WESTON SOLUTIONS, INC.

**To:** Canadian Radium & Uranium Corp. Site File

**Date:** January 17, 2014

**W.O. No.:** 20405.012.013.2222.00

From: Denise Breen, Weston Solutions, Inc.

Subject: Groundwater Population

#### References

Environmental Protection Agency. <u>Safe Drinking Water Information System (SDWIS) Search:</u> Westchester, NY. Downloaded from

http://oaspub.epa.gov/enviro/sdw\_query\_v2.get\_list?wsys\_name=&fac\_search=fac\_beginning &fac\_county=WESTCHESTER&pop\_serv=500&pop\_serv=3300&pop\_serv=10000&pop\_ser v=100000&pop\_serv=100001&sys\_status=active&pop\_serv=&wsys\_id=&fac\_state=NY&last\_fac\_name=&page=1&query\_results=&total\_rows\_found=September 18, 2013. [9 pages]

Village of Mount Kisco. <u>2012 Annual Drinking Water Quality Report</u>. Downloaded from <a href="http://www.mountkisco.org/pages/mtkiscony">http://www.mountkisco.org/pages/mtkiscony</a> water/index September 20, 2013. [4 pages]

Town of Bedford. <u>Annual Water Quality Report: Reporting Year 2012.</u> Downloaded from <a href="http://www.bedfordny.gov/html/d\_water.html">http://www.bedfordny.gov/html/d\_water.html</a> September 20, 2013. [8 pages]

Reich, Hershel, Yeshiva Farm Settlement. <u>Phone correspondence with Denise Breen, WESTON, Subject RE: Population Served for Yeshiva Farm Settlement</u>. October 16, 2013. [1 page]

Blum, Samuel, Khal Adas Kashau. Phone correspondence with Denise Breen, WESTON, Subject RE: Population Served for Population Served for Khal Adas Kashau. October 16, 2013. [1 page]

Breen, Denise, WESTON. <u>Project Note to Canadian Radium & Uranium Corp. Site File:</u> <u>Population Served for Well Water System Information Request.</u> November 21, 2013. [1 page]

WESTON took the following steps to determine the population served by groundwater within a 4-mile radius of the Site:

- 1. Obtained Public Supply Well information in KML format from USEPA Region 2.
- 2. Used the ESRI ArcGIS 10.1 KML To Layer (Conversion) tool to convert the KML file into a shapefile.
- 3. Used the ESRI ArcGIS 10.1 Multiple Ring Buffer tool to create a 4-mile radius around the site reference location.
- 4. Brought the shapefile containing all of the Public Supply Well information into the 4-mile radius map.

5. Used the ESRI ArcGIS 10.1 Clip feature to separate all the Public Supply Wells within the 4-mile radius into separate files.

As a result, it was determined that there are 42 actively pumping public supply wells within the 4-mile radius of the Site. Only 17 of these wells are for community water systems.

WESTON used information provided by each Well Water Provider to confirm the population served by each well, approximate well depth, and the contributing sources of water to the system.

The following water departments and the populations they serve was located on the SWDIS websites for Westchester County:

# **Bedford Road Apartments: 40** \*Bedford Gold and Tennis Club: 150

## Bedford Consolidated W.D./Cedar Downs Water District: 1,495

\*Bedford Rest Area NYS Rt 684: 1000 \*Chestnut Ridge Racquet Club: 220

\*Church of Jesus Christ LDS: 300

\*\*Fox Lane High & Middle Schools: 2800

\*\*Glen Arbor Golf Club: 101 \*Jennifer Restaurant: 35 **Khal Adas Kashau: 650** 

\*Kingdom Hall of Jehovah's Wit: 125 Mount Kisco Water Department: 9600

\*Muscoot Farm: 150

\*\*Northern Westch Pro. PK 101: 80 \*\*Northern Westchester 103-105: 50 Rahlem Water Works Corp. Inc.: 80

\*\*Rippowam Cisque School – Bedford: 350

\*\*Rippowam Cisque – Mt Kisc: 365 Roosevelt Drive Homeowners: 63

\*Saint Mathew Episcopal Church: 100

\*\*Temple Sharaay Tefila: 100

\*Travelers Rest: 150

\*\*West Patent Elementary School: 400

Yeshiva Farm Settlement: 175

#### **Bolded Water Systems signify community water systems**

\*Signifies that the system is a Transient Non-Community Water System

\*\*Signified that the system is a Non-Transient Non-Community Water System

All seven community water systems are equally blended within themselves. WESTON personnel performed the following to calculate the approximate amount of people served by the wells within

4 miles of the site:

- 1. Subtracted the total number of wells within each system by the number of wells within the system which lay within a 4-mile radius of the Site.
- 2. Calculated the percentage of wells only within the 4-mile radius of each water system.
- 3. Multiplied the percentage of wells within the 4-mile radius by the total population served within the water system.

In order to calculate the approximate amount of people within each specified distance ring per water system, WESTON:

- 1. Counted the number of wells within each ring of one specific water system.
- 2. Divided the number of wells for each water system within each ring by the total number of wells for each water system within the 4-mile radius.
- 3. Multiplied this number by 100 to obtain the percentage of people who are served from those specified wells within the designated ring.
- 4. Multiplied this number by the total population served within the 4-mile radius for each water system.
- 5. Added all populations of the water systems for each ring boundary.

Following these steps, the approximate populations served by wells located within 4 miles of the site that are drawn from the aquifer of concern are listed as follows:

<b>Distance</b>	<b>Population</b>
0 - 1/4 mile	None Identified.
>1/4 - 1/2 mile	None identified.
>0 - 1 mile	120 people
>1 - 2 miles	10,825 people
>2 - 3 miles	6,047 people
>3 - 4 miles	2,991 people

Approximate total population = 19,983 people

Below are the site specific calculations used in Microsoft Excel to find the above populations of people served within a 4-mile radius of the Site as well as the populations served within each designated distance ring.

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Calculations of Populations Served by Well Water Systems:

Calculations of Popi	1				I
Well Water System	Total	Total #	Number of	% of	Number of People
	Population	of Wells	Wells in 4-	Wells in	Served by Wells in total
	Served	in	mile Radius	4-mile	4-mile Radius
	within	System		Radius	
	System				
Bedford Road	40	2	2	100%	40
Apartments					
Bedford	8,975	6	6	100%	8975
Consolidated					
W.D./Cedar Downs					
Water District/					
Bedford Hills Taconic					
Correctional Facility					
Khal Adas Kashau	650	1	1	100%	650
Mount Kisco Water	10,000	4	4	100%	10,000
Department					
Rahlem Water	80	2	2	100%	80
Works Corp. Inc					
Roosevelt Drive	63	1	1	100%	63
Homeowners					
Yeshiva Farm	175	1	1	100%	175
Settlement					
Total			17		19,983

Calculations of Populations Served within Radius Rings:

Calculation	1 <u>S 01 PC</u>	pulatio	ns serv	zea wii	nin Kac	iius Kii	igs:					
	0-1	lmi Radius F	Ring	1-2	mi Radius I	Ring	2-3	Bmi Radius	Ring	3-4	mi Radius I	Ring
l		People	Numb er of		People	Numb er of		People	Numb er of		People	Numb er of
ļ		Service	People		Service	People		Service	People		Service	People
! !	Numb	d by	Service	Numb	d by	Service	Numb	d by	Service	Numb	d by	Service
ļ	er of	Wells	d by	er of	Wells	s by	er of	Wells	s by	er of	Wells	d by
<u> </u>	Wells	(%)	Wells	Wells	(%)	Wells	Wells	(%)	Wells	Wells	(%)	Wells
Bedford Road												
Apartments	2	100%	40	0	0	0	0	0	0	0	0	0
Bedford Consolidated W.D./Cedar Downs Water District												
	0	0	0	0	0	0	4	66.67%	5984	2	33.32%	2991
Khal Adas Kashau	0	0	0	1	100%	650	0	0	0	0	0	0
Mount Kisco Water Department	0	0	0	4	100%	10,000	0	0	0	0	0	0
Rahlem Water Works Corp. Inc	2	100%	80	0	0	0	0		0	0	0	0
Roosevelt Drive Homeowners							1	100%	63	0	0	0
Yeshiva Farm Settlement	0	0	0	1	100%	175	0	0	0	0	0	0
Total	U			1	100%	175	0			U		2001
TOtal	L		120	<u> </u>		10,825	<u> </u>		6047			2991

## WESTON SOLUTIONS, INC.

Additionally, there are 8 Non-Transient Non-Community water systems, including schools, are located within a 4-mile radius of the Site.

