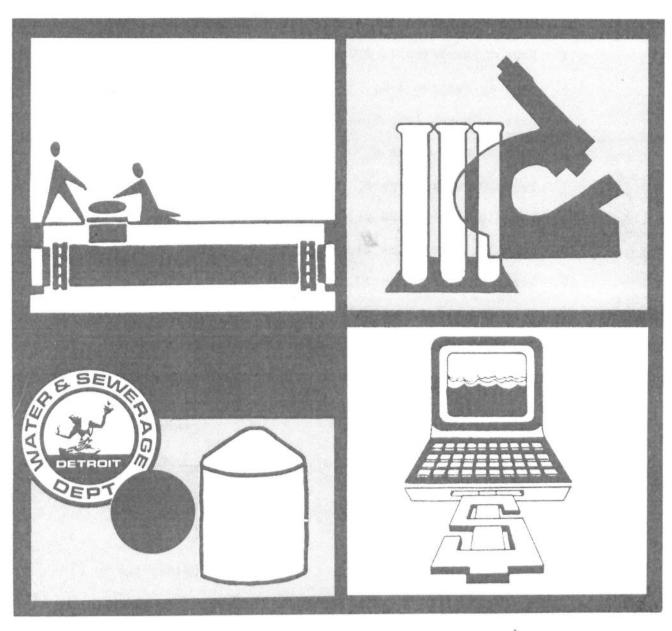
# SURCHARGE RULES AND REGULATIONS





### DWSD

# SURCHARGE RULES AND REGULATIONS

# ERRATA SHEET

1.	CONTENTS, Section 7, Page,	read	23	as	27
2.	CONTENTS, Tables 4-2	11	Unity	n	Unit
3.	Page 2, Division J, SIC,	M	9199	н	9111
4.	Page 4, Section 2-C,	Ħ	V-Volume	11	V=Volume
5.	Page 7, Notes (2), Line 4,	н	Equipment	88	Equivalent
6.	Page 9, User, Line 6,	89	bar lunch	22	bar or lunch
7.	Page 10, User, Line 6,	99	bars, lunch	**	bars or lunch
8.	Page 10, User, Line 21,	Ħ	County	11	Country
9.	Page 10, User, Line 23,	91	14	99	0.14
10.	Page 10, User, Line 30,	. 11	1,00	11	1,000
11.	Page 10, User, Line 33,	99	1,00	**	1,000
12.	Page 17, Sec.5., C.(5.), Line 7,	19	form	**	from
13.	Page 18, Para. 1, Line 9,	**	provied	11	provided
14.	Page 21, Sec. 5.F. (1.), Line 3,	11	resiential	**	residential
15.	Page 24,	н	$\sum_{i=i}^{n}$		$ \begin{array}{c}                                     $
16.	Page 26, n-1=20,	19	2.13	89	2.09
17.	Page 26, Last Line,	11	Edinbourgh	81	Edinburgh

### SURCHARGE RULES AND REGULATIONS

METHOD OF SEWAGE FLOW DETERMINATION POLLUTION ABATEMENT VARIANCE AND INVESTMENT CREDIT

MADE EFFECTIVE BY ORDER OF THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN
AS PART OF EXHIBIT D OF THE
APPLICABLE RATE SETTLEMENT AGREEMENT

# DEFINITIONS AND ABBREVIATIONS

ACT OR THE ACT - The Federal Water Pollution Control Act, PL 92-500, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

ASSIGNED WASTEWATER STRENGTH CHARACTERISTICS - The wastestrengths determined to be typical by the DWSD as set forth in Table 3-1.

AUTHORIZED PARTICIPATING AGENT - Any Governmental agency appointed by the DWSD to act as its agent to enforce the pollution abatement requirements in accordance with the Federal Water Pollution Control Act of 1972, PL 92-500, as amended (Federal Clean Water Act of 1977), 33 U.S.C. 1251, et seq. and applicable Federal Environmental Protection Agency regulations, particularly 40 CFR 403 and applicable ordinances of the City of Detroit enacted in accordance with the said statutes and regulations.

AUTHORIZED REPRESENTATIVE OF NONRESIDENTIAL USER - A corporate officer of the nonresidential user if the user is a corporation; a general partner or proprietor if the nonresidential user is a partnership or proprietorship, respectively; or a duly authorized representative of the individual designated in either of the above if such representative is responsible for the overall operation of the facility from which a discharge originates or is the identified corporate partnership or proprietorship representative for responding to wastewater discharge inquiries or actions.

BOARD - Board of Water Commissioners of the City of Detroit

 ${\rm BOD}$  - (denoting biochemical oxygen demand) The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days, at twenty (20) degrees centigrade expressed in terms of weight and concentration (milligrams per liter) as measured by standard methods.

COMMERCIAL USER - All nondomestic sources of discharge to the DWSD Sewerage System other than industrial users, as defined herein, including but not limited to the following: A publicly or privately-owned facility where persons are engaged in the exchange or sale of goods or services, hospitals, retail establishments, schools and facilities operated by local and State governments. Residential dwellings including single family and multifamily (regardless of size) are specifically excluded.

COMPOSITE SAMPLE - A series of grab-samples of equal or flow pro-portioned volume taken over a specified time period which are combined into one sample.

CONNECTION OR SERVICE CONNECTION - Each physical connection to the municipal or DWSD sewerage system or private main sewer.

CONSENT JUDGMENT - The judgment issued by the United States District Court for the Eastern District of Michigan on Septemer 14, 1977 (US EPA versus City of Detroit, et al., C.A. No. 77-1100) as amended.

COOLING WATER - Any non-contact water used in any cooling system such as, but not limited to, that circulated through air-conditioners.

<u>DETERMINATION NOTIFICATION</u> - A written notice filed with the <u>DWSD Industrial Waste Control Section</u> at least thirty (30) days in advance of the commencement of the determination sampling period containing the following information:

- (a) Description of wastewater flow and sewer connections.
- (b) Sketch of plant area showing buildings and surrounding streets and alleys.
- (c) Plant sewer outlets and municipal sewers they connect to if known.
- (d) Sampling locations If more than one (1), assign a sequential number to each.
- (e) Any additional diagrams describing wasteflow from your facility.
- (f) A written description of the sampling procedure and compositing method to be used. Include the sampling location, length of composite period and if more than one (1) outfall is being sampled, an estimate of the relative flow rates in each discharge.
- (g) Name and qualifications of the analytical laboratory supervisor and the method of analysis to be used.

<u>DETERMINATION REPORT</u> - A written report, expressed in terms of weight and concentration (milligrams per liter), by the nonresidential user notifying the DWSD of the laboratory analytical data resulting from the lab analysis of the determination sample.

<u>DETERMINATION SAMPLES</u> - Daily composite samples taken by the nonresidential user during a production cycle or at least five (5) days, whichever is longer after providing the DWSD Industrial Waste Control Division with a determination sampling notification.

<u>DETERMINATION SAMPLE ANALYSIS</u> - The average of analyses of the daily determination samples conducted by the nonresidential user in accordance with the standard methods.

DIRECTOR - Director of the DWSD.

DISCHARGE - The introduction of wastewater into the sewerage system directly or indirectly by means of, but not limited to, pipes, conduits, pumping stations, ditches or tank trucks and all constructed devices and appliances appurtenant thereto.

DOMESTIC EQUIVALENT DISCHARGE - The discharge strength characteristics of domestic wastewater (BOD, TSS, P, and FOG) from residential users as a class, as established for the DWSD by the United States District Court on July 10, 1981.

DOMESTIC WASTEWATER - Water carried waste from residences, business buildings, institutions, or industrial establishments generated by personal activities (from sources such as kitchens, bathrooms, lavatories and toilets). Strength charcteristics of this wastewater shall be deemed to be equal to those of the "Domestic Equivalent Discharge", as established for the DWSD by the United States District Court on July 10, 1981. Domestic wastewater does not include process wastewater from industrial establishments, infiltration or inflow.

<u>DWELLING</u> - Any structure designed for non-transient habitation including, but not limited to, houses, mobile homes, apartment buildings, condominiums, and townhouses.

DWSD - The Detroit Water and Sewerage Department.

ENVIRONMENTAL PROTECTION AGENCY OR EPA - The U.S. Environmental Protection Agency, or where appropriate, the term may also be used as a designation for the administrator or other authorized official of said agency.

 $\overline{\text{FOG}}$  - Fats, oils, grease and other nonvolatile material of animal, vegetable, or mineral origin that is extractable by freon in accordance with the standard methods.

