



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

SPILL AND ENFORCEMENT TOTALS

SPILL CHARACTERISTICS						MISSOURI DNR ENFORCEMENT EFFORTS				
Est. Volume of Reported Spills (gal.) ¹	Total Reported Spills	Reported Spills w/ Unknown Volume	% Spills w/ Unknown Volume	Avg. Spill Volume (gal.) ²	Avg. Annual Spill Volume, Past 30 Yrs. (gal.) ²	Letters of Warning	Notices of Violation	Spills w/o Onsite Response	% Spills w/o Onsite Response	Volume of Spills w/o Onsite Response (gal.) ¹
129,750	33	13	39%	6,488	4,325	2	11	10	30%	38,500

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

² Average volumes were calculated for known spills (i.e., excluding spills of unknown volume).

WHITETAIL—REPORTED WASTE SPILLS AND VIOLATIONS

DATE	ESTIMATED GALLONS SPILLED	DESCRIPTION
9/18/1995	3,200	Agency records indicate a mower had struck and broken a clean out riser that resulted in a spill on site. A sand bag dam and an earthen emergency dam were constructed to contain the spill.
12/26/1995	35,000–40,000	Agency records indicate a plugged pipeline spilled wastes from a broken pipeline riser into North Blackbird Creek, resulting in a fish kill (at least 909 aquatic mortalities along 1 mile of stream). An additional 5 miles of stream were polluted. PSF had not inspected the line as required since December 22. Multiple emergency dams were constructed to contain the spill. One of the dams overtopped after heavy rain on Jan 17, 1996, spilling additional wastewater into North Black Bird Creek.
5/5/1998	2,000–3,000	Agency records indicate a wheel fell off of a defective center pivot waste sprayer unit, spilling wastes into a crop field. A crew built an emergency dam.
7/13/1998	200	Agency records indicate a blown fuse on a traveling waste sprayer unit resulted in spill
10/22/1998	600	Agency records indicate a leaking gasket spilled wastes into a field.
11/3/1998	unknown	Agency records indicate a citizen complaint about the overapplication of wastes and runoff onto a neighboring property. The waste application field was condemned from the permit.
7/28/1999	10,000	NOV #0776NE: A “valve failed to shut completely, charging an underground pipeline unbeknownst to the facility.” Wastes spilled into Sandy Creek resulting in a fish kill. Emergency dams were constructed to contain the spill.

