EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	05/23/2017		
Media:	EPCRA		
Regulatory Program(s)	Section 313 – Toxic Release Inventory Reporting		
Company Name:	Land O'Lakes		
Facility Name:	Land O'Lakes Purina Feed LLC - Shreveport		
Facility Physical Location:	223 West 63rd Street		
	Shreveport, LA 71106		
Mailing address:	P.O. Box 6637		
	Shreveport, LA 71106		
County/Parish:	Caddo Parish		
Website:	www.purinamills.com		
Facility Contact:	Billy Gueringer	Regional EH&S Manager	
	btgueringer@landolakes.com		
FRS Number:	110000450235		
TRI Facility ID Number:	71106PRNML223WE		
NAICS:	311119 – Other Animal Food Manufacturing		
Personnel participating in the inspection:			
Billy Gueringer	Land O'Lakes	Regional EH&S Manager	(254) 722-6632
Todd Kennedy	Purina Animal Nutrition LLC	Senior Plant Manager	(318) 671-6362
Jennifer Hines	Purina Animal Nutrition LLC	Quality & Safety Supervisor	-
EPA Lead Inspector Signature/Date	David Riley		7/10/17 Date
Supervisor Signature/Date	Troy Stuckey		7/10/17 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

The purpose of this inspection is to evaluate compliance with Section 313 of the Emergency Planning & Community Right-to-Know Act (EPCRA) for the Land O'Lakes Purina Feed LLC – Shreveport facility located at 223 West 63rd Street, Shreveport, Louisiana, 71106. The EPCRA 313 program has not been delegated to any state, so compliance inspections are conducted by the EPA. While the Louisiana Department of Environmental Quality was notified of the inspection, a representative did not attend.

The inspection covered the 2011 through 2015 calendar years and was initiated following a review of the facility's reporting history in the Toxic Release Inventory (TRI) database, which is the repository for reports submitted pursuant to EPCRA § 313. There are three criteria that a facility must meet in order to be subject to reporting under EPCRA § 313:

1. The facility has 10 full-time employees or the equivalent of 20,000 hours worked by all full-time, part-time, and contract employees in that year
2. The facility is in a covered primary North American Industry Classification System (NAICS) code.
3. The facility manufactures, processes, or otherwise uses any listed toxic chemical above a specified threshold amount in a calendar year.

I arrived at the Land O'Lakes Purina Feed facility at 10:00am on May 23, 2017, for an announced inspection. I met with Billy Gueringer, Regional Environmental, Health, & Safety Manager; Todd Kennedy, Plant Manager; and Jennifer Hines, Quality & Safety Supervisor. I presented my EPA enforcement credentials to those individuals present and informed them that the scope of the inspection would involve a review of the facility's manufacturing process, its annual usage of reportable toxic chemicals, and any releases, transfers, or other waste management of those chemicals. Mr. Kennedy's business card is in Appendix 1.

FACILITY DESCRIPTION

The facility was built in 1953 by Ralston Purina for the manufacturing of livestock feed. In the late 1970s, manufacturing was split into pet food (Ralston) and livestock feed (Purina Mills), with this facility continuing to operate under the Purina Mills name. Purina Mills has had several owners since that time and was most recently purchased by Land O'Lakes in 2001. Currently, the company is designated as Purina Animal Nutrition LLC, a Division of Land O'Lakes. A facility map is contained in Appendix 2.

The facility is in NAICS code 311119 (Other Animal Food Manufacturing), which is a covered code for TRI reporting. The facility makes feed for beef & dairy cattle, horses, poultry, and other livestock. Raw materials such as wheat, soybean, and cottonseed byproducts; oats; grain; and

microingredients are received via truck and rail. They are ground, mixed, and formed into meal or pellets. Afterward, they are bagged or bulk loaded, and are distributed by truck. A process flow diagram is contained in Appendix 3.

Total operating hours is approximately 6,500 per year, yielding 135,000 tons of feed annually. The facility currently employs 48 people.

Section II - OBSERVATIONS

CHEMICALS SUBMITTED TO THE TRI DATABASE

For reporting years 2011, 2012, 2014, and 2015, the facility filed Form A certification statements for the TRI chemical categories copper compounds, manganese compounds, and/or zinc compounds (no forms were filed for 2013). Compounds in these categories are processed as microingredients for feed, and the annual reporting threshold for each category is 25,000 pounds. Usage calculations are performed in-house, and the facility prepared annual chemical usage spreadsheets for review during the inspection which are contained in Attachment 4.

The facility's usage calculations consider the weight percent of the elemental or "parent" form of the metal (copper, manganese, and zinc), as shown on the ingredient labels of their various trace mineral mixes; however, those labels also show that the metals are actually present in compound forms (such as copper sulfate, manganous oxide, and zinc sulfate). When a metal is in a compound form, the entire weight of the metal compound should be applied towards calculating annual usage. I utilized the facility's calculations to determine the corresponding amounts of metal compounds that were processed for each year. These calculations are shown in Appendix 5.

The table below shows a summary of metal compound usage for each year, based on my calculations. It also indicates whether or not a Form A was filed. Amounts that exceed the processing threshold are in bold type.

Chemical	2011 pounds used	2012 pounds used	2013 pounds used	2014 pounds used	2015 pounds used	Type of use
Copper compounds	16,113 Not filed	12,933 Not filed	12,821 Not filed	16,135 Filed	16,802 Not filed	Processed
Manganese compounds	**28,356** Filed	23,848 Filed	24,042 Not filed	**30,193** Filed	**30,440** Filed	Processed
Zinc compounds	**33,183** Filed	**26,000** Not filed	**28,170** Not filed	**38,294** Filed	**38,229** Filed	Processed

OTHER CHEMICALS USED BY THE FACILITY

Selenium compounds were processed for each year covered by the inspection, but annual usage did not exceed the reporting threshold of 25,000 lbs.

Chemical	2011 pounds used	2012 pounds used	2013 pounds used	2014 pounds used	2015 pounds used	Type of use
Selenium compounds	15	126	129	152	166	Processed

CERTIFICATION DATES OF FORMS

Forms for each calendar year are due by July 1st of the following year. An Envirofacts database query of the dates on which the facility filed its forms is contained in Appendix 6.

Year	Chemical	Original postmark date	Comment
2011	Manganese compounds, zinc compounds	June 27, 2012	On-time
2012	Manganese compounds	June 29, 2013	On-time
2013	none	Not applicable	Not applicable
2014	Copper compounds, manganese compounds, zinc compounds	June 22, 2015	On-time
2015	Manganese compounds, zinc compounds	June 30, 2016	On-time

FORM A CERTIFICATION STATEMENTS

For reporting years 2011, 2012, 2014, and 2015, the facility submitted Form A certification statements, rather than Form R reports. EPCRA § 313 does not consider copper compounds, manganese compounds, or zinc compounds to be "persistent, bioaccumulative, and toxic"; therefore, a facility is able to submit a simplified Form A, instead of a Form R, provided that the following two criteria are met for a given year:

- The facility manufactures/processes/otherwise uses less than 1,000,000 lbs. of that chemical.
- The annual reportable amount (ARA) for that chemical is less than 500 lbs. The ARA is the combined total quantities released at the facility, treated at the facility, recovered at the facility as a result of recycling operations, combusted for the purpose of energy recovery at the facility, and amounts transferred from the facility to off-site locations for the purpose of recycling, energy recovery, treatment, and/or disposal. These quantities correspond to the sum of amounts reportable on the Form R, Part II column B of section 8, data elements 8.1 (quantity released), 8.2 (quantity used for energy recovery on-site), 8.3 (quantity used for

energy recovery off-site), 8.4 (quantity recycled onsite), 8.5 (quantity recycled off-site), 8.6 (quantity treated on-site), and 8.7 (quantity treated off-site).

By signing the Form A, the facility is certifying that the chemical meets those two criteria, and records supporting this must be retained for a period of three years from the date of submission. The facility did not have these records available at the time of the inspection; however, releases and other elements were discussed. The facility did follow up with information related to production amounts and waste management, which is contained in Appendix 7. The applicable data elements are discussed below. Note: while annual usage calculations for metal compounds consider the entire weight of the compound, the releases, transfers, and other waste management consider only the weight of the elemental metal.

