TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	148844	***Company Name:***	Cargill, Incorporated	***APD Reviewer:***	David Reyna
Project No.:	275731	***Unit Name:***	Cargill Sweet Bran Feed Facility	***PBR No(s).:***	106.261, 106.262, 106.511

GENERAL INFORMATION			
Regulated Entity No.:	RN103150603	**Project Type:**	Permit by Rule Application
Customer Reference No.:	CN600273742	**Date Received by TCEQ:**	September 20, 2017
City/County:	Dalhart, Dallam County	**Date Received by Reviewer:**	September 22, 2017
Physical Location:	2888 Fm 1727		

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Jj Zmudzinski Operations Manager Avp	**Phone No.:** **Fax No.:**	(314) 306-5819 (402) 533-5080	**Email:**	JJ_ZMUDZINSKI@CARGILL.COM
Technical Contact/ Consultant Name and Title:	Mark Orear Ehs Manager	**Phone No.:** **Fax No.:**	(402) 613-9832 (806) 244-0116	**Email:**	MARK_OREAR@CARGILL.COM

GENERAL RULES CHECK	**YES**	**NO**	**COMMENTS**
Is confidential information included in the application?		X	
Has the PBR fee been paid?	X		
Is this registration certified?	X		
Is this an APWL site?		X	
Are there any upstream or downstream affects associated with this registration?		X	Initial PBR and no NSR permits
Is planned MSS included in the registration?	X		
Are there affected NSR or Title V authorizations for the project?		X	If yes, what is the number(s):
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		X	
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?		X	
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	
Does NOx Cap and Trade apply to this registration?		X	
Is the facility in compliance with all other applicable rules and regulations?	X		

DESCRIBE OVERALL PROCESS AT THE SITE

Equipment for the production of Cargill's Sweet Bran® animal feed products includes an enclosed wet feed rail unload building, separate unload buildings for receiving powder and granular products and a third enclosed unload area for bulk commodity products. The powder and granular unloads areas will have individual dust collector system as will the bulk commodity unload. The facility is designed to unload wet bran feed in an enclosed building which is then conveyed via enclosed conveyors to a batch mixer. Additional bulk ingredients are stored in ingredient silos, in which emission controls devices will be converted to individual static fabric filtration vents with pulse air cleaning. Ingredients will be transferred by enclosed conveying into the process mixers.

The facility is currently authorized under TCEQ permit by rule (PBR) No. 78692. Cargill requests PBR No. 78692 to be voided upon authorization of this submittal. The PBR No. 78692 is being voided because Cargill will be change the control device at the site, therefore the site would have to be re-evaluated for the new controls.

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DESCRIBE PROJECT AND INVOLVED PROCESS

PBR 106.261/262

The facility will have the capability to receive up to 8,000 tons per day of wet feed, 1,600 tons per day of dry feed ingredients and 100 tons per day of liquid feed ingredients based on normal operations of 24 hours per day. The maximum annual throughputs will be 2.92 MM tons of wet feed, 584,000 tons of dry feed ingredients and 36,500 tons of liquid feed ingredients. The 3.54 MM tons throughput is equivalent to about 7,010,000,000 lb/year production.

Changes to the facility will include removal of the pneumatic conveyor for ingredient unload previously authorized in the May 2012 PBR authorization. In place of the pneumatic conveyor a mechanical conveyor with aspiration EP#10: Dry Ingredient Unload 2 will be installed. Silo storage for the new conveyance system will include a change from powered baghouse filtration media to a static self-cleaning bin vent filter arrangement as characterized in EP#12: F-2407 Bin Vent Filtration. Four silos on site will additionally receive continuous dehumidification in EP#13 Dehumidification Filtration: Tks. 2011-2013 and in EP #6: Dry Ingredient Storage, Dry Ingredient #1. In addition to dehumidification on EP#6 an air cannon will be installed and vented through the silo via the static bin vent filter for air balancing. The addition of a powered bag house filter for EP #17: Forage Ingredient Storage F-4402 will be added to the system. The facility will be converting EP #6-9: Dry Ingredient Storage, Dry Ingredient Silos 1-4 from a powered bag house arrangement to individual static bin vent filters due to changing product composition to different ingredients comprised of larger particle sizes and fewer fines. Included is an update for VOC emissions representations utilizing test data for EP# 20: Steep Tanks 1&2, EP# 1 Wet Feed Unload, EP# 2 Wet Feed Transfer and EP# 3 Product loadout. The final addition to the process will be EP # 13 Ingredient Weigh Hopper Vent Filter F-2407 to abate fugitive emissions from the ingredient transfers from the eight silos ingredient transfers from silo to the enclosed weigh hoppers.

A detailed breakdown of each EPN process is in the permit application.

PBR 106.263

Planned maintenance, startup and shutdown (MSS) activities include diverting off-spec corn-based feed material to an outdoor pile. From the pile the off-spec material will be loaded into trucks for recycle within the production process or for transport to off-site locations for disposal.

The quantity of dust emissions from an outdoor storage pile which is covered to reduce duct emission. Dust emissions from storage pile results from batch-wise building of the storage pile by truck unloading, wind erosion of pile surfaces and ground area around piles, and loadout onto trucks for transport. Truck dumping onto the receiving surface and loading out from the pile to a truck with a front-end loader are the typical batch drop operations.

Emissions from MSS activities will meet PBR 106.263, Routine Maintenance, Startup and Shutdown of Facilities, and Temporary Maintenance Facilities.

Cargill has decide on 10/5/2017 during its meeting to only claim MSS activates.

