Supporting documentation

-Municipal WWCTF-SEWER USE ORDINANCE and USER CHARGE SYSTEM

> Village of Dorchester, Wisconsin July, 2004

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RESOLUTION

WHEREAS The Village of Dorchester owns, manages, and operates a municipal Wastewater

Treatment Facility and related Sanitary Sewer Collection System;

AND WHEREAS The Village of Dorchester operates said facility under a current WPDES Permit, Number WI-0021571-5, issued by the Wisconsin Department of Natural Resources on Jan. 1, 1999 with an expiration date of Dec. 31, 2003;

AND WHEREAS The Village of Dorchester, agrees to abide by the conditions contained in their current WPDES Permit and all subsequent editions thereto; causing a copy of said Permit to become a permanent attachment of this Ordinance;

AND WHEREAS The Village of Dorchester has directed the preparation of an adequate Sewer Use Ordinance and User Charge System;

NOW, THEREFORE, BE IT RESULVED	: That the Village Board of Dorchester, Wiscons
in regular session assembled this day	of, 2004 do hereby ordain this
Sewer Use Ordinance and User Charge Syste	m as follows:
Adopted	_(Date)
	Bea Seidel, Village President
Attest:	Judy Robida, Village Clerk

PART A: SEWER USE ORDINANCE

SECTION 1. PURPOSE

The purpose of this Ordinance is to provide for the use of Village owned and operated sewerage facilities, including the existing Wastewater Treatment Facility, without damage to the physical facilities, without impairment of their normal function of collection, treating and discharged domestic wastewater from the area served by the Village, and without the discharge by the publicly owned treatment works of pollutants which would be in violation of its permitted discharge under the applicable rules and regulations of the State and Federal regulatory agencies.

A. <u>Enactment</u> of this Ordinance and its User Charge System shall take place following approval by the Village Board.

SECTION 2. DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms used in this Ordinance shall be as follows:

- A. <u>Approving Authority</u> shall mean the Village Board of Dorchester or their Authorized Deputy, Agent, Representative or Consulting Engineer. Approving Authority and Village are used interchangeably.
- B. <u>BOD (Biochemical Oxygen Demand)</u> shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter, under standard laboratory procedure, in five days at 20 degrees Centigrade and expressed in milligrams per liter.
- C. <u>Combined Sewer</u> means a sewer intended to receive both wastewater and storm water or surface water.
- D. <u>Commercial User</u> means those users of the publicly owned treatment works, which deal primarily in the transfer of goods or services.
- E. <u>Compatible Pollutants</u> means those pollutants generally characterized as BOD, suspended solids, pH and fecal coliform, together with any additional pollutants defined in the Village's WPDES Permit, unless the concentrations of any of these pollutants are such that they interfere with the operation of the treatment works or exceed the limits established under Sections 4 and 5.
- F. <u>Debt Service Charge</u> means that charge to the users, which shall, in whole or in part, defray the costs of retiring the debts incurred in the construction or retrofitting of any wastewater facilities by the Village of Dorchester.

- G. <u>Domestic Wastewater</u> means water borne wastes normally being discharged from the sanitary conveniences of dwellings, apartment houses, hotels, office buildings, factories and institutions, free of industrial wastes in which the average concentration of Suspended Solids is established at or below 275 mg/l and the BOD is established at or below 275/mg/l.
- H. Flat Charge means the charge made to unmetered users for use of the treatment works.
- I. <u>Holding Tank</u> is a buried temporary storage reservoir, usually located adjacent to the structure it serves, which directly receives raw wastewater from a building's internal waste plumbing collection system. The waste contents are periodically removed by a septic tank pumper and transported elsewhere for treatment.
- J. <u>Incompatible Pollutants</u> are specifically defined in Section 5. Generally, incompatible pollutants shall mean wastewater or septage with pollutants that will adversely affect or disrupt the wastewater treatment processes or effluent quality if discharged to the wastewater treatment facility.
- K. <u>Industrial Cost Recovery</u> means recovery by the Village of Dorchester from industrial users of a wastewater works of the grant amount allocable to the treatment of wastes from such users; pursuant to Section 204 (b) of the Federal Act; if and when applicable.
- Industrial User as Defined for Industrial Cost Recovery shall mean (a) Any non-L. governmental user of publicly owned treatment works which discharges more than 25,000 gallons per day of sanitary waste, or a volume of process waste, or combined process and sanitary waste, equivalent to 25,000 gallons per day of domestic strength sanitary waste. Sanitary wastes are the wastes discharged from the average residential user in the Village's service area. The strength of the average residential waste discharge in the Village's service area shall be defined in terms of a concentration of 275-mg/l biochemical oxygen demand (BOD) and 275 mg/l suspended solids (SS). These concentrations will be applied in determining equivalent volumes of process waste or combined discharge of sanitary and process wastes. (b) Any nongovernmental user of publicly owned treatment works which discharges wastewater to the treatment works which contains toxic pollutants or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in or have any adverse effect on the waters receiving any discharge from the treatment works.
- M. <u>Industrial User as Defined for Industrial User Class</u> means any user or publicly owned treatment process that engages in processing, blending, assembling or in some way transforming of materials or substances into new products. This type of user would normally occupy an establishment described as a plant, factory or a mill.
- N. <u>Industrial Waste</u> means the wastewater from an industrial user as distinct from domestic wastewater.

- O. <u>Institutional User</u> means a user of the publicly owned treatment works that functions primarily as a social, charitable, religious, educational, or of a hospice nature.
- P. <u>Minimum Charge</u> means the amount charged to each user regardless of use. This charge does not provide the user a minimum amount of use.
- Q. <u>Monitoring Station</u> means a location where a means of monitoring wastewater can be performed for a specific customer before their wastewater is introduced into the Village wastewater collection system.
- R. Operation & Maintenance Costs shall mean all costs incurred in the operation and maintenance of the Village's Wastewater Treatment Facility. This class of cost shall include, but not be limited to, labor, energy, chemicals and replacement costs, but excludes debt retirement.
- S. <u>Person</u> means any individual, firm, company, association, society, corporation, public authority, or group.
- T. <u>pH</u> means the logarithm (base 10) of the reciprocal of the hydrogen ion concentration in gram moles per liter of solution as determined by acceptable laboratory procedures.
- U. <u>Pretreatment</u> means the treatment of wastewater by the user before introduction or discharge into the Village wastewater collection system.
- V. <u>Properly Shredded Garbage</u> shall mean the waste, 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 sanitary sewers. No particle shall be greater than one-half (1/2) inch in any dimension.
- W. <u>Public Authority User</u> means a user of the publicly owned treatment works that would be a group, organization, or authority that is a governmental institution.
- X. Replacement Cost means expenditures for obtaining and installing equipment, accessories or appurtenances that are necessary to maintain the capacity and performances during the service life of the Wastewater Treatment Facility for which such works were designed and constructed. The term "operation and maintenance" includes replacement. The yearly replacement cost is calculated as follows:

Yearly Replacement Cost
$$=\frac{Present\ Installed\ Cost}{Projected\ Service\ Life}$$

Y. <u>Residential User</u> means a user of the publicly owned treatment works that would occupy an establishment considered a house or apartment or other dwelling facilities in which people reside.