Data Element 8.1 – Quantity Released: The facility provided information on total amounts of waste material transferred off-site for disposal, as well as product manufactured, for each year. Using this information, the inspector estimated the amounts of elemental metal transferred off-site for disposal for each year. These calculations assume that the percentages of reportable chemicals in each year's waste are equivalent to the percentages in each year's manufactured product. The calculations are contained in Appendix 8.

Year	Metal	Amount sent off-site for disposal (pounds)
2011	Copper	1
	Manganese	4
	Zinc	5
2012	Copper	2
	Manganese	6
	Zinc	6
2013	Copper	5
	Manganese	16
	Zinc	19
2014	Copper	16
	Manganese	50
	Zinc	63
2015	Copper	7
	Manganese	20
	Zinc	25

Data Element 8.4 - Quantity Recycled Onsite: Dust is controlled through the use of baghouses (throughout the facility) and cyclones (during pelleting), and the feed dust that is collected is automatically returned for further processing. According to the EPA guidance document *Interpretations of Waste Management Activities: Recycling, Combustion for Energy Recovery, Treatment for Destruction, Waste Stabilization and Release* (Revised August 1999), the material that is returned to the process is recycled. The activity is defined as follows:

> "Recycling" is (1) the recovery for reuse of a toxic chemical from a gaseous, aerosol, aqueous, liquid, or solid stream...
>
> "Recovery" is the act of extracting or removing the toxic chemical from a waste stream and includes: (1) the reclamation of the toxic chemical from a stream that entered a waste treatment or pollution control device or process where destruction of the stream or destruction or removal of certain constituents of the stream occurs (including air pollution control devices or processes, wastewater treatment or control devices or processes, Federal or State permitted treatment or control devices or processes, and other types of treatment or control devices or processes)...

The document then presents the following example, which is comparable to what is occurring at the facility:

> For example, a baghouse removes chemicals from an airstream prior to discharge. Some of the chemicals, including certain metal compounds, are recovered from the baghouse and returned to the process for "processing." The quantity of the chemicals recovered from the baghouse and returned to the process would not be considered integral to production and would be reportable as "recycled" because the baghouse prepares the stream containing the toxic chemical for release.

The pertinent pages from this guidance document are contained in Appendix 9.

The facility did not provide an estimate of the amount of dust that is returned to the process for each year, so I was not able to determine the amounts of reportable chemicals that were recycled.

A tour of the facility focused on the raw materials receiving area, mixing and production lines, pelleting, packaging, and loading areas.

Section III – AREAS OF CONCERN

1. The facility processes metal compounds, but the annual usage calculations consider only the weight of the elemental metal. Usage calculations for metal compounds should consider the weight of the entire metal compound, while calculations for releases, transfers, etc. consider only the elemental metal.

2. The facility did not retain records justifying the use of the Form A certification statement.

The facility staff were very cooperative throughout the discussion and tour. The inspection was concluded at approximately 12:00pm.

Section IV – FOLLOW UP

After exiting the facility on May 23rd, Mr. Kennedy provided an email with numbers for annual production and waste disposal, plus a general summary of dust control measures. Additional emails were provided on June 27th, clarifying the facility's use of baghouses and cyclones.

Section V – LIST OF APPENDICES

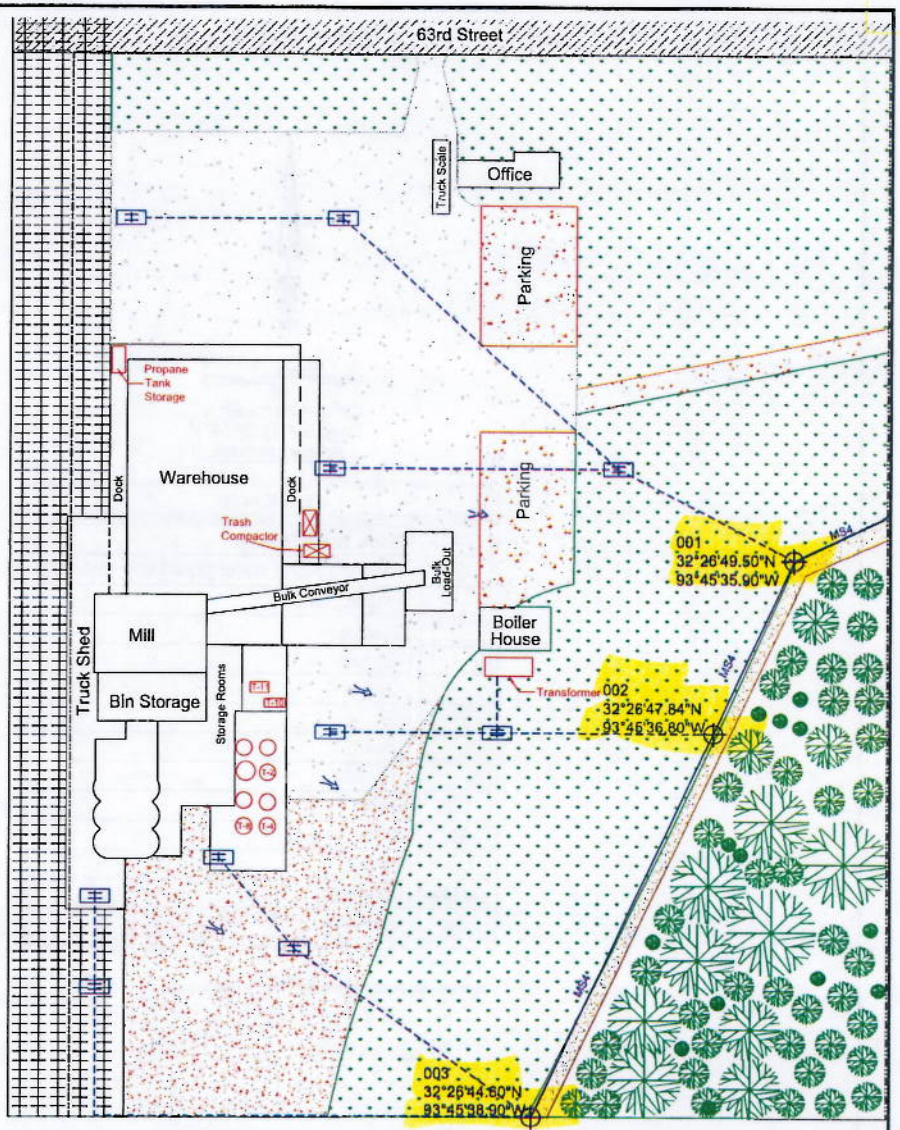
Appendix 1 – Business Card
Appendix 2 – Facility Map
Appendix 3 – Process Flow Diagram
Appendix 4 – Facility's Chemical Usage Calculations
Appendix 5 – Inspector's Chemical Usage Calculations
Appendix 6 – Certification Dates of Forms
Appendix 7 – Facility Emails
Appendix 8 – Inspector's Release Calculations
Appendix 9 – Recycling Excerpts from EPA Guidance

Appendix 1
Business Card

Todd Kennedy
Sr. Plant Manager

Purina Animal Nutrition LLC
223 W. 63rd Street, Shreveport, LA 71106
Office: 318.671.6362 | Cell: 601.504.7519 | Fax: 651.234.8408
ttkennedy@landolakes.com

Appendix 2
Facility Map



Lat: 32° 26' 49.53" N
Long: 93° 45' 36.59" W
Approx. 14 Acres

LEGEND	
	Storm Water Runoff
	Sampling Storm Water Outfall 001, 002, 003
	Property Line
	Building
	Asphalt
	Concrete
	Dirt
	Grass
	Asphalt
	Drain
	Trees
	Tanks
	Railroad
	Dumpster

