



Tideflex® Mixing System

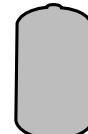
FOR FINISHED WATER STORAGE FACILITIES

DESIGN DATA SHEET

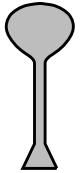
Red Valve Company, Inc.®



GROUND LEVEL



STANDPIPE



ELEVATED

I. GENERAL INFORMATION		RED VALVE AREA REPRESENTATIVE:	
RESERVOIR/TANK NAME:		PROJECT LOCATION:	
OWNER COMPANY NAME:		OWNER COMPANY ADDRESS	
PHONE:	FAX:	E-MAIL	
OWNER CONTACT:		OWNER PROJECT NUMBER:	
CONSULTING ENGINEERING FIRM:		CONSULTANT'S ADDRESS	
PHONE:	FAX:	E-MAIL	
ENGINEER CONTACT:		ENGINEER PROJECT NUMBER:	

COMPLETE WITH AS MUCH INFORMATION KNOWN OR APPLICABLE

II. SYSTEM INFORMATION

INSTALLATION: <input type="checkbox"/> NEW TANK <input type="checkbox"/> EXISTING TANK	
WATER SOURCE: <input type="checkbox"/> SURFACE WATER <input type="checkbox"/> RECLAIMED WATER <input type="checkbox"/> GROUND WATER	
TYPE OF DISINFECTION: <input type="checkbox"/> CHLORINE <input type="checkbox"/> CHLORAMINES <input type="checkbox"/> CHLORINE DIOXIDE <input type="checkbox"/> OZONE	
OPERATION: <input type="checkbox"/> DISTRIBUTION SYSTEM RESERVOIR <input type="checkbox"/> CLEARWELL <input type="checkbox"/> COMBINATION	MODE: <input type="checkbox"/> FILL & DRAW <input type="checkbox"/> FLOW THRU
HIGH WATER LEVEL SHUT-OFF CONTROL: <input type="checkbox"/> BY ALTITUDE VALVE <input type="checkbox"/> NONE, FLOATS ON SYSTEM <input type="checkbox"/> BY PRESSURE SWITCH	

III. RESERVOIR/TANK DATA (CONT'D)

VOLUME OF TANK:	_____ gallons, m ³
BOTTOM ELEVATION:	_____ ft, m (above m.s.l.)
OVERFLOW ELEVATION:	_____ ft, m (above m.s.l.)
WATER DEPTH:	_____ ft, m
TYPE OF ROOF/COVER: <input type="checkbox"/> FIXED ROOF <input type="checkbox"/> INTERNAL COLUMN SUPPORTS <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> FLOATING COVER <input type="checkbox"/> NONE, OPEN RESERVOIR	
MATERIALS OF CONSTRUCTION: <input type="checkbox"/> WELDED STEEL <input type="checkbox"/> COMPOSITE <input type="checkbox"/> BOLTED STEEL <input type="checkbox"/> EARTHEN LINED <input type="checkbox"/> RIVETED STEEL <input type="checkbox"/> REINFORCED CONCRETE <input type="checkbox"/> OTHER _____	

III. RESERVOIR/TANK DATA

TYPE OF RESERVOIR/TANK: <input type="checkbox"/> GROUND LEVEL <input type="radio"/> CIRCULAR <input type="checkbox"/> AT GRADE <input type="radio"/> RECTANGULAR <input type="checkbox"/> BURIED <input type="radio"/> IRREGULAR <input type="checkbox"/> SEMI-BURIED <input type="checkbox"/> STANDPIPE <input type="checkbox"/> ELEVATED TANK <input type="radio"/> SPHEROID <input type="radio"/> TOROPILLAR <input type="radio"/> TOROSPHERICAL <input type="radio"/> DOUBLE ELLIPSOIDAL <input type="radio"/> HYDROPILLAR <input type="radio"/> _____	
TANK MANUFACTURER: _____	
SHELL DIMENSIONS: (LxWxH) or (Dia.xH) _____ ft, m	

IV. HYDRAULIC DATA

FILL RATE:	_____ MIN (gpm, l/s)
	_____ MAX (gpm, l/s)
	<input type="checkbox"/> PUMPED <input type="checkbox"/> BY GRAVITY
DRAW RATE:	_____ MAX or FIRE FLOW (gpm, l/s)
	<input type="checkbox"/> PUMPED <input type="checkbox"/> BY GRAVITY
DIST. SYSTEM LINE PRESSURE AT RESERVOIR DURING FILLING	
	_____ MIN (psi, kN/m ²)
	_____ MAX (psi, kN/m ²)

