

Meat and Poultry Processing

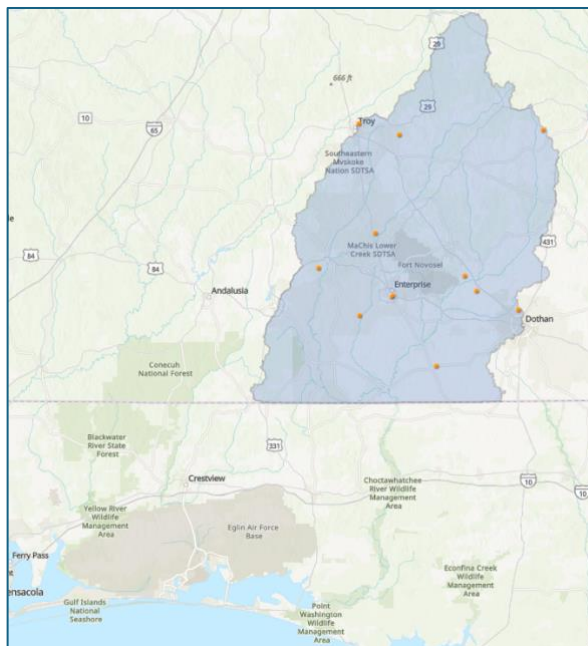


CHOCTAWHATCHEE RIVER WATERSHED

Alabama's Choctawhatchee River originates as two separate forks (East Fork and West Fork) in wetlands near Clayton in Barbour County. The East and West Forks flow through areas with more species of trees than any other forest in temperate North America. Near Ozark in central Dale County, the forks merge to form the Choctawhatchee River, which flows southeast for about 48 miles to Geneva. The Choctawhatchee River is one of the longest free-flowing rivers remaining in Alabama and drains an area of 3,484 square miles. Its main tributary, the Pea River, joins the Choctawhatchee just below Geneva near the Florida state line. Forests cover approximately 43% of the watershed, with 26% in pasture and cropland.

MPP Facilities in the Choctawhatchee Watershed

Based on EPA data, there are at least 12 facilities that are potentially encompassed within the Meat and Poultry Products (“MPP”) category within the Choctawhatchee watershed – shown on the map to the right. Four of these facilities are located in areas with one or more EJScreen Indexes above the 80th percentile, indicating a strong potential for disproportionate impacts on Environmental Justice communities. It is likely that there are additional MPP facilities that discharge indirectly through municipal wastewater treatment plants located in this watershed. Of the identified MPP facilities, based on ADEM and EPA ECHO records, it appears that three are particularly significant contributors of pollutants to the watershed:



- (1) Wayne Farms LLC – Jack Facility, (2) Pilgrim’s Pride Corporation – Enterprise, and (3) Keystone Foods – Eufaula Division.**

Wayne Farms LLC – Jack Facility,

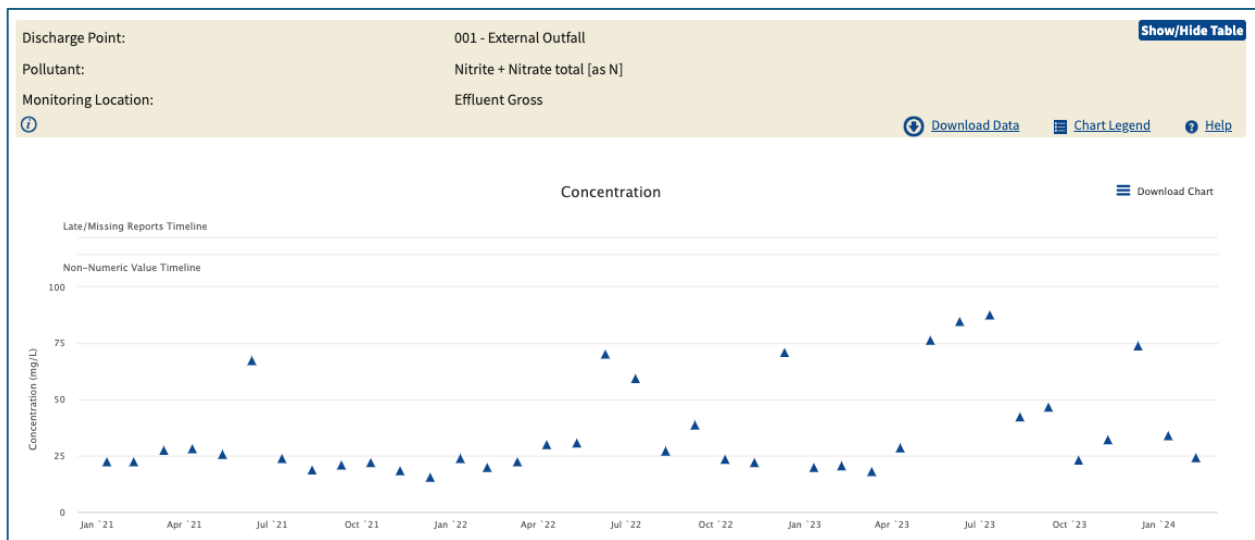
Individual NPDES Permit No. AL0028860, is a Poultry Slaughtering and Processing facility located in Jack, AL. The facility discharges pollutants into the Pea River. The [Choctawhatchee Riverkeeper](#) has observed significant algal blooms in the Pea River. He observed the worst algal blooms during drought conditions not far downstream from the Wayne Farms facility.

