Final 9/26/18

RCAP Solutions
Resources for Communities And People

Whitingham / Jacksonville Wastewater Rate Analysis

Contents

This report has been prepared by RCAP Solutions, Inc. at no cost to the Town of Whitingham. The work is funded under a grant from the Rural Utilities Service, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this report are solely the responsibility of the author and do not necessarily represent the official views of the Rural Utilities Service. Any actions taken in response to the recommendations or analysis provided by RCAP Solutions, Inc. and the outcomes of such actions, are the responsibility of the wastewater system managers.

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Whitingham / Jacksonville Wastewater Rate Analysis – Background

RCAP Solutions, Inc. is the Northeast partner of a national network of nonprofits, the Rural Community Assistance Partnership (RCAP). On a national level, RCAP works to ensure that rural and small communities have access to safe drinking water and sanitary wastewater disposal. In the northeastern United States and Puerto Rico, the Community Resources Division of RCAP Solutions promotes public, environmental and economic health by providing consulting, planning, financing, build-out oversight, regulatory and compliance oversight, management and operational support for a wide range of community development and infrastructure projects. RCAP Solutions offers both no-cost and fee-for-service technical assistance in the areas of needs assessment, planning, finance, project development, education, and administration. RCAP Solutions is currently funded by federal grants, and our services have been provided at no cost to the Town of Whitingham.

RCAP Solutions was contacted in 2017 by David DiCantio to assist with the process of transitioning to a flat rate fee structure. A considerable amount of work was done prior to contacting RCAP Solutions by the Sewer Commission and Mr. DiCantio to ensure that rates are applied fairly and consistently, and they should be applauded for these efforts. However, the transition to the flat rate structure could have unintended impacts. This document is an effort to begin looking at some of these impacts and determine options for moving forward. Any actions taken in response to the recommendations or analysis provided by RCAP Solutions, and the outcomes of such actions, are the responsibility of the wastewater system managers.

Based on the User Charge System document, the user charge system for the Villages of Jacksonville and Whitingham results in the "distribution of treatment works operation and maintenance costs to each user in approximate proportions to the user's contribution to the total wastewater loading of the treatment works." Additionally, the document specifies the following goals:

- **Proportional distribution of costs among users and user classes**
- **Sufficient revenue to provide adequate operation and maintenance funds**
- **Application of excess revenue from a particular class of users to that class in future years**

These goals address elements of equity and fairness. As the community attempts to move forward with modification of its rate structure to support a sustainable wastewater system, issues of affordability should also be considered. In considering these issues and others, RCAP Solutions is looking at the impacts of three options:

- Option A: Keep current structure; replace some or all of meters over time
- Option B: Move to a flat rate system using updated EU guidelines
    - "Option B adjusted" is a flat rate system using customized EU assignments (see Addendum)
- Option C: Create two classes of user accounts, residential and non-residential. Charge residential users a flat rate, and bill non-residential accounts a combination of flat (base) rate and volumetric fees.

This analysis is based on the Selectboard's desire to understand the impacts of modifying the rate structure on fairness, affordability, and revenue. There are several distinct, but related issues to consider: rate structure, which drove some of the initial conversations (i.e., flat fee vs. volumetric rates); the adjustment of equivalent units in the system; and the inevitability that revenue requirements need to be increased for the fall 2018 billing (based on equipment failure at one of the treatment facilities). The rate structure options described in the first few sections of the report are compared with the existing rate structure and fees (FY18). Further on in the report, there is a discussion of the increasing revenue requirements and the need for rate adjustment, once the rate structure has been decided on.

Option A – Description

Keep current rate structure

The Sewer Commission, along with the system's operator, discussed modification of the rate structure for over a year. This process, which was driven by issues that have come up over many years, has become more urgent as time goes on. The failure of the water meters used to estimate wastewater flow becomes more and more common as the meters age. In addition, the Commission recognized that the long-term sustainability of the wastewater system is dependent on their ability to plan for infrastructure repair and replacement as the system ages. The user charge system is the only resource that a utility has to ensure long-term sustainability. Option A will consider the impact of leaving the current rate structure in place.

Current sewer user charges are structured on a fixed fee per equivalent unit (EU) plus a volumetric fee based on actual, estimated, or averaged water meter consumption. The number of equivalent units assigned to each account was at one time based on guidance from the state of Vermont, although some accounts have been modified over the years to reflect changes in use. The bills are generated twice per year. A breakdown of the basic fee structure follows:

a. Fixed fee - $133.76 per billing per EU
b. Volumetric fee - $15.12/thousand gallons used

While the fixed fee portion of the bills appears to be applied consistently, assuming that the EU assignments are appropriate, the volumetric portions of the system's bills are not. Currently, some customers are billed based on actual usage, some on estimates, and some on average usage. As of May 2017, over 1/3 accounts were being billed based either on an average or an estimate of their water usage for the volumetric portion of the bill. This practice is employed on a case-by-case basis and presumably intended to rectify some billing issue that has come up. However, the long-term use of this practice is neither equitable nor sustainable.

Maintaining the current rate structure would require that the system accept the inconsistent application of volumetric charges, or make plans to replace the failing meters on the water sources (i.e. the main source of perceived inequity). Because there is no community water system to drive the replacement of meters, the wastewater system would likely assume responsibility for the replacement of the meters.

An estimate of the size and number of meters in the system could be made to better understand the replacement costs of this endeavor, and should be included in the ongoing asset management plan.

If this option is chosen, the decision of whether or not the system moves to the updated state guidance for EU assignment is not integral to the discussion of impacts. Some customers would see increases in the flat fee portion of the bill, and some would see decreases. Overall, all customers could see a slight increase in the amount that they pay per EU based on a slight reduction in the overall number of EUs in the system, but whether this change equates to an overall "fair" bill is difficult to ascertain.

Option B – Description

Move to a flat rate system, 248 EUs

The move to a flat fee structure for wastewater billing in the Town of Whitingham seems to be driven by a desire for equity among customers amid an environment of failing water meters and varied billing practices. It is admirable that the system is attempting to simplify the billing structure; it is important to understand that the move to a flat fee structure could have considerable impacts, both positive and negative, on the system and its customers. Option B considers the impact of moving to such a system.

The impact on an individual customer of moving to a flat fee structure – and getting rid of the volumetric fee – varies greatly depending on whether the volume billed was above or below the corresponding EU assignment. For example, a customer with 2 EUs – and using exactly 2 EUs' worth of volume – would generally not see a significant change in their bill. The fact that the majority of the residential users (about 71 out of 113) would see increases in their bills based on the loss of the volumetric fee indicates that they are using, or being charged for, less volume than one would expect based on their EU assignment. In effect, the customers who have attempted to conserve water, and therefore minimized contributions to the wastewater system, would see a jump in their bills. Conversely, those who have been heavy contributors would see decreases; the remaining 37 (est.) residential users would see an average decrease in their bills of approximately $228 / year, based on the fact that they are currently being charged for their high usage. Approximately 5 residential customers are using about their expected volume, and would see no significant change.

For large users, or those customers with high EU assignments, the volumetric portion of the bill can have drastic impacts. The school is the most obvious example of this, with 61 assigned EUs. In the proposed rate structure under Option B, the school could see an increase of over $11,000 per year. In the water and wastewater industry, it is a common practice to look at fairness when conducting a rate study. To come up with a target revenue goal for a customer or customer class, the portion of the overall system made up by that customer, or class, is averaged with the overall percentage of system usage contributed by that customer (or customer class). This needs to be considered when looking at the contribution of the school into the overall system. The reason for the potential jump in billing is simply the reality of basing the rate structure on EU-assignment only; the school, which makes up approximately 24% of the system (61 of the total 248 EUs), would be responsible to pay approximately 24% of the annual revenue

requirements. Reducing the number of EUs assigned to the school would decrease this burden on the school, but spread it among the remaining customers.

Observations and Impacts – Option B

1. The Sewer Commission has attempted to reassign Equivalent Units based on state guidelines for facility type. Of the 139 accounts:
    a. **113 accounts would see no change in EU assignment.**
        i. 37 of the 113 would see a decrease in their bill.
        ii. 5 of the 113 would see no change in their bill.
        iii. 71 of the 113 would see an increase in their bill.
    b. **17 accounts would see a decrease in EU assignment.**
        i. 10 of the 17 would see a decrease in their bill.
        ii. 7 of the 17 would see an increase in their bill.
    c. **9 accounts would see an increase in EU assignment.**
        i. 3 of the 9 would see a decrease in their bill.
        ii. 6 of the 9 would see an increase in their bill.

2. Based on the new EU assignments, the overall number of EUs in the system decreases slightly. Prior to the reassignment, there are 253 EUs. Following, there would be 248.4 EUs.
    a. By itself, this process would spread the cost of operating the system among fewer users. In other words, it would be expected that even if an account has not had any changes to its assigned EUs, you would expect to see an increase of approximately 1.8% per EU.

3. As of May 2017, approximately 53 out of 139 accounts were being billed based on either an estimate or an average of water usage for the volumetric portion of the bill. By itself, this is not the issue. Of the 53 accounts, about half would see an increase and half would see a decrease in the new billing structure.

4. Overall, 84 of the 139 accounts would see increases in their sewer bills.
    a. 71 of the 84 are (presumed) residential, or the equivalent of 1 EU under the new assignment
        i. These 71 accounts would see an average increase of 63% (approx. avg. of $204/year).
    b. 13 of the 84 include accounts of between 1.5 EUs and 61 EUs
        i. These 13 accounts would see an average increase of 41%

Option C – Description

Create two classes of user accounts, residential and non-residential. Charge residential users a flat rate, and bill non-residential accounts a combination of flat rate and volumetric fees.

The use of multiple classes in water and wastewater billing is a common practice. Residential customers generally do not vary in their usage as appreciably as commercial or industrial (non-residential) accounts. While households of varying sizes do contribute varying amounts of wastewater into the system, the main benefit of having a sewer system does not vary by household size. The capacity to discharge to a sewer system - regardless of actual usage - should be considered, just as the benefit of having a fire department is a benefit regardless of whether an individual home has a fire. The same sentiment could be considered of police services and of schools. Regardless of a taxpayer's actual use of these services, the capacity to have them at their disposal is a big part of what defines a community. In the case of the wastewater system, the benefit of meters to the individual resident for the purpose of more equitable sewer charges may not outweigh the cost to the wastewater system of maintaining, reading, and replacing water meters over time. For this reason, Option C considers the impacts of creating two customer classes, residential and non-residential. Ideally, the rate structure design would not drastically change anyone's individual bill. However, any changes to the design of the existing system will impact some customers more than others. RCAP Solutions has attempted to ensure that the proposed rate structure considers equity, affordability, and the goals outlined in the system's User Charge System document.

Presumably, the system for assigning equivalent units is not perfect – whether the "old" guideline or an updated version is used. However, the EU system is based on a "capacity to serve" concept that is critical to understand when looking at rates. The idea that a school, factory, restaurant, etc. have a number of EUs assigned to them based on how much volume they could produce, rather than entirely on actual usage, ensures that capacity in the system is available when needed. This can be a difficult concept for customers to grasp, and often leads into the question, "Why can't you bill me on my usage alone?" Customers not understanding the "capacity to serve" principle will not be inclined to think that a billing structure without any volumetric component is "fair." By incorporating a volumetric fee into the rate structure, the capacity portion – or fixed, base rate assigned on this principle– may be de-emphasized slightly, allowing for a more "fair" system in the eyes of the customer. They see a slightly smaller bill when their usage is lower.

With Option C, an equitable rate structure would be designed for customers based on target revenue for the respective customer class. Target revenue has been calculated to be approximately 58% residential and 42% non-residential, based on water consumption and the overall makeup of the system. More details on these calculations are found in the section on "Equity" further along in this document. Using these target goals, the necessary revenue from each class can be calculated. For residential customers, based on the 2017-18 budget, this would mean a flat fee per EU of about $635.82 per year, or $317.91 per billing. For non-residential customers, there would be a flat fee per EU of about $297.68 per year (or $148.84 per billing) plus a volumetric rate of $16.13 per thousand gallons.

Observations and Impacts – Option C

Impact to residential customers

In the proposed Option C, and using current 2017-18 revenue requirements, residential customers would see a predictable flat fee of $317.91 per billing, or $635.82 per year. Under the existing billing scenario, residential customers with one assigned EU pay, on average, about $274 per billing ($548 per year). However, there are residential customers in this category who pay less than half of this amount - and some who pay more than double. The proposed structure under Option C has the benefit of being more predictable and easier to understand for the residential customer and for the utility.

Impact to nonresidential customers

Using the 2017-18 bills for comparison, nonresidential customers would not generally see a significant change to their bills. This is because rates would be set to achieve a target revenue, which is discussed further in the document. The exception would be for those who have had a change in the number of units assigned to their accounts. However, the rate structure design in Option C minimizes the impact of the change in units for those not using their equivalent flow by maintaining the volumetric portion of the bill.

In Option C, all nonresidential meters would have to be maintained and replaced, if necessary. These costs should be included in the WW system's asset management program that is being developed.

Affordability – All Options

There is no universal measure of affordability criteria for water or wastewater rates. Commonly used indicators of affordability for annual rates are between 1% and 2% of MHI. The USDA affordability criterion of 1.5% of MHI is generally accepted as a baseline indicator.