- Z. <u>Sanitary Sewer</u> means a sewer pipe that conveys domestic wastewater or industrial waste or a combination of both, and into which storm, surface and ground waters or unpolluted industrial wastewater are not intentionally passed.
- A-A. <u>Septage</u> shall mean scum, liquid, sludge or other waste from a septic tank, soil absorption field, holding tank, vault toilet or privy. This does not include the waste from a grease trap.
- B-B. Septic Tank is a buried reservoir, usually located adjacent to the structure it serves, which directly receives raw wastewater from a building's internal waste plumbing collection system. During detention of the wastewater in the septic tank, sewage solids are separated from the liquid and bacterial action digest a portion of these solids.
- C-C. <u>Service Lateral</u> is either a pressure or gravity pipe connecting an individual building's sanitary sewer with the municipal wastewater collection system.
- D-D. <u>Sewer Service Charge</u> is the sum of the minimum charge, user charge, debt service charge and any applicable surcharge.
- E-E. Shall is mandatory; May is permissive.
- F-F. Slug means any discharge of water or wastewater which, in concentrations of any given constituent or in quantity of flow, exceeds, for any period of duration longer than fifteen minutes, more than five times the average "twenty-four hour" concentration of flows during normal operation, and which adversely affects the sewage collection system and/or performance of the wastewater treatment plant.
- G-G. Standard Methods means the examination and analytical procedures set forth in the most recent edition of "Standard Methods for the Examination of Water & Wastewater", published jointly by the American Public Health Association, the American Waterworks Association and the Water Pollution Control Federation.
- H-H. <u>Storm Sewer</u> means a sewer pipe, which carries storm and/or surface drainage but excludes domestic wastewater and industrial wastes.
- I-I. <u>Surcharge</u> means an additional charge related to industrial wastes being discharged by any user having unusual characteristics such as excessive BOD, excessive suspended solids or other pollutants.
- J-J. Suspended Solids (SS) means total suspended matter that either floats on the surface of or are in suspension in water, sewage, or other liquids and which are removable by a laboratory filtration device. Quantitative determination of SS shall be made in accordance with procedures set forth in "Standard Methods".

- K-K. <u>Unpolluted Water</u> is water of quality equal to or better than the effluent criteria in effect, or water that would not cause violation of receiving water quality standards as established by DNR and published in the applicable section of the "<u>Wisconsin Administrative Code</u>".
- L-L. <u>User</u> means any person discharging domestic wastewater or industrial wastes into the collection system.
- M-M. <u>User Charge</u> means that charge to users of the treatment facility, which adequately provides for proportionate recovery of the operation and maintenance costs.
- N-N. <u>User Class</u> means a group of users having similar wastewater flows and characteristics, levels of BOD, suspended solids, pH and etc.
- O-O. <u>Wastewater</u> means a combination of the water-carried waste discharged into the sanitary sewer collection system from residences, commercial buildings, institutions and industrial establishments, together with such ground, surface and/or storm water as may be present.
- P-P. <u>Wastewater Collection System</u> shall mean the wastewater (sewer) collection system of the Village, including lift stations, forcemains, sewer mains, manholes and related components that collect and transport sewage to the treatment facility.
- Q-Q. <u>Wastewater Treatment Works</u> means all facilities and appurtenances for collection, pumping, treating and disposing of domestic wastewater and industrial waste.
- R-R. <u>WPDES Permit</u> means the "<u>Wisconsin Pollutant Discharge Elimination System Permit</u>", which allows the Village of Dorchester to discharge treated effluent to a watercourse, provided the effluent meets the condition of the WPDES Permit.

SECTION 3. GENERAL REQUIREMENTS

- A. <u>Discharge of Wastewater Prohibited</u>. It shall be unlawful to discharge, within the Village of Dorchester, or in any area under the jurisdiction of said Village, any wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of the Ordinance.
- B. <u>Privies, Septic Tank and Cesspools Compliance with Provisions Required</u>. Except as provided in this Section, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, holding tank, cesspool or other facility intended or used for the disposal of wastewater.
- Connection with Public Sewer Required. The owner of any house, building or structure used for human occupancy, employment, recreation or other purposes, situated within the Village of Dorchester and abutting on any street, alley or right-of-way in which there is now located, or may in the future be located, a properly designed and constructed public sanitary sewer of said Village, is hereby required, at the owner's expense, to install suitable toilet facilities which have been properly designed, pursuant to all applicable rules

as published in the "Wisconsin Administrative Code", therein, and to connect such facilities directly with the proper public sanitary sewer, in accordance with the provisions of this Ordinance, within ninety (90) days after date of "Official Notice" to do so; provided that said public sewer is within one hundred feet of the property line. Where a public sanitary sewer is not available under the provisions of this section, the owner must apply for an exemption from the Village Board. Such exemption application shall require an inspection fee, payable to the Village at the time of application. Then the building sewer shall be connected to a private wastewater disposal system complying with the provisions of this Ordinance and all applicable State Codes and applicable County Regulations.

- D. <u>Compliance with County Regulations required</u>. Before commencement of construction of a private wastewater disposal system the owner shall first obtain a written permit signed by the Clark County Zoning Administrator and comply with the then-applicable County sanitary laws. The Village expressly consents to the enforcement of such laws by the County Zoning Administrator, and other County Officials within the Village. Violations of this section may also be prosecuted by the Village.
- E. <u>Inspection of Installation</u>. A permit for a private wastewater disposal system shall not become effective until the installation is completed to the satisfaction of the Approving Authority. The Approving Authority shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the Approving Authority when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within forty-eight (48) hours of the receipt of notice by the Approving Authority.
- F. <u>Compliance with Department of Commerce Regulations (Wis. Adm. Code)</u>: All private wastewater collection and treatment/disposal systems shall comply with applicable sections of the Wisconsin Administrative Code; namely Comm 82 thru 87 PLUMBING.
- Connections with Public Sewer Required When. At such times as a public sewer becomes available to a property served by a private wastewater disposal system, as provided in Item F above, a direct connection shall be made to the public sewer within ninety (90) days, in compliance with this Ordinance, and any septic tanks, cesspools and similar private wastewater disposal facilities shall be cleaned of sludge and filled with suitable material or physically removed from property within 30 days of connection to the sanitary sewer.
 - H. <u>Sanitary Operation Required</u>. The owner shall operate and maintain his or her private wastewater disposal facility in a sanitary manner at all times, at no expense to the Village.
 - I. <u>Conflict of Provisions</u>. No statement contained in this section shall be construed to interfere with any additional requirements that may be imposed by the Health Office or agent thereof.
 - J. <u>A Wastewater Discharge Permit</u> shall be required of any person desiring to discharge wastewater to the wastewater treatment facility and shall be one of two classes.