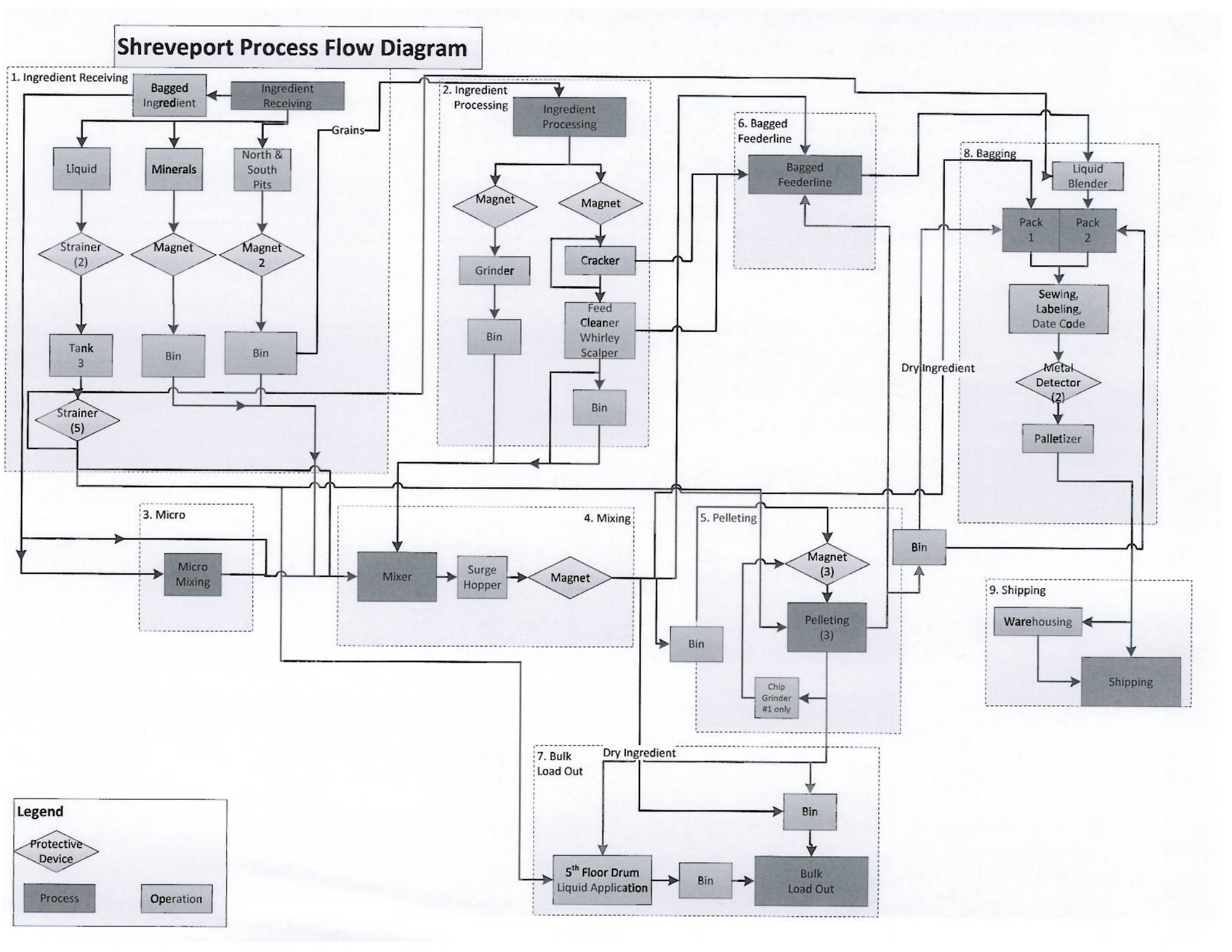
NOTES:
Receiving body of water; Pierre Bayou.

Purina Animal Nutrition, LLC
223 W 63rd St.
Shreveport, LA 71106

Prepared by:
AARC Environmental—Southeast LLC
Environmental, Occupational Health & Safety Solutions

Date: 12/20/2016
Revised By: HMumtaz
Map: Storm Water
Drawn By: ND
Revision: 1

Appendix 3
Process Flow Diagram


Shreveport Process Flow Diagram
1. Ingredient Receiving
Bagged Ingredient
Ingredient Receiving
Liquid
Minerals
North & South Pits
Grains
Strainer (2)
Magnet
Magnet 2
Tank 3
Bin
Bin
Strainer (5)
2. Ingredient Processing
Ingredient Processing
Magnet
Magnet
Grinder
Cracker
Bin
Feed Cleaner Whirley Scalper
Bin
6. Bagged Feederline
Bagged Feederline
8. Bagging
Liquid Blender
Pack 1
Pack 2
Sewing, Labeling, Date Code
Dry Ingredient
Metal Detector (2)
Palletizer
3. Micro
Micro Mixing
4. Mixing
Mixer
Surge Hopper
Magnet
5. Pelleting
Magnet (3)
Bin
Pelleting (3)
Chip Grinder #1 only
Bin
9. Shipping
Warehousing
Shipping
7. Bulk Load Out
Dry Ingredient
Bin
5th Floor Drum Liquid Application
Bin
Bulk Load Out
Legend
Protective Device
Process
Operation

Appendix 4
Facility's Chemical Usage Calculations

Purina Animal Nutrition
Shreveport, LA
Premix usage 2011-2015

2011					
Product Name	TRI Chemical	Weight %	Manf., Proc., OW Used (M, P, OWU)	Amount of Product Used (LBS)	Amount of TRI Chemical Used (LBS)
Zinc sulfate	Zinc	35.5		600	213
Zinc oxide	Zinc	72.0		1,200	864
Copper sulfate	Copper	25.2		4,650	1171.8
Magnesium Oxide	Manganese	60		1,350	810
Selenium	Selenium	0.06		11,600	6.69
Dairy Premix	Zinc	11.00		10,300	1,133
Dairy Premix	Manganese	8.20		10,300	844.6
Dairy Premix	Copper	2.50		10,300	257.5
Horse trace premix	Zinc	12.8		90,000	11,520
Horse trace premix	Manganese	12.8		90,000	11,520
Horse trace premix	Copper	3.2		90,000	2,880
Trace Minerals A	Zinc	12.95		750	97.125
Trace Minerals A	Manganese	17.5		750	131.25
Trace Minerals A	Copper	1.25		750	9.375
Trace Minerals G	Zinc	9.60		6,300	604.8
Trace Minerals G	Manganese	9.60		6,300	604.8
Trace Minerals G	Copper	3.48		6,300	219.24
Sheep trace minerals	Zinc	20		5,300	1060
Sheep trace minerals	Manganese	16		5,300	848
Beef Mineral Premix	Zinc	17.5		26,000	4,550
Beef Mineral Premix	Manganese	10.0		26,000	2,600
Beef Mineral Premix	Copper	5.20		26,000	6,136
Swine Mineral Premix	Zinc	14.71		750	110.325
Swine Mineral Premix	Manganese	4.12		750	30.9
Swine Mineral Premix	Copper	2.36		750	17.7

I attest that the above information it true and correct to the best of my knowledge:

Todd K

Todd Kennedy
Plant Manager
Purina Animal Nutrition
Shreveport, LA

5/23/17
Date

Purina Animal Nutrition
Shreveport, LA
Premix usage 2011-2015

2012					
Product Name	TRI Chemical	Weight %	Manf., Proc., OW Used (M, P, OWU)	Amount of Product Used (LBS)	Amount of TRI Chemical Used (LBS)
Zinc sulfate	Zinc	35.5		400	142
Zinc oxide	Zinc	72.0		700	504
Copper sulfate	Copper	25.2		4,300	1083.6
Magnesium Oxide	Manganese	60		1,050	630
Selenium	Selenium	0.06		96,000	57.6
Dairy Premix	Zinc	11.00		7,150	786.5
Dairy Premix	Manganese	8.20		7,150	586.3
Dairy Premix	Copper	2.50		7,150	178.75
Horse trace premix	Zinc	12.8		80,000	10,240
Horse trace premix	Manganese	12.8		80,000	10,240
Horse trace premix	Copper	3.2		80,000	2,560
Trace Minerals A	Zinc	12.95		9,300	1204.35
Trace Minerals A	Manganese	17.5		9,300	1627.5
Trace Minerals A	Copper	1.25		9,300	116.25
Trace Minerals G	Zinc	9.60		3,750	360
Trace Minerals G	Manganese	9.60		3,750	360
Trace Minerals G	Copper	3.48		3,750	130.5
Sheep trace minerals	Zinc	20		4,850	970
Sheep trace minerals	Manganese	16		4,850	776
Beef Mineral Premix	Zinc	17.5		14,750	2,581.25
Beef Mineral Premix	Manganese	10.0		14,750	1,475
Beef Mineral Premix	Copper	5.20		14,750	767
Swine Mineral Premix	Zinc	14.71		1,000	147.1
Swine Mineral Premix	Manganese	4.12		1,000	41.2
Swine Mineral Premix	Copper	2.36		1,000	23.6