GRAB SAMPLE - A sample which is taken from a waste stream on basis with no regard to the flow in the waste stream and without consideration of time or variation in constituent composition.

INDUSTRIAL USER - Any user described by SIC Divisions A, B, D, E and I, that discharge process wastewater to the DWSD. Residential dwellings, including single family and multifamily (regardless of size) are specifically excluded.

INDUSTRIAL WASTE - Any liquid, solid or gaseous waste or form of energy or combination thereof resulting from any process of industry, manufacturing, business, trade or research, including the development, recovery or processing of natural resources.

INFILTRATION - Water entering a sewer system, including sewer service connections from the ground through such means as, but not limited to, defective pipes, porous pipes, pipe joints, connections or manhole walls. Infiltration does not include, and is distinguished from, inflow.

INFLOW - Water discharged into a sewer system, including service connections, from such sources as, but not limited to, roof leaders, cellars, yards, and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and combined sewers, catch-basins, stormwaters, surface run-off, street wash-waters, or drainage and river inflow. Inflow does not include, and is distinguished from, infiltration.

MUNICIPALITY - Any municipal corporation or political subdivision or any governmental agency that contracts with the DWSD for the transportation or treatment of wastewater or that dischage directly or indirectly to the DWSD Sewerage System.

NONRESIDENTIAL USER - Any user which has been included under the definition of either commercial or industrial user.

ORDINANCE NO. 353-H - An ordinance to amend Chapter 56 of the Municipal Code of the City of Detroit regulating and pertaining to the discharge of industrial or commercial waste into the Wastewater Treatment System of the City of Detroit which became effective on December 20, 1979.

 $\overline{\text{OWNER}}$  - The owner of any real property from which wastewater and/or storm water is discharged, directly or indirectly, into the sewerage system.

<u>PERSON</u> - Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, unit of government, school district, or any other legal representative, agent or assigns.

PHOSPHORUS - (P) The total concentration of all forms of organic and inorganic phosphorus compounds in wastewater, expressed in milligrams per liter as phosphorus. Quantitative determinations shall be made in accordance with procedures set forth in the standard methods.

 $\frac{PRIVATE}{tal}$  - A prefix denoting jurisdiction by a nongovernmental entity.

PRIVATE MAIN SEWER - A privately-owned sewer having more than one (1) connection and serving more than one (1) user.

PROCESS WASTEWATER - Any wastewater discharged to the sewerage system from a nonresidential user other than, but not limited to, domestic wastewater, infiltration, and inflow.

<u>PUBLIC</u> - A prefix denoting jurisdiction by any governmental subdivision or agency.

 $\frac{\text{RESIDENTIAL USER}}{\text{dwelling unit, including but not limited to, single and multifamily units and apartments.}}$ 

SERVICE AREA - Any area whose wastewater is treated at a wastewater treatment plant of the Board.

SEWAGE OR WASTEWATER - Spent water that may be a combination of the liquid and water carried wastes from residences, commercial buildings, industrial plants, institutions, or other land uses, present in said waste.

SEWAGE FLOW DETERMINATION - The determination of the sewage flow volume in accordance with the DWSD rules and regulations concerning sewage metering and the DWSD surcharge rules and regulations.

SEWAGE METERING - An ordinance (363-H) and DWSD rules and regulations that provide for the determination of the sewage flow volume for billing purposes.

SEWERAGE SYSTEM - The wastewater treatment works and the sewers and conveyance appurtenances discharging thereto, owned and operated by the City of Detroit or by any municipality now or hereafter served by the DWSD.

SHALL - Is mandatory; may is permissive.

SOURCES OF WATER CONSUMED - All sources of potable water or other liquids including, but not limited to, municipal water utilities, private water utilities, public wells, and private wells. The only supplies not included are those that cannot result in discharge to the sewerage system, such as wells that exclusively serve an irrigation system.

 $\frac{\text{STANDARD DEVIATION}}{\text{defined in Section}}$  - A measure of the scatter of data, as

STANDARD INDUSTRIAL CLASSIFICATION - (SIC) A classification made according to the standard industrial classification manual issued by the Executive Office of the President, Office of Management and Budget, 1977, as amended.

STANDARD METHODS - The current edition of "Standard Methods for the Examination of Water and Wastewater," as published by the American Public Health Association, or "Guidelines for Establishing Test Procedures for Analysis of Pollutants," as given in 40 CFR 136. Where these two references are in disagreement, the methods given in 40 CFR 136 shall be followed.

STORM WATER - The water running off the surface of a drainage area during and immediately after a period of rain.

STRENGTH - The BOD, TSS, P, and FOG concentrations of any wastewater, expressed in milligrams per liter.

 $\frac{\text{SURCHARGE}}{\text{nonresidential}}$  - A fee imposed pursuant to Section 2 herein on nonresidential users, as defined in these surcharge rules and regulations.

 $\frac{\text{SURCHARGE CLASSIFICATION}}{\text{waste strength characteristics for each as set forth in Tabel 3-1 herein.}}$ 

SURCHARGE PROGRAM - A system of charges to non-residential users only for the cost of treating these quantities of BOD, TSS, P and FOG in concentrations in excess of domestic equivalent discharge.

TOTAL SUSPENDED SOLIDS (TSS) - Total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquids and which is removable by laboratory filtering, as measured according to standard methods.

UNIT ASSIGNMENT FACTORS - A schedule of factors equating the amount of sewage originating from various types of residential, institutional, commercial and industrial users to the amount of sewage normally originating from a single family dwelling of average size.

<u>USER</u> - Any owner or occupant of any property from which there is a discharge.

WASTE STRENGTH DETERMINED NONRESIDENTIAL USERS - Nonresidential users that have reported their wastewater strengths to the Detroit Water and Sewerage Department for surcharge billing purposes.

<u>WASTEWATER FACILITIES</u> - The structures, equipment, and processes required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent and residues.

WASTEWATER TREATMENT - WORKS An arrangement of devices and structures for treating wastewater and the residues therefrom. Sometimes uses as synonymous with wastetreatment plant, or wastewater treatment plant, or a water pollution control plant, or a sewage plant, or a publicly owned treatment works (POTW).

The combination of Michigan and Federal legislation requires that all users of public sewerage system facilities contribute their proportionate share of the cost of service pertaining to the costs of the facilities and their operation. The stated intent of the cost of service rates is to distribute the costs of publicly-owned sewerage systems to the responsible user or class of users and to promote self-sufficiency of sewerage systems with respect to all costs.

The Detroit Water and Sewerage Department (DWSD) has adopted a cost of service rate program, which applies surcharges to nonresidential users with wastewater strength greater than that of domestic wastewater. This document sets forth proposed principles and procedures for establishing the volume and strength of a nonresidential user's discharge that will be used as the basis for computation of user charges and user surcharges. These principles and procedures provide for proportional cost recovery.

The collection of samples, measurement of flows, and all analyses must be conducted according to recognized professional practice. The sampling procedure must be designed to provide an analysis which is representative of actual conditions. Samples must be collected over a sufficient period to obtain the average wastewater characteristics. This document addresses those matters.

All rules and regulations, or parts of rules and regulations, in conflict herewith are hereby repealed. The rules and regulations known as the "Rules and Regulations Governing Implementation of Surcharges" (Interim Surcharge Rules), and the "Self Monitoring Rules and Regulations" are hereby expressly rescinded. The DWSD shall have the authority to utilize data collected under preceding programs as these Rules and Federal Regulations permit.

### A. RESIDENTIAL USERS

In accordance with EPA regulations, user charges must be apportioned to each user or class of users on the basis of wastewater flow and strength discharged to the system. Due to the size of the residential class, monitoring of each user's discharge would not be feasible. The strength of each residential user's wastewater will, therefore, be based on the character istics of a typical residential discharge called a "domestic equivalent" discharge.

