

MANAGING WATER IN POULTRY PROCESSING

Protecting water quality in connection with on-farm poultry processing is the responsibility of all producers. In general, contamination of surface or groundwater can occur either from mishandling of wastewater or from the intersection of storm water runoff and processing activities. In the interest of supporting poultry processing that protects public health and environmental quality, we have compiled the following best management practices (BMPs) related to both wastewater and stormwater¹.

Relevant Rules:

According to the San Francisco Bay Basin Plan Discharge Prohibitions, it shall be prohibited to discharge:

*No. 7: Rubbish, refuse, bark, sawdust, **or other solid wastes** into surface waters or at any place where they would contact or where they would be eventually transported to surface waters, including flood plain areas.*

No. 9: Silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity or discoloration in surface waters or to unreasonably affect or threaten to affect beneficial uses.

No. 16: Waste that is not a sufficient distance from areas designated as being of special biological significance to assure maintenance of natural water quality conditions in these areas.

In general, the sources of pollutants from poultry processing would be:

- Animal waste - urine/feces/blood/offal
- Wash water generated during processing activities

The pollutants of concern in these activities include:

- Fecal indicator bacteria
- Pathogens
- Nutrients
- Sediment

In the case of poultry processing, such discharges may occur through contamination of stormwater that passes near or through the facility or through mishandling of wastewater from the actual processing activities.

Stormwater BMPs:

- Keep “clean water clean.” Use grassed ditches, berms or subsurface drains and properly-sized roof gutters and downspouts to divert clean stormwater runoff around the processing area.
- Do not allow rain or stormwater runoff to come into direct contact with the animal processing area. i.e. locate processing area on an impervious pad and under a roof.
- Locate the processing area at least 100 feet away from creeks, intermittent streams, drains, wells, septic tank or leach fields.
- Properly clean up and dispose of animal waste either via a licensed rendering facility or through on-farm composting according to CalRecycle rules and BMPs related to animal mortality composting.
- Do not hose down material from animal processing areas to a storm drain or waterway.
- Do not allow any wash waters to be discharged to a storm drain or receiving water without proper treatment.
- Maintain treatment controls (vegetated buffers, detention areas, etc) to ensure proper function.

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Processing Wastewater BMPs:

- Any discharge to surface or ground waters is prohibited.
- All animal carcass products must be removed from the property and disposed off-site at a licensed rendering facility, unless properly composted² on-site according to current technical standards³ and in compliance with local and state requirements⁴. Disposal into on-site retention ponds is prohibited.
- Collected blood must be fully contained and disposed of off-site at a licensed rendering facility, unless composted on-site according to current technical standards and in compliance with local and state requirements. If the blood is to be utilized as a fertilizer within Region 2, it must be done in accordance to all local, state, and federal laws and regulations and the Water Board staff must be notified of the procedures for such use.
- Best Management Practices must be implemented to reduce, eliminate and/or minimize the amount of blood and/or fluids that are washed off the kill area or slab.
- Minimal wash water from the kill area or slab (approximately 50-100 gallons per site), may discharge to the ground, provided that:
 - *It is applied at a rate that does not exceed the intake rate of the soil.*
 - *It is applied during dry conditions and is not allowed to enter surface waters or flood-prone areas.*
 - *Structural BMPs are in place where surface waters are within 100 feet of the slab; such as, filter strips, berms, trenching, etc.*

Final Note:

Poultry Processing operators should develop a site-specific pollution prevention plan (narrative and map) as a means of assessing their unique infrastructure, location in relation to waterways, scope of activity, etc. and developing the set of waste/water management practices that will protect surface and groundwater.

² Composting of mammalian tissue is forbidden in California and must be disposed of at a licensed rendering facility such as Petaluma By-Products (707-763-9181). Only waste from chickens, turkeys and other fowl can be composted on the farm.

³ Composting Best Management Practices can be found in the Marin UCCE handout "Composting Poultry Waste on the Farm"

⁴ For details on the composting rules that may apply to your on-farm composting of poultry waste, see CalRecycle information here: <http://www.calrecycle.ca.gov/Laws/Regulations/Title14/ch31.htm>.