Tideflex® Coarse Bubble Mixing & O2 Systems Design Data Form

Click on box and input value. Units box will expand for Imperial (US) or International System of Units (SI) designation.

GENERAL INFORMATION

Project Identification Name:

Facility Name:
Location:
Address:
Facility Supervisor:
Phone:
Fax:
Email:

Consulting Engineering Firm:
Location:
Address:
Engineer Contact:
Phone:
Fax:
Email:

DIFFUSED AERATION REQUIREMENT

☐ Oxygen Transfer & Adequate Mixing ☐ Mixing Only ☐ Supplemental Oxygen Only

GENERAL COMMENTS

Please include tank drawings in AUTOCAD, CAD or scanned PDF format with this data form.

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TANK / BASIN GEOMETRY

Total Number of Tanks: ☐ Parallel Operation ☐ Series Operation

Tank Bottom Material: ☐ Concrete ☐ Steel ☐ Plastic/Fiberglass ☐ Clay

Bottom Elevation Above Mean Sea Level (MSL): ft

Rectangular Tank or Channel (Straight Sidewall)

Length: ft Width: ft Side Wall Height: ft

Additional V-Bottom Depth (at centerline of V): ft

Bottom Slope (if sloped to end of tank): [%]

Operating Water Depth: ft

Circular (Flat Bottom)

Diameter: ft Side Wall Height: ft Bottom Slope to Center [%]:

Operating Water Depth: ft

Circular (Conical Bottom)

Diameter: ft Side Wall Height: ft Cone Depth at Center: ft

Operating Water Depth (top of cone to water level): ft

Horizontal Circular

Diameter: ft Horizontal Length: ft Flat Ends ☐ Domed Ends ☐ Open Top ☐

Manway Access Diameter: ft Manway Location (from end of tank): ft

Operating Water Depth (measured at centerline to water level): ft

Rectangular Lagoon

Top Length: ft Top Width: ft

Water Surface Length: ft Water Surface Width: ft

Bottom Length: ft Bottom Width: ft Sidewall Slope [%]:

Operating Water Depth: ft

Fluid Operational Method

Constant Liquid Level ☐ Variable Volume Liquid Level ☐

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Red Valve

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WASTEWATER CHARACTERIZATION

Operating Mixed Liquor Suspended Solid (MLSS) Concentration		mg/l
Wastewater Operating Temperature		Degrees F
Actual Oxygen Required (AOR)		lbs/day
Air Flowrate Available		cfm
Waste Sludge Flowrate		MGD
Solids Concentration in Influent		mg/l
Sludge Concentration in Tank		mg/l
Actual Oxygen Required (AOR)		lbs/day
Air Flowrate Available		cfm

PROCESS FLUID DESCRIPTION

Raw Municipal Wastewater, Waste Aerobic Sludge, Grit Fluid, MLSS Fluid, Food Waste, etc.

AERATION SYSTEM PIPING MATERIALS

Drop Pipe	Schedule 10 – 304L Stainless Steel	☐
Submerged Manifold Piping	Schedule 10 – 304L Stainless Steel	
Drop Pipe	Schedule 10 – 316L Stainless Steel	☐
Submerged Manifold Piping	Schedule 10 – 316L Stainless Steel	

American Iron and Steel (AIS) ☐ Import Supply of Metals ☐
Domestic Supply of Metals

DIFFUSER RETROFIT INFORMATION

Brand Name of Existing Diffusers / Description:		
Total Number of Diffusers per Tank:		
Threaded Connection Diameter:		in
Maximum Operating Airflow per Tank:		cfm
Maximum Operating Airflow per Diffuser:		cfm