- 1. A domestic wastewater discharge permit or request for sanitary sewer service shall be required of any person desiring to discharge domestic waste into the municipal system and shall be considered as part of the "building permit" required and issued by the Village of Dorchester for new construction.
- 2. An industrial wastewater discharge permit shall be required of any person desiring to discharge any industrial waste and shall be completely separate from any other permits issued by the Village. Further requirements for this class of permit can be found in Section 11 of this Ordinance.
- Owner Responsibility and Compliance with Village Regulations. All costs and expenses incidental to the installation and connection of the building sewer to the municipal sanitary sewer collection system shall be borne by the owner and shall conform to the requirements of the Department of Commerce's Building and Plumbing Code, and other applicable rules and regulations of the Village.
 - L. <u>Inspection and Sampling</u>. The Village shall be permitted to have an Authorized Representative inspect any new or old installation for compliance with the regulations of this Ordinance. The user shall allow the Village or an Authorized Representative to enter upon the premises of the user at a reasonable time, for the purpose of inspection, sampling or records examination of the sanitary sewer facility and/or sanitary plumbing/connection. The Village shall have the right to set upon said property such devices as necessary to collect samples, monitor, test or meter the installation.
 - M. <u>New Connection Availability</u>. New connections to the system shall not be allowed unless all downstream components have a reserve capacity capable of accepting the proposed additional wastewater.
 - N. <u>Manhole</u>. The Village reserves the right to require any user of the system to install and maintain at the user's expense, a control or monitoring manhole on the user's discharge pipeline. The user shall provide the Village free and unobstructed access to the installed manhole.
 - O. Monitoring Station. Any industrial or commercial user, directed by the Village or its Authorized Representative for reasonable cause, shall install and maintain at the user's expense a monitoring station. The station may include 24-hour composite samplers, continuous flow meters, flow recorders and other necessary equipment to accurately measure and sample the wastewater being discharged. Where conditions do not permit monitoring of all discharges from a user at a single station, multiple monitoring stations shall be installed. The station shall be situated on the user's premises. The user shall allow the Village access to the station at all reasonable hours.

SECTION 4. NEW CONNECTIONS

1. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance without first obtaining a written permit from the Approving Authority.

2. There shall be two (2) classes of Building Sewer Permits: (a) domestic, and (b) industrial. In either case, the owner shall make application on forms obtained from the Village. See also Section 16 Plumbing Requirements.

Attached to the permit application shall be any plans, specifications, or other information considered pertinent in the judgment of the Approving Authority. A permit and inspection fee, to be determined by the Village, shall be paid to the Village at the time the application is filed.

- The costs for installation and connection of the building sewer shall be the responsibility of those needing these facilities so as to allow their wastewater to be discharged to the Village sanitary sewer system.
 - 4. A separate and independent building sewer shall be provided for every building; except where it is not feasible, and at the Village's discretion, an exemption is allowed.
 - 5. Old building sewer may be used in connection with new buildings only when they are found, on examination and test by the Approving Authority, to meet all requirements of this ordinance.
 - 6. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, joining, testing, and backfilling the trench, shall all conform to the requirements of the this ordinance. All connections shall be gastight and watertight. The connection of the building sewer into the public sewer shall be in compliance with all aspects of the Department of Commerce's Building and Plumbing Codes.
 - 7. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.
 - 8. No person shall make connection of roof downspouts, exterior foundation drains, or other sources of runoff or groundwater to a building sewer or building drain, which in turn is connected directly or indirectly to a public sanitary sewer.
 - 9. The applicant for the building sewer permits shall notify the Approving Authority when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Approving Authority or his representative.

SECTION 5. PROTECTION FROM DAMAGE

No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the

wastewater collection and treatment system. Any person violating this provision shall be subject to immediate arrest under the charge of disorderly conduct.

SECTION 6. POWERS OF APPROVING AUTHORITY

- 1. The Approving Authority, bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this Ordinance. The Approving Authority shall have no authority to inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.
- 2. While performing the necessary work on private properties the Approving Authority shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the Village employees and the Village shall indemnify the company against liability claims and demands for personal injury or property damage asserted against the company and growing out of the measuring and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required by OSHA.
- 3. The Approving Authority shall be permitted to enter all private properties through which the Village holds an easement for the purpose of inspection, observation, measurement, sampling, repair or maintenance of any portion of the wastewater collection and treatment system lying within said easement.

SECTION 7. PROHIBITED DISCHARGES

- A. No person or persons shall discharge or cause to be discharged, any unpolluted water, such as storm water, groundwater, roof runoff, subsurface drainage or cooling water to any sanitary sewer; except that storm water runoff from limited areas, which may be polluted at times, may be discharged to the sanitary sewer by permission of the Approving Authority. Unpolluted industrial cooling water or process waters may be discharged, only with the approval of the Approving Authority, DNR, Department of Commerce, or other regulatory agency as required by law, to a storm sewer or natural outlet.
- B. Except as provided in this Ordinance, no person or persons shall discharge or cause to be discharged any of the following described waters, wastes, compounds or material to any public sewer:
 - 1. <u>Explosive Mixtures</u>: Gasoline, kerosene, benzene, naphtha, fuel oil, alcohols, ketones, aldehydes, ethers, xylene, toluene, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, sulfides or other flammable or explosive liquid, solid or gas;

