Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

Steven & Rebekah Hunter
12438 Moores Chapel Road
Charlotte, North Carolina 28214

Re: **Water-Supply Well Sampling Results (WSW-17)**
12438 Moores Chapel Road
Charlotte, Mecklenburg County, North Carolina
NONCD0001257

Dear Property Owners:

On June 7, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a residential well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A summary of the analytical results from the June 7, 2016 sampling event as reported by Excel and along with select historical data have been included in the attached "Table 1. Summary of Water-Supply Well Sampling Results" for your review.

Laboratory analyses of the groundwater sample collected from the onsite water-supply well on June 7, 2016 reported concentrations of acetone and trichlorofluoromethane. The reported concentrations of acetone and trichlorofluoromethane were below the North Carolina Groundwater Quality Standards (15A NCAC 2L).

The data summarized in Table 1 were used to conduct a Health Risk Evaluation (HRE) by Hanna Assefa of the Division of Waste Management (Division). I have enclosed a copy of the HRE and a portion of the laboratory report for your review. In addition, complete laboratory reports from the sampling event may be reviewed by accessing the Division's electronic records at the following web portal: http://edocs.deq.nc.gov/WasteManagement/Search.aspx

I appreciate your participation in this assessment. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosures

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Table 1. Summary of Water-Supply Well Sampling Results

			Constituent (µg/L)								
Lab Sample Number	**Well ID**	**Date Sampled**	**Acetone**	**cis-1,2-DCE**	**1,1-DCA**	**1,1-DCE**	**1,4-Dioxane**	**PCE**	**1,1,1-TCA**	**TCFM**	**Xylene**
92127133002	17	8/7/2012	**12.6 J**	**0.29 J**	<1.0	<1.0	<2.00	**0.53 J**	<1.0	<1.0	<2.0
L840158-04	17	6/7/2016	**1.51 J**	<0.500	<0.500	<0.500	<3.00	<0.500	<0.500	**0.788**	<1.50

cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCFM = Trichlorofluoromethane

J = Estimated Concentration
µg/L = micrograms / Liter (~parts per billion)

July 28, 2017

MEMORANDUM

TO: George Adams, Engineer
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
American Truetzschler
12438 Moores Chapel Rd. (WSW-17)
Charlotte, Mecklenburg County
NONCD 000 1257

A water sample was collected from the subject well on June 7, 2016. All the contaminants detected in the water sample were at a concentration below applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If both the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health –based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	15A NCAC 2L/IMAC (u/L)	Calculated Health-based Concentration (ug/l)
L840158-04	Acetone	1.51 J	*	6,000	**
	Trichloroflurometh ane	0.788	*	2,000	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.
J-Estimated concentration

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.51	J	1.05	25.0	1	06/11/2016 09:40	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 09:40	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 09:40	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 09:40	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 09:40	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 09:40	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 09:40	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 09:40	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 09:40	WG878919
1,1-Dichloroethene	U		0.188	0.500	1	06/11/2016 09:40	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 09:40	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 09:40	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 09:40	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 09:40	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 09:40	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 09:40	WG878919
Tetrachloroethene	U		0.199	0.500	1	06/11/2016 09:40	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 09:40	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 09:40	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 09:40	WG878919
Trichlorofluoromethane	0.788		0.130	0.500	1	06/11/2016 09:40	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 09:40	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 09:40	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 09:40	WG878919
(S) Toluene-d8	*104*			*90.0-115*		*06/11/2016 09:40*	WG878919
(S) Dibromofluoromethane	*96.5*			*79.0-121*		*06/11/2016 09:40*	WG878919
(S) 4-Bromofluorobenzene	*90.0*			*80.1-120*		*06/11/2016 09:40*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	06/13/2016 05:00	WG879404
(S) Toluene-d8	*96.2*			*70.0-130*		*06/13/2016 05:00*	WG879404

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

Lindsey Thomka & Logan Scott
12636 Moores Chapel Road
Charlotte, North Carolina 28214

Re: Water-Supply Well Sampling Result (WSW-32)
12636 Moores Chapel Road
Charlotte, Mecklenburg, North Carolina
NONCD0001257

Dear Property Owners:

On June 7, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a residential well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A review of the laboratory data suggests that **no VOCs were detected** in the groundwater sample from the June 7, 2016 sampling event.

