: Default Cooler

Cooler Temp: 2.10 °C

Custody Seals Intact:	Yes	COC/Containers Agree:	Yes
Containers Intact:	Yes	Correct Preservation:	Yes
Received On Ice:	Yes	Correct Number of Containers Received:	Yes
Radiation Scan Acceptable:	Yes	Sufficient Sample Volume for Testing:	Yes
COC Present:	Yes	Samples Received in Proper Condition:	Yes

Comments:

Microbac

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Sample Submittal
Chain of Custody Record

Work Order Number:

Client Name - Loudoun Water	Project: Beacon Hill WTP	Turnaround Time (Required)	QC and EDD Type (Required)
Address - PO Box 4000 ; 44865 Loudoun Water Way	Location: 17132 Winning Colors Leesburg, VA	[X] Standard	[ ] Level I (NAC) / [ ] EDD
City, State, Zip - Ashburn, Virginia 20146	PO #	[ ] RUSH* (notify lab)	[ ] Level II** / Format:
Contact - Les Morefield	Compliance Monitoring? [ ] Yes [ ] No	7 Days (needed by)	[ ] Level III** / Comments:
Telephone # 703-401-8764 or 703-777-6677	(1)Agency/Program		[ ] Level IV**

Sampled by (PRINT) David McBill Sampler Signature David McBill Sampler Phone # 703-314-9102

Send Report via [X] e-mail (address) lmorefield@loudounwater.org [X] Mail [ ] Telephone [ ] Fax (fax #) P.O. Box 4000 Ashburn, Virginia 20146

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

Requested Analysis

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	BOD, TSS, COD	TOC & NH3-N with H2So4	TSS					
Beacon Hill WWTP Effluent	WW		X		9/22/2010	0840-1030	3	X	X	X					

101371

Possible Hazard Identification [ ] Hazardous [X] Non-Hazardous [ ] Radioactive Sample Disposition [X] Dispose as appropriate [ ] Return

Number of Containers:	Relinquished By (signature)	Printed Name/Affiliation	Date/Time	Received By (signature)	Printed Name/Affiliation
Cooler Number: / Temp upon receipt(°C): 2.1	David McBill	D McBill	9-22-10 1045	Bill Notey	B.N.
Sample Received on Ice or Refrigerated from Client: Yes / No	Bill Notey	B.N.	9-22-10	Frank Spitzer	FRANK SPITZER
	Frank Spitzer	FRANK SPITZER	9/22/10 1411	[illegible]	Mix
	[illegible]	Mix	9/23/10 1220	[illegible]	MCI

rev. 060507 ** Surcharge May Apply to addl QC Packages WHITE - LAB YELLOW - REPORT PINK - CLIENT RECEIPT Page 1 of 1

[illegible] MCI 9/23/10 1720

COOLER TEMP. = 3°C [illegible]

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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 1011371
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 10/19/2010 14:38
Ashburn, VA 20146	Project Manager: Sam Richardson	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
BEACON HILL WWTP EFFLUENT	1011371-01	Wastewater	Composite	09/22/2010 00:00	09/23/2010 17:20

Microbac Laboratories, Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mark B. Horan, Laboratory Director

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Fax: 410-633-6553
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COVER LETTER

Sam Richardson
Loudoun Water
PO Box 4000, 44961 Loudoun Water Way
Ashburn, VA 20146

RE: Beacon Hill

October 19, 2010
Report No.: 10I1371

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 09/23/2010 17:20.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

10/19/2010

Final report reviewed by: Mark B. Horan/Laboratory Director Report issue date

All samples received in proper condition and results conform to ISO 17025 standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.

11/12/2010

Microbac Laboratories, Inc.

Baltimore Division

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Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

COVER LETTER

Sam Richardson
Loudoun Water
PO Box 4000, 44961 Loudoun Water Way
Ashburn, VA 20146
RE: Beacon Hill

November 12, 2010
Report No.: 10K0366

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 11/04/2010 13:42.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

11/12/2010

Final report reviewed by: Mark B. Horan/Laboratory Director — Report issue date

All samples received in proper condition and results conform to ISO 17025 standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.

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Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800
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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 10K0366
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 11/12/2010 13:55
Ashburn, VA 20146	Project Manager: Sam Richardson	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
BEACON HILL WWTP EFFLUENT	10K0366-01	Wastewater	Grab	11/03/2010 07:50	11/04/2010 13:42
BEACON HILL WWTP EFFLUENT	10K0366-02	Wastewater	Grab	11/04/2010 06:25	11/04/2010 13:42

Microbac Laboratories, Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mark B. Horan, Laboratory Director

Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

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Fax: 410-633-6553
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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 10K0366
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 11/12/2010 13:55
Ashburn, VA 20146	Project Manager: Sam Richardson	

BEACON HILL WWTP EFFLUENT

10K0366-01 (Wastewater) Sampled: 11/03/2010 07:50; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Metals, Total by EPA 200/6000 Series Methods								
Copper	ND	0.0050	mg/L	110810 1130	111110 1547	AT	EPA 200.8/6020	

Microbac Laboratories, Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mark B. Horan, Laboratory Director

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Baltimore Division
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Phone: 410-633-1800
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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 10K0366
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 11/12/2010 13:55
Ashburn, VA 20146	Project Manager: Sam Richardson	

BEACON HILL WWTP EFFLUENT

10K0366-02 (Wastewater) Sampled: 11/04/2010 06:25; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Metals, Total by EPA 200/6000 Series Methods

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Copper	ND	0.0050	mg/L	110810 1130	111110 1618	AT	EPA 200.8/6020	