- Toxic Substances: Water or wastes containing toxic or poisonous solids, liquids
 or gases in sufficient quantity, either singly or by intersection with other wastes, to
 injure or interfere with any waste treatment process, constitute a hazard to humans
 or animals, or create a public nuisance in the receiving waters of the wastewater
 treatment plant;
- 3. <u>Corrosive Wastes</u>: Water or wastes having a pH lower than 6.0 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to piping, structures, equipment and personnel of the wastewater treatment works;
- 4. <u>Solid or Viscous Wastes</u>: Solid or viscous substances in quantities or of such size as to be capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities such as, but not limited to, ashes, sand, mud, straw, shavings, metal, glass, rags, feathers, entrails, whole blood, paunch manure, hair, fleshings, paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.
- 5. <u>Noxious Material</u>. Noxious or malodorous solids, liquids or gases which either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or will prevent the entry into the sanitary sewer collection system for maintenance purposes.
- 6. Radioactive Wastes. Radioactive waste or isotopes of such half-life or concentration that they are in noncompliance with regulations issued by the appropriate authority having control over their use and which will or may cause damage or hazards to the waste treatment facilities or personnel operating the system.
- 7. Accidental Discharge: Each user shall provide protection from accidental discharge of prohibited or regulated materials or substances established by this Ordinance. Users shall notify the Village immediately upon occurrence of a "slug" or accidental discharge of substances prohibited by this Ordinance and shall submit within 48 hours a written report of the incident. The report shall include location of discharge, date and time thereof, type of waste, concentration and volume, and corrective actions. Any user who discharges a slug of prohibited materials shall be liable for any expense, loss or damage caused by the discharge, in addition to the amount of fines imposed by the Village. Signs shall be permanently posted in conspicuous places on user's premises, advising employees whom to call in the event of a slug or accidental discharge. Users shall instruct all employees who may cause or discover such a discharge, with respect to wastewater emergency notification procedure.

SECTION 8. LIMITED AND RESTRICTED DISCHARGES

The following described substances, materials, water or wastes shall be limited to discharges to municipal systems, to concentrations or quantities which will not harm the municipal sewers,

wastewater treatment process equipment, will not have an adverse effect on the receiving waters, or will not otherwise endanger life, limb or public property, or constitute a nuisance. The Approving Authority may set limitations lower than the limitations established in the regulations below, if such limitations are necessary to meet the above objectives. In forming an opinion as to acceptability, the Approving Authority will give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the Wastewater Treatment Facility, and other pertinent factors. The limitations or restrictions on materials or characteristics of waste or wastewaters discharged to the sanitary sewer, which shall not be violated without approval of the Approving Authority, are as follows:

- A. <u>Temperature Limit</u>: Wastewater having a temperature higher than (150°F) one hundred-fifty degrees Fahrenheit (sixty-five degrees Celsius);
- B. <u>Oil Content</u>: Wastewater containing more than twenty-five milligrams per liter (25 mg/l) of petroleum oil, non-biodegradable cutting oils, or products of mineral oil margin;
- C. Grease Limit: Wastewater containing fats, wax, oils and grease, whether emulsified or not, shall not exceed a concentration of one hundred milligrams per liter. This concentration limit shall be lowered if it is found that the substances are solidifying or becoming viscous and creating obstructions in the sewerage system.
- D. <u>Garbage Restriction</u>: Garbage that has not been properly shredded. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments or similar places where the garbage originates from the preparation of food in kitchens for the purpose of consumption on the premises, or when served by caterers;
- E. <u>Metals Restrictions</u>: Water or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances to such a degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the Approving Authority in compliance with the WPDES Permit and applicable State regulations;
- F. Odor Limit: Water or wastes containing odor-producing substances exceeding limits which may be established by the Approving Authority in compliance with State regulations and to those levels which do not create a nuisance;
- G. <u>Slugs</u>: Quantities of flow, concentrations, or both, which constitute a "slug", as defined in Section 2.
- H. <u>Incompatible Wastes</u>: Water or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such a degree that the wastewater treatment plant effluent cannot meet the requirements of the Village's WPDES Permit;

- I. <u>Interactive Wastes</u>: Water or wastes which, by interaction with other water or wastes in the public sewer system, release obnoxious gases, from suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes;
- J. Materials which exert or cause unusual excessive conditions:
 - 1. Unusual BOD, Chemical Oxygen Demand or chlorine requirements in such quantities as to constitute a significant load on the wastewater treatment plant,
 - 2. Unusual concentrations of inert suspended solids, such as fullers earth, lime slurries and lime residues, or of dissolved solids, such as sodium sulfate,
 - 3. Excessive discoloration, such as dye wastes, inks and/or vegetable tanning solutions.

SECTION 9. PRETREATMENT

- A. Pretreatment required. When, in the opinion of the Approving Authority, and in accordance with Title 40, Part 128 of the Code of Federal Regulations, and/or other applicable State and Federal regulations, pretreatment is required to modify or eliminate wastes that are harmful to the structures, processes or operation of the wastewater treatment facility, the person or persons creating the waste shall provide, at their expense, such preliminary treatment or processing facilities as may be determined required to render their wastes acceptable for admission to the public sewers.
- B. Interceptor requirements. Grease, oil and sand interceptors shall be provided when, in the opinion of the Approving Authority, they are necessary for the proper handling of such wastes; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Department of Commerce Plumbing Code, and shall be located so as to be readily and easily accessible for cleaning and inspection. In the maintaining of these interceptors, the owner shall be responsible for the proper removal and disposal, by appropriate means, of the captured material, and shall maintain records of the dates and means of disposal, which are subject to review by the Approving Authority. Any removal and handling of the collected materials not performed by the owner's personnel must be performed by currently licensed waste-disposal firms.
- C. <u>Regulatory Action</u>. If the wastewater to be discharged by a user may be harmful to the Village sanitary sewer system or to the operation of the treatment system, or if the proposed wastewater discharge is prohibited, limited or restricted by this Ordinance the Village may take the following actions:
 - 1) Prohibit the discharge of such wastewaters.
 - 2) Require a discharger to demonstrate that in-plant modifications will

- eliminate the discharge of such substances to a degree as to be acceptable to the Village.
- Require pretreatment including storage facilities, or flow equalization necessary to reduce or eliminate the objectionable characteristics or substances so that the discharge will not violate these rules and regulations.
- 4) Require the person making, causing or allowing the discharge to pay all additional costs of collecting, handling and treating the wastewater.
- 5) Take such other remedial action, as may be deemed desirable or necessary to achieve the purpose of this Ordinance.
- D. <u>Submission of Plans</u>. Where pretreatment or equalization of wastewater flows prior to discharge into any part of its sanitary sewer facilities is required by the Village, plans and specifications, other pertinent data or information relating to such pretreatment or flow-control facilities shall be submitted to the Village for review and approval. Approval shall in no way exempt the discharge or such facilities from compliance with any applicable code, ordinance, rule or regulation of any governmental unit or the Village. Any subsequent alterations or additions to such pretreatment or flow-control facilities shall not be made without due notice to, and approval of the Village.
- E. <u>Costs</u>. The cost of constructing grease, oil and sand interceptors, pretreatment facilities and flow equalization facilities shall be the responsibility of the person needing these facilities so as to allow their wastewater to be discharged to the Village sanitary sewer system.
- F. Operations. If pretreatment or flow equalization facilities are installed, they shall be effectively operated and maintained at the user's expense.

