



CONSOLIDATED TREATMENT SYSTEMS

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Franklin, OH 45005

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Fax: 937-746-1446

Field Sales
937-550-2215

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Enviro
GUARD

MULTI-FLO

NAYADIC

Over 35 Years of
Reliable,
Accountable,
Professional Service

October 29, 2010

Allen Knapp, Onsite Program Manager
Division of Onsite Sewage and Water Services
Virginia Department of Health
109 Governor St.
Richmond, VA 23219

Dear Sir:

Subject: Multi-Flo FTB-Series Submittal in Accordance with GMP 147

Attached is additional information submitted in response to the memorandum of October 29, 2010, submitted by Kemper Loyd of your staff.

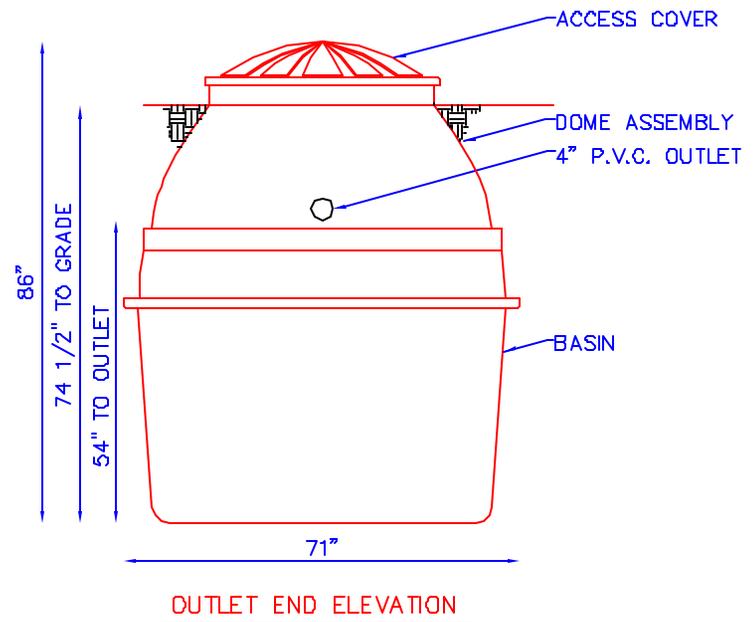
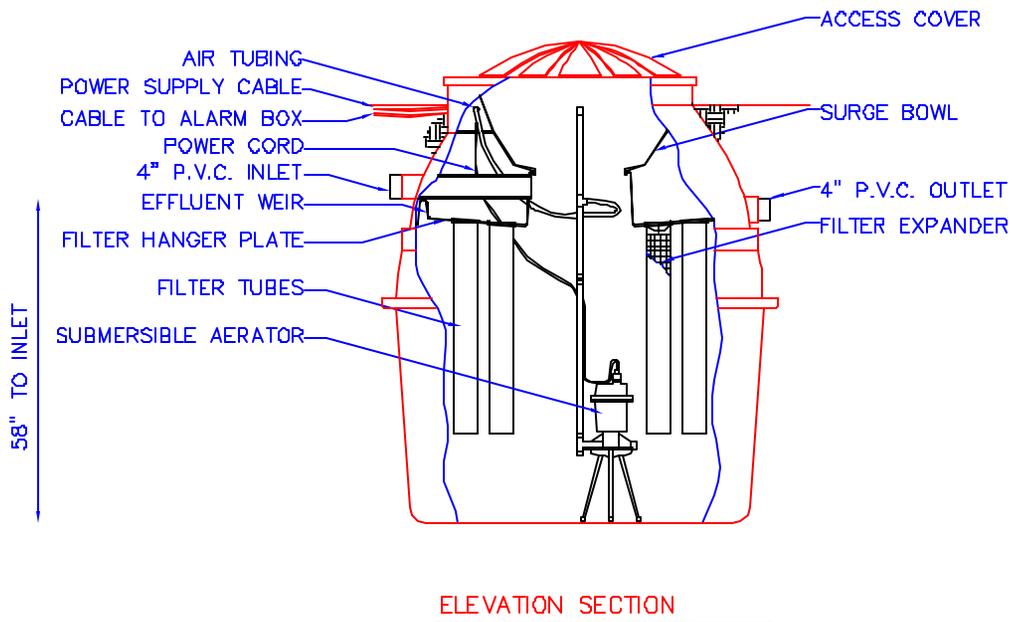
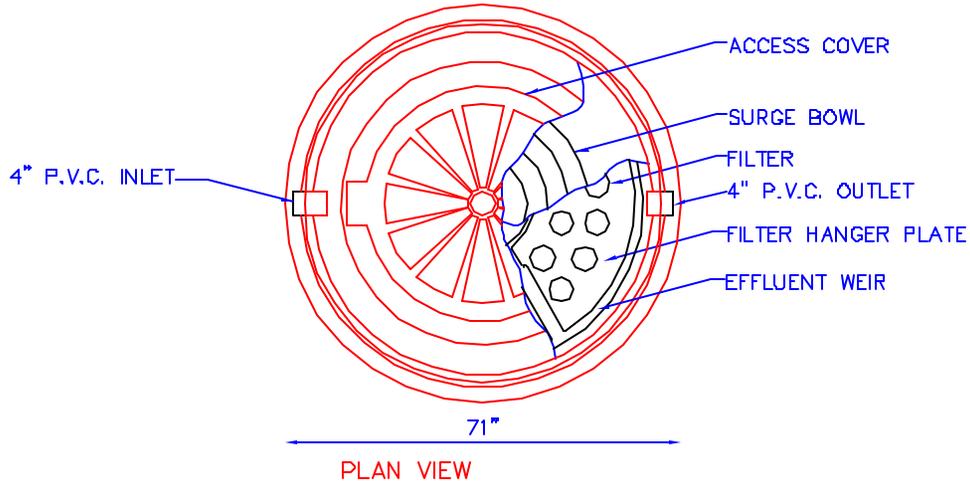
- 1.a. Product Identification Form. Please include the Multi-Flo FTB-0.6 in the evaluation.
- 1.b. Multi-Flo FTB-1.0 Technical Plans. Technical plans for the Multi-Flo FTB-1.0 are attached
- 2.a. QA/AC Plan. A QA/QC Plan is attached. Please understand that the samples will be collected by either former CTS Engineering Director or dealer with transport, and analysis of Multi-Flo samples.
- 2.b. Statement Regarding Submission of Sampling Results.
"Sampling results will be submitted to the Virginia Department of Health no later than the 15th day following analysis of the sample."
- 2.c. Statement Regarding Collection, Transport, and Testing of Samples.
"All persons who collect, transport, or test samples will be properly trained by employees or agents of Consolidated Treatment Systems, Inc., as to the proper procedures to complete their tasks."