I attest that the above information it true and correct to the best of my knowledge:

Todd Kennedy
Plant Manager
Purina Animal Nutrition
Shreveport, LA

5/23/17
Date

Purina Animal Nutrition
Shreveport, LA
Premix usage 2011-2015

2013					
Product Name	TRI Chemical	Weight %	Manf., Proc., OW Used (M, P, OWU)	Amount of Product Used (LBS)	Amount of TRI Chemical Used (LBS)
Zinc sulfate	Zinc	35.5		1,100	390.5
Zinc oxide	Zinc	72.0		1,750	1260
Copper sulfate	Copper	25.2		3,950	995.4
Magnesium Oxide	Manganese	60		950	570
Selenium	Selenium	0.06		98,000	58.8
Dairy Premix	Zinc	11.00		8,500	935
Dairy Premix	Manganese	8.20		8,500	143.5
Dairy Premix	Copper	2.50		8,500	212.5
Horse trace premix	Zinc	12.8		72,000	9,216
Horse trace premix	Manganese	12.8		72,000	9,216
Horse trace premix	Copper	3.2		72,000	2,304
Trace Minerals A	Zinc	12.95		9,500	1230.25
Trace Minerals A	Manganese	17.5		9,500	1662.5
Trace Minerals A	Copper	1.25		9,500	118.75
Trace Minerals G	Zinc	9.60		6,300	604.8
Trace Minerals G	Manganese	9.60		6,300	604.8
Trace Minerals G	Copper	3.48		6,300	219.24
Sheep trace minerals	Zinc	20		4,650	930
Sheep trace minerals	Manganese	16		4,650	744
Beef Mineral Premix	Zinc	17.5		17,000	2,975
Beef Mineral Premix	Manganese	10.0		17,000	1,700
Beef Mineral Premix	Copper	5.20		17,000	884
Swine Mineral Premix	Zinc	14.71		900	132.39
Swine Mineral Premix	Manganese	4.12		900	37.08
Swine Mineral Premix	Copper	2.36		900	21.24

I attest that the above information it true and correct to the best of my knowledge:

Todd Kennedy 5/23/17
Todd Kennedy Date
Plant Manager
Purina Animal Nutrition
Shreveport, LA

Purina Animal Nutrition
Shreveport, LA
Premix usage 2011-2015

2014					
Product Name	TRI Chemical	Weight %	Manf., Proc., OW Used (M, P, OWU)	Amount of Product Used (LBS)	Amount of TRI Chemical Used (LBS)
Zinc sulfate	Zinc	35.5		2,050	727.75
Zinc oxide	Zinc	72.0		4,100	2952
Copper sulfate	Copper	25.2		5,800	1461.6
Magnesium Oxide	Manganese	60		1,700	1020
Selenium	Selenium	0.06		116,000	69.6
Dairy Premix	Zinc	11.00		21,000	2310
Dairy Premix	Manganese	8.20		21,000	1722
Dairy Premix	Copper	2.50		21,000	525
Horse trace premix	Zinc	12.8		74,000	9472
Horse trace premix	Manganese	12.8		74,000	9472
Horse trace premix	Copper	3.2		74,000	2368
Trace Minerals A	Zinc	12.95		13,750	1780.63
Trace Minerals A	Manganese	17.5		13,750	2406.25
Trace Minerals A	Copper	1.25		13,750	171.89
Trace Minerals G	Zinc	9.60		3,250	312
Trace Minerals G	Manganese	9.60		3,250	312
Trace Minerals G	Copper	3.48		3,250	113.1
Sheep trace minerals	Zinc	20		5,000	1000
Sheep trace minerals	Manganese	16		5,000	800
Beef Mineral Premix	Zinc	17.5		25,000	4,375
Beef Mineral Premix	Manganese	10.0		25,000	2,500
Beef Mineral Premix	Copper	5.20		25,000	1,300
Swine Mineral Premix	Zinc	14.71		800	117.68
Swine Mineral Premix	Manganese	4.12		800	32.95
Swine Mineral Premix	Copper	2.36		800	18.88

I attest that the above information it true and correct to the best of my knowledge:

Todd Kennedy — 5/23/17
Date

Plant Manager
Purina Animal Nutrition
Shreveport, LA

Purina Animal Nutrition
Shreveport, LA
Premix usage 2011-2015

2015					
Product Name	TRI Chemical	Weight %	Manf., Proc., OW Used (M, P, OWU)	Amount of Product Used (LBS)	Amount of TRI Chemical Used (LBS)
Zinc sulfate	Zinc	35.5		2,050	727.75
Zinc oxide	Zinc	72.0		5,100	3672
Copper sulfate	Copper	25.2		6,850	1726.2
Magnesium Oxide	Manganese	60		3,300	1980
Selenium	Selenium	0.06		126,000	75.6
Dairy Premix	Zinc	11.00		15,500	1705
Dairy Premix	Manganese	8.20		15,500	1271
Dairy Premix	Copper	2.50		15,500	387.5
Horse trace premix	Zinc	12.8		78,000	9,984
Horse trace premix	Manganese	12.8		78,000	9,984
Horse trace premix	Copper	3.2		78,000	2,496
Trace Minerals A	Zinc	12.95		10,000	1295
Trace Minerals A	Manganese	17.5		10,000	1750
Trace Minerals A	Copper	1.25		10,000	125
Trace Minerals G	Zinc	9.60		4,450	427.2
Trace Minerals G	Manganese	9.60		4,450	427.2
Trace Minerals G	Copper	3.48		4,450	154.86
Sheep trace minerals	Zinc	20		5,500	1100
Sheep trace minerals	Manganese	16		5,500	880
Beef Mineral Premix	Zinc	17.5		25,000	4,375
Beef Mineral Premix	Manganese	10.0		25,000	2,500
Beef Mineral Premix	Copper	5.20		25,000	1,300
Swine Mineral Premix	Zinc	14.71		1050	154.455
Swine Mineral Premix	Manganese	4.12		1050	43.26
Swine Mineral Premix	Copper	2.36		1050	24.78

I attest that the above information it true and correct to the best of my knowledge:

Todd Kennedy — 5/23/17

Todd Kennedy
Plant Manager
Purina Animal Nutrition
Shreveport, LA

Date

Appendix 5
Inspector's Chemical Usage Calculations

Based on parent metal = no reports. Based on metal compound = Mn compounds & Zn compounds exceed threshold.