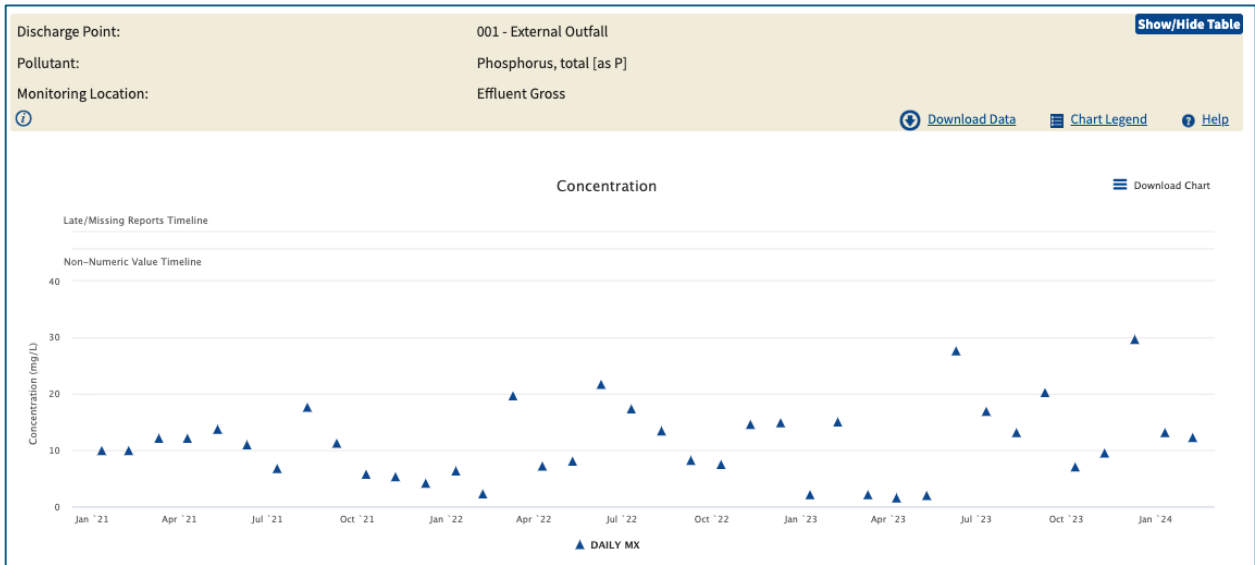


A [2018 Alabama Geological Survey Report](#)¹ documented high Nitrate concentrations associated with elevated Chloride concentrations in the lower Pea River.

The [NPDES permit](#)² for Wayne Farms, which has been administratively continued since it expired on May 31, 2022, only contains concentration limits on Ammonia-N, B.O.D., Fecal Coliform, E. coli, Total Nitrogen, Oil and Grease, pH, and TSS. The Total Nitrogen concentration limits in the permit are very high at 103 mg/l (Monthly Average) and 147 mg/l (Daily Maximum), and the permit does not contain any limits on Total Phosphorus, Nitrate-Nitrite, TKN, Chlorides, or Metals.

