

Rombough, Kyrik

From: Rombough, Kyrik
Sent: Wednesday, July 11, 2007 1:21 PM
To: 'keen@rtpev.com'
Cc: Gustafson, Brian; Anderson, Jim A. (AQ); Schultz, Brad
Subject: FW: Hyperion Language



Inventory
sources.xls (48 K)
Hyperion
map.jpg (306 KB)

Mr. Keen:

You asked for an emission inventory for the proposed Oil Refinery project. I have enclosed two documents for your information. The first document is a jpeg file outlining a map. The second document is an excel file outlining the emission inventory information.

The map indicates the proposed projects location (light red), the estimated 10 kilometer significant impact area of the project (light blue), the 50 kilometer review area around the significant impact area (light yellow), and the location of the permitted sources in the counties encompassed in the review area. As can be seen some of the permitted facilities are outside of the review area (light yellow) and most of them, if not all, are outside of the significant impact area (light blue).

The excel spreadsheet contains three worksheets. The first worksheet covers the basic information of the facility. The second worksheet contains the emission inventory. I included the actual emission for the Title V permits covering the 2006 operations. As discussed by phone, we do not track actual emissions of minor sources. Therefore, I listed the potential emissions for these sources. The third spreadsheet is the stack parameter information for the Title V sources.

Most of these permitted facilities have an impact area less than 1 mile from its property boundary. Therefore, these permitted facilities will not impact your project and would not need to be included in the modeling analysis. There are a few sources on the edge of the proposed projects significant impact area that may need to be included.

If you have any questions, please feel free to contact me either by email at Kyrik.Rombough@state.sd.us or by phone at 605-773-5708.

Kyrik

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Facility	Permit #	County	Unit #	Unit Description	Stack Height (Feet)	Stack Diameter (Feet)	Stack Flow (Cubic Feet / Minute)	Stack Temp (F)
Sioux River Ethanol	28.0501-44	Lincoln	1	Grain Receiving	58	1.67	23450	Ambient
			2	Grain Cleaning	68	0.67	2500	Ambient
			3	Grain Milling	15	1.33	9000	Ambient
			4	Grain Milling	15	1.33	9000	Ambient
			5	Grain Milling	15	1.33	9000	Ambient
			6	Conveyor	50	12	4300	Ambient
			7	Fluid Bed Cooler	20	2	23800	200
			8	Silo	112	1	5000	70
			9	Silo Bypass	30	1.33	5000	70
			10	Dryer	100	6.33	112000	320
			11	Fermentation/Disillation	68	2	9000	65
			12	Truck Loadout				
			13	Boiler	35	3		
			14	Railcar Loadout				
			15	Cooling tower				
			16	Grain Milling	15	1.33	9000	Ambient
			17	Generator	10	1	7100	750
			18	Tank				
			19	Tank				
			20	Tank				
			21	Tank				
			22	Tank				
			23	Boiler	75	4	27900	400
Great Plains Ethanol	28.0501-61	Turner	1	Grain Receiving	85	3	23450	Ambient
			2	Grain Cleaning	68	0.67	2500	Ambient
			4	Fermentation	68	2	9000	65
			6	Dryers	100	7.67	160000	325
			7	Cooling Tower				
			8	Ethanol Loadout	20	1.3	400	
			9	Fluid Bed Cooler	15	2	23800	200
			10	DDGS Silo	112	1	5000	70
			11	DDGS Silo Bypass	30	1.33	5000	70
			12	Hammer mill	15	1.33	9000	Ambient
			13	Hammer mill	15	1.33	9000	Ambient
			14	Hammer mill	15	1.33	9000	Ambient
			15	Hammer mill	15	1.33	9000	Ambient
			15	Generator	10	1		
			18	Tank				
19	Tank							
20	Tank							
21	Tank							