Whether using the MHI from the 2010 census data (55,761) or from the 2015 census data (49,076) for the town of Whitingham, affordability based on the typical residential unit's existing bill is either 0.9% or 1.1% of MHI. This is well within the acceptable levels of affordability, based on current industry standards. Looking at the more conservative estimate (2015), the % MHI affordability for residential customers with 1 EU is listed below for all three options:

Option A: 1.1% MHI based on average of $553. Individual affordability ranges from 0.55% to 2.7%, although it is difficult to look at "individual" affordability due to the variation in income.

Option B: 1.2% MHI based on flat rate of $600 per EU

Option C: 1.3% MHI based on flat rate of $635.82

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Equity – All Options

To determine equitability of the current billing structure, and any proposed changes to that structure, a target revenue for each customer class has been estimated. Customers were divided into two general classes, residential customers and non-residential customers (commercial, industrial). The process considers how much revenue would ideally be collected from each customer class. This target revenue is the average of the following two factors:

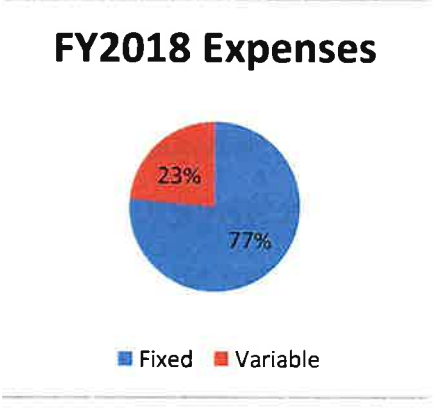
- Percentage of customer base
- Percentage of sewer volume based on average bills

Customer Class	**Target Revenue**	Option A	Option B	Option C
Residential	**58%**	54%	54%	58%
Non-residential	**42%**	46%	46%	42%

Revenue Requirements

Fixed vs. Variable Portion of Budget

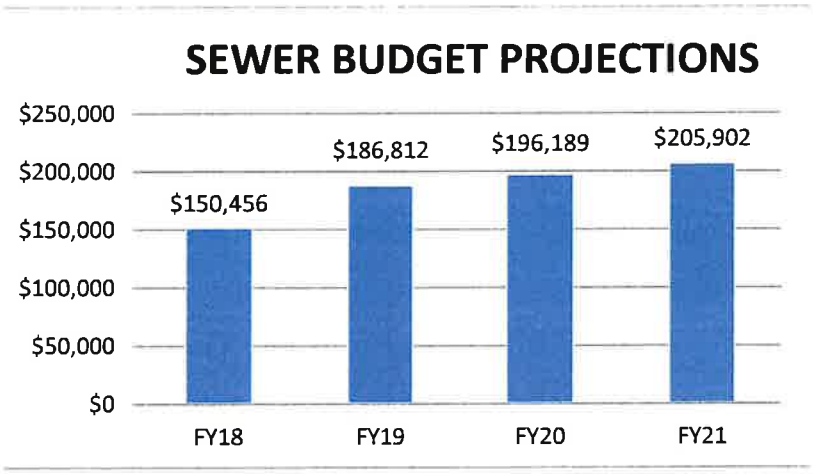
Under the current rate structure, approximately half of all revenue is from the volumetric portion of the billing. Option B would remove any use of the volumetric component of the billing. Option C would realize about 18% of revenue from the volumetric portion of the billing. Considering that most costs associated with the wastewater system are fixed – and, in the case of Whitingham, an analysis of the budget confirms that the system is typical in this regard - a reduction in the volumetric (I.e. variable) component of the bill is recommended. Approximately 77% of the budget could be considered fixed, or predictable and not contingent on volume treated.



Budget Projections

Based on current projections, the cost of providing wastewater services in Whitingham and Jacksonville will increase approximately 37% by FY2021. Anticipated capital improvements at treatment facilities will likely be financed through one of the major wastewater funding mechanisms in the state, the Clean Water State Revolving Loan Fund (SRF) or USDA Rural Development Water and Environment Program (WEP). Costs of providing wastewater services continue to increase, although the system has done well to contain typical operational costs with aging infrastructure.

In addition to a placeholder for the bond payment that has been included in the projected budget, the system has provided a list of equipment requiring servicing or replacement, the frequency, and the anticipated costs. These costs have been worked into the projections as Plant Improvement Reserve. At this point, neglecting to increase rates annually - at the cost of inflation, minimally – will likely have negative consequences for the system. Options for raising fees, depending on the rate structure chosen, are presented in the following section.



Current and Projected Budgets				
		PROJECTED	PROJECTED	PROJECTED
	FY18	FY19	FY20	FY21
REVENUES				
Current User Fees	$144,156	$184,400	$193,189	$202,902
Interest on Fees	$2,000	$1,000	$1,000	$1,000
Penalties	$2,300	$1,000	$1,000	$1,000
Sludge Revenue	$2,000	$1,000	$1,000	$1,000
TOTAL	**$150,456**	**$187,400**	**$196,189**	**$205,902**
EXPENSES				
LABOR				
TOTAL	**$61,486**	**$69,900**	**$71,345**	**$72,546**
INSURANCE				
TOTAL	**$30,470**	**$32,262**	**$35,598**	**$37,248**
SEWER PLANT EXPENSES				
TOTAL	**$53,500**	**$72,650**	**$74,466**	**$76,328**
PLANT CAPITAL IMPROVEMENT				
Plant Improvements Reserve	$5,000	$8,000	$6,780	$6,780
Capital Improvement (Bond)	$0	$4,000	$8,000	$13,000
TOTAL	**$5,000**	**$12,000**	**$14,780**	**$19,780**
	FY18	**FY19**	**FY20**	**FY21**
TOTAL SEWER BUDGET	**$150,456**	**$186,812**	**$196,189**	**$205,902**

Rate Adjustment – Example, Option C

To ensure that anticipated debt service obligations and the increasing cost of providing service are met, it is recommended that rates be increased for the next billing cycle. Based on the budget projections, a 27% increase should be made to revenue realized from user fees as a first step. Depending on the option for rate structure chosen, the mechanics of the rate adjustment would vary. Based on conversation with the Selectboard and the stated desire to create a more equitable rate structure, the impact of a rate

adjustment on Option C has been prepared. However, this does not preclude the Selectboard from further investigating any of the options for rate structure modification.

As discussed earlier in this document, choosing Option C for the rate structure would promote equity, in terms of target revenue. For comparison with the current structure, the following rates would have approximately met 2017-18 revenue:

Customer Type	Fixed Rate, per EU (Annual)	Volumetric Rate, per 1000 gal
Residential	$635.82	N/A
Non-residential	$298.68	$16.13

To maintain the target revenue goals and provide necessary rate increases, the following fees could be set for the next billing cycle:

Customer Type	Fixed Rate, per EU (Annual)	Volumetric Rate, per 1000 gal
Residential	$813.85	N/A
Non-residential	$381.03	$20.64

Following the significant rate increase being recommended for FY19, incremental increases of 5% for FY2020 and FY2021 should be expected. Based on the projected budgets, the following fee schedule could result by FY2021:

Customer Type	Fixed Rate, per EU (Annual)	Volumetric Rate, per 1000 gal
Residential	$897.27	N/A
Non-residential	$441.09	$22.76

Affordability – Option C, New Rates

To reiterate the principle, there is no universal measure of affordability criteria for water or wastewater rates. Commonly used indicators of affordability for annual rates are between 1% and 2% of MHI. The USDA affordability criterion of 1.5% of MHI is generally accepted as a baseline indicator, although communities in Vermont have been moving toward 2% (or higher).

Using the more conservative MHI from 2015 (49,076), the increase would result in a 1.7% MHI for wastewater billing for an average residential customer in FY2019. This is based on new EU assignments, Option C, and a 28% overall rate increase. Extending a 5% annual increase for FY2020 and FY2021, the average residential customer would spend about 1.83% of their annual household income on wastewater services.

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Addendum – 09/04/2018

Option B, Adjusted – Description

Move to a flat rate system based on modified EU assignments

At a working meeting in mid-August with RCAP Solutions, members of the Selectboard expressed interest in understanding the impact of re-assigning equivalent units based on local knowledge of usage and what would be considered fair to members of the community. Participants in the meeting on 8/21 worked through a list of all the accounts and considered these factors to determine a modified EU assignment:

- Current EU assignments by account
- Industry and state EU assignment based on facility type
- Customer-specific considerations for EU assignment

The list of equivalent units that the group decided on has been included as an appendix to this document. The group acknowledged instances where state guidelines for EU assignment were not representative of specific facilities and customers in the community. The group determined that a 0.75 EU assignment should be the minimum user charge for a commercial account, suggesting that some of these customers in the system should not be responsible for the same share of wastewater expenses as a typical residence. The minimum EU assignment for a residence will be 1.0 EU.

Observations and Impacts – Option B, Adjusted

Many of the impacts noted in Option B apply to this adjusted version. Impacts on individual customers will vary based on previous water usage and changes to assigned equivalent units.

While local knowledge of facilities and usage is critical to the overall evaluation of equity in the system, the customization of EU assignments can lead to questions about how the determinations were made. Despite the inaccuracies noted with the metering system, past usage patterns were considered in identifying commercial accounts who would be assigned the minimum of 0.75 EU. Changing the EU assignments for one customer will, theoretically, impact everyone's bill. The impact on other customers would likely not take place until the next billing or the next rate-setting in the annual budgeting process.

Twenty-one customers had their EU assignment reduced during this process. The most notable of those reductions was the school, who was given a new EU assignment of 56 EUs (reduced from 61 EUs). Nine accounts were given increased EU assignments. The overall result of the changes was an approximate system EU reduction of 4%, with a new total of 242.7 EUs (reduced from 253 EUs). Even with the 8% EU reduction for the school, the move to a flat rate results in a 22% increase in their bill - before any rate "increases" are made.

Prior to any increases in the budget or adjustments in EU assignments, a flat fee system would have resulted in a flat user fee of approximately $570 per EU per year. With the reduction of EUs, the flat fee would increase to about $594 per EU per year.

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Increasing revenue requirements would suggest that the fees should increase to $759.94 per EU per year for the upcoming billing (FY19). The impact on the school would be an increase of over $17k per year for FY19, and over $21k per year by FY21.

***This amount represents the equivalent flat fee that would have been collected based on current revenue.**

Anticipated User Fees based on Current and Projected Revenue Requirements	FY18	PROJECTED FY19	PROJECTED FY20	PROJECTED FY21
User Fees	$144,156	$184,400	$193,189	$202,902
Anticipated Annual Flat User Fee / EU (based on 242.65 EUs)	$594.09*	$759.94	$796.16	$836.19
Affordability for Residential Customers (MHI - $49076)	1.21%	1.55%	1.62%	1.70%
Average Rate Increase	N/A	27.9%	4.8%	5.0%

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Appendices

SEWER BUDGET FY19				
	CURRENT	PROPOSED	PROPOSED	PROPOSED
ACCOUNT	FY18	FY19	FY20	FY21
REVENUES				
Current User Fees	$144,156	$184,400	$193,189	$202,902
Interest on Fees	$2,000	$1,000	$1,000	$1,000
Penalties	$2,300	$1,000	$1,000	$1,000
Sludge Revenue	$2,000	$1,000	$1,000	$1,000
TOTAL	**$150,456**	**$187,400**	**$196,189**	**$205,902**
% Increase		27.9%	4.8%	5.0%
EXPENSES				
LABOR				
Bookkeeping Services	$432	$432	$432	$432
FICA/Medicare-Town Share	$3,840	$4,712	$4,810	$4,902
Reimburse User Penalties	$2,300	$2,400	$2,500	$2,500
Retirement-Town Share	$2,601	$3,164	$3,227	$3,291
Wages-Sewer Commissioners	$625	$0	$0	$0
Assistant	$1,500	$8,000	$8,160	$8,160
Plant Operator Salary	$47,296	$48,242	$49,207	$50,191
Treasurer Salary	$2,892	$2,950	$3,009	$3,070
TOTAL	**$61,486**	**$69,900**	**$71,345**	**$72,546**
INSURANCE				
Health Insurance	$25,370	$26,362	$28,998	$30,448
Liability Insurance	$2,100	$2,100	$2,150	$2,200
Unemployment Insurance	$1,200	$1,300	$1,350	$1,400
Workers' Compensation	$1,800	$2,500	$3,100	$3,200
TOTAL	**$30,470**	**$32,262**	**$35,598**	**$37,248**
SEWER PLANT EXPENSES				
Chemicals	$500	$500	$513	$525
Contracted Services	$2,500	$2,500	$2,563	$2,627
Electricity	$15,000	$15,000	$15,375	$15,759
Equipment Purchases	$1,000	$1,000	$1,025	$1,051
Mileage - Operator	$1,500	$1,500	$1,538	$1,576
Miscellaneous	$300	$3,000	$3,075	$3,152
Plant Operating Fee - VT	$450	$400	$410	$420
Postage	$200	$200	$205	$210
Repairs: Facility & Equip	$1,000	$2,000	$2,050	$2,101
Repairs: Line & Pump	$1,000	$5,000	$5,125	$5,253
Repairs: Meters	$1,000	$1,000	$1,025	$1,051
Sludge Removal	$20,000	$30,000	$30,750	$31,519
Supplies	$1,500	$1,500	$1,538	$1,576
Telephone	$650	$650	$666	$683
Outside Testing	$6,500	$8,000	$8,200	$8,405
Training	$200	$200	$205	$210
Uniforms/Safety Glasses	$200	$200	$205	$210
TOTAL	**$53,500**	**$72,650**	**$74,466**	**$76,328**
PLANT CAPITAL IMPROVEMENT				
Plant Improvements Reserve	$5,000	$8,000	$6,780	$6,780
Capital Improvement (Bond)	$0	$4,000	$8,000	$13,000
TOTAL	**$5,000**	**$12,000**	**$14,780**	**$19,780**
	FY18	**FY19**	**FY20**	**FY21**
TOTAL SEWER BUDGET	**$150,456**	**$186,812**	**$196,189**	**$205,902**