As a result of inadequate permit limits, the facility discharges high levels of multiple pollutants into surface waters. For example, [ECHO](#) shows that Wayne Farms reported discharges of Nitrate-Nitrite in excess of 50 mg/l and Total Phosphorus in excess of 10 mg/l on multiple occasions:





ECHO [DMR and Loading records](#) show that Wayne Farms contributed high loads of pollutants to the Pea River, including high loading of Nitrogen (488,975 lbs./yr. – 2022), TSS (7,106,766 lbs./yr. – 2022), Phosphorus (92,746 lbs./yr. – 2022), Ammonia (93,787 lbs./yr. – 2021), and C.O.D. (1,666,367 lbs./yr. – 2022).

WAYNE FARMS LLC-ENTERPRISE PROCESSING
JACK, AL, 36346
 FRS ID: 110006795441
 NPDES ID(s): AL0028860, ALG150161
 TRI ID(s): 36346STHLNRTEIC

Discharges to Chemical Groups by Pounds (lb)

Units: Pounds TWPE

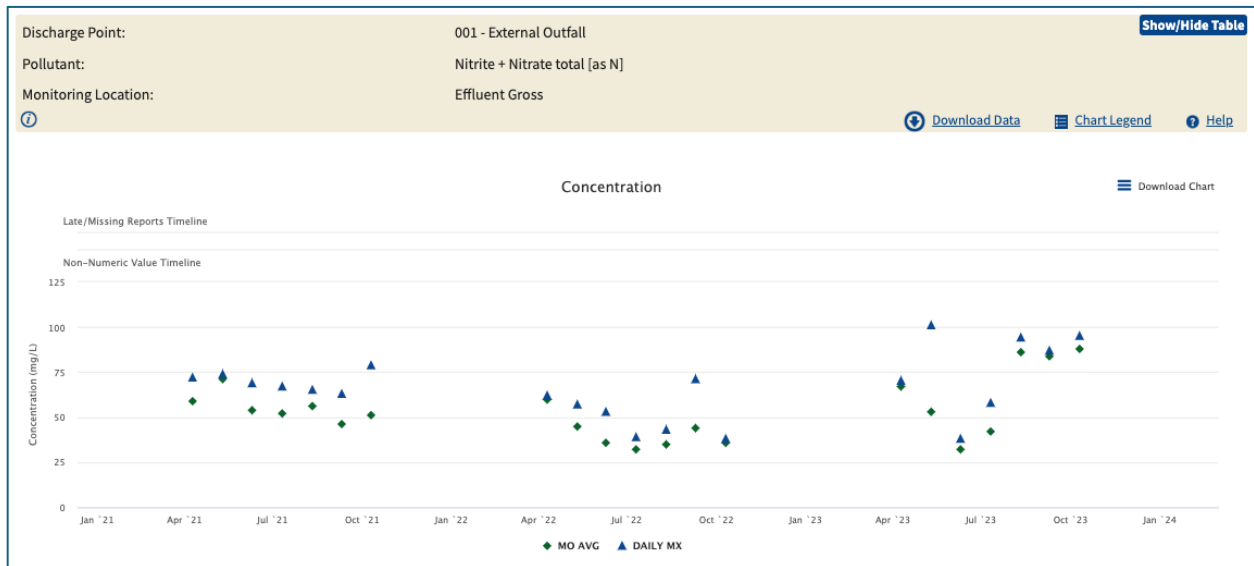
Chemical Group	2020 DMR (lb/yr)	2020 TRI (lb/yr)	2021 DMR (lb/yr)	2021 TRI (lb/yr)	2022 DMR (lb/yr)	2022 TRI (lb/yr)
▶ AMMONIA	10,965	574	93,787	1,695	26,432	307
▶ BOD, 5-day, 20 deg. C	86,889	N/A	386,098	N/A	556,793	N/A
▶ BOD, carbonaceous, 05 day, 20 C	7,938	N/A	12,801	N/A	14,703	N/A
▶ Chemical oxygen demand (COD)	142,523	N/A	231,840	N/A	1,666,367	N/A
▶ NITRATE COMPOUNDS	217,931	597,073	256,316	749,559	267,270	1,081,219
▶ Nitrogen	375,777	N/A	492,517	N/A	488,975	N/A
▶ Oil and grease	60,446	N/A	108,892	N/A	36,562	N/A
▶ PERACETIC ACID	--	24	--	25	--	436
▶ Phosphorus	58,700	N/A	76,769	N/A	92,746	N/A
▶ Solids, total suspended	1,259,037	N/A	1,031,236	N/A	7,106,766	N/A
▶ Total Kjeldahl Nitrogen	375,777	N/A	492,517	N/A	488,975	N/A

[Pilgrim's Pride Corp. – Enterprise](#) is a Poultry Slaughtering and Processing facility located in Enterprise, AL. The facility discharges pollutants into Little Double Bridges Creek, which flows into Double Bridges Creek. Choctawhatchee Riverkeeper has observed very heavy algal growth (filamentous algal mats) in Double Bridges Creek during drought conditions downstream from this facility at Coffee County Road 682.



