



2007 Area Source Emissions Inventory Methodology

420 – AGRICULTURAL CROPS AND PRODUCTS PROCESSING LOSSES

I. Purpose

This document describes the Area Source Methodology used to estimate emissions of carbon monoxide (CO), nitrogen oxides (NO_x), fine particulate matter less than 10 microns (PM₁₀), volatile organic compounds (VOC), and sulfur oxides (SO_x) from the processing of agricultural crops and products in the San Joaquin Valley Air Basin. With the exception of deep fat fryers, coffee roasters and meat smokehouses, this category does not contain emissions from combustion equipment. Emissions from boilers, engines, dryers, and heaters used to process agricultural crops and products are found in the combustion source categories (050-XXX-XXXX-XXXX, 052-XXX-XXXX-XXXX, and 060-XXX-XXXX-XXXX). This methodology also does not include VOC emissions from the fermentation of silage on dairies and feedlots.

An area source category is a collection of similar emission units within a geographic area (i.e., a County). An area source category collectively represent individual sources that are small and numerous, and that may not have been inventoried as specific point, mobile, or biogenic sources. The California Air Resources Board (CARB) has grouped these individual sources with other like sources into area source categories. These source categories are grouped in such a way that they can be estimated collectively using one methodology.

II. Applicability

The emission calculations from this Area Source Methodology apply to facilities that are identified by the following Category of Emission Source (CES) codes and Reconciliation Emission Inventory Codes (REIC):

Table 1. Emission inventory codes.

CES	REIC	Description
47050	420-418-6000-0000	Agricultural Products Processing Losses
47076	420-420-6000-0000	Agricultural Crops Processing Losses

III. Point Source Reconciliation

Emissions from the area source inventory and point source inventory are reconciled against each other to prevent double counting. This is done using relationships created by the California Air Resources Board (CARB) between the area source REIC and the point sources' Standard Industry Classification (SIC) code and emissions process Source Category Code (SCC) combinations. The area sources in this methodology reconcile against processes in our point source inventory with the SIC/SCC combinations listed in Appendix A.

IV. Methodology Description

Historically, the eight counties of the San Joaquin Valley used the *Agricultural Crops Processing Losses* source category to estimate area source emissions from farms that were exempt from regulation. The *Agricultural Products Processing Losses* source category was used to estimate point and area source emissions from non-farm processing facilities that were subject to regulation. At this time, the District does not make any distinction between these two categories.

Significant sources of agricultural crops and products processing emissions include the following:

- Cotton ginning
- Grain milling
- Feed manufacture
- Nut processing (almonds, pistachios and walnuts)
- Vegetable oil processing
- Sugar beet processing
- Starch manufacturing

All of these sources are permitted by the district and represented in our point source inventory. Therefore, the area source emissions inventory for *Agricultural Crops Processing Losses* and *Agricultural Products Processing Losses* will be set to zero.

V. Activity Data

The activity data for each process associated with these source categories is reported through the District's point source inventory.

VI. Emission Factors

The emission factors for agricultural processing losses at each facility associated with these source categories are reported through the District's point source inventory.

VII. Emissions Calculations

Not applicable.

VIII. Temporal Variation

The temporal activity of each facility associated with these source categories is reported through the District's point source inventory.

IX. Spatial Variation

The spatial data for each facility associated with these source categories is reported through the District's point sources inventory.

X. Growth Factor

Growth factors are developed by either the District's Planning Department or CARB for each EIC. These factors are used to estimate emissions in future years. The growth factors associated with this emissions category may be obtained from the District's Planning Department.

XI. Control Level

Control levels are developed by either the District's Planning Department or CARB for each EIC. Control levels are used to estimate emissions reductions in future years due to implementation of District rules. These control levels take into account the effect of control technology, compliance and exemptions at full implementation of the rules.

Emission units within this area source category may be subject to the following District Rules:

Table 2. District rules applicable to REIC 420-418-6000-0000 and 420-420-6000-0000.

Rule No.	Rule Description
4204	Cotton Gins
4691	Vegetable Oil Processing Operations

Control levels associated with these emissions categories may be obtained from the District's Planning Department.