9/10/1999	unknown	NOV #0795NE: On September 8, 1999, PSF sprayed wastes onto neighboring property without permission or permit. DNR noted, "Additionally, it was the opinion of the inspector that prudent monitoring should have caught the incident earlier. Individuals recorded the incident on tape and reported it to us prior to any notification by PSF."
4/4/2000	-----	<p>NOV #0834NE: "Failure to Perform Stormwater Monitoring Within 24 Hours of Land Application"</p> <p>NOV #0835NE: "Failure to Report Other Chemicals Used at the Facility"</p> <p>NOV #0838NE: "Failure to Submit Accurate Discharge Monitoring Reports (DMRs) of the July 28, 1999, Discharge from Whitetail Facility"</p> <p>DMR Report on the 1999 Annual Records Review: "PSF failed to accurately report the required parameters from wastewater discharges as required by the existing permit. During a July 28, 1999, discharge of processed waste into Sandy Creek from the Whitetail facility, NERO [DNR Northeast Regional Office] staff collected samples for ammonia. The results of the NERO samples at the down gradient property boundary were nearly 500 times as high as those listed in the [company] report for the same day at the same sample location."</p> <p>Ten of eleven facilities reviewed were determined to be in noncompliance."</p>
4/26/2000	-----	U.S. EPA NOV issued: U.S. EPA issues PSF a Notice of Violation of the federal Clean Air Act alleging that PSF annually emits several hundred tons of potentially hazardous air pollutants including hydrogen sulfide and particulate matter from its hundreds of confinement buildings and open-pit waste lagoons. USEPA also cites PSF's failure to apply for air pollution permits as required by law.
1/9/2001	unknown	Agency records indicate wastewater exited structure #8 of Site #1, "an excavation was constructed...to minimize the impacted area."
7/25/2001	1,000	NOV #1064NE: A plugged pipeline backed wastes up into and spilled out of a barn. The spill went into and through a leaking emergency containment pit and into a tributary of North Blackbird Creek causing a fish kill. Emergency dams were constructed to contain the spill. DNR investigators also documented "that the 'Discharge Response Procedures' outlined within the Operation and Maintenance Manual were not properly performed."
7/31/2001	1,000-2,000	NOV #1065NE: Overapplication and runoff of wastes onto neighboring property and into a tributary of Shoal Creek causing a fish kill. An emergency dam was constructed to contain the spill. DNR investigators also documented that the company "failed to maintain a fifty (50) feet buffer zone from property boundaries as required...failed to operate land application equipment in such a manner that wastes do not reach an adjoining property line as required...failed to check the perimeter of application fields at least once per hour during land application to insure that applied wastewater does not run off the fields where applied...exceeded 0.2 to 0.5 inches/hour and 1.0 inches/day application rate as required...failed to implement procedures of field supervision during operation of [waste] irrigation equipment as required...failed to implement the procedures for routine, unannounced inspections of land application sites...failed to implement the procedure to assure that all appropriate employees are properly trained in the operation of the waste system...failed to have a CAFO Supervisor arrive at the application site within 30 minutes of notification of an emergency" and concluded "that improper land application procedures and a fundamental breakdown of the monitoring process specified in the permit resulted in a discharge of process waste and a fish kill."
8/3/2001	unknown	NOV #1213NE: Rainfall washed excess wastes off the land application site that had been improperly land-applied on July 31. Wastes flowed into a tributary of Shoal Creek.
8/6/2001	unknown	NOV #1215NE: Overapplication and runoff of wastes spilled into a tributary of Sandy Creek. DNR investigators documented that the company, "Failed to adhere to the plant available nitrogen management approach, as required."
8/6/2001	unknown	NOV #1214NE: Overapplication and runoff of wastes spilled into a tributary of Sandy Creek. DNR investigators documented that the company, "Failed to adjust the application rate based on the crop requirements of Field 588, as required."

11/7/2001	-----	"Agency records indicate a DNR investigator wrote, "as discussed the NERO [Northeast Regional Office] has identified several occasions in which the land application map was not current. I did a quick review of the individual [inspection] files for the Site Specific Permits at PSF and found the following... Inspection Date / Site 11-06-01 Terre Haute—land application over last four days not reflected on map 10-11-01 Hedgewood—several days of application in new season, no map yet on site 08-08-01 Whitetail—prior days (sic) application by contract app not reflected on map 08-01-01 Green Hills—land map could not be located by PSF env. staff to inspect 06-11-01 Peach/Perkins—map was not current from October 2000 app on FI 08-28-00 Somerset—map was not current."
6/13/2002	>1,000	NOV #1387NE: Wastes spilled from a manhole and into a freshwater lake resulting in a fish kill. An emergency dam was constructed to help contain the spill.
8/26/2002	10,000	Agency records indicate a failed valve buried in the side of a waste holding pit spilled wastes into a grassed waterway. An emergency dam was constructed to contain the spill.
7/15/2004	4,000–4,500	Agency records indicate that the wrong hose was connected to the irrigation pump, which spilled wastes into a field and a stream. Multiple emergency dams were constructed in the field and stream to contain the spill.
8/21/2005	13,000	Agency records indicate a plugged pipeline backed up into the barn and spilled into emergency containment.
3/29/2006	>1,000	Agency records indicate a plugged pipeline spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
1/6/2008	>1,000	Agency records indicate a plugged pipeline spilled wastes from Barn #4 into emergency containment.
4/29/2008	>1,000	Agency records indicate a plugged pipeline spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
6/26/2008	4,000–6,000	Agency records indicate that a pipeline riser cap blew off while wastes were being transferred between lagoons. Wastes spilled into a drainageway leading to the company's freshwater lake. Due to heavy rains, the lake had a "voluminous" discharge and the wastes were not captured. The company feared the lake's discharge would overtop the dam and said they would contact neighboring landowners of the spill. DNR did not respond on site to investigate the incident. Due to flooded conditions, the spill was categorized as "authorized" due to "catastrophic" rain events.
9/30/2008	unknown	Agency records indicate a plugged pipeline flooded barns #1–5 and spilled wastes into emergency containment.
11/29/2008	20,000	Agency records indicate a plugged pipeline spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
12/23/2008	unknown	Agency records indicate a frozen pipeline caused waste to spill from a manhole into emergency containment. DNR did not respond on site to investigate the incident.
7/24/2009	unknown	Agency records indicate a plugged pipeline between the barns and lagoon spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
8/15/2009	unknown	Agency records indicate overapplication and runoff during land application on Field 514 spilled wastes through a buffer zone and into the right of way of State Highway Y. DNR did not respond on site to investigate the incident.
10/24/2009	-----	Agency records indicate a DNR correspondence to PSF states, "Your letter requests department feedback on PSF's plan to suspend certain inspection related requirements as a result of the inoperable state of the mechanical and plumbing at this site...it would seem reasonable for these inspections to be suspended as the system as a whole is completely inoperable and will be such for an extended period of time, perhaps for many months or even a year or two."
3/11/2011	-----	Agency records indicate a DNR inspector noted, "Some of the fields had no crop information...Failed to conduct monitoring...as required by the Missouri State Operating Permit."