The domestic equivalency levels of BOD, TSS, P and FOG, as established for the DWSD by order of the United States District Court for the Eastern District of Michigan on July 10, 1981, are as follows:

BOD = 275 mg/1 TSS = 350 mg/1 P = 12 mg/1 FOG = 100 mg/1

### B. NONRESIDENTIAL USERS

A surcharge classification code has been assigned to each nonresidential user in accordance with that user's primary function. These codes are grouped into general SIC divisions as follows:

DIVISION	SIC	2	FUNCTION		
A	0111 to	0971	agriculture, forestry, and fishing		
В	1011 to	1499	mining		
C	1521 to	1799	construction		
D	2011 to	3999	manufacturing		
Е	4011 to	4971	transportation, communications, electric, gas, and sanitary services		
F	5012 to		wholesale trade		
G	5211 to	5999	retail trade		
H	6011 to	6799	finance, insurance and real estate		
I	7011 to	8999	service		
J	9111 to	9721	public administration		
K	9999		nonclassifiable (none)		

Measured daily, average discharge strength data show wide variations from hour to hour and day to day for the same nonresidential users. Variations may be experienced when comparing nonresidential users within

# B. NONRESIDENTIAL USERS (continued)

the same standard industrial classification. To charge nonresidential users by actual strength of reasonable accuracy, a large number of samples must be analyzed which can be prohibitive in cost for some users, especially smaller ones. Simplification is necessary. Applying assigned discharge strengths within a standard industrial classification with the option on the part of the nonresidential user to have a determined discharge strength replace the assigned strength is a reasonable and acceptable concept. For billing purposes, the surcharge formula shown below will be used. That formula calculates surcharges in dollars per pound of BOD, TSS, P and FOG derived from either the assigned or determined discharge strength and either the water consumption or wastewater flow, pursuant to City of Detroit ordinances and DWSD rules and regulations during a billing period. Initially, nonresidential users shall be assigned wastewater strength characteristics typical for each surcharge code as set forth in Table 3-1. Furthermore, the DWSD shall continue to measure discharge strengths of nonresidential users in accordance with the DWSD verification program as set forth in Section 6 herein.

Upon the effective adoption of these Rules and Regulations all nonresidential users presently enrolled for surcharges will retain the strength bases for billing which were assigned as a result of either 1.) previous self-monitoring or surcharge "average" classification under the earlier Interim Surcharge Program or 2.) the Self-Monitoring Program, whichever was lower. Any nonresidential user who was not in previous sur-charge programs and who is added to the program under the Rules and Regulations will be initially assigned typical wastewater strength character istics by surcharge classifications given in Table 3-1. The volume discharged for all nonresidential users will be determined: 1) by the procedures set forth herein, or by the water used at the non residential user's facility as measured by the water supply meter. Upon the effective adoption of these Rules and Regulations, all nonresidential users shall be subject to the provisions of Section 6.

# C. SURCHARGE FORMULA AND DEFINITION

As established by the DWSD Board of Water Commissioners, the industrial waste pollutant strength surcharge will be computed in accordance with the following formula:

### C. SURCHARGE FORMULA AND DEFINITION (continued)

 $SC^{1/} = 0.0624 \text{ V } [a(BOD-275) + b(TSS-350) + c(P-12) + d(FOG-100)]$ 

#### Where:

SC = Pollutant strength surcharge fee in dollars for the billing period.

0.0624 = Factor which converts MCF to MM pounds.

V = Volume of wastewater discharge in billing
 period in Mcf (1000 cubic feet).

BOD = 5-day Biochemical Oxygen Demand of nonresidential users's wastewater in milligrams per liter (or ppm).

TSS = Total Suspended Solids in nonresidential user's wastewater in milligrams per liter (or ppm).

P = Phosphorus in nonresidntial user's wastewater in milligrams per liter (or ppm).

FOG = Fats, oils and grease in the wastewater expressed in milligrams per liter (or ppm).

ppm = Parts per million.

a,b,c,d = Surcharge rates in \$/pound for treating
BOD, TSS, P and FOG, respectively.

### D. DISCHARGE FLOW DETERMINATION

The basic means of determining sewage flow for billing purposes will remain the water meter. However, some nonresidential users may not discharge all water received to the sewer. Reasons for this include, but are not limited to, water discharged to septic systems or injection wells, water discharged to a receiving water under an NPDES permit, water incorporated into a product, and water evaporated into the atmosphere. Therefore, nonresidential users shall be given the opportunity to furnish their wastewater discharge to water consumption ratio data in accordance with the provisions of Section 5 herein.

Any factor which results in a negative value, either individually or collectively, will be dropped from this calculation.

### E. WASTE STRENGTH DETERMINATION

Some nonresidential users may also discharge wastewater of other than the assigned wastewater strength characteristics. Therefore, such users have the right, at their option, to submit a determination sample analysis of their wastewater that is representative of the total discharge of wastewater to the sewer system from that facility but not more often than once every six months. This determination sample will then serve as the basis for future surcharge billing. The determination report need not be filed more than once, unless the nonresidential user implements significant changes in its product, process or operation or is requested to redetermine by the DWSD under the DWSD verification sampling program.

### F. VERIFICATION

The DWSD will periodically sample each nonresidential user. The purposes of this verification sampling are to:

- verify the appropriateness of the most recent determination sample analysis for continued use for billing purposes.
- verify the appropriateness of the assigned wastewater strength characteristics for the given nonresidential user; and,
- determine improper and/or unauthorized use of the DWSD sewerage system.

In accordance with the procedures in Section 6, when the verification sampling detects a deviation, the DWSD will notify the nonresidential user that a redetermined sampling and analysis or a new determined sampling and analysis is required. The verification sampling shall not be used as a basis for billing, except as specified in Section 6.

The DWSD, in accordance with the procedures set forth in Section 6, shall have the right to require a determination sample analysis of any nonresidential user not covered by the applicable surcharge classes listed in Table 3-1, whose wastewater strength exceeds the domestic equivalent strength as established by the United States District Court for the Eastern District of Michigan in its order of July 10, 1981.

The DWSD shall, in accordance with the procedures set forth in Section 6, have the right to require determination sample analysis of any nonresidential user covered by the surcharge classes listed in Table 3-1, included those whose wastewater strength exceeds the surcharge class average in Table 3-1.

Table 3-1 presents the wastewater strength characteristics that shall be assigned to nonresidential users for billing purposes, unless the nonresidential user requests to be billed on the basis of a determination sample analysis. This analysis shall be applied to the nonresidential user's total wastewater discharge, except as provided in Section 5, including, but not limited to, process and domestic wastewater, as well as cooling water. Those nonresidential users which have self-reported their strength data under the Interim Surcharge or Self-Monitoring programs, for surcharge billing or exemption purposes shall, at their option, be deemed to have determined such data and shall not have to redetermine under this program, unless requested to do so in accordance with the procedures set forth in Section 6, or pursuant to the procedures set forth in Section 5. There shall be no retroactive billing or collection based on a determination sample analysis as defined herein after the date of adoption of these rules and regulations.

The table of assigned wastewater strength characteristics shall be updated every five (5) years, but may, at the DWSD's discretion, be updated as frequently as annually. The expanded data base resulting from nonresidential user determination reports and the data collectd under th DWSD verification program, may be used as a basis for proposing revisions. Any proposed revisions shall be published on or before January 1, of the year of implementation and shall be implemented on July 1 of that year. Appeal of the final publication shall be to the Director in accordance with the procedures set forth in Sections 7B(1) and 7C hereof. the event that the proposed revision(s) is/are not published on or before January 1, the proposed revision(s) shall not be used for any purpose until the next rate period follow-In addition to publication, all nonresidential users affected by the revision of the assigned wastewater strength characteristics table shall be individually notified, in writing, of such proposed revision on or before January 1 of the year for implementation. In the event of an Appeal wherein the decision as to the appropriate wastewater strength characteristics is rendered after July 1, the wastewater strength characteristics as finally determined shall be effective retroactively to July 1 and the surcharge billing of all nonresidential users affected by the revision shall be adjusted accordingly.