PBR 106.511

Cargill is also authorizing an emergency generator, a Cummins Model #1750DQKAA diesel-fired engine-driven emergency generator.. The engine is rated at 2,554 brake horsepower (bhp) and will operate for less than 10% of the normal plant operating hours, equivalent to no more than 876 hours/year.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

PBR 106.261/262 Compliance Demonstration

- The emission point(s) associated with the facilities or changes to facilities are located at least 100 ft from the nearest off-site receptor.
  Yes
- The total new or increase emissions will comply with the applicable hourly and annual emission limits as represented in the table below.
  Yes
- There are no changes to or addition of any pollution abatement equipment.
  No NSR permit and is an initial permit review for the site.
- Visible emissions to the atmosphere, from any point or fugitive source, do not exceed 5.0 opacity in any six-minute period.
  Correct it does not
- This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit.
  Only authorization for this type of operation.
- The permit application includes a full detail impacts evaluation for the emission limits of 106.261/262. The detail evaluation includes the representation total PM for cellulose fiber and how it meets the requirement of 106.261. The evaluation includes total PM for the dry nutrients and how it meets the requirement of 106.261/262, the dry nutrients is a PM mixture which is spectated in the permit application. The total VOC emissions are also spectated and meet the requirements of 106.261/262. All emission representation meets the requirements of 106.261/262 with full detail of representation is in the permit application.

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COMMUNICATION LOG			
Date	**Time**	**Name/Company**	**Subject of Communication**
9/26/17	4:17 pm	Mr. Mark O'Rear/Cargill	Additional information on how the facilities meet 106.261/262 requirements for PM/PM_{10}/$PM_{2.5}$
10/5/2017	3:00 pm	Mr. Irvin L. Bilsky/Cargill	Meeting with Mr. Bilsky submitting all information to complete the permit review.
10/6/2017	2:30 pm	Mr. David Reyna and Samuel Short TCEQ/ Mr. Irvin L. Bilsky	Conference call to confirm the representation of total PM, PM_{10}, $PM_{2.5}$ evaluation does meet the 106.261/262 requirements for cellulose fiber and dry nutrients.

ESTIMATED EMISSIONS

EPN / Emission Source	**VOC**		**NOx**		**CO**		**PM**		**PM_{10}**		**$PM_{2.5}$**		**SO_2**	
	lbs/hr	**tpy**	**lbs/hr**	**tpy**	**lbs/hr**	**tpy**	**lbs/hr**	**tpy**	**lbs/hr**	**tpy**	**lbs/hr**	**tpy**	**lbs/hr**	**tpy**
EPN 1 / Wet Feed Railcar Unload	0.66	2.89					0.83	2.41	0.20	0.58	0.03	0.10		
EPN 2 / Wet Feed Transfer	0.14	0.61					0.83	2.41	0.20	0.58	0.03	0.10		
EPN 3 / Product Loadout	0.27	1.20					0.83	2.92	0.20	0.71	0.03	0.12		
EPN 4 / Dry Ingredients Unload							0.25	0.23	0.08	0.08	0.08	0.08		
EPN 5 / Dry Ingredients Aspiration							0.17	0.75	0.17	0.75	0.17	0.75		
EPN 6 / Dry Ingredient No. 1							0.01	0.05	0.01	0.05	0.01	0.05		
EPN 7 / Dry Ingredient No. 2							<0.01	0.01	<0.01	0.01	<0.01	0.01		
EPN 8 / Dry Ingredient No. 3							<0.01	0.01	<0.01	0.01	<0.01	0.01		
EPN 9 / Dry Ingredient No. 4							<0.01	0.01	<0.01	0.01	<0.01	0.01		
EPN 10 / Dry Ingredients Unload 2							0.17	0.19	0.06	0.06	0.06	0.06		
EPN 11 / Dry Ingredients Unload 2 Aspiration							0.21	0.45	0.21	0.45	0.21	0.45		
EPN 12 / F-2407c-14(c) Bin Vents (9)							0.01	0.04	0.01	0.04	0.01	0.04		
EPN 13 / Ingredient Weigh Hopper Bin Vent Filters F-2407(b)-2414 (b)							<0.01	0.04	<0.01	0.04	<0.01	0.04		
EPN 14 / Dehumidification Filtation;3 Silos Tks 2011-2013							0.02	0.04	0.02	0.04	0.02	0.04		
EPN 15 / Forage Ingredient Unload							0.43	0.32	0.06	0.05	0.01	0.01		
EPN 16 / Forage Ingredient Unload Dust Collector							0.52	1.13	0.52	1.13	0.52	1.13		
EPN 17 / Forage Storage F- 4402							0.04	0.19	0.04	0.19	0.04	0.19		
EPN 18 / West Pad Hoop Building							0.17	0.03	0.04	0.01	0.01	<0.01		
EPN 19 / FD&C No. 1 Station							0.02	<0.01	0.02	<0.01	0.02	<0.01		
EPN 20 / Steep Tanks 1&2	<0.01	<0.01												
ENG/Emergency Generator	6.39	2.80	79.2	34.68	17.11	7.50	5.62	2.46	5.62	2.46			5.36	2.35
Fug / Supersack Addition							<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
TOTAL EMISSIONS (TPY):		7.51		34.68		7.50		13.70		7.26		3.20		2.35

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MAXIMUM OPERATING SCHEDULE:	**Hours/Day**		**Days/Week**		**Weeks/Year**		**Hours/Year**	8,760

	TECHNICAL REVIEWER	**PEER REVIEWER**	**FINAL REVIEWER**
SIGNATURE:			
PRINTED NAME:	Mr. David Reyna		Mr. Samuel Short
DATE:	October 6, 2017		October 6, 2017