4/26/2011	unknown	Letter of Warning: Agency records indicate that on April 8, 2011, a hole in a leaking underground pipeline spilled into emergency containment. An employee unknowingly opened the valve on the emergency containment that spilled wastes through the containment onto neighboring property and into a tributary of North Blackbird Creek. An emergency dam was constructed to contain the spill.
3/28/2012	-----	Agency records indicate a DNR Annual Records Review of PSF records noted that the company failed to report the suspected causes of high ammonia readings [indicative of hog waste] in the company's emergency containment systems as required by their Missouri State Operating Permits. Nine facilities were determined to be in noncompliance.
6/13/2012	-----	Agency records indicate a DNR inspector documented, "An erosion gully (sic) was above the secondary containment at Site #7 and a gully (sic) was observed at the base of the berm at Site #8, below the secondary containment...Ensure that feed spills are removed and properly disposed when discovered."
1/25/2013	unknown	Agency records indicate a DNR records inspector documented, "Secondary Containment Monitoring records did not have the estimate (sic) gallons of process waste or stormwater that is released or pumped from the secondary containments. Exhibit "A" Crops Planted and Expected Yields did not have gallons applied to fields."
9/29/2014	10,000	Agency records indicate a plugged pipeline between the barns and lagoon spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
10/7/2014	1,000–10,000	Letter of Warning: Agency records indicate that wastes spilled from an open pipeline riser during a lagoon transfer. The spill ran into and through an open emergency containment that was being drained and continued into a tributary of North Blackbird Creek and onto two neighboring properties. An emergency dam was constructed to contain the spill. The facility was determined to be in noncompliance.
7/23/2015	1,500	Agency records indicate a plugged pipeline spilled wastes into emergency containment. DNR did not respond on site to investigate the incident.
7/14/2019	unknown	Agency records indicate a plugged pipeline spilled wastes from a manhole into emergency containment; some of the wastes spilled into a drainageway to a freshwater lake on company property. An emergency dam was constructed to help contain the spill. The company also reported that the stormwater diversion that directed flows to emergency containment was not adequate, allowing some of the spill to bypass the containment system. The stormwater diversion was reworked by the company. DNR did not respond on site to investigate the incident.
7/23/2020	-----	Agency records indicate a DNR inspector noted, "Ensure that trash is removed from the lagoons as discovered and properly disposed. Feed spills observed at multiple sites."