Fox lane High & Middle Schools: 2800

Glen Arbor Golf Club: 101

Northern Westchester PK. 101: 80 Northern Westchester 103-105: 50

Rippowam Cisque School – Bedford: 350 Rippowam Cisque School – Mount Kisco: 365

Temple Sharaay Tefila: 100

West Patent Elementary School: 400

Total Non-Transient Non-Community: 4,246 people

Denise Breen

**Assistant Project Scientist** 

# Envirofacts **Search**





Search Selections:

State selected: **NEW YORK**County selected: **WESTCHESTER** 

Population Selected: Very Small (0-500), Small (501-3,300), Medium (3,301-10,000), Large (10,001-100,000), Very Large (100,000+)

Water System Status: active Search executed on: SEP-18-2013

Results are based on data extracted on : JUL-30-2013

## **List of Water Systems in SDWIS**

Information about water systems in NEW YORK is maintained by NEW YORK STATE DEPT. OF HEALTH .

To obtain additional information about drinking water please call EPA's Safe Drinking Water hotline at 1-800-426-4791.

Community Water Systems: Water Systems that serve the same people year-round (e.g. in homes or businesses).

Water System Name	County(s)	<u>Population</u>	Primary Water Source Type	<u>System</u>	Water System
	<u>Served</u>	Served		<u>Status</u>	<u>ID</u>
796 BEDFORD ROAD APARTMENTS	WESTCHESTER	40	Groundwater	Active	NY5930069
AMAWALK HEIGHTS WATER DISTRICT	WESTCHESTER	400	Purch_surface_water	Active	NY5903458
AMAWALK-SHENOROCK WATER DIST.	WESTCHESTER	3800	Purch_surface_water	Active	NY5903459
APPLEHILL FARM WATER DISTRICT	WESTCHESTER	209	Purch_surface_water	Active	NY5917105
ARBOR HILLS WATER WORKS	WESTCHESTER	180	Groundwater	Active	NY5922910
BEAR RIDGE LAKE WATER DISTRICT	WESTCHESTER	518	Purch_surface_water	Active	NY5903438
BEDFORD CONSOLIDATED W.D.	WESTCHESTER	8000	Groundwater	Active	NY5903419
BEDFORD HILLS/TACONIC CORR. FACILITIES	WESTCHESTER	1300	Groundwater_under_infl_of_surface_water	Active	NY5902880
BLOOMERSIDE WATER SUPPLY	WESTCHESTER	300	Groundwater	Active	NY5903448
BRIARCLIFF MANOR VILLAGE	WESTCHESTER	8831	Purch_surface_water	Active	NY5903420
BUCHANAN VILLAGE	WESTCHESTER	2200	Purch_surface_water	Active	NY5903422
CALE FARMS WATER WORKS	WESTCHESTER	212	Groundwater	Active	NY5922908
CANDLEWOOD PARK WATER DISTRICT	WESTCHESTER	125	Groundwater	Active	NY5903449
CEDAR DOWNS WATER DISTRICT	WESTCHESTER	195	Groundwater	Active	NY5903478
CORTLANDT CONSOLIDATED WD	WESTCHESTER	28369	Purch_surface_water	Active	NY5903423
COTSWOLD WATER SUPPLY	WESTCHESTER	150	Groundwater	Active	NY5920706
CROTON FALLS WATER DISTRICT	WESTCHESTER	175	Groundwater_under_infl_of_surface_water	Active	NY5903424
CROTON-ON-HUDSON VILLAGE	WESTCHESTER	7100	Groundwater	Active	NY5903425
DANISH HOME FOR THE AGED INC	WESTCHESTER	27	Groundwater	Active	NY5903728
DYKEER WATER CO.	WESTCHESTER	480	Groundwater_under_infl_of_surface_water	Active	NY5920065
		Page 7 of 28			

ELMSFORD VILLAGE	WESTCHESTER	4600	Purch_surface_water	Active	NY5903427
FOREST PARK WATER CO PLANT #3	WESTCHESTER	67	Groundwater	Active	NY5903487
FOUR WINDS HOSPITAL	WESTCHESTER	400	Groundwater	Active	NY5930031
GOLDENS BRIDGE COMMUNITY ASSOC	WESTCHESTER	250	Groundwater	Active	NY5903428
GREENBRIAR SUBDIVISION	WESTCHESTER	956	Groundwater	Active	NY5918381
GREENBURGH CONSOLIDATED WD #1	WESTCHESTER	38489	Purch_surface_water	Active	NY5903429
HERITAGE HILLS WATERWORKS CORP	WESTCHESTER	3619	Groundwater	Active	NY5917221
HUNT FARM WATER COMPANY	WESTCHESTER	156	Groundwater	Active	NY5920064
INDIAN HILL SUBDIVISION	WESTCHESTER	320	Groundwater	Active	NY5918382
IRVINGTON WATER SUPPLY	WESTCHESTER	6631	Purch_surface_water	Active	NY5903432
JENNIE CLARKSON HOME	WESTCHESTER	96	Groundwater	Active	NY5910508
JUENGSTVILLE FARM ASSOCIATION	WESTCHESTER	45	Groundwater	Active	NY5916740
KEELER FIELD	WESTCHESTER	100	Groundwater	Active	NY5906656
KENSICO WATER DISTRICT	WESTCHESTER	17917	Purch_surface_water	Active	NY5930082
KHAL ADAS KASHAU	WESTCHESTER	650	Groundwater	Active	NY5903154
KITCHAWAN WATER DISTRICT	WESTCHESTER	150	Purch_surface_water	Active	NY5903831
LAKE KATONAH CLUB INC	WESTCHESTER	356	Groundwater	Active	NY5903476
LARCHMONT VILLAGE	WESTCHESTER	6485	Purch_surface_water	Active	NY5903433
LINCOLN HALL SCHOOL	WESTCHESTER	500	Groundwater	Active	NY5903156
MEADOWBROOK WATER DISTRICT	WESTCHESTER	91	Purch_surface_water	Active	NY5903439
MEADOWS AT CROSS RIVER	WESTCHESTER	630	Groundwater_under_infl_of_surface_water	Active	NY5920685
MICHELLE ESTATES	WESTCHESTER	340	Groundwater	Active	NY5930013
MILL RIVER WATER DISTRICT	WESTCHESTER	74	Purch_surface_water	Active	NY5931080
MONTROSE IMPROVEMENT DISTRICT	WESTCHESTER	4112	Purch_surface_water	Active	NY5903436
MOUNT KISCO WATER DEPARTMENT	WESTCHESTER	9600	Surface_water	Active	NY5903437
MOUNT VERNON WATER DEPARTMENT	WESTCHESTER	68381	Purch_surface_water	Active	NY5903441
NEW CASTLE/STANWOOD W.D.	WESTCHESTER	16800	Purch_surface_water	Active	NY5903442
NORTH CASTLE WD #1	WESTCHESTER	2500	Purch_surface_water	Active	NY5903445
NORTH CASTLE WD #2	WESTCHESTER	1200	Groundwater	Active	NY5903446
NORTH CASTLE WD #4	WESTCHESTER	2200	Groundwater	Active	NY5922909
NORTH CASTLE WD #5	WESTCHESTER	225	Purch_groundwater	Active	NY5903492
NORTH CASTLE WD #7	WESTCHESTER	100	Purch_groundwater	Active	NY5930057
NORTHERN WESTCHESTER JOINT WATER WORKS	WESTCHESTER	0	Purch_surface_water	Active	NY5930056
OAKRIDGE WATER DISTRICT	WESTCHESTER	892	Groundwater	Active	NY5918395
OLD FARM HILL WATER DISTRICT	WESTCHESTER	1768	Purch_surface_water	Active	NY5903485
OLD POST ROAD WATER DISTRICT	WESTCHESTER	1500	Purch_groundwater	Active	NY5930061
OSSINING WATER DEPARTMENT	WESTCHESTER	30000	Surface_water	Active	NY5903451
PABST WATER CO. INC.	WESTCHESTER	250	Groundwater	Active	NY5903470
PACE UNIVERSITY	WESTCHESTER	2753	Purch_surface_water	Active	NY5907678
PEEKSKILL CITY	WESTCHESTER	22400	Surface_water	Active	NY5903452
PELHAM VILLAGE	WESTCHESTER	2053	Purch_surface_water	Active	NY5911901
PIETSCHS GARDENS	WESTCHESTER	337	Groundwater	Active	NY5903467
PLEASANT RIDGE WATER DISTRICT	WESTCHESTER	95	Purch_surface_water	Active	NY5920776
PLEASANTVILLE EXTENSION #1	WESTCHESTER	49	Purch_surface_water	Active	NY5917106
PLEASANTVILLE ROAD WATER DISTRICT	WESTCHESTER	46	Purch_surface_water	Active	NY5930081
PLEASANTVILLE WATER DISTRICT	WESTCHESTER	Page 8 os/52/8	Purch_surface_water	Active	NY5903455