The [NPDES Permit](#)³ for Pilgrim's Pride, which has been administratively continued since it expired on June 30, 2022, only contains concentration limits on Ammonia-N, B.O.D., Fecal Coliform, E. coli, Total Nitrogen, Oil and Grease, pH, D.O., and TSS. The permit does not contain any limits on Total Phosphorus, TKN, Chlorides, or Metals, and the concentration limits for Total Nitrogen are also very high at 103 mg/l (Monthly Average and 147 mg/l Daily Maximum).

As a result of inadequate permit limits, ECHO [effluent records](#) show that the facility discharges high levels of multiple pollutants into surface waters.



ECHO [DMR and Loading records](#) show that this facility contributed high loads of pollutants to Little Double Bridges Creek, including Nitrogen (2,272,653 lbs./yr. in 2021), Phosphorus (95,173 lbs./yr. in 2022), Ammonia (668,509 lbs./yr. in 2021), Oil and Grease (6,965,682 lbs./yr. in 2021), C.O.D. (121,055,174 lbs./yr. in 2021), and B.O.D. (23,448,267 lbs./yr. in 2021):

DMR and TRI Multi-Year Loading Report

PILGRIM PRIDE CORPORATION
ENTERPRISE, AL, 36330

FRS ID: 110058963849

NPDES ID(s): AL0003697

TRI ID(s): 36330CNGRBHWY14

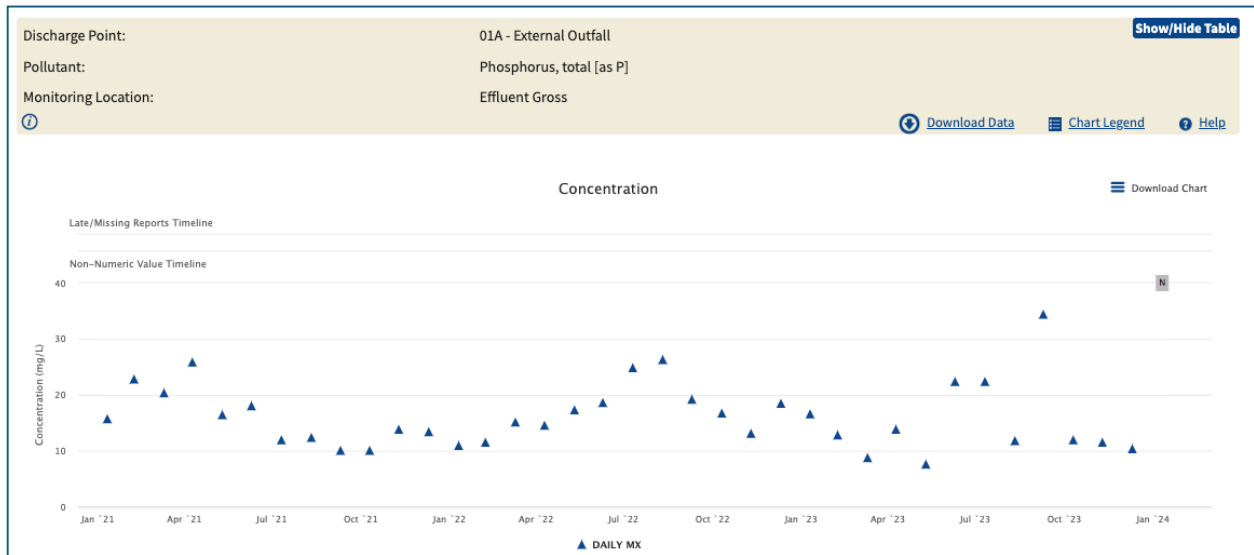
Discharges to Chemical Groups by Pounds (lb)						
Units: <input checked="" type="radio"/> Pounds <input type="radio"/> TWPE						
Chemical Group ↑	2020 DMR (lb/yr) ↓	2020 TRI (lb/yr) ↓	2021 DMR (lb/yr) ↓	2021 TRI (lb/yr) ↓	2022 DMR (lb/yr) ↓	
▶ AMMONIA	3,674,819	2,773	668,509	80	687	
▶ BOD, 5-day, 20 deg. C	45,562,093	N/A	23,448,267	N/A	19,291	
▶ Chemical oxygen demand (COD)	124,863,565	N/A	121,055,174	N/A	21,647	
▶ HYDROGEN SULFIDE	--	--	--	0	--	
▶ NITRATE COMPOUNDS	1,908,596	584,971	1,937,794	764,356	120,763	
▶ Nitrogen	7,723,587	N/A	2,272,653	N/A	255,425	
▶ Oil and grease	17,424,121	N/A	6,965,682	N/A	16,962	
▶ PERACETIC ACID	--	0	--	0	--	
▶ Phosphorus	3,837,521	N/A	860,698	N/A	95,173	
▶ Solids, total suspended	1,064,466,804	N/A	959,588,021	N/A	140,153	
▶ Total Kjeldahl Nitrogen	7,723,587	N/A	2,272,653	N/A	255,425	
▶ Total Residual Chlorine	83.85	N/A	104	N/A	130	