I appreciate your participation in this investigation, and I have enclosed a portion of the laboratory report. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosure:

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	06/11/2016 10:01	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 10:01	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 10:01	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 10:01	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 10:01	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 10:01	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 10:01	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 10:01	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 10:01	WG878919
1,1-Dichloroethene	U		0.188	0.500	1	06/11/2016 10:01	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 10:01	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 10:01	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 10:01	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 10:01	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 10:01	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 10:01	WG878919
Tetrachloroethene	U		0.199	0.500	1	06/11/2016 10:01	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 10:01	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 10:01	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 10:01	WG878919
Trichlorofluoromethane	U		0.130	0.500	1	06/11/2016 10:01	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 10:01	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 10:01	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 10:01	WG878919
(S) Toluene-d8	*105*			*90.0-115*		*06/11/2016 10:01*	WG878919
(S) Dibromofluoromethane	*98.7*			*79.0-121*		*06/11/2016 10:01*	WG878919
(S) 4-Bromofluorobenzene	*90.7*			*80.1-120*		*06/11/2016 10:01*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	06/13/2016 05:20	WG879404
(S) Toluene-d8	*96.6*			*70.0-130*		*06/13/2016 05:20*	WG879404

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

Joel Horwick
Post Office Box 1490
Belmont, North Carolina 28012

Re: Water-Supply Well Sampling Result (WSW-33)
12624 Moores Chapel Road
Charlotte, Mecklenburg, North Carolina
NONCD0001257

Dear Property Owner:

On June 21, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a residential well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A review of the laboratory data suggests that **no VOCs were detected** in the groundwater sample from the June 21, 2016 sampling event.

I appreciate your participation in this investigation, and I have enclosed a portion of the laboratory report. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosure:

cc: Current Occupant (w/ enc)
12624 Moores Chapel Road
Charlotte, North Carolina 28214

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	06/29/2016 12:36	WG884181
Benzene	U		0.331	1.00	1	06/29/2016 12:36	WG884181
Carbon tetrachloride	U		0.379	1.00	1	06/29/2016 12:36	WG884181
Chlorobenzene	U		0.348	1.00	1	06/29/2016 12:36	WG884181
Chloroethane	U		0.453	5.00	1	06/29/2016 12:36	WG884181
Chloroform	U		0.324	5.00	1	06/29/2016 12:36	WG884181
Chloromethane	U		0.276	2.50	1	06/29/2016 12:36	WG884181
1,2-Dibromoethane	U		0.381	1.00	1	06/29/2016 12:36	WG884181
1,1-Dichloroethane	U		0.259	1.00	1	06/29/2016 12:36	WG884181
1,2-Dichloroethane	U		0.361	1.00	1	06/29/2016 12:36	WG884181
1,1-Dichloroethene	U		0.398	1.00	1	06/29/2016 12:36	WG884181
cis-1,2-Dichloroethene	U		0.260	1.00	1	06/29/2016 12:36	WG884181
trans-1,2-Dichloroethene	U		0.396	1.00	1	06/29/2016 12:36	WG884181
1,2-Dichloropropane	U		0.306	1.00	1	06/29/2016 12:36	WG884181
Ethylbenzene	U		0.384	1.00	1	06/29/2016 12:36	WG884181
Methylene Chloride	U		1.00	5.00	1	06/29/2016 12:36	WG884181
Tetrachloroethene	U		0.372	1.00	1	06/29/2016 12:36	WG884181
Toluene	U		0.780	5.00	1	06/29/2016 12:36	WG884181
1,1,1-Trichloroethane	U		0.319	1.00	1	06/29/2016 12:36	WG884181
1,1,2-Trichloroethane	U		0.383	1.00	1	06/29/2016 12:36	WG884181
Trichloroethene	U		0.398	1.00	1	06/29/2016 12:36	WG884181
Trichlorofluoromethane	U		1.20	5.00	1	06/29/2016 12:36	WG884181
Vinyl chloride	U		0.259	1.00	1	06/29/2016 12:36	WG884181
Xylenes, Total	U		1.06	3.00	1	06/29/2016 12:36	WG884181
(S) Toluene-d8	*103*			*90.0-115*		*06/29/2016 12:36*	WG884181
(S) Dibromofluoromethane	*114*			*79.0-121*		*06/29/2016 12:36*	WG884181
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*06/29/2016 12:36*	WG884181

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	07/05/2016 15:01	WG885985
(S) Toluene-d8	*101*			*70.0-130*		*07/05/2016 15:01*	WG885985

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

Joseph Recore
12510 Moores Chapel Road
Charlotte, North Carolina 28214

Re: **Water-Supply Well Sampling Results (WSW-35)**
12510 Moores Chapel Road
Charlotte, Mecklenburg County, North Carolina
NONCD0001257

Dear Property Owner:

On June 21, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a residential well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A summary of the analytical results from the June 21, 2016 sampling event as reported by Excel and along with select historical data have been included in the attached "Table 1. Summary of Water-Supply Well Sampling Results" for your review.