SECTION 10. SPECIAL AGREEMENTS

No statement contained in this Ordinance shall be construed as prohibiting any special agreement between the Village and any person or persons, whereby an industrial waste of unusual strength or character may be admitted to the sewage disposal works, either before or after pretreatment, provided that there is not impairment of the functioning of the sewage disposal works by reason of the admission of such wastes, and no extra costs are incurred by the Village without recompense by said person or persons to the Village of Dorchester.

SECTION 11. <u>INDUSTRIAL WASTES</u>

An industrial Wastewater Discharge Permit is required under Section 3 of this Ordinance. For any discharge by an industrial user, as defined in Section 2, Item L or M of this Ordinance, this permit must be obtained 180 days prior to the beginning of discharge. In support of this application, the user shall comply with the following:

A. <u>Application Information</u>.

1. Name, address and standard industrial classification number of applicant.

- 2. Average hydraulic volume of wastewater to be discharged.
- 3. Wastewater constituents and characteristics as determined by examination according to the latest edition of <u>"Standard Methods for the Examination of Water, Sewage and Industrial Wastes."</u>
- 4. Time and duration of discharge.
- 5. Average and peak wastewater flow rates, including daily, monthly and seasonal variations; if any.
- 6. Site plan, floor plans, mechanical and plumbing plans and details to show all sewers and appurtenances by size, location and elevation.
- 7. Description of activities, facilities and plant processes on the premises including all materials and types of materials, which are, or could be, discharged.
- 8. Each product produced by type, amount and rate of production.
- 9. Number and type of employees including work hours of week.
- 10. Any other information as may be deemed appropriate by the Approving Authority to be necessary to evaluate the permit application.
- B. Review. The Approving Authority will evaluate the data furnished by the prospective user and may require additional information be supplied by applicant. After evaluation and acceptance of the data furnished, the Approving Authority may issue a Wastewater Discharge Permit; subject to appropriate terms and conditions.
- C. <u>Duration of Permit</u>. Industrial discharge permits shall be issued for a specified time period, not to exceed two years. A permit may be issued for a period of less than one year, or may be stated to expire on a specific date. If the user is not notified by the Village 15 days prior to the expiration of the permit, the permit shall automatically be extended for 12 months. The terms and conditions of the permit may be subject to modification and change by the Village during the life of the permit. The user shall be informed of any proposed changes in his permit at least 30 days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.
- D. <u>Permit Conditions</u>: Industrial wastewater discharge permits shall be subject to all provisions of this Ordinance. Additional permit conditions are:
 - 1. The average and maximum wastewater flow and constituent limits the user will be allowed to discharge to the Village sewerage system.

- 2. Limits on the rate of discharge and time of discharges necessary to reduce slug flows.
- 3. Requirement to construct and maintain a flow regulation or equalization facility.
- 4. Requirement to construct, operate and maintain a monitoring station.
- 5. The monitoring requirements for the industrial discharge will include type of sample, sampling frequency and the laboratory analyses required. All analyses shall be performed in accordance with "Standard Methods" and shall be at the user's expense.
- 6. Require the user to install pretreatment facilities.
- 7. Require the user to maintain stipulated wastewater records and to allow the Village access to these records.
- 8. Other conditions deemed necessary by the Village to insure compliance with the Ordinance.
- E. <u>Transfer Of Permit</u>. Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation.
- F. <u>Wastewater Monitoring</u>. The user discharging industrial waste shall be responsible for the required flow monitoring, sample collection and laboratory analyses stated in their permit. If the user is not qualified to perform these duties, the user shall engage a qualified private firm. As an alternative, the user may engage the Village to perform these duties provided the associated costs are born by the user.

SECTION 12. INDUSTRIAL COST RECOVERY

As the Village currently has no user that would qualify for industrial cost recovery, this section is therefore not applicable.

SECTION 13. VIOLATIONS AND PENALTIES

- A. <u>Written Notice Required</u>. Any person found to be violating any provision of this Ordinance, shall be served by the Village with a written notice stating the nature of the violation, and providing a reasonable time for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.
- B. <u>Civil Penalties</u>. Whoever fails to comply with any provisions of this Ordinance or with an Order of the Village issued in pursuance of this Ordinance, shall be fined not less than \$100.00 nor more than \$1,000.00 for each offense. Each day's continuance of such failure is a separate offense. The penalties so imposed, plus reasonable attorneys' fees, court costs and other expenses of litigation, are recoverable by the Village upon its suit as

debts are recoverable by law.

- C. Recovery of Costs Incurred by the Village. Any User violating any of the provisions of this Ordinance, or who discharges or causes a discharge producing a deposit or obstruction; or causes damage to or impairs the Village sanitary sewer system shall be liable to the Village for any expense, loss or damage caused by such violation or discharge. The Village shall bill the cleaning, repair, or replacement work resulting from the violation or discharge. Refusal to pay the assessed costs shall constitute a violation of this Ordinance, and shall be enforceable under the provisions of this Ordinance.
- D. <u>Falsifying Information</u>. Any person who knowingly makes any false statement, representation or certification in any application, record, or report, plan or other document filed or required to be maintained pursuant to this Ordinance, or a Wastewater Discharge Permit; or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Ordinance, shall, upon conviction be punished by the imposition of the civil penalty stated above or by imprisonment for not more than thirty days or by both.
- E. <u>Liability for Expense, Loss or Damage</u>. Any person violating any provisions of this title shall become liable to the Village for any expense, loss or damage occasioned by reason of such violation, which the Village may suffer as a result thereof.
- F. <u>Right to Reject Connections</u>. The Village reserves the right to reject connections to the system if downstream facilities do not have adequate capacity.
- G. <u>Right to Enter Premises</u>. The Village reserves the right to enter premises of any user to sample and/or inspect.

SECTION 14. MANAGEMENT, OPERATION, AND CONTROL OF FACILITIES

The management, operation, and control of the Wastewater Treatment Facility and Sanitary Collection System for the Village is the responsibility of the Dorchester Village Board and all records, minutes, and written proceedings thereof shall be kept by the Village Clerk. The Village Clerk shall, also, keep all financial records of said facilities.

A. The Sewer Utility of the Village of Dorchester shall have the power to construct sewer lines for public use, and shall have the power to lay sewer pipes in and through alleys, streets, easements, and public grounds of the Village; and generally, to do all such work as may be found necessary or convenient in the management of the sewer system. The Village shall have the power by themselves, their officers, agents, and representatives, to enter upon any land for the purpose of making examination or supervise in the performance of their duties under this Ordinance, without liability therefore; and the Village shall have power to purchase and acquire for the sewer utility all real and personal property which may be necessary for construction of the sewer system, or for any repair, remodeling or additions thereto.