RY	Product Name	Chemical Category Name	Chemical Category Number	Conc. of parent metal[a]	Lbs. of product used	Lbs. of Parent Metal Used	Total Lbs. of Parent Metal Used	MW of Parent Metal	MW of Metal Comp. in Column C[b]	Lbs. of Metal Comp. Used	Total Lbs. of Metal Comp. Used
2011	Zinc sulfate	zinc compound (ZnSO4)	N982	35.50%	600	213		65.38	161.47	526	
	Zinc oxide	zinc compound (ZnO)	N982	72.00%	1,200	864		65.38	81.38	1,075	
	Dairy premix	zinc compound (ZnSO4)	N982	11.00%	10,300	1,133		65.38	161.47	2,798	
	Horse trace premix	zinc compound (ZnO)	N982	12.80%	90,000	11,520		65.38	81.38	14,339	
	Trace minerals A	zinc compound (ZnO)	N982	12.95%	750	97	**20,152**	65.38	81.38	121	**33,183**
	Trace minerals G	zinc compound (ZnSO4, Zn?, ZnO)	N982	9.60%	6,300	605		65.38	161.47	1,494	
	Sheep trace minerals	zinc compound (ZnO, ZnSO4)	N982	20.00%	5,300	1,060		65.38	81.38	1,319	
	Beef mineral premix	zinc compound (ZnSO4)	N982	17.50%	26,000	4,550		65.38	161.47	11,237	
	Swine mineral premix	zinc compound (ZnSO4)	N982	14.71%	750	110		65.38	161.47	272	
	Copper sulfate	copper compound (CuSO4)	N100	25.20%	4,650	1,172		63.55	159.61	2,943	
	Dairy premix	copper compound (CuSO4)	N100	2.50%	10,300	258		63.55	159.61	647	
	Horse trace premix	copper compound (CuSO4)	N100	3.20%	90,000	2,880		63.55	159.61	7,234	
	Trace minerals A	copper compound (CuSO4)	N100	1.25%	750	9	**5,890**	63.55	159.61	24	**16,113**
	Trace minerals G	copper compound (basic CuCl, CuSO4, Cu?, CuO)	N100	3.20%	6,300	202		63.55	213.56	678	
	Beef mineral premix	copper compound (basic CuCl)	N100	5.20%	26,000	1,352		63.55	213.56	4,544	
	Swine mineral premix	copper compound (CuSO4, basic CuCl)	N100	2.36%	750	18		63.55	159.61	44	
	Manganous oxide	manganese compound (MnO)	N450	60.00%	1,350	810		54.94	70.94	1,046	
	Dairy premix	manganese compound (MnSO4)	N450	8.20%	10,300	845		54.94	151.00	2,321	
	Horse trace premix	manganese compound (MnO)	N450	12.80%	90,000	11,520		54.94	70.94	14,875	
	Trace minerals A	manganese compound (MnO)	N450	17.50%	750	131	**17,390**	54.94	70.94	169	**28,356**
	Trace minerals G	manganese compound (MnSO4, Mn?, MnO)	N450	9.60%	6,300	605		54.94	151.00	1,662	
	Sheep trace minerals	manganese compound (MnO, MnSO4)	N450	16.00%	5,300	848		54.94	70.94	1,095	
	Beef mineral premix	manganese compound (MnSO4)	N450	10.00%	26,000	2,600		54.94	151.00	7,146	
	Swine mineral premix	manganese compound (MnO, MnSO4)	N450	4.12%	750	31		54.94	70.94	40	
	Selenium	selenuim compound (Na_2SeO_3)	N725	0.06%	11,600	7	**7**	78.96	172.95	15	**15**

a - As shown on ingredient label.

b - When more than one compound is listed for a product, the first compound listed is used.

To determine amount of metal compound used, divide the molecular weight (MW) of the metal compound by the MW of the metal, then multiply by "Lbs. of Parent Metal Used".

Based on parent metal = no reports. Based on metal compound = Zn compounds exceed threshold.

RY	Product Name	Chemical Category Name	Chemical Category Number	Conc. of parent metal[a]	Lbs. of product used	Lbs. of Parent Metal Used	Total Lbs. of Parent Metal Used	MW of Parent Metal	MW of Metal Comp. in Column C[b]	Lbs. of Metal Comp. Used	Total Lbs. of Metal Comp. Used
2012	Zinc sulfate	zinc compound (ZnSO4)	N982	35.50%	400	142		65.38	161.47	351	
	Zinc oxide	zinc compound (ZnO)	N982	72.00%	700	504		65.38	81.38	627	
	Dairy premix	zinc compound (ZnSO4)	N982	11.00%	7,150	787		65.38	161.47	1,942	
	Horse trace premix	zinc compound (ZnO)	N982	12.80%	80,000	10,240		65.38	81.38	12,746	
	Trace minerals A	zinc compound (ZnO)	N982	12.95%	9,300	1,204	**16,935**	65.38	81.38	1,499	**26,000**
	Trace minerals G	zinc compound (ZnSO4, Zn?, ZnO)	N982	9.60%	3,750	360		65.38	161.47	889	
	Sheep trace minerals	zinc compound (ZnO, ZnSO4)	N982	20.00%	4,850	970		65.38	81.38	1,207	
	Beef mineral premix	zinc compound (ZnSO4)	N982	17.50%	14,750	2,581		65.38	161.47	6,375	
	Swine mineral premix	zinc compound (ZnSO4)	N982	14.71%	1,000	147		65.38	161.47	363	
	Copper sulfate	copper compound (CuSO4)	N100	25.20%	4,300	1,084		63.55	159.61	2,722	
	Dairy premix	copper compound (CuSO4)	N100	2.50%	7,150	179		63.55	159.61	449	
	Horse trace premix	copper compound (CuSO4)	N100	3.20%	80,000	2,560		63.55	159.61	6,430	
	Trace minerals A	copper compound (CuSO4)	N100	1.25%	9,300	116	**4,849**	63.55	159.61	292	**12,933**
	Trace minerals G	copper compound (basic CuCl, CuSO4, Cu?, CuO)	N100	3.20%	3,750	120		63.55	213.56	403	
	Beef mineral premix	copper compound (basic CuCl)	N100	5.20%	14,750	767		63.55	213.56	2,578	
	Swine mineral premix	copper compound (CuSO4, basic CuCl)	N100	2.36%	1,000	24		63.55	159.61	59	
	Manganous oxide	manganese compound (MnO)	N450	60.00%	1,050	630		54.94	70.94	814	
	Dairy premix	manganese compound (MnSO4)	N450	8.20%	7,150	586		54.94	151.00	1,611	
	Horse trace premix	manganese compound (MnO)	N450	12.80%	80,000	10,240		54.94	70.94	13,223	
	Trace minerals A	manganese compound (MnO)	N450	17.50%	9,300	1,628	**15,736**	54.94	70.94	2,102	**23,848**
	Trace minerals G	manganese compound (MnSO4, Mn?, MnO)	N450	9.60%	3,750	360		54.94	151.00	989	
	Sheep trace minerals	manganese compound (MnO, MnSO4)	N450	16.00%	4,850	776		54.94	70.94	1,002	
	Beef mineral premix	manganese compound (MnSO4)	N450	10.00%	14,750	1,475		54.94	151.00	4,054	
	Swine mineral premix	manganese compound (MnO, MnSO4)	N450	4.12%	1,000	41		54.94	70.94	53	
	Selenium	selenuim compound (Na_2SeO_3)	N725	0.06%	96,000	58	**58**	78.96	172.95	126	**126**

a - As shown on ingredient label.

b - When more than one compound is listed for a product, the first compound listed is used.

To determine amount of metal compound used, divide the molecular weight (MW) of the metal compound by the MW of the metal, then multiply by "Lbs. of Parent Metal Used".

Based on parent metal = no reports. Based on metal compound = Mn compounds exceed threshold.

RY	Product Name	Chemical Category Name	Chemical Category Number	Conc. of parent metal[a]	Lbs. of product used	Lbs. of Parent Metal Used	Total Lbs. of Parent Metal Used	MW of Parent Metal	MW of Metal Comp. in Column C[b]	Lbs. of Metal Comp. Used	Total Lbs. of Metal Comp. Used
2013	Zinc sulfate	zinc compound (ZnSO4)	N982	35.50%	1,100	391		65.38	161.47	964	
	Zinc oxide	zinc compound (ZnO)	N982	72.00%	1,750	1,260		65.38	81.38	1,568	
	Dairy premix	zinc compound (ZnSO4)	N982	11.00%	8,500	935		65.38	161.47	2,309	
	Horse trace premix	zinc compound (ZnO)	N982	12.80%	72,000	9,216		65.38	81.38	11,471	
	Trace minerals A	zinc compound (ZnO)	N982	12.95%	9,500	1,230	**17,674**	65.38	81.38	1,531	**28,170**
	Trace minerals G	zinc compound (ZnSO4, Zn?, ZnO)	N982	9.60%	6,300	605		65.38	161.47	1,494	
	Sheep trace minerals	zinc compound (ZnO, ZnSO4)	N982	20.00%	4,650	930		65.38	81.38	1,158	
	Beef mineral premix	zinc compound (ZnSO4)	N982	17.50%	17,000	2,975		65.38	161.47	7,347	
	Swine mineral premix	zinc compound (ZnSO4)	N982	14.71%	900	132		65.38	161.47	327	
	Copper sulfate	copper compound (CuSO4)	N100	25.20%	3,950	995		63.55	159.61	2,500	
	Dairy premix	copper compound (CuSO4)	N100	2.50%	8,500	213		63.55	159.61	534	
	Horse trace premix	copper compound (CuSO4)	N100	3.20%	72,000	2,304		63.55	159.61	5,787	
	Trace minerals A	copper compound (CuSO4)	N100	1.25%	9,500	119	**4,737**	63.55	159.61	298	**12,821**
	Trace minerals G	copper compound (basic CuCl, CuSO4, Cu?, CuO)	N100	3.20%	6,300	202		63.55	213.56	678	
	Beef mineral premix	copper compound (basic CuCl)	N100	5.20%	17,000	884		63.55	213.56	2,971	
	Swine mineral premix	copper compound (CuSO4, basic CuCl)	N100	2.36%	900	21		63.55	159.61	53	
	Manganous oxide	manganese compound (MnO)	N450	60.00%	950	570		54.94	70.94	736	
	Dairy premix	manganese compound (MnSO4)	N450	8.20%	8,500	697		54.94	151.00	1,916	
	Horse trace premix	manganese compound (MnO)	N450	12.80%	72,000	9,216		54.94	70.94	11,900	
	Trace minerals A	manganese compound (MnO)	N450	17.50%	9,500	1,663	**15,231**	54.94	70.94	2,147	**24,042**
	Trace minerals G	manganese compound (MnSO4, Mn?, MnO)	N450	9.60%	6,300	605		54.94	151.00	1,662	
	Sheep trace minerals	manganese compound (MnO, MnSO4)	N450	16.00%	4,650	744		54.94	70.94	961	
	Beef mineral premix	manganese compound (MnSO4)	N450	10.00%	17,000	1,700		54.94	151.00	4,673	
	Swine mineral premix	manganese compound (MnO, MnSO4)	N450	4.12%	900	37		54.94	70.94	48	
	Selenium	selenuim compound (Na_2SeO_3)	N725	0.06%	98,000	59	**59**	78.96	172.95	129	**129**

