

Surcharge Program, IP Program and FOG Program Fee Development Calculations

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Overview

- Legal authority
- Programs fee types
- Fees pros & cons
- Various Program fees calculation options
- Specific activities/costs recovered (user fees)
- Surcharge Program fees calculation method

Legal Authority

- Authority to assess user charges (water, ww use charges) & user fees (program user fees, late fees, appeal processing fees) must be stated in the Code & SUO, respectively
- Exact fee (or cost recovery) amounts may be:
 - Specified or Referenced in Code and SUO
 - ★ ➤ Specified in & adopted by Resolution
- Identify the various programs where user fees apply (FOG Program, IP Program, Waste Hauler Permitting Program, BMP Program, Surcharge Program, etc.)

Program Cost Recovery

Types... User Charges or Fees

➤ User Charges:

- Based on monthly user flows
- Unit Basis: \$/1000 gallons or \$/100 ft³
- All SIUs and Commercial Users pay same rate, based on water consumption

➤ User Fees:

- Program specific
- Multi-program user fees
- Targeted to activities, services performed
- Costs recovery

Program Cost Recovery Types...

User Charges Pros & Cons

➤ User Charges Pros:

- Every commercial and SIU pays the same rate (\$/1000 gallons or \$/100 ft³ rate)
- Easy to apply/assess on monthly utility bill
- Recover all program costs
- Less time explaining various fees to users

➤ User Charges Cons:

- Not very equitable (for commercial users that don't use lots of water, but discharge lots of pollutants that require expensive monitoring)
- Commercial users subsidize SIU costs

Program Cost Recovery Types...

User Fees Pros & Cons

➤ User Fees Pros:

- More equitable cost recovery
- Easier to define and defend fees amounts
User services - Uses pays the same rate
 - Based on Specific Activity
 - \$/Sample Outfall

➤ User Fees Cons:

- More difficult to calculate
- More burdensome to explain & explain to customer
- Cost prohibitive to recover all user costs (i.e., Local Limits develop costs)

Program User Charges Based on User Flow (\$/1000 Gallons Example)

If your billing system establishes a user charge (\$) per 1000 gallons of wastewater, the calculation would be:

Ave Annual Flow (AAF) for SIUs = 1,410,000 1,000 gals

AAF for Commercial Users = 2,094,000 1,000 gals

Total Annual Flow for all regulated customers: = 3,504,000 1,000 gals

Total Pretreatment Budget: = \$1,078,826

User Charge = Total Budget/User Consumption =
\$1,078,826/3,504,000 1,000 galls = \$0.31 / 1,000 galls

Program User Fee Types...

IP Program Fees

- Permit Application fee
- Permit Issuance fee
- Annual Permit Maintenance fee
- Permit Renewal/Modification fee
- Temp. Discharger Permit Issuance fee
- Compliance Inspection fee
- Specific User (Industry Type) Fees
 - Local Limits development costs are often not included in fees, absorbed by POTW
 - Admin. fines are enforcement related

Program User Fee Types...

FOG Program, and other BMP Program Fees

- Program Application or Registration fee
- Program Maintenance fee (monthly)
- Compliance Inspection fee
- Compliance Sampling fee

Note:

- Compliance Inspection fees can be applied to all SUO programs...

Program User Fee Types...Waste Hauler Permitting Program Fees

- Annual Permit Maintenance fee
- Annual Vehicle Registration Fee (per vehicle)
- Permit Renewal/Modification fee
- Compliance Inspection fee

Program User Fee Types...

Surcharge Program Fees

- Cost recovery fees assessed to customer (sampling data, and monthly water usage)
- Fees are typically assessed:
 - Monthly
 - Using utility sampling data (typical)
 - Using customer sample data (not typical, for IPP customers only)
 - When customers chose to not p/o their grease prevention devices
 - Using 1 sample result or an average of 2 sample results is common
 - Based on WRF removal cost per pound of pollutant

How Do Determine What Program Fees are Needed...

It is important to know what your objective is, and how costs are currently being recovered. Are you trying to:

- Achieve full cost recovery?
- Fully or partially allocate program costs to the users who require your services
- Minimize burden on residential customers

IP Program Fees

Calculation Options...

Permit Application fee

- Labor cost for each position supporting each activity
 - Short form survey (optional)
 - Permit application review
 - Facility walk-through inspection
 - Customer service billing support (reading specialty meters or reviewing IU deduct meter logs, etc.)
- Expenses to support this activity
 - Program brochure
 - Paper costs (handouts)
 - Printer ink
 - Log books (1 page per inspection)
 - Vehicle-related expenses

IP Program Fees

Calculation Options...

