pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0285102**
Wastewater Type	**Sewage**	APS ID	**1088852**
Facility Type	**SRSTP**	Authorization ID	**1440430**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Dale Versaw**	Facility Name	**Versaw Properties SRSTP**
Applicant Address	611 Ashton Court	Facility Address	241 Bovard Luxor Road
	Irwin, PA 15642-3692		Greensburg, PA 15601
Applicant Contact	Dale Lutterman	Facility Contact	Dale Versaw
Applicant Phone	(724) 244-5028	Facility Phone	(724) 244-5028
Client ID	377302	Site ID	864795
SIC Code	8800	Municipality	Unity Township
SIC Description	Private Households	County	Westmoreland
Date Application Received	May 12, 2023	WQM Required	Yes
Date Application Accepted		WQM App. No.	6523401

Project Description: New NPDES permit application.

Summary of Review

The PA Department of Environmental Protection (PADEP/Department) received a new Part I NPDES and Part II WQM permit applications from Fred R. Brant (consultant) of F.R. Brant Company on behalf of Mr. Dale Versaw (applicant) on May 12, 2023. The applications are for a proposed Small Flow Treatment Facility (SFTF/SRSTP) located in Unity Township, Westmoreland County with an average design flow of 500 GPD and 0.9 lbs. BOD_5/day from a proposed 4-bedroom single-family residence. The proposed discharge is into UNT to Little Crabtree Creek through Outfall 001.

This fact sheet is developed in accordance with 40 CFR §124.56

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
√		Reza H Chowdhury, E.I.T / Project Manager	May 30, 2023
X		Pravin Patel Pravin C Patel, P.E. / Environmental Engineer Manager	06/05/2023

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0005
Latitude	40º 20' 17.20"	Longitude	-79º 27' 37.00"
Quad Name	Latrobe	Quad Code	1610
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Little Crabtree Creek (WWF)	Stream Code	43375
NHD Com ID	125292718	RMI	0.2000
Watershed No.	18-C	Chapter 93 Class.	WWF
Existing Use	**WWF**	Existing Use Qualifier	Ch. 93
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	None within 100 miles downstream of Outfall 001		

Changes Since Last Permit Issuance: None, new application.

Other Comments:
Anti-Degradation Requirement:

Chapter 93.4a(b) of the Department's rules and regulations require that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The discharge is into a stream segment designated as Warm-Water Fishes (WWF). No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

Class A Wild Trout Streams:

No Class A Wild Trout Fishery will be impacted by this discharge.

Kiskiminetas-Conemaugh River Watershed TMDL:
Kiskiminetas-Conemaugh River Watersheds TMDL was approved by EPA on January 29, 2010 for AMD discharges. There is no reason to believe this SRSTP will be discharging these metals in high concentrations. Therefore, no monitoring for TMDL parameters is proposed in this permit.

Treatment Facility summary:

The application was submitted for a new SRSTP named Versaw Property SRSTP that will be constructed to serve a proposed 4-bedroom single dwelling located in 241 Bovard Luxor Road, Greensburg, PA 15601. The proposed discharge will be into an UNT to Little Crabtree Creek (WWF) through Outfall 001.

The details of the proposed treatment plant will be discussed in the Internal Review & Recommendation (IR&R) that will accompany the WQM permit under WQM permit number 6523401. In summary, the proposed treatment plant will be a Singulair Bio-Kinetic Model 960-500 treatment tank, followed by a Hydro-Kinetic Bio-Film Reactor with a model AT 1500 UV disinfection system and discharge into UNT to Little Crabtree Creek through Outfall 001.

The proposed treatment technology isn't listed in the SFTF Manual, therefore, the facility doesn't qualify for coverage under general PAG04 permit.

Development of effluent limitations:

Flow monitoring:
Flow monitoring will be placed in this permit in accordance with DEP's SOP BCW-PMT-003 revised May 17, 2019. The reporting frequency set forth is once a year and sample type is Estimate (for SRSTP.)

Biochemical Oxygen Demand (BOD_5)
An average annual BOD_5 limit of 10 mg/l and IMAX limit of 20 mg/l will be placed in this permit. These limits are consistent with the SOP.

Total Suspended Solids (TSS)
An average annual BOD_5 limit of 10 mg/l and IMAX limit of 20 mg/l will be placed in this permit. These limits are consistent with the SOP.