			22	Tank				
			23	Corn Surge Bin	68	1	2500	Ambient
			24	Hammer mill	15	1.33	12000	Ambient
			25	Hammer mill	15	1.33	12000	Ambient
			26	Hammer mill	15	1.33	12000	Ambient
			27	Hammer mill	15	1.33	12000	Ambient
			28	Flour Conveyor	60	1	4500	Ambient
			29	Fermentation	68	2	9000	65
			30	Fluid Bed Cooler	70	3	23400	100
			31	DDGS Silo	112	1.3	4300	70
			32	DDGS Silo Bypass	30	1.3	4300	70
			33	Boiler	75	4	27900	400
			34	Boiler	75	4	27900	400
			35	Boiler	75	4	27900	400
			36	Boiler	50		45000	350
			37	Generator	10	1.5	15470	810
			38	Troana Storage Bin			1100	Ambient
			39	Wood Silo	15	1.5	16000	Ambient
			40	Cooling Tower				
			41	Ash Storage Bin	15	1.5	850	Ambient
			42	DDGS Bypass	30	1.3	9000	Ambient
Basin Electric Power Cooperative	28.0801-19	Clay	1	Turbine	53.1	17.6	1600000	990
			2	Turbine	53.1	17.6	1500000	970
University of South Dakota	28.2201-19	Clay	1	Boiler	80	14	18700	350
			2	Boiler			Same stack as #1	
			3	Incinerator	18	1.67	1200	1800
			5	Boiler	78	2	8500	750
			6	Boiler	78	2	8500	750
			7	Boiler	78	2	8500	750
Alcoa Inc	28.3306-07	Yankton	1	Furnace	36	4	15,600	650
			2	Furnace	36	4	15,600	650
			3	Furnace	36	4	15,600	650
			4	Furnace				
			5	Furnace				
			6	Heater	30	1.16	2201	260
			7	Furnace	24	1.41	2370	225
			8	Heater	27	1.41	2489	295
			9	Heater	31	1.33	3145	390
			10	Coating Line				
			11	Oven	42	1.61	8670	560
			12	Coating Line				

			13	Heater	56	1.16	1200	135
Northwestern Public Service Company (Yankton)	28.0801-07	Yankton	1	Generator	22.4	1.67	25,740	700
			2	Generator	22.1	1.83	25,740	700
			3	Generator	26.5	3.5	62,365	700
			4	Generator	31	1.67	30,960	720
			5	Tank				
			6	Tank				
South Dakota Human Services Center	28.0101-07	Yankton	1	Boiler	30	2	20000	330
			2	Boiler	40	2.6	11000	330
			3	Boiler	40	2.6	11000	330
			4	Boiler	40	2.6	11000	330