- B. <u>Condemnation of Real Estate</u>. Whenever any real estate or any easement therein, or use thereof, shall in the judgment of the Village Sewer Utility be necessary to the sewer system; and whenever, for any cause, an agreement for the purchase thereof, cannot be made with the owner thereof, the Village shall proceed with all necessary steps to take such real estate easement, or use by condemnation in accordance with Wisconsin Statutes and the Uniform Relocation and Real Property Acquisition Policy Act of 1970, if Federal Funds are used.
- C. <u>Title to Real Estate and Personal Property</u>. All property, real, personal and mixed, acquired for the construction of sewer system, and all buildings, equipment, piping, tanks, machinery, and fixtures pertaining thereto, shall be property of said Village.

SECTION 15. USER RULES AND REGULATIONS

The rules, regulations, and sewer rates of Dorchester's Sewer Utility herein set forth shall be considered a part of the contract with every person, company or corporation who is connected to the sewer system of the Village of Dorchester and every such person, company, or corporation by connecting to the sewer system shall be considered as expressing his or their consent to be bound thereby. Whenever any said rules and regulations, as adopted are violated, the service shall be shut off from the building or place of such violation (even though two or more parties are receiving service through the same connection), and shall not be re-established except by order of the Village of Dorchester, and on payment of all debts, plus the expenses and established charges of shutting off and putting on, and such terms as the Village may determine, and a satisfactory understanding with the parties that no further cause for complaint shall arise. In case of such violation, the Village, furthermore, may declare any payment made for the service by the party or parties committing such violation, to be forfeited. The right is reserved by the Village to change the said rules, regulations, and sewer rates from time to time, as they may deem advisable; and to make special rates and contracts in all property cases.

SECTION 16. PLUMBING REQUIREMENTS

The following rules and regulations for the governing of licensed plumbers, sewer users, and others are hereby adopted and established:

- A. <u>Plumbing</u>: No plumber, pipe fitter, or other persons will be permitted to do any plumbing or pipe fitting work in connection with the sewer system without first receiving a proper license from the State of Wisconsin.
- B. Application for Service: Every person connecting with the sewer system shall file an application in writing to the Village of Dorchester on such forms as are prescribed for that purpose. Blanks for such applications will be furnished at the Office of the Village Clerk. The application must state fully and truly all the use, which is requested. If the applicant is not the owner of the premises, the written consent of the owner must accompany the application. People connected to the Sewer System of the Village of Dorchester are referred to herein as "users". The application may be for service to more than one building, or more than one unit of service through one service connection; and, in such case, charges shall be made accordingly. If it appears that the service applied for will not provide adequate

- service for the contemplated use, the Village may reject the application.
- C. <u>Tap Permits</u>: After sewer connections have been introduced into any building or upon any premises, no plumber shall make any alterations, extensions, or attachments, unless the party ordering such tapping or other work shall exhibit the proper permit for the same from the Village.
- D. <u>User Use Only</u>: No user shall allow others or other services to connect to the Sewer System through their lateral.
- E. <u>User to Permit Inspection</u>: Every user shall permit the Village, or their duly Authorized Agent at any reasonable hour of the day, to enter their premises or building to examine the pipes and fixtures, and the manner in which the drains, and sewer connections operate; and they must at all times, frankly and without concealment, answer all questions put to them relative to its use.
- F. <u>Utility Responsibility</u>: It is expressly stipulated that no claim shall be made against said Village or its representative by reason of the breaking, clogging, stoppage, or freezing of any service pipes; nor from any damage arising from repairing mains, making connections or extensions or any other work that may be deemed necessary. The right is hereby reserved to cut off the service at any time for the purpose of repairs or any other necessary purpose; any permit granted or regulation to the contrary notwithstanding. Whenever it shall become necessary to shut off the sewer service within any district of the said Sewer Utility, the Village shall, if practicable, give notice to each and every consumer within such affected district of the time when such service will be so shut off.

SECTION 17. EXCAVATIONS

- A. The Contractor executing the excavation must properly notify all affected utilities prior to commencing any work; i.e. notify Diggers Hotline.
- B. In making excavations in streets, alleys, highways, or easements for laying service pipe or making repairs, the paving and earth removed must be deposited in a manner that will occasion the least inconvenience to the public.
- C. No person shall leave such excavation made in any street or highway open at any time without barricades; and during the night, warning lights must be maintained at such excavations.
- D. In refilling the opening, after the service pipes are laid, the earth must be laid in layers of not more than nine (9") inches in depth, and each layer thoroughly compacted to prevent settling. This work together with the replacing of sidewalks, ballast and paving, must be done so as to make the street as good, at least, as before it was disturbed and satisfactory to the Village. No opening of the streets for tapping the pipes will be permitted when the ground is frozen.

SECTION 18. TAPPING MAINS

No person, except those having permission from the Village, will be permitted, under any circumstances to tap the sanitary mains or collection pipes. The kind and size of the connection with the pipe network shall be that specified in the permit or order from the Village.

- A. <u>Laterals</u>: All private service laterals and pumping facilities shall be installed according to the specifications approved by the Village.
- B. <u>Hook-up Fee</u>: The connection fee shall be paid in advance of physical installation of lateral.
- C. <u>Inspection</u>: All private service laterals and pumping facilities will be inspected by a Village representative upon completion of pipe installation and prior to backfilling and testing.

SECTION 19. SEPTIC TANK SLUDGE AND HOLDING TANK DISPOSAL

At this point in time, the Village of Dorchester will not accept septage or holding tank waste.

SECTION 20. AUDIT

The Village of Dorchester shall conduct an Annual Audit, the purpose of which shall be to maintain the proportionality between users and user classes of the user charge system and to ensure that adequate revenues are available relative to increasing operation, maintenance and replacement costs. The Village shall conduct an annual audit of the separate Industrial Cost Recovery Account, if and when it is applicable, to ensure that proportionate and adequate payments are being made by industries to the Village.

SECTION 21. VALIDITY

- A. <u>Repeal of Conflicting Ordinances</u>. All Ordinances, Resolutions, Orders or parts thereof heretofore adopted, enacted or entered which are in conflict with this Ordinance are hereby repealed.
- B. <u>Savings Clause</u>. If any provision of this Ordinance is found invalid or unconstitutional or if the application of this Ordinance to any person or circumstances is found to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the other provisions or application of this Ordinance which can be given effect without the invalid or unconstitutional provision of application.
- C. <u>Amendments</u>. The Village of Dorchester, through its duly qualified governing body, may amend this Ordinance in part or in whole whenever said body may deem it necessary.