Fecal Coliform:
A year-round annual average and IMAX limit of 200 No./100 ml will be placed in this permit.

UV:
The SOP indicates that it is not necessary to require UV intensity or transmittance monitoring in the permit for SRSTPs/SFTFs.

The Design Engineer's Report stated that the UV system will be inspected and cleaned on a monthly basis, the Singulair-HKBFR Combo will have regular service every six months, and the UV bulb will be changed annually.

The Design Engineers Report accompanied with the WQM permit indicated that the proposed treatment plant can treat the wastewater to generate an effluent that will have maximum CBOD5 of 8.0 mg/l and TSS of 7.0 mg/l

Act 537 Planning was approved under PADEP Code 65959-23-006 on March 22, 2022.

Proposed Effluent Limitations and Monitoring Requirements

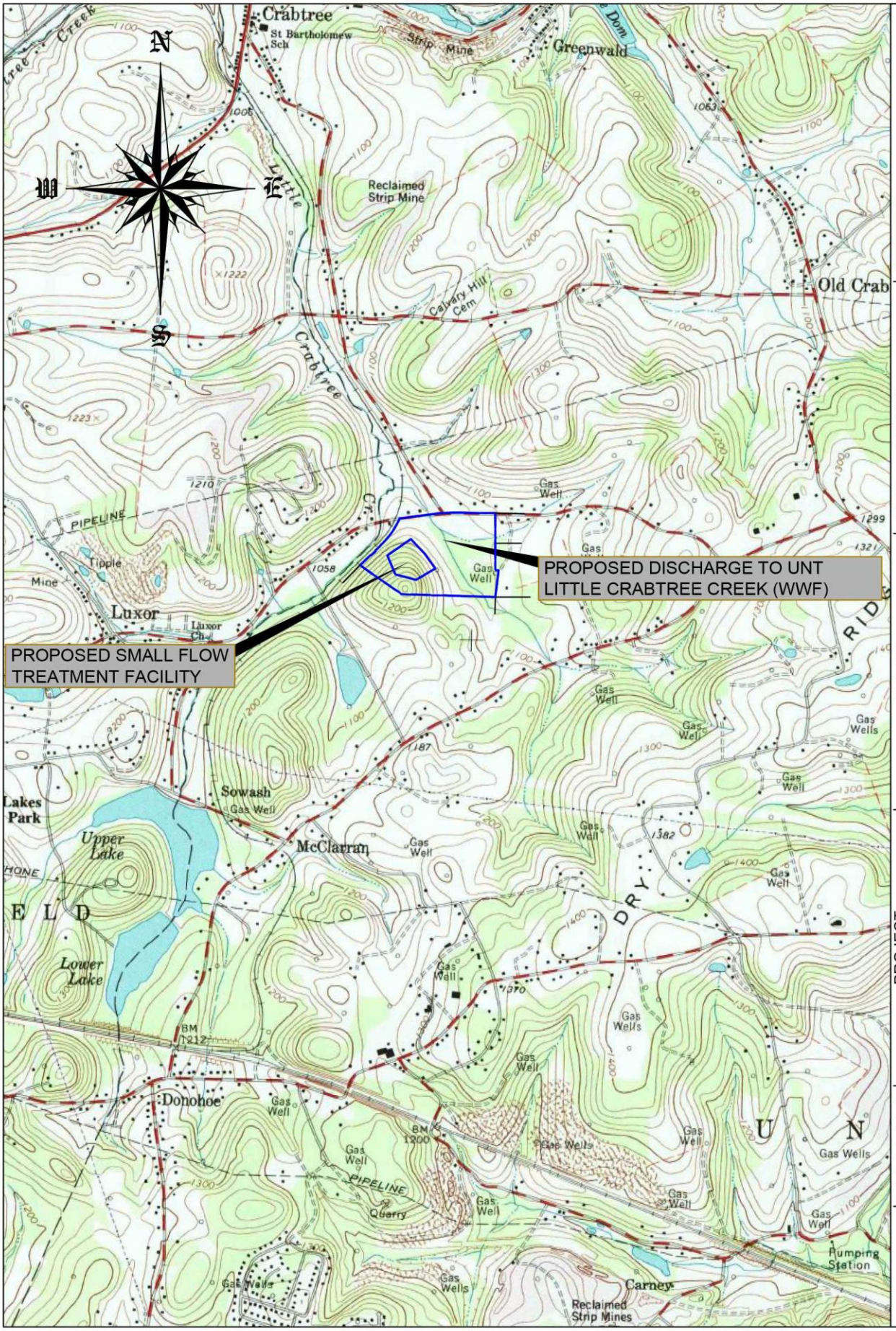
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: After last treatment unit

