

City of Napoleon, Ohio Phase 1 – Digester Covers and Sludge Removal Improvements

ADDENDUM 1

October 3, 2019

Planholders on the City of Napoleon, Ohio, Phase 1 – Digester Covers and Sludge Removal Improvements are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

SPECIFICATIONS

Page CITY-NTB-1, Notice To Bidders

In the Notice To Bidders, in the first paragraph, change "October 9, 2019" to "October 30, 2019".

Page 11275-4, Part 4

After Paragraph 4.01, add the following new Paragraphs 4.02 and 4.03:

"4.02 CITY WATER RATES

A. City water will be billed at a rate of \$8.43 per 1,000 gallons.

4.03 SLUDGE INFORMATION

A. The attached four pages is previous sludge data sent to Defiance landfill for disposal of current sludge."

Attachments: Paragraph 4.03 Sludge Information, Alloway Analytical Report, Pages 1 through 4







Lab Project #

L19-12478

Napoleon WWTP Attn: Dave Pike

Received:

03/15/2019 04/01/2019

PO Box 151

Reported: Date/Time Sampled:

03/14/2019 10:00

Napoleon, OH 43545

Sampled By:

KΒ

Sampled Matrix: Containers:

Sludge 1

Project Name:

Quarterly

Sample ID:

581 Sludge

Lab Sample #

L19-12478-01

Analyte	Results	Units	PQL	Method	Analyst	Extraction Date	Analysis Date
Ammonia-N	2110	mg/Kg dry	0.20	EPA-350.1	BRM	(03/19/2019
Phosphorus, Total	16600	mg/Kg dry	39.4	EPA-365.3	BRM	(03/19/2019
Total Kjeldahl Nitrogen	19900	mg/Kg dry	116	EPA 351.2	BRM	(03/20/2019
Total Solids	42.4	%	0.01	SM-2540 G	TNS	(03/17/2019
Potassium, Total	2050	mg/Kg dry	11.4	SW-6010B	AOP	(03/20/2019
Arsenic, Total	10.3	mg/Kg dry	0.57	SW-6020A	BAS	(03/22/2019
Cadmium, Total	<1.14	mg/Kg dry	1.14	SW-6020A	BAS	(03/22/2019
Copper, Total	171	mg/Kg dry	2.29	SW-6020A	BAS	(03/22/2019
Lead, Total	25.9	mg/Kg dry	2.29	SW-6020A	BAS	(03/22/2019
Molybdenum, Total	12.5	mg/Kg dry	4.58	SW-6020A	BAS	(03/22/2019
Nickel, Total	27.9	mg/Kg dry	2.29	SW-6020A	BAS	(03/22/2019
Selenium, Total	4.57	mg/Kg dry	0.46	SW-6020A	BAS	(03/22/2019
Zinc, Total	732	mg/Kg dry	1	SW-6020A	BAS	(03/22/2019
Mercury, Total	0.958	mg/Kg dry	0.236	SW-7471A	BRM	(03/26/2019

Amy Staley

800.436.1243

419.223.1362 - Fax 419.227.3792





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Attn: Dave Pike PO Box 151

Date/Time Sampled:

03/14/2019 10:00

Napoleon, OH 43545

Sampled By:

KB Sludge

Sampled Matrix: Containers:

1

Project Name:

Quarterly

Sample ID:

586 Sludge

Lab Sample #

L19-12478-02

Analyte	Results	Units	PQL	Method	Analyst	Extraction Date	Analysis Date
Cyanide, Reactive	<0.50	mg/Kg	0.50	SW-9014	LW		03/26/2019
Paint Filter	*	Y/N		SW-9095	MS		03/18/2019
	Pass						
pH, Laboratory Analyzed (Estimate)	7.2	S.U.		SW- 9040C/9045C	CTL		03/18/2019
Sulfide, Reactive	<100	mg/Kg	100	SW-9030B	CTL		03/22/2019
Arsenic, TCLP	<0.50	mg/L	0.50	SW-6010B	AOP		03/20/2019
Barium, TCLP	<1.00	mg/L	1.00	SW-6010B	AOP		03/20/2019
Cadmium, TCLP	<0.10	mg/L	0.10	SW-6010B	AOP		03/20/2019
Chromium, TCLP	<0.10	mg/L	0.10	SW-6010B	AOP		03/20/2019
Lead, TCLP	<0.10	mg/L	0.10	SW-6010B	AOP		03/20/2019
Selenium, TCLP	<0.50	mg/L	0.50	SW-6010B	AOP		03/20/2019
Silver, TCLP	<0.10	mg/L	0.10	SW-6010B	AOP		03/20/2019
Mercury, TCLP	<0.020	mg/L	0.020	SW-7470A	BRM		03/20/2019
Chlordane, TCLP	<0.00125	mg/L	0.00125	SW-8081B	BG	03/21/2019	03/21/2019
Endrin, TCLP	<0.00050	mg/L	0.00050	SW-8081B	BG	03/21/2019	03/21/2019
Heptachlor Epoxide, TCLP	<0.00025	mg/L	0.00025	SW-8081B	BG	03/21/2019	03/21/2019
Heptachlor, TCLP	<0.00025	mg/L	0.00025	SW-8081B	BG	03/21/2019	03/21/2019
Lindane (Gamma-BHC), TCLP	<0.00025	mg/L	0.00025	SW-8081B	BG	03/21/2019	03/21/2019
Methoxychlor, TCLP	<0.0025	mg/L	0.0025	SW-8081B	BG	03/21/2019	03/21/2019
Toxaphene, TCLP	<0.0125	mg/L	0.0125	SW-8081B	BG	03/21/2019	03/21/2019
(Surrogate) TCMX	98.3	%		SW-8081B	BG	03/21/2019	03/21/2019
	(5.4 - 140.4)						
(Surrogate) DCB	72.3	%		SW-8081B	BG	03/21/2019	03/21/2019
2 mothylphonol (a Crossil) TCLD	(D - 152.1)	ma/l	0.50	CIM 02700	N A T	02/24/2040	02/21/2010
2-methylphenol (o-Cresol), TCLP	<0.50	mg/L	0.50	SW-8270C	JMT		03/21/2019
3&4-methylphenol (m&p-Cresol), TCLP	<1.00	mg/L	1.00	SW-8270C	JMT	03/21/2019	03/21/2019

Analysis Certified By:____

1101 N. Cole Street - Lima, Ohio 45805 419.223.1362 - Fax 419.227.3792 800.436.1243

Amy Staley

1502 W. Fourth St. - Mansfield, Ohio 44906 419.525.1644 - Fax 419.524.5575 800.635.3222



Lab Project #

L19-12478

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03/15/2019

Attn: Dave Pike PO Box 151

Napoleon WWTP

Reported:

Date/Time Sampled:

04/01/2019 03/14/2019 10:00

Napoleon, OH 43545

Sampled By:

KB Sludge

Sampled Matrix: Containers:

1

Project Name: Quarterly

Sample ID:

586 Sludge

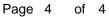
Lab Sample #

L19-12478-02

Analyte	Results	Units	PQL	Method	Analyst	Extraction Date	Analysis Date
Pentachlorophenol, TCLP	<0.50	mg/L	0.50	SW-8270C	JMT	03/21/2019	03/21/2019
2,4,5-Trichlorophenol, TCLP	<0.50	mg/L	0.50	SW-8270C	JMT	03/21/2019	03/21/2019
2,4,6-Trichlorophenol, TCLP	<0.50	mg/L	0.50	SW-8270C	JMT	03/21/2019	03/21/2019
2,4-Dinitrotoluene, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
Hexachlorobutadiene, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
Hexachlorobenzene, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
Hexachloroethane, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
Nitrobenzene, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
Pyridine, TCLP	<1.00	mg/L	1.00	SW-8270C	JMT	03/21/2019	03/21/2019
1,4-Dichlorobenzene, TCLP	<0.10	mg/L	0.10	SW-8270C	JMT	03/21/2019	03/21/2019
(Surrogate) 2-Fluorophenol	19.2	%		SW-8270C	JMT	03/21/2019	03/21/2019
	(D-91.6)						
(Surrogate) Phenol d6	20.6	%		SW-8270C	JMT	03/21/2019	03/21/2019
	(D-92.4)						
(Surrogate) Nitrobenzene d5	64.8	%		SW-8270C	JMT	03/21/2019	03/21/2019
	(D-115.7)						
(Surrogate) 2-Fluorobiphenyl	62.8	%		SW-8270C	JMT	03/21/2019	03/21/2019
(Company) O. A.C. Teilmann and an al	(14.6-103.6)	0/		CM 00700	INAT	00/04/0040	00/04/0040
(Surrogate) 2,4,6-Tribromophenol	9.7 (D-102.0)	%		SW-8270C	JMT	03/21/2019	03/21/2019
(Surrogate) p-Terphenyl-d14	59.6	%		SW-8270C	JMT	03/21/2019	03/21/2019
(Surrogato) p Torphonyr ara	(D-118.6)	70		OV 02700	O.W.	00/21/2010	00/21/2010
Benzene, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Carbon Tetrachloride, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Chlorobenzene, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Chloroform, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
1,2-Dichloroethane, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019