Laboratory analyses of the groundwater sample collected from the onsite water-supply well on June 21, 2016 reported a concentration of 1,1-dichloroethene. The reported concentration of 1,1-dichloroethene is below the United States Environmental Protection Agency (US EPA) Maximum Contaminant Level (MCL) for drinking water.

The data summarized in Table 1 were used to conduct a Health Risk Evaluation (HRE) by Hanna Assefa of the Division of Waste Management (Division). I have enclosed a copy of the HRE and a portion of the laboratory report for your review. In addition, complete laboratory reports from the sampling event may be reviewed by accessing the Division's electronic records at the following web portal: http://edocs.deq.nc.gov/WasteManagement/Search.aspx

I appreciate your participation in this assessment. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosures

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Table 1. Summary of Water-Supply Well Sampling Results

			Constituent (µg/L)								
Lab Sample Number	**Well ID**	**Date Sampled**	**Acetone**	**cis-1,2-DCE**	**1,1-DCA**	**1,1-DCE**	**1,4-Dioxane**	**PCE**	**1,1,1-TCA**	**TCFM**	**Xylene**
92127478001	35	8/9/2012	**8.7 J**	<1.0	<1.0	**3.1**	**11.9**	<1.0	<1.0	<1.0	<2.0
L601815-03	35	10/18/2012	<50	<1.0	<1.0	**5.4**	<3.0	<1.0	<1.0	<5.0	<3.0
L611838-05	35	12/17/2012	<50	<1.0	<1.0	**4.4**	<3.0	<1.0	<1.0	<5.0	<3.0
L643004-01	35	6/21/2013	<25 J3	<0.50	<0.50	**3.7**	**0.81 J**	<0.50	<0.50	<0.50	<1.5
L675426-05	35	12/20/2013	**3.1 J J4**	<0.50	<0.50	**3.7**	<3.0	<0.50	<0.50	<0.50	<1.5
L705932-01	35	6/18/2014	**1.5 J**	<0.50	<0.50	**4.1**	**0.95 J**	<0.50	<0.50	<0.50	**0.43 J**
L740973-01	35	12/26/2014	**1.0 J**	<0.50	<0.50	**3.8**	<3.0	<0.50	<0.50	<0.50	<1.5
L773387-03	35	6/24/2015	<50.0	<1.00	<1.00	**3.79**	<3.00	<1.00	<1.00	<5.00	<3.00
L808831-01	35	12/22/2015	<25.0	<0.500	<0.500	**5.59**	**1.83 J**	**0.233 J**	<0.500	<0.500	<1.50
L843224-02	35	6/21/2016	<50.0	<1.00	<1.00	**6.19**	<3.00	<1.00	<1.00	<5.00	<3.00

cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCFM = Trichlorofluoromethane

J = Estimated Concentration
µg/L = micrograms / Liter (~parts per billion)

July 28, 2016

MEMORANDUM

TO: George Adams, Engineer
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
12510 Moores Chapel Road -Well 35
Charlotte, Mecklenburg County
NONCD 000 1257

A water sample was collected from the subject well on June 31, 2016. The concentration of 1,1-dichloroethene detected in this water did not exceed applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If both the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health –based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking, and all other purposes above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	15A NCAC 2L/IMAC (ug/L)	Calculated Health-based Concentration (ug/l)
L843224-02	1,1-Dichloroethene	6.19	7	*	*

*Not Applicable
ug/L= Micrograms of contaminant per liter of water.

