The Do’s and Don’ts of Manure Management and Clean Water

The Do's and Don'ts of Manure Management and Clean Water:

Do slope corrals and maintain for adequate drainage to retention pond.

Don’t allow standing water in animal corrals. Don’t discharge to surface or ground water.

Do maintain acceptable backflow prevention devices.

For the air gap example above, it is twice the distance (2x the diameter of the discharge pipe) to the receiver.

Don’t have inadequate backflow prevention. This may allow manure contaminated water to potentially flow back into the well and contaminate groundwater.

Do contain, collect, and transport silage and commodity leachate to the retention pond.

Don’t allow standing water in feed storage area. Don’t allow discharge of leachate to surface or ground water.

Do apply solid or liquid manure to crop lands at rates which are reasonable for the crop, soil, climate, specific local situations, management system, and type of manure.

Don’t over apply solid or liquid manure.

Standing water in manured areas (corrals). Potential infiltration.

This is a proper backflow prevention device.

For the air gap example above, it is twice the distance (2x the diameter of the discharge pipe) to the receiver.

Don’t have inadequate backflow prevention. This may allow manure contaminated water to potentially flow back into the well and contaminate groundwater.

Feed storage area

Curbed area to contain runoff and transport to retention pond.

This is a proper backflow prevention device.

For the air gap example above, it is twice the distance (2x the diameter of the discharge pipe) to the receiver.

Don’t have inadequate backflow prevention. This may allow manure contaminated water to potentially flow back into the well and contaminate groundwater.

Process to prevent manure contaminated water from flowing back into well.

No "Backflow" prevention device to prevent manure contaminated water from flowing back into well.

No proper backflow prevention device.

Feed leachate not contained

Don’t allow standing water in feed storage area. Don’t allow discharge of leachate to surface or ground water.

Winter small-grain field, irrigated with liquid manure.

Uniform crop and no visible manure.

Do apply solid or liquid manure to crop lands at rates which are reasonable for the crop, soil, climate, specific local situations, management system, and type of manure.

Don’t over apply solid or liquid manure.

Leachate not collected or transported to the retention pond.

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The Partner agencies of the California Dairy Quality Assurance Program (CDQAP) realize there may be some confusion regarding legal and illegal manure management practices.

This pictorial of acceptable and unacceptable manure management practices was developed to assist producers. The photos displayed in this publication are from California. The activities shown, that are illegal, have already resulted in fines or warnings. If you have any questions, or would like an explanation of a specific photo, please call your representative to the CDQAP listed at right.

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• California Farm Bureau Federation (CFBF)
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• United States Department of Agriculture: Animal Plant Health Inspection Services – Veterinary Service (USDA-APHIS-VS)
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• California Department of Food and Agriculture (CDFA)
• California Environmental Protection Agency (Cal-EPA)
• California Resources Agency (CRA) (e.g. Department of Fish and Game)
• State Water Resources Control Board (SWRCB)
The Do's and Don’ts of Manure Management and Clean Water (Continued)

A retention pond designed for adequate storage capacity.

- **Do:** Construct retention ponds with sufficient storage capacity. Accommodate facility washwater, manure and bedding, normal rain including runoff, and the 25-year, 24-hour storm event. Provide flexibility for management to apply liquid manure at appropriate rates. Be sure pond sidewalls and bottom are at least 10 percent clay and not more than 10 percent gravel.

- **Don’t:** Overfill retention pond. Don’t utilize freeboard, don’t discharge and don’t damage sidewall.

**Insufficient storage capacity in retention pond.**

- **Don’t:** Discharge into a ditch that exits your property. This is the result of the flow from picture “A” that has now flowed into the irrigation canal that flows into the river (waters of the U.S.).

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

- **Don’t:** Allow floatage or weeds to accumulate on pond surface or sidewall. Do prevent mosquito habitat. The level of the pond can be raised and lowered to eliminate breeding areas.

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Illegal discharge into the waters of the U.S.**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Manured water**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Irrigation canal**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Mosquito habitat**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Excessive solids and floatage**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Illegal discharge**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.

**Overflow and illegal discharge**

- **Don’t:** Discharge from confined areas to surface waters. Don’t allow cattle from confined areas access to surface waters.