

## Spill Characteristics and DNR Enforcement Efforts at Ruckman CAFO, 1995–2021

## SPILL AND ENFORCEMENT TOTALS

SPILL CHARACTERISTICS					MISSOURI DNR ENFORCEMENT EFFORTS					
Est. Volume of Reported Spills (gal.)	Total Reported Spills	Reported Spills w/ Unknown Volume	% Spills w/ Unknown Volume	Avg. Spill Volume (gal.) <sup>2</sup>	Avg. Annual Spill Volume, Past 30 Yrs. (gal.) <sup>2</sup>	Letters of Warning	Notices of Violation	Spills w/o Onsite Response	% Spills w/o Onsite Response	Volume of Spills w/o Onsite Response (gal.) <sup>1</sup>
1,150,870	24	10	42%	82,205	38,362	3	7	3	13%	52,000

<sup>&</sup>lt;sup>1</sup> These totals do not include reported spills of unknown volume. For details about spill calculation, see the Methodology section of the Rap Sheet (<u>sraproject.org/SmithfieldMORapSheet</u>)

## **RUCKMAN-REPORTED WASTE SPILLS AND VIOLATIONS**

DATE	ESTIMATED GALLONS SPILLED	DESCRIPTION
9/1/1995	300,000	NOV #0469KC: Construction debris in a manhole plugged a pipeline causing lagoon wastes to spill into a tributary of the Grand River.
10/30/1995	500,000- 750,000	NOV #0475KC: On September 25, 1995, a pipeline fitting ruptured and spilled lagoon wastes into 1.9 miles of Manion Creek and 9.5 miles of the Middle Fork of the Grand River resulting in a fish kill (at least 88,897 aquatic mortalities). The facility was also cited for operating without a proper permit.
11/2/1995		Agency records indicate that actual construction did not adhere to approved construction and no emergency overflow outlets were built on lagoons #9–16. The facilities were determined to be in noncompliance.
2/8/1996		A settlement agreement is reached with the Missouri Attorney General's Office for the September 27 spill from Ruckman #13 into Manion Creek and the Middle Fork of the Grand River causing a fish kill. The agreement imposes \$268,499.99 in fines, penalties, and restitution.
6/4/1996	2,000	Agency records indicate a pipeline drain blockage spilled onto the ground and into emergency containment.
8/5/1996		Agency records state "Homan and Ruckman Farms have approximately 300 acres of underground tile outlets draining the terraces at irrigation sites [draining directly to waterways]. These outlets have not been marked on the 'as-built' mapsPlease submit revised 'as-built' plans with the underground tile outlets identified." "[T]he Kansas City Regional Office, found lagoons without emergency spillways during a recent inspection of Ruckman Farmsalso found a truckwash which empties into a lagoonthe truckwash was not included in the design and/or the design capacity for the Ruckman Farms construction application."
10/23/1996	unknown	Agency records indicate a DNR inspection noted, "A pit of wastewater/storm water approximately ten feet long by five feet wide by three foot deep was observed at the east end of building 105. The pit had been dug there to temporarily contain wastewater from a crack in the foundation of the building."
12/11/1997	unknown	NOV #0849KC: A clamp on a flexible pipeline failed during a transfer of wastes from lagoon 13 to lagoon 27 and spilled wastes onto a neighboring property.

<sup>&</sup>lt;sup>2</sup> Average volumes were calculated for known spills (i.e., excluding spills of unknown volume).

