

## **Comments and Instructions**

### **Macro Security Comment**

This Excel Workbook makes use of embedded macros. Therefore to function properly the macro settings must be enabled.

- 1) The green shaded areas indicate where data can be entered.
- 2) To enter data, use the mouse, arrow, or tab keys move to and select a green area.
- 3) Some data can be simply typed in. Other data is selected from a list by "clicking" on the "popup" down arrow with the mouse, then selecting the desired list item. The scroll bar allows the viewing of all list items.
- 4) Data entry is conditional in that before information about a litter/manure source or a field can be supplied, the litter/manure source or field must be named. In addition, if the name of one of these is deleted, the associated information will be lost.
- 5) The scroll bars on the side and bottom of the screen can be used to view different portions of the worksheet.
- 6) Comments and instructions are available by moving the mouse cursor near the red triangles. If the displayed text is not completely visible, use the horizontal and vertical scroll bars to move the red triangle closer to the center of the screen then position the cursor near it again.
- 7) To save the current values for future use, use the "Save" or "Save As" command under the "File" menu.
- 8) The "command" buttons can be used print the displayed worksheet, clear all the input values, insert example input values, or perform additional calculations.

**Annual Manure Production Worksheet**

Planner:	Ima Planner	Date:	11/2/2011
Plan Description:	This plan is for Mr. Needa Plannow		

This worksheet is based on material developed by Stan Rose and Lane Johnson Ark. NRCS engineers to assist with the writing of liquid manure plans.

**Settling Basin Annual Manure Volume**

Design Storage Period (d)	45
Required Storage Volume (1000 gal)	29.32
Daily Storage Volume (1000 gal/d)	0.65
<b>Annual Storage Volume (1000 gal)</b>	<b>238</b>

**Holding Pond Annual Manure Volume**

Waste Storage Pond Storage Period (mn)	6
Design Operating Period Volume (gal)	2,000,000
Daily Storage Volume (gal/d)	10,959
<b>Annual Operating Volume (gal)</b>	<b>4,000,000</b>
<b>(1000 gal)</b>	<b>4,000</b>

**Settling Basin Volume Capacity Evaluation Worksheet**

Planner:	Ima Planner	Date:	11/2/2011
Plan Description:	This plan is for Mr. Needa Plannow		

This worksheet is based on material developed by Stan Rose and Lane Johnson Ark. NRCS engineers to assist with the writing of liquid manure plans.

Animal type	Boar	Gestating Sow	Lactating Sow	Nursery Pig	Grow-Finish (Replacement Gilts)
<b>Typical Animal Design Information</b>					
Animal Wt Range (lb)				10 to 50	50 to 265
Animal Design Wt (lb)	450	425	400	28	158
Animal Cycle Time (d)	365	365	365	45	123
<b>Manure Total Solids Production Design Information</b>					
TS (lb/d/au)	1.90	2.50	5.90	10.00	6.50
<b>Animal Population Information</b>					
Number Animals	4	424	84		
Animal Weight (lb)	450	425	400		
AU	1.8	180.2	33.6		
TS (lb/d)	3	451	198		
Design Storage Period (d)	45				
<b>Manure Total Solids Production</b>					
Required Volume		As-Built Dimensions and Volume		Volume Capacity Comment	
Total Solids Production (lb)	29,347	Top Length (ft)	50.00	Settling Basin Volume is Sufficient. Actual capacity is 52 days.	
Assume 50% TS as settleable (lb)	14,674	Top Width (ft)	50.00		
Assume Sludge 6% solids (lb)	244,560	Total Depth (ft)	6.00		
Sludge Volume (cuft @ 62.4 lbs/cuft):	3,919	Side Slopes ( :1)	3.00		
Required Basin Volume (cuft)	3,919	Free Board (ft)	1.00		
(cuyd)	145	Water Depth (ft)	5.00		
(gal)	29,316	Bottom Length (ft)	14.00	<b>Volume Surplus/Deficit</b>	
(1000 gal)	29.32	Bottom Width (ft)	14.00	Volume (cuft)	661
		As-Built Volume (cuft)	4,580	(cuyd)	24
		(cuyd)	170	(gal)	4,943
		(gal)	34,258	(1000 gal)	4.94
		(1000 gal)	34.26		

Developed by Karl VanDevender (kvan@uaex.edu) using input from NRCS AWFHB and Cargill Pork. 8/2009

<b>Totals</b>
512
1,275
216
652
29,347

Planner:	Ima Planner	Date:	11/2/2011
Plan Description:	This plan is for Mr. Needa Plannow		