a - As shown on ingredient label.

b - When more than one compound is listed for a product, the first compound listed is used.

To determine amount of metal compound used, divide the molecular weight (MW) of the metal compound by the MW of the metal, then multiply by "Lbs. of Parent Metal Used".

Based on parent metal = no reports. Based on metal compound = Mn compounds & Zn compounds exceed threshold.

RY	Product Name	Chemical Category Name	Chemical Category Number	Conc. of parent metal[a]	Lbs. of product used	Lbs. of Parent Metal Used	Total Lbs. of Parent Metal Used	MW of Parent Metal	MW of Metal Comp. in Column C[b]	Lbs. of Metal Comp. Used	Total Lbs. of Metal Comp. Used
2014	Zinc sulfate	zinc compound (ZnSO4)	N982	35.50%	2,050	728		65.38	161.47	1,797	
	Zinc oxide	zinc compound (ZnO)	N982	72.00%	4,100	2,952		65.38	81.38	3,674	
	Dairy premix	zinc compound (ZnSO4)	N982	11.00%	21,000	2,310		65.38	161.47	5,705	
	Horse trace premix	zinc compound (ZnO)	N982	12.80%	74,000	9,472		65.38	81.38	11,790	
	Trace minerals A	zinc compound (ZnO)	N982	12.95%	13,750	1,781	**23,047**	65.38	81.38	2,216	**38,294**
	Trace minerals G	zinc compound (ZnSO4, Zn?, ZnO)	N982	9.60%	3,250	312		65.38	161.47	771	
	Sheep trace minerals	zinc compound (ZnO, ZnSO4)	N982	20.00%	5,000	1,000		65.38	81.38	1,245	
	Beef mineral premix	zinc compound (ZnSO4)	N982	17.50%	25,000	4,375		65.38	161.47	10,805	
	Swine mineral premix	zinc compound (ZnSO4)	N982	14.71%	800	118		65.38	161.47	291	
	Copper sulfate	copper compound (CuSO4)	N100	25.20%	5,800	1,462		63.55	159.61	3,671	
	Dairy premix	copper compound (CuSO4)	N100	2.50%	21,000	525		63.55	159.61	1,319	
	Horse trace premix	copper compound (CuSO4)	N100	3.20%	74,000	2,368		63.55	159.61	5,948	
	Trace minerals A	copper compound (CuSO4)	N100	1.25%	13,750	172	**5,949**	63.55	159.61	432	**16,135**
	Trace minerals G	copper compound (basic CuCl, CuSO4, Cu?, CuO)	N100	3.20%	3,250	104		63.55	213.56	350	
	Beef mineral premix	copper compound (basic CuCl)	N100	5.20%	25,000	1,300		63.55	213.56	4,369	
	Swine mineral premix	copper compound (CuSO4, basic CuCl)	N100	2.36%	800	19		63.55	159.61	47	
	Manganous oxide	manganese compound (MnO)	N450	60.00%	1,700	1,020		54.94	70.94	1,317	
	Dairy premix	manganese compound (MnSO4)	N450	8.20%	21,000	1,722		54.94	151.00	4,733	
	Horse trace premix	manganese compound (MnO)	N450	12.80%	74,000	9,472		54.94	70.94	12,231	
	Trace minerals A	manganese compound (MnO)	N450	17.50%	13,750	2,406	**18,265**	54.94	70.94	3,107	**30,193**
	Trace minerals G	manganese compound (MnSO4, Mn?, MnO)	N450	9.60%	3,250	312		54.94	151.00	858	
	Sheep trace minerals	manganese compound (MnO, MnSO4)	N450	16.00%	5,000	800		54.94	70.94	1,033	
	Beef mineral premix	manganese compound (MnSO4)	N450	10.00%	25,000	2,500		54.94	151.00	6,871	
	Swine mineral premix	manganese compound (MnO, MnSO4)	N450	4.12%	800	33		54.94	70.94	43	
	Selenium	selenuim compound (Na_2SeO_3)	N725	0.06%	116,000	70	**70**	78.96	172.95	152	**152**

a - As shown on ingredient label.

b - When more than one compound is listed for a product, the first compound listed is used.

To determine amount of metal compound used, divide the molecular weight (MW) of the metal compound by the MW of the metal, then multiply by "Lbs. of Parent Metal Used".

Based on parent metal = no reports. Based on metal compound = Mn compounds & Zn compounds exceed threshold.

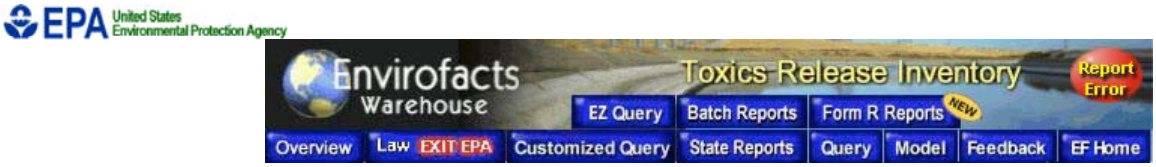
RY	Product Name	Chemical Category Name	Chemical Category Number	Conc. of parent metal[a]	Lbs. of product used	Lbs. of Parent Metal Used	Total Lbs. of Parent Metal Used	MW of Parent Metal	MW of Metal Comp. in Column C[b]	Lbs. of Metal Comp. Used	Total Lbs. of Metal Comp. Used
2015	Zinc sulfate	zinc compound (ZnSO4)	N982	35.50%	2,050	728		65.38	161.47	1,797	
	Zinc oxide	zinc compound (ZnO)	N982	72.00%	5,100	3,672		65.38	81.38	4,571	
	Dairy premix	zinc compound (ZnSO4)	N982	11.00%	15,500	1,705		65.38	161.47	4,211	
	Horse trace premix	zinc compound (ZnO)	N982	12.80%	78,000	9,984		65.38	81.38	12,427	
	Trace minerals A	zinc compound (ZnO)	N982	12.95%	10,000	1,295	**23,440**	65.38	81.38	1,612	**38,229**
	Trace minerals G	zinc compound (ZnSO4, Zn?, ZnO)	N982	9.60%	4,450	427		65.38	161.47	1,055	
	Sheep trace minerals	zinc compound (ZnO, ZnSO4)	N982	20.00%	5,500	1,100		65.38	81.38	1,369	
	Beef mineral premix	zinc compound (ZnSO4)	N982	17.50%	25,000	4,375		65.38	161.47	10,805	
	Swine mineral premix	zinc compound (ZnSO4)	N982	14.71%	1,050	154		65.38	161.47	381	
	Copper sulfate	copper compound (CuSO4)	N100	25.20%	6,850	1,726		63.55	159.61	4,336	
	Dairy premix	copper compound (CuSO4)	N100	2.50%	15,500	388		63.55	159.61	973	
	Horse trace premix	copper compound (CuSO4)	N100	3.20%	78,000	2,496		63.55	159.61	6,269	
	Trace minerals A	copper compound (CuSO4)	N100	1.25%	10,000	125	**6,202**	63.55	159.61	314	**16,802**
	Trace minerals G	copper compound (basic CuCl, CuSO4, Cu?, CuO)	N100	3.20%	4,450	142		63.55	213.56	479	
	Beef mineral premix	copper compound (basic CuCl)	N100	5.20%	25,000	1,300		63.55	213.56	4,369	
	Swine mineral premix	copper compound (CuSO4, basic CuCl)	N100	2.36%	1,050	25		63.55	159.61	62	
	Manganous oxide	manganese compound (MnO)	N450	60.00%	3,300	1,980		54.94	70.94	2,557	
	Dairy premix	manganese compound (MnSO4)	N450	8.20%	15,500	1,271		54.94	151.00	3,493	
	Horse trace premix	manganese compound (MnO)	N450	12.80%	78,000	9,984		54.94	70.94	12,892	
	Trace minerals A	manganese compound (MnO)	N450	17.50%	10,000	1,750	**18,835**	54.94	70.94	2,260	**30,440**
	Trace minerals G	manganese compound (MnSO4, Mn?, MnO)	N450	9.60%	4,450	427		54.94	151.00	1,174	
	Sheep trace minerals	manganese compound (MnO, MnSO4)	N450	16.00%	5,500	880		54.94	70.94	1,136	
	Beef mineral premix	manganese compound (MnSO4)	N450	10.00%	25,000	2,500		54.94	151.00	6,871	
	Swine mineral premix	manganese compound (MnO, MnSO4)	N450	4.12%	1,050	43		54.94	70.94	56	
	Selenium	selenuim compound (Na_2SeO_3)	N725	0.06%	126,000	76	**76**	78.96	172.95	166	**166**