TOWN OF WHITINGHAM

NEW SEWER EU CLASSIFICATION SYSTEM

FY 2019 RATES

based on State of Vermont guidelines

	USER CLASSIFICATION	UNIT OF MEASUREMENT	EU PER UNIT	RATE FY19 07/01/18-6/30/2019
1a	SINGLE FAMILY HOUSE	EACH HOUSE	1.0	$759.94
1b	CHURCH PARSONAGE	EACH	1.0	$759.94
1c	CHURCH SANCTUARY	EACH	0.75	$569.96
2	APARTMENT	EACH	1.0	$759.94
4a	ROOM RENTAL (NON-APARTMENT)	SLEEPING SPACE	0.20	$151.99
5b	SCHOOL (WITH CAFETERIA, GYM OR SHOWERS)	PUPILS & STAFF	0.20	$151.99
6e	OFFICE/BUSINESS (1 TO 2 EMPLOYEES)	EACH OFFICE	0.75	$569.96
6f	OFFICE/BUSINESS (3 TO 6 EMPLOYEES)	EACH OFFICE	1.0	$759.94
6g	OFFICE/BUSINESS (EACH ADDITIONAL EMPLOYEE)	EACH EMPLOYEE	0.15	$113.99
7	LIBRARY	EACH	1.0	$759.94
8a	STORE/RETAIL SPACE (UP TO 2,000 SQUARE FEET)	UP TO 2,000 SQ. FT.	1.0	$759.94
8b	STORE/RETAIL SPACE (IF GREATER THAN 2,000 SQ.FT.)	TOTAL SQ FT DIVIDED BY 2000 SQ FT	1.0	$759.94
8c	STORE/RETAIL SPACE WITH MEAT DEPARTMENT	PER 1000 SQ FT	0.55	$417.97
11	BARBER OR BEAUTY SHOPS	PER CHAIR	0.55	$417.97
12	ASSEMBLY HALL		0.75	$569.96
14a	AUTO SERVICE STATION (UP TO 2 FUEL PUMPS WITH 4 NOZZLES)	EACH	0.75	$569.96
15	BREWERY (LESS THAN 6 EMPLOYEES)	EACH	1.0	$759.94
19	MINIMUM ADJUSTMENT			$759.94

Sewer rents are due and payable in two equal installments;
one half on December 1st and one half on June 1st

Any User Classification not addressed on this schedule will be billed using state guidelines.

Town of Whitingham
Sewer Department

NOTICE OF RATE CHANGE

September 28, 2018

Dear Sewer Customer:

As you may know, the Sewer Department is going through some changes. Recently emergency repairs had to be made to keep the Jacksonville plant running and we have started the state required "20-year Evaluation" on both plants which will require engineering services as well as equipment replacement and repairs. The result is a sewer rate increase of approximately 27%. The average household is looking at an annual sewer expense of $759.94.

To save money on the expense of water meters, meter repairs and meter readings we have studied various billing methods and decided to move to a flat fee system. Your next bill will look a little different.

If you have any questions a rate report has been prepared and will soon be available at www.whitinghamvt.org/sewerdepartment or you can call the Selectboard Office at 368-7500.

Sincerely,

Greg Brown,
Selectboard Vice Chair

Wastewater Rates are Changing!

The Town of Whitingham has undertaken an effort to re-evaluate the wastewater billing structure and overall wastewater fees. This document is an effort to communicate the changes and impacts to wastewater customers.

Why is this necessary?

In April of 2018, the Selectboard voted to decommission the Sewer Commission and take control of the Sewer Department. The action was reflective of significant challenges faced by the community regarding critical upcoming wastewater infrastructure projects and a desire to ensure continued financial and operational sustainability. The Selectboard has been working with a non-profit organization, RCAP Solutions, to perform an analysis of the rates and rate structure.

How is your bill calculated?

Current sewer user charges are based on a combination of a flat fee and a volumetric fee. More specifically, there is a fixed fee per equivalent unit (EU) that is based on the type of facility plus a volumetric fee based on actual, estimated, or averaged water meter consumption. Typically, the volume of water passing through a water meter is equivalent to the amount of wastewater discharged to the sewer system – with a few exceptions for irrigation water and water used in a manufacturing process.

The bills are generated twice per year. A breakdown of the basic fees in place for FY18 follows:

a. Fixed fee - $133.76 per billing per EU
b. Volumetric fee - $15.12/thousand gallons used

What is the problem?

While the fixed fee portion of the bills are applied consistently based on facility type, the volumetric portions of the bills are not. Currently, some customers are billed based on actual usage, some on estimates, and some on average usage. As of 2018, over 1/3 accounts were being billed based either on an average or an estimate of their water usage for the volumetric portion of the bill. In an effort to be more consistent, the Selectboard is proposing a change to how bills are calculated.

What will change?

Rather than continuing to charge a volumetric fee, the Selectboard is considering a move to a flat fee system of user charges. During the process, the number of EUs assigned to each account has been reviewed and updated based on updated facility usage estimates and industry guidelines. A typical single family home comprises 1.0 EU, while other types of facilities may be assigned more. The table used in the evaluation of facility EUs is available for review at the town office.

Why don't we just replace the meters?

For the villages of Whitingham and Jacksonville, there is no public water system to ensure that meters are maintained or replaced over time. Many of the meters installed on the private water sources in the community currently are not even used for their intended purpose because they have failed. Meter

replacement programs are costly, and the Selectboard has determined that the move to a flat fee system results in an equitable solution without the added expense of meter replacement and semi-annual meter reading. In addition, the move to a flat rate system provides consistent revenue for the Town without being impacted by changes in customer usage patterns. This concept is further supported when you consider the "capacity to serve" principle, which acknowledges that the overall operating expenses of the system are not significantly impacted by the volume of wastewater treated.

How will your bill be calculated?

Beginning with the November 1, 2018 billing, meters will not be used in the determination of user charges. Bills will continue to be sent out twice per year. The user charges will be based solely on the number of equivalent units assigned to each facility. If you have questions about how your equivalent units were calculated, you may contact the Town to learn more.

What will the new wastewater rate be?

Town staff will continue to look at user rates on an annual basis, and to keep you informed of changes to the wastewater fees. For the November 1, 2018 billing, user rates for most customers will increase. The amount of the change to your bill is based on two primary factors:

- Whether the number of equivalent units for your account changed
- How much volume you were billed for under the previous rate structure

Based on budget projections and revenue requirements for user fees, there will be a 27.9% overall rate increase for the November 1, 2018 billing. This increase will impact users differently based on the factors described above. On a positive note, fees should be more predictable for customers.

Anticipated User Fees based on Current and Projected Revenue Requirements	FY18	PROJECTED[1] FY19	PROJECTED[1] FY20	PROJECTED[1] FY21
User Fees	**$144,156**	**$184,400**	**$193,189**	**$202,902**
Anticipated Annual Flat User Fee / EU (based on 242.65 EUs)	**$594.09[2]**	**$759.94**	**$796.16**	**$836.19**
Affordability[3] for Residential Customers (MHI - $49076)	**1.21%**	**1.55%**	**1.62%**	**1.70%**
Average Rate Increase	**N/A**	**27.9%**	**4.8%**	**5.0%**

1. Projections makes assumptions about potential bond payments for infrastructure improvements.
2. This theoretical number is based on current user revenue, if the system had been using a flat fee structure for the previous billings.
3. Affordability is an estimate of the percentage of Median Household Income in a community that goes toward the annual wastewater rates. Generally, communities in VT are between 1% and 2% of MHI.

For more information contact the Selectboard Office at (802) 368-7500.

TOWN OF WHITINGHAM, VERMONT

USER CHARGE SYSTEM

GENERAL

The user charge is a means of accounting to insure that each recipient of waste treatment services will pay its proportionate share of the costs of operation and maintenance, including replacement. The intent of the user charge and user surcharge revenue structure is to distribute the cost of operation and maintenance of the publicly owned treatment works to the pollutant source and to promote self-sufficiency of treatment works with respect to operation and maintenance costs.

The user charge system for the Villages of Jacksonville and Whitingham results in the distribution of treatment works operation and maintenance costs to each user in approximate proportions to the user's contribution to the total wastewater loading of the treatment works.

The total annual sewer user charge contribution shall not be less than the annual cost of operating and maintaining the system. The charges must be sufficient to allow the treatment works to be operated self-sufficiently.

The user charge system shall be reviewed annually to adjust and provide for: (1) proportional distribution of costs among users and user classes, (2) sufficient revenue to provide adequate operation and maintenance funds, and (3) application of excess revenue from a particular class of users to that class in future years.

II. REVENUE REQUIREMENTS

The Revenue requirements for the first year of operation, maintenance and replacement for the wastewater facilities are shown in Table 1. This information shall be presented annually to each user in conjunction with regular billing to notify the user of the wastewater rate and which costs are attributable to wastewater.

III. USER CHARGE SYSTEM

A system of user charges is proposed for the Town of Whitingham which defines and equivalent unit service as follows:

3.2 persons per service or user

x 70 gallons per capita per day of wastewater

224 gallons wastewater per service or equivalent user.

The number of equivalent users in Whitingham is the number of domestic users and industrial and commercial users equated with respect to flow (224

gpd/equivalent user) in terms of a typical domestic user. Based on present information, approximately _____ equivalent users will be serviced the first year of operation.

IV. IMPLEMENTATION

A. Unmetered connections - all unmetered users will be billed annually for user charges in terms of an equivalent user cost. The equivalent user cost is determined as follows:

$$\frac{\text{1st year's O\&M Cost}}{\text{Total number of equivalent users}}$$

21,020 = _____/per user

A typical household would be charged _____ per year for one equivalent user while a restaurant might be charged _____ per year because its calculated wastewater flow is eight (8) times greater than that for a typical household equivalent user. The wastewater flow can be calculated for a specific user such as a restaurant by utilizing flow rates established by the State of Vermont (Table II). Referring to Appendix A, Chapter 5 of Subchapter 10, Part III of Vt. Health Regulations, a 60-seat restaurant, serving lunch and dinner will yield an approximate flow of 1800 gallons per

per seat. As the equivalent user rate is 224 gallons per day, the restaurant is equated in terms of 8 equivalent users.

B. Metered connections - all metered users will be billed quarterly for user charges in terms of wastewater actually discharged. The amount of wastewater discharged during the billing period will be estimated from water meter readings assuming that 90 percent of metered water is actually discharged to the wastewater collection system. The wastewater user rate is computed as follows:

$$\frac{\$\_\_\_\_\_/\text{year/equivalent user}}{224 \text{ gallons/day/equivalent user} \times 365 \text{ days/year}} = \$\_\_\_\_\_/1000 \text{ gals.}$$

If the water meter reads 1000 cubic feet, then the quantity must be multiplied by 7.481 to convert to gallons. For instance, if a household water meter indicated that 4000 cubic feet of water was used during the quarter billing period, the wastewater flow would be estimated at 3600 cubic feet (4000 x 0.9) or 26,932 gallons (3600 x 7.481). The user charge is then computed as follows:

26,932 gal. x $1.08/1000 gallons =
$39.09/quarter = $116.35/year

C. User Surcharges - Each user in the Village of Whitingham and Jacksonville suspected of discharging strong or toxic wastes will be evaluated for user surcharges by the Town of Whitingham Water and Sewer Department as delineated in the sewer use ordinance for the Town.

BOD_5 and Suspended Solids tests and flow determinations would be performed by an independent testing laboratory of the suspected strong wastes. If the tests indicate that BOD_5 and Suspended Solids concentrations exceed the design concentrations of the facility, the user shall pay for all tests and surcharges. If the tests indicate that said concentrations are less than or equal to the design concentrations, the Town shall pay for all tests and no surcharge shall be levied.

The surcharge must be paid by the user in addition to the user charge calculated above in Part IV, A or B. User surcharges are calculated as follows for the Whitingham Wastewater Treatment Facilities.

TABLE III

USER SURCHARGE COMPUTATIONS

Unit Cost Determinations	Q	BOD5	S.S.
Percent	10%	54%	35%
Total O&M Cost $16,660	$1666	$8996	$5998
Normal Sewage Strength or	N/A	200 mg/l .00167 lb/gal	220 mg/l .00184 lb/gal
Annual Pounds of Wasteload		38,013 lbs/yr	41,814 lbs/yr
Cost per Pound of Wasteload		.2367 $/lb	.1434 $/lb
Surcharge per pound of additional wasteload treated		.00198 $ per 1000 gal for each 1.0 ppm in excess of design	.00120 $ per 1000 gal for each 1.0 ppm in excess of design

As an example, if the restaurant in the previous example discharged a wastewater with a BOD5 = 400 mg/l and Suspended Solids equal to 600 mg/l, the surcharge would be computed as follows:

(BOD_5) $0.00198 (400-200) = $0.396/1000 gallons

(S.S.) $0.00120 (600-220) = $0.456/1000 gallons

Total Surcharge $0.852/1000 gallons

Total user cost = user charge + surcharge

User charge - (previously calculated) = $176.76/quarter

Surcharge = 164,250* ($0.852/1000 gal) = $139.94/quarter

Total user cost = $316.70/quarter

Total user cost = 164,250 ($1.08 + 0.852) = 317.33/quar

*Estimated quarterly flow based on 1800 GPD flow of the example restaurant.