Other Comments: None



engineers • surveyors
F.R. BRANT COMPANY
317 Vanyo Road, Berlin, PA 15530 - 814.279.2093

DATE REVISION

CLIENT
DALE LUTTERMAN
1813 STATE ROUTE 819
GREENSBURG, PA 15601

PROJECT
LOCATION PLAN
LUTTERMAN PROPERTY
SMALL FLOW TREATMENT FACILITY
UNITY TWP., WESTMORELAND CO., PA

DATE 6.02.2021
SCALE 1"=2000'
DRAWING 1309 LUTTERMAN
LAYOUT Location Plan
SHEET NO. L-1

GENERAL NOTES:

① SINGULAIR® AERATOR, AS TESTED AND ACCEPTED BY NSF.

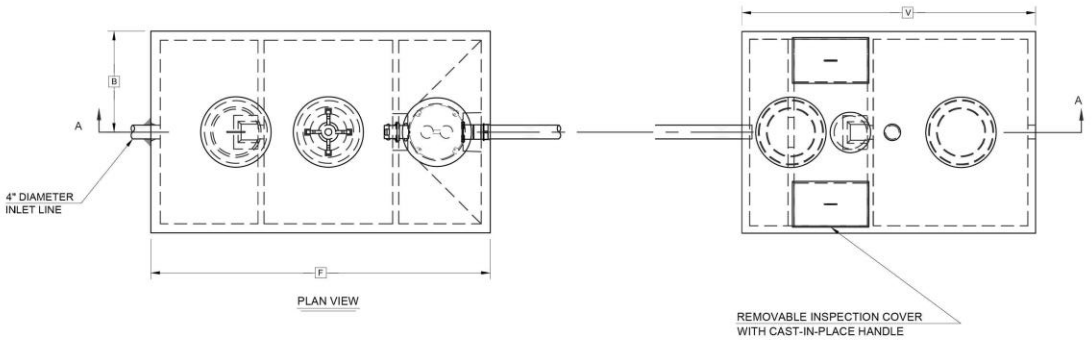
② FALL THROUGH SINGULAIR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.

③ ON DEEPER INSTALLATIONS, RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING, BIO-FILM REACTOR RISER, AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE. INSPECTION COVER ON PRETREATMENT CHAMBER MUST BE DEVELOPED TO WITHIN TWELVE INCHES OF GRADE.

④ TANK REINFORCED PER ACI STD. 318-05.

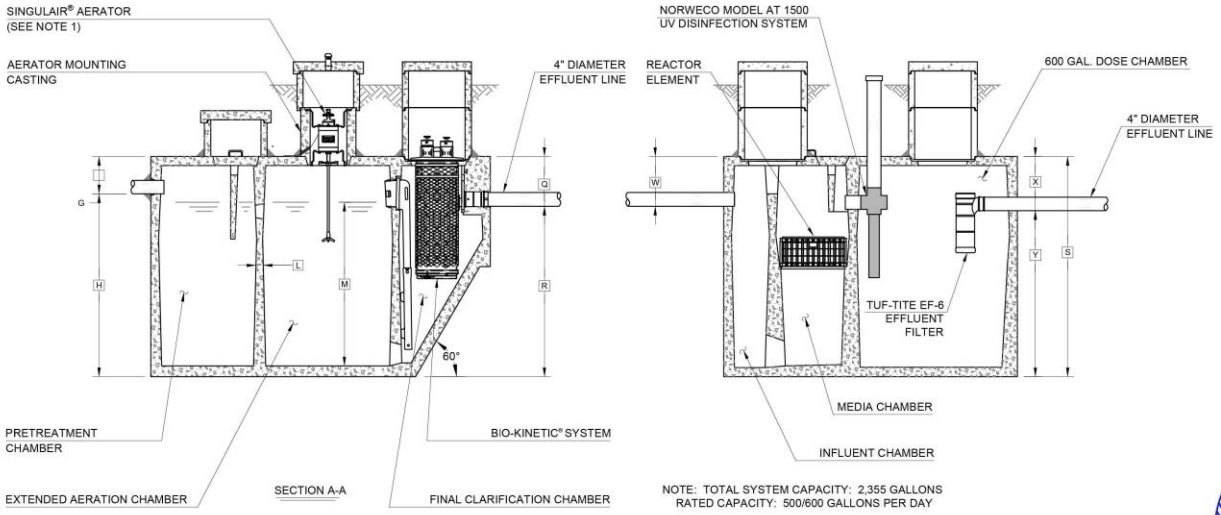
⑤ REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS. REACTOR LID IS SECURED.