V. CATHODIC PROTECTION SYSTEM

PASSIVE SACRIFICIAL NONE
 IMPRESSED CURRENT

VI. INLET/OUTLET PIPING (NEW OR EXISTING TANK):

NEW TANK
 PIPE DIA. SUPPLYING RESERVIOR _____ (in, mm)
 PIPE MATERIAL _____
 TANK PENTRATION FLOOR SIDE WALL

EXISTING TANK

COMMON INLET/OUTLET
 PIPE DIA. _____ (in, mm)
 IS PIPE LOCATED IN A SUMP? Yes No
 PIPE MATERIAL _____
 TANK PENTRATION FLOOR SIDE WALL

SEPARATE INLET/OUTLET
 INLET PIPE DIA. _____ (in, mm)
 IS PIPE LOCATED IN A SUMP? Yes No
 PIPE MATERIAL _____
 TANK PENTRATION FLOOR SIDE WALL

OUTLET PIPE DIA. _____ (in, mm)
 IS PIPE LOCATED IN A SUMP? Yes No
 PIPE MATERIAL _____
 TANK PENTRATION FLOOR SIDE WALL

FINAL TANK DRAIN THRU:

COMMON INLET/OUTLET PIPE SEPARATE DRAIN PIPE
 OUTLET PIPE ONLY

VII. OVERFLOW PIPE PROTECTION

Check method used to prevent birds, rodents, ect. from entering tank through overflow pipe

TIDEFLEX VALVE
 SCREEN + FLAP VALVE
 SCREEN ONLY
 NONE

VIII. RETROFIT INFORMATION (In addition to III.)

YEAR TANK CONSTRUCTED _____
 DATE OF LAST INSPECTION _____
 DATE OF LAST REHAB./REPAINT _____
 DESCRIBE WORK DONE _____

 NEXT SCHEDULED REHAB: _____
 INTERNAL BAFFLES: Yes No
 ICE FORMATION: Yes No
 AVERAGE DRAWDOWN: _____ (ft, m)
 WATER TEMPERATURE RANGE _____ MIN (°F, °C)
 _____ MAX (°F, °C)
 SIZE OF LARGEST ROOF HATCH (DIA. SQ.) _____ (in, mm)
 SIZE OF LARGEST SHELL HATCH (DIA. SQ.) _____ (in, mm)
 SILT STOP Yes No
 FIXED PIPE EXTENSION REMOVABLE
 RECHLORINATION/RECIRCULATION SYSTEMS Yes No
 ARE SAMPLING TAPS INSTALLED? Yes No
 HAS WATER QUALITY BEEN MONITORED AT THE TANK? Yes No
 HAS A TRACER STUDY OR CFD MODEL BEEN DONE? Yes No

VIII. RETROFIT INFORMATION (CONT'D)

IDENTIFY WATER QUALITY ISSUES ASSOCIATED WITH RESERVOIR

LOSS OF DISINFECTANT RESIDUAL
 COLIFORM BACTERIA
 ELEVATED HPC BACTERIA
 NITRIFICATION
 ALGAE GROWTH
 BIOFILM GROWTH
 DISINFECTION BY PRODUCTS (DBP)
 THM'S
 HAA'S
 TASTE & ODOR
 INCREASED pH
 IRON & MANGANESE BUILD-UP
 LEAD/COPPER
 HYDROGEN SULFIDE
 LEACHATE FROM COATINGS
 SEDIMENT BUILD-UP
 COLOR
 TURBIDITY

IDENTIFY POSSIBLE CAUSATIVE FACTORS TO THE ABOVE

POOR MIXING
 SHORT-CIRCUITING/STAGNANT ZONES
 POOR TURNOVER
 THERMAL STRATIFICATION
 LONG DETENTION TIME
 ELEVATED TEMPERATURE
 INCREASE IN pH
 LEACHING OF COATINGS
 EXPOSURE TO UV
 HIGH LEVEL ORGANICS

IX. COMMENTS

PLEASE MAIL, FAX OR E-MAIL COPIES OF PLANS, DETAILS AND SHOP DRAWINGS OF TANK, INLET/OUTLET PIPING, ETC. TO:

TIDEFLEX PRODUCT GROUP, RED VALVE COMPANY, INC.
 700 NORTH BELL AVENUE • CARNEGIE, PA 15106

PHONE: 412-279-0044 • **FAX:** 412-279-5410

E-MAIL: mduer@redvalve.com
 or
 valves@redvalve.com