TABLE I

TOWN OF WHITINGHAM, VERMONT
WASTEWATER COLLECTION & TREATMENT FACILITIES
REVENUE ALLOCATION

INITIAL OPERATION

Salaries and Wages	$10,500.00
Treatment Plant	$ 8,220.00
Operating Supplies	
Chemicals	
Electrical	
Fuel	
Repair and Maintenance	
Communications	
New Equipment	
Collection and Interceptor System	$ 1,000.00
Operating Supplies	
Repair and Maintenance	
Small Tools and Equipment	
Communications	$ 3,000.00
Sludge Removal	$ 8,000.00
Division Services	
Operating Supplies	
Insurance and Fidelity Bond	
Purchased SErvices, Other	
Rentals of Private Equipment	
Unclassified	
Capital Reserve for Renewal/Replacement	$ 2,000.00
Customer Accounts Expense	$ 1,500.00
Supervision	
Meter Reading	
Customer Records and Collections	
Uncollectible Accounts	
Total O&M Replacement	$21,020.00

USER SURCHARGE COMPUTATIONS

The treatment facilities have a total design flow of 62,400 GPD, BOD loading of 200 mg/l yields a design wasteload of 89 lbs/day and Suspended Solids at 220 mg/l yeilds a design wasteload of 89 lbs/day.

V. Any user which discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge of the Whitingham treatment works shall pay for such increased costs.

VI. ENACTMENT

These rules and regulations become effective upon their adoption by the Board of Selectmen of the Town of Whitingham, Vermont this 23 day of May, 1984, by the Board of Selectmen, Town of Whitingham, County of Windham, State of Vermont.

BOARD OF SELECTMEN

TOWN OF WHITINGHAM, VERMONT

Dan Dix

Ch. C. Herrmann

Richard M. Pfeiffer

Harold A. [illegible]

DATE May 23 1984 Lewis M. Corse

TABLE II
TAKEN FROM VERMONT HEALTH REGULATIONS
CHAPTER 5 OF SUBCHAPTER 10, PART III

APPENDIX A
FLOW QUANTITIES

ESTABLISHMENT	GALLONS/PERSON/DAY (Unless otherwise noted)
Airports (per passenger)	
Bathhouses and swimming pools	5
Camps:	10
Campground with central comfort stations	
with flush toilets, no showers	35
Construction camps (semi-permanent)	25
Day camps (no meals served)	50
Resort camps (night & day) with limited plumbing	15
Cottages	50
Country Clubs (per resident member)	50
Country Clubs (per non-resident member present)	100
Dwellings:	25
Apartments	
Boarding Houses	75
Addition for non-resident boarders	50
Multiple Dwellings (condominiums, townhouses, clustered housing)	10
Rooming Houses	75
Single family dwellings	40
Factories (gallons per person, per shift, exclusive of industrial waste	75
Institutions other than hospitals (per bed)	15
*Hotels with private baths	125
Laundries, self-service (gallons per machine)	50
Mobile home parks (per space)	500
tels with bath, toilet (per bed space)	250
Picnic parks (toilet wastes only/picknicker)	50
Picnic parks with bathhouses, showers, and flush toilets	5
Restaurants (toilet and kitchen wastes/meal/seat)	10
Restaurants additional for bars and cocktail lounges	15
Schools:	3
Boarding	
Day, without gyms, cafeterias, or showers	100
Day, with gyms, cafeterias, and showers	15
Day, with cafeteria, but without gyms or showers	25
Service stations (first set of gas pumps)	20
(each set thereafter)	500
Theaters:	300
Movie (per auditorium seat)	
Drive-in (per car space)	5
Travel trailer parks without individual water and sewer hook-ups	5
(per trailer space)	
Traveltrailer parks with individual water and sewer hook-ups	50
(per car space)	
Workers:	100
Construction (at semi-permanent camps)	
Day at schools and offices (per shift)	50
	15

* Does not include laundry or restaurant waste.

WHITINGHAM, VERMONT, TOWN CLERK'S OFFICE, THIS 26th DAY OF MAY IN THE YEAR OF OUR LORD ONE THOUSAND NINE HUNDRED ~~EI~~ NTY-FOUR AT 11 O'CLOCK Thirty six MINUTES IN THE FORE NOON RECEIVED FOR RECORD THIS INSTRUMENT OF WHICH THE FOREGOING IS A TRUE RECORD,

Attest, [signature]
Town Clerk

Pursuant to law, notice is hereby given that the Whitingham Board of Selectmen, on January, 26, 2000, adopted changes to the following Articles and Sections of the Ordinance Regulating the Use of Public and Private Sanitary Sewer Systems within the Town of Whitingham:

(Note: All Articles are changed from Roman Numerals to Numerical Units; Article #'s change to provide for added and deleted articles; there are semantic and sentence construction changes throughout the document for clarification and consistency.)

Article I - Sec. 106 deleted
Article II - Sec. #'s deleted; "Scavenger Waste" deleted
Article III - Sec. #'s deleted
Article IV - Sec. 404: "In all cases, the Commissioners shall provide rights-of-way from the property line to the main sewer. All easements must be obtained must be obtained prior to construction or other developments, minimum width to be determined by the sewer commissioners." added

New Article 5 added: Capacity Allocation and Connection: includes numerous allocation references

Former Article V: Sec. 502: "industrial waste" added
Article VI - "Scavenger Waste language deleted
Article VIII - Private Sewerage Systems deleted
Article IX - Vitrified Pipe and Fittings; Asbestos Cement Pipe and Fittings - all language deleted
Article XI - Sewer Rents changed to "Charges" Sec. 1104 - change (by the assessment of appropriate impact fees to "through the assessmemt of a capitol construction fee"
New Article 12 - Dedicated Fund for Major Rehabilitation, Major Maintenance and Upgrade Costs
Article XII - changed to Enforcement and Penalties
New Article 16 - Civil Ordinance Designation

The full text of the Ordinance Regulating the Use of Public and Private Sanitary Sewer Systems within the Town of Whitingham is available at the Office of Town Clerk at the Jacksonville Municipal Center in Jacksonville, Vermont. Questions regarding these changes may be directed to the Town Clerk, Earle Holland Jr. at 368-7887. This amended Ordinance will take effect sixty days from January 26, 2000, unless a petition signed by at least five percent of the voters of Whitingham is filed with the municipal clerk by March 10, 2000, asking for a vote to disapprove the Ordinance. If a petition is received, the Board of Selectmen will warn a special meeting and the voters may vote on that question. 24 VSA §1973.

2000 new AA cpy

ORDINANCE
REGULATING THE USE
OF
PUBLIC AND PRIVATE
SANITARY SEWAGE
SYSTEMS

TOWN OF WHITINGHAM
VERMONT

ORDINANCE
REGULATING THE USE OF
PUBLIC AND PRIVATE SANITARY SEWAGE SYSTEMS
WHITINGHAM, VERMONT

CONTENTS

ORDINANCE
REGULATING THE USE OF PUBLIC AND PRIVATE SANITARY SEWAGE SYSTEMS

Pursuant to Title 24 Section 3617 of the Vermont Statutes Annotated, it is hereby ordained by the COMMISSIONERS of Selectmen of the TOWN of Whitingham, Vermont that the protection of the health and safety of the TOWN of Whitingham and of the general public requires the establishment of minimum standards governing the design, construction, installation and operation of public and private sanitary SEWAGE systems.

ARTICLE I - GENERAL PROVISIONS

SECTION 101 - All rules and regulations contained herein, together with such additions and amendments as may be hereafter adopted, are hereby designated as the "ORDINANCE Regulating the Use of Public and Private Sanitary SEWAGE Systems" hereinafter sometimes referred to as the ORDINANCE.

SECTION 102 - The TOWN Clerk of the TOWN of Whitingham shall file certified copies of the ORDINANCE, as well as certified copies of any additions or amendments to this ORDINANCE as may be hereafter adopted, with the Board of Selectmen, Sewer COMMISSIONERS, and Health Officer.

SECTION 103 - The principal objective of SEWAGE facilities is to collect SEWAGE and industrial wastes and to provide the required or justified degree of treatment under the most favorable and economic conditions possible. Therefore, the discharge of waste waters into the public SANITARY SEWERS which do not require nor justify treatment or which will cause damage to or stoppage of the SEWAGE system or interfere with SEWAGE treatment processes is prohibited.

SECTION 104- The provisions of this ORDINANCE shall be reviewed at intervals not exceeding five (5) years by the Board of Selectmen with the objective of assessing the continued applicability of these provisions; to consider any recommendations proposed for their improvement; and to determine if and what changes are advisable due to advances in the technical methods and processes of waste treatment and SEWAGE collection available to the TOWN of Whitingham.

SECTION 105 - In the case of any other applicable regulation, bylaw, ORDINANCE, or statute which differs from the rules and regulations of this ORDINANCE, the more strict shall apply

SECTION 106 - It shall be the function of the COMMISSIONERS to vary or modify the application of any of the provisions of this ORDINANCE when strict enforcement would result in practical difficulties or unnecessary hardship, providing, however, that no modification be in conflict or contrary to existing Federal Regulations.

ARTICLE 2 - DEFINITIONS

For the purpose of this ORDINANCE, the following terms and phrases shall have the meanings ascribed to them under this ARTICLE:

BUILDING SEWER shall mean that part of the SEWAGE System which receives the SEWAGE from the House Plumbing System and conveys it to the nearest end of the House Connection, unless a House Connection is not available, whereby the BUILDING SEWER shall be extended to the nearest available "Y" branch on the Main Sewer.

CLERK shall mean the TOWN Clerk of the TOWN of Whitingham, Vermont.

COMBINED SEWER shall mean a sewer receiving both surface runoff and SEWAGE.

COMMITTED RESERVE CAPACITY shall mean the total amount of DEVELOPMENT wastewater flow (gallons per day) from all projects/buildings approved by the SEWER COMMISSIONERS for discharge to the treatment PLANTS, but not yet discharging at the time of the calculation.

DEVELOPMENT shall mean the construction of improvements on a tract of land for any purpose, including, but not limited to, residential, commercial, industrial, manufacturing, farming, educational, medical, charitable, civic, recreational and religious uses.

GARBAGE shall mean solid wastes from the preparation, cooking, and dispensing of food and from the handling, storage and sale of produce.

HEALTH OFFICER shall mean the legally designated Health Officer or Deputy Health Officer of the TOWN of Whitingham, Vermont.

HOUSE CONNECTION shall mean that part of the SEWAGE System that runs from the Main Sewer to the property line and includes all necessary fittings.

HOUSE PLUMBING SYSTEM shall mean all the plumbing work within the building and to a point five (5) feet (1 1/5 meters) outside of the building which conveys SEWAGE from within the building to the BUILDING SEWER outside the building.

INDUSTRIAL WASTES shall mean the liquid wastes from industrial manufacturing processes, trade or business as distinct from sanitary SEWAGE.

MAIN SEWER shall mean the sewers laid longitudinally along the centerline or other part of the streets or other rights-of-way and which all OWNERS or abutting properties have equal rights and which is controlled by public authority.

NATURAL OUTLET shall mean any outlet into a watercourse, pond, ditch, lake or other body of surface or groundwater.

OWNER shall mean any person, vested with ownership, legal or equitable, sole or partial, or possession of any property.

PERSON shall mean any individual, firm, company, association, society, corporation, institution, partnership, group, or other entity.

PRIVATE SEWAGE SYSTEM OR FACILITIES shall mean all facilities or collection, pumping, treating and disposing of SEWAGE, and is not under the control of nor operated by the TOWN of Whitingham.

PROPERLY SHREDDED GARBAGE shall mean the wastes from preparation, cooking and dispensing of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1/27 centimeters) in any dimension.

PUBLIC SEWAGE SYSTEM OR FACILITIES shall mean all facilities for collecting, pumping, treating and disposing of SEWAGE, and is controlled and operated by the TOWN of Whitingham.

SANITARY SEWER shall mean a sewer which carries SEWAGE and industrial waste and to which storm, surface and ground waters are not intentionally admitted.

SECRETARY shall mean the Secretary of the Agency of Environmental Conservation, State of Vermont, or the Secretary's representative.

SELECTMEN shall mean members of the Board of Selectmen of the TOWN of Whitingham, Vermont.

SEWAGE shall mean a combination of the water-carried wastes from residents, institutions and commercial and industrial establishments together with such ground waters as may be present.

SEWAGE TREATMENT PLANT or WASTEWATER TREATMENT PLANT shall mean any arrangement of devices and structures used for treating SEWAGE and/or industrial wastes.

SEWER shall mean a pipe or conduit.