#### **Broiler Litter Production Information**

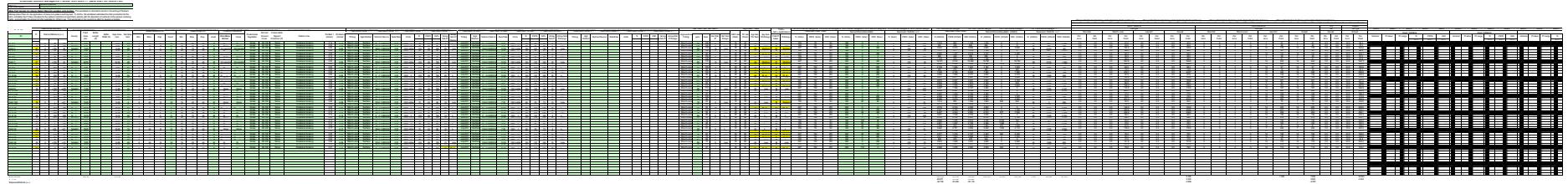
Number Houses:	4	Houses
Flocks/Year:	5.5	Flocks/Year
Birds/House:	20,000	Birds/House
Bird Market Weight:	4	Lb/Bird
Est. Birds Produced/Year:	440,000	Birds
Bird Litter Production Rate:	1	Ton/1000 Birds/Flock
Est. Annual Farm Litter Production:	440	Ton/Year
Historical Annual Litter Production:	425	Ton/Year
Litter Production Value to Use:	Estimated	
Total Litter Production Used:	440	Ton/Year
Estimated % of Total Litter is Cake	0	% (0 - 100)
Historical Total Cake Production:	90	Ton/Year
Method of Cake Production to Use:	Historical	

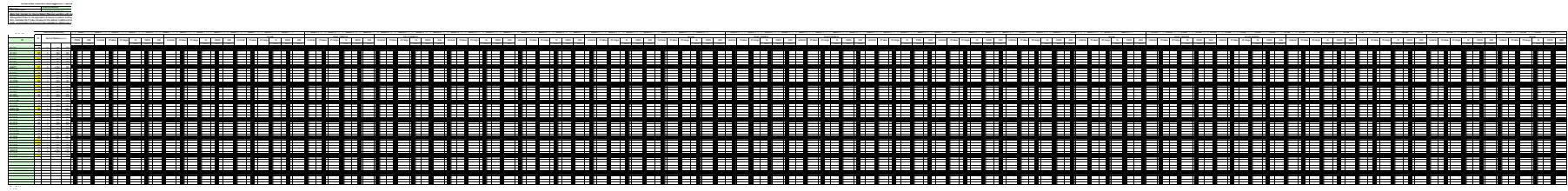
#### **Numbers to Use In Planning Sheet**

Annual Cake Production:	90 ton/yr	Ton/Year
Annual Total Clean Out Production:	350 ton/yr	Ton/Year









## **2009 PI Best Management Practices**

### **Diversion 362**

Diversions must comply with NRCS conservation practice 362.

The maximum percent effectiveness allowed is 5%.

The desired assigned value should be entered as whole number, for example 5 for 5%.

### **Terrace 600**

Terraces must comply with NRCS conservation practice 600.

The maximum percent effectiveness allowed is 10%.

The desired assigned value should be entered as whole number, for example 10 for 10%.

### **Pond 378**

Ponds must comply with NRCS conservation practice 378.

The maximum percent effectiveness allowed is 20% if the pond is not fenced. If fenced the maximum percent effectiveness allowed is 30%.

If fencing is used it must comply with NRCS conservation practice 382. The fencing associated with this practice should not receive any additional Fencing Supplemental Management Practice credit.

The percent effectiveness is prorated based on the amount of the field that drains into the pond. For example if  $\frac{1}{2}$  the field drains into the pond the percent effectiveness for this practice for this field is  $\frac{1}{2}$  of the 20% or 10%.

The desired assigned value should be entered as whole number, for example 20 for 20%. If desired the proration calculations can be done in the spread sheet by entering the formula in the appropriate cell. For the example above " $=0.5*0.2$ " is entered.

The determination of the percentage of the field that drains into the pond will be made by professional judgment utilizing at least a visual inspection. Use of topographic maps and other tools may also be used.

### **Fencing 382**

Fencing must comply with NRCS conservation practice 382.

The maximum percent effectiveness allowed is 30%.

Normally Fencing is associated with other practices such as Ponds, Riparian Forest Buffers, Riparian Herbaceous Covers, and Filter Strips. When associated with these practices the presence of the fence increases the allowed maximum effectiveness.

Normally the effectiveness of fencing is accounted for in the other Supplemental Management Practice areas and therefore the assigned Fencing effectiveness is not entered or set to 0.

### **Field Borders 386**

Field Borders must comply with NRCS conservation practice 386.

The maximum percent effectiveness allowed is 10%.