TABLE 3-1
ASSIGNED WASTEWATER STRENGTH CHARACTERISTICS

SURCHARGE					
CLASSIFICATION	FUNCTION	BOD	TSS	P	FOG
2011	Meat Packing Plants	1200	800	*	400
2012	Meat Packing, Sausage & Meats			*	
	and Cold Storage		name ne n	sign	
2013	Sausages & Meats	800	700	*	150
2022	Cheese Products	2000	500	50	*
2022/6	Milk with Cottage-Cheese	2300	500	35	225
2023	Milk-Cond./Evap.	1000	500	20	*
2024	Ice-Cream	*	*	25	*
2026	Milk	1100	500	*	500 /
2035/8	Pickled Fruits, Vegetables	1000	500	*	* *
2040	Grain Mill Products	1600	*	*	*
2050	Bakery Products	800	*	*	*
2051	Cakes & Pastries	3800	1100	*	260
2076/7	Vegetable & Animal Oils	650	2000	*	500
2079	Shortenings	1000	*	*	200
2082	Malt Beverages	1400	600	*	*
2086	Soft Drinks	600	*	*	*
2090	Miscellaneous Food Products	1000	500	*	150
2620	Paper Mills	*	480	*	*
2640	Converted Paper Products	300	1500	*	*
2810	Ind. Inorganic Chem.	*	2000	*	*
2830	Drugs	500	500	*	*
2840	Soaps & Detergents	600	*	*	200
2850	Paints & Allied Products	*	*	15	200
2860	Ind. Organic Chem.	500	500	20	150
2890	Miscellaneous Chemical Products	400	*	*	*
3010	Tire & Inner-Tubes	*	500	*	*
3060	Fabricated Rubber Products	*	500	*	
5085	Drum & Barrels - Reconditioning	1200	800	16	1500
5090	Miscellaneous - Durable Goods	400	500	*	150
7213	Linen Services	500	*	*	200
7218	Industrial Laundries	600	600	*	400
7 8 2 0	and the ten ten are to the six his day that the hir his his day his day the his his his	-			

#### Notes:

- (1) \* Indicates that the assigned wastewater strength is the same as or less than the Domestic Equivalent Discharge of BOD = 275 mg/1, TSS = 350 mg/1, P = 12 mg/1, and FOG = 100 mg/1.
- (2) Present data indicate that the wastewater strength characteristics for users in surcharge classifications other than those listed above are equal to or less than the domestic equivalency values. Therefore, the Domestic Equivalent Discharge strengths shall apply to any surcharge classification not listed in this table unless indicated otherwise in procedures set forth in Section 5 or 6
- (3) The strength characteristic values given in this table are subject to increase, or decrease, pending the results of ongoing data collection. Additional surcharge categories may also be added.

Section 4.
ESTIMATED VOLUME OF DISCHARGE FOR SURCHARGE PURPOSES FOR PRIVATE WATER SUPPLY SOURCES

Industrial users are required to install meters on their wells or private sources of water supply that contribute a discharge to the sewerage system to provide a basis for surcharge billings.

Non-industrial non-residential users who are subject to surcharges, if any, may also obtain water from wells or private sources. The water consumption from these sources that is discharged to the sewerage systems must be estimated to provide a basis for user surcharge billing. The factors set forth in Table 4-1 for Wayne and Macomb coun ties and in Table 4-2 for Oakland County provide the basis for such estimates. One unit factor is equivalent to 15,370 cubic feet per year in Oakland County and 26,738 cubic feet per year in Wayne and Macomb counties. Any user who is subject to surcharges may install meters on its private water sources in lieu of using the estimations derived from the values in either Tabel 4-1 or 4-2.

Existing industrial users who are required, as indicated above, to install meters on their well or private sources of water supply, shall have six (6) months from the date of the adoption of these rules and regulations to install the required meter(s). New industrial users shall be required to install the necessary meter(s) prior to their use of the sewerage systems.

### TABLE 4-1

### WAYNE AND MACOMB COUNTIES UNIT ASSIGNMENT FACTORS

### USER

Auto Car Wash (production lines)
Auto Car Wash (self-service)
Auto Dealers (new cars)
Barber Shops
Bars (drinks and/or dinners)

Bowling Alleys (without bar or lunch)
Beauty Shop
Churches

Cleaners

Clinics

Drug Stores (without fountain service)

Grocery Stores & Supermarkets

Hospital
Hospitals (convalescent homes)
Hotels & Motels (not including restaurants
or bar and without kitchen facilities)
Laundry (self-service)

Office Building

Plating Companies

Schools

Service Station Snack Bars (drive-in)

Stores (other than specifically listed)

Swimming Pool (residential excluded)

Theaters (drive-in)
Theaters (inside with air-conditioning)
Other uses not specifically mentioned above

#### UNIT FACTOR

- 10.00 per production line
- 1.00 per stall
- 1.00 unit plus 0.15 per stall
- 1.00 unit plus 0.10 unit per chair
- 1.00 unit per 600 square feet of building area
- 1.00 unit plus 0.10 unit per lane
- 1.00 unit plus 0.15 unit per booth
- 1.00 unit per 6,000 square feet of building area
- 1.00 unit per 1,000 square feet of building area
- 1.00 unit plus 0.50 unit per examining room
- 1.00 unit per 4,000 square feet of building area
- 1.00 unit per 2,000 square feet of building area
- 1.00 unit plus 0.75 unit per bed
- 1.00 unit plus 0.50 unit per bed
- 1.00 unit plus 0.25 unit per bed
- 1.00 unit per 200 square feet of building area
- 1.00 unit per 4,000 square feet of building area
- 1.00 unit per 500 square feet of building area
- 1.00 unit plus 1.00 unit per teaching station
- 1.00 unit plus 0.15 unit per pump
- 1.00 unit per 600 square feet of building plus 0.8 unit per stall
- 1.00 unit per 4,000 square feet of building area
- 1.00 unit per 2,000 square feet of service building area
- 3.50 unit per acre
- 1.00 unit plus 0.01 per seat
- 1.00 unit per 4,000 square feet of building area

### TABLE 4-2

# OAKLAND COUNTY UNIT ASSIGNMENT FACTORS

USER		UNIT FACTORS			
Auto Dealers Bollouborg Tang During	.30	per	1,000 sq. ft.		
Barber Shops			1,000 sq. ft.		
Bars Tale and 21:0 moly time on			seat would engined monA		
Beauty Shops		_	booth equil8 red to8		
Boarding Schools			person was salarable and		
Bowling Alleys (no bars or lunch facilities)			alley		
Car Wash glos 01.0 abig sino 00.1			prostative regulation and Iw-of-		
a. Manual, Do-It-Yourself	2.5		stall godd yssem8		
b. Semi-Automatic (Mechanical without		Pos	Churches		
conveyor) Rein Milling	12.5	per	stall		
c. Automatic with conveyor			lane		
d. Automatic with conveyor conserving and	33.0	Por			
recycling water a second of the second of th	8.4	Der	lane		
Churches moon gaintmaxe		-	seat		
Cleaners (pickup only)		_	employee		
Cleaners (pressing facilities)			press		
Clinics Thups 000 to any than our			misder w seroig Kiabung		
a. Medical	1.00				
b. Dental 2000 many man do		-	dentist lasiquel		
Convalescent and/or Nursing Homes			bed salavaoo) alaligaoli		
	. 3	per	bed as a selection of the second		
			member Blatch & Blatch		
a. With fountain service					
	.08		seat plus 0.14		
Anna gnibilia			1,000 sq. ft.		
b. Without fountain service	. 14	per	1,000 sq. ft.		
Factories (exclusive of excessive industrial					
use) real engage 000 as in the contract of	.50		1,000 sq. ft.		
Fraternal Organizations (members only)	1.0		hall		
Fraternal Organizations (members & rentals)	2.0	-	hall		
Funeral Homes, inclduing one residence	2.2		funeral home		
Grocery Stores & Super Markets	1.1	per	1,000 sq. ft.		
Health Clubs			Will these desired		
a. With Showers and/or pool			1,000 sq. ft.		
Name it all the showers and or pool			1,000 sq. ft.		
Hospitals ope 000 a september 100	1.22	per	bed		
Hotels and/or Motels (exclusive of swimming					
pools, bars, restaurants, etc.)			room had galamied		
Laundry (self-service)			washer		
Office Building	. 40	per	1,000 sq. ft.		
Public Institutions Other than Hospitals					
Racquet Clubs	.82	per	tennis or		
enc kilded		hand	ball court		
Schools					
a. Elementary	.012	per	student		
b. Junior or Middle High	.020	per	student		
c. Senior High	.038	per	student		
Service Station	. 24	per	pump		
Store (other than specifically listed)	.16	per	employee		
Swimming Pool (residential excluded)	3.00	per	1,000 sq. ft.		
Theaters (Drive-In)			car-space		
Theaters (Indoor)	.008	-			
Warehouses			1,000 sq. ft.		
			97		