XII. CARB Chemical Speciation

CARB has developed organic gas profiles in order to calculate reactive organic gasses (ROG), volatile organic compounds (VOC) or total organic gas (TOG) given any one of the three values. For each speciation profile, the fraction of TOG that is ROG and VOC is given. The organic gas profile codes can also be used to lookup associated toxics. CARB's speciation profiles for agricultural processing losses are presented in the table below.

Table 3. CARB organic gas speciation profiles for REIC 420-418-6000-0000 and 420-420-6000-0000.

Profile Description	CARB Organic Gas Profile#	Fractions	
		ROG	VOC
Species Unknown – All Categories Combined	600	0.699	0.699

CARB has developed particulate matter speciation profiles in order to calculate particulate matter (PM), particulate matter with a diameter less than or equal to 10 microns (PM₁₀) or particulate matter with a diameter less than or equal to 2.5 microns (PM_{2.5}) given any one of the three values. For each speciation profile, the fraction of PM that is PM₁₀ and PM_{2.5} is given. The particulate matter profile codes can also be used to lookup associated toxics. CARB's speciation profiles for agricultural processing losses are presented in the table below.

Table 4. CARB particulate matter speciation profiles for REIC 420-418-6000-0000 and 420-420-6000-0000.

Profile Description	CARB PM Profile#	Fractions	
		PM ₁₀	PM _{2.5}
Unspecified	900	0.70	0.42

XIII. Assessment Of Methodology

Since all facilities associated with *Agricultural Crops Processing Losses* and *Agricultural Products Processing Losses* are permitted, there are no area source emissions. All emissions are reported through the District's point source inventory.

XIV. Emissions

Following is the 2007 area source emissions inventory for *Agricultural Products Processing Losses* (REIC 420-418-6000-0000) and *Agricultural Crops Processing Losses* (REIC 420-420-6000-0000) estimated by this methodology. Emissions are reported for each county in the District.

Table 5. Area source emissions for Agricultural Crops Processing Losses (REIC 420-418-6000-0000) and Agricultural Products Processing Losses (REIC 420-420-6000-0000), 2007.

County	Emissions (tons/year)					
	NOx	CO	SOx	VOC ⁽¹⁾	PM ₁₀	PM _{2.5} ⁽²⁾
Agricultural Products Processing Losses						
Fresno	0.0	0.0	0.0	0.0	0.0	N/A
Kern	0.0	0.0	0.0	0.0	0.0	N/A
Kings	0.0	0.0	0.0	0.0	0.0	N/A
Madera	0.0	0.0	0.0	0.0	0.0	N/A
Merced	0.0	0.0	0.0	0.0	0.0	N/A
San Joaquin	0.0	0.0	0.0	0.0	0.0	N/A
Stanislaus	0.0	0.0	0.0	0.0	0.0	N/A
Tulare	0.0	0.0	0.0	0.0	0.0	N/A
TOTAL	0.0	0.0	0.0	0.0	0.0	N/A
Agricultural Crops Processing Losses						
Fresno	0.0	0.0	0.0	0.0	0.0	N/A
Kern	0.0	0.0	0.0	0.0	0.0	N/A
Kings	0.0	0.0	0.0	0.0	0.0	N/A
Madera	0.0	0.0	0.0	0.0	0.0	N/A
Merced	0.0	0.0	0.0	0.0	0.0	N/A
San Joaquin	0.0	0.0	0.0	0.0	0.0	N/A
Stanislaus	0.0	0.0	0.0	0.0	0.0	N/A
Tulare	0.0	0.0	0.0	0.0	0.0	N/A
TOTAL	0.0	0.0	0.0	0.0	0.0	N/A

(1) The District only reports ROG to CARB. As noted in Section XII, ROG is the same as VOC.

(2) At this time, the District does not calculate PM_{2.5} emissions. PM_{2.5} emissions can be estimated using the speciation profiles found in Section XII.