SEWER COMMISSIONERS (COMMISSIONERS) shall mean members of the COMMISSIONERS of Selectmen and/or the group of individuals who shall be designated from time to time by the COMMISSIONERS of Selectmen to have that title, or their authorized deputy, agent or representative.

SHALL is mandatory; MAY is permissive.

SLUG shall mean any discharge of water, SEWAGE or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

STORM SEWER or STORM DRAIN shall mean a sewer which carries storm and surface waters and drainage, but excludes SEWAGE and industrial wastes other than unpolluted cooling water.

SUBDIVISION shall mean a tract of land, owned or controlled by a person, which has been partitioned or divided for the purpose of resale into two (2) or more lots.

SUBSURFACE SEWAGE DISPOSAL SYSTEM shall mean any SEWAGE treatment system whereby the tank or plant effluent is leached into the ground by subsurface disposal.

MUNICIPAL DESIGNEE shall mean that employee of the TOWN who shall be designated from time to time by the COMMISSIONERS of Selectmen to operate and maintain the Public SEWAGE Facilities and oversee connection processes.

SUSPENDED SOLIDS shall mean solids that either float on the surface of, or are in suspension in water, SEWAGE or other liquids; and which are removable by laboratory filtering.

TOWN shall mean the TOWN of Whitingham, Vermont.

UNCOMMITTED RESERVE CAPACITY shall mean that amount of daily flow in gallons after subtracting the daily average flow and committed reserve capacity from the daily design capacity of the plants.

WATERCOURSE shall mean a channel in which a flow of water occurs, either continuously or intermittently.

ARTICLE 3 - ABBREVIATIONS

For the purpose of this ORDINANCE, the following abbreviations shall have the meanings ascribed to them under this ARTICLE. References to standards of the following organizations shall refer to the latest editions of the same.

ANSI shall mean American National Standards Institute.

ASME shall mean American Society of Mechanical Engineers.

ASTM shall mean American Society for Testing and Materials.

AWWA shall mean American Water Works Association.

B.O.D. (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20 degrees C, expressed in milligrams per liter.

BOCA shall mean Building Occupational Code Administration.

cm. shall mean centimeter.

CS shall mean Commercial Standard.

DEGREES F shall mean degrees Fahrenheit.

DEGREES C shall mean degrees Centigrade.

gpd shall mean gallons per day.

hp shall mean horsepower.

Kg. shall mean kilograms.

l. shall mean liters.

mg./l shall mean milligrams per liter.

m. shall mean meter.

NPC shall mean National Plumbing Code.

pH shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

ppm shall mean parts per million.

sq.m. shall mean square meters.

ARTICLE 4 - USE OF PUBLIC SEWERS REQUIRED

SECTION 401 - It shall be unlawful for any person to place, deposit or permit to be placed or deposited upon public or private property within the TOWN of Whitingham, or in any area under the jurisdiction of said TOWN, any human excrement or other

objectionable waste except through a PUBLIC SEWAGE SYSTEM or other approved system.

SECTION 402 - It shall be unlawful to discharge to any natural outlet within the TOWN of Whitingham or in any area under the jurisdiction of said TOWN, any SEWAGE or other polluted waters, except where suitable treatment has been provided in accordance with the provisions of this ORDINANCE and the laws of the State of Vermont.

SECTION 403 - It shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of SEWAGE, unless specific approval is granted.

SECTION 404 - The OWNERs of all houses, buildings, and properties used for human occupancy, employment, recreation, or other purpose, situated within the TOWN and abutting any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary, is hereby required, if SEWAGE is generated, to install suitable toilet facilities therein and to connect such facilities directly with such sewer in accordance with the provisions of this ORDINANCE, within forty-five (45) days after the date of official notice to do so, provided that said public sewer is within one hundred (100) feet (30.5 m.) of the building(s) requiring service. Installation of or repair to any other SEWAGE system is not permitted unless the COMMISSIONERS find that connection to the public sewer would cause extreme hardship to the OWNER and the alternative SEWAGE system would meet all pertinent State of Vermont and TOWN rules.

SECTION 405 - At the discretion of the COMMISSIONERS, an OWNER of a private SEWAGE system which is abandoned because of the availability of a public sanitary sewer may be required to thoroughly and properly clean, disinfect, and fill or remove the system or removed according to good sanitation practice and under the inspection and direction of the COMMISSIONERS.

ARTICLE 5 -CAPACITY ALLOCATION AND CONNECTION

SECTION 501 - Ownership & Permit

The TOWN owns and operates two PLANTS and two SANITARY SEWERS. The PLANTS have permitted capacities and are operated in accordance with discharge permits issued by the Vermont Department of Environmental Conservation (DEPARTMENT) under authority granted in 10 V.S.A. chapter 47. The COMMISSIONERS are obligated by law to comply with the conditions of such permits.

SECTION 502 - Introduction to Reserve Capacity Allocation

The permitted capacities of the PLANTS and the SEWERS are the property of the

TOWN. The uncommitted reserve capacities of the PLANTS and the SEWERS shall be allocated by the COMMISSIONERS in the manner described below. This ORDINANCE shall not be construed as an abandonment or relinquishment of the authority or the responsibility of the COMMISSIONERS to regulate, control, and supervise all means and methods of SEWAGE collection, treatment and disposal within the TOWN, nor shall it be construed to impair or inhibit the ability of the TOWN to contract with persons for the collection, transmission and treatment of SEWAGE.

The PLANT located in the Village of Whitingham has a design capacity of 12,300 gallons per day and currently operates at an average of 6054 gallons per day. The PLANT located in the Village of Jacksonville has a design capacity of 50,100 gallons per day and currently operates at an average of 20.432 gallons per day. At the time of the adoption of this ORDINANCE, committed reserve capacity of the PLANT in the Village of Whitingham equals 1800 gallons per day and the uncommitted reserve capacity equals 3446 gallons per day. Committed reserve capacity of the PLANT in the Village of Jacksonville equals 3420 gallons per day and the uncommitted reserve capacity equals 26248 gallons per day. These amounts are subject to change.

SECTION 503 - Reserve Capacity Allocation

A. - Allocation Flow Basis

An allocation to a DEVELOPMENT shall be based on the OWNER's wastewater flow basis. Any differential between actual flows and DEVELOPMENT wastewater flows which occurs is not available to the OWNER for re-allotment to another DEVELOPMENT or a DEVELOPMENT expansion.

B. - Allocation Priorities

Allocation of uncommitted reserve capacity shall comply with the following priority intended to govern the gross allocation of reserve capacity before the allocation principles are applied to a specific DEVELOPMENT.

Residential, commercial, institutional and industrial facilities existing within the sewer service areas on the date of the adoption of this ORDINANCE which are required to connect to the PUBLIC SEWAGE SYSTEM shall be entitled to first priority in allocation of uncommitted reserve capacity. New OWNERs within or outside the sewer service areas shall have second priority in allocation of uncommitted reserve capacity provided that the DEVELOPMENT is in the best interests of the TOWN as determined by the COMMISSIONERS.

In no instance shall any one of the described customer categories (i.e. residential, commercial, institutional, and industrial) be allocated more than 75% of the annual allocation in any given year.

SECTION 504 - Allocation Principles

Subsequent to application of the allocation priority, uncommitted reserve capacity in the PLANTS may be allocated to a specific DEVELOPMENT according to the following procedure:

A. Once an application and fee have been returned to the TOWN office and marked with the time and date of receipt by the person receiving the application and fee, the COMMISSIONERS or the COMMISSIONERS's MUNICIPAL DESIGNEE may review applications on a first come-first served basis. The total remaining uncommitted wastewater reserve capacity shall be allocated by the COMMISSIONERS or the COMMISSIONERS's MUNICIPAL DESIGNEE in a manner consistent with the TOWN's allocation priorities. The total uncommitted reserve capacity shall be determined at six month intervals and committed reserve continuously shall be recorded and updated for use in allocation decisions.

B. The COMMISSIONERS retain the right to review applications and make allocations on other than a first come-first served basis if they find such practice is in the TOWN's best interests.

SECTION 505 - Application for Allocation

OWNERS wishing to use the PUBLIC SEWAGE SYSTEM shall apply to the COMMISSIONERS on an application form prescribed by the COMMISSIONERS. Such application form shall:

A. Be accompanied by a calculation of the OWNER'S wastewater flow to be generated by the DEVELOPMENT;

B. Include calculations for the volume, flow rate, strength, and any other characteristic determined appropriate by the COMMISSIONERS;

C. Unless waived by the COMMISSIONERS all calculations required in (a) and (b) above for a DEVELOPMENT generating over 1000 g.p.d. shall be certified by a Vermont registered professional engineer;

D. Be accompanied by plans and specifications prepared by a Vermont registered engineer for the construction of BUILDING SEWERS and any municipal sewer extensions, including pump stations, required to service the DEVELOPMENT prepared by a Vermont registered engineer. This requirement to submit plans and specifications may be waived by the COMMISSIONERS until final connection approval.

E. Include payment of fee as set forth in fee schedule.

SECTION 506 - Preliminary Allocation Approval Requirements

Upon receipt of an acceptable application and supporting documents, the COMMISSIONERS may make a preliminary allocation of uncommitted reserve capacity upon making affirmative findings that:

A. The proposed wastewater is of domestic, sanitary origin and there is sufficient uncommitted reserve capacity to accommodate the volume and strength of the wastewater from the proposed connection; or

B. The proposed wastewater is not of domestic sanitary origin and that sufficient evidence has been presented to demonstrate that the flow and character of the wastewater is compatible with the proper operation of the PUBLIC SEWAGE SYSTEM and that the proposed wastewater shall not alone or in combination with other wastes cause a violation of the discharge permit, pass through the PLANT without treatment, interfere or otherwise disrupt the proper quality and disposal of PLANT sludge or be injurious in any other manner to the PUBLIC SEWAGE SYSTEM and that there is sufficient uncommitted reserve capacity to accommodate the strength and volume of wastewater from the proposed DEVELOPMENT; and

C. The proposed use of wastewater capacity complies with the allocation priorities and principles and is not in conflict with any other enactment adopted by the COMMISSIONERS or TOWN.

SECTION 507 - Conditions of Preliminary Allocation Permit Approval

The COMMISSIONERS, or MUNICIPAL DESIGNEE, after making the findings required above, may issue a preliminary wastewater allocation permit, which approval shall be a binding commitment of capacity to the OWNER contingent only upon compliance with any conditions attached to the preliminary permit and the subsequent issuance of a final allocation permit. Preliminary allocation permit conditions shall include:

A. Specification of the one year period during which the interim connection approval shall remain valid. The COMMISSIONERS may issue extension(s) upon a request of OWNER made prior to the date a permit expires..

B. Specific conditions which must be fulfilled by the OWNER to maintain validity of the preliminary allocation approval.

C. Provision for revocation by the COMMISSIONERS upon failure of the OWNER to fulfill requirements of the preliminary allocation approval.

D. Specification that the recipient of the preliminary allocation approval may not connect to the PUBLIC SEWAGE SYSTEM or transfer to any other person, by any

means, such preliminary allocation approval.

SECTION 508 - Final Allocation Permit Approval Requirements

Prior to final allocation approval, the following requirements shall be met by the OWNER:

A. All applicable local, State, and Federal permits shall have been secured for the DEVELOPMENT;

B. Allocation fees and other local fees or taxes set by the COMMISSIONERS shall have been paid in full to the TOWN. Allocation fees shall be based partially on the volume and strength of the proposed wastewater flow. The COMMISSIONERS shall establish the fee schedule.

D. Financial hardship cases. The due date for allocation fees may be extended by the COMMISSIONERS, if the OWNER demonstrates an inability to pay the allocation fees at the time of application. Such OWNER may file a request in writing to the COMMISSIONERS for the COMMISSIONERS' review. All allocation and connection fees, however, shall be paid by the OWNER prior to sewer connection.

SECTION 509 - Final Allocation Permit Approval Conditions

A final allocation permit is an agreement between the TOWN and the OWNER. The OWNER who is issued a final allocation permit does not own the capacity and forfeits all rights to such capacity if preliminary and final allocation permit conditions are not met.

The COMMISSIONERS, or MUNICIPAL DESIGNEE, on making affirmative findings that all conditions of the preliminary allocation approval prerequisites in SECTION 506 of this ARTICLE have been fulfilled, shall issue the final wastewater allocation permit, which may be conditioned as follows:

A. The permit shall specify the permitted volume, flow rate, strength, frequency and any other characteristics of the proposed discharge determined appropriate by the COMMISSIONERS.

B. The capacity allocation is not transferable to any other person or to any other DEVELOPMENT unless requested by the original OWNER and approved by the COMMISSIONERS.

C. Incorporation of specific conditions which must be fulfilled by the OWNER to maintain validity of the final allocation approval.

D. Provision for revocation by the action of the COMMISSIONERS on failure of the

OWNER to fulfill requirements of the final allocation approval.

E. Capacity allocated in conjunction with the final allocation permit for DEVELOPMENT shall revert to the TOWN if the permit recipient has failed to initiate construction within one year of the issued date on the final wastewater allocation permit.