⑥ CONTACT THE LOCAL, LICENSED SINGULAIR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS AND CONFIRMATION OF CRITICAL DIMENSIONS.



CRITICAL DIMENSIONS (SEE NOTE 6)

A	1'- 0"	N	
B	2'- 9"	O	
C		P	
D		Q	1'- 4"
E		R	4'- 8"
F	9'- 3"	S	6'- 0"
G	1'- 0"	T	
H	5'- 0"	U	
I		V	8'- 0"
J		W	1'- 4"
K		X	1'- 5.5"
L	0'- 2"	Y	4'- 6.5"
M	4'- 6"	Z	



SINGULAIR BIO-KINETIC MODEL 960-500 & HYDRO-KINETIC BIO-FILM REACTOR

N.T.S.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
FREDERICK RICHARD BRANT
No. PE054388E

F R engineers • surveyors
F.R. BRANT COMPANY
317 Vanyo Road, Berlin, PA 15530 - 814.279.2093

DATE	REVISION

CLIENT
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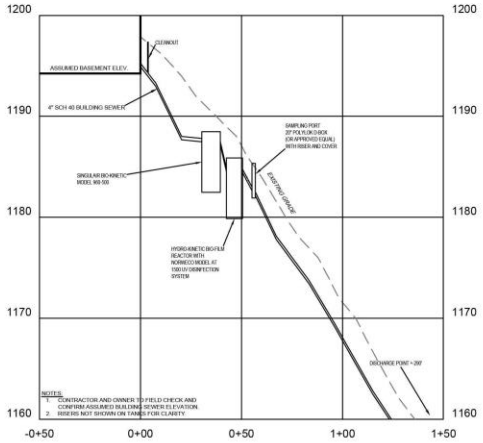
1813 STATE ROUTE 819
GREENSBURG, PA 15601

PROJECT
VERSAW PROPERTY
SMALL FLOW TREATMENT FACILITY
UNITY TWP., WESTMORELAND COUNTY, PA

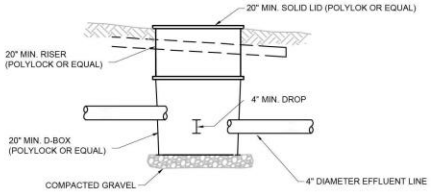
DATE	3/27/2023
SCALE	N.T.S.
DRAWING	1309 Lutterman
LAYOUT	SFTF-2

SHEET NO.
2 OF 4

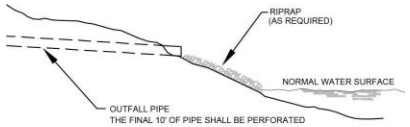


SYSTEM PROFILE

1"=50' H. & 1"=10' V.



SAMPLING PORT DETAIL



OUTFALL DETAIL

GENERAL INFORMATION
The Small Flow Treatment Facility (SFTF) should be installed by a competent, experienced individual to ensure that the treatment units and structures are constructed in accordance with the guidelines of the DEP and all manufacturer's recommendations.

Extreme care shall be exercised in the operation of machinery and vehicles during and after installation to prevent damage to the system.

Notify DEP, the municipality, and the design engineer prior to construction and at the completion of construction to schedule inspections. No part of a SFTF may be covered until a final inspection is conducted and final written approval is given.

The design engineer must inspect the system and certify that the installation is consistent with the design.

The SFTF shall be inspected, approved and covered before the structure is occupied.

The SFTF shall be covered by the permittee within 5 calendar days after final inspection and approval to prevent damage.

Liquid wastes, including kitchen and laundry wastes, shall be discharged to the SFTF.

Discharge from roof gutters, foundation drainage and surface runoff may not be discharged to a treatment tank; nor may the discharges be permitted to flow over the SFTF.