Analysis Certified By:_____

1101 N. Cole Street - Lima, Ohio 45805 419.223.1362 - Fax 419.227.3792 800.436.1243





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1

Project Name: Quarterly

Sample ID:

586 Sludge

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Analyte	Results	Units	PQL	Method	Analyst	Extraction Date	Analysis Date
1,1-Dichloroethene, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Methyl Ethyl Ketone (2-Butanone), TCLP	<1.00	mg/L	1.00	SW-8260B	MS		03/26/2019
Tetrachloroethene, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Trichloroethene, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
Vinyl Chloride, TCLP	<0.05	mg/L	0.05	SW-8260B	MS		03/26/2019
(Surrogate) 1,2-Dichloroethane d4	107.8 (73.3-145.0)	%		SW-8260B	MS		03/26/2019
(Surrogate) Toluene d8	100.5 (87.1-115.8)	%		SW-8260B	MS		03/26/2019
(Surrogate) 4-Bromofluorobenzene	108.2 (71.7-111.4)	%		SW-8260B	MS		03/26/2019
Diesel Range Organics (C10 - C20)	2030	mg/Kg	100	SW-8015C	AS	03/26/2019	03/28/2019
Motor Oil Range (C20-C34) Estimate	3780	mg/Kg	500	SW-8015C	AS	03/26/2019	03/28/2019
Gasoline Range Organics (C6 - C12)	<50.0	mg/Kg	50.0	SW-8015C	MS		03/25/2019
TCLP extraction	*	Y/N		SW-1311	CTL		03/18/2019
Zero Headspace TCLP Extraction	*	Y/N		SW-1311	MS		03/18/2019
2,4-Dichlorophenoxyacetic acid (2,4-D), TCLP	<0.04	mg/L	0.04	SW-8151	A-MAR		03/26/2019
Silvex, TCLP	<0.04	mg/L	0.04	SW-8151	A-MAR		03/26/2019
(Surrogate) DCAA	86 (44-139)	%		SW-8151	A-MAR		03/26/2019

Amy Staley

City of Napoleon, Ohio Phase 1 – Digester Covers and Sludge Removal Improvements

NOTICE TO BIDDERS

Sealed Bids for Phase 1 – Digester Covers and Sludge Removal Improvements, will be received by the City of Napoleon, Ohio, at the 255 West Riverview Avenue; Post Office Box 151; Napoleon, Ohio 43545 until 11:00 a.m., local time, on October 9, 2019 October 30, 2019 (Addendum 1, Issued October 3, 2019) at which time they will be publicly opened and read in Council Chambers.

In general, the work consists of removal of the primary and secondary digester covers or left in place, sludge digester mixers, all sludge, grit, and debris from the digesters, and cleaning the walls and floors.

The issuing office is Jones & Henry Engineers, Ltd., 3103 Executive Parkway, Suite 300; Toledo, Ohio 43606-1373; 419-473-9611. Copies of the Bidding Documents may be examined at the Owner's office listed above or the issuing office, without charge.

A pre-bid meeting will be held September 26, 2019 at 10:00 a.m. at the Napoleon Wastewater Treatment Plant located at 735 East Washington Street, Napoleon, Ohio 43545. All bidders are encouraged to attend.

Technical questions regarding the project should be e-mailed to the Project Manager, Daniel W. Miller, P.E., at Jones & Henry Engineers, Ltd.

Copies of Bidding Documents and Contract Documents may be obtained electronically from www.jhplanroom.com. There is no charge to download from the digital print-room, however, registration is required. If hard copies of the bidding documents are needed, they can be ordered from the print-room for a fee. If you have any problems using the digital print-room, you are encouraged to contact either the Engineer's Project Manager, or Eastern Engineering at 419-661-9841.