- A. SEWAGE FLOW DETERMINATION DETROIT FOR ALL PURPOSES AND THE ENTIRE DWSD SEWAGE SERVICE AREA FOR EFFLUENT LOADING SURCHARGE PURPOSE
  - (1.) For purposes of all sewage volume determination within the City of Detroit and for purposes of sewage volume determination for effluent loading surcharge purposes throughout the entire DWSD sewage service area, Detroit and Suburban, the basic means of determining sewage flow for retail billing purposes will remain the water meter except for the following paragraphs in Section 5.A.
  - (2.) For all billing purposes within the City of Detroit and for all effluent loading surcharge billing purposes within the entire DWSD sewage service area sewage meters shall be allowed for determining sewage flow in lieu of the water meter upon written application of the customer to the Detroit Water and Sewerage Department (DWSD) subject to the following conditions:
    - a. The meter must be of a make and model ap proved by DWSD, and the entire installation must also be approved by DWSD:
      - i.) Magnetic meters generally are acceptable.
      - ii.) Sonic meters generally are acceptable
      - iii.) Flumes and weirs generally are not acceptable except in cases where they are proven to be the most practical method of measuring wastewater flow.
      - iv.) The installation must include a totalizer and, for customers whose wastewater flow exceeds twenty five thousand (25,000) gallons per day, a chart recorder.
    - b. All costs associated with furnishing and installing the meter, including design, all necessary permits, the meter, construction, installation and inspection shall be borne by the customer. DWSD shall review plans submitted prior to installation and shall inspect the overall construction and installation. However, separate permits and separate inspections for certain parts of

A. SEWAGE FLOW DETERMINATION - DETROIT FOR ALL PURPOSES
AND THE ENTIRE DWSD SEWAGE SERVICE AREA FOR EFFLUENT
LOADING SURCHARGE PURPOSE (continued)

### (2.) (continued)

b. (continued)

the work, such as plumbing and electrical, may be necessary and it will be the customer's responsibility to obtain these as to satisfy DWSD that these requirements have been complied with. Once the meter as installed is accepted by DWSD, it shall become the property of the DWSD, except in those instances where the nonresidential user is outside the corporate limits of the City of Detroit but inside the DWSD service area. In such cases, the county or municipal rule re ownership shall apply.

- c. All costs associated with the operation of the meter, including power, light and recorder, and meter pit and site maintenance, shall be borne by the customer. DWSD and the local sewerage agency shall have access to the meter and shall furnish, at no cost or expense to customers, recording charts to those customers who are required to install a chart recorder.
- d. The DWSD shall maintain all meters in service, making such periodic tests and repairs as are necessary to insure correct registration. The cost of meter reading and bill ing, meter maintenance, meter repair and meter replacement, when necessary as determined by the DWSD, shall be borne by the customer; provided, however, that the cost of repairing any damage to the meter caused by an employee of DWSD or the local sewerage agency shall be borne by the DWSD or the local sewerage agency as appropriate.
- (3.) Subject to the provisions of paragraph 4, below, deduct water meters, special internal meters, calculations, estimates, etc. will not be acceptable as adjustments to metered water as a basis for billing for sewerage disposal.

- A. SEWAGE FLOW DETERMINATION DETROIT FOR ALL PURPOSES AND THE ENTIRE DWSD SEWAGE SERVICE AREA FOR EFFLUENT LOADING SURCHARGE PURPOSE (continued)
  - (4.) Where, due to cost considerations, practical difficulties or hardship, the installation of a sewage meter is not reasonably possible and a customer desires a sewage flow and/or effluent loading surcharge billing determined by other than the water meter, the Board of Water Commissioners may establish such other reasonable method for determining sewage flow for billing purposes, such as, but not limited to, computations utilizing generally accepted engineering practices or company records reflecting water used in product, when requested to do so by written application. The Board may require the customer to provide calculations of the sewage flow to DWSD.
  - (5.) Drainage charges shall be adjusted to the extent that it can be shown, to the satisfaction of DWSD, that stormwater passes through the meter.
  - (6.) In cases where there is a malfunction in the metering system used for the determination of the sewage flow for billing purposes for a particular customer, the wastewater flow for the period of malfunction shall be computed by multiplying the influent metered water supply to the customer for such period by a fraction, the numerator of which shall be the average metered wastewater flow of the customer for the preceding ninety (90) days (or such other mutually agreed upon period) and the denominator of which shall be the average influent metered water supply to the customer for the preceding (90) days (or such other mutually agreed upon period). During such period of malfunction, the Board may require the customer to provide calculations for the sewage flow to DWSD.
  - (7.) The Board of Water Commissioners, by and through its officers, agents or employees, may discontinue sewage service to any building or any premises, lot or lots, or any parcel or parcels of land upon which any sewage rates, assessments or charges herein referred to shall have accrued, or may institute suit for collection of said sewage rates, assessments, or charges, in any court of competent jurisdiction and no discontinuance of service nor any attempt to collect such sewage rates, assessments or charges by any process shall in any way invalidate or waive the lien upon the premises.

# B. SEWAGE FLOW DETERMINATION - WAYNE COUNTY FOR ALL PURPOSES OTHER THAN EFFLUENT LOADING SURCHARGE PURPOSES

With respect to the communities serviced by the Wayne County Board of Public Works, (the systems commonly known as the Rouge Valley Sewage Disposal District including those areas commonly known as Wayne County #3 and Wayne County #6 and the Northeast Sewage Disposal District) the sewage flow determination, other than for effluent loading surcharge purposes, shall be established, per the 1980 settlement agreement, as provided for in the Wayne County exemption policy as set forth in Article 5, Section 2 of the Sewer Use Regulations adopted by the Wayne County Board of Public Works on March 17, 1981 and approved by the United States District Court for the Eastern District of Michigan. However, in the event that a method other than Wayne County's exemption policy is used to establish the sewage volume for effluent loading surcharge purposes, such method shall not be applicable for the purpose of establishing the general user sewage flow charges. Said exemption policy being as follows:

### Exemptions

Under certain circumstances, and upon proper application, an exemption from basic wastewater disposal charges may be authorized on all or part of the metered water consumption, used as the basis of payment for wastewater disposal service, which does not enter wastewater disposal facilities. In order to qualify for an exemption, an applicant must conform to the following requirements:

- Application must be made on a form provided by the County Agency.
- (2.) Applicant must establish, beyond a reasonable doubt, that none of the flows to be exempted can enter the wastewater disposal facilities.
- (3.) The municipal wastewater agency shall agree to read the required meters and forward the meter readings to the County Agency each month.
- (4.) Exemptions shall not become effective until approved by the municipality and by the County Agency.
- (5.) Applicants shall pay an exemption fee upon approval of the exemption and an annual exemption renewal fee, as established by the County Agency.

B. SEWAGE FLOW DETERMINATION WAYNE COUNTY FOR ALL PURPOSES OTHER THAN EFFLUENT LOADING SURCHARGE PURPOSES (continued)

Exemptions (continued)

- (6.) Exemptions shall be for ninety (90%) percent of the metered water consumption which does not enter the wastewater disposal facilities, as measured by use of the following method:
- a. Water Meter Method
- ( i) All water exempted must be delivered through a separately metered line.
- (iii) All process piping for exempted water shall be exposed to view from the meter through the discharge point, or as approved by the Board.
- b. All sources of water supply to the premises must be metered.
- C. SEWAGE FLOW DETERMINATION OAKLAND COUNTY FOR ALL PURPOSES OTHER THAN EFFLUENT LOADING SURCHARGE PURPOSES
- (1.) The basic means of determining sewage flow for billing purposes will remain the water meter or unit assignment as provided in Article VII of the Wastewater Regulations of the County of Oakland and Table 4-2 of these regulations.

it will be the customer's

- (2.) Sewage meters shall be allowed for determining sewage flow for billing purposes in lieu of the water meter or unit assignment upon written application of the customer to the municipality and upon written application of the municipality to the County subject to the following conditions:
- a. The meter must be a make and model approved by the municipality and the County and the entire installation must also be approved by the municipality and the County:

- C. SEWAGE FLOW DETERMINATION OAKLAND COUNTY FOR ALL PURPOSES OTHER THAN EFFLUENT LOADING SURCHARGE PURPOSES (continued)
  - i.) Magnetic meters generally are acceptable
  - ii.) Sonic meters generally are acceptable.
  - iii.) Flumes and weirs generally are not acceptable except in cases where they are proven to be the most practical method of measuring wastewater flow.
  - iv.) The installation must include a totalizer and, a chart recorder.
  - b. All costs associated with furnishing and installing the meter, including design, all necessary permits, the meter, construction, installation and inspection shall be borne by the customer. The municipality and the County shall review plans submitted prior to installation and shall have the right to inspect the overall construction and installation. However, separate permits and separate inspections for certain parts of the work, such as plumbing and electrical, may be necessary from other municipal agencies, and it will be the customer's responsi bility to obtain these as necessary and to satisfy the County that these requirements have been complied with. The meter as installed shall remain the property of the customer.
  - c. All costs associated with the operation of the meter, including power, light and recorder, and meter pit and site maintenance, shall be borne by the customer. The municipality and the County shall have access to the meter.
  - d. The municipality shall maintain all meters in service, making such periodic tests and repairs as are necessary to insure correct registration. The cost of meter reading and billing meter maintenance, meter repair and meter replacement, when necessary as determined by the municipality and/or the County shall be borne by the customer.