Please feel free to contact either Mr. Burks or me if you require additional information. We appreciate your prompt attention to our submittal and look forward to a quick approval.

Sincerely,

Jeff Coomer, Vice President
Consolidated Treatment Systems, Inc

Attachments



NOTES:

1. THE FTB-1.0 CONTAINS TWO AERATORS, EACH PROVIDING 3.6 LB/DAY OF OXYGEN
2. THE FTB-1.0 HAS THE IDENTICAL 30-FILTER MEDIA CONFIGURATION AS THE FTB-0.5, 0.6, AND 0.75.

MULTI-FLO FTB 0.6 VERSION 1.0

Date:
10/27/2005
Drawn By:
BDB
Scale:
N.T.S.

Consolidated Treatment Systems, Inc.
1501 Commerce Center Drive, Franklin, OH 45005-1891
1-800-416-0324 www.nayadic.com
Bennete D. Burks, P.E.

MULTI-FLO AND ENVIRO-GUARD MATERIAL AND COMPONENT SPECIFICATIONS

Tank:

Polyester Laminated FRP A-610, or equal, with over 33 percent glass content, Owens Corning fiberglass 825-DA-211, producing cured properties as follows:

<i>Flexural Strength:</i>	<i>36,350 PSI</i>
<i>Flexural Modulus:</i>	<i>1.49 X 106 PSI</i>
<i>Tensile Strength:</i>	<i>16,210 PSI</i>
<i>Heat Distortion Temperature:</i>	<i>183°F</i>
<i>Nominal Thickness:</i>	<i>3/16 in+ 1/16 in -0 in</i>

Filtration Media:

11-ounce polyester felt having a nominal filtration of 100-micron and an air permeability of 400 cfm

Aeration:

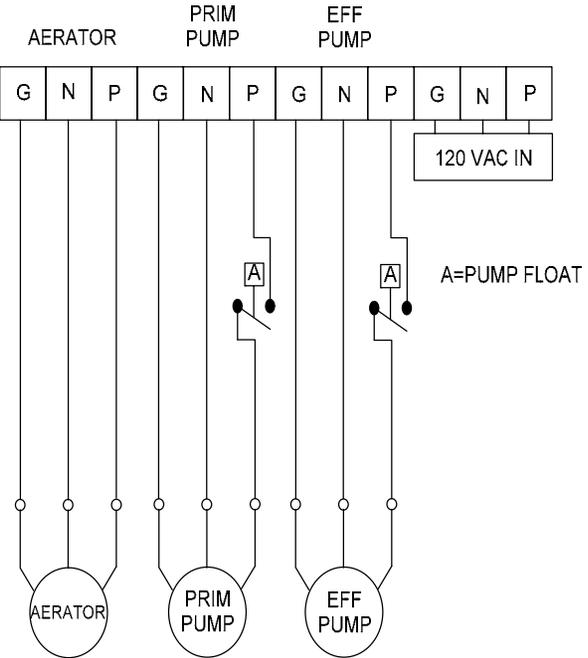
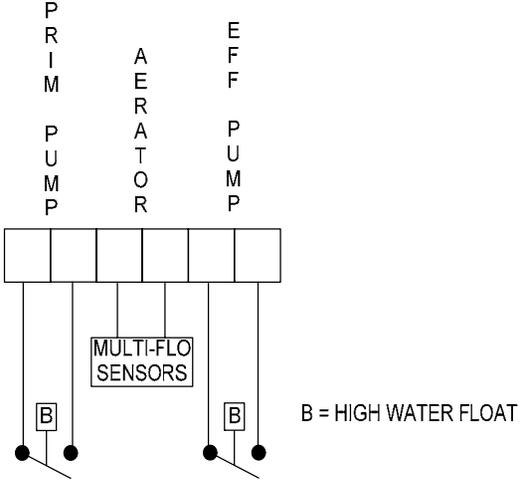
Submerged open impeller aerator with a nominal rating of 1/6 hp drawing no more than 2 A during operation. The aerator shall be rated for continuous operation.

MULTI-FLO AND ENVIRO-GUARD SPECIFICATIONS

Date:	02/26/2009
Drawn By:	BDB
Scale:	NONE

CONSOLIDATED TREATMENT SYSTEMS, INC.
1501 COMMERCE CENTER DRIVE
FRANKLIN, OH 45005-1891
1-937-746-2727 www.multi-flo.com

MULTI-FLO CONTROL PANEL SCHEMATIC



		TITLE	
		4080D4B-MF	
SIZE	CAGE CODE	DWG NO	REV
A2		021407RW-FW	2

QA/QC Procedures for the Collection, Transport, and Analysis of Multi-Flo Samples
Virginia Department of Health Evaluation
October 29, 2010

Notes:

- **All collection and transport will conform to the latest edition *Standard Methods for the Examination of Water and Wastewater*.**
- **Units will be inspected prior to sampling to confirm the ability to obtain samples in accordance with these procedures.**
- **Sampling Ports will be required as a part of new installations and will be encouraged as a part of existing installations.**