F. A final allocation permit shall expire two (2) years from the date of its issuance. A revised DEVELOPMENT plan and sewer use application may be approved by the COMMISSIONERS, or MUNICIPAL DESIGNEE, in the same manner as the original. Such revised plans must be approved under this ORDINANCE and by applicable State laws and regulations. If the COMMISSIONERS, or MUNICIPAL DESIGNEE, approves a revised sewer use application, it may issue a revised final allocation permit with reduced or increased capacity allocation determined in accord with the allocation priorities and principles. Where reduced capacity is granted in a revised allocation permit, the unused capacity shall revert to the TOWN. The COMMISSIONERS shall determine the amount of unused capacity returned. With any approval of a revised allocation and allocation permit, the COMMISSIONERS may consider extension of the original two (2) year allocation permit expiration date.

If a permit expires after two (2) years or after any extension of time provided by the COMMISSIONERS, the unused portion of the committed capacity allocation at the time of expiration shall revert to the TOWN and there shall be no refund of allocation, permit or other fees paid.

Regardless of the permit expiration period above, the COMMISSIONERS may extend the final wastewater allocation permit expiration date if this action is determined to be in the TOWN's best interests.

G. For subdivisions, the OWNER for a proposed subdivided parcel shall describe the DEVELOPMENT planned for each lot within the subdivision. If all prerequisites defined for final allocation approval are met, final allocation permits shall be issued to the OWNER for each lot with a specific reserve capacity allocation associated with the proposed DEVELOPMENT. These final allocation permits shall expire after two (2) years from the date of preliminary issuance unless the OWNER has sold the lot or has completed construction in accord with the approved DEVELOPMENT plan. The expiration of a permit two years from date of original issuance shall not be modified by any revisions to the DEVELOPMENT plan subsequent to the preliminary approval. The COMMISSIONERS shall notify the Vermont Agency of Natural Resources of expired subdivision allocation permits.

The reserve capacity allotted to lots that either are unsold or do not have construction completed the date of permit expiration shall revert to the TOWN from any reductions made to the DEVELOPMENT wastewater flow planned for each lot subsequent to preliminary approval.

The OWNER shall record the final allocation permits in the land records of the TOWN along with receipts for all fees paid and reference to the location of the approved connection plans and specifications. When an OWNER sells individual subdivided lots within the two (2) year time frame, the final allocation permit shall transfer when the titled property passes and the new OWNER becomes bound to comply with all permits issued and the plans and specifications for connecting to the PUBLIC SEWAGE SYSTEM. The transferred permit shall be considered to be a new final allocation permit issued on the date of property transfer; the provisions of this ORDINANCE shall apply to such permit. The permit shall expire as provided by this ORDINANCE.

SECTION 510 - Transfer of Allocation

A. Initially, reserve capacity is allocated by the COMMISSIONERS, or MUNICIPAL DESIGNEE, to a specific OWNER, DEVELOPMENT and parcel of land.

B. The capacity allocation belongs to the TOWN and is not transferable until the DEVELOPMENT is completed and connected to the MAIN SEWER. The transfer of the capacity allocation is prohibited unless approved in writing by the COMMISSIONERS at the original OWNER's request.

C. The COMMISSIONERS may approve transfer of capacity from one DEVELOPMENT to another and one OWNER to another provided the new DEVELOPMENT and OWNER meet all the requirements for the final connection approval originally issued and the original OWNER requests such transfer.

SECTION 511 - Connection Permit Approval Requirements

A. The construction of a connection and, if necessary a SEWER extension, must be overseen to assure compliance with the plans and specifications and good construction practice in a manner acceptable to the COMMISSIONERS or MUNICIPAL DESIGNEE.

B. The COMMISSIONERS or MUNICIPAL DESIGNEE shall be notified at least five (5) business days in advance of any proposed SEWER connection authorized by a connection permit. The connection to the municipal sewer shall not be performed unless the COMMISSIONERS or MUNICIPAL DESIGNEE are present and shall not be covered until approved by the COMMISSIONERS or MUNICIPAL DESIGNEE.

The COMMISSIONERS and MUNICIPAL DESIGNEE shall have the authority to inspect activities pertaining to the construction of the HOUSE CONNECTION, BUILDING SEWER and other related facilities, by way of illustration such as grinder pumps and pump stations, which may affect the PUBLIC SEWAGE SYSTEM. Given the nature of a connection or extension, the COMMISSIONERS may obtain

engineering services for consultation and inspection during construction and at the expense of the OWNER.

D. Connection fees shall be set by the COMMISSIONERS and shall be paid in full prior to granting connection approval to the TOWN.

SECTION 512 - Authority to Require Connection

Nothing herein shall be construed as limiting or impairing the authority of the TOWN and its COMMISSIONERS to require connections to the PUBLIC SEWAGE SYSTEM under the general laws of the State or under local ordinances.

ARTICLE 6- CONNECTION TO PUBLIC SEWER

SECTION 601 - No person shall cover or uncover, make any connections with or opening into, use, alter or disturb the PUBLIC SEWAGE SYSTEM without first obtaining a permit.

SECTION 602 - There shall be three (3) classes of Sanitary Sewer Connection permits: (1) residential, (2) commercial, and (3) industrial. In any case, the OWNER, or OWNER's agent, shall make application on a form provided by the COMMISSIONERS. The permit application shall be supplemented by plans, specifications, and other information in the judgment of the COMMISSIONERS considered to be pertinent.

SECTION 603 - There shall be obtained prior to issuance of a sewer connection permit for work requiring excavation in a paved street or highway, a Road Opening Permit. For streets or highways under jurisdiction of governmental agencies other than the TOWN written permission for excavation shall be obtained from the agencies in question and such shall be presented to the COMMISSIONERS and meet their approval prior to issuance of the sewer connection permit.

SECTION 604 - All costs and expenses incident to installation and connection shall be borne by the OWNER. The OWNER shall indemnify the TOWN from any loss or damage that directly or indirectly may be occasioned by the installation of sewer connection.

SECTION 605 - A separate SEWER connection shall be provided for each building except where one building stands at the rear of another on an interior lot and no private SEWER is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the BUILDING SEWER from the front building may be extended to the rear building and the whole be considered as one sewer connection. Use of private SEWERS which accept and convey flow from more than one building may not be used except when found, on examination and test by the COMMISSIONERS, to be in satisfactory condition and meeting all requirements of this

ORDINANCE. The burden of proof and all expenses incurred by the COMMISSIONERS to determine the condition and adequacy of the private SEWER shall be borne by the OWNERS of such private sewer.

SECTION 606 - The COMMISSIONERS may require the OWNER of a DEVELOPMENT to install a water meter so recorded water flow can be used to determine the yearly wastewater charge. Water saving fixtures and equalization tanks may be required by the COMMISSIONERS for DEVELOPMENTS connecting to the PUBLIC SEWAGE SYSTEM. The TOWN owns the meters and will maintain same.

SECTION 607 - A portion of the HOUSE PLUMBING SYSTEM existing outside the structure may be used with the sewer connection only when it is found, on examination and test by the COMMISSIONERS, to meet all requirements of this ORDINANCE.

SECTION 608 - The diameter of the BUILDING SEWER shall not be less than four (4) inches (10.2 cm). Materials used in construction shall comply with the applicable sections of the ORDINANCE and as required and approved by the COMMISSIONERS. The BUILDING SEWER shall be laid on a uniform grade, wherever practicable, at a straight grade of at least one-fourth (1/4) of an inch per foot (2%). Where, in special cases, a minimum grade of one-fourth (1/4) inch per foot cannot be maintained, a grade of one-eighth (1/8) inch per foot (1%) will be permitted, but only if the COMMISSIONERS approve.

SECTION 609 - Whenever possible, the BUILDING SEWER shall be brought to the building at an elevation below the basement floor. No BUILDING SEWER shall be laid parallel to or within three (3) feet (91.4 cm) of any bearing wall which might thereby be weakened. The depth shall be sufficient to afford protection from frost. The BUILDING SEWER shall be laid at a uniform grade in the direction from the main sewer to the building and in a straight alignment insofar as possible. Change in direction shall be made only with properly curved pipes and fittings with suitable clean-outs or flush holes as described in SECTION 618.

SECTION 610 - In all buildings in which the house plumbing is too low to permit gravity flow to the public sewer, sanitary SEWAGE carried by such sewer shall be lifted by approved artificial means and discharged to the BUILDING SEWER. Such lifting devices shall be located outside the building foundation and have no access or ventilation through the building.

SECTION 611 - No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, cellar drains, basement sumps, or other sources or surface runoff or groundwater to a BUILDING SEWER which, in turn, is connected directly or indirectly to a public sanitary sewer. All such connections which exist shall be disconnected by the OWNER, at his expense, within thirty (30) days upon receipt of notification by the COMMISSIONERS.

SECTION 612- When installing the BUILDING SEWER, the trenches shall be dug in a careful manner and properly sheathed where required. The excavated materials shall be placed in a separate pile from road materials and not mixed with rest of the excavated materials which must be piled in a compact heap so placed as to cause the least possible inconvenience to the public.

SECTION 613 - In backfilling, the material under, around and for two (2) feet (61 cm) immediately over the pipe shall be selected so it contains no stones capable of damaging the installation. This must be carefully tamped, the balance of the trench to be backfilled in a professional manner, tamping and filling in eight (8) inch (20.3 cm) layers so as to avoid any settlement. When the trench has been filled to the proper height, the road material is to be replaced and heavily tamped or rolled.

SECTION 614 - Where the trench is excavated in rock, the rock must be carefully excavated to a depth of six (6) inches (15.2 cm) below the bottom of the sewer and the trench brought to the proper elevation with gravel or other material satisfactory to the COMMISSIONERS. The remainder of the trench must be backfilled with suitable material as described in SECTION 613.

SECTION 615 - Where sub-soil conditions warrant, such special precautions must be taken as may be directed by the COMMISSIONERS. In quicksand, all pipes must be laid out on planking two (2) inches (5.1 cm) thick by at least six (6) inches (15.2 cm) wide.

SECTION 616 - The connection of the BUILDING SEWER to the main sewer shall be made at the house connection at the property line or, if no house connection exists, connection shall be made at the nearest available "Y" connection on the main sewer. The COMMISSIONERS will designate the position of the end of the house connection at the property line or the "Y" connection on the main sewer, whichever is appropriate. If it becomes necessary to cut into the main sewer, since no other source of connection is available, then such connection shall be made as directed by and under the supervision of the COMMISSIONERS. The dead-ends of all pipes not immediately connected with the house plumbing system must be securely closed by a watertight cover of imperishable material and properly marked and located.

SECTION 617 - Prior to any connection with the HOUSE CONNECTION, "Y" or to the MAIN SEWER, the COMMISSIONERS shall be given proper notice in order that they may inspect such work. If the COMMISSIONERS have not been properly notified, they may require the completed work to be uncovered for examination at the OWNER's expense.

SECTION 618 - Clean-outs on BUILDING SEWERS shall be made by installing a "Y" and one-eighth (1/8) bends. Clean-outs ordinarily shall be installed at the point of connection between the BUILDING SEWER and the HOUSE PLUMBING SYSTEM at all curves in the BUILDING SEWER and on the straight run of the BUILDING SEWER

to the HOUSE CONNECTION. Clean-outs in a BUILDING SEWER shall be installed at least every one hundred (100) feet with manholes installed every three hundred (300) feet. Clean-outs shall be brought up from the BUILDING SEWER to four (4) inches (10.2 cm) below ground level and shall be capped properly. Locations of all clean-outs shall be documented and the documentation delivered to the COMMISSIONERS. Where the distance from the building to the MAIN SEWER is less than fifty (50) feet (15.2 m), and there are no curves in the SEWER, a clean-out in the building will be sufficient if it is at least six (6) inches (15.2 cm) above the basement floor. Where such distance exceeds fifty (50) feet (15.2 m) at least one (1) clean-out twenty (20) feet (6.1 m) from the building shall be provided. Clean-outs shall be of the same diameter as the BUILDING SEWER.

SECTION 619 - Before any portion of an existing BUILDING SEWER or the HOUSE PLUMBING SYSTEM is connected to the HOUSE CONNECTION, the OWNER shall prove, to the satisfaction of the COMMISSIONERS, that it is clean, conforms in every respect to this ORDINANCE, and all joints are water-tight.

SECTION 620 - BUILDING SEWERS shall be installed by a Vermont licensed plumber.

SECTION 621 - The COMMISSIONERS shall appropriately test all BUILDING SEWERS. The plumber, at the plumber's own expense, shall furnish all necessary tools, labor, materials, and assistance for such tests and shall remove any defective materials and shall repair any defective work when so ordered by the COMMISSIONERS.

SECTION 622 - Each plumber, contractor or other person performing work on public property for the purpose of installing a BUILDING SEWER shall file with the COMMISSIONERS satisfactory evidence of adequate insurance coverage for liability and property damage. Minimum amounts of coverage shall be established by the COMMISSIONERS and posted in the Clerk's office.

SECTION 623 - Proper safety barricades, lights, and other reasonably necessary measures for protection of the public from injury to persons and property shall be maintained at all work sites. Streets, sidewalks, curbs and other public property disturbed in the course of work shall be restored in a manner satisfactory to the TOWN and other authorities having jurisdiction.

SECTION 624 - No person shall block any driveway, street or road at any time without permission of the COMMISSIONERS and other authorities having jurisdiction. Every reasonable effort shall be made to permit the movement of vehicular and pedestrian traffic at all times. Whenever it becomes necessary to cross or interfere with streets, roads, walks, or drives, whether public or private, the OWNER shall maintain, at the OWNER'S own expense and subject to the approval of the COMMISSIONERS, safe bridges or other means of passage.