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POCANTICO HILLS WATER DISTRICT	WESTCHESTER	329	Surface_water	Active	NY5903472
RAMLEH WATER WORKS CORP. INC.	WESTCHESTER	80	Groundwater	Active	NY5922912
ROOSEVELT DRIVE HOMEOWNERS	WESTCHESTER	63	Groundwater	Active	NY5903474
SALEM ACRES ASSOC	WESTCHESTER	138	Groundwater	Active	NY5903466
SALEM CHASE	WESTCHESTER	175	Groundwater	Active	NY5930027
SCARSDALE WATER DEPARTMENT	WESTCHESTER	20608	Purch_surface_water	Active	NY5903457
SLEEPY HOLLOW (VILLAGE)	WESTCHESTER	9870	Purch_surface_water	Active	NY5903450
SOMERS CHASE WATER WORKS CORP	WESTCHESTER	224	Groundwater	Active	NY5930049
SOMERS MANOR NURSING HOME INC.	WESTCHESTER	400	Groundwater_under_infl_of_surface_water	Active	NY5910496
SUNSET RIDGE WATER DISTRICT	WESTCHESTER	625	Groundwater	Active	NY5905657
SUNSHINE CHILDREN'S HOME & REHAB CENTER	WESTCHESTER	130	Groundwater_under_infl_of_surface_water	Active	NY5910495
TARRYTOWN WATER SUPPLY	WESTCHESTER	11000	Purch_surface_water	Active	NY5903461
THE FARMS WATER DISTRICT	WESTCHESTER	300	Groundwater	Active	NY5903418
THE HARVEY SCHOOL	WESTCHESTER	60	Groundwater	Active	NY5912829
TRUESDALE LAKE P.O.A.	WESTCHESTER	625	Groundwater	Active	NY5903468
TWIN LAKES WATER WORKS CORP.	WESTCHESTER	366	Groundwater	Active	NY5903475
UNITED WATER NEW ROCHELLE	WESTCHESTER	145000	Purch_surface_water	Active	NY5903444
UNITED WATER WESTCHESTER	WESTCHESTER	52300	Purch_surface_water	Active	NY5903456
WACCABUC FARMS INC.	WESTCHESTER	44	Groundwater	Active	NY5903769
WESTCHESTER COUNTY WD #1	WESTCHESTER	0	Surface_water	Active	NY5903488
WESTCHESTER COUNTY WD #2	WESTCHESTER	0	Surface_water	Active	NY5903489
WESTCHESTER COUNTY WD #3	WESTCHESTER	6000	Purch_surface_water	Active	NY5903482
WESTCHESTER JOINT WATER WORKS	WESTCHESTER	55210	Surface_water	Active	NY5903435
WHITE PLAINS CITY	WESTCHESTER	56853	Purch_surface_water	Active	NY5903464
WILD OAKS WATER COMPANY	WESTCHESTER	805	Groundwater_under_infl_of_surface_water	Active	NY5903479
WINDSOR FARMS WATER DISTRICT	WESTCHESTER	150	Purch_surface_water	Active	NY5930091
YESHIVA FARM SETTLEMENT	WESTCHESTER	175	Groundwater_under_infl_of_surface_water	Active	NY5903150
YESHIVA KEHILETH YAKOV	WESTCHESTER	150	Groundwater	Active	NY5920450
YONKERS CITY	WESTCHESTER	196086	Purch_surface_water	Active	NY5903465
YORKTOWN CONSOLD. WATER DIST.#1	WESTCHESTER	36000	Purch_surface_water	Active	NY5903469

Non-Transient Non-Community Water Systems: Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system).

Water System Name	County(s) Served	Population Served	Primary Water Source Type	System Status	Water System ID
1 - 3 NEW KING STREET	WESTCHESTER	25	Groundwater_under_infl_of_surface_water	Active	NY5930117
1 BYRAM BROOK PL.	WESTCHESTER	50	Groundwater	Active	NY5930130
10 NEW KING STREET ASSOCIATES	WESTCHESTER	170	Groundwater_under_infl_of_surface_water	Active	NY5930066
28 KAYSAL COURT OFFICE BLDG.	WESTCHESTER	50	Groundwater	Active	NY5930025
4 NEW KING STREET	WESTCHESTER	101	Groundwater	Active	NY5922945
BACKDAC REALTY LLC	WESTCHESTER	30	Groundwater	Active	NY5917428
BARNWELL BUILDING	WESTCHESTER	25	Groundwater_under_infl_of_surface_water	Active	NY5917426
BEDFORD PROFESSIONAL BUILDING	WESTCHESTER	110	Groundwater	Active	NY5930102
BEST PLUMBING	WESTCHESTER	60 Page 9 of 2	Groundwater 8	Active	NY5930030

BAD WHILL S HIGH SCHOOL	WESTCHESTER	1000	Groundwater	Active	NV5007710
BYRAM HILLS HIGH SCHOOL  CAMP SMITH NYS	WESTCHESTER WESTCHESTER	1000	Groundwater Groundwater	Active Active	NY5907710 NY5902878
CITIGROUP EXEC. PLANNING CENTER	WESTCHESTER	101	Groundwater	Active	NY5930052
					NY5930032 NY5930023
COUNTRY CHILDREN CENTER	WESTCHESTER	63	Groundwater	Active	
COUNTRY CHILDRENS CENTER II	WESTCHESTER	100	Groundwater	Active	NY5930045
COUNTRY CHILDRENS CENTER YORKTOWN	WESTCHESTER	79	Groundwater	Active	NY5930005
CROSS RIVER PLACE	WESTCHESTER	50	Groundwater	Active	NY5930090
FIRST PURDY BUILDING	WESTCHESTER	50	Groundwater	Active	NY5917421
FOX LANE HIGH & MIDDLE SCHOOLS	WESTCHESTER	2800	Groundwater	Active	NY5907723
GLEN ARBOR GOLF CLUB	WESTCHESTER	101	Groundwater	Active	NY5930070
IBM SOMERS	WESTCHESTER	1300	Groundwater	Active	NY5930014
INCREASE MILLER ELEMENTARY SCH	WESTCHESTER	450	Groundwater	Active	NY5907704
JOHN F KENNEDY HIGH SCHOOL	WESTCHESTER	840	Groundwater	Active	NY5907677
JOHN JAY MIDDLE SCHOOL	WESTCHESTER	1030	Groundwater	Active	NY5907701
JOHN JAY SENIOR HIGH SCHOOL	WESTCHESTER	1425	Groundwater	Active	NY5907700
LEWISBORO ELEMENTARY SCHOOL	WESTCHESTER	475	Groundwater	Active	NY5907702
LUDL ELECTRONICS PRODUCTS	WESTCHESTER	30	Groundwater	Active	NY5930035
MAJESTECH BUILDING	WESTCHESTER	50	Groundwater	Active	NY5930002
MBIA	WESTCHESTER	450	Groundwater_under_infl_of_surface_water	Active	NY5930042
MEADOW POND ELEMENTARY SCHOOL	WESTCHESTER	405	Groundwater	Active	NY5907676
MILL POND OFFICES	WESTCHESTER	50	Groundwater_under_infl_of_surface_water	Active	NY5930001
MODERN BARN	WESTCHESTER	101	Groundwater	Active	NY5930116
MORAN REAL ESTATE HOLDINGS	WESTCHESTER	100	Groundwater	Active	NY5930106
MOUNT KISCO MEDICAL GROUP	WESTCHESTER	50		Active	NY5930019
NO. SALEM HIGH / MIDDLE SCHOOL	WESTCHESTER	1520	Groundwater	Active	NY5907716
NORTH COUNTY SHOPPING CENTER	WESTCHESTER	150	Groundwater	Active	NY5906828
NORTH SALEM CENTER	WESTCHESTER	54	Groundwater_under_infl_of_surface_water	Active	NY5920353
NORTH SALEM NURSERY SCHOOL	WESTCHESTER	100	Groundwater	Active	NY5906670
NORTHERN WESTCH PROF. PK.101	WESTCHESTER	80	Groundwater	Active	NY5922308
NORTHERN WESTCHESTER 103-105	WESTCHESTER	50	Groundwater	Active	NY5930006
ORCHARD SQUARE AT CROSS RIVER	WESTCHESTER	100	Groundwater	Active	NY5919234
PEPSICO OFFICE-SOMERS	WESTCHESTER	1000	Groundwater	Active	NY5920812
PEQUENAKONCK ELEMENTARY SCHOOL	WESTCHESTER	1200	Groundwater	Active	NY5907717
POUND RIDGE ELEMENTARY SCHOOL	WESTCHESTER	380	Groundwater_under_infl_of_surface_water	Active	NY5907674
POUND RIDGE GOLF CLUB	WESTCHESTER	101	Groundwater	Active	NY5917333
PRIMROSE SCHOOL	WESTCHESTER	900	Groundwater	Active	NY5907706
QUADE BLDG/ DINARDO REST.	WESTCHESTER	50	Groundwater	Active	NY5918809
RIPPOWAM CISQUA SCHOOL - BEDFORD	WESTCHESTER	350	Groundwater	Active	NY5907718
RIPPOWAM CISQUA SCHOOL-MT KISC	WESTCHESTER	365	Groundwater	Active	NY5907719
SAFE FLIGHT INSTRUMENT CORPORATION	WESTCHESTER	120	Groundwater	Active	NY5930072
SOMERS HIGH SCHOOL	WESTCHESTER	980	Groundwater	Active	NY5907707
SOMERS INTERMEDIATE SCHOOL	WESTCHESTER	760	Groundwater	Active	NY5907708
SOMERS MIDDLE SCHOOL	WESTCHESTER	790	Groundwater	Active	NY5907705
SOMERS TOWN HOUSE/HALL	WESTCHESTER	25	Groundwater	Active	NY5906659
SWISS RE OF AMERICA	WESTCHESTER	800	Groundwater	Active	NY5930059
TEMPLE SHARAAY TEFILA	WESTCHESTER			Active	NY5930051
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THISTLE WAITHE LEARNING CENTER	WESTCHESTER	146	Groundwater_under_infl_of_surface_water	Active	NY5905629
TOWNE CENTRE AT SOMERS	WESTCHESTER	275	Groundwater	Active	NY5906831
TRINITY CORNERS SHOPPING CENT.	WESTCHESTER	100	Groundwater_under_infl_of_surface_water	Active	NY5918811
WACCABUC COUNTRY CLUB	WESTCHESTER	100	Groundwater	Active	NY5918230
WEST EXCEPTIONAL CHILDRENS SCH	WESTCHESTER	150	Groundwater	Active	NY5907712
WEST PATENT ELEMENTARY SCHOOL	WESTCHESTER	400	Groundwater	Active	NY5907720