### **Riparian Herbaceous Cover 393**

Riparian Herbaceous Covers must comply with NRCS conservation practice 393.

The maximum percent effectiveness allowed is 20% if the practice is not fenced. If fenced the maximum percent effectiveness allowed is 30%.

If fencing is used it must comply with NRCS conservation practice 382. The fencing associated with this practice should not receive any additional Fencing Supplemental Management Practice credit.

The desired assigned value should be entered as whole number, for example 20 for 20%.

### **Riparian Forest Buffer 391**

Riparian Forest Buffers must comply with NRCS conservation practice 391.

The maximum percent effectiveness allowed is 20% if the practice is not fenced. If fenced the maximum percent effectiveness allowed is 35%.

If fencing is used it must comply with NRCS conservation practice 382. The fencing associated with this practice should not receive any additional Fencing Supplemental Management Practice credit.

The desired assigned value should be entered as whole number, for example 20 for 20%.

#### **Filter Strip 393**

Filter Strips must comply with NRCS conservation practice 393.

The maximum percent effectiveness allowed is 20% if the practice is not fenced. If fenced the maximum percent effectiveness allowed is 30%.

If fencing is used it must comply with NRCS conservation practice 382. The fencing associated with this practice should not receive any additional Fencing Supplemental Management Practice credit.

The desired assigned value should be entered as whole number, for example 20 for 20%.

#### **Grassed Waterway 412**

Grassed Waterways must comply with NRCS conservation practice 412.

The maximum percent effectiveness allowed is 5%.

The desired assigned value should be entered as whole number, for example 5 for 5%.



1. The first step is to identify the specific needs of the organization. This involves understanding the mission, vision, and values of the organization, as well as its current strengths and weaknesses. It also requires identifying the specific skills and knowledge required for the job.

2. Once the needs have been identified, the next step is to develop a plan for training. This plan should include the following elements:

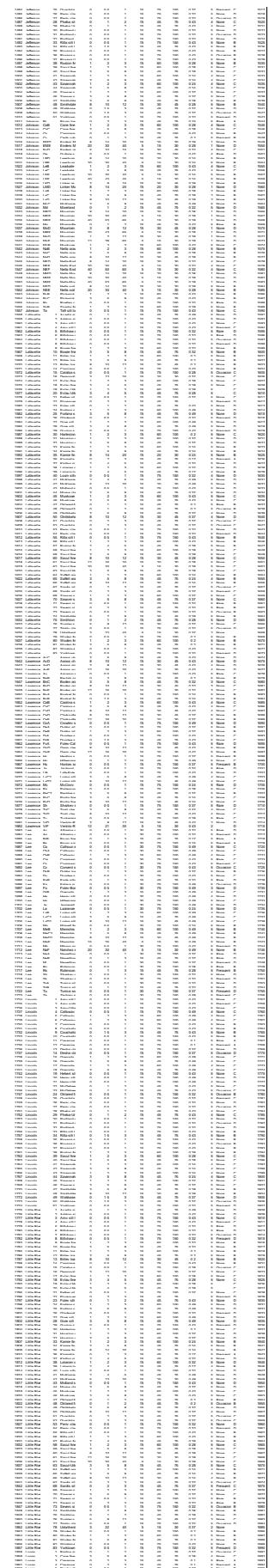
- a. Objectives: Clearly defined goals for the training program.
- b. Content: The specific knowledge and skills to be taught.
- c. Methods: The techniques and approaches to be used for delivery.
- d. Resources: The materials, equipment, and personnel required for the program.

3. The third step is to implement the training plan. This involves carrying out the training activities according to the plan, monitoring progress, and making adjustments as needed.

4. The final step is to evaluate the effectiveness of the training program. This involves assessing the impact of the training on the organization's performance and the development of the individuals involved.