PART B: USER CHARGE SYSTEM

SECTION 22. BASIS OF SEWER SERVICE CHARGE

A. <u>Authority</u>. The Village Board of the Village of Dorchester shall have the authority to establish and collect a sewer service charge for the use of the public Wastewater Collection and Treatment Facility maintained and operated by the Village of Dorchester.

It shall be the policy of the Village of Dorchester to obtain sufficient revenues through a User Charge to pay the cost of the annual debt retirement, operation & maintenance expenses, replacement account and related costs incurred to successfully manage the municipal Sanitary Sewer Utility. The User Charge System (UCS) shall assure that each user of the Sanitary Sewer Facilities pay a proportionate share of all costs necessary to operate the utility. These charges are to be reviewed annually and all excess revenues shall be applied to the replacement account. The initial User Charge System shall be as set forth in this Resolution, which may then be changed from time to time by the Village Board, with the then current Resolution to be included in the Appendix.

- B. <u>Classes of Users</u>. There shall be two classes of users:
 - 1. Industrial
 - 2. Residential (for the purposes of billing, this includes residential, commercial, institutional, and Public Authority)

All users will pay at the residential rate plus the appropriate surcharges.

- Usage. The service charge shall be based on water or wastewater meter readings, when available. When such meter readings are unavailable, the service charges will be a flat charge based on the estimate. This estimate shall be 12,000 gallons per quarter. Where the flat charge must be used, it will be paid for the full quarter and shall not be prorated. If service should be interrupted for any full quarter, only the minimum will be charged. The flat charge will be adopted by resolution.
 - D. <u>Debt Service Charge</u>. All charges incurred for debts for capital improvements for the Wastewater Treatment Works shall be paid for by a debt service charge, which is a part of the total sewer service charge. The amount of this charge will be reviewed at least annually and adopted by resolution.
 - E. <u>Minimum Charge</u>. The minimum charge per user shall be the charge to cover the cost of billing, collection & administration of accounts, plus the debt service charge per connection. This charge will be made regardless of use and shall be adopted by resolution.
 - F. Replacement Fund Account: This account is set aside as a fund for replacement of equipment, emergency loan installments, emergency maintenance, extensions to the facility and replacement of short-lived assets.

- G. Operation & Maintenance Costs shall be the sum of all non-fixed annual costs such as: labor, electrical power, testing, supplies, repairs, insurance, maintenance, fees etc.
- H. <u>Surcharge</u> is an additional fee charged per pound of BOD and SS discharged in excess of domestic strength.
- I. <u>Treatment Charge</u> is the sum of operation and maintenance costs, plus replacement fund costs expressed as a charge per 1000 gallons of use.
- J. <u>User Charge</u>. The user charge for all users discharging domestic wastewater shall be based on a minimum quarterly charge per user, plus debt service, plus the treatment charge according to the volume used. Those discharging wastewater in excess of domestic strength shall also pay the surcharges. The amount of this charge will be reviewed annually and adopted by resolution.
- K. <u>Billing Periods</u>. The total sewer service charge shall be billed quarterly. The due date shall be as set forth on the quarterly bill.
- Late Penalties. Charges levied in accordance with this Section shall be a debt due to the Village and shall be a lien upon the property. If this debt is not paid within twenty (20) days after it is due and payable, it shall be deemed delinquent, and a late payment charge is added. The late payment charge is equal to 3 percent (3%) or a minimum of \$.50. This debt may then be recovered by civil action in the name of the Village of Dorchester against the property owner, the person or both. If delinquent payments are not received by November 1st of the calendar year, a ten percent (10%) charge shall be added to delinquent bills. Thereafter, if payment is not received prior to November 15th, the delinquent bill will be forwarded to the County for placement on the succeeding tax roll.

M. Failure to Pay, Removal or Closure of Connection, Restoration of Service:

- 1. In the event of failure to pay sewer service charges after they become delinquent, the Village shall have the right to remove or close sewer connections and enter upon the property for accomplishing such purposes.
- 2. The expense of such removal or closing, as well as the expense of restoring service, shall likewise be a debt to the Village and a tax lien upon the property, and may be recovered by a civil action in the name of the Village of Dorchester against the property owner, the person, or both.
- 3. Sewer service shall not be restored until all charges, including the expense of removal, closing and restoration, shall have been paid.
- 4. Change of ownership or occupancy of premises found delinquent shall not be cause for reducing or eliminating these penalties.

SECTION 23. SCHEDULE OF CHARGES

- A. <u>Development of Charges</u>. Appendix I sets forth the annual Wastewater Collection and Treatment Facility Budget and develops the charges necessary to support that budget. Thereafter, the rate shall be increased at 8% annually to the year 2010.
- B. The Schedule of Charges, as developed in Appendix I are as follows:

QU	ARTERLY METERED SERVICES:	2005	2006	2007	2008	2009	2010
1.	Minimum Charge	\$6.50	\$7.02	\$7.58	\$8.19	\$8.84	\$9.55
2.	Debt Retirement Charge	0.00	0.00	0.00	0.00	0.00	0.00
3.	Treatment Charge (per 1,000 Gallons)	\$4.95	\$5.34	\$5.77	\$6.23	\$6.73	\$7.27

QU	ARTERLY UNMETERED SERVICES:	2005	2006	2007	2008	2009	2010
1.	Minimum Charge	\$6.50	\$7.02	\$7.58	\$8.19	\$8.84	\$9.55
2.	Debt Retirement Charge	0.00	0.00	0.00	0.00	0.00	0.00
3.	Treatment Charge (12,000 Gallons)	\$59.40	\$64.08	\$69.24	\$74.76	\$80.76	\$87.24

QU	ARTERLY SURCHARGES:						
		2005	2006	2007	2008	2009	2010
A.	Any User Discharging Wastewater with:						. <u>.</u>
	BOD in excess of 275 mg/l	\$0.60 per Lb.	\$0.64 per Lb.	\$0.70 per Lb.	\$0.75 per Lb.	\$0.82 per Lb.	\$0.88 per Lb.
	SS in excess of 275 mg/L	\$0.12 per Lb.	\$0.13 per Lb.	\$0.14 per Lb.	\$0.15 per Lb.	\$0.16 per Lb.	\$0.18 per Lb.
B.	Industrial Cost Recovery	N/A	N/A	N/A	N/A	N/A	N/A
C.	Users outside of Village Limits (Fee + 25%)	125%	125%	125%	125%	125%	125%

QUARTERLY COST @ 12,	000 GAL.	:					
	Current	2005	2006	2007	2008	2009	2010
	\$48.00	\$65.90	\$71.10	\$76.82	\$82.95	\$89.60	\$96.79

APPENDIX I FINANCIAL CALCULATIONS

SECTION A: ANNUAL COST DEVELOPMENT

1.	DEBT	RETIR	EMENT:

At this point in time, the Village's Wastewater Collection & Treatment Facility has an advance from the General Fund in the amount of \$592,821 that will be paid back when funds are available.