1. Preliminary Procedures

- a. Schedule with the Testing Laboratory the collection, transport, and transfer of samples
 - i. Identify and Follow specific procedures the Testing Laboratory requires
 - ii. Establish and Maintain with the Testing Laboratory a protocol to conduct verification analyses on duplicate samples collected and transported.
- b. Obtain Appropriate Sample Containers from Testing Laboratory
 - i. BOD
 - ii. TSS
 - iii. Fecal Coliform
 - iv. Nitrogen Series, optional
- c. Confirm Presence and Fitness for Use of Ancillary Sampling Equipment, if needed.
 - i. Dipper
 - ii. Vacuum bulb
- d. Prepare Sample Transport Container
 - i. Insulated Container with fastening lid
 - ii. Container filled with sufficient crushed ice to cool and cushion sample containers
- e. Examine Personal Protective Equipment for Availability and Fitness for Use
 - i. Safety Glasses
 - ii. Surgical Mask

- iii. Gloves
- iv. Disinfectant in spray bottle
- v. Disinfecting cleaner
- vi. Alcohol towelettes
- vii. 1-gal bottle of 0.5% Chlorine Solution
- f. Confirm Sample Collection Log is Complete
 - i. Sample Locations
 - 1. Owner
 - 2. Address
 - ii. Sample Number
 - iii. Date
 - iv. Time
 - v. Weather Conditions and Temperature
 - vi. Analysis Requested
 - vii. Photographs Taken Y/N
 - viii. Notes
- 2. General Sample Collection Procedures
 - a. The transport container will be secured in a trunk or locked vehicle.
 - b. Samples will be transported to the testing laboratory within the time limits and on the days and times established by the testing laboratory.
 - c. A Chain of Custody log will be maintained for all samples.
 - d. Sample collection will be conducted only by Bennette Burks, Douglas Crooks, or those persons who Mr. Burks has personally trained and certified to collect samples.
 - e. Sample containers will be labeled with an indelible ink pen.
 - i. Date
 - ii. Time
 - iii. Location
 - iv. Analysis

- v. Sample Number
- vi. Other information as directed by the testing laboratory
- f. Two samples for each analysis will be collected.
 - i. Inspect piping and area in proximity to sample location to confirm the absence of any object or item that could affect the validity of the sample to be collected.
 - ii. Debris, which could include but is not limited to insects, spider webs, small animals or vegetation, settled solids, or any other substance, will be removed prior to sampling, if necessary, such that a representative sample is collected.
 - iii. Induce flow for at least 30 seconds before collecting sample.
 - 1. Measure time with a stop watch or by manual count
 - iv. Collect sample
 - 1. Directly into sample container, if possible.
 - 2. Using a *disinfected* dipper or vacuum bulb and transfer immediately into the sample container. Disinfection will be accomplished by wiping with an alcohol towelette and/or rinsing with a chlorine solution and then drying the sampling instrument immediately prior to sample collection.
- 3. Influent Sample Collection
 - a. Collect samples from the discharge piping to the dose tank, if installed, or treatment tank
- 4. Effluent Sample Collection
 - a. Collect samples from sealed, designated sampling port attached to the Multi-Flo treatment tank, if installed.
 - i. Sampling port will be purged prior to sampling, if necessary.
 - ii. Debris will be removed, if necessary, such that a representative sample of the effluent is collected.

- iii. Wipe pipe with alcohol towelette to disinfect the pipe in preparation for the fecal coliform sample.
 - b. Collect the fecal coliform sample first.
 - c. Collect sample from discharge to effluent pump tank, if effluent pumping is conducted.
 - d. Collect sample using a dipper or vacuum bulb from top of weir plate in the center of a filter media opening. Immediately transfer sample to sample container.
5. Place samples in insulated transport container.
6. Transport Samples to the Testing Laboratory.
7. Complete the Chain of Custody log.
 - a. Complete and Sign forms required by the Testing Laboratory
 - b. Maintain receipts issued by the Testing Laboratory.
8. Request Duplicate Sample Analysis in Accordance with the QA/QC protocol.