[Keystone Foods - Eufaula Division, LLC](#) is a Poultry Slaughtering and Processing facility located in Bakerhill, AL. The facility discharges pollutants into Sally Hole Branch, and an unnamed tributary to Sally Hole Branch, in the headwaters of the East Fork Choctawhatchee River. Keystone Foods is located in an area that has 1 State EJSscreen Index over the 80th percentile based on wastewater discharges and 3 U.S. EJ Indexes over the 80th percentile, including wastewater discharges.



The [NPDES permit](#)⁴ for this facility authorizes stormwater discharges from multiple outfalls and discharge of treated process and sanitary wastewater and digested biosolids associated with poultry processing operations prior to land application through a sprayfield system from two other outfalls – DSN 01A1 (which has no concentration or loading limits other than pH and Oil and Grease) and DSN 01AY (which has no concentration or loading limits besides a 827 lb./acre/yr. land application Total Nitrogen loading limit without any corresponding Phosphorus land application limit). This demonstrates why EPA needs to address land application-related discharges from MPP facilities in the final ELGs.

As a result of inadequate permit limits, ECHO [effluent records](#) show that this facility discharges high levels of multiple pollutants into surface waters. For example, in Outfall 01A, Total Phosphorus concentrations regularly exceed 10 mg/l.



ECHO [DMR and Loading records](#) show that this facility contributed high loads of pollutants to Sally Hole Branch, including significant loads of Cadmium, Copper, Lead, Nickel, Zinc (93,562 lbs./yr. – 2023), Nitrogen (62,464 lbs./yr. – 2023), Phosphorus (89,660 lbs./yr. – 2023), and TSS (1,309,741 lbs./yr. – 2023):

EQUITY GROUP EUFAULA DIVISION LLC
BAKERHILL, AL, 36016
FRS ID: 110042837972
NPDES ID(s): AL0071285, ALR10BBL7, ALR10BCM7, ALR10BDPO
TRI ID(s): 36027CHRN57MEL

Discharges to Chemical Groups by Pounds (lb)

Units: Pounds TWPE

Chemical Group ↑	2020 DMR (lb/yr) ↓	2020 TRI (lb/yr) ↓	2021 DMR (lb/yr) ↓	2021 TRI (lb/yr) ↓	2022 DMR (lb/yr) ↓
▶ AMMONIA	46,056	10,498	26,656	7,700	656,231
▶ BOD, 5-day, 20 deg. C	231,800	N/A	710,164	N/A	25,187,725
▶ CADMIUM AND CADMIUM COMPOUNDS	12.69	--	0	--	4,989
▶ COPPER AND COPPER COMPOUNDS	7,391	--	0	--	12,136
▶ LEAD AND LEAD COMPOUNDS	68.78	--	0	--	19,170
▶ NICKEL AND NICKEL COMPOUNDS	14.17	--	0	--	4,202
▶ NITRATE COMPOUNDS	56,429	5,647	34,974	7,620	867,080
▶ Nitrogen	129,492	N/A	91,337	N/A	5,933,155
▶ Oil and grease	63,340	N/A	36,038	N/A	57,731
▶ Phosphorus	102,776	N/A	69,071	N/A	3,844,254
▶ Solids, total suspended	5,827,085	N/A	329,193	N/A	788,349,280
▶ Total Kjeldahl Nitrogen	129,492	N/A	91,337	N/A	5,933,155
▶ ZINC AND ZINC COMPOUNDS	28,850	--	77,795	--	79,407