SECTION 625 - MAINTENANCE - Maintenance of all privately owned SEWAGE facilities including, but not limited to (1) HOUSE PLUMBING SYSTEMS, (2) BUILDING SEWERS, (3) HOUSE CONNECTIONS, (4) SEWERS and (5) appurtenances shall be the responsibility of the OWNER at the OWNER'S expense. The OWNER, solely, shall be responsible for continually maintaining such facilities in satisfactory operating condition. Maintenance shall include, but not limited to (1) maintaining flow, (2) clearing obstructions, (3) maintaining all joints gas-tight and water-tight , (4) repairing or replacing collapsed, deteriorated or defective materials, and (5) all other work which is necessary and essential to maintain proper operation and preserve the structural integrity and water tightness of the system.

SECTION 626 - If the COMMISSIONERS reject an application for an industrial connection permit, the basic application fee shall be forfeited together with such portion of the fee required to cover the costs of the industrial waste review as may be determined by the COMMISSIONERS.

SECTION 627 - The OWNERS of all new and existing DEVELOPMENT within the TOWN not being served by the PUBLIC SEWAGE SYSTEM shall provide engineering proof of SEWAGE disposal capability complying with the Sub-Surface Regulations of the TOWN and the State of Vermont Agency of Environmental Conservation. Connections to and use of the TOWN's PUBLIC SEWAGE FACILITIES shall be within sole discretion of the COMMISSIONERS who shall consider, among other things, the following:

1. Capacity of existing facilities;
2. Location of the DEVELOPMENT and future potential impact on the TOWN as a result of the contemplated extension of the PUBLIC SEWAGE FACILITIES;
3. Costs of the TOWN;
4. Economic and social benefit to the TOWN; and
5. Availability of funding.

The local share cost to the TOWN for all future PUBLIC SEWAGE FACILITY extensions and expansions shall be borne by the OWNERS to be benefitted by the extension or expansion, unless the voters of the TOWN shall vote at a duly warned or special TOWN Meeting to assume the costs involved in such extension of expansion.

SECTION 628 - In the case of new DEVELOPMENTS, the required SANITARY SEWERS shall be designed, installed, and operational prior to the generation of any SEWAGE from the DEVELOPMENT.

SECTION 629 - All provisions of this ARTICLE shall apply to SANITARY SEWERS within DEVELOPMENTS, except as hereinafter noted.

SECTION 630 - Materials and design and installation shall comply with this

ORDINANCE and as required and approved by the COMMISSIONERS.

SECTION 631 - At the discretion of the COMMISSIONERS, the TOWN may accept such facilities as part of the PUBLIC SEWAGE SYSTEM and will operate and maintain the same provided the following conditions are met by the OWNER of the DEVELOPMENT:

1. The OWNER shall provide the TOWN with a signed affidavit that such facilities are free from debt and that all bills for materials, labor, engineering, etc., and claims for damage have been satisfied.
2. The OWNER shall provide warranty instruments of conveyance of either fee title or permanent easemens to the TOWN for the lands on which such facilities are located.
3. The OWNER shall commit to the TOWN to pay for all repairs and replacements of defective structures, materials, equipment, etc., during twelve (12) consecutive months from the date the COMMISSIONERS accept the facilities.
4. The OWNER shall provide a Bill of Sale conveying ownership of the facilities to the TOWN.
5. The OWNER shall provide other statements, affidavits, and materials as required by the COMMISSIONERS.
6. The OWNER shall pay all costs for the transfer of ownership and for all expenses incurred in complying with the requirements of this ORDINANCE.

ARTICLE 7 - USE OF PUBLIC SEWERS

SECTION 701 - No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, or unpolluted industrial process waters to any SANITARY SYSTEM.

SECTION 702 - Storm water and all other unpolluted drainage shall be discharged to such SEWERS as are specifically designated as COMBINED SEWERS or STORM SEWERS or to a NATURAL OUTLET approved by the COMMISSIONERS. Industrial cooling water and unpolluted process waters may be discharged, upon approval of the COMMISSIONERS, to a STORM SEWER, COMBINED SEWER or NATURAL OUTLET.

SECTION 703 - No person shall discharge or cause to be discharged any of the following described waters or wastes to any PUBLIC SEWAGE SYSTEM:

A. Liquor or vapor having a temperature higher than 150 degrees F(65 degrees C);

B. Water or waste which may contain more than 100 parts per million, by weight, of fat, oil, wax or grease, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32 degrees F (0 degrees C) and 150 degrees F (65 degrees C);

C. Gasoline, benzene, naptha, fuel oil or other flammable or explosive liquid, solid, or gas;

D. Garbage that has not been properly shredded; (The installation and operation of a garbage grinder equipped with a motor of 3/4 hp (0.76 hp metric) or greater shall be subject to the review and approval of the COMMISSIONERS.)

E. Ashes, cinder, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, unground garbage, whole blood, hair, fleshings, entrails, paper dishes, cups, milk containers, or any other solid or viscous substance, either whole or ground by garbage grinders, capable of causing obstruction to the flow in SEWERS or other interference with the proper operation of the PUBLIC SEWAGE FACILITIES;

F. Waters or wastes having a pH lower than 5.5 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the PUBLIC SEWAGE FACILITIES.

G. Waters or wastes containing toxic or poisonous solids,liquids or gases in sufficient quantity, whether singly or by interaction with other wastes, to injure or interfere with any SEWAGE treatment process, to constitute a hazard to humans or animals, create a public nuisance, or to create any hazard in the receiving waters of the wastewater treatment plant.;

H. Chemicals or chemical compounds of the following nature or characteristics or having similarly objectionable characteristics: alcohols, arsenic and arsenicals, phenols or creosols, formaldehydes, iodine, manganese, cyanide, heavy metals and other metal finishing or plant wastes, acid pickling waste, mercury and mercurials, silver and silver compounds, sulfonamides, toxic dyes (organic or mineral), zinc, all strong oxidizing agents such as chromates, dichromates, permanganates, peroxide and the like, compounds producing hydrogen sulfide or any other toxic or inflammable or explosive gases, whether upon acidification or alkalization or oxidation or reduction, strong reducing agents such as nitrites, sulphides, sulphites, and the like, radioactive materials and isotopes;

I. Water or wastes containing excessive settleable solids exerting an excessive chlorine demand or exerting an unusual chemical oxygen demand or containing any other material or constituent in concentrations which exceed limits which may be established by the COMMISSIONERS;

J. Materials which exert or cause unusual concentrations of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries and lime residuals) or dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate);

K. Materials which cause excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);

L. Materials which exert or cause an unusual volume of flow or concentrations of wastes constituting a slug;

M. Waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the WASTEWATER TREATMENT PLANT;

N. Waters or wastes if it appears likely, in the opinion of the COMMISSIONERS, that such wastes can harm SEWERS, SEWAGE TREATMENT PLANT process or equipment, can have an adverse effect on the receiving stream, or can otherwise endanger human or animal life, limb, property, or constitute a nuisance;

O. Noxious or malodorous gas or other substance capable of creating a public nuisance; and

P. Waters or wastes containing substances which are not amenable to treatment or reduction by the SEWAGE treatment process employed or are amenable to treatment only to such a degree that the SEWAGE TREATMENT PLANT effluent cannot meet the requirements of its discharge permit or the requirements of other agencies having jurisdiction over discharge to the receiving waters.

SECTION 704 - Grease, oil, hair and sand interceptors shall be provided when, in the opinion of the COMMISSIONERS, they are necessary for the proper handling of liquid wastes containing grease or flammable wastes, sand or other objectionable ingredients. Grease interceptors are shall be installed at restaurants, schools, and other establishments which prepare food for public consumption. Interceptors shall be of a type and capacity approved by the COMMISSIONERS and shall be located so as to be readily and easily accessible for cleaning and inspection.

SECTION 705 - Interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight, and equipped with easily removable covers which, when bolted in place, shall be gas-tight and watertight.

SECTION 706 - Interceptors shall be maintained by the OWNER, at the OWNER'S expense, in continually efficient operation. Materials collected by interceptors shall not be introduced into the PUBLIC SEWAGE SYSTEM.

SECTION 707 - Discharging or causing to be discharged into thePUBLIC SEWAGE SYSTEM of any waters or wastes having (a) a five (5) day B.O.D. greater than 300 mg./l. (b) containing more than 350 mg./l of suspended solids, (c) containing any substances having the characteristics described in SECTION 703, or (d) having an

average daily flow greater than two percent (2%) of the average daily SEWAGE flow received at the TOWN'S SEWAGE TREATMENT PLANT shall be subject to review by the COMMISSIONERS. The COMMISSIONERS may reject the wastes or:

a. may require pretreatment to an acceptable condition for discharge to the PUBLIC SEWAGE SYSTEM and
b. may establish quantities and rates of discharge.

If the COMMISSIONERS are willing to consider pretreatment or equalization of waste flows, the design, plans, specifications and all other pertinent information relating to proposed equipment and facilities shall be submitted for review by the COMMISSIONERS and the Agency of Environmental Conservation; no construction of such facilities shall be commenced until approved by both the COMMISSIONERS and the Agency and such approvals to be in writing.

SECTION 708 - Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continually in satisfactory and effective operation by the OWNER at the OWNER'S expense.

SECTION 709 - When required by the COMMISSIONERS, the OWNER of property served by a BUILDING SEWER carrying industrial wastes shall install a suitable control manhole in the BUILDING SEWER to facilitate observation, sampling and measurement of the wastes. Such manhole shall be accessibly and safely located and shall be constructed in accord with plans approved by the COMMISSIONERS. Such manhole shall be installed by the OWNER, at the OWNER'S expense, and shall be maintained so as to be safe and accessible at all times.

SECTION 710 - Any person discharging INDUSTRIAL WASTES into a PUBLIC SEWAGE SYSTEM shall perform such monitoring of the discharges as the COMMISSIONERS may reasonably require, including the installation, use, and maintenance of monitoring equipment, keeping records, and providing the records of such monitoring to the COMMISSIONERS upon demand. Where industrial pretreatment permits are issued by the State of Vermont, monitoring records also must be submitted to the State in accord with such permit. Such monitoring records shall be provided to the COMMISSIONERS upon demand.

SECTION 711 - All measurements, tests and analysis of the characteristics of waters and wastes to which reference is made in this ORDINANCE shall be determined in accord with the latest edition of "Standard Methods of the Examination of Water and Wastewater" published by the American Public Health Association and shall be accomplished at the control manhole provided or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the downstream manhole in the SEWER nearest to the point at which the BUILDING SEWER is connected. Sampling shall be carried out

by customarily accepted methods. The particular analysis involved will determine whether a twenty-four (24) hour composite of all discharges is appropriate or whether a grab sample or samples should be taken.

SECTION 712 - Any OWNER found to be in violation of this ORDINANCE may have any disposal authorization terminated. DICK ADVISES THAT THIS BE MOVED TO ARTICLE 13.

SECTION 713 - Any person proposing a new discharge into the PUBLIC SEWAGE SYSTEM or a substantial change in volume or character of pollutants to be discharged into the PUBLIC SEWAGE SYSTEM shall notify the COMMISSIONERS at least forty-five (45) days prior to the proposed new discharge or change, and shall provide such laboratory analyses, technical data, engineering reports, and all other information requested by the COMMISSIONERS. No such change or connection shall be made without the written consent of the COMMISSIONERS.

SPECIAL AGREEMENTS

SECTION 714 - Notwithstanding the provisions of this ARTICLE, the TOWN may execute an agreement with an industrial concern whereby INDUSTRIAL WASTE of unusual strength or character may be accepted by the TOWN for treatment, subject to payment of additional fees by the industrial concern, provided that such agreement does not contravene any requirement of Federal and State law and regulation.

ARTICLE 8 - PROTECTION FROM DAMAGE

SECTION 801 - No person shall break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is part of the PUBLIC SEWAGE SYSTEM without the knowledge and consent of the COMMISSIONERS.

ARTICLE 9 - SEWER CONSTRUCTION MATERIALS

SECTION 901 - The COMMISSIONERS may allow or disallow the use of any construction material as they, in theirdiscretion and in accord with the best available technology, may deem appropriate. They shall have the authority to order changes in construction materials used in systems under the TOWN'S jurisdiction at any time.

SECTION 902 - Improvements in materials used for construction and improvements in jointing methods may be submitted to the COMMISSIONERS for approval, but the COMMISSIONERS shall not be obligated to approve such improved materials or jointing methods.

SECTION 903 - Although it is intented that all joints shall be water-tight, allowable leakage by infiltration or exfiltration tests as prescribed in SECTION 905 shall not exceed fifty (50) gallons per inch diameter per mile per day (0.46

cu.m./day/cm.diameter/KM) except when the SEWER is within the sensitive areas of water sources as defined in SECTION 904. The allowable leakage shall be zero in sensitive areas of water sources and shall be demonstrated by infiltration or exfiltration tests as described in SECTION 905. In no case will cement or mortar joints be acceptable.

SECTION 904 - The following criteria define sensitive field conditions and establish guidelines for the design and construction of gravity and pressure SEWERS within sensitive areas of water sources. These guidelines shall be followed in order to help ensure that water sources are adequately protected from SEWAGE contamination:

1. All public and private drinking water sources within the distances listed below shall be located, and defined as to type, on a SEWER permit application. The construction of each water source also should be shown to the extent such information is available from well records or local knowledge.