a - As shown on ingredient label.

b - When more than one compound is listed for a product, the first compound listed is used.

To determine amount of metal compound used, divide the molecular weight (MW) of the metal compound by the MW of the metal, then multiply by "Lbs. of Parent Metal Used".

Appendix 6
Certification Dates of Forms



TRI EZ Query Results

Page No. 1

TRI Facility Id Equal to 71106PRNML223WE
Reporting Year Greater than/Equal to 2011
Results are based on data extracted on 01-MAR-17

Generated SQL

Select distinct V_TRI_SUBMISSIONS_EZ.TRI_FACILITY_ID, V_TRI_SUBMISSIONS_EZ.FACILITY_NAME, V_TRI_SUBMISSIONS_EZ.REPORTING_YEAR, V_TRI_SUBMISSIONS_EZ.CHEM_NAME, V_TRI_SUBMISSIONS_EZ.FORM_TYPE_IND, to_char(V_TRI_SUBMISSIONS_EZ.ORIG_POSTMARK, 'YYYY-MM-DD') from V_TRI_SUBMISSIONS_EZ where (V_TRI_SUBMISSIONS_EZ.TRI_FACILITY_ID = '71106PRNML223WE') and (V_TRI_SUBMISSIONS_EZ.REPORTING_YEAR >= '2011') order by V_TRI_SUBMISSIONS_EZ.REPORTING_YEAR asc , V_TRI_SUBMISSIONS_EZ.CHEM_NAME asc

TRI Facility Id	Facility Name	Reporting Year	Chemical Name	Form Type Indicator	Orig Postmark
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2011	MANGANESE COMPOUNDS	S	JUN-27-2012
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2011	ZINC COMPOUNDS	S	JUN-27-2012
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2012	MANGANESE COMPOUNDS	S	JUN-29-2013
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2014	COPPER COMPOUNDS	S	JUN-22-2015
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2014	MANGANESE COMPOUNDS	S	JUN-22-2015
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2014	ZINC COMPOUNDS	S	JUN-22-2015
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2015	MANGANESE COMPOUNDS	S	JUN-30-2016
71106PRNML223WE	LAND O'LAKES PURINA FEED LLC - SHREVEPORT	2015	ZINC COMPOUNDS	S	JUN-30-2016

Total number of records returned from your query: 8
Number of Records shown on this page: 8 ***
Output to CSV File

***The result set above presents a list of *unique* data in the output.
If you would like to run the query again and obtain a result set that lists all data, please click **here** . This query can potentially take a longer time to complete, than your previous query. This is due to the larger quantity of data retrieved.

Appendix 7
Facility Emails

Riley, David

From: Kennedy, Todd <TTKennedy@landolakes.com>
Sent: Tuesday, May 23, 2017 2:34 PM
To: Riley, David
Cc: Gueringer, Billy; Hines, Jennifer
Subject: Additional Information Request - Purina, Shreveport

David,

I have gathered the information on materials disposed of at an off-site facility as requested. Amounts are listed as follows:

2011 – 28 Tons, or 0.02%	Total manufactured volume was 117,447 tons
2012 – 36 Tons, or 0.038%	Total manufactured volume was 93,968 tons
2013 – 103 Tons, or 0.1%	Total manufactured volume was 96,009 tons
2014 – 283 Tons, or 0.27%	Total manufactured volume was 104,343 tons
2015 – 124 Tons, or 0.10%	Total manufactured volume was 116,412 tons

In regard to dust control and how product is handled from this process, all collected product is immediately reintroduced to the process flow. We operate both bag house filters and cyclones for dust control at the facility. None of the product captured from these processes is sent to a storage bin for later use or disposal. It is all added back to the same production run it is collected from.

Please let me know if you have further questions.

Thank You,

Todd Kennedy l Purina Animal Nutrition, LLC
Plant Manager
223 W. 63rd Street, Shreveport, LA 71106
Direct: 318-671-6362 l Cell: 601-504-7519
Office: 318-861-3506

PURINA

Riley, David

From: Kennedy, Todd <TTKennedy@landolakes.com>
Sent: Tuesday, June 27, 2017 9:12 AM
To: Riley, David
Subject: RE: EPCRA 313 inspection - additional questions on your process

The product from all dust collection systems is returned to the process system in which it was captured.

Todd Kennedy l Purina Animal Nutrition, LLC
Plant Manager
223 W. 63rd Street, Shreveport, LA 71106
Direct: 318-671-6362 l Cell: 601-504-7519
Office: 318-861-3506

PURINA

From: Riley, David [mailto:riley.david@epa.gov]
Sent: Tuesday, June 27, 2017 8:35 AM
To: Kennedy, Todd <TTKennedy@landolakes.com>
Subject: RE: EPCRA 313 inspection - additional questions on your process

Thank you very much! And regarding the cyclone/baghouse question: the cyclone dust is returned to pelleting. Is material from the baghouses also returned to various processes, or is this what is sent off-site for disposal?

David Riley
EPCRA 313 Enforcement Officer
US EPA Region 6 (EN-H3)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Phone: (214) 665-7298
Fax: (214) 665-6655
e-mail: riley.david@epa.gov

From: Kennedy, Todd [mailto:TTKennedy@landolakes.com]
Sent: Tuesday, June 27, 2017 8:31 AM
To: Riley, David <riley.david@epa.gov>
Subject: RE: EPCRA 313 inspection - additional questions on your process

David,

1. We do produce both pelleted and meal animal foods. These are the two main types.

2. We have three cyclones on our pellet cooling systems. These are the only cyclones in the plant so they are only used during the pelleting process. We have multiple baghouses throughout the plant that are used in processes other than pelleting.

3. Your statement is basically correct. I am not sure of the date when the two divisions were split. It was in the late 70's, early 80's time frame to the best of my knowledge. Our company operated under Purina Mills until 2001, at which time it became Land O'Lakes Purina Mills, LLC. We are currently operating as Purina Animal Nutrition, LLC.

Hope this gives you what you need. Please let me know if you need further information.