Facility	Permit #	County	Emission Inventory	TSP (tpy)	PM10 (tpy)	SO2 (tpy)	NOx (tpy)	VOC (tpy)	CO (tpy)	Notes
Ace Ready Mix	SDG11D022	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Brandon Materials	SDG11C019	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Cenex Harvest States	28.0502-44G	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Cenex Harvest States	28.0503-44G	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Koyker Manufacturing	28.3301-44	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
ShowPlace Wood Products	28.4401-44	Lincoln	Yes	-	-	-	-	180.0	-	Actual emissions -- 2006 emissions inventory
Sioux River Ethanol	28.0501-44	Lincoln	Yes	44.1	44.1	0.4	75.6	58.9	66.0	Actual emissions -- 2006 emissions inventory
United Concrete	SDG11C014	Lincoln	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Farmers Coop Elevator	28.0505-62G	Union	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Southeast Farmers Elevator Cooperative	28.0501-62G	Union	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Steck Wholesale Foods, Inc.	28.0301-62	Union	No	-	-	-	1.3	65.77	1.1	Potential Emissions -- 2004 statement of basis
Terex Load King	28.3301-62	Union	No	-	-	-	-	13	-	Potential Emissions -- 2006 statement of basis
The Iams Company	28.9901-62	Union	No	1.7	1.7	0.1	22.3	1.2	18.7	Potential Emissions -- 2006 statement of basis
Cargill AgHorizons	28.0503-61G	Turner	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Cenex Harvest States	28.0502-61G	Turner	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Chancellor Ready Mix	SDG11C016	Turner	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Fremar Farmers Coop	28.0504-61G	Turner	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Fremar LLC	28.0505-61G	Turner	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Great Plains Ethanol	28.0501-61	Turner	Yes	13.5	13.5	0.7	52.7	45.8	56.9	Actual emissions -- 2006 emissions inventory
Millennium Ethanol	28.0502-61	Turner	Yes	94	63	80.0	86	95	96	
Basin Electric Power Cooperative	28.0801-19	Clay	Yes	0.1	0.1	1.0	3.1	0.0	0.0	Actual emissions -- 2006 emissions inventory
Midwest Ready Mix	SDG11C015	Clay	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Standard Ready Mix	SDG11A035	Clay	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
University of South Dakota	28.2201-19	Clay	Yes	0.5	0.5	0.1	10.4	0.3	4.9	Actual emissions -- 2006 emissions inventory
Vermillion Fertilizer and Grain	28.0501-19G	Clay	No	< 100	< 100	-	-	-	-	Potential Emissions -- 2006 statement of basis
Alcoa Inc	28.3306-07	Yankton	Yes	5.2	5.2	0.1	16.5	194.2	13.8	Actual emissions -- 2006 emissions inventory
Barnes Hay and Feed Company	28.0523-07	Yankton	No	70.8	64.1	0.0	5.8	0.3	4.9	Potential Emissions -- 2004 statement of basis
Concrete Materials	SDG11C011	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Farmers Elevator Company	28.0505-07G	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Gehl Company	28.3302-07	Yankton	No	0	0	0	2.9	69	2.4	Potential Emissions -- 2006 statement of basis
Kaneb Pipe Line Operating Partnership LP	28.0701-07	Yankton	Yes	-	-	-	-	186.0	-	Actual emissions -- 2006 emissions inventory
Kolberg-Pioneer Inc	28.9906-07	Yankton	Yes	0.0	0.0	0.0	0.2	41.8	0.2	Actual emissions -- 2006 emissions inventory
Northwestern Public Service Company (Yankton)	28.0801-07	Yankton	Yes	0.3	0.2	0.1	3.6	0.2	0.9	Actual emissions -- 2006 emissions inventory
Riley Company Inc	28.0502-07G	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Sacred Heart Monastery	28.0102-07	Yankton	No	26.7	24.8	50	67.8	1.8	39.1	Potential Emissions -- 2004 statement of basis
South Dakota Human Services Center	28.0101-07	Yankton	Yes	0.3	0.3	0.0	4.5	0.3	3.8	Actual emissions -- 2006 emissions inventory
Utica Grain & Feed Inc	28.0503-07G	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Vishay Dale Electronics Inc	28.9901-07	Yankton	No	-	-	-	-	42.6	-	Potential Emissions -- 1999 statement of basis
Wilson Trailer Company	28.3304-07	Yankton	No	-	-	-	-	36.8	-	Potential Emissions -- 2007 statement of basis
Yaggies Inc	28.0504-07G	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria
Yankton Redi Mix	SDG11B013	Yankton	No	< 100	< 100	-	-	-	-	Potential Emissions -- General Permit Criteria