420 – Ag Processing Losses

Following is the 2007 point source emissions inventory for *Agricultural Products Processing Losses* (REIC 420-418-6000-0000) and *Agricultural Crops Processing Losses* (REIC 420-420-6000-0000) as reported to the District by permit holders. Emissions are reported for each county in the District.

Table 6. Point source emissions for Agricultural Crops Processing Losses (REIC 420-418-6000-0000) and Agricultural Products Processing Losses (REIC 420-420-6000-0000), 2007.

County	Emissions (tons/year)					
	NO _x	CO	SO _x	VOC ⁽¹⁾	PM ₁₀	PM _{2.5} ⁽²⁾
Agricultural Products Processing Losses						
Fresno	0.00	0.00	0.00	1.40	19.44	N/A
Kern	0.00	0.00	0.00	2.70	27.42	N/A
Kings	0.00	0.00	0.00	0.00	16.26	N/A
Madera	0.00	0.00	0.00	0.00	4.72	N/A
Merced	0.00	0.00	0.00	0.00	8.02	N/A
San Joaquin	0.20	1.07	0.00	0.14	55.66	N/A
Stanislaus	0.42	1.05	0.05	3.00	75.15	N/A
Tulare	0.00	0.00	0.00	0.00	53.61	N/A
TOTAL	0.62	2.12	0.05	7.24	260.28	N/A
Agricultural Crops Processing Losses						
Fresno	0.00	0.00	0.92	0.00	263.18	N/A
Kern	0.00	0.00	0.00	0.00	138.61	N/A
Kings	0.00	3.91	0.00	186.84	142.09	N/A
Madera	0.00	0.00	9.40	0.00	7.86	N/A
Merced	0.00	0.00	0.00	14.04	56.89	N/A
San Joaquin	0.00	0.00	0.48	12.01	107.22	N/A
Stanislaus	0.00	0.00	0.00	0.00	79.30	N/A
Tulare	0.00	0.00	0.09	0.00	66.06	N/A
TOTAL	0.00	3.91	10.89	212.89	861.21	N/A

- (1) The District only reports ROG to CARB. As noted in Section XII, ROG is the same as VOC.
- (2) At this time, the District does not calculate PM_{2.5} emissions. PM_{2.5} emissions can be estimated using the speciation profiles found in Section XII.

420 – Ag Processing Losses

Following is the 2007 total unreconciled (point source plus area source) emissions inventory for *Agricultural Products Processing Losses* (REIC 420-418-6000-0000) and *Agricultural Crops Processing Losses* (REIC 420-420-6000-0000). Emissions are reported for each county in the District.

Table 7. Total unreconciled (point source plus area source) emissions for Agricultural Crops Processing Losses (REIC 420-418-6000-0000) and Agricultural Products Processing Losses (REIC 420-420-6000-0000), 2007.

County	Emissions (tons/year)					
	NO _x	CO	SO _x	VOC ⁽¹⁾	PM ₁₀	PM _{2.5} ⁽²⁾
Agricultural Products Processing Losses						
Fresno	0.00	0.00	0.00	1.40	19.44	N/A
Kern	0.00	0.00	0.00	2.70	27.42	N/A
Kings	0.00	0.00	0.00	0.00	16.26	N/A
Madera	0.00	0.00	0.00	0.00	4.72	N/A
Merced	0.00	0.00	0.00	0.00	8.02	N/A
San Joaquin	0.20	1.07	0.00	0.14	55.66	N/A
Stanislaus	0.42	1.05	0.05	3.00	75.15	N/A
Tulare	0.00	0.00	0.00	0.00	53.61	N/A
TOTAL	0.62	2.12	0.05	7.24	260.28	N/A
Agricultural Crops Processing Losses						
Fresno	0.00	0.00	0.92	0.00	263.18	N/A
Kern	0.00	0.00	0.00	0.00	138.61	N/A
Kings	0.00	3.91	0.00	186.84	142.09	N/A
Madera	0.00	0.00	9.40	0.00	7.86	N/A
Merced	0.00	0.00	0.00	14.04	56.89	N/A
San Joaquin	0.00	0.00	0.48	12.01	107.22	N/A
Stanislaus	0.00	0.00	0.00	0.00	79.30	N/A
Tulare	0.00	0.00	0.09	0.00	66.06	N/A
TOTAL	0.00	3.91	10.89	212.89	861.21	N/A

- (1) The District only reports ROG to CARB. As noted in Section XII, ROG is the same as VOC.
- (2) At this time, the District does not calculate PM_{2.5} emissions. PM_{2.5} emissions can be estimated using the speciation profiles found in Section XII.