EPA’s ENVIRONMENTAL ASSESSMENT

Additionally, Wayne Farms LLC – Jack Facility and Pilgrim’s Pride Corp. – Enterprise were the subjects of study by EPA as part of its [Environmental Assessment](#)⁵ for the proposed rule. The evaluation found that, of the four point source contributors in the Double Bridges Creek watershed, these two MPP facilities contributed 99.6 percent and 99.5 percent of the Total Nitrogen and Total Phosphorus loads to the larger Double Bridges Creek watershed in 2021.

Table 3-5: Summary of Changes to Annual Pollutant Loadings Compared to the Baseline for Double Bridges Creek Watershed						
Facility	Discharge Type	Regulatory Option	Changes in Annual Pollutant Loadings (lbs/year)			
			TN	TP	TSS	CBOD
Pilgrim’s Pride Corp., Enterprise	Direct	1	-104,540	-50,881	-302,255	-15,143
		2	-104,540	-50,881	-302,255	-15,143
		3	-104,540	-50,881	-302,255	-15,143
Wayne Farms LLC-Enterprise Processing	Direct	1	-190,153	0	0	-33,329
		2	-190,153	0	0	-33,329
		3	-190,153	0	0	-33,329

Source: U.S. EPA Analysis, 2023

As shown on Table 3-5 from the Environmental Assessment, EPA’s proposed options will reduce nitrogen loading from both facilities, but Total Phosphorus, TSS, and CBOD loading would only be reduced at the Pilgrim’s Pride facility. Unfortunately, even EPA’s most protective proposed option – Option 3 – will not control the phosphorus or TSS coming from Wayne Farms LLC–Enterprise Processing. This indicates that EPA must establish more protective ELGs than currently proposed.

OTHER FACILITIES

Based on EPA’s map produced as part of this rulemaking, it appears there are additional MPP facilities in this watershed that discharge indirectly through wastewater treatment plants or via land application areas. Information about their pollution discharges is not available through ECHO, but these facilities are likely to be significant contributors of pollutants to surface waters. This category likely includes, for example:

- [Wayne Farms Ozark Feed Mill](#) in Ozark, AL
- [Pilgrim’s Pride Corp. – Midland City Feed Mill](#) in Midland City,
- [Pilgrim’s Pride Corp. of Delaw-](#) in Enterprise, AL
- [Keystone Foods, LLC - Banks Feed Mill](#) in Banks, AL
- [Harrell Milling Company](#) (ALG150058) in Hartford, AL
- Dothan Warehouse Freezer Storage in Dothan, AL
- Kelly Foods, A Division of Ben E. Keith Foods in Elba, AL
- Serv Cold in Troy, AL

ENDNOTES

¹ Geological Survey of Alabama, *Surface Quality Water Update of the Choctawhatchee, Pea, and Yellow Rivers in Southeast Alabama*, Open File Report 1804 (2018), available at: https://cpyrwma.alabama.gov/wp-content/uploads/2018/05/2018_March-28-Choc-Pea-Yellow-QW-with-figures.pdf. **Exhibit 1**

² ADEM, *NPDES Permit No. AL0028860 for Wayne Farms LLC – Jack Facility*, 1020 County Road 114, Jack AL (June 1, 2017), available at: <https://lf.adem.alabama.gov/WebLink/DocView.aspx?id=31505284&dbid=0>. **Exhibit 2**

³ ADEM, *NPDES Permit No. AL0003697 for Pilgrim’s Pride Corporation*, 4693 County Road 636, Enterprise, AL (July 1, 2017), available at: <https://lf.adem.alabama.gov/WebLink/DocView.aspx?id=28650174&dbid=0>. **Exhibit 3**

⁴ ADEM, *NPDES Permit No. AL0071285 for Keystone Foods – Eufaula Division, LLC*, 57 Melvin Clark Road, Bakerhill, AL (Jan. 1, 2024), available at: <https://lf.adem.alabama.gov/WebLink/DocView.aspx?id=105257912&dbid=0>. **Exhibit 4**

⁵ EPA, *Environmental Assessment for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category*, EPA-HQ-OW-2021-0736-0661 (Dec. 11, 2023), available at: <https://www.regulations.gov/document/EPA-HQ-OW-2021-0736-0661>.