2. No publicly or privately owned SEWERS shall be installed closer than 400 feet from a public or multiple-home water supply without the specific written approval of Environmental Engineering Division, Vermont Health Department and the COMMISSIONERS.

3. Isolation distances from sewers (including HOUSE PLUMBING SYSTEMS) to private water supplies shall be governed by the following:

a. In all instances, the maximum reasonable distances based on actual field conditions shall be provided.
b. In no case shall the isolation distance be less than 50 feet from a drilled well or 75 feet from a dug (shallow) well unless adequate provisions (as defined in C below) are made to reduce the likelihood of contamination. Specific site conditions may require greater isolation distances as directed by the COMMISSIONERS.
c. Minimum criteria follow:
    1.) Where an isolation distance is less than 50 feet but greater than 25 feet from a drilled well or less than 75 feet but greater than 35 feet from a dug (shallow) well, the pipe material must be ductile iron gravity pipe with mechanical or push-on joints. Other materials may be proposed and will be reviewed by the COMMISSIONERS, State Environmental Engineering Division, and Vermont Health Department if supported by reasonable justification.
    2.) Where an isolation distance is less than 25 feet from a drilled well or less than 35
    feet from a dug (shallow) well, the SEWER must be encased in concrete to a point where the 25 foot or 35 foot isolation distance is achieved unless the SEWER involved is a BUILDING SEWER. These minimum isolation distances shall be avoided whenever possible.

3.) No manholes shall be allowed within 50 feet of a drilled well or 75 feet of a dug (shallow) well.
4.) All gravity SEWERS within 50 feet of a drilled well or within 75 feet of a dug (shallow) well must pass low pressure air tests and all pressure SEWERS within these distances must pass a water exfiltration test or not be used.

SECTION 905 - Infiltration and exfiltration testing shall be conducted as follows:

1. Infiltration - Test BUILDING SEWERS and HOUSE CONNECTIONS for infiltration only when groundwater is at least two feet above the invert. Test by measuring the flow in the completed SEWER line. No infiltration shall be allowed.

2. Exfiltration - Test BUILDING SEWERS and HOUSE CONNECTIONS for exfiltration by water or pressure air test. Exfiltration by water test shall consist of:

a. Minimum of 2 feet of head over upstream end.
b. Minimum of 6 feet of head over downstream end.
c. Adjust head after one hour.
d. Measure loss of water during next hour.
e. Maximum allowable exfiltration shall be 50 gallons per inch of SEWER diameter per mile of SEWER per day for normal field conditions and shall be zero when installed in sensitive areas of water sources.

Exfiltration testing by pressurized air shall be according to the Ramseier procedure as recommended by the Uni-Bell Plastic Pipe Association specification, Uni-B-6-79.

a. Compute test pressure using the following equation:

$$P = 3.5 + \frac{H}{2.31} \quad \text{(psig)}$$

P = Test pressure, maximum 9 P.S.I.

H = Height of groundwater above invert.

b. Minimum holding time shall be calculated using Ramseier's equation:

$$T = 0.085 \frac{DK}{Q}$$

Where: T = Shortest time, in seconds, allowed for the air pressure to drop 1.0 psig.
K = 0.000419 DL, but not less than 1.0
Q = 0.0015 cubic/minute.square feet of internal surface.

D = Nominal SEWER diameter in inches, and
L = Length of SEWER being rested in feet.

Except, In sensitive areas of water sources, the test pressure will be held at a minimum of ten (10) minutes with no pressure lost.

SECTION 906 - The following materials shall be the only generally acceptable materials for constructing SANITARY SEWERS discharging domestic SEWAGE or wastewaters to a PUBLIC SEWAGE SYSTEM. Othe materials may be employed only with specific written permission from the COMMISSIONERS.

CAST IRON PIPE

a. Pipe - Class 100	ANSI A21.6 or A21.8
b. Fittings	ANSI A21.10
c. Rubber Gasketed Joints - Mechanical and push-on type	ANSI 21.11
d. Coatings - Cement mortar lining, bituminous coatings inside and outside	ANSI A21.4
e. Acrylonitrile - Butadiene - Styrene (ABS) Pipe	
a. Pipe	ASTM D2751
b. Solvent and Cement	ASTM D2780

POLY (VINYL CHLORIDE) (PVC)

a. Pipe and Fittings	ASTM D3034
b. Joints - Bell & Spigot, rubber compression type	ASTM D1869

CAST IRON SOIL PIPE

a. Pipe and Fittings	ASTM A74
b. Joints - Lead and twisted jute or rubber ring compression type	ASTM C564

DUCTILE IRON PIPE (for sensitive field conditions)

a. Pipe and Fittings	
1. Class 50 for 3" to 6" Diameter Pipe	ANSI A21.50
2. Class 51 for 8" to 10" Diameter Pipe	AND A21.51

b. Joints - Push-on or mechanical joints ANSI 21.11

SECTION 907 - The preceding materials represent minimum requirements; higher strength materials shall be used when required by the COMMISSIONERS.

ARTICLE 10 - POWERS AND AUTHORITY OF INSPECTORS

SECTION 1001 - Selectmen, Health Officer, COMMISSIONERS and other duly authorized employees of the TOWN bearing proper Identification shall be permitted to enter upon all properties for the purposes of inspection, observation, measurement, sampling and testing in accord with this ORDINANCE. They shall have no authority to inquire into any industrial processes including metallurgical, chemical, oil, refining, ceramic, paper, or other, except to the extent such industry has a direct bearing on the source of discharge to the SEWERS, waterways or PUBLIC SEWAGE FACILITIES.

ARTICLE 11 -SEWER CHARGES

SECTION 1101 - OPERATION AND MAINTENANCE - An annual charge shall be determined by the COMMISSIONERS and such charge is hereby imposed upon each parcel of real property having a building or structure and served by thePUBLIC SEWAGE SYSTEM. This charge shall be used by the TOWN for the payment of the costs of operating, maintaining, and repairing such system.

SECTION 1102 - Charges shall be determined for recovery of capital costs and administrative costs whether or not the property is occupied and whether or not such system is being used.

SECTION 1103 - CAPITAL COSTS - Design and construction costs of a PUBLIC SEWAGE SYSTEM expansion or extension which has been approved by the COMMISSIONERS shall be borne through the assessment of a capital construction fee on the developer or OWNER requiring, requesting, or directly benefiting from such extension or expansion, unless the voters of the TOWN shall vote at a duly warned annual or special TOWN Meeting to assume all or a portion of such costs involved. When the voters of the TOWN vote to assume all or a portion of such costs, such costs will be paid from the collection of taxes unless the voters of the TOWN approve some other means of raising the required monies.

SECTION 1105 - COLLECTION - Collection of delinquent charges shall be enforced by the TOWN. In the event any charge is not paid within thirty (30) days from the billing date, a late penalty shall be added to the sewer charge together with interest. The amount of the late penalty and the interest rate on overdue charges shall be the same as those applied to the collection of real estate taxes. If payment is not made, such charges shall be a lien upon such real estate in the same manner and to the same effect as real estate taxes are a lien upon real estate under 32 V.S.A. Sec. 5061.

ARTICLE 12 -DEDICATED FUND FOR MAJOR REHABILITATION, MAJOR MAINTENANCE AND UPGRADE COSTS

SECTION 1201 - The COMMISSIONERS may create a dedicated fund to finance major maintenance, major rehabilitation and upgrade costs for the PUBLIC SEWAGE SYSTEM. Such dedicated fund may be authorized through a written policy of the TOWN enacted by the Board of Selectmen. Any such policy shall contain at least the following: major rehabilitation, major maintenance, and upgrade identification, estimated costs, estimated year of expenditure, contribution amount, type of account to be used to hold fund contributions, source of funding and when contributions are to stop. Alternatively, a dedicated fund may be established at a TOWN Meeting pursuant to 24 V.S.A. Sec. 2804.

SECTION 1202 - Total annual contributions to the dedicated fund shall not exceed 15% of the normal operations, maintenance and bond payment costs. The COMMISSIONERS shall have authority to withdraw from the dedicated fund amounts only for the purpose of paying for major rehabilitation, major maintenance and upgrade costs.

SECTION 1203 - When dedicated fund assets are not fully disbursed remaining shall be retained in the fund for future expenditures. This fund shall not exceed the estimated future major rehabilitation, major maintenance, and upgrade costs.

ARTICLE 13 - ENFORCEMENT AND PENALTIES

A violation of this ORDINANCE shall be a civil matter enforced in accord with the provisions of 24 VSA, Chapter 59. A civil penalty of not more than $500.00 shall be imposed for a violation of this civil ORDINANCE and the waiver fee shall be $100.00 for a first offense, and $300.00 for a subsequent offense within six months of the most recent offense. Each day a violation continues constitutes a separate violation.

ARTICLE 14 - APPLICATIONS/PERMITS/FEES

SECTION 1401 - Applications for permits shall be made on forms established and provided by the COMMISSIONERS.

SECTION 1402 - Any false or misleading statement in any application for a permit shall invalidate the permit and shall be deemed a violation of this ORDINANCE.

SECTION 1403 - Any permit issued by the COMMISSIONERS may be suspended or revoked by the COMMISSIONERS at any time for:

a. Violation of any provision of this ORDINANCE.
b. Violation of the specific terms and conditions of the permit.

c. Refusal to allow inspection by the COMMISSIONERS of their duly authorized representatives.

SECTION 1404 - The COMMISSIONERS, or MUNICIPAL DESIGNESS, may orally suspend or revoke a permit at any time for any practice or operation which violates or contravenes the provisions or the purpose of this ORDINANCE or the permit whereupon the suspension or revocation shall take effect immediately. Such action shall promptly be confirmed in writing by the COMMISSIONERS. When possible, the COMMISSIONERS shall provide written notice to desist from or make correction of any practice or operation which violates or contravenes the provisions or the purpose of this ORDINANCE or a permit and shall allow reasonable time for correction of the violation.

SECTION 1405 - All permits must be kept on the premises to which the permit pertains and shall be made available to the COMMISSIONERS or their duly authorized representatives at any time. Failure to keep permits available shall be presumptive evidence that the work or operation is conducted without a permit and is in violation of this ORDINANCE.

SECTION 1406 - All fees required by this ORDINANCE shall be determined by the COMMISSIONERS and a schedule thereof shall be posted in the office of the CLERK. All fees shall be payable to the TOWN and delivered to the TOWN TREASURER.

ARTICLE 15 - VALIDITY

SECTION 1501 - All rules and regulations in the TOWN in conflict herewith are hereby repealed.

SECTION 1502 - Each section or part of a section in this ORDINANCE is hereby declared to be a separate and distinct enactment. If any section, or portion thereof, is found to be void, invalid, unconstitutional, inoperative, or ineffective for any cause, such funding shall not affect the validity of any other section, or part thereof, which can be given effect without such invalid part or parts.

ARTICLE 16 -CIVIL ORDINANCE DESIGNATION

This ORDINANCE is designated as a civil ORDINANCE.

ARTICLE 17 - ORDINANCE ADOPTED AND IN FORCE

SECTION 1701 - Duly adopted and ordained by the BOARD of Selectmen of the TOWN of Whitingham, Windham County, State of Vermont, on this 26th day of January, 2000, at a duly called and duly held meeting. This ORDINANCE shall become effective sixty (60) days from the date hereof.

Attest by:

Earle S. Holland

Earle Holland, TOWN CLERK

1-26-2000

Richard M. Tefft

Richard Tefft, Chair

Steven A. Morse

Steven Morse, Member

Norman O. Stevens

Norman Stevens, Member

Keith Bronson

Keith Bronson, Member

Allan Twitchell

Allan Twitchell, Member

WHITINGHAM, VERMONT
TOWN CLERK'S OFFICE
RECEIVED FOR RECORD

this 16 day of Nov
A.D. 2000 at 11 o'clock
30 minutes A M. and
Recorded in Vol. 16 at
Page 436 of LAND RECORDS
Attest Earle S. Holland
Town Clerk

ORDINANCE REGULATING THE USE OF PUBLIC AND PRIVATE SANITARY SEWAGE SYSTEMS TOWN OF WHITINGHAM

DELINQUENT SEWER FEE COLLECTION POLICY

When the sewer fees remain unpaid more than two billing periods, the TOWN TREASURER may issue a warrant for collection on the delinquent accounts to the TAX COLLECTOR who shall have the same power to enforce the collection and shall proceed in the same manner as provided by law for the collection of taxes under VSA 32 Subchapter 9 of Chapter 133. Upon receipt of the TOWN TREASURER'S warrant, the TAX COLLECTOR shall give notice to each delinquent sewer fee payer within 30 days. The TAX COLLECTOR shall notify each named sewer user of the following: amount delinquent, penalties, monthly interest charges, TAX COLLECTOR'S fee, total amount due including all fees and charges and dates and location where payment can be made. This notice shall be given to the sewer user at least 30 days before the payment due date. The notice should include the following statement: "If your sewer bill remains unpaid after the due date on this notice, you will be responsible for any additional fees and costs associated with the tax sale according to VSA 32 Section 5258."

Policy adopted on November 2, 2000

Sewer Commissioners:

Richard M. Tafft

Rosemary J. Tafft

Edward Reynolds

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