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	06/29/2016 12:55	WG884181
Benzene	U		0.331	1.00	1	06/29/2016 12:55	WG884181
Carbon tetrachloride	U		0.379	1.00	1	06/29/2016 12:55	WG884181
Chlorobenzene	U		0.348	1.00	1	06/29/2016 12:55	WG884181
Chloroethane	U		0.453	5.00	1	06/29/2016 12:55	WG884181
Chloroform	U		0.324	5.00	1	06/29/2016 12:55	WG884181
Chloromethane	U		0.276	2.50	1	06/29/2016 12:55	WG884181
1,2-Dibromoethane	U		0.381	1.00	1	06/29/2016 12:55	WG884181
1,1-Dichloroethane	U		0.259	1.00	1	06/29/2016 12:55	WG884181
1,2-Dichloroethane	U		0.361	1.00	1	06/29/2016 12:55	WG884181
1,1-Dichloroethene	6.19		0.398	1.00	1	06/29/2016 12:55	WG884181
cis-1,2-Dichloroethene	U		0.260	1.00	1	06/29/2016 12:55	WG884181
trans-1,2-Dichloroethene	U		0.396	1.00	1	06/29/2016 12:55	WG884181
1,2-Dichloropropane	U		0.306	1.00	1	06/29/2016 12:55	WG884181
Ethylbenzene	U		0.384	1.00	1	06/29/2016 12:55	WG884181
Methylene Chloride	U		1.00	5.00	1	06/29/2016 12:55	WG884181
Tetrachloroethene	U		0.372	1.00	1	06/29/2016 12:55	WG884181
Toluene	U		0.780	5.00	1	06/29/2016 12:55	WG884181
1,1,1-Trichloroethane	U		0.319	1.00	1	06/29/2016 12:55	WG884181
1,1,2-Trichloroethane	U		0.383	1.00	1	06/29/2016 12:55	WG884181
Trichloroethene	U		0.398	1.00	1	06/29/2016 12:55	WG884181
Trichlorofluoromethane	U		1.20	5.00	1	06/29/2016 12:55	WG884181
Vinyl chloride	U		0.259	1.00	1	06/29/2016 12:55	WG884181
Xylenes, Total	U		1.06	3.00	1	06/29/2016 12:55	WG884181
(S) Toluene-d8	*103*			*90.0-115*		*06/29/2016 12:55*	WG884181
(S) Dibromofluoromethane	*114*			*79.0-121*		*06/29/2016 12:55*	WG884181
(S) 4-Bromofluorobenzene	*102*			*80.1-120*		*06/29/2016 12:55*	WG884181

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	06/27/2016 23:46	WG883940
(S) Toluene-d8	*101*			*70.0-130*		*06/27/2016 23:46*	WG883940

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

David & Sharon Ryerson
10235 Harbor Drive
Charlotte, North Carolina 28214

Re: **Water-Supply Well Sampling Results (WSW-36)**
10235 Harbor Drive
Charlotte, Mecklenburg County, North Carolina
NONCD0001257

Dear Property Owners:

On June 7, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a residential well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A summary of the analytical results from the June 7, 2016 sampling event as reported by Excel and along with select historical data have been included in the attached "Table 1. Summary of Water-Supply Well Sampling Results" for your review.

Laboratory analyses of the groundwater sample collected from the onsite water-supply well on June 7, 2016 reported concentrations of acetone, 1,1-dichloroethene, and tetrachloroethene. The reported concentrations of 1,1-dichloroethene and tetrachloroethene are below the United States Environmental Protection Agency (US EPA) Maximum Contaminant Levels (MCLs) for drinking water. The reported concentration of acetone was below the North Carolina Groundwater Quality Standard (15A NCAC 2L).

The data summarized in Table 1 were used to conduct a Health Risk Evaluation (HRE) by Hanna Assefa of the Division of Waste Management (Division). I have enclosed a copy of the HRE and a portion of the laboratory report for your review. In addition, complete laboratory reports from the sampling event may be reviewed by accessing the Division's electronic records at the following web portal: http://edocs.deq.nc.gov/WasteManagement/Search.aspx

I appreciate your participation in this assessment. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosures

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Table 1. Summary of Water-Supply Well Sampling Results

			Constituent (µg/L)								
Lab Sample Number	**Well ID**	**Date Sampled**	**Acetone**	**cis-1,2-DCE**	**1,1-DCA**	**1,1-DCE**	**1,4-Dioxane**	**PCE**	**1,1,1-TCA**	**TCFM**	**Xylene**
92125855003	36	7/25/2012	**4.4 J**	<1.0	<1.0	**7.6**	<2.00	<1.0	<1.0	<1.0	<2.0
L604432-01	36	11/5/2012	<50	<1.0	<1.0	**5.9**	<3.0	<1.0	<1.0	<5.0	<3.0
L611838-01	36	12/17/2012	<50	<1.0	<1.0	**6.4**	<3.0	<1.0	<1.0	<5.0	<3.0
L643004-03	36	6/21/2013	<25 J3	<0.50	<0.50	**4.8**	<3.0	<0.50	<0.50	<0.50	<1.5
L675426-07	36	12/20/2013	**1.5 J J4**	<0.50	<0.50	**3.8**	<3.0	<0.50	<0.50	<0.50	<1.5
L705932-03	36	6/18/2014	**2.1 J**	<0.50	<0.50	**6.1**	**0.82 J**	<0.50	<0.50	<0.50	<1.5
L740973-02	36	12/26/2014	**1.1 J**	<0.50	<0.50	**4.9**	<3.0	<0.50	<0.50	<0.50	<1.5
L773387-01	36	6/24/2015	<10.0	<1.00	<1.00	**5.82**	<3.00	<1.00	<1.00	<5.00	<3.00
L806544-01	36	12/10/2015	<25.0	<0.500	<0.500	**5.70**	**1.07 J**	**0.248 J**	<0.500	<0.500	<1.50
L840158-01	36	6/7/2016	**1.72 J**	<0.500	<0.500	**4.84**	No Data	**0.230 J**	<0.500	<0.500	<0.500
L840158-06	36	6/7/2016	**1.65 J**	<0.500	<0.500	**5.81**	<3.00	**0.243 J**	<0.500	<0.500	<1.50

cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCFM = Trichlorofluoromethane

J = Estimated Concentration
µg/L = micrograms / Liter (~parts per billion)

July 28, 2016

MEMORANDUM

TO: George Adams, Engineer
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
10235 Harbor Drive, Well 36
Charlotte, Mecklenburg County
NONCD 000 1257

A water sample was collected from the subject well on June 7, 2016. None of the contaminants in the well water exceeded applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If both the USEPA MCL and health-based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	Concentration (ug/l)	US EPA MCL (ug/L)	15A NCAC 2L/IMAC (u/L)	Calculated Health-based Concentration (ug/l)
L840158-01/L840158-06	1,1-Dichloroethene	4.84	5.81	7	**	**
	Acetone	1.72 J	1.65 J	*	6,000	**
	Tetrachloroethene	0.230 J	0.243 J	5	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.
J= Estimated concentration

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.72	J	1.05	25.0	1	06/11/2016 08:39	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 08:39	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 08:39	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 08:39	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 08:39	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 08:39	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 08:39	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 08:39	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 08:39	WG878919
1,1-Dichloroethene	4.84		0.188	0.500	1	06/11/2016 08:39	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 08:39	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 08:39	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 08:39	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 08:39	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 08:39	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 08:39	WG878919
Tetrachloroethene	0.230	J	0.199	0.500	1	06/11/2016 08:39	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 08:39	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 08:39	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 08:39	WG878919
Trichlorofluoromethane	U		0.130	0.500	1	06/11/2016 08:39	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 08:39	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 08:39	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 08:39	WG878919
(S) Toluene-d8	*106*			*90.0-115*		*06/11/2016 08:39*	WG878919
(S) Dibromofluoromethane	*96.0*			*79.0-121*		*06/11/2016 08:39*	WG878919
(S) 4-Bromofluorobenzene	*87.8*			*80.1-120*		*06/11/2016 08:39*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	J	1.05	25.0	1	06/11/2016 10:21	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 10:21	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 10:21	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 10:21	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 10:21	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 10:21	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 10:21	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 10:21	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 10:21	WG878919
1,1-Dichloroethene	5.81		0.188	0.500	1	06/11/2016 10:21	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 10:21	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 10:21	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 10:21	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 10:21	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 10:21	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 10:21	WG878919
Tetrachloroethene	0.243	J	0.199	0.500	1	06/11/2016 10:21	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 10:21	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 10:21	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 10:21	WG878919
Trichlorofluoromethane	U		0.130	0.500	1	06/11/2016 10:21	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 10:21	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 10:21	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 10:21	WG878919
(S) Toluene-d8	*105*			*90.0-115*		*06/11/2016 10:21*	WG878919
(S) Dibromofluoromethane	*98.4*			*79.0-121*		*06/11/2016 10:21*	WG878919
(S) 4-Bromofluorobenzene	*90.2*			*80.1-120*		*06/11/2016 10:21*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	06/13/2016 05:39	WG879404
(S) Toluene-d8	*103*			*70.0-130*		*06/13/2016 05:39*	WG879404

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

July 29, 2016

Stephen & Kimberly Woodruff, David Jones
463 Kings Avenue
Bronx, New York 10464

Re: **Water-Supply Well Sampling Results (WSW-37)**
10335 Harbor Drive
Charlotte, Mecklenburg County, North Carolina
NONCD0001257

Dear Property Owners:

On June 7, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a Point of Entry (POE) water-treatment system at the above referenced location. I understand that the POE system was installed to reduce the concentration of dissolved Volatile Organic Compounds (VOCs) in groundwater from an onsite residential water-supply well (**WSW-37**). The sample of groundwater was collected after the POE system (effluent) and submitted for laboratory analyses including select VOCs. A summary of the analytical results from the June 7, 2016 sampling event as reported by Excel along with select historical data have been included in the attached "Table 1. Summary of Water-Supply Well Sampling Results" for your review.