420 – Ag Processing Losses

Following is the net change in total unreconciled emissions between this update (2007 inventory year) and the previous inventory year (2006) for *Agricultural Products Processing Losses* (REIC 420-418-6000-0000) and *Agricultural Crops Processing Losses* (REIC 420-420-6000-0000). The changes in emissions are reported for each county in the District.

Table 8. Net emissions change for Agricultural Crops Processing Losses (REIC 420-418-6000-0000) and Agricultural Products Processing Losses (REIC 420-420-6000-0000), 2007-2006.

County	Emissions (tons/year)					
	NOx	CO	SOx	VOC ⁽¹⁾	PM ₁₀	PM _{2.5} ⁽²⁾
Agricultural Products Processing Losses						
Fresno	-1.78	-0.49	0.00	-0.01	-19.64	N/A
Kern	0.00	0.00	0.00	0.05	-4.90	N/A
Kings	0.00	0.00	0.00	-178.57	-0.13	N/A
Madera	-2,196.82	-549.25	-9.39	-289.70	-99.58	N/A
Merced	0.00	0.00	0.00	-0.01	-2.77	N/A
San Joaquin	-0.79	0.00	-0.10	-47.14	-47.19	N/A
Stanislaus	0.00	0.00	0.00	0.71	26.45	N/A
Tulare	0.00	0.00	0.00	-0.01	0.60	N/A
TOTAL	-2,199.39	-549.74	-9.49	-514.68	-147.16	N/A
Agricultural Crops Processing Losses						
Fresno	0.00	0.00	-220.70	0.00	-532.89	N/A
Kern	0.00	0.00	0.00	0.00	-733.61	N/A
Kings	0.00	-0.60	0.00	-39.90	-274.41	N/A
Madera	0.00	0.00	0.00	0.00	-67.18	N/A
Merced	-1,104.63	-220.93	-6.62	-48.16	-440.95	N/A
San Joaquin	-0.89	-0.20	0.00	-2.00	-19.42	N/A
Stanislaus	0.00	0.00	0.00	0.00	-385.68	N/A
Tulare	0.00	0.00	0.06	0.00	-294.22	N/A
TOTAL	-1,105.52	-221.73	-227.26	-90.06	-2,748.36	N/A

(1) The District only reports ROG to CARB. As noted in Section XII, ROG is the same as VOC.

(2) At this time, the District does not calculate PM_{2.5} emissions. PM_{2.5} emissions can be estimated using the speciation profiles found in Section XII.

XV. Revision History

2007. This is a new District methodology.

XVI. Update Schedule

In an effort to provide inventory information to CARB and other District programs and maximize limited resources, the District has developed an update cycle based on emissions within the source category as shown in the following table:

Table 9. Area source update frequency criteria.

Total Emissions (tons/day)	Update Cycle (years)
<=1	4
>1 and <= 2.5	3
>2.5 and <=5	2
>5	1

Since PM₁₀ emissions are between 2.5 and 5 tons per day, these area source estimates will be updated every two year.

Table 10. Agricultural processing losses methodology update frequency.

EIC	Frequency (years)	Source of Emissions (Point Source Inventory / Data Gathering)
420-418-6000-0000	2	Point Source Inventory
420-420-6000-0000	2	Point Source Inventory

XVII. References

1. San Joaquin Valley Unified Air Pollution District. 2005. District Rule 4204 - Cotton Gins. Adopted February 17, 2005.
2. San Joaquin Valley Unified Air Pollution District. District Rule 4691 - Vegetable Oil Processing Operations. Adopted April 11, 1991; Amended May 21, 1992; Amended December 17, 1992.