Transient Non-Community Water Systems: Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

<u>Water System Name</u>	County(s) Served	Population Served	Primary Water Source Type	System Status	Water System ID
121 RESTAURANT/BAR	WESTCHESTER	100	Groundwater	Active	NY5906566
15 COMMERCE STREET RESTAURANT CORP.	WESTCHESTER	60	Groundwater	Active	NY5906556
2 BYRAM BROOK PL./SAMOLA	WESTCHESTER	50	Groundwater	Active	NY5930131
265 ROUTE 202	WESTCHESTER	25	Groundwater	Active	NY5930099
890 ROUTE 35	WESTCHESTER	101	Groundwater	Active	NY5930047
AIA-GHI REAL ESTATE	WESTCHESTER	101	Groundwater	Active	NY5930087
ALBANO ELECTRIC	WESTCHESTER	102	Groundwater	Active	NY5930053
ANGLEBROOK GOLF CLUB	WESTCHESTER	200	Groundwater	Active	NY5930046
ANNOR INC.	WESTCHESTER	50	Groundwater	Active	NY5930108
ANNSVILLE MOBIL	WESTCHESTER	75	Groundwater	Active	NY5908355
ARMONK FIRE DISTRICT #2	WESTCHESTER	60	Groundwater	Active	NY5930071
ARMONK TENNIS CLUB	WESTCHESTER	200	Groundwater	Active	NY5905438
<u>ATEMENTERPRISES</u>	WESTCHESTER	101	Groundwater	Active	NY5930132
BACIO RESTAURANT	WESTCHESTER	130	Groundwater	Active	NY5919075
BAILEYCOURT	WESTCHESTER	40		Active	NY5930094
BEDFORD COMMUNITY CHURCH	WESTCHESTER	250	Groundwater	Active	NY5930115
BEDFORD GOLF AND TENNIS CLUB	WESTCHESTER	150	Groundwater	Active	NY5905442
BEDFORD POST RESTAURANT	WESTCHESTER	100	Groundwater	Active	NY5906569
BEDFORD REST AREA NYS RT 684	WESTCHESTER	1000	Groundwater	Active	NY5906683
BLAZER PUB	WESTCHESTER	50	Groundwater	Active	NY5906573
BLIND CHARLIE RESTAURANT	WESTCHESTER	101	Groundwater	Active	NY5930080
BONNE BUILDING	WESTCHESTER	101	Groundwater_under_infl_of_surface_water	Active	NY5930126
BREEZEMONT DAY CAMP	WESTCHESTER	850	Groundwater	Active	NY5912841
CAMP DISCOVERY	WESTCHESTER	120	Groundwater	Active	NY5906503
CARAMOOR CENTER FOR MUSIC ART	WESTCHESTER	100	Groundwater	Active	NY5918213
CARMICHAEL DELI	WESTCHESTER	101	Groundwater_under_infl_of_surface_water	Active	NY5930063
CHESTNUT RIDGE RACQUET CLUB	WESTCHESTER	220	Groundwater	Active	NY5917324
CHURCH OF JESUS CHRIST LDS	WESTCHESTER	300	Groundwater	Active	NY5909977
CHURCH OF ST. PATRICK	WESTCHESTER	200	Groundwater	Active	NY5930065
CHURCH OF THE GOOD SHEPHERD	WESTCHESTER	40	Groundwater	Active	NY5906661
COLONIAL COURT	WESTCHESTER	25	Groundwater	Active	NY5930122
COMMUNITY CHURCH AT POUND RIDGE	WESTCHESTER	80	Groundwater	Active	NY5906662
CONGREGATION BNAI ISRAEL	WESTCHESTER	30	Groundwater	Active	NY5906666
CDANREDDVI AKE	WESTCHESTED	Page 11 of 28	Groundwater	Active	NV5017326