Laboratory analyses of the groundwater sample collected after the POE water-treatment system on June 7, 2016 (effluent) reported concentrations of acetone and 1,4-dioxane. The reported concentrations of acetone and 1,4-dioxane were below the North Carolina Groundwater Quality Standard (15A NCAC 2L).

The data summarized in Table 1 were used to conduct a Health Risk Evaluation (HRE) by Hanna Assefa of the Division of Waste Management (Division). I have enclosed a copy of the HRE and a portion of the laboratory report for your review. In addition, complete laboratory reports from the sampling event may be reviewed by accessing the Division's electronic records at the following web portal: https://edm.nc.gov/DENR-Portal.

I appreciate your participation in this assessment. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosures

cc: Current Occupant (w/ enc)
10335 Harbor Drive
Charlotte, North Carolina 28214

ec: Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Stephen Woodruff
stephenawoodruff@gmail.com

Table 1. Summary of Water-Supply Well Sampling Results

			Constituent (µg/L)								
Lab Sample Number	**Well ID**	**Date Sampled**	**Acetone**	**cis-1,2-DCE**	**1,1-DCA**	**1,1-DCE**	**1,4-Dioxane**	**PCE**	**1,1,1-TCA**	**TCFM**	**Xylene**
L601815-01	37	10/17/2012	<50	<1.0	<1.0	**15**	**1.0 J**	**0.44 J**	<1.0	<5.0	<3.0
L604432-03	37	11/5/2012	<50	<1.0	<1.0	**14**	**0.96 J**	**0.43 J**	<1.0	<5.0	<3.0
L611838-03	37	12/17/2012	<50	<1.0	<1.0	**14**	**0.93 J**	**0.38 J**	<1.0	<5.0	<3.0
L643004-05	37	6/21/2013	<25 J3	<0.50	<0.50	**13**	**1.2 J**	**0.34 J**	**0.32 J**	<0.50	<1.5
L671959-01	37 INF	12/3/2013	**2.1 J**	<0.50	<0.50	**14**	**1.2 J**	**0.56**	<0.50	<0.50	<1.5
L671959-03	37 EFF	12/3/2013	**2.6 J**	<0.50	<0.50	<0.50	No Data	<0.50	<0.50	<0.50	<1.5
L688007-01	37 INF	3/13/2014	<25	<0.50	<0.50	**10**	**0.92 J**	**0.37 J**	<0.50	<0.50	<1.5
L688007-03	37 EFF	3/13/2014	<25	<0.50	<0.50	<0.50	<3.0	<0.50	<0.50	<0.50	<1.5
L740973-03	37 INF	12/26/2014	<25	<0.50	<0.50	**10**	<3.0	**0.37 J**	<0.50	<0.50	<1.5
L740973-04	37 EFF	12/26/2014	<25	<0.50	<0.50	<0.50	**0.63 J**	<0.50	<0.50	<0.50	<1.5
L771364-01	37 INF	6/15/2015	<25.0	<0.500	<0.500	**8.68**	**1.02 J**	**0.405 J**	<0.500	<0.500	<1.50
L771364-02	37 EFF	6/15/2015	<25.0	<0.500	<0.500	<0.500	**1.50 J**	<0.500	<0.500	<0.500	<1.50
L808831-03	37 INF	12/22/2015	<25.0	<0.500	**0.237 J**	**16.0**	**1.26 J**	**0.643**	**0.197 J**	<0.500	<1.50
L808831-05	37 EFF	12/22/2015	<25.0	<0.500	<0.500	<0.500	**1.73 J**	<0.500	<0.500	<0.500	<1.50
L840158-02	37 EFF	6/7/2016	**1.33 J**	<0.500	<0.500	<0.500	**1.58 J**	<0.500	<0.500	<0.500	<1.50

cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCFM = Trichlorofluoromethane

J = Estimated Concentration
µg/L = micrograms / Liter (~parts per billion)

July 28, 2016

MEMORANDUM

TO: George Adams, Engineer
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
American Truetzschler
Stephen Woodruff & David Jones Residential Well (WSW-37)
10335 Harbor Dr.
Charlotte, Mecklenburg County
NONCD 000 1257

An effluent water sample was collected from the subject well on June 7, 2016. The concentration of contaminants detected in the effluent sample was below applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If both the USEPA MCL and health-based North Carolina 2L/IMAC are not available, a health–based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the effluent water from this well can be used for drinking, cooking, and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Effluent Concentration (ug/L)	US EPA MCL (ug/L)	15A NCAC 2L/IMAC (u/L)	Calculated Health-based Concentration (ug/l)
L840158-02	Acetone	1.33 J	*	6,000	**
	1,4 Dioxane	1.58 J	*	3	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.
J-Estimated concentration