XVIII. Appendix

Appendix A. Inventory Reconciliation Codes

Appendix A. Inventory Reconciliation Codes

Table 11. EIC, SCC and SIC codes in the District's 2007 point source inventory that reconciled to Agricultural Products Processing Losses (REIC 420-418-6000-0000).

EIC	SCC	Point Source Type	SIC
420-418-6000-0000	30200740	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - SILO STORAGE	2046
	30203601	FOOD/AGRICULTURE - DEEP FAT FRYING - COOKING VATS - GENERAL	2015, 2096, 2099
	30299998	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	2033, 2034, 2084, 2096
	30299999	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	2035, 2043, 2077, 2096, 2098
	30201711	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - UNLINDING TO RCVNG PIT	191, 723
420-418-6003-0000	30201712	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - PROCLEANG ORCHRD DBRS	191
	30201713	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - HULL RMVL/SEPARATION	173, 723
	30201715	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - SCREEN TO RMV SHELLS	723
	30201717	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - DRCT-FIRD ROTATNGDRM	173, 723
	30200804	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - HANDLING	2043
420-418-6018-0000	30204001	FOOD/AGRICULTURE - CEREAL - DRYER - -	2043
	30200201	FOOD/AGRICULTURE - COFFEE ROASTING - ROASTER - DIRECT FIRED	2095
420-418-6020-0000	30200299	FOOD/AGRICULTURE - COFFEE ROASTING - NOT CLASSIFIED - SEE COMMENTS	2095

420-418-6022-0000	30200740	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - SILO STORAGE	2041, 2043, 2048
	30200741	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - GRAIN RECEIVING	2041
	30200743	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - PRECLEAN/HANDLING	2034, 2041
	30200747	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - PNEUMATIC CONVEYOR	2041
	30200754	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - DRYERS	2034
	30200757	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - MIXING TANK	2869
	30200743	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - PRECLEAN/HANDLING	2046
	30200748	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - GRINDING	2046
	30200751	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - GRAIN RECEIVED	2046
	30200752	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - GRAIN HANDLING	2046
	30200753	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - GRAIN CLEANING	2046
	30200754	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - DRYERS	2046
	30200755	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - BULK LOADING	2046
420-418-6037-0000	30200756	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - MILLING	2046
	30202201	FOOD/AGRICULTURE - AGRIC.PRODUCTION - COTTON SEED DELINTNG - ACID DELINTING	2041

420-418-6038-0000	30200503	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - CLEANING	2041
	30200505	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - UNLOADG/RECEIVING	2041
	30200603	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - CLEANING	2041
	30200607	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - REMOVAL FROM BINS	2041
	30200611	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - GENERAL	2041
	30299998	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	2041
	30200802	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRAIN RECEIVING	2041
	30200804	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - HANDLING	2041
	30200805	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	2041
	30200806	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - PELLET COOLERS	2041
420-418-6040-0000	30200810	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - CONVEYING	2041
	30200814	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - STORAGE	2099
	30200815	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	2041
	30203001	FOOD/AGRICULTURE - DAIRY PRODUCTS - MILK - SPRAY DRYER	2022, 2023, 2026, 5143, 8733
	30203099	FOOD/AGRICULTURE - DAIRY PRODUCTS - NOT CLASSIFIED - SEE COMMENTS	2022, 2023, 2024
	30299998	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	2022, 2023
	30203603	FOOD/AGRICULTURE - DEEP FAT FRYING - COOKING VATS - POTATO CHIPS	2096
	30202601	FOOD/AGRICULTURE - AGRIC.PRODUCTION - SEED PROCESSING - GENERAL	2099
	30201302	FOOD/AGRICULTURE - MEAT SMOKING - SMOKEHOUSE - SMOKING CYCLE	2013
	30203604	FOOD/AGRICULTURE - DEEP FAT FRYING - COOKING VATS - SNACK CHIPS	2096

