FORM B: CALCULATION OF INDUSTRIAL WASTEWATER DISCHARGE FLOW RATE

COMPANY NAME:		
Calculation of flow rate is based on: (Check one)	 Adjusted metered water supply (Company Direct measurement through a Districts' ap system * Estimate for a facility not yet in operation * 	oproval effluent flow measurement
ADJUSTED METERED WATER SUPPL	Y CALCULATIONS (Round all figures to two decima	ls)
Incoming Water		, MILLION GALLONS <u>PER</u> <u>YEAR</u>
1. Metered Water Supply from Purveyor (W		
Use most recent 12 consecutive months 2. Water Supply from Company Well.	and attach copies of water bills.	MGY
Attach meter or water master data for me	ost recent 12 consecutive months	MGY
3. Water Received in Raw Materials, or by		
Explain in attachments.		MGY
4. Rainwater/Groundwater Discharged to the	ne Sewerage System.	
Explain in attachments		MGY
5. Total Incoming Water.		
(add lines 1 to 4)	·····	MGY
Water Losses 6 Wastewater Discharged to Stormwater E	Drainage System.	
Explain in attachments. (NPDES Per	nit No)	MGY
7 Water Lost Through Evaporation and Irri	-	
(add lines $a + b + c + d$ at the bottom of the least in Draducte	his form)	MGY
8 Water Lost in Products. Explain in attachments.		MGY
9 Sanitary Flow Deduction.		
(from line "e" on the back of this form)		MGY
10 Total Water Loses.		
(add lines 6 to 9)		MGY
Industrial Wastewater Discharged 11 Calculated Industrial Wastewater Discha	rged to the public sewer.	
(subtract line 10 from line 5)		MGY
12 Any Proposed increase (+) or decrease		
water discharge to the public sewer? (ex		MGY
13 Total proposed yearly industrial wastewa		MCY
(add lines 11 and 12)		MGY
(use line 13 to calculate below)		
(

MILLION GALLONS PER YEAR	x	1,000,000	·ŀ	Number of Discharge Days per Year	II	Gallons per Day
	x	1,000,000	÷		=	

This is the average daily flow rate that must be used on the application for industrial wastewater discharge. (It may be rounded to two significant figures).

Note: The applicant must also complete the calculations on the back of this page.

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- * If your company currently has an **approved effluent wastewater flow measurement system**, please submit effluent totalizer readings for the last twelve months. Your company does not have to complete the rest of this form.
- ** The company must submit detailed information that substantiates how the flow rate was estimated.

WATER LOSSES

a. COOLING TOWER LOSSES

Tonnage	x	Hours of Operation Per Year	x	Load ¹	x	1.38 ²	÷	1,000,000	I	Mil. Gal. Per Year	
	х		х		х		÷	1,000,000	=		
	х		х		х		÷	1,000,000	=		
B									=		a

¹ Load = 0.5 to 0.80

 2 1.38 = Gallons evaporated per hour per ton

b. BOILER LOSSES

Horse- power	x	Hours of Operation Per Year	x	Load ³	x	% Evaporation ⁴	x	3.82 ⁵	÷	1,000,000	=	Mil. Gal. Per Year	
	х		х		х		х		÷	1,000,000	=		1
	x		x		х		х		÷	1,000,000	=		
										=		b	

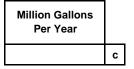
 3 Load = 0.5 to 0.80

⁴ % Evaporation = (100 - % condensate returned)/100

 5 3.82 = Gallons evaporated per hour per horsepower

c. OTHER EVAPORATE LOSSES

(Explain in attachments)



d. IRRIGATION LOSSES

Square Feet of Land Irrigated		18.7 ⁶	÷	1,000,000	I	Mil. Gal. Per Year	
	х		·ŀ·	1,000,000	Ш		d

⁶ 18.7 = Gallons irrigated per square foot per year

e. SANITARY FLOW DEDUCTION

No. Employees	x	Working Days Per Year	x	Gallons Per Employee Per Day		1,000,000	I	Mil. Gal. Per Year	
	х		х	15	÷	1,000,000	Ш		е

INCOMING WATER METERS

Please list all the accounts (or other identification) for all the meters that measure the water supplied to this facility.

Meter #

Location

Account #

Abbreviations and Conversion Factors

MGY = million gallons per year

1 cubic foot = 7.48 gallons

1 acre foot = 325,900 gallons

1 acre = 43,560 square feet

1 CCF = 748 gallons