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.33	J	1.05	25.0	1	06/11/2016 09:00	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 09:00	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 09:00	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 09:00	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 09:00	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 09:00	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 09:00	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 09:00	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 09:00	WG878919
1,1-Dichloroethene	U		0.188	0.500	1	06/11/2016 09:00	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 09:00	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 09:00	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 09:00	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 09:00	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 09:00	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 09:00	WG878919
Tetrachloroethene	U		0.199	0.500	1	06/11/2016 09:00	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 09:00	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 09:00	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 09:00	WG878919
Trichlorofluoromethane	U		0.130	0.500	1	06/11/2016 09:00	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 09:00	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 09:00	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 09:00	WG878919
(S) Toluene-d8	*105*			*90.0-115*		*06/11/2016 09:00*	WG878919
(S) Dibromofluoromethane	*97.9*			*79.0-121*		*06/11/2016 09:00*	WG878919
(S) 4-Bromofluorobenzene	*90.3*			*80.1-120*		*06/11/2016 09:00*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	1.58	J	0.597	3.00	1	06/13/2016 05:59	WG879404
(S) Toluene-d8	*104*			*70.0-130*		*06/13/2016 05:59*	WG879404

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VART
Secretary

MICHAEL SCOTT
Director

Via Electronic Mail – JGuglielmetti@am-truetzschler.com
Via First Class Mail

July 29, 2016

John Guglielmetti
American Trützschler, Inc.
Post Office Box 669228
Charlotte, North Carolina 28266

Re: **Water-Supply Well Sampling Results (WSW-41 ATSW)**
American Truetzschler
12300 Harbor Drive
Charlotte, Mecklenburg County, North Carolina
NONCD0001257

Dear Mr. Guglielmetti:

On June 7, 2016, Excel Civil & Environmental Associates, PLLC (Excel) collected a groundwater sample from a water-supply well at the above referenced location. The groundwater sample was submitted for laboratory analyses including select Volatile Organic Compounds (VOCs). A summary of the analytical results from the June 7, 2016 sampling event as reported by Excel and some historical data have been included in the attached "Table 1. Summary of Water-Supply Well Sampling Results" for your review.

Laboratory analyses of the groundwater sample collected from the onsite water-supply well on June 7, 2016 reported a concentration of acetone. The reported concentration of acetone is below the North Carolina Groundwater Quality Standard (15A NCAC 2L).

The data summarized in Table 1 were used to conduct a Health Risk Evaluation (HRE) by Hanna Assefa of the Division of Waste Management (Division). I have enclosed a copy of the HRE and a portion of the laboratory report for your review. In addition, complete laboratory reports from the sampling event may be reviewed by accessing the Division's electronic records at the following web portal: http://edocs.deq.nc.gov/WasteManagement/Search.aspx

I appreciate your participation in this assessment. If you have questions, need additional information, or would like to review the complete laboratory report in its entirety, please contact me at (704) 663-1699.

Sincerely,

George D. Adams, Engineer
Division of Waste Management, NCDEQ

Enclosures

ec: Patrick Grogan
Division of Water Resources, NCDEQ
patrick.grogan@ncdenr.gov

Shawna Caldwell
Mecklenburg County, LUESA
shawna.caldwell@mecklenburgcountync.gov