420-418-6072-0000	30201401	FOOD/AGRICULTURE - STARCH MFG - COMBINED OPERATNS - GENERAL	2096, 2099
420-418-6074-0000	30203001	FOOD/AGRICULTURE - DAIRY PRODUCTS - MILK - SPRAY DRYER	2034
	30203099	FOOD/AGRICULTURE - DAIRY PRODUCTS - NOT CLASSIFIED - SEE COMMENTS	2034
420-418-6086-0000	30200732	FOOD/AGRICULTURE - GRAIN MILLING - WHEAT MILLING - PRECLEAN/HANDLING	2048
	30200733	FOOD/AGRICULTURE - GRAIN MILLING - WHEAT MILLING - CLEANING HOUSE	2043, 2048
420-420-6038-0000	30203108	FOOD/AGRICULTURE - GRAIN ELEVATORS - EXPORT GRAIN ELEV - ELEVATOR LEGS	5153

Table 12. EIC, SCC and SIC codes in the District's 2007 point source inventory that reconciled to Agricultural Crops Processing Losses (REIC 420-420-6000-0000).

EIC	SCC	Point Source Type	SIC
420-420-6000-0000	30200833	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	5191
	30299998	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	173, 723, 2098
	30299999	FOOD/AGRICULTURE - MISCELLANEOUS - NOT CLASSIFIED - OTHER	723, 2048
420-420-6002-0000	30200102	FOOD/AGRICULTURE - ALFALFA DEHYDRATI - CYCLONE AND DRYER - PRIMARY	723
	30200199	FOOD/AGRICULTURE - ALFALFA DEHYDRATI - NOT CLASSIFIED - OTHER	723
420-420-6006-0000	30200703	FOOD/AGRICULTURE - GRAIN MILLING - BARLEY MILLING - CLEANING	2043, 2048
420-420-6022-0000	30200741	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - GRAIN RECEIVING	2048, 2068
	30200743	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - PRECLEAN/HANDLING	2068
	30200745	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - DEGERMING/MILLING	723, 2048
	30200747	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - PNEUMATIC CONVEYOR	723, 2048
	30200748	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - GRINDING	2048
420-420-6024-0000	30200757	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - MIXING TANK	2048
	30200759	FOOD/AGRICULTURE - GRAIN MILLING - DRY CORN MILLING - KETTLE COOKER	2068
	30200710	FOOD/AGRICULTURE - GRAIN MILLING - MILO MILLING - RECEIVING	4221
420-420-6024-0000	30200751	FOOD/AGRICULTURE - GRAIN MILLING - CORN WET MILLING - GRAIN RECEIVED	2048
	30201408	FOOD/AGRICULTURE - STARCH MFG - COMBINED OPERATNS - STARCH BULK LOADOUT	2046

	30200404	FOOD/AGRICULTURE - AGRIC. SERVICES - COTTON GINNING - MISCELLANEOUS	724
	30200406	FOOD/AGRICULTURE - AGRIC. SERVICES - COTTON GINNING - SAW GINNING	724
420-420-6028-0000	30200408	FOOD/AGRICULTURE - AGRIC. SERVICES - COTTON GINNING - BALING	724
	30200410	FOOD/AGRICULTURE - AGRIC. SERVICES - COTTON GINNING - GENERAL	724, 4221
	30200606	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - LOADING	724
420-420-6030-0000	30201908	FOOD/AGRICULTURE - VEG OIL PROCESSNG - SOYBEAN OIL - GENERAL	2041
	30201916	FOOD/AGRICULTURE - VEG OIL PROCESSNG - GENERAL PROCESSES - OIL EXTRACTION	2041
420-420-6032-0000	30200712	FOOD/AGRICULTURE - GRAIN MILLING - DURUM MILLING - PRECLEAN/HANDLING	2048