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<u>ORANDERNI LANE</u>	WESTOTIESTER	200			
CROSS RIVER SHELL STATION	WESTCHESTER	101	Groundwater	Active	NY5930003
CROTON FALLS SHELL STATION	WESTCHESTER	101	Groundwater	Active	NY5930009
CYRUSS RUSSELL COMMUNITY	WESTCHESTER	50	Groundwater	Active	NY5930032
EDITH MACY CAMP OF TOMORROW	WESTCHESTER	100	Groundwater	Active	NY5921709
FARMER AND THE FISH	WESTCHESTER	45	Groundwater	Active	NY5906572
FIFTH DIVISION MARKET	WESTCHESTER	101	Groundwater	Active	NY5902883
FINCH COUNTRY STORE	WESTCHESTER	100	Groundwater	Active	NY5902879
FIRST UNITARIAN CHURCH	WESTCHESTER	100	Groundwater	Active	NY5921481
<u>FOX VALLEY PARK</u>	WESTCHESTER	150	Groundwater	Active	NY5930043
FROGGY'S DELI	WESTCHESTER	35	Groundwater	Active	NY5930101
GOLDENS BRIDGE COMMUNITY HOUSE	WESTCHESTER	50	Groundwater	Active	NY5907721
GRAND SLAM BANKSVILLE	WESTCHESTER	100	Groundwater	Active	NY5917330
GRISSINI RESTAURANT	WESTCHESTER	50	Groundwater	Active	NY5906553
HAMMOND MUSEUM	WESTCHESTER	50	Groundwater	Active	NY5917350
HARVEST MOON FARM AND ORCHARD	WESTCHESTER	30	Groundwater	Active	NY5904004
HILLSIDE CHURCH OF THE CM & A	WESTCHESTER	100	Groundwater	Active	NY5906667
IL FORNO RESTAURANT	WESTCHESTER	150	Groundwater	Active	NY5906576
JENNIFERS RESTAURANT	WESTCHESTER	35	Groundwater	Active	NY5906560
JEWISH FAMILY CONGREGATION	WESTCHESTER	101	Groundwater	Active	NY5930129
JOHN JAY FIELD HOUSE	WESTCHESTER	100	Groundwater	Active	NY5930124
JOHN JAY HOMESTEAD	WESTCHESTER	100	Groundwater_under_infl_of_surface_water	Active	NY5920182
K & L REALTY/SUPER DELI	WESTCHESTER	25	Groundwater	Active	NY5922664
KINGDOM HALL OF JEHOVAHS WIT	WESTCHESTER	125	Groundwater	Active	NY5916308
KINGSLEY KORNER DELI	WESTCHESTER	25	Groundwater	Active	NY5930022
LA CREMAILLERE	WESTCHESTER	125	Groundwater	Active	NY5906235
LAKESIDE FIELD CLUB	WESTCHESTER	100	Groundwater	Active	NY5905441
LASDON PARK	WESTCHESTER	25	Groundwater	Active	NY5930010
LE CHATEAU RESTAURANT	WESTCHESTER	100	Groundwater	Active	NY5906167
LE FONTANE (ALFANT CORP)	WESTCHESTER	101	Groundwater	Active	NY5906558
LEWISBORO TOWN PARK	WESTCHESTER	700	Groundwater	Active	NY5912813
LINCOLNDALE PLAZA LP	WESTCHESTER	85	Groundwater	Active	NY5906834
LITTLE CREEK FARM	WESTCHESTER	101	Groundwater	Active	NY5902884
LITTLE PEOPLES LEARNING CENTE	WESTCHESTER	46	Groundwater	Active	NY5930039
LOMBARDI PARK	WESTCHESTER	25	Groundwater	Active	NY5921077
MAMMA ROSA RISTORANTE	WESTCHESTER	50	Groundwater	Active	NY5906160
METZGER BUILDING	WESTCHESTER	100	Groundwater	Active	NY5930135
MONTEVERDE AT OLDSTONE	WESTCHESTER	50	Groundwater	Active	NY5919522
MOUNTAIN LAKES CAMP	WESTCHESTER	675	Groundwater	Active	NY5906525
MUSCOOT FARM	WESTCHESTER	150	Groundwater	Active	NY5917600
MUSCOOT RESTAURANT	WESTCHESTER	120	Groundwater	Active	NY5906559
NICKS CORNER MARKET/PIRMAR FOOD CORP.	WESTCHESTER	25	Groundwater	Active	NY5930073
NICO'S DELI	WESTCHESTER	101	Groundwater	Active	NY5930114
NORTH CASTLE POOL &TENNIS CLUB	WESTCHESTER	400	Groundwater	Active	NY5905627
NORTH SALEM FIREHOUSE	WESTCHESTER	50	Groundwater	Active	NY5930092
NORTH SALEM MARKET	WESTCHESTER	Page 12 of 28	Groundwater	Active	NY5904005
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NORTH SALEM TOWN HALL	WESTCHESTER	101	Groundwater	Active	NY5930128
NYS DOT RESIDENCY- KATONAH	WESTCHESTER	30	Groundwater_under_infl_of_surface_water	Active	NY5930017
OLD POST ROAD PROFESSIONAL CENTER	WESTCHESTER	25	Groundwater	Active	NY5930079
OLD SALEM FARM	WESTCHESTER	101	Groundwater	Active	NY5917325
ONATRU FARM	WESTCHESTER	400	Groundwater	Active	NY5930044
ONE TWENTY THREE RESTAURANT, LLC	WESTCHESTER	250	Groundwater	Active	NY5906568
POUND RIDGE PLAZA	WESTCHESTER	45	Groundwater	Active	NY5930105
POUND RIDGE TOWN PARK	WESTCHESTER	300	Groundwater	Active	NY5905443
PRIMAVERA RESTAURANT	WESTCHESTER	100	Groundwater	Active	NY5906161
RED LINE SALOON AND RESTAURANT	WESTCHESTER	50	Groundwater	Active	NY5930068
REIS PARK/SOMERS LIBRARY	WESTCHESTER	500	Groundwater	Active	NY5917338
ROCK CUT DELI	WESTCHESTER	101	Groundwater	Active	NY5930062
ROCKEFELLER STATE PARK	WESTCHESTER	25	Groundwater_under_infl_of_surface_water	Active	NY5930015
SAINT LUKES EPISCOPAL CHURCH	WESTCHESTER	50	Groundwater	Active	NY5906660
SAINT MATHEWS EPISCOPAL CHURCH	WESTCHESTER	100	Groundwater	Active	NY5906663
SALEM GOLF CLUB	WESTCHESTER	150	Groundwater	Active	NY5917329
SALEM MARKET	WESTCHESTER	101	Groundwater	Active	NY5930033
SAMUEL PARKERS COUNTRY MARKET	WESTCHESTER	101	Groundwater	Active	NY5930055
SEASONS RESTAURANT	WESTCHESTER	200	Groundwater_under_infl_of_surface_water	Active	NY5930038
SEVEN-ELEVEN STORE	WESTCHESTER	900	Groundwater	Active	NY5920040
SOMERS BUS FACILITY	WESTCHESTER	70	Groundwater	Active	NY5930109
SOMERS PROFESSIONAL COMMONS	WESTCHESTER	25	Groundwater	Active	NY5930096
SOMERS PROFESSIONAL PARK	WESTCHESTER	40	Groundwater	Active	NY5917425
SOUTH SALEMPRESBYTERIAN CHURC	WESTCHESTER	100	Groundwater	Active	NY5906672
ST. JOHNS EPISCOPAL CHURCH	WESTCHESTER	101	Groundwater	Active	NY5930089
ST. JOSEPHS CHURCH	WESTCHESTER	50	Groundwater	Active	NY5907713
STEVENS MEMORIAL UNITED METHOD	WESTCHESTER	25	Groundwater	Active	NY5906671
SWAN DELI @ GRILL / DAFNI GROCERY INC.	WESTCHESTER	101	Groundwater	Active	NY5930060
SWOOSH,LP	WESTCHESTER	25	Groundwater	Active	NY5930041
TABLE 9	WESTCHESTER	160	Groundwater	Active	NY5906226
TEATOWN LAKE RESERVATION	WESTCHESTER	100	Groundwater	Active	NY5917611
THE HORSE AND HOUND RESTAURANT	WESTCHESTER	87	Groundwater	Active	NY5930085
THE MEXICAN SHACK	WESTCHESTER	100	Groundwater	Active	NY5930100
TRAVELERS REST	WESTCHESTER	150	Groundwater_under_infl_of_surface_water	Active	NY5906163
UNITED METHODIST CHURCH	WESTCHESTER	25	Groundwater	Active	NY5906674
VAN TASSEL PARK	WESTCHESTER	100	Groundwater	Active	NY5930088
VILLAGE PLAZA-LINCOLNDALE	WESTCHESTER	50	Groundwater	Active	NY5906829
<u>VISTA INDOOR TENNIS</u>	WESTCHESTER	250	Groundwater	Active	NY5917327
<u>VISTA MARKET</u>	WESTCHESTER	30	Groundwater	Active	NY5904007
vox	WESTCHESTER	50	Groundwater	Active	NY5906571
WACCABUC COUNTRY CLUB BEACH AND CAMP	WESTCHESTER	160	Groundwater_under_infl_of_surface_water	Active	NY5930107
WESTCHESTER CTY SPORTSMAN CTR.(BLUE MTN	WESTCHESTER	50	Groundwater	Active	NY5919235
WESTWOOD SWIM AND TENNIS ASSOC	WESTCHESTER	350	Groundwater	Active	NY5912814
YELLOW MONKEY VILLAGE	WESTCHESTER	50	Groundwater	Active	NY5902881

#### **Water Conservation Tips**

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



## En Español

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

# illage of Mount Kisco

You are invited to participate in our public foum and voice your questions or concerns about your drinking water at a regularly scheduled Village Board of Trustees Meeting. Meetings are generally held every two weeks on Mondays, beginning at 7:30 p.m., at Village Hall, 104 Main Street. Mount Kisco. New York.

gestions?

For more information about this report, or for any questions relating to your drinking waver, please contact James Palmer, Village Manager, at (914) 864-0001. You can also the Westchester County Department of He at (914) 813-5000. To be informed of water emergencies, please visit the Village of Mou Kisco website and sign up for the Emergenc Email Alert System at www.mountkisco.or, or you may call the Water Quality Informat Line at (914) 864-0020 for a recorded mess.

Mount Kisco

2012 Annual Drinking Water Quality Report

## **2012 Annual Drinking Water Quality Report**

We are once again proud to present our annual water quality report, covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. Last year, your tap water met all state and federal drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies.

#### **Facts and Figures**

Our water system serves approximately 10,000 customers through 2,300 service connections. The total amount of water produced in 2012 was 480 million gallons. The daily average of water treated and pumped into the distribution system is 1.3 million gallons per day. Approximately 85 percent of the total was billed directly to consumers. The balance, or unaccounted water, was used for fire-fighting, hydrant use, distribution system leaks, and unauthorized use. The Village continues to be vigilant in identifying any loss of water in our system. The community is encouraged to report any unauthorized use, such as an illegal hydrant connection, to the Mount Kisco Police Department immediately. In 2012, the annual water charge per customer was \$804, based on an average household water use of 10,800 cubic feet.

#### Where Do We Get Our Drinking Water?

The Village of Mount Kisco's primary water source is Byram Lake Reservoir, which is a surface water supply located on Byram Lake Road in the towns of Bedford and North Castle. Water from Byram Lake Reservoir is pumped to the Byram Lake Filtration Plant, a state-of-the-art facility which became operational in 2003, where the water is then disinfected with chlorine, treated for corrosion control, and filtered before entering the distribution system. The Leonard Park Wells, constructed and operational in 2001, supplement the Byram Lake water supply. The well water is disinfected with chlorine, aerated to remove radon, and treated for corrosion control before entering the distribution system. The water filtration plant and wells are operated by United Water.

Please be reminded that what enters a community's separate storm sewer system (catch basins and storm drains) outflows to tributaries which contribute to our drinking water. For more information on our stormwater regulations, please visit our website at www.mountkisco.org/Pages/MtKiscoNY\_ Engineering/stormwater.