- C. SEWAGE FLOW DETERMINATION OAKLAND COUNTY FOR ALL PURPOSES OTHER THAN EFFLUENT LOADING SURCHARGE PURPOSES (continued)
  - (3.) to the provisions of paragraph 4, below, deduct water meters, special internal meters, calculations, estimates, etc., will not be ac ceptable as adjustments to metered water as a basis for billing sewage disposal.
  - (4.) In cases where there is a malfunction in the metering system used for the determination of the sewage flow for billing purposes for a particular customer, the wastewater flow for the period of malfunction shall be computed by using prior historical sewage flow records of the customer acceptable to the municipality and the County.
  - (5.) If a sewage meter is allowed for determining sewage flow for billing purposes the County and/or the municipality may establish a sewage disposal rate that considers the cost of disposing of inflow/infiltration into the system. Said sewage disposal rate based on a sewage meter shall be 110% of the rate established from time to time for sewage disposal charges based on metered water.

### D. WASTE STRENGTH DETERMINATION

Any nonresidential user has the right to file, at any time, but not more than once every six (6) months, a Waste Strength Detrmination form. A user may want to file this form if the user is subject to a surcharge fee, and if the facility's discharge has been assigned a typical waste strength for one or more parameters that is greater than the actual average waste strength. In addition, pursuant to Section 6, the DWSD has the option of requiring a Waste Strength Determination

The data contained on the form shall be certified by an analytical laboratory supervisor. Nonresidential users who have in their employ, individudals who are also analytical supervisors, may certify the data at the option of the nonresidential user.

The user desiring to determine his actual waste water discharge strength shall file a written DETERMI-NATION NOTIFICATION FORM with the DWSD at least thirty (30) days in advance of the actual sampling. A registered professional engineer shall make arrangements

### D. WASTE STRENGTH DETERMINATION (continued)

for the collection and analysis of the representative discharge samples and certify that acceptable sampling practices were used. During the sampling, the opera tion at the facility being sampled shall be typical of its everyday, normal operation. At the option of the DWSD, a DWSD representative may be present at the sampling, and upon request by the DWSD representative an identical or split sample in sufficient quantity shall be provided to the DWSD representative for a duplicate analysis. Within 30 days of the filing of the Determination Report, the DWSD shall accept or reject the results of the nonresidential user's determination sample analysis. Acceptance shall not be unreasonably withheld and disapproval shall be appeal able in accordance with the provisions of Section 7. Upon acceptance, the new values will be certified by the DWSD for surcharge billing. The surcharge billing shall be effective as of the next billing cycle after the submission of the determination report. A copy of the certification shall also be sent to the nonresidential user involved.

If, however, in situations involving a redetermination or new determination, requested by the DWSD in accordance with the procedures in Section 6, and the laboratory results of the user and the DWSD are substantially different, the DWSD current surcharge loading data shall be used for surcharge billing purposes until the DWSD requests a redetermination in accordance with the procedures set forth in Section 6.

In the event that a nonresidential user is conducting a new determination sampling without being required to do so by the DWSD pursuant to Section 6 procedures and the laboratory results of the nonresidential user and the DWSD are substantially different, the DWSD shall have the right to require a resampling and analysis. A substantial difference shall be defined as:

(1.) In regard to BOD, TSS and P, a resampling shall be required only if the DWSD data shall be more than twenty-five (25%) percent greater than the nonresidential user's data. In the event that the DWSD data is not more than twenty-five (25%) percent greater than the nonresidential user's data, the nonresidential user's data shall be used.

# D. WASTE STRENGTH DETERMINATION (continued)

(2.) In regard to FOG, if the DWSD data is not more than fifty (50%) percent greater than the non residential user's data, the nonresidential user's data shall be accepted. If the DWSD data is more than fifty (50%) percent greater than the nonresidential user's data but less than one hundred (100%) percent greater, the two sets of data shall be averaged for surcharge purposes. If the DWSD data is more than one hundred (100%) percent greater than the nonresidential user's data, the nonresidential user shall be required to resample its effluent for FOG and submit such samples and reanalysis.

The percentages set forth in paragraph (1.) and (2.) immediately preceding shall be computed by finding the difference between the DWSD data and the nonresidential user's data and dividing their difference by the average of the DWSD data and the nonresidential user data.

Under the waste strength determination program, the user shall submit an analysis of BOD, TSS, P and FOG consisting of the average value from representative composite samples. Sampling used for determination of discharge strength by a nonresidential user shall be conducted over one operating cycle or a period of seven (7) days consisting of daily sampling as described below. If no wastewater is discharged during Saturday and/or Sunday, then those days shall not be sampled. Thus, the days of sampling shall be reduced to six (6) or five (5), whichever will apply. Nonresidential users shall have the option, in multiple outfall facilities, or compositing into one final sample for analysis or compositing each outfall separately for analysis and proportioning the final result, provided satisfactory flow estimates are available. Each daily sample, or daily composited sample shall be analyzed every day. All of the daily determination sample analyses shall be averaged to determine the waste strength for surcharge billing computation purposes.

For FOG, the samples may be taken manually or mechanically. If the samples are taken mechanically, the FOG sample shall be the same as that used for analysis for BOD, TSS and P. If the samples are taken manually, the samples of one (1) day and equal volume may be composited into one or several composites. Each composite shall be analyzed.

Sample locations shall be any sample point, such as control manholes, pits, etc., where a representative effluent sample of that user connection can be taken. The DWSD has the option to require that water meter readings be taken at the beginning and end of a sampled operating day of any nonresidential user. This is to calculate the daily loading or variations in daily water use.

### E. POLLUTION ABATEMENT VARIANCE

Any nonresidential user subject to surcharges or a prospective nonresidential user who is constructing a new facility that is expected to be subject to the surcharges may obtain a special temporary variance from the Board of Water Commissioners. In order to qualify for the variance, the nonresidential user must file the follwing information:

- (1.) A statement that pollution abatement equipment and/or processes for the purposes of reducing the effluent loading of the nonresidential user of BOD, TSS, P or FOG are intended for implementation by the nonresidential user.
- (2.) That pollution abatement equipment and/or processes in (1.) above will reduce the financial impact of the actual or expected surcharge bills and that a time vector is desired during the design, financing, and acquisition, construction, installation and implementation of the pollution abatement.
- (3.) Each filing with the Board for a temporary variance shall be accompanied by appropriate information, data, financial statements, pollution abatement plans, etc., in support of the non-residential user's filing. The filing should also contain the time period for the variance being requested. The pollution abatement variance filing must be signed by an authorized representative of the nonresidential user submitting the filing.

Any nonresidential user meeting the above criteria shall be granted variance. The variance shall consist of the following: 1. During the period of design, financing, land and equipment acquisition, construction, installation and implementation, the nonresidential user's surcharge shall be based upon either the strength values set forth in Table 3-1, or the self-determined waste strength as previously accepted by the DWSD for billing purposes at the sole option of the nonresidential user. 2. During the period of the variance, the user shall not be subject to the provisions of Section 6 of these Rules.

The length of the variance shall be as follows:

A. The initial variance period shall be of six (6) months duration commencing upon application. the purpose of this initial period is for research and design. Extensions shall be granted for reasonable cause and upon application to the Board of Water Commissioners.

# E. POLLUTION ABATEMENT VARIANCE (continued)

B. The second variance period shall be of twelve (12) months duration. The nonresidential user recipient of the second variance period shall submit progress reports to the DWSD every three (3) months commencing with the date the second variance begins. The DWSD may revoke the second variance for lack of reasonable progress upon 30 days written notice. The revocation action shall be appealable in accordance with the provisions of Section 7. Upon the expiration of the second variance period (12 months) the nonresidential user may file for one or more 6 month extension of the variance period as is needed to complete and implement the pollution abatement project.