Table 1. Summary of Water-Supply Well Sampling Results

			Constituent (µg/L)												
Lab Sample Number	**Well ID**	**Date Sampled**	**Acetone**	**$CHCl_3$**	**CH_3Cl**	**1,1-DCA**	**1,2-DCA**	**1,1-DCE**	**DCM**	**1,4-Dioxane**	**PCE**	**1,1,1-TCA**	**1,1,2-TCA**	**TCE**	**Toluene**
L596656-01	41 (PW-1)	9/19/2012	<50	<5.0	<2.5	<1.0	<1.0	<1.0	<5.0	**20**	<1.0	<1.0	<1.0	<1.0	<5.0
L614063-01	41 (PW-1)	1/4/2013	<50	<5.0	<2.5	<1.0	<1.0	<1.0	<5.0	**23**	<1.0	<1.0	<1.0	<1.0	<5.0
L626799-01	41 (PW-1)	3/22/2013	<50	<5.0	<2.5	<1.0	<1.0	<1.0	<5.0	**30**	<1.0	<1.0	<1.0	<1.0	<5.0
L643005-01	41 (PW-1)	6/20/2013	**3.0 J J3**	**2.7**	**0.42 J**	<0.50	<0.50	<0.50	<2.5	**53**	<0.50	<0.50	<0.50	<0.50	<0.50
L741800-02	41 (ATSW)	1/5/2015	**6.6 J**	<0.50	<0.50	<0.50	<0.50	<0.50	**2.1 J**	**3.0**	<0.50	<0.50	<0.50	<0.50	<0.50
L806544-03	41 (ATSW)	12/10/2015	<25.0	**0.459 J**	<0.500	**0.916**	**0.521**	**32.8**	<2.50	**22.8**	**1.71**	**0.544**	**0.681**	**0.666**	<0.500
L822260-01	41 (ATSW)	3/8/2016	**5.67 J**	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	**2.66 J**	**0.206 J**	<0.500	<0.500	<0.500	**0.150 J**
L840158-03	41 (ATSW)	6/7/2016	**1.48 J**	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<3.00	<0.500	<0.500	<0.500	<0.500	<0.500

$CHCl_3$ = Chloroform
CH_3Cl = Chloromethane
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
DCM = Dichloromethane (methylene chloride)

J = Estimated Concentration
PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
TCE = Trichloroethene
µg/L = micrograms / Liter (~parts per billion)

July 28, 2016

MEMORANDUM

TO: George Adams, Engineer
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
American Truetzschler
12300 Moores Chapel Road -41(ATSW)
Charlotte, Mecklenburg County
NONCD 000 1257

A water sample was collected from the subject well on June 7, 2016. Acetone was detected at a concentration below applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If both the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health -based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes.** The table below compares the detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	15A NCAC2L /IMAC (ug/L)	Calculated Health-based Concentration (ug/l)
L840158-03	Acetone	1.48 J	*	6,000	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.
J-Estimated concentration.

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.48	J	1.05	25.0	1	06/11/2016 09:20	WG878919
Benzene	U		0.0896	0.500	1	06/11/2016 09:20	WG878919
Carbon tetrachloride	U		0.159	0.500	1	06/11/2016 09:20	WG878919
Chlorobenzene	U		0.140	0.500	1	06/11/2016 09:20	WG878919
Chloroethane	U		0.141	0.500	1	06/11/2016 09:20	WG878919
Chloroform	U		0.0860	0.500	1	06/11/2016 09:20	WG878919
Chloromethane	U		0.153	0.500	1	06/11/2016 09:20	WG878919
1,1-Dichloroethane	U		0.114	0.500	1	06/11/2016 09:20	WG878919
1,2-Dichloroethane	U		0.108	0.500	1	06/11/2016 09:20	WG878919
1,1-Dichloroethene	U		0.188	0.500	1	06/11/2016 09:20	WG878919
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/11/2016 09:20	WG878919
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/11/2016 09:20	WG878919
1,2-Dichloropropane	U		0.190	0.500	1	06/11/2016 09:20	WG878919
Ethylbenzene	U		0.158	0.500	1	06/11/2016 09:20	WG878919
1,2-Dibromoethane	U		0.193	0.500	1	06/11/2016 09:20	WG878919
Methylene Chloride	U		1.07	2.50	1	06/11/2016 09:20	WG878919
Tetrachloroethene	U		0.199	0.500	1	06/11/2016 09:20	WG878919
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/11/2016 09:20	WG878919
1,1,2-Trichloroethane	U		0.186	0.500	1	06/11/2016 09:20	WG878919
Trichloroethene	U		0.153	0.500	1	06/11/2016 09:20	WG878919
Trichlorofluoromethane	U		0.130	0.500	1	06/11/2016 09:20	WG878919
Toluene	U		0.102	0.500	1	06/11/2016 09:20	WG878919
Vinyl chloride	U		0.118	0.500	1	06/11/2016 09:20	WG878919
Xylenes, Total	U		0.316	1.50	1	06/11/2016 09:20	WG878919
(S) Toluene-d8	*104*			*90.0-115*		*06/11/2016 09:20*	WG878919
(S) Dibromofluoromethane	*94.8*			*79.0-121*		*06/11/2016 09:20*	WG878919
(S) 4-Bromofluorobenzene	*88.5*			*80.1-120*		*06/11/2016 09:20*	WG878919

Volatile Organic Compounds (GC/MS) by Method 8260B-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	06/13/2016 04:41	WG879404
(S) Toluene-d8	*96.4*			*70.0-130*		*06/13/2016 04:41*	WG879404