

CSP Benchmark Water Quality Practices

Place an "X" in the appropriate box next to each question. An X indicates "Yes"

1. All sites associated with crop or livestock production other than fields or pastures (e.g. feedlots, storage sites etc) are protected from erosion caused by concentrated water (No noticeable channels greater than 6 inches in depth).
2. Fertilizer and pesticides are stored, handled, mixed and loaded to prevent well or surface water contamination. Unused or empty containers are disposed of properly.
- All pesticide and liquid fertilizer containers are clearly labeled and stored in fenced areas separate from most other activities. The storage site(s) have impermeable surfaces and curbs installed to contain leaks and spills
 - Anti-back-flow devices are installed on water supplies used to mix chemicals
 - Separation distances required by state law are maintained between water supply and mixing and loading site. Mixing and loading occurs at least 150 feet or more downslope from wells.
 - Triple-rinsed pesticide containers returned to dealers or taken to permitted landfill or municipal incinerator. Or Empty bags disposed of at permitted landfills or incinerated if allowed by state and local authorities.
 - Pesticide sprayer washed out in field or on pad at farmstead. Rinsate used in next load and applied to labeled crop.
3. Hazardous wastes used in production activities are stored and disposed of in a safe manner. These wastes include building/wood maintenance products and vehicle /metal equipment maintenance products.
- Paints, adhesives, thinners, strippers, solvents, rust removal products are used up or taken to hazardous waste collection service or empty containers taken to permitted landfills.
 - Waste oil and grease and used antifreeze disposed of at recycling or collection services.
4. Petroleum products are stored in a safe manner.
- Tanks are made synthetic material or protected from rust and located downslope from wells, and on an impermeable catch basin having automatic shutoff or overflow alarm.
 - Tanks are monitored monthly for leaks
5. Wastewater from production areas does not discharge into drainage ditches or other conduits to ground or surface waters.
- This section applies to milkhouse wastes or wastes from bathrooms located in production sites (not household wastewater)
6. Manure and other animal by-products are stored in a manner that prevents pollution including livestock yards. All pertinent state laws are complied with.
- Feedlot is registered as required by state law.
 - All practices needed to comply with open-lot agreement requirements (if you have one) will be installed by October 2005.
 - Runoff from your lots is not considered a pollution source.
 - Seepage into the soil from stored manure meets state law requirements.
 - Stored manure does not discharge to surface waters or if so meets state law 0 pollution standards.
 - Manure that is stockpiled meets MPCA stockpiling requirements
 - Leachate from stored silage does not move into groundwater or surface waters
 - Mortalities are disposed of in accordance with state law.
 - Required setbacks between on-site wells and manure storage areas are met.
 - Required setbacks between manure storage areas and off-site public or community wells are met.
 - Livestock from CAFOs are excluded from waters of the state.
 - Livestock from non-CAFOs are excluded from natural environment, recreational or general development lakes. Livestock access to permanent streams is controlled via fencing and crossings.
7. Commercial fertilizer and manure is applied with calibrated applicators

Example



- 8. Do you have manure test results from an MDA certified lab that are 1 year old or newer and do you have these for every manure source of 15 or more animal units?
- 9. Are your current soil test results from MDA certified labs and do you have at least 1 test result per 10 acres on fields with complex terrain or 1 test per 40 acres on fields with simple terrain
- 10. Abandoned wells in fields and pastures are properly sealed.

CSP Applicant's Name

Date

Retain all permits and other information that verifies your answers to the above questions. This information will be requested from you in the future when you are spot-checked. It is advised that applicants contemplating Tier III complete the Farm*A*Syst self assessment packet available from the Minnesota Extension Service. This packet evaluates the potential water quality impact of your current production site practices. Retain the self-assessments in the event you are spot-checked by NRCS. We will review the completed worksheets without copying them and return them to you. The packet is available and can be ordered from the following URL:

<http://www.extension.umn.edu/units/dc/item.html?item=05696>

For information on state law requirements related to feedlots, click on the following URL:

<http://www.pca.state.mn.us/hot/feedlots.html>

For information on pesticide container disposal click on the following URLs:

<http://www.pestlaw.com/x/notice/epa/pr83-3.html>

<http://www.mda.state.mn.us/appd/bmps/bmps.htm#generalbmps>

For information on mortality disposal click on the following URL:

http://www.bah.state.mn.us/animals/carcass%20disposal/carcass_disposal.htm

For information on isolation distances between water supply wells and other activities or features click on the following URL:

<http://www.health.state.mn.us/divs/eh/water/ncom/mmappendixaq.pdf>

Example

**Conservation Security Program (CSP)
 Benchmark Water Quality Nutrient and Pest Management**

Producer Jones Farms **Farm** 434 **Date** 3/15/05

Tract 2503, 2504 **Field(s)** 1,2,3,4,5,6,7,8,9 1,2,3,4 **Crop Rotation** C-C-SB-C-O-A-A-A