The Village needs you to help to ensure that Byram Lake is protected. Please report any dumping, littering, or other illegal activity to the MKPD at (914) 241-1100. Certain fishing activities are permitted at Byram Lake, provided the appropriate permits have been obtained (please contact the Tax Receiver at 914-864-0034 for more information).

#### **Substances that Could be in Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

#### **All Drinking Water May Contain Contaminants**

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling Westchester County Department of Health at 914-813-5000 or the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

#### **Important Health Information**

Some people may be more vulnerable to contaminants n drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

#### **Lead and Drinking Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Mount Kisco is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

## **Cryptosporidium in Water**

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2012, as part of our routine sampling plan, 5 samples were taken bi-weekly, 10 per month, with no positive results. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES										
					Byram Lake	Leonard Park Wells				
Substance (Unit)	Date Sampled	Violation Yes/No	MCL [MRDL]	MCLG [MRDLG]	Level Detected	Level Detected	Typical Source			
Barium (ppm)	2012	No	2	2	0.0409	0.0906	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Chromium (ppb)	2012	No	100	100	ND	1.6	Discharge from steel and pulp mills; erosion of natural deposits			
Flouride (ppm)	2012	No	4.0	4.0	ND	0.161	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories			
Turbidity (NTU)	3/15/12	No	TT=1 NTU	NA	Average: 0.045 Range: 0.034-0.074	Average: 0.02 Range: 0.02-0.02	Soil runoff			

DISINFECTION BY-PRODUCTS									
			Foxwood Pump Station	256 W. Main Street					
Substance (Unit)	Date Sampled	Violation Yes/No	MCL [MRDL]	MCLG [MRDLG]	Level Detected	Level Detected	Typical Source		
Total Trihalomethanes [TTHM] (ppb)	2012	No	80	NA	39.94	36.93	By-product of drinking water disinfection		
Haloacetic Acids [HAA5] (ppb)	2012	No	60	NA	35.76	43.73	By-product of drinking water disinfection		

LEAD AND COP	LEAD AND COPPER											
Substance (Unit)	Date Sampled	Violation Yes/No	AL	MCLG	Amount Detected (90th Percentile)	Range (Low-High)	Sites Above AL/ Total Sites	Typical Source				
Copper (ppm)	2012	No	1.3	1.3	0.304	0.0473-0.486	0/20	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative				
Lead (ppb)	2012	No	15	0	1.4	ND-2.9	0/20	Corrosion of household plumbing systems; erosion of natural deposits				

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SECONDARY SUBSTANCES										
		Byram Lake	Leonard Park Wells							
Substance (Unit)	Date Sampled	Violation Yes/No	Secondary MCL	Level Detected	Level Detected					
Chloride (ppm)	2012	No	50-200	55.6	39.3					
Iron (ppb)	2012	No	300	ND	26					
Manganese (ppb)	2012	No	50	4.3	61.8					
Sulfate (ppm)	2012	No	250	5.78	24.4					
Zinc (ppm)	2012	No	5	ND	0.0179					

UNREGULATED SUBSTANCES									
		Byram Lake	Leonard Park Wells						
Substance (Unit)	Date Sampled	Level Detected	Level Detected						
Sodium¹ (ppm)	2012	26.4	14.6						

Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

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#### **Definitions**

In the table above, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

- **90th percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90 percent of the lead and copper values detected at your water system.
- **Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- Maximum Contaminant Level or MCL: The highest level of a contaminant that is
  allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the
  best available treatment technology.
- Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

#### Non-detected Substances

The following contaminants were tested for but not detected in our water:

- Inorganics: Silver, Aluminum, Arsenic, Asbestos, Beryllium, Cadmium, Cyanide, Mercury, Ammonia as N, Nickel, Nitrite nitrogen as N, Nitrate nitrogen as N, Potable Metal Digestion, Antimony, Selenium, Thallium.
- Volatile Organic Compounds: Bromoform, Dibromochloromethane, Tetrachloroethane, Trichloroethane, Dichloroethane, Dichloropropene, Trichlorobenzene, Trichloropropane, Trimethylbenzene, Dichlorobenzene, Dichloropropane, Butanone (MEK), Chlorotoluene, Benzane, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, Dichlorethene, Dibromoethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methyl isobutyl ketone (MIBK), Methyl tertbutyl ether (MTBE), Methylene Chloride, Nbutylbenzene, N-propylbenzene, Naphthalene, O-xylene, P & M-xylene, Pisopropyltoluene, SEC-butylbenzene, Styrene, TERTbutylenzene, Toluene, trans-1,2dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl chloride.
- Synthetic Organics: Dioxin, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 4,4-DDE, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCBs, Propachlor, Toxaphene, 2,4,5-T, 2,4-D, Dalapon, DCPA di-acid, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 2,4-Dinitrotoluene, 2,6-Dinitrolouene, Acetochlor, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl)adipate, Butachlor, EPTC, Hexachlorobenzene, Hexachlorocyclopentadiene, Metoachlor, Metribuzin, Molinate, Simazine, Terbacil, 3-Hydroxycarbofuran, Aldicarb, Aldicard sulfone, Aldicard sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Glyphosate, Endothall, Diquat.

- Maximum Residual Disinfectant Level or MRDL the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Level Goal or MRDLG the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- NA not applicable
- **ND (Not Detected)** indicates that the substance was not found by laboratory analysis.
- **NTU** Nephelometric Turbidity Units
- Parts Per Million (ppm) or Milligrams Per Liter (mg/l) one part by weight of analyte to 1 million parts by weight of the water sample.
- Parts Per Billion (ppb) or Micrograms Per Liter (µg/l) one part by weight of analyte to 1 billion parts by weight of the water sample.
- **Treatment Technique (TT)** a required process intended to reduce the level of a contaminant in drinking water.





Reporting Year 2012



Presented By
Town of Bedford

PWS ID#: 5903418, 5930061, 5903419, 5903478

## Introduction

nce again we are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protections, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us to continue providing you and your family with high-quality drinking water. This report includes the four water districts located in the Town which are Bedford Consolidated, Bedford Village, Old Post Road and Cedar Downs.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions or concerns, we are always available to assist you.

## **Community Participation**

We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled meetings. The meetings are generally held at 8:00 p.m. on the first and third Tuesdays of each month at the Town House, 321 Bedford Road, Bedford Hills, New York. Visit the Town Web site at Bedfordny.info for meeting dates.

## Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

## Important Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from you health care provider.

Some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, Giardia, and other microbial pathogens are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at www.epa. gov/safewater/lead.

## QUESTIONS?

If you have any questions about this report or concerns about drinking water, please contact the Water Department at (914) 666-7855 or the local Health Department at (914) 813-5148.

## Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include Microbial Contaminants; Inorganic Contaminants; Pesticides and Herbicides; Organic Chemical Contaminants; and Radioactive Contaminants.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the State and the U.S. EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the U.S. FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Where Does My Water Come From?

#### Consolidated Water District #1

The Town of Bedford has three groundwater sources (wells) to supply drinking water to the Consolidated Water District #1. The locations and descriptions of these water sources are listed below.

Katonah Well is located along Jay Street near the railroad station. Water from this facility is treated with two air strippers prior to disinfection.

Harris Road Well is located along Harris Road near the Bedford Hills Correctional Facility.

Haines Road Well is located along Haines Road near Bedford Hills Memorial Park. The two wells at this location were taken out of service due to high concentrations of manganese in 1997. Since then, the wells have been rehabilitated, and one is back in use. The other well is out of service due to a high amount of nitrates.

These water supplies are disinfected with sodium hypochlorite, a chemical that kills bacteria but is totally harmless to humans in the concentrations in your water supply. The water is then pumped into the distribution system.

#### **Bedford Farms and Old Post Road Water Districts**

The Bedford Farms Water District has groundwater sources (wells) that supply drinking water to the district. They consist of one shallow gravel-packed well and one rock well. These water supplies are disinfected with sodium hypochlorite, a chemical that kills bacteria but is totally harmless to humans in the concentrations in your water supply. This water supply was rehabilitated in 1996 and an air stripper was installed in 1998. The air stripper treats the water prior to disinfection. After disinfection it is pumped to distribution.

The Old Post Road Water District is considered a consecutive water system and obtains treated water from the Farms Water District.

#### Cedar Downs Water District

Cedar Downs Water District has two deep-rock groundwater sources (wells) to supply drinking water to the District. Well #1 has a daily capacity of 50,000 gallons and Well #2 has a daily capacity of 30,000 gallons. There is also a connection to the adjacent New Castle/Stanwood water supply system that is used during emergencies and when repair work is performed on the Cedar Downs system. The New Castle/Stanwood water is treated, processed, and disinfected with chlorine gas prior to distribution. The Cedar Downs water supply is disinfected with sodium hypochlorite, a chemical that kills bacteria but is totally harmless to humans in the concentrations in your water supply.

#### Nondetected Contaminants

The following are some of the contaminants tested for but not found in the drinking water. A more extensive list of contaminants tested for but not detected is available at the Bedford Water Department.