SUB-TOTAL: ANNUAL DEBT RETIREMENT \$ -0-

2. <u>OPERATION & MAINTENANCE COSTS:</u>

A. Labor	\$22,000
B. Utilities	20,000
C. Testing & Lab Supplies	10,000
D. Maintenance	2,500
E. Transportation	250
F. Telemetry Fees	75
G. Insurance Premiums	525
H. WW Operator Training	300
I. DNR: Environmental Discharge Fee	350
J. Utility Locate Fees	250
SUB-TOTAL: OPERATION & MAINTENANCE COST	\$56,250

3. REPLACEMENT COSTS:

ITEM	Installed Cost	Service Life	Annual Cost
Pumps	15,000	10	\$1,500
Blowers	20,000	10	2,000
Flow Meters	5,000	10	500
Equipment	10,000	10	1,000
Utility/Mower Tractor	10,000	10	1,000
Sludge Removal	288,000	15	19,200
SUB-TOTAL: Annual Replacen	nent Cost	-	\$25,200

4. <u>BILLING, COLLECTION & ADMINISTRATION:</u>

A. Labor	\$5,500
B. Computer & Software	850
C. Supplies & Postage	600
D. Utility Membership Services	100
E. Accounting Services	
SUB-TOTAL: Billing, Collection & Administration	
5. <u>SUMMARY</u> :	
1. Debt Retirement Charge	-0-
2. Operation & Maintenance Costs	
3. Replacements Costs	•
4. Billing, Collection & Administration	•
TOTAL ESTIMATED ANNUAL EXPENSES	

SECTION B: USER CHARGE DEVELOPMENT

The Village of Dorchester Sanitary Sewer Service User Charge System shall be developed in accordance with accepted practices and will consist of a minimum charge, debt charge, treatment charge and any applicable surcharge.

A. <u>USERS OF THE SYSTEM:</u>

The following is a summary of the existing users of the Dorchester WWTF.

USER CLASS	No. of Services	Annual Flow:(Gals.)	Annual BOD:(Lbs)	Population Equivalent
Residential:	350	14,050,000	27,800	450
Industrial:	17	3,125,000	6,200	100
TOTALS	367	17,175,000	34,000	550

NOTES:

- 1-Flows estimated from 2003 billing statements and 2003 PSC report.
- 2-BOD Loadings based on WWTF CMAR.
- 3-Population Equivalent based on 0.17 Lb. BOD per capita/day.
- 4-Average Residential usage = 110 g/d (Equivalent Dwelling Unit).
- 5-Industrial BOD concentration assumed equal to residential concentration.
- 6-All users discharge wastewater at domestic sewage strength and are charged are charged accordingly.
- 7-Pounds of SS is assumed equal to pounds of BOD for calculation purposes only.

It should be noted that an annual review and assessment of Village's wastewater strength (BOD & SS) shall be made. If there are any significant changes from the established strengths previously listed, this portion of the document shall be modified to reflect those changes.

B. DEBT RETIREMENT CHARGE:

At this point in time, the Village of Dorchester's Sewer Utility is not attempting to pay back the previous advance from the general fund. However, if debt repayment is made at some future point in time, the incurred debt repayment should be based on the number of individual connections; regardless of quantity used. Thus:

C. TREATMENT CHARGE:

The Treatment Charge should be total cost of Operation & Maintenance, plus replacement, proportional to the flow, BOD and SS in the same ratio as they relate to the Wastewater Treatment Facility. The assumed ratio is:

Flow @ 70%, BOD @ 25% and SS @
$$5\% = 100\%$$

For the residential rate, these will be based on 1,000 gallons of flow at maximum domestic strength.

Flow User Charge = 70% x
$$\frac{(\$56,250 + \$25,200)}{17,175,000}$$
 x 1,000 gal. = \$3.31

BOD User Charge = 25% x
$$\frac{(\$56,250 + \$25,200)}{34,000}$$
 = \$0.60/lb. BOD

SS User Charge = 5% x
$$\frac{(\$56,250 + \$25,200)}{34,000}$$
 = \$0.12/lb. SS

Therefore, the total cost per 1,000 gallons of domestic strength sewer is (BOD & SS assumed @ 275 mg/l at the source):

BOD =
$$\frac{1,000 \times 8.34}{1,000,000} \times 275$$
 @ $0.60 = 1.37

$$SS = \frac{1,000 \times 8.34}{1,000,000} \times 275 @ 0.12 = --- 0.27$$

Flow = 1,000 @
$$3.31 = ---- 3.31$$

D. <u>MINIMUM CHARGE</u>:

The minimum charge is the cost of Billing, Collection & Administration. This cost is divided by the total number of users to obtain the minimum charge per user and is calculated as shown below.

Minimum Charge =
$$\frac{\$9,550}{367} \div 4 = \$6.50$$
 per Quarter

E. FLAT RATE CHARGE:

The flat rate charge shall be based on 12,000 gallons per quarter and shall be computed using the Minimum Charge, the Debt Retirement (if applicable) and treatment charge for domestic strength wastewater.

C-Treatment Charge
$$(12 \times 4.95) - = 59.40$$

F. <u>SURCHARGES</u>:

Any user discharging wastewater containing concentrations of BOD and suspended solids (SS) in excess of 275 mg/L shall be charged a surcharge on the excess poundage of both BOD and SS as listed below, based on debt service (if applicable) and proportional treatment costs.

SECTION C: ESTIMATE

1.	RESIDEN Ched Beck = 12,000	
	A. Minimu	
	350 x \$t	\$9,100.00
	B. Debt Ser Gorke Arto	
	350 x \$0.	0.00
	C. Treatmen	annual water meter readings of
	14,050,00	
	14,050,000	\$69,547.50
2.	INDUSTRIAL	
	A. Minimum C	
	17 x \$6.50 x 4	\$442.00

17 x \$6.50 x 4 \$442.00		
B. Debt Service		
17 x \$0.00 0.00		
C. Treatment Charge for 17 users based upon estimated annual water meter readings of		
3,125,000 gallons		
3,125,000/1,000 x \$4.95		
ESTIMATED ANNUAL REVENUE		
Therefore, estimated Annual Revenue exceeds estimated Annual Budget and sewer rates are		
adequate.		
SECTION D: EXAMPLE SEWER SERVICE CALCULATIONS		
Example 1: Average Residential User Charge per quarter.		
A. Minimum Charge		
B. Debt Service		
C. Treatment Charge		
110 gallons per day x 91/1,000 x \$4.95		
\$56.05		