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CERTIFICATE OF ANALYSIS

Loudoun Water	Project: Beacon Hill	Report: 10K0366
PO Box 4000, 44961 Loudoun Water Way	Project Number: Beacon Hill	Reported: 11/12/2010 13:55
Ashburn, VA 20146	Project Manager: Sam Richardson	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Certifications

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- A2LA (Microbiology): 410.02
- A2LA (Environmental): 410.01
- A2LA (ELLAP): 410.01
- CPSC: 1115
- Maryland: 109
- Pennsylvania (NELAC): 68-00339
- USDA: S-53726
- Virginia: 00152

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Phone: 410-633-1800
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Cooler Receipt Log

Cooler ID: Default Cooler **Cooler Temp:** 2.80 °C

Custody Seals Intact:	Yes	COC/Containers Agree:	Yes
Containers Intact:	Yes	Correct Preservation:	Yes
Received On Ice:	Yes	Correct Number of Containers Received:	Yes
Radiation Scan Acceptable:	Yes	Sufficient Sample Volume for Testing:	Yes
COC Present:	Yes	Samples Received in Proper Condition:	Yes

Comments:

Cooler ID: RED **Cooler Temp:** 5.80 °C

Custody Seals Intact:	No	COC/Containers Agree:	No
Containers Intact:	No	Correct Preservation:	No
Received On Ice:	No	Correct Number of Containers Received:	No
Radiation Scan Acceptable:	No	Sufficient Sample Volume for Testing:	No
COC Present:	No	Samples Received in Proper Condition:	No

Comments:

Microbac

Baltimore Division
Baltimore, MD 21224
Tel: 410-633-1800
Fax: 410-633-6553
www.microbac.com

Sample Submittal
Chain of Custody Record

Work Order Number:

Client Name - Loudoun Water	Project Beacon Hill WWTP	Turnaround Time (Required)	QC and EDD Type (Required)
Address - PO Box 4000 ; 44865 Loudoun Water Way	Location 17132 Winning Colors Leesburg, VA	[X] Standard	[ ] Level I (NAC) / [ ] EDD
City, State, Zip - Ashburn, Virginia 20146	PO #	[ ] RUSH* (notify lab)	[ ] Level II** / Format:
Contact - Les Morefield	Compliance Monitoring? [ ] Yes [ ] No	7 Days (needed by)	[ ] Level III** / Comments:
Telephone # 703-401-8764 or 703-777-6577	(1)Agency/Program		[ ] Level IV**

Sampled by (PRINT) David McGill Sampler Signature David McGill Sampler Phone # 703-314-8102

Send Report via [X] e-mail (address) lmorefield@loudounwater.org [X] Mail [ ] Telephone [ ] Fax (fax #) P.O. Box 4000 Ashburn, Virginia 20146

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (spec

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Copper				Comments
Beacon Hill WWTP Effluent	WW	X			11-3-10	0750	1	X				Preserved with HNO3
Beacon Hill WWTP Effluent	WW	X			11-4-10	0625	1	X				Preserved with HNO3

10K0366

Possible Hazard Identification [ ] Hazardous [X] Non-Hazardous [ ] Radioactive Sample Disposition [X] Dispose as appropriate [ ] Return [ ] Archive

Number of Containers:
Cooler Number:
Temp upon receipt(°C):
Sample Received on Ice or Refrigerated from Client: Yes / No

Relinquished By (signature)	Printed Name/Affiliation	Date/Time	Received By (signature)	Printed Name/Affiliation
David McGill	David McGill	0750 11-4-10	[illegible]	11/4/10 0753
[illegible]	Mix	11/4/10 1110	[illegible]	CDGES
[illegible]	CDGES	11-4-10 [illegible]	Received for Lab By (signature) [illegible]	Printed Name/Affiliation [illegible]
Relinquished By (signature)	Printed Name/Affiliation	Date/Time	Received for Lab By (signature)	Printed Name/Affiliation

060607 ** Surcharge May Apply to add'l QC Packages** WHITE - LAB YELLOW - REPORT PINK - CLIENT RECEIPT

Temp 4

Cooler Recei Form / Sample Acceptance & No ompliance Form

Number of Coolers Received: 2
Client: LOUDOUN CO. WATER
Form Completed By: CB

Receipt Date / Time: 11-04-10 1342
Work Order #

Shipper: ☑ Microbac ☐ Client ☐ UPS ☐ FedEx
Custody Tape Intact: YES / NO / NA
Containers Intact: YES / NO
Sample Received on Ice or refrigerated: YES / NO 5.8
Temperature: 2.8 °C or
Infrared (IR)Temperature: _____ °C

Radiation Scan: ☑ Negative or _____ mR/hr
Chain of Custody Present with shipment: YES / NO
Sample Bottle IDs agree with COC: YES / NO
Preservation requirements met: YES / NO / Not Checked
Correct Number of Containers / Sample Volume: YES / No (If No, contact client immediately)
Headspace in container: YES / NO / NA
Type of Sample: Water Soil Wipes Oil Filter Solid Sludge Food Other

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
B - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
D - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
H - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
M - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
W - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
V - ___ Unpreserved ___ HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
S - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
SN - ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA **(Checked at time of Analysis)**
J - ___ Unpreserved

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ Other(_____)

Describe preservation requirements not met:
All Acid preserved <2 pH *NaOH preserved >12 pH* *All others >2 and <10 (usually 4-8)*
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID: _____ H_2SO_4 HNO_3 NaOH _____ mls added
H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:
Date / Time: _____ Contact: _____ Contact By: _____
Comments: _____