420-420-6038-0000	30200503	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - CLEANING	723, 2048
	30200505	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - UNLOADG/RECEIVING	723, 762, 2048, 5153
	30200506	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - LOADING/SHIPPING	723, 762, 2041, 2048
	30200512	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - GENERAL	723
	30200526	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - GENERAL	723
	30200603	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - CLEANING	723, 2048, 4221, 5153
	30200608	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - ELEVATOR LEGS	2046
	30200611	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - GENERAL	723, 2048
	30203103	FOOD/AGRICULTURE - GRAIN ELEVATORS - EXPORT GRAIN ELEV - CLEANING	2048
	30203104	FOOD/AGRICULTURE - GRAIN ELEVATORS - EXPORT GRAIN ELEV - DRYING	5153
	30203105	FOOD/AGRICULTURE - GRAIN ELEVATORS - EXPORT GRAIN ELEV - UNLOADING	2048, 4221, 5153
	30203106	FOOD/AGRICULTURE - GRAIN ELEVATORS - EXPORT GRAIN ELEV - LOADING	4221, 5153

420-420-6040-0000	30200802	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRAIN RECEIVING	723, 2043, 2047, 2048, 4221, 5153
	30200803	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - SHIPPING	2048
	30200804	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - HANDLING	723, 2048, 5153
	30200805	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	2048
	30200806	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - PELLET COOLERS	723, 2048
	30200807	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRAIN CLEANING	723, 2047, 2048
	30200808	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - MILLING	2048
	30200809	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - MIXING/BLENDING	723, 2043, 2047, 2048
	30200810	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - CONVEYING	2047, 2048
	30200812	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - BULK LOAD-OUT	2041, 2048, 4221, 5153
	30200814	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - STORAGE	2034, 2046, 2048
	30200815	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	723, 2044, 2047, 2048
	30200816	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - PELLET COOLERS	2041, 2047, 2048
	30200821	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - FUG EMS: GENERAL	2046, 2047, 2048
	30200822	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - FUG EMS:SHPNG/REVNG	2043, 2046, 5153
	30200823	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - FUG EMS: PACKING	2047, 2048
	30200832	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - HANDLING & TRANSFRNG	723, 2043, 2048
30200833	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - GRINDING	2048	
30200834	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - DRYING	2034	
30200835	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - STORAGE	2048	

420-420-6060-0000	30200504	FOOD/AGRICULTURE - GRAIN ELEVATORS - TERMINAL ELEVATOR - DRYING	2044
	30200611	FOOD/AGRICULTURE - GRAIN ELEVATORS - COUNTRY ELEVATORS - GENERAL	2044
	30200771	FOOD/AGRICULTURE - GRAIN MILLING - RICE MILLING - GRAIN RECEIVING	2044, 2048
	30200772	FOOD/AGRICULTURE - GRAIN MILLING - RICE MILLING - PRECLEAN/HANDLING	2044, 2048
	30200774	FOOD/AGRICULTURE - GRAIN MILLING - RICE MILLING - CLEANING/MILLHOUS	2044, 2048
	30200804	FOOD/AGRICULTURE - FEED MANUFACTURE - OTHER GRAIN FEED - HANDLING	5191

420-420-6064-0000	30202601	FOOD/AGRICULTURE - AGRIC.PRODUCTION - SEED PROCESSING - GENERAL	723, 9511
420-420-6068-0000	30200781	FOOD/AGRICULTURE - GRAIN MILLING - SOYBEAN MILLING - GRAIN RECEIVING	2044
	30200788	FOOD/AGRICULTURE - GRAIN MILLING - SOYBEAN MILLING - FLAKING	2048
420-420-6072-0000	30201413	FOOD/AGRICULTURE - STARCH MFG - COMBINED OPERATNS - UNMOD.SPRAY DRYERS	2046
420-420-6076-0000	30201501	FOOD/AGRICULTURE - SUGAR CANE PROCES - GENERAL - GENERAL	2063, 2099
	30201599	FOOD/AGRICULTURE - SUGAR CANE PROCES - NOT CLASSIFIED - OTHER	2063
420-420-6083-0000	30201716	FOOD/AGRICULTURE - NUT PROCESSING - ALMONDS - LEG TO SEPRTE SHELLS	723
420-420-6086-0000	30200731	FOOD/AGRICULTURE - GRAIN MILLING - WHEAT MILLING - GRAIN RECEIVING	723, 2043, 2048
	30200734	FOOD/AGRICULTURE - GRAIN MILLING - WHEAT MILLING - MILLHOUSE	723, 2048