#### Consolidated Water District #1

Coliform bacteria, nitrites, pesticides, and herbicides. Volatile organic compounds tested for and not found include bromodichloromethane, bromoform, chloroform, dibromochloromethane, tetrachloroethane, trichloroethane, dichloroethane, dichloropropane, trichlorobenzene, trichloropropane, trimethylbenzene, dichlorobenzene, dichloropropane, butanone (MEK), chlorotoluene, benzene, bromobenzene, bromochloromethane, bromomethane, carbon tetrachloride, chlorobezene, chloroethane, chloromethane, dichloropropene, dibromoethane, dichlorodifluoromethane, ethylbenzene, hexachlorobutadiene, isopropylbenzene, methyl tert-butyl ether (MTBE), methylene chloride, n-butylbenzene, n-propylbenzene, naphthalene, o-xylene, p and m-xylene, p-isopropyltoluene, SEC-butylbenzene, styrene, TERT-butylenzene, toluene, trans-1,2-dichloroethene, trans-1,3dichloropropene, trichlorofluoromethane, and vinyl chloride.

#### Cedar Downs Water District

Includes the contaminants listed above for Consolidated Water District #1 and haloacetic acids.

#### **Bedford Farms Water District**

Includes the contaminants listed above for Consolidated Water District #1, haloacetic acids, and asbestos.

#### Old Post Road Water District

Includes the contaminants listed above for Consolidated Water District #1 and haloacetic acids.

#### Source Water Assessment

The New York State Department of Health (NYSDOH) has completed a Source Water Assessment Program (SWAP) Report for our systems based on available information. Possible and actual threats to the drinking water sources were evaluated. The assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. Copies of the assessment can be obtained from the NYSDOH.

The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will become, contaminated. See the section of this report entitled Sampling Results for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information to protect source waters into the future.

#### Consolidated Water District #1

Our water is derived from three drilled wells. The Source Water Assessment has rated these wells as having a very high susceptibility to microbial contamination and a high susceptibility to nitrates, pesticides, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government) and hazardous waste sites; the fact that a large portion of the assessment area is categorized as an unsewered residential area; associated industrial activity; and low-intensity residential activities in the assessment area, such as fertilizing lawns. In addition, the wells draw greater than 100 gallons per minute from an unconfined aquifer. While the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

#### **Bedford Farms and Old Post Road Water Districts**

As mentioned before, the water for these districts is derived from two drilled wells. The Source Water Assessment has rated these wells as having a very high susceptibility to microbials and a high susceptibility to nitrates and industrial solvents. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government); the fact that a large portion of the assessment area is categorized as an unsewered residential area; and low-intensity residential activities in the assessment area, such as fertilizing lawns. The high industrial solvent rating is due to hazardous waste sites located in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity. While the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

#### Cedar Downs Water District

This district's water is derived from two drilled wells. The Source Water Assessment has rated these wells as having a medium-high susceptibility to microbial contamination and nitrates. These ratings are due primarily to the close proximity of the wells to a permitted discharge facility (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government) and the fact that a large portion of the assessment area is categorized as an unsewered residential area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. While the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

## Facts and Figures

#### Consolidated Water District #1

This water system serves approximately 7,000 people through 2,136 service connections. The total amount of water produced in 2012 was 181 million gallons. The daily average of water treated and pumped into the distribution system was 496,000 gallons per day. Approximately 90 percent of the total was billed directly to the consumers. The balance of 18.1 million gallons of unaccounted-for water was from firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2012, water customers were charged a combined total of \$920,185. The annual water charge per user is based on a sliding scale of water rates. The rates increase slightly as water use increases. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$45.26. The average quarterly bill in 2012 was \$113, which includes commercial accounts.

#### The Bedford Farms Water District

The Bedford Farms water system serves approximately 300 people through 83 service connections. The total amount of water produced in 2012 was 8.0 million gallons. The daily average of water treated and pumped into the distribution system was 21,995 gallons per day. Approximately 98 percent of the total was billed directly to the consumers. The balance of 0.16 million gallons of unaccounted-for water was from distribution system leaks and unauthorized use. In 2012, water customers were charged a combined total of \$19,484. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$21.55. The rates increase slightly as water use increases. The average quarterly bill in 2012 was \$52.

#### **Old Post Road Water District**

The Old Post Road water system serves approximately 1,500 people through 44 service connections. The total amount of water produced in 2012 was 10.9 million gallons. The daily average of water treated and pumped into the distribution system was 29,899 gallons per day. Approximately 99 percent of the total was billed directly to the consumers. The balance of 0.11 million gallons of unaccounted-for water was from distribution system leaks and unauthorized use. In 2012, water customers were charged a combined total of \$48,751. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$26.08. The rates increase slightly as water use increases. The average quarterly bill in 2012 was \$205, which includes commercial accounts.

#### Cedar Downs Water District

This water system serves approximately 175 people through 62 service connections. The total amount of water produced in 2012 was 4.1 million gallons. The daily average of water treated and pumped into the distribution system was 11,181 gallons per day. Approximately 81 percent of the total was billed directly to the consumers. The balance of 0.78 million gallons of unaccounted-for water was from firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2012, water customers were charged a combined total of \$24,514. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$51.72. There are slight increases as the water use increases. The average quarterly bill in 2012 was \$99.

## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The State requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

TABLE OF DETECTED CONTAMINANTS										
			Consoli	idated Water [	District #1	Cedar D	owns Water Di	istrict		
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2	2	01/05/2012	0.248	0.171-0.248	04/02/2012	0.169	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta Particle/Photon Activity [from manmade radionuclides] (pCi/L)	50	0	02/22/2010	3.95	2.45–6.09	2011	9.1	8.5–9.61	No	Decay of natural deposits and man-made emissions
Chloride (ppm)	250	NA	02/02/2012	310	137–310	04/02/2012	59.1	NA	Yes <sup>2</sup>	Naturally occurring or indicative of road salt contamination
Chromium (ppb)	100	100	01/05/2012	4.3	1.9–4.3	04/02/2012	1.7	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
cis-1,2-Dichloroethylene (ppb)	5	NA	01/2011	0.410	ND-0.410	02/2011	ND	NA	No	Discharge from industrial chemical factories
Combined Radium [226 and 228] (pCi/L)	5	0	02/22/2010	0.89	0.17-0.89	02/06/2012	3.94	NA	No	Erosion of natural deposits
Fluoride (ppm)	2.2	NA	01/05/2012	ND	NA	04/02/2012	0.19	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha Activity [including radium 226 but excluding radon and uranium] (pCi/L)	15	0	02/22/2010	1.45	0.65–2.97	2011	0.9	0.56–1.18	No	Erosion of natural deposits
Haloacetic Acids (ppb)	60	NA	08/2011	1.35	ND-1.35	08/08/2011	ND	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Iron (ppb)	300	NA	01/05/2012	201	ND-201	04/02/2012	21	NA	No	Naturally occurring
Manganese (ppb)	300	NA	01/05/2012	169	ND-169	04/02/2012	29.2	NA	No	Naturally occurring; Indicative of landfill contamination
Nitrate (ppm)	10	10	01/05/2012	7.84³	5.51–7.84	02/02/2012	0.069	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	01/05/2012	2.2	ND-2.2	04/02/2009	ND	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium <sup>4</sup> (ppm)	(see footnote)	NA	01/05/2012	128	92.6–128	04/02/2012	18.2	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	250	NA	01/05/2012	38.7	22.4–38.7	09/10/2012	33.9	NA	No	Naturally occurring
Tetrachloroethylene [PCE] <sup>5</sup> (ppb)	5	NA	01/2011	18.15	ND-18.10	02/2011	ND	NA	No	Discharge from factories and dry cleaners; Waste sites; Spills
Total Trihalomethanes [TTHMs] (ppb)	80	NA	08/2011	23.68	16.88–23.68	08/08/11	3.12	NA	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Trichloroethylene [TCE] (ppb)	5	0	01/2011	0.590	ND-0.590	02/2011	ND	NA	No	Discharge from metal degreasing sites and other factories
Uranium (ppb)	30	0	02/22/2010	0.87	ND-1.6	02/06/2012	ND	NA	No	Erosion of natural deposits
Zinc (ppm)	5	NA	01/05/2012	0.0707	0.0098-0.0707 Page 2	04/02/2012 3 of 28	0.057	NA	No	Naturally occurring; Mining waste