To minimize water usage, water conservation fixtures are required.

The permit requires specific levels of operation, maintenance, monitoring and reporting. Some routine testing, such as the monthly chlorine residual test, can be conducted by the permittee. Other monitoring requirements, such as the annual fecal coliform test and inspection and maintenance functions described on the Annual Maintenance Report, are to be conducted by a trained service provider contracted by the permittee.

MINIMUM HORIZONTAL ISOLATION DISTANCES
The following minimum horizontal isolation distances must be maintained between all treatment or mechanical components of the SFTF and the features named. Where conditions warrant, greater isolation distances may be required:
-Property line, easement or right-of-way - 10 ft.
-Occupied buildings, swimming pools and driveways - 10 ft.
-Individual water supply or water supply system suction line - 50 ft.
-Water supply line under pressure - 10 ft.
-Streams, watercourses, lakes or other surface waters - 25 ft.

BUILDING SEWERS
Building sewers must be constructed of a durable material acceptable to DEP (Schedule 40 DWV or better) and as specified by local plumbing or building codes.

When the average daily flow from an establishment is 1000 gallons or less, all building sewers shall be at least 3" in diameter unless otherwise specified by local plumbing or building codes. Where the average daily flow exceeds 1000 gallons per day, all building sewers shall be at least 6" in diameter unless otherwise specified by local building or plumbing codes.

Cleanouts shall be provided at the junction of the building drain and building sewer. Cleanouts shall be provided at intervals not greater than 100 feet.

Bends ahead of the treatment tanks shall be limited to 45° or less where possible.

The grade of the building sewer shall be at least 1/8 inch per foot; however, the grade of the 10 feet of building sewer immediately preceding the treatment tank shall not exceed 1/4 inch per foot.

TREATMENT TANKS
The treatment tanks shall consist of a Norweco Singulair Bio-Kinetic Model 960 and a Hydro-Kinetic Bio-Film Reactor in series supplied by the local Norweco distributor.

The tanks shall have access manholes with removable covers extended to grade. Access covers shall be secured by bolts or locking mechanisms, or have sufficient weight to prevent unauthorized access.

The ground surface shall slope away from any access extended to grade level.

Bi-annual inspection of the system by the service provider is required.

DOSING TANKS *(IF NECESSARY)*
The dosing tank shall be a rectangular precast concrete tank.

Unless otherwise regulated by local electrical codes, all electrical connections shall be moisture resistant and at a point higher than the inlet pipe, or mounted above grade outside of the dosing tank or manhole extension within a tamper resistant, lockable control box.

A watertight manhole, at least 20 inches square (20 x 20) or in diameter, extended to grade, shall be provided for access to the dosing tank. The access cover shall be secured by bolts or locking mechanisms, or have sufficient weight to prevent unauthorized access.

The ground surface shall slope away from any access extended to grade level.

Annual inspection of the system and pumping of the dosing tank by the service provider is required.

DOSING PUMP *(IF NECESSARY)*
A disconnect shall be incorporated into the piping within the dosing tank for ease of pump removal. This shall be located so that entering the tank to remove the pump is not necessary. A non-biodegradable rope may be provided to remove the dosing tank pump.

An effective warning device shall be installed in the dosing tank to indicate failure of the pump or siphon. Warning devices requiring electricity shall be provided with a circuit separate from the pump circuit.

WASTEWATER DISINFECTION
A Norweco Model AT UV Disinfection System shall be installed prior to the dose tank.

Monthly cleaning and inspection of the UV system water contact suface is required.

A spare UV tube and other necesary equipment must be available to allow prompt repair by qualifed personnel property insturcted in the operation and maintenance of the equipment.
An annual inspection of the system and changing of the UV bulb by the service provider is required.

MINIMUM MAINTENANCE CHART

COMPONENT	MAINTENANCE FREQUENCY		
	Monthly	Bi-Annually	Annually
Singulair-HKBFR Combo		Inspect and Service	
Dosing Tank *(If Provided)*		Inspect and Service	
Chlorinator *(If Provided)*	Inspect and Fill		
UV System *(If Provided)*	Inspect and Clean		Inspect and Change Bulb

Make all repairs required as a result of the inspections as soon as possible. Maintain disinfection units according to manufacturer's requirements.

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SHEET NO.
3 OF 4