

# CASS COUNTY HEALTH DEPT. - FLOOD DOSED WORK SHEET

Project: \_\_\_\_\_ Date: \_\_\_\_\_

Installer: \_\_\_\_\_

*Refer to 410 IAC 6-8.2-73, Sec. R*

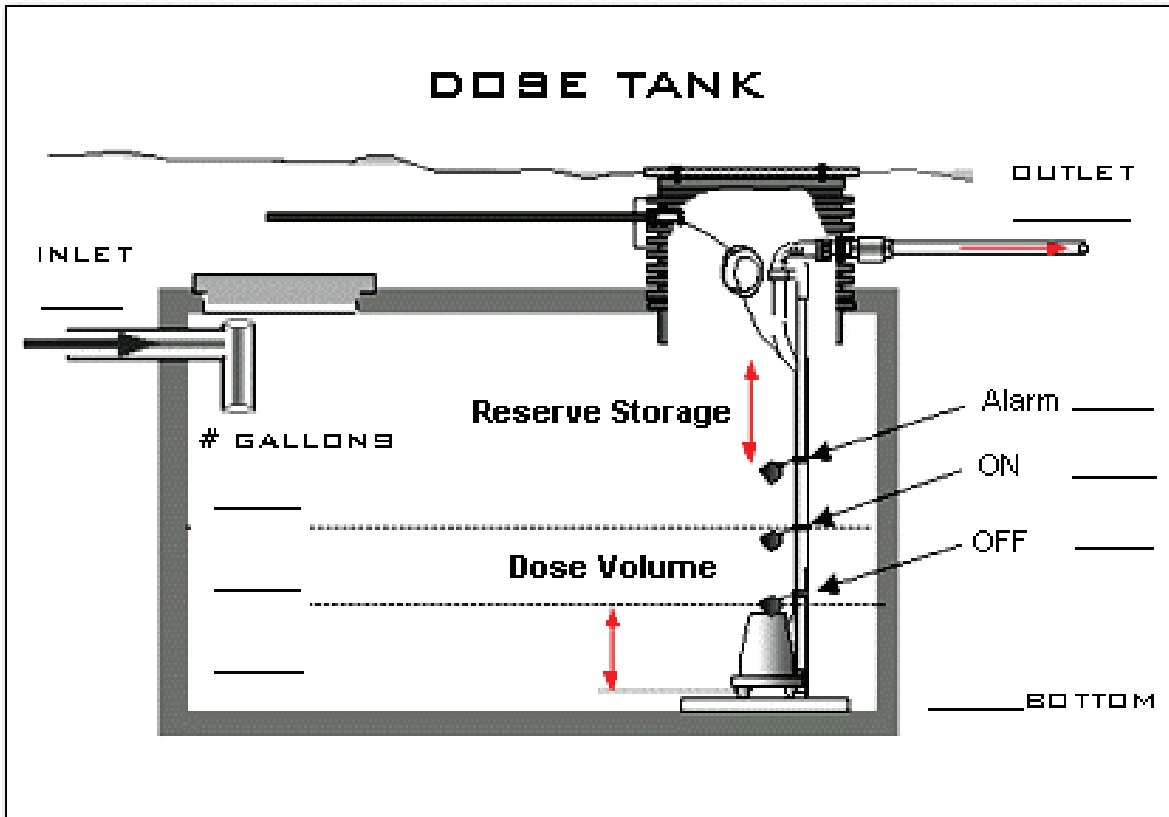
**Daily Design Flow in one dose + Drainback** (Table 1) = \_\_\_\_\_ gallons/day.

**Pump Discharge Rate** (Table 2) = \_\_\_\_\_ gallons/minute.

**Total Head**

Elevation difference between pump off and the inlet in the distribution box. (Static Head)	+	_____ feet
Fitting Friction Loss (multiply the equivalent footage from table 3 by the friction loss from table 4)	+	_____ feet
Friction loss in _____ feet of _____ inch pipe. (Table 4)	+	_____ feet
<b>= Total Head</b>		<b>_____ feet</b>

Pump selected: \_\_\_\_\_



Provide a copy of the **PUMP CURVE** to the Cass County Health Department

TURN PAGE OVER FOR CALCULATIONS →

TABLE 1

Drainback Calculation						
Diameter (Inches)	1"	1 ¼"	1 ½"	2"	3"	4"
Volume (Gal./ft.)	.045	.078	.106	.174	.384	.650

TABLE 2

Required Pump Discharge Rates for Flood Dosed Systems	
Number of Bedrooms	Discharge Rate (GPM)
1	30
2	30
3	30-45
4	30-60
5	38-75
6	45-90

TABLE 3

Fitting Friction Chart (per SSPMA)						
Nominal Pipe Size	90° Elbow	45° Elbow	Tee (Thru-flow)	Tee (Branch flow)	Swing Check Valve	Gate Valve
2"	5.2 ft	2.8 ft	3.5 ft	10.3 ft	17.2 ft	1.4 ft
2 ½"	6.2 ft	3.3 ft	4.1 ft	12.3 ft	20.6 ft	1.7 ft
3"	7.7 ft	4.1 ft	5.1 ft	15.3 ft	25.5 ft	2.0 ft

TABLE 4

Table VII – Friction Losses in Plastic Pipe	
<i>*Only most common pipe size and flow rate. Refer to the rule for additional sizes/rates</i>	
Pipe Diameter = 2" (most common size)	
Flow (gpm)	Friction loss in feet / 100 feet
30	1.82
35	2.42
40	3.10
45	3.85
50	4.86