# F. POLLUTION ABATEMENT INVESTMENT CRED

Any nonresidential user subject to surcharges or a prospective nonresidential user who is constructing a new facility that is expected to be subject to the surcharges may obtain a special investment credit from the Board of Water Commissioners. In order to ualify for the credit, the nonresidential user must file the following information:

- (1.) A statement that pollution abatement equipment and/or processes for the purposes of reducing the effluent loading of the nonresidential user of BOD, TSS, P or FO are intended for implementation by the nonresidential user.
- (2.) That pollution abatement equipment and/or processes in 1 above will reduce the financial impact of the actual or expected surcharge bills and that a credit is desired during and/or after the design, fixed ng, land acquisition, construction, installation and implementation of the pollution abatement.
- (3.) Each filing with the Board for an investment credit shall be accompanied by appropriate information, data, financial statments, pollution abatement plans, etc., in support of the nonresidential user's filing. The filing should also contain the time period covered by the credit being requested. The pollution abatement investment credit filing must be signed by an authorized representative or the nonresidential user submitting the filing.

Any nonresidential user meeting the above criteria shall be granted a credit.

### F. POLLUTION ABATEMENT INVESTMENT CREDIT (continued)

There shall be allowed by the DWSD, as a credit against all of the DWSD portion of the sewerage charges imposed, an amount equal to twenty-five (25%) percent of the total cost that the nonresidential user invests in the design, financing, construction, land and equipment acquisition and implementation of the sewerage effluent pollution abatement equipment facility.

The credit shall be accredited against all of the DWSD portion of the nonresidential user's sewerage charges. In no event, however, shall the creditatilized in any given billing period exceed twenty (20%) to cent of the amount of the DWSD portion of all sewerage larges that would have been applicable but for the credit. The nonresidential user shall have a right to the efficient pollution abatement investment credit only upon notification to the DWSD. The notification shall be in writing and shall include sufficient financial information to support the credit being applied for. The nonresidential user shall have the right to carry forward into future the periods such portions of the credit as shall not have been used during the present rate period until such time as the credit shall have been exhausted. The nonresidential user may, at its option, file for the credit in two phases. The first phase may be applied for at any time affect a amount equal to forty (40%) percent of the preliminary cost estimate has been expended on the project. If a first mase credit is applied for the first phase credit shall not exceed twenty-five (25%) percent of the funds expended at the time of application. The nonresidential user may daily application for the investment credit until the pollution abatement project is completely operational. If a first phase credit has been applied for and received, the section phase application shall be the final application notwit standing the fact that additional implementation expenses shall be incurred subsequent to the second phase application:

The credit shall be effective on all effluent pollution abatement projects completed on or after January 1, 1982. In the instance of a multilocation ratepayer, whether the facility where the pollution abatement is installed is a division of a multilocation ratepayer, or the facility is a separate but wholly-owned corporate subsidiary, the credit may be utilized by the parent ratepayer at the parent ratepayer's sole discretion, to offset as allowed by these requlations, the sewerage charges of any or all of the locations and/or subsidiaries of the parent ratepayer which are within the DWSD service region. Where applicable, such credits shall be credited to and shall be passed through by the suburban wholesale customer(s) to the nonresidential user who has been approved by the DWSD for such credit. For purposes of this section, the word "completed" shall be interpreted to mean "placed in service" as used by the Internal Revenue Service. In addition, projects started prior to January 1, 1980, are not eligible for a pollution abatement investment credit.

# Waste Strength Verification - DWSD

The DWSD will periodically sample all surchargeable or potentially surchargeable users to verify the analytical data submitted by such users. In addition, other select nonresidential users will be sampled periodically to verify that the assigned wastewater strength characteristics (See Table 3-1) are reasonably appropriate for that user. The main objectives of this verification program are to assure that certified or assigned waste strength characteristics are providing an appropriate basis for computing user surcharges and that improper or unauthorized use of the sewerage system is detected.

All nonresidential users shall be subject to the verification sampling program. However, to assure a cost effective program, the magnitude of a user's and user classes' surcharge, or unlawful, improper, or unauthorized use of the sewerage system will be considered in establishing the DWSD's sampling frequency for that user or user class.

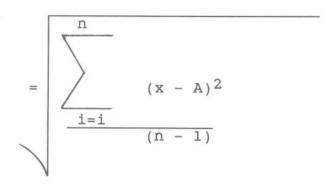
The verification program shall serve as the basis for requesting a nonresidential user to determine its waste strength characteristics, or, if already determined, to redetermine its waste strength characteristics provided that the nonresidential user shall not be required to "determine" or "redetermine" more than once in each 12-month period. The DWSD shall require a user to determine or to redetermine whenever at least five (5) consecutive, representative composite samples have been collected by the DWSD and the following statistical relationship is satisfied.

$$\frac{(A-R)}{s}$$
  $t_{n-1}$ 

Where:

- A = the average pollutant wastewater value, as determined from the n most recent DWSD composite samples collected after the date of last certification or July 1, 1980, as appropriate, and with the stipulation that the time interval between the first and last samples in the group shall not be greater than twelve (12) months.
- R = the pollutant wastewater value which shall be one of the following: (1) the value from Table 3-1 if the nonresidential user is being surcharged in accordance with that table [in the event that the Table 3-1 value is an (\*) the domestic equivalent strength value shall be used]: (2) the domestic equivalent strength if the nonresidential user is not being surcharged and has not self-certified; or, (3) the value of the nonresidential user's certified waste strength if the user has self-certified. If the nonresidential user has not self-certified one or more of the pollutants subject to surcharge, the domestic equivalent strength value for that pollutant shall be used.

- n = number of samples used to compute A, which
  shall be five (5) or greater collected
  within a twelve (12) month period.
- s = standard deviation of the n sample values used to compute A.



Xi = sample value

tn - 1 = the Student-t distribution value at the
 ninety (90%) or ninety-five (95%) percent
 level of confidence (see Table 6-1 for
 values). The ninety (90%) percent level
 shall be used for nonresidential users that
 are being surcharged based upon the values
 set forth in Table 3-1. The ninety-five
 (95%) percent level shall be used for all
 other nonresidential users.

In factual circumstances where the above statistical relationship is satisfied but not for all four (4) of the pollutants and upon the request of the nonresidential user and with the prior approval of the DWSD, which approval shall not be unreasonably withheld, the nonresidential user may submit a determination report on less than all four (4) pollutants.

It is the user's responsibility to furnish determined or redetermined values within ninety (90) days after written notification by the DWSD and charges will be computed in accordance with the new determined values, commencing with the date of submission of the determination report by the user. Failure to provide such timely values will result in the DWSD's data (A in the above formula) being used in determining applicable surcharges and the surcharges will be computed on the DWSD values retroactively to the date of notification. Determination data submitted late will be used for computation of charges commencing with the billing period immediately following submittal.

Section 6.
VERIFICATION PROCEDURES (continued)

The DWSD or its authorized participating agency shall not do any verification sampling or inspection for surcharge purposes without notifying, upon arrival, the affected nonresidential user, and providing the user with the right to observe the sampling and/or inspection. Upon the request of the user, the DWSD or its authorized participating agency shall furnish (a) identification upon arrival of the DWSD personnel involved in the sampling and/or inspection, (b) a split sample of any samples taken by the DWSD or its authorized participating agency, and (c) a copy of any laboratory report by the DWSD or its authorized participating agency resulting from the sampling.

The nonresidential user has a right to review any and all material maintained by the DWSD and pertaining to that specific nonresidential user, including, but not limited to, billing information and all information maintained by the Industrial Waste Control Section on that specific user.

Appeal of the DWSD actions taken under the verification process shall be in accordance with the Appeal Procedures set forth in Section 7.

TABLE 6-1

Values of Student's t Distribution

	t	t
$\underline{n-1}$	90%	95%
4	2.13	2.78
5	2.02	2.57
6	1.94	2.45
7	1.89	2.37
8	1.86	2.31
9	1.83	2.26
10	1.81	2.23
11	1.80	2.20
12	1.78	2.18
13	1.77	2.16
14	1.76	2.15
15	1.75	2.13
16	1.75	2.12
17	1.74	2.11
18	1.73	2.10
19	1.73	2.09
20	1.72	2.09
21	1.72	2.08
22	1.72	2.07
23	1.71	2.07
24	1.71	2.06
25	1.71	2.06
26	1.71	2.06
27	1.70	2.05
28	1.70	2.05
29	1.70	2.05
30	1.70	2.04

Source: R. A. Fisher and F. Yates, Statistical Tables, 4th Rev. Ed., Edinburgh, Oliver & Boyd, LTD., 1953.