Permit Issuance fee

- Labor cost for each position supporting each activity
 - Sample point verification and process inspection
 - Permit preparation
 - Database management
 - Customer Service billing request
 - Permit review meeting
- Expenses for this activity
 - Paper Costs (handouts, brochures)
 - Printer Ink
 - Log Books (1 logbook per IU)
 - Gloves, vehicle expenses, GPS equipment usage

IP Program Fees

Calculation Options...

Annual Permit Maintenance fee (1 Outfall)

- Labor cost for each position supporting each activity
 - Semiannual inspection prep. (file & data review)
 - Semiannual Inspection (facility & outfall inspection)
 - Semiannual Sampling preparation & sampling
 - PCR/SMR, CA data, & SNC review, database entry, filing
 - Permit compliance & enforcement activities
- Expenses for this activity
 - Paper, ink costs (inspection sheets, lab reports)
 - Sampling supplies, sampling equipment costs equipment usage, lab analysis
 - Vehicle usage

IP Program Fees

Calculation Options...

Annual Permit Maintenance fee (For Each Additional Outfall)

- Labor cost for each position supporting each activity
 - Semiannual Sampling preparation & sampling
 - PCR/SMR, CA data, & SNC review, database entry, filing
 - Permit compliance & enforcement activities
- Expenses for this activity
 - Paper, ink costs (extra lab report sheets)
 - Sampling supplies, sampling equipment costs equipment usage, lab analysis

IP Program Fees

Calculation Options...

Permit Renewal/Modification fee

- Labor cost for each position supporting each activity
 - Permit application review
 - New sample point verification/process inspection (modifications)
 - Permit review with customer (permit changes)
 - Customer service billing request
 - Database management
- Expenses for this activity
 - Paper, ink, & Certified Mailing costs
 - Log Books (1 logbook per IU)
 - Vehicle expenses, GPS equipment usage

IP Program Fees

Calculation Options...

Temp. Discharger Permit Issuance & Monitoring fee

- Labor cost for each position supporting each activity
 - Sample point verification and process inspection
 - Permit preparation
 - Database management
 - Customer Service billing request
 - Permit review meeting
 - Inspection (after start-up)
 - Sampling preparation & sampling (after Start-up)
 - PCR/SMR, CA data, & SNC review, database entry, filing
 - Permit compliance & enforcement activities
- Expenses for this activity...

IP Program Fees Calculation Options...

Compliance Inspection fee

- Labor cost for position supporting each activity
 - Inspection & reinspection
 - Code research, NOV issuance, enforcement activities
 - Database management
- Expenses for this activity...
 - Paper, ink costs
 - Postage (Certified Mail)
 - Vehicle expenses

Note: Compliance Inspection fees can be applied to all SUO programs...

FOG Program Fees

Calculation Options...

Program Application or Registration fee

- Labor cost for each position supporting each activity
 - Program Survey (review & pick-up) w/customer
 - Facility walk-through inspection and follow-up inspection to determine pretreat. device o/p frequency
 - Customer account research, Customer Service billing
 - Program Registration Certificate preparation, issuance
 - Database management
- Expenses for this activity
 - Program brochure & handouts
 - Paperb & ink (Survey, inspection forms) & postage costs (for Registration Certificate mailing)
 - Inspection equipment and expendables
 - Vehicle-related expenses

FOG Program Fees Calculation Options...

Program Maintenance fee

- Labor cost for each position supporting each activity
 - Annual facility walk-through inspection
 - Waste manifest tracking
 - Program Registration Certificate preparation, issuance
 - Database management
- Expenses for this activity
 - Program brochure & handouts (new customer staff)
 - Paper and ink costs (inspection & NOV forms)
 - Inspection equipment and expendables
 - Vehicle-related expenses

FOG Program Fees Calculation Options...

Compliance Inspection fee (See IPP Inspection Fees)

FOG Program Fees

Calculation Options...

Compliance Sampling fee

- Labor cost for position supporting each activity
 - Sampling preparation & sampling
 - Data review, surcharge fee calculation
 - Customer Service billing request
- Expenses for this activity...
 - Sampling supplies, sampling equipment costs
equipment usage, lab analysis
 - Paper, ink costs
 - Postage (Certified Mail if compliance-related sampling)
 - Vehicle expenses

BMP Program Fees Calculation Options...

BMP Program Application or Registration fee
and Maintenance fee, see FOG Program
Examples

Waste Hauler Permitting Program Fees Calculation Options...

Annual Program Permitting fee

- Labor cost for each position supporting each activity
 - Program Survey (mail-out & review)
 - Customer account set-up, Customer Service billing
 - Registration Certificate preparation, issuance
 - Database management
 - Facility inspection, file review
 - Surveillance activities
- Expenses for this activity
 - Paper, ink costs (Survey, inspection forms), Postage (Certified Mail)
 - Vehicle-related expenses
 - Surveillance equipment

Waste Hauler Permitting Program Fees Calculation Options...