Facility	Permit #	Permit Type	Source Type	County	Address	City	Easting (Meters)	Northing (Meters)
Ace Ready Mix	SDG11D022	Minor	Portable Concrete Plant	Lincoln	Canton Industrial	Canton	-	-
Brandon Materials	SDG11C019	Minor	Stationary Concrete Plant	Lincoln	101 East Industrial	Harrisburg	686173	4812304
Cenex Harvest States	28.0502-44G	Minor	Grain Elevator	Lincoln	415 E. 5th Street	Canton	695624	4796892
Cenex Harvest States	28.0503-44G	Minor	Grain Elevator	Lincoln		Canton	695745	4797019
Koyker Manufacturing	28.3301-44	Minor	Manufacturing	Lincoln	200 North Cleveland	Lennox	669766	4802693
ShowPlace Wood Products	28.4401-44	Title V	Wood Manufacturing	Lincoln		Harrisburg	685817	4812240
Sioux River Ethanol	28.0501-44	Title V	Ethanol Plant	Lincoln	29619 Spur Avenue	Hudson	705157	4774586
United Concrete	SDG11C014	Minor	Stationary Concrete Plant	Lincoln	27291 Ironworks Ave	Harrisburg	678562	4811213
Farmers Coop Elevator	28.0505-62G	Minor	Grain Elevator	Union	101 NE Street	Beresford	681600	4772453
Southeast Farmers Elevator Cooperative	28.0501-62G	Minor	Grain Elevator	Union		Elk Point	689868	4728833
Steck Wholesale Foods, Inc.	28.0301-62	Minor	Bakery	Union	101 River Drive	North Sioux City	706826	4711214
Terex Load King	28.3301-62	Minor	Manufacturing	Union	701 East Rose Street	Elk Point	690436	4728449
The Iams Company	28.9901-62	Minor	Pet Food	Union	630 North Derby Lane	North Sioux City	705536	4712766
Cargill AgHorizons	28.0503-61G	Minor	Grain Elevator	Turner		Parker	650950	4806419
Cenex Harvest States	28.0502-61G	Minor	Grain Elevator	Turner	220 RR Street	Hurley	655455	4794264
Chancellor Ready Mix	SDG11C016	Minor	Stationary Concrete Plant	Turner	46124 Hwy 44	Chancellor	663684	4804241
Fremar Farmers Coop	28.0504-61G	Minor	Grain Elevator	Turner		Marion	640921	4809482
Fremar LLC	28.0505-61G	Minor	Grain Elevator	Turner		Marion	639590	4810305
Great Plains Ethanol	28.0501-61	Title V	Ethanol Plant	Turner	27716 462nd Avenue	Chancellor	665259	4803873
Millennium Ethanol	28.0502-61	Title V	Ethanol Plant	Turner		Marion	639565	4810708
Basin Electric Power Cooperative	28.0801-19	Title V	Electrical Generation	Clay		Vermillion	664075	4751356
Midwest Ready Mix	SDG11C015	Minor	Stationary Concrete Plant	Clay	1405 East Highway 50	Vermillion	670876	4739676
Standard Ready Mix	SDG11A035	Minor	Stationary Concrete Plant	Clay	1016 E. Cherry	Vermillion	670518	4739411
University of South Dakota	28.2201-19	Title V	University	Clay	414 East Clark Street	Vermillion	669691	4739049
Vermillion Fertilizer and Grain	28.0501-19G	Minor	Grain Elevator	Clay	1919 West Cherry	Vermillion	666773	4739089
Alcoa Inc	28.3306-07	Title V	Manufacturing	Yankton	2500 Alumax Road	Yankton	634685	4749708
Barnes Hay and Feed Company	28.0523-07	Minor	Animal Feed	Yankton	31020 450th Avenue	Gayville	646934	4750449
Concrete Materials	SDG11C011	Minor	Stationary Concrete Plant	Yankton	2210 Alumax Road	Yankton	634341	4749776
Farmers Elevator Company	28.0505-07G	Minor	Grain Elevator	Yankton	200 S WASHINGTON AV	Mission Hill	640402	4753160
Gehl Company	28.3302-07	Minor	Manufacturing	Yankton	900 Ferdig Avenue	Yankton	633051	4748620
Kaneb Pipe Line Operating Partnership LP	28.0701-07	Title V	Pipeline	Yankton	2608 East Hwy 50	Yankton	634774	4748978
Kolberg-Pioneer Inc	28.9906-07	Title V	Manufacturing	Yankton	700 West 21st Street	Yankton	630270	4750100
Northwestern Public Service Company (Yankton)	28.0801-07	Title V	Electrical Generation	Yankton	5/8 mile NE adjacent to Hwy 50	Yankton	634451	4750264
Riley Company Inc	28.0502-07G	Minor	Grain Elevator	Yankton	P.O. Box 178	Irene	649679	4771496
Sacred Heart Monastery	28.0102-07	Minor	Monastery	Yankton	1005 West 8th Street	Yankton	630244	4748272
South Dakota Human Services Center	28.0101-07	Title V	Steam Generation	Yankton	3515 Broadway	Yankton	630089	4752439
Utica Grain & Feed Inc	28.0503-07G	Minor	Grain Elevator	Yankton	P.O. Box 6	Utica	622727	4759732
Vishay Dale Electronics Inc	28.9901-07	Minor	Manufacturing	Yankton	East Highway 50	Yankton	633154	4748277
Wilson Trailer Company	28.3304-07	Minor	Manufacturing	Yankton	3602 Broadway	Yankton	630999	4752863
Yaggies Inc	28.0504-07G	Minor	Grain Elevator	Yankton	3rd & Mulberry	Yankton	631753	4747566
Yankton Redi Mix	SDG11B013	Minor	Portable Concrete Plant	Yankton	2300 West City Limits Road	Yankton	-	-