### A. CONCILIATION PROCESS

### (1.) General Dispute

Disputes involving surcharge classification designation, assigned wastewater strength characteristics for surcharge classification classes, sampling procedures, sample-point locations, sample handling, surcharge computation(s), specific equipment usage and any other matters pertaining to these surcharge program regulations shall be subject to conciliation between the nonresidential user or his representative and the DWSD staff or their authorized participating agency staff for the purpose of resolving such disputes in an expeditious manner.

A conciliation meeting may be initiated by a nonresidential user by phone call or letter to the DWSD Industrial Waste Control Division, or appropriate participating agency. If initiated by phone, a date, time and place will be set for the first conciliation meeting. If the process is requested by letter, the DWSD, or participating agency, will respond by letter within ten (10) days, setting the time, date and place of meeting. In general, most conciliation meetings will be scheduled on Wednesday mornings, but may be held at the mutual convenience of the parties. The first meeting shall be scheduled as promptly as possible, but in no case later than thirty (30) days from the time a conciliation is requested by the user.

Attendance at the conciliation meeting(s) will be open to all concerned parties and their representatives. At a minimum, an engineer of the Industrial Waste Control Division of the DWSD, representing the Director, the field engineer responsible for surveillance of the nonresidential user, and nonresidential user representative(s) shall be in attendance. In cases involving a participating agency, that agency staff shall represent the Director in the conciliation process. However, as the agency responsible for equitable administration of the surcharge program throughout the region served by the DWSD Waste Treatment Plant, the DWSD may, at its option, send a representative to conciliation hearings held by the participating agency. Decisions of conciliation proceedings held by a participating agency shall be mutually agreed to by all parties and be binding on all parties, unless appealed. In all cases, nonresidential users shall have the right of appeal to the Director of the DWSD.

# A. CONCILIATION PROCESS (continued)

### (2.) Billings

In disputes involving surcharge billings, surcharge billing procedures, or surcharge wastewater volume measurements, the conciliation process shall involve the following parties in addition to those mentioned in A.(1.) above.:

- A representative of the local water and sewerage agency;
- A representative of the DWSD Commercial Division if different from item (2.)a. above;
- c. A representative of the wholesale water and sewerage agency, if any.

### (3.) Procedures

At hearing, the nonresidential user is asked to present the nature of the dispute, or problem relative to the surcharge program and/or its implementation, including expert testimony, if appropriate. Secondly, the DWSD or participating agency staff shall respond. Thirdly, the nonresidential user will be asked to present a proposed resolution of the dispute or problem.

The business of the conciliation meeting(s) will be to arrive at a mutually acceptable solution within the framework of the law and the surcharge rules and regulations. The original action of the DWSD, or its participating agency, shall remain suspended pending the resolution of the dispute. Any relief or resolution by the conciliation hearing shall be made retroactive to the date of appeal or other appropriate date as decided by the hearing.

The process may or may not, require additional meetings. Conciliation ends when it is apparent that (1) a mutually acceptable solution has been reached, or, (2) no resolution is reached, in which case the original action of the DWSD, or its participating agency, shall be put into effect, upon the expiration of the appeal period.

Where conciliation between the nonresidential user and staff is unable to secure a resolution, any nonresidential user adversely affected or about to be adversely affected by any action taken by the DWSD, or any of the contributing communities and/or agencies, shall have a right to appeal of such action to the Director of the DWSD.

### B. APPEAL TO THE DIRECTOR OF THE DWSD

- (1.) Disputes involving modification of the Table of Assigned Wastewater Strength Characteristics (Table 3-1), shall be resolved in accordance with the following procedures:
  - a. All companies in the affected surcharge classification(s) shall be notified, in writing, by the DWSD of the proposed modification within fifteen (15) days of the filing thereof, and be given an opportunity to review available data pertaining to the proposed modification, and to comment and/or object. Notification shall be deemed to be sufficient if the DWSD has notified ninety (90%) percent of the companies within the affected surcharge classification(s). Such comments and/or objections shall be in writing and filed with the Director of the DWSD within forty-five (45) days of the notification.
  - b. Any nonresidential user who disputes the wastewater strength characteristics that have been assigned to its particular surcharge classification may, at its discretion, write the Director requesting that the assigned wastewater strength(s) be modified, and setting forth the proposed wastewater strengths, along with supporting data and reasons.
  - c. The Director (or his designee) shall render a written decision within sixty (60) days of the filing of the dispute to all nonresidential users within the surcharge classification, setting forth the decisions and the reasons for each of the decisions. Notification shall be deemed to be sufficient if the DWSD has notified ninety (90%) percent of the companies within the affected surcharge classification(s). In the event that the sufficiency of the notification is disputed, the DWSD shall have the burden of proving the 90% notification.
- (2.) Disputes involving designation of surcharge classification codes made for one or more of a nonresidential user's facilities or outfalls shall be resolved in accordance with the following procedures:

# B. APPEAL TO THE DIRECTOR OF THE DWSD (continued)

- a. A nonresidential user who disputes the surcharge classification made for one (1) or more of the user's facilities or outfalls, or whose surcharge classification is not listed in Table 3-1 may, at its discretion, write the Director notifying him of the correct surcharge classification and/or wastewater strength characteristics and provide documentation supporting the correct surcharge classification and/or wastewater strength characteristics. The surcharge classification and/or wastewater strength characteristics provided by the user shall be presumed to be correct in the absence of compelling evidence to the contrary.
- b. The Director (or his designee) shall render a written decision within thirty (30) days of the filing of the dispute setting forth the decision and the reason(s) for the decision.
- (3.) Disputes involving other actions shall be directed, in writing, to the Director (or his designee) by the nonresidential user, or his agent. The written request shall include the action complained of, the reasons for disputing such action, and the requested relief. The Director shall make a decision on the appeal within thirty (30) days of the date the appeal is filed. No evidentiary hearing on record shall be required as part of the appeal to the Director, unless requested by the nonresidential user. The Director may, with the agreement of the nonresidential user who is appealing, grant relief other than that requested by the nonresidential user. All decisions on appeals made by the Director of the DWSD shall be in writing, responsive to all issues raised, and with reasons stated for each decision.
- (4.) In all disputes that are appealed to the Director, the burden of proof shall rest with the DWSD or its participating agency to show with clear and convincing evidence that the proposed resolution is unreasonable.

# C. APPEAL TO THE BOARD OF WATER COMMISSIONERS

All final, written decisions by the Director shall be appealable by the nonresidential user to the Board of Water Commissioners (Board) as provided below. The appeal to the Board shall be in writing and shall be submitted to the President of the Board within thirty (30) days of the date the nonresidential user has received written notice of the Director's decision regarding the appeal. A de novo hearing of the appeal shall be held before the Board of Water Commissioners at a regularly scheduled Board meeting within forty-five (45) days of the date the appeal is filed with

# C. APPEAL TO THE BOARD OF WATER COMMISSIONERS (continued)

the Board. The President of the Board shall, at his discretion, have the authority to appoint a three (3) person panel of Board members to conduct the de novo hearing. If a panel is used, the panel shall make a written recommendation to the entire Board within thrity (30) days of the completion of the hearing. The rules and procedures for a panel hearing shall be the same as if the full Board were conducting the hearing. Written notice of the time and place of the hearing shall be given to the nonresidential user at least twenty (20) days in advance of the date of the hearing. Before the hearing, the nonresidential user and the DWSD, or contributing community or agency, may submit written evidence and documentation. At the hearing, the DWSD, the contributing community or agency, and the nonresidential user may present testimony and ask questions of other parties to the appeal presenting oral or written testimony or documentation. A verbatim record of the hearing by a Court Reporter shall be maintained.

The Board shall make its decision within thirty (30) days of either the receipt of the panel recommendation or the completion of the hearing. The Board may grant relief other than that requested by any of the parties. The Board's decision shall be in writing and shall state the issue(s) reviewed, the decision(s) made, and the reason for each of the decisions. During the pendency of any conciliation or appeal, the action by the DWSD, or the contributing community or agency, which is the subject of the appeal shall be stayed. All decisions by the Board shall be final and binding on all parties. Further appeal of the Board's decision shall be in a manner prescribed by law. In all disputes that are appealed to the Board of Water Commissioners, the burden of proof shall rest with the DWSD or its participating agency to show with clear and convincing evidence that the proposed resolution is unreasonable.

Section 8. CONFIDENTIALITY

Section 56-6-10 of the Municipal Code of the City of Detroit dealing with confidentiality and disclosure of data shall apply to the programs described in these rules and regulations.

Nothing in these rules and regulations shall give the DWSD the authority to require a nonresidential user to furnish confidential and/or proprietary information without the nonresidential user's consent.