Neither Owner nor Engineer has any responsibility for the accuracy, completeness or sufficiency of any bid documents obtained from any source other than the source indicated in these documents. Obtaining these documents from any other source(s) may result in obtaining incomplete and inaccurate information. Obtaining these documents from any source other than directly from the source listed herein may also result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued.

Bids must be submitted on the forms bound herein, must contain the names of every person or company interested therein, and shall be accompanied by either a Bid Guaranty and Contract Bond in the amount of 100% of the amount bid with satisfactory corporate surety, or by a certified check on a solvent bank in the amount of not less than 10% of the amount of the Bid, subject to conditions provided in the Instructions to Bidders. The successful bidder will be required to furnish satisfactory Performance Bond and Maintenance and Guarantee Bond in the amount of 100% of the Bid.

The Contractor shall be required to pay not less than the prevailing wage rates established by the federal Davis-Bacon Wage Determinations issued by the U.S. Department of Labor.

Any Bid may be withdrawn prior to the scheduled closing time for receipt of Bids, but no bidder shall withdraw his Bid within 60 days after the actual opening thereof.

Domestic steel use requirements as specified in Section 153.011 of the Revised Code apply to this project. Copies of Section 153.011 of the Revised Code can be obtained from any of the offices of the Department of Administrative Services.

The Owner reserves the right to reject any or all Bids, waive irregularities in any Bid, and to accept any Bid which is deemed most favorable to the Owner.

Engineer's Estimate is \$600,000.

City of Napoleon, Ohio				
	Kelly C. O'Boyle			
	City Finance Director			

Dated: September 19, 2019

SECTION 11275 DIGESTER CLEANING AND SLUDGE DISPOSAL

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes all materials, equipment, and labor necessary to clean two bdigesters and dispose of all sludge, grit, sand, scale, and/or miscellaneous foreign material encountered in the tanks.
- B. Each tank shall be emptied completely. Liquid from the tanks used for washdown free of grit and scum or from dewatering operations can be returned to a designated plant sewer. Dewatering grit, scum, and sludge shall be landfilled. The Contractor shall then remove and dispose of the remaining scum, sludge, grit, sand, scale, and/or miscellaneous material from each tank.
- C. All Work performed shall comply and be in accordance with all local, State, and Federal regulations.
- D. Sludge samples are available at the Treatment Plant. The Contractor is required to obtain his own samples. Sludge characteristics from sludge samples collected are not guaranteed to be representative of the digester contents. Any conclusions drawn by the Contractor from the samples are the responsibility of the Contractor.

1.02 SUBMITTALS

- A. Information for the Record:
 - 1. Sludge disposal plan and a time schedule for performance of each operation.
 - 2. Location of the disposal site and copies of the approval documents.
 - 3. Quantities and weight tickets for all sludge disposal including percent solids.

1.03 TANK VOLUMES

- A. The tanks to be cleaned are 55-feet diameter Secondary, 20.5-feet side water depth, and 6-feet deep center cone; and 55-feet diameter Primary, 20.5-feet side water depth, and a small center sump.
- B. The liquid levels and volumes indicated in this Section are approximate only and are not guaranteed. The Contractor shall assume full responsibility for conclusions which he may draw.
- C. The liquid level in the existing digesters is expected to be approximately 18-feet above the sidewall bottom.
- D. Digester cleaning and sludge disposal shall include any sludge spilled by the Contractor.

Phase 1 – Digester Covers and Sludge Removal Imp.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01 PROTECTION

A. The Contractor shall be responsible for the protection of all piping, equipment, and components in the digester complex and shall make all the repairs which may be necessary as a result of damage incurred during the cleaning operation.

3.02 EQUIPMENT

A. The Contractor shall provide, install, and remove all necessary pumps, hoses, piping, trucks, and other equipment required to remove the tanks' contents, washwater, and any other debris from each of the tanks.

3.03 WASHWATER

A. Final effluent is available for the Contractor's cleaning and removal operations from the Final Effluent Weir Box. City water is also available. The Contractor shall provide all necessary pumps, hoses, power, equipment fuel, or any other equipment, material, or labor required to suit his needs to provide water for cleaning the digesters. He City shall provide a meter for installation by the Contractor to monitor use of City water. Backflow preventors are required to be provided and installed by the Contractor.