Thanks

Todd Kennedy l Purina Animal Nutrition, LLC
Plant Manager
223 W. 63rd Street, Shreveport, LA 71106
Direct: 318-671-6362 l Cell: 601-504-7519
Office: 318-861-3506

PURINA

From: Riley, David [mailto:riley.david@epa.gov]
Sent: Tuesday, June 27, 2017 8:08 AM
To: Kennedy, Todd <TTKennedy@landolakes.com>
Subject: EPCRA 313 inspection - additional questions on your process

Good morning Todd –

I am currently finishing up a draft of the inspection report, and I have a few questions in order to verify that my notes are correct:

1. Does your facility produce both pellets and meal? (Are these the two main types of feed, or are there others?)

2. Is the cyclone/baghouse dust collection system only used during the pelletization process?

3. Regarding the facility history… I wrote down that it was built in 1953 by Ralston Purina for the manufacturing of livestock feed. In the late 1970s, the company's manufacturing was split into pet food (Ralston) and livestock feed (Purina Mills), with your facility continuing to operate under the Purina Mills name. Is that worded properly?

Thank you,

David Riley
EPCRA 313 Enforcement Officer
US EPA Region 6 (EN-H3)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Phone: (214) 665-7298
Fax: (214) 665-6655
e-mail: riley.david@epa.gov

This message may contain confidential material from Land O'Lakes, Inc. (or its subsidiary) for the sole use of the intended recipient(s) and may not be reviewed, disclosed, copied, distributed or used by anyone other than the intended recipient(s). If you are not the intended recipient, please contact the sender by reply email and delete all copies of this message.

Appendix 8
Inspector's Release Calculations

RY	Total manufactured amount of product, in tons	Total manufactured amount of product, in lbs.	Chemical Category Name	Total lbs. of parent metal used	% of parent metal in total manufactured amount	Waste material, in tons	Wate material, in lbs.	Amount of parent metal in waste material, in lbs.
2011	117,447	234,894,000	zinc compounds	20,152	0.0085793%	28	56,000	5
			copper compounds	5,890	0.0025075%			1
			manganese compounds	17,390	0.0074031%			4
			selenuim compounds	7	0.0000030%			0

RY	Total manufactured amount of product, in tons	Total manufactured amount of product, in lbs.	Chemical Category Name	Total lbs. of parent metal used	% of parent metal in total manufactured amount	Waste material, in tons	Wate material, in lbs.	Amount of parent metal in waste material, in lbs.
2012	93,968	187,936,000	zinc compounds	16,935	0.0090112%	36	72,000	6
			copper compounds	4,849	0.0025802%			2
			manganese compounds	15,736	0.0083731%			6
			selenuim compounds	58	0.0000306%			0

RY	Total manufactured amount of product, in tons	Total manufactured amount of product, in lbs.	Chemical Category Name	Total lbs. of parent metal used	% of parent metal in total manufactured amount	Waste material, in tons	Wate material, in lbs.	Amount of parent metal in waste material, in lbs.
2013	96,009	192,018,000	zinc compounds	17,674	0.0092043%	103	206,000	19
			copper compounds	4,737	0.0024672%			5
			manganese compounds	15,231	0.0079323%			16
			selenuim compounds	59	0.0000306%			0

RY	Total manufactured amount of product, in tons	Total manufactured amount of product, in lbs.	Chemical Category Name	Total lbs. of parent metal used	% of parent metal in total manufactured amount	Waste material, in tons	Wate material, in lbs.	Amount of parent metal in waste material, in lbs.
2014	104,343	208,686,000	zinc compounds	23,047	0.0110439%	283	566,000	63
			copper compounds	5,949	0.0028509%			16
			manganese compounds	18,265	0.0087525%			50
			selenuim compounds	70	0.0000334%			0

RY	Total manufactured amount of product, in tons	Total manufactured amount of product, in lbs.	Chemical Category Name	Total lbs. of parent metal used	% of parent metal in total manufactured amount	Waste material, in tons	Wate material, in lbs.	Amount of parent metal in waste material, in lbs.
2015	116,412	232,824,000	zinc compounds	23,440	0.0100679%	124	248,000	25
			copper compounds	6,202	0.0026638%			7
			manganese compounds	18,835	0.0080900%			20
			selenuim compounds	76	0.0000325%			0

"Total pounds of parent metal used" is taken from Appendix 5.
Amounts of manufactured product and waste material are taken from Appendix 7.

Appendix 9
Recycling Excerpts from EPA Guidance

INTERPRETATIONS OF WASTE MANAGEMENT ACTIVITIES: RECYCLING, COMBUSTION FOR ENERGY RECOVERY, TREATMENT FOR DESTRUCTION, WASTE STABILIZATION AND RELEASE

Revised August, 1999

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
401 M St., SW
Washington, D.C. 20460

wastes. To ensure that there is some consistency between reporting under EPCRA and other environmental statutes, EPA believes that toxic chemicals that are constituents of or are hazardous wastes under RCRA should be considered toxic chemicals that are managed as waste, since by definition RCRA hazardous wastes are intended to be discarded. Therefore, practices affecting a toxic chemical identified as a RCRA hazardous waste, or that is a constituent of a RCRA hazardous waste would be considered to be waste management.

A. Recycling

EPA interprets for the purposes of EPCRA section 313 "recycling" to be the following:

> "Recycling" is (1) the recovery for reuse of a toxic chemical from a gaseous, aerosol, aqueous, liquid, or solid stream; or (2) the reuse, or the recovery for reuse of a toxic chemical that is a RCRA hazardous waste or is a constituent of a RCRA hazardous waste as defined in 40 CFR 261.
>
> "Recovery" is the act of extracting or removing the toxic chemical from a waste stream and includes: (1) the reclamation of the toxic chemical from a stream that entered a waste treatment or pollution control device or process where destruction of the stream or destruction or removal of certain constituents of the stream occurs (including air pollution control devices or processes, wastewater treatment or control devices or processes, Federal or State permitted treatment or control devices or processes, and other types of treatment or control devices or processes); and (2) the reclamation for reuse

of an "otherwise used" toxic chemical that is spent or contaminated and that must be recovered for further use in either the original or any other operations.

EPA considers the direct recirculation of a toxic chemical within a process or between processes without any reclamation to be "reuse" of the toxic chemical rather than “recycling.” The direct use, direct further use, or direct reuse of the toxic chemical is not "recycling" provided that there is no reclamation of the chemical prior to that continued use or reuse.

EPA believes its approach most accurately describes practices that are not integral to production and practices affecting toxic chemicals that are amenable to source reduction and other forms of management. A practice that is not integral to production may be classified as a management activity, including recycling. EPA's interpretation of reportable "recycling" is therefore based on identifying practices involving the toxic chemical that are not integral to production.

Recovery of a toxic chemical for reuse. EPA’s interpretation of "recycling" includes the recovery of a toxic chemical from a chemical stream and the reuse of that chemical. The key to determining what is or is not integral to production is the definition of "recovery," which is the act of extracting or removing the toxic chemical from a chemical stream. EPA believes that recovery activities that are not integral to production include the following: (1) the recovery for reuse of a chemical from a stream that has entered a treatment or control device or process; and (2) the recovery for reuse of an “otherwise used” chemical that must be recovered prior to continued use. This

interpretation of "recovery" is intended to limit the scope of "recycling" based on the function of the toxic chemical, as well as the direction of the toxic chemical and chemical stream and the function of the device affecting the toxic chemical.

EPA believes that when the toxic chemical is recovered after entering a device or process that controls or treats the toxic chemical or chemical stream in order to make the toxic chemical or chemical stream more amenable for release or further management, the chemical should be considered as "recycled." EPA believes that such devices or processes are not integral to production because the direction of the stream is toward management or release and not toward the immediate processing of the toxic chemical. Therefore, regardless of the function or nature of the toxic chemical, the recovery and reuse of any toxic chemical after it has entered a treatment or control device or process is reportable "recycling" of that toxic chemical.

For example, a baghouse removes chemicals from an airstream prior to discharge. Some of the chemicals, including certain metal compounds, are recovered from the baghouse and returned to the process for “processing.” The quantity of the chemicals recovered from the baghouse and returned to the process would not be considered integral to production and would be reportable as "recycled" because the baghouse prepares the stream containing the toxic chemical for release.

For the purposes of the EPCRA section 313 reporting requirements, the treatment devices are NOT limited to those treatment devices that are Federally or State permitted. For EPCRA section 313 purposes, basing the criterion on whether a device is permitted is an unnecessary distinction. Not all devices that treat or control waste streams are