Common Compliance Problems

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Common Compliance Problems

1. Attitudes
2. Insufficient pond capacity and storage requirements (ELGs)
3. Not maintaining freeboard
4. Other waste discharges
5. Insufficient berming at compost and manure areas and piles
6. Feed and waste feed runoff
7. Mortality management
8. Over-application of manure and wastewater
9. Pen runoff

1. Attitudes

It's human nature to think nothing bad will happen to you - producers tend to underestimate their facility's potential to discharge. Common rationalizations:

-In 50+ years we've never had a discharge

-We've never had a 25-year storm here

-This is the desert, it never rains

-I have an NMP or NRCS designed facility

-I am not near a water

-Manure is not a problem, not a serious pollutant

-The requirements are dumb and/or always changing

Examples of Discharges to Waters or Conveyances to Waters Observed by Don in Utah and Arizona

1. Frozen pipe from milk parlor breaks and leaks to creek
2. Pond embankment failure, flowed to river.
3. Milk parlor drain pipe to canal.
4. Milk parlor drain pipe to city sewer.
5. Dry well in pond. (points for creativity)
6. Milk parlor water trenched to river.
7. Manure pit overflow to river.
8. Canal overflow flowed through pens offsite
9. Flood waters up to corrals and flowed to river.
10. Reverse osmosis treatment water to ditch.
11. Cooling water overflow to ditch.
12. Pumping pond water to canal.
13. Pen runoff pipe to canal.
14. Pen runoff piped directly to river.
15. Pen runoff directly to canal
16. Tailwater gate open to canal
17. Public irrigation system used to transfer wastewater.
18. Manure piles on creek bank.

19. Manure dumped in dry wash.
20. Mortalities dumped in dry wash.
21. Excess feed dumped in canal.
22. Gopher holes in field tile drain to slough.
23. Pens and calf hutches on river bank.
24. Well located in corrals.
25. Mortalities in river.
26. Mortalities next to wellhead.
27. Manure runoff at wellhead.
28. Pipe for wastewater application corroded through and leaked to ditch.
29. Pipe for wastewater application leaked at connection and leaked to river.
30. Over-applied land application that flowed to ditch.
31. Over-applied land application that flowed to river.
32. Runoff from compost area to ditch.
33. Feed runoff drain to slough.
34. Pump failure in pumping station flowed barn water to slough.
35. Corrals built creek.
36. Trash thrown into slough.
37. Mortalities buried in ground water.
38. Direct animal access to river and creek.

39. Gopher holes caused wastewater pond leaks to ditch and canal.
40. Blood applied to fields.
41. Milk dumped to fields (by the tanker).
42. Tailwater berm failure to ditches and canals.
43. Wastewater over-applied to “fields” caused prolonged standing water and discharges to ditches.
44. Ends of an oxbow bermed to make a pond that receives wastewater.

2. Insufficient Pond Size and Storage Requirements

(a) Facilities without the permit and without the PBR.

- Ponds must have enough storage for the area's storage period (winter storage).
- For any AFO and CAFO, the 25-year, 24-hour storm event is not necessarily the applicable containment standard anymore. Facilities may need to expand capacity.
- For any AFO and CAFO, any discharge from any size storm or snowmelt is illegal and facilities must be designed to prevent discharge – whatever capacity that may be.

2. Insufficient Pond Size and Storage Requirements, continued

(b) Facilities with the PBR.

- Swine, poultry, and veal operations require Large Weather Event (LWE) capacity which is at least a 100-year, 24-hour storm, plus 30 day average precipitation.
- Non-swine, poultry, and veal operations require LWE capacity which is at least a 25-year, 24-hour storm, plus 30 day average precipitation for the area.
- A discharge over the 25-year or 100-year storm, respectively, may still require a CAFO permit. The PBR only provides penalty protection. A CAFO permit may be required even if covered by a PBR.
- Any discharge prior to the 25-year or 100-year storm is not covered by the PBR.

2. Insufficient Pond Size and Storage Requirements, continued

(c) Facilities with the Permit.

- Swine, poultry, and veal operations follow the no discharge design requirements in the permit. These facilities are allowed to discharge over the 100-year, 24-hour storm event although the storage capacity will be greater than the 100-year storm volume.
- Non-swine, poultry, and veal operations require 25-year, 24-hour storm event capacity, plus the appropriate storage period.
- Unless it is a LWE, any discharge prior to the 25-year or 100-year storm event, respectively, could be subject to a penalty or enforcement.
- Facilities with the permit are allowed upset discharges when applicable. Upset discharges may include unusual non-precipitation related discharges such as earth quakes and vehicle accidents to storage structures. Instances of improper or neglectful maintenance and operation is not covered by an upset.

3. Improper Freeboard Management

(a) Producers not paying attention to pond levels and weather forecasts.

(b) Ponds aren't properly dewatered when needed.

(c) Depth measurement not in ponds showing pond levels needed for the runoff and precipitation of the required weather event.

(d) Solids are allowed to over-accumulate.

4. Other Waste Discharges

The PBR and Permit only covers precipitation-related discharges of manure, litter, compost, pen runoff, and wastewater. Discharge of fertilizers, mortalities, milk, silage/haylage leacheate, pesticides, etc. are not covered.

5. Insufficient Berming of Runoff

(a) Manure storage and compost areas frequently aren't bermed adequately to prevent runoff from the area.

(b) Manure piles in fields are seldom bermed. There cannot be discharges from temporary storage/placement of manure. Place stacks away from waters and conveyances to waters.

(c) Berming must be sufficient to properly manage runoff and prevent discharges.


This is a good berm!

6. Feed and Waste Feed Runoff

(a) Feed, waste feed, and feed runoff must be contained.

(b) This seems to be a small AFO problem mostly.

(c) If needed, place berms or other means of preventing runoff discharges.

7. Mortality Management

(a) NRCS Practice 316 should be followed.

(b) Keep in mind that mortalities cannot pollute groundwater.

(c) Berms may be needed.

(d) Some counties have requirements for disposal of mortalities. AFOs and CAFOs should follow those requirements.

8. Over-application of Manure and Wastewater

(a) Over-application can result in nutrient runoff in snow melt and spring thaw.

(b) Can result in high phosphorus soils.

(c) Manure and wastewater should be evenly distributed in the field.

(d) Applications should be evenly among the fields (as needed). Avoid over-application at fields nearest the production area.

(e) Soil erosion can move nutrients to waters.

(f) Can result in groundwater contamination in loose soils and high water tables.

(g) Is a wasted nutrient resource.

9. Pen Runoff

(a) This is obvious, yet pen runoff occurs very frequently.

(b) Use berms, drains to ponds, or other means to control runoff.

(c) Upgradient water from sheet flow, canal overflows, fields, etc. should be prevented from contacting corral areas.

(d) Do not place corrals in floodplains or waters (even if dry).