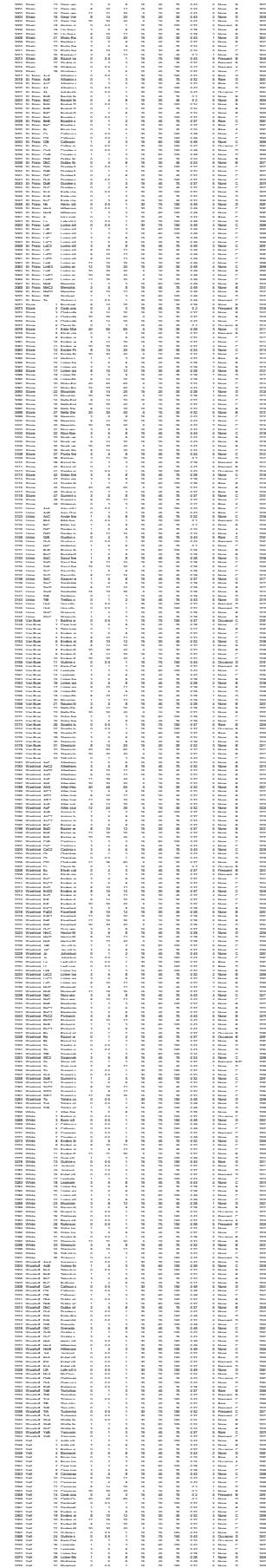
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Field	Post BMP PI Value	Total PI Value	Diff	Diff/100						
P1H1	31.79008464	31.76406414	0.02602	0.08%	0.03%	32	32	0	0.00%	
P1H2	31.99661699	31.97285699	0.02376	0.07%	0.02%	32	32	0	0.00%	
P1H3	40.59523963	40.57514263	0.020097	0.05%	0.02%	41	41	0	0.00%	
P1H4	29.06335699	29.04685699	0.0165	0.06%	0.02%	29	29	0	0.00%	
P1H5	45.04179513	45.01069263	0.031102	0.07%	0.03%	45	45	0	0.00%	
P1H6	47.16840863	47.13204263	0.036366	0.08%	0.04%	47	47	0	0.00%	
P1H7	56.06276809	55.97759509	0.085173	0.15%	0.09%	56	56	0	0.00%	
P1H8	27.10353514	27.08911414	0.014421	0.05%	0.01%	27	27	0	0.00%	
P1H9	42.52852463	42.50364263	0.024882	0.06%	0.02%	43	43	0	0.00%	
P1H10	30.01679564	29.99516414	0.021632	0.07%	0.02%	30	30	0	0.00%	
P1H11	29.99666699	29.97785699	0.01881	0.06%	0.02%	30	30	0	0.00%	
P1H12	36.14868413	36.13959263	0.009091	0.03%	0.01%	36	36	0	0.00%	
P1H13	28.79669699	28.78085699	0.01584	0.05%	0.02%	29	29	0	0.00%	
P1H14	29.33001699	29.31285699	0.01716	0.06%	0.02%	29	29	0	0.00%	
P1H15	24.39680699	24.39185699	0.00495	0.02%	0.00%	24	24	0	0.00%	
P1H16	41.75521063	41.73224263	0.022968	0.05%	0.02%	42	42	0	0.00%	
P1H17	29.06335699	29.04685699	0.0165	0.06%	0.02%	29	29	0	0.00%	
P2H1	27.72327327	27.69725277	0.02602	0.09%	0.03%	28	28	0	0.00%	
P2H2	27.71576291	27.69200291	0.02376	0.08%	0.02%	28	28	0	0.00%	
P2H3	34.38800122	34.36790422	0.020097	0.06%	0.02%	34	34	0	0.00%	
P2H4	24.78250291	24.76600291	0.0165	0.07%	0.02%	25	25	0	0.00%	
P2H5	38.83455672	38.80345422	0.031102	0.08%	0.03%	39	39	0	0.00%	
P2H6	40.96117022	40.92480422	0.036366	0.09%	0.04%	41	41	0	0.00%	
P2H7	60.68067722	60.59550422	0.085173	0.14%	0.09%	61	61	0	0.00%	
P2H8	23.03672377	23.02230277	0.014421	0.06%	0.01%	23	23	0	0.00%	
P2H9	36.32128622	36.29640422	0.024882	0.07%	0.02%	36	36	0	0.00%	
P2H10	25.94998427	25.92835277	0.021631	0.08%	0.02%	26	26	0	0.00%	
P2H11	25.71581291	25.69700291	0.01881	0.07%	0.02%	26	26	0	0.00%	
P2H12	29.94144572	29.93235422	0.009092	0.03%	0.01%	30	30	0	0.00%	
P2H13	24.51584291	24.50000291	0.01584	0.06%	0.02%	25	25	0	0.00%	
P2H14	25.04916291	25.03200291	0.01716	0.07%	0.02%	25	25	0	0.00%	
P2H15	20.11595291	20.11100291	0.00495	0.02%	0.00%	20	20	0	0.00%	
P2H16	35.54797222	35.52500422	0.022968	0.06%	0.02%	36	36	0	0.00%	
P2H17	24.78250291	24.76600291	0.0165	0.07%	0.02%	25	25	0	0.00%	

**From:** [C H Hog Farms Inc](#)  
**To:** [Water Permit Application](#)  
**Cc:** ["William A. Waddell, Jr."](#)  
**Subject:** Updated P Index  
**Date:** Friday, December 29, 2017 10:10:35 AM  
**Attachments:** [Req 5 P Index.xlsx](#)

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Attached is the updated P Index which should be replaced in the most recent NMP submitted.

Thank you,  
Jason Henson