Vehicle Registration Fee (per vehicle)

- Labor cost for each position supporting each activity
 - Vehicle waste tank capacity verification
 - Vehicle decal issuance
 - Database management
- Expenses for this activity
 - Program Decals (per vehicle)

Waste Hauler Permitting Program Fees Calculation Options...

Program Permit Modification fee

- Labor cost for each position supporting each activity
 - Program Survey (mail-out & review)
 - Certificate preparation, reissuance
 - Database management
- Expenses for this activity
 - Paper, ink costs (Survey, inspection forms), Postage (Certified Mail)

Surcharge Program Fees Calculation Basics

- Compensate Utility for high strength wastewater impact
- Pollutants are those used for POTW design
 - BOD or COD
 - Total Suspended Solids (TSS)
 - Total Nitrogen or TKN
 - Total Phosphorous (TP)
 - Total Oil & Grease (O&G)
- Surcharge pollutant limits are values = POTW design basis, where base wastewater fees are calculated
- Based on overall POTW cost to provide wastewater service, for high strength values > POTW design

Surcharge Program Fees...

Calculation Basics

- Cost recovery fees assessed to customer (sampling data, and monthly water usage)
- Fees are typically assessed:
 - Monthly
 - Using utility sampling data (typical) or customer sample data (for IP customers only)
 - Using 1 sample result or an average (2 sample results is common)
 - Based on Wastewater Utility cost to process & remove each pound of pollutant
 - When customers chose to not pump/out their grease prevention devices
 - 1-time sampling study for User type

Surcharge Program Fees...

Wastewater Utility Costs Calculation

- Use same calculation scenario used to determine regular wastewater fees
 - Define the unit wastewater processes that support the removal of each surcharge pollutant
 - Identify all budget items supporting these specific treatment processes
 - Identify overall utility services supporting the Wastewater budget, including...

Surcharge Program Fees...

Wastewater Utility Costs Calculation

- Wastewater Treatment budget
- Wastewater Collections budget
- Lab budget (supporting wastewater)
- Finance budget (supporting wastewater)
- Customer Service budget (supporting WW)
- Administration (supporting WW)
- Engineering Services (supporting WW)
- Construction Services (supporting WW)
- Industrial Pretreatment Program Services

Surcharge Program Fees...

Wastewater Utility Costs Calculation

➤ Remember...

- Utilities budgets are based on services provided.
- If Your Utility provides Water & Sewer services, it will have support agencies to support both water and sewer
- The Water & Sewer fees are based on the % of each agency budget needed to support the following essential utility function:
 - Support water production, delivery
 - Support wastewater collection, treatment, disposal

Wastewater Utility Costs Calculation

Define all wastewater treatment processes:

- Preliminary treatment
- Biological treatment
- Clarification
- Tertiary treatment
- Disinfection
- Solids handling
- Effluent disposal
- Water Quality testing (process & permit)

Wastewater Utility Costs Calculation

Define the % each Utility (Agency) Budget allocated to support wastewater treatment processes:

- Preliminary treatment
- Biological treatment
- Clarification
- Tertiary treatment
- Disinfection
- Solids handling
- Effluent disposal
- Water Quality testing (process & permit)

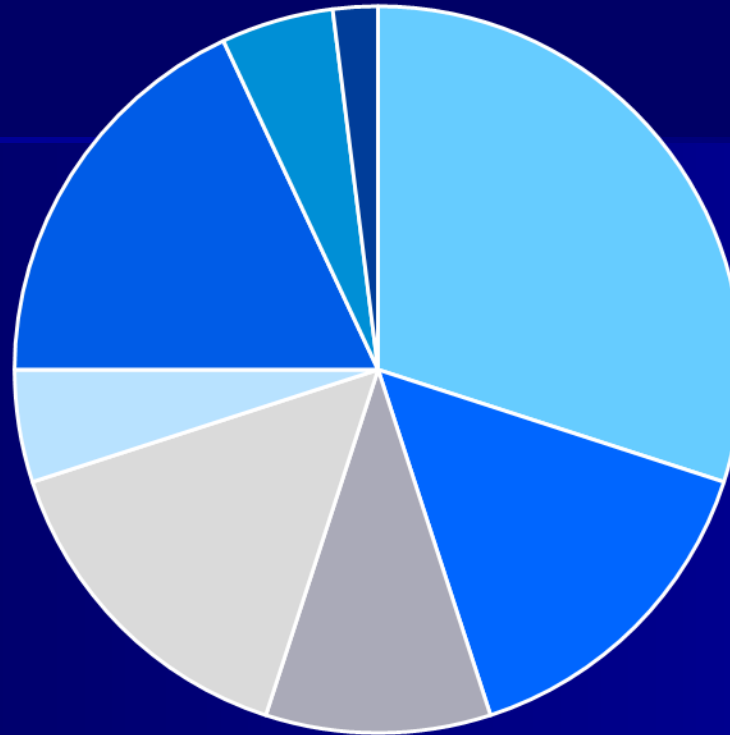
Wastewater Utility Costs Calculation

- If a Utility Section only supports Wastewater, then 100% of its Budget will be used to determine/calculate Wastewater Fees (and Surcharge fees).
- If a Utility Section supports both Water and Wastewater services, then you will need to define the % Section budget supporting each.