9/30/1998	unknown	NOV #1001KC: DNR personnel found an active discharge during a facility inspection. A pipeline failed during land application and spilled wastes into the right of way of County Road 71.
9/30/1998	unknown	NOV #1002KC: A spill of wastes during land application activities flowed into a tributary of Peddler Creek. Three emergency dams were constructed to contain the spill.
2/8/1999		Agency records indicate a DNR inspection noted, "Buildings #158, #161, and #162 showed evidence of extensive concrete spalling [breaking off in fragments] on these buildings' west ends. The facility shall repair the damaged structures as soon as possible, and investigation of procedures to abate the cause of the deterioration begun immediately." DNR also documented 51 hog confinement barns with cracked foundations needing repair, and "broken plastic electrical conduit was noted at Building #102."
2/9/1999		Agency records indicate a joint U.S. EPA and DNR inspection discovered "Twenty-two (22) 55 gallon drums of LIQUICLOR, a 12.5% chlorine solution were located adjacent to the facilities central office. The drums were stored haphazardly in the open. Nineteen (19) drums were full 1 was open and nearly full and 1 was approximately half empty and laying on its side. The facility was not able to produce a MSDS [Material Safety Data Sheet] for LIQUICLORThe rodenticide in use is CONTRAX. Four 'bait traps' are placed along each side of the buildings at each farm. At several of the locations the content of the bait traps had spilled on the surrounding ground."
6/10/1999		Agency records from a DNR inspection revealed cracks in the foundations of 21 confinement buildings, noting that "Loss of structural integrity could allow wastewater to discharge to the environment." The facility was determined to be in noncompliance.
9/29/1999		Agency records indicate that a DNR inspection revealed overfull lagoons operating above the safe maximum level of wastes. The facility was determined to be in noncompliance.
9/26/2000	unknown	Agency records indicate a DNR inspector revealed "At farm 12, the valve at the underground piping inlet was leakingAt farms 9, 11, and 14, there were feed spills on the pads below the binsAt farms 10, 14, and 15 trash was found floating in the lagoons. The trash needs to be removed to prevent line blockagesAt farm #15, an excessive amount of oil dry has been allowed to accumulate in the pump-houseMany, if not all, of the pumps located in the pump-houses at the lagoons, were noted to have oil leaks of low to moderate severityIn past reports and during this quarterly inspection, cracks in the foundation of the confinement buildings were foundnew cracks have developed and need to be repaired."
12/5/2000	unknown	Agency records indicate a DNR inspection noted the following deficiencies: "At all farms, holes were found in the berms of the lagoons. The holes appeared to be from digging activities of animals. The holes need to be fixed and, due to the number of holes and distribution over the entire farm, some sort of control plan may need to be implemented in order to insure (sic) that the lagoon berms are not compromised by such activitiesAt farms 10, 11, 12, 13, and 15, there were feed spills on the pads below the binsAt Farm #15, an excessive amount of oil dry has been allowed to accumulate in the pump-house."
9/4/2001		Agency records indicate a DNR inspection report revealed that "The land application color map, located in the land application barn, was not up-to-date. Field M had been land applied on three different days between August 30, 2001, and September 4, 2001; as of September 4, 2001, the date of the inspection; the map of Field M was not covered at all. These maps must be kept current so that the department can track the application, and so CGC employees will know what fields have been applied on and where in the field the application has taken placeAt farms 9, 11, 13, 14 and 16 there were feed spills on the pads below the bins." The facility was determined to be in noncompliance.
12/10/2001	unknown	Agency records indicate DNR personnel discovered an ongoing spill during the inspection in land application Field CC due to a broken pipeline joint. Three emergency dams were constructed to contain the spill. Wastewater was also found on the north side of lagoon #14. "Inspection of the emergency containment structures found that none of the caps, on the discharge end of the pipe, had screws in them. The caps are supposed to be securely attached to the discharge pipe with screws."

10/14/2003	1,000	Agency records indicate a plugged pipeline flooded Barn 2 and spilled wastes out of the barn door, which soaked into the ground.
11/22/2004	158,300	Agency records indicate a plugged pipeline in Barn 8 flooded the barn and spilled into emergency containment.
3/10/2005	1,500	Agency records indicate an underground pipeline break caused waste to spill into a pond.
6/22/2005	70	Agency records indicate a semi-truck tanker of hog wastes overturned at Route YY and Cedar Road and spilled wastes into the road right of way.
10/4/2005	unknown	Agency records indicate an ongoing spill was discovered during an inspection, noting that "The pump house at farm #12 was leaking at the time of the inspection."
10/4/2005	1,000	Agency records indicate a plugged pipeline spilled wastes from the barn out of a manhole. Wastes were contained by construction of an emergency dam.
5/17/2006	1,000	Agency records indicate a ruptured line during land application spilled wastes into a tributary of the East Fork of the Grand River. Two emergency dams were constructed to contain the spill
6/8/2006	1,000	NOV #2268KC: An above-ground pipeline ruptured and spilled wastes into a tributary of Dawson Branch and onto neighboring property. Emergency dams were constructed to contain the spill.
6/13/2006	unknown	Agency records indicate that DNR personnel identified an ongoing spill during an inspection. "The pump house at farm #14 was leaking at the time of inspection."
5/15/2007	unknown	Agency records indicate that during a DNR inspection, DNR personnel discovered an actively leaking underground pipeline riser due to the safety cap not being secured. "Feed spills were noted around the site."
11/2/2007	1,000	Agency records indicate a plugged pipeline between a barn and lagoon flooded the barn and spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
4/9/2008		Letter of Warning: Failure to submit Operation & Maintenance Report as required.
5/19/2008	8,000	Agency records indicate a broken pipeline riser spilled wastes during land application. Wastes were contained by constructing an emergency dam.
5/28/2008	50,000	Agency records indicate a plugged pipeline between barns and the lagoon spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
2/4/2009	1,000	Agency records indicate a plugged pipeline between a barn and lagoon spilled wastes that froze on the ground. DNR did not respond on site to investigate the incident.
2/26/2009		Letter of Warning: Failure to submit Operation & Maintenance Report as required.
6/1/2011		Agency records indicate a DNR inspector noted, "The concrete at several of the production barns at the facility (especially at farm 15) are deteriorating."
2/17/2012		Agency records indicate a DNR inspection noted that "land application records for Ruckman field 5 showed a much higher than expected yield for soybeans. Upon further review, PSF stated this was an error, and the crop planted was actually corn." The facility was determined to be in noncompliance.
3/15/2013		Letter of Warning: Non-payment of annual fees for the facility's Missouri State Operating Permit.
4/18/2013		NOV #BFUCWN10088: Non-payment of annual fees for the facility's Missouri State Operating Permit.