3.04 NOTIFICATION OF PERSONNEL

A. The Contractor shall notify the City at least two weeks prior to the date Work is to commence on any digester.

3.05 DIGESTER CLEANING SCHEDULE

- A. A minimum of one digester shall remain in service and completely operational at all times.
- B. The Contractor shall submit to the Engineer for approval a proposed Digester Cleaning Schedule prior to commencing the Work.
- C. Digester(s) shall be emptied, cleaned, placed into service, and be completely operational on schedule as planned.

3.06 TANK ACCESS

A. Access to the inside of the existing digester(s) shall be confined to hatches on the existing covers only under Bid Item 3., or the Contractor can first remove the cover under Bid Item 1. If Bid Item 1 is accepted.

- B. No new openings shall be made in the existing digester covers or walls during the digester cleaning and sludge disposal operations.
- C. Bolted covers that are removed during the cleaning and/or construction operations shall be replaced and made gastight during the renovation work.

3.07 PROTECTION OF PIPING

- A. The Contractor shall protect all piping and pipe openings in the digesters from accumulation of grit and debris during cleaning and rehabilitation operations.
- B. The Contractor shall completely clean any piping or pipe openings that become plugged.

3.08 SLUDGE DISPOSAL

- A. All sludge materials removed from the digesters shall be transported from the treatment plant site and disposed of in accordance with local, State, and Federal requirements at an approved facility.
- B. The Contractor shall not return any sludge, grit, sand, scale, and/or miscellaneous foreign material into the interceptor sewers or the treatment plant influent.
- C. At no time, shall any liquid or solid fraction from the cleaning and removal operation be allowed to spill or be placed or stored on the ground or handled in a manner inconsistent with Federal, State, or local regulations.
- D. If the Contractor's operations include dewatering the sludge at the treatment plant site, the filtrate liquid may be discharged into the treatment plant influent sewers. The filtrate liquid must be free of any sludge, grit, sand, scale, and/or other miscellaneous foreign material. The manhole used for discharge of the filtrate liquid shall be approved by the Plant Superintendent.
- E. Dewatering equipment shall provide a 90 percent capture rate of TSS.

3.09 TANK AND PIPE CLEANING

- A. Each tank shall be completely emptied, and power washed clean as specified prior to starting removal of sludge from the next digester. The Contractor shall leave a period of three weeks in his schedule to allow the Owner to inspect the concrete and covers after the first digester is cleaned.
- B. All debris resulting from the cleaning operations of the tanks and covers shall be removed and disposed of by the Contractor.
- C. During the cleaning operation, the Contractor shall take proper safety precautions to properly protect workmen.
- D. Power washing shall be sufficient to allow inspection of existing concrete walls and floors. Removal of existing paint coatings on the walls is not necessary.

E. The feed pipe from the digester to the existing sludge day tanks in the dewatering building shall be jet cleaned.

PART 4 SPECIAL PROVISIONS

4.01 DIGESTER CONTENTS

- A. Following this Section, is a report generated by the Owner of testing performed on the digester contents. The material, if dewatered to meet the selected landfill requirements, can be landfilled.
- B. The depth of grit has been measured by probing down the side wall of the secondary digester and through the sample hatch of the primary digester. The depths were found to be:
 - 1. 8 Feet from the top of wall in the secondary digester.
 - 2. 8 Feet from the top of the sample port in the primary digester.
- C. Grit is contained in all sludge at various percentages. The levels noted in Paragraph B. are the levels which the probe became difficult to push in. Levels above the note level may contain significant volumes of grit as the grit will not be level across the tank diameter.
- D. The percentage of grit has not been measured by the Owner; however, is expected to range from 10 to 80 percent at various locations within the digester. The concentration varies. The Contractor is highly encouraged to sample the contents prior to bidding.
- E. Sludge sample data follows on next page.

4.02 CITY WATER RATES

A. City water will be billed at a rate of \$8.43 per 1,000 gallons.

4.03 SLUDGE INFORMATION

A. The attached four pages is previous sludge data sent to Defiance landfill for disposal of current sludge. (Addendum 1, Issued October 3, 2019)

END OF SECTION