Crop / Yield Goal	Previous Crop / Yield or Quality	Nutrient Source Manure or Commercial Fertilizer	Timing ¹	Method ²	Application Rate ³ Pounds or Gallons or Tons per Acre	Analysis ⁴		
						N	P ₂ O ₅	K ₂ O
Corn 165 bu./acre	Corn 159 bu./acre	Dairy Pit	Fall	BC-inc < 12 hrs	8000 gals	32.9	12.5	32.2
		Comm. Fert.	Starter	Row	120 lbs	9	23	30
		Comm. Fert.	Preemerge w/ herb	Surface BC	10 gallons	28	0	0
Corn 165 bu./acre	Soybeans 53 bu./acre	Comm. Fert.	Starter	Row	120 lbs	9	23	30
		Comm. Fert.	Fall	Knife	175 lbs	82	0	0
Corn 165 bu./acre	Alfalfa (2-3 plts/ft)	Comm. Fert.	Starter	Row	120 lbs	9	23	30
		Comm. Fert.	Spring	BC & Incorp.	150 lbs	46	0	0
Corn 165 bu./acre	Soybeans 48 bu./acre	Lot Manure	Fall / Spring	BC - no inc	20 tons	14.7	8.8	13.3
		Comm. Fert.	Starter	Row	120 lbs	9	23	30
		Comm. Fert.	Fall	Knife	130 lbs	82	0	0
Soybeans 50 bu./acre	Corn 168 bu./acre	None applied						
Alfalfa 5 tons/ac	Alfalfa 5 tons/ac	Comm. Fert.	In season	BC-no inc	200	0	0	60

Example

Comments:

1. For Example: Fall Pre-Plant, Spring Pre-plant, Planting
2. For Example: Broadcast (BC), Knife, Starter in Row, and Sidedress for fertilizer; and broadcast incorporate or no incorporate or sweep or knife inject for manure
3. Rate is product rate and not rate of N, P₂O₅ or K₂O.
4. Analysis is % for commercial fertilizer and lbs./ton or 1000 gal. for manure

Conservation Security Program (CSP) Benchmark Water Quality Nutrient and Pest Management						
Producer Jones Farms		Farm 434			Date 3/15/05	
Tract(s) 2503, 2504			Field(s) 1,2,3,4,5,6,7,8,9 1,2,3,4			
Crop	Target Pest(s) (Weeds, Insects, Disease, Etc.)	Product(s) Used and Other Controls ¹	Formulation	Timing ²	Method ³	Application Rate (per acre)
Corn following Corn	Weeds	Surpass	EC	PPI	Broadcast	2.5 pints / acre
	Insects	Capture	2 EC	At Planting	Row	5 ounces / acre
	Weeds	Marksman		Postemerge	Broadcast	3 pints / acre
	Weeds	Cultivated 1x		Postemerge		
	Weeds	Surpass	EC	PPI	Broadcast	2.5 pints / acre
Corn following Soybeans	Weeds	Outlook		PPI	Broadcast	21 ounces / acre
	Weeds	Distinct		Postemerge	Broadcast	4 ounces / acre
	Weeds	Cultivated 1x		Postemerge		
Corn following Soybeans	Weeds	Harness Xtra		Pre-emerge	Broadcast	2 quarts / acre
	Weeds	Distinct		Postemerge	Broadcast	4 ounces / acre
	Insects	Pounce	3.2 EC	Postemerge	Broadcast	6 ounces / acre
	Weeds	Cultivated 2x				
Soybeans	Weeds	Roundup	UltraMax	Postemerge	Broadcast	24 ounces / acre
	Weeds	Roundup	UltraMax	Postemerge	Broadcast	20 ounces / acre
	Weeds	Cultivated 1x		Postemerge		
Soybeans						
Alfalfa	None					
Peas	Weeds	Pursuit Plus	EC	PPI	Broadcast	30 ounces / acre
	Weeds	Flexstar		Postemerge	Broadcast	1.0 pint/acre
	Weeds	Cultivated 1x		Postemerge		
Comments:						
1 For Example, Herbicides, Insecticides, Crop cultivation, Rotary hoeing, Flame weeding						
2 For Example: Spring Pre-plant, Planting, Pre-emerge, Post-emerge						
3 For Example Broadcast, Band						

Example

CSP Benchmark Water Quality Manure Information

	Manure Source #1	Manure Source #2	Manure Source #3	Example
				Dairy Barn
Livestock Information				
Species				1400 lb. Dairy Cows
Annual Number				50
Species				Dairy heifers
Annual Number				7
Storage Information				
Storage Type				Above ground tank
Capacity				500000 gallons
Storage Length				6 months
Application Information				
Handling Method				Liquid
Commercial Hauler				No
Spreader Type ¹				Balzer slurry tanker
When Applied ²				Spring and fall
Application Method ³				Knife inject
Incorporation Timing ⁴				Immediate
Spreader Calibrated				Yes
Normal (n) or Calibrated © Application Rate				11000 gal./ac. ©
Manure Analysis from a Mn. Dept. of Ag. Certified Lab				
Date Analyzed				10/99
N				24
P ₂ O ₅				18
K ₂ O				29
Date Analyzed				
N				
P ₂ O ₅				
K ₂ O				

1. "Spreader types" are: Slurry tanker Solids Spreader Towed Hose Center Pivot Other Sprinkler
2. "When applied" choices are: Daily Every other day Weekly Every 2 weeks Monthly Fall Spring Summer Winter
3. "Application Method" choices are: Surface Broadcast Sweep Inject Knife Inject
4. "Incorporation Timing" choices are: <12 Hrs. 12-96 hrs. > 96 hrs. Immediate Immediate
5. "Acres Covered" are average acres covered when the storage system is emptied after an average storage time interval.