TABLE OF DETECTED CONTAMINANTS										
			Bedfor	d Farms Water Di	istrict	Old Post Ro	oad Water Dist	rict		
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2	2	04/02/2012	0.176	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta Particle/Photon Activity [from manmade radionuclides] (pCi/L)	50	0	02/22/2010	3.65	3.29–4.00	NA	NA	NA	No	Decay of natural deposits and man-made emissions
Chloride (ppm)	250	NA	04/02/2012	205	NA	NA	NA	NA	Yes <sup>2</sup>	Naturally occurring or indicative of road salt contamination
Chromium (ppb)	100	100	04/02/2012	ND	NA	NA	NA	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
cis-1,2-Dichloroethylene (ppb)	5	NA	02/14/2011	0.420	ND-0.420	NA	NA	NA	No	Discharge from industrial chemical factories
Combined Radium [226 and 228] (pCi/L)	5	0	02/22/2010	0.65	0.27-1.03	NA	NA	NA	No	Erosion of natural deposits
Fluoride (ppm)	2.2	NA	04/02/2012	0.10	NA	NA	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha Activity [including radium 226 but excluding radon and uranium] (pCi/L)	15	0	02/22/2010	2.66	1.35–3.97	NA	NA	NA	No	Erosion of natural deposits
Haloacetic Acids (ppb)	60	NA	08/12/2011	3.93	NA	08/22/2011	1.79	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Iron (ppb)	300	NA	NA	NA	NA	NA	NA	NA	No	Naturally occurring
Manganese (ppb)	300	NA	NA	NA	NA	NA	NA	NA	No	Naturally occurring; Indicative of landfill contamination
Nitrate (ppm)	10	10	02/10/2012	2.95	2.69–2.95	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium <sup>4</sup> (ppm)	(see footnote)	NA	04/02/2012	74	NA	NA	NA	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	250	NA	09/10/2012	40.6	NA	NA	NA	NA	No	Naturally occurring
Tetrachloroethylene [PCE] <sup>5</sup> (ppb)	5	NA	02/2012	2.42 ug/l <sup>5</sup>	ND-2.42	NA	NA	NA	No	Discharge from factories and dry cleaners; Waste sites; Spills
Total Trihalomethanes [TTHMs] (ppb)	80	NA	08/12/2011	6.87	NA	08/22/2011	15.24	NA	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Trichloroethylene [TCE] (ppb)	5	0	NA	NA	NA	NA	NA	NA	No	Discharge from metal degreasing sites and other factories
Uranium (ppb)	30	0	02/22/2010	2.5	2.0-3.0	NA	NA	NA	No	Erosion of natural deposits
Zinc (ppm)	5	NA	04/02/2012	0.01	NA	NA	NA	NA	No	Naturally occurring; Mining waste

#### Tap water samples were collected for lead and copper analyses from sample sites throughout the community Consolidated Water District #1 Cedar Downs Water District AMOUNT SITES AMOUNT SITES SUBSTANCE ABOVE AL/ DATE **DETECTED** DATE DETECTED ABOVE AL/ (UNIT OF MEASURE) AL MCLG SAMPLED (90TH%TILE) RANGE LOW-HIGH TOTAL SITES SAMPLED (90TH%TILE) RANGE LOW-HIGH TOTAL SITES VIOLATION TYPICAL SOURCE Corrosion of household plumbing systems; Copper (ppm) 1.3 1.3 01/05/2012 0.114 0.0092 - 0.1140/32011 0.0567 0.0203-0.0599 0/5No Erosion of natural deposits; leaching from wood preservatives Lead (ppb) 15 01/05/2012 4.4 ND-4.4 0/3 2011 ND NA 0/5 No Corrosion of household plumbing systems; Erosion of natural deposits Tap water samples were collected for lead and copper analyses from sample sites throughout the community **Bedford Farms Water District** Old Post Road Water District **AMOUNT** SITES **AMOUNT** SITES SUBSTANCE (UNIT OF MEASURE) DATE DETECTED ABOVE AL/ DATE DETECTED ABOVE AL/ SAMPLED SAMPLED VIOLATION AL **MCLG** (90TH%TILE) RANGE LOW-HIGH **TOTAL SITES** (90TH%TILE) RANGE LOW-HIGH TOTAL SITES TYPICAL SOURCE Corrosion of household plumbing systems; Erosion Copper (ppm) 1.3 1.3 08/02/2011 0.0606 0.0271-0.0685 0/5 06/2012 0.086 0.0461 - 0.2380/10 No of natural deposits; leaching from wood preservatives Lead (ppb) 15 08/02/2011 0.65 ND-1.3 0/5 06/2012 4.6 ND-7.2 0/10 No Corrosion of household plumbing systems; Erosion of natural deposits

## **Definitions**

**90th percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

**AL** (**Action Level**): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

#### MRDL (Maximum Residual Disinfectant Level):

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

#### MRDLG (Maximum Residual Disinfectant Level

**Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

**ND** (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

**ppb** (parts per billion): One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

- <sup>1</sup>The State considers 50 pCi/L to be the level of concern for beta particles.
- <sup>2</sup>This is a Consolidated Water District #1 violation only. There are no health effects. The MCL for chloride is the level above which the taste of water may become objectionable. In addition, to the adverse taste effects, high chloride concentration levels in the water contribute to the deterioration of domestic plumbing and water heaters. Elevated chloride concentrations may also be associated with the presence of sodium in drinking water.
- ³ Haines Well: 01/05/2012, 7.84 ppm; 04/05/2012, 6.53 ppm; 07/06/2012, 5.51 ppm; 10/12/2012, 5.96 ppm. Katonah Well: 01/05/2012, 7.16 ppm; 04/05/2012, 7.33 ppm; 07/02/2012, 6.79 ppm;10/04/2012, 5.72 ppm.
- <sup>4</sup>Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.
- <sup>5</sup>Results include samples taken from untreated (raw) water. The volatile organic compounds (VOCs) Tetrachloroethylene, Trichloroethylene, and cis-1,2-Dichloroethylene at Katonah well and Bedford Farms wells are removed by air stripping and are not detected in the thread of drinking water. Air stripping only removes VOCs. Harris Road Well has a detectable tetrachloroethylene and no treatment. The amount detected is below the MCL.

#### PHONE MEMO

Contact: Hershel Reich Phone Number: 914-666-8402

Of: Yeshiva Farm Settlement Date: October 16, 2013

Case Name: Canadian Radium & Uranium Corp. Case Number: 20405.012.013.2222.00

RE: Population Served for Yeshiva Farm Settlement

On October 16, 2013, at approximately 10:30, Denise Breen called 914-666-8402 and spoke with Hershel Reich, who serves as an Administrator at the Yeshiva Farm Settlement. Mr. Reich told Denise Breen that the there are approximately 175 people who have access to the community well water on the Farm Settlement. He also confirmed that there is only one well within the system.

#### PHONE MEMO

Contact: Samuel Blum Phone Number: 914-241-4431

Of: Khal Adas Kashau Date: October 16, 2013

Case Name: Canadian Radium & Uranium Corp. Case Number: 20405.012.013.2222.00

RE: Population Served for Khal Adas Kashau

On October 16, 2013, at approximately 11:30, Denise Breen called 914-241-4431 and spoke with Samuel Blum, who serves as an Administrator at Khal Adas Kashau. Mr. Blum told Denise Breen that the there are approximately 650 people who have access to the community well water. He also confirmed that there is only one well within the system.

## WESTON SOLUTIONS, INC.

To: Canadian Radium & Uranium Corp. File

Date: November 21, 2013

**W.O. No.:** 20405.012.013.2222.00

From: Denise Breen, Weston Solutions, Inc.

Subject: Population Served for Well Water System Information Request

The following Community Water System's did not respond to information requests via telephone voicemails placed by Denise Breen (DB) of Weston Solutions, Inc.:

• 796 Bedford Road Apartments: 914-424-9969

- o DB left message on 10/16/2013 at 9:15
- o DB left message on 10/17/2013 at 10:20
- Bedford Consolidated Water Department:914-666-7855
  - o DB left message on 10/16/2013 at 9:20
  - o DB left message on 10/17/2013 at 10:30
- Mount Kisco Water Department: 914-864-0021
  - o DB left message on 10/16/2013 at 9:10
  - o DB left message on 10/17/2013 at 10:40
- Roosevelt Drive Homeowners: 914-241-0436
  - o DB left message on 10/16/2013 at 10:45
  - o DB left message on 10/17/2013 at 10:50
- Ramleh Water Works Corp.: 914-666-0761
  - o DB left message on 10/16/2013 at 10:45
  - o DB left message on 10/17/2013 at 9:00

Due to the lack of response to the information requests, it is assumed that the following populations are served as stated by The Safe Drinking Water Information System (SDWIS) listing for Public Supply Well Water Systems in Westchester County, NY:

796 Bedford Road Apartments: 40 people from 2 wells Ramleh Water Works Corp.: 80 people from 1 well Roosevelt Drive Homeowners: 63 people from 1 well

Denise Breen performed an internet search for annual quality reports for all Community Water systems that did not respond. Annual Quality Reports were located for Bedford Consolidated Water Department and Mount Kisco Water Department. These reports provided sufficient information concerning populations, number of wells, location of wells, depth of well and other pertinent information, no further information is required.

Denise Breen Assistant Project Scientist