Wastewater Utility Costs Calculation

- Then define each Section's % contribution to support each Wastewater Process. So in the case where the Utility Section only supports wastewater, then 100% of the budget must be allocated to the wastewater processes (combined)
- Then apply each section's total budget by the % allocation to define the budget allocated to that wastewater process.

Total Utility Budget Allocation to each Wastewater Process



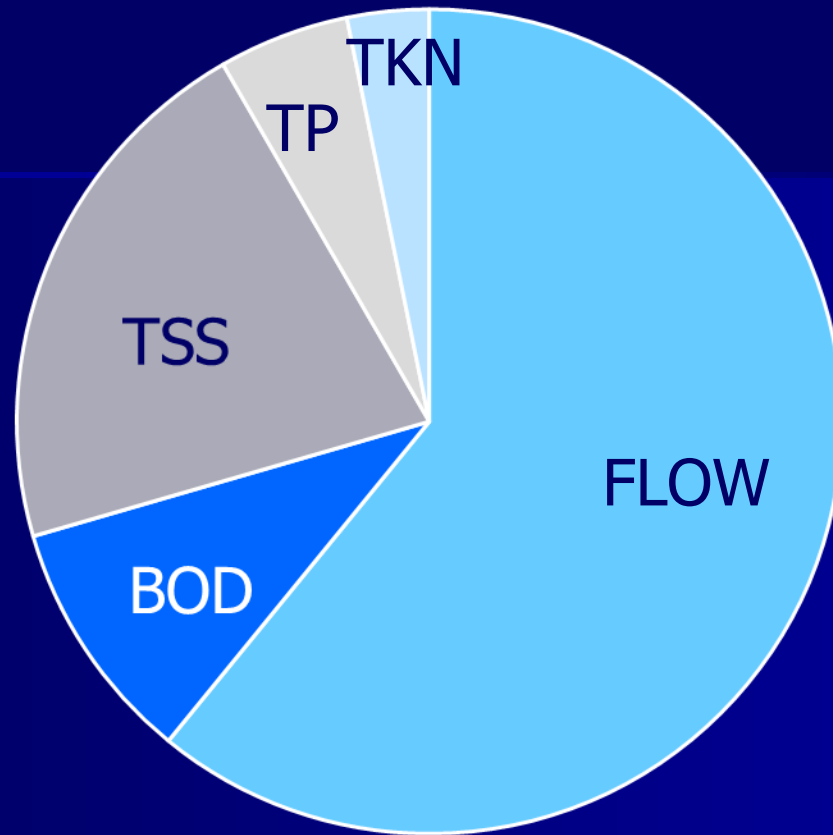
■ Prelim Treatment
■ Clarification
■ Disinfection
■ Solids Handling

■ Biological Treatment
■ Tertiary Treatment
■ Effluent Disposal
■ Water Quality Testing

Wastewater Treatment Costs Allocation (Includes IP Program Costs)

Surcharge Parameter:	Flow	BOD	TSS	TP	TN
Wastewater Treatment Processes Costs	%	%	%	%	%
Preliminary Treatment	60%	20%	20%	0%	0%
Biological Treatment	30%	30%	30%	5%	5%
Clarification	30%	0%	55%	10%	5%
Tertiary Treatment	40%	20%	20%	15%	5%
Disinfection	95%	5%	0%	0%	0%
Effluent Disposal	100%	0%	0%	0%	0%
Solids Handling	20%	20%	40%	10%	10%
Water Quality Testing	100%	0%	0%	0%	0%
Pretreatment & Compliance Program Costs:	0.0%	41.78 %	47.87 %	1.60 %	8.75%

Total Utility Budget Wastewater Process Allocation to each Surcharge Parameter



■ Flow ■ BOD ■ TSS ■ TP ■ TKN

Wastewater Treatment Costs Calculation:

Establish the amount of surcharge pollutants removed each year:

- Pollutant mass (in Pounds/year) removed
 - Influent, Effluent data
 - Annual wastewater flow data
- Then apply total annual wastewater cost for each pollutant to the pounds of pollutant removed each year:

So, For BOD:

$$\text{BOD cost/Lb} = \frac{\text{Annual BOD Treatment Cost}}{\text{Lbs of BOD removed annually}}$$

Questions?

