

Sunflower Permit Application 2010

Public Comment Overview

KDHE received a total of 5,876 oral and written comments during the public comment periods for the Sunflower draft permit.

- Of the 5,876 comments received, approximately 240 comments were unique.
- Of those 240 comments, about 50 required a complex review and response and came from organizations such as the US Environmental Protection Agency, Sierra Club and Great Plains Alliance for Clean Energy.
- More than 4,000 of the 5,876 comments received were form letters, postcards or e-mails.
- 242 comments were received at the public hearings.

Breakdown of Written Comments

		1 st Period	2 nd Period	Total
E-mail, personal	Count of Favor Permit Issuance	72	14	86
	Count of Oppose Permit Issuance	1,048	168	1,216
	Count of Public Comment Extension Requested		1	1
	Count of Misc	16	12	28
Form E-mail	Count of Favor Permit Issuance	33		33
	Count of Oppose Permit Issuance	877	642	1,519
	Count of Public Comment Extension Requested			
	Count of Misc		1	1
Form Letter or Postcard	Count of Favor Permit Issuance	2,538	4	2,542
	Count of Oppose Permit Issuance		4	4
	Count of Public Comment Extension Requested			
	Count of Misc			
Letter, personal	Count of Favor Permit Issuance	22	2	24
	Count of Oppose Permit Issuance	51	58	109
	Count of Public Comment Extension Requested			
	Count of Misc			
Organizational E-mail	Count of Favor Permit Issuance	2	4	6
	Count of Oppose Permit Issuance	5	7	12
	Count of Public Comment Extension Requested	1		1
	Count of Misc		1	1
Organizational Letter	Count of Favor Permit Issuance	13	25	38
	Count of Oppose Permit Issuance	2	1	3
	Count of Public Comment Extension Requested	4		4
	Count of Misc	1	1	2
Phone Message	Count of Favor Permit Issuance			
	Count of Oppose Permit Issuance	1	3	4
	Count of Public Comment Extension Requested			
	Count of Misc			
Total Count of Favor Permit Issuance		2,680	49	2,729
Total Count of Oppose Permit Issuance		1,984	883	2,867
Total Count of Public Comment Extension Requested		5	1	6
Total Count of Misc		17	15	32
Total Number of Public Comments Submitted Via E-mail and Post		4,686	948	5,634

Note: The 1st Public Comment Period was held July 1-August 15, 2010. The 2nd Public Comment Period was held September 23 – October 23, 2010.

Environmental Impact Overview

With requirements to use renewable energy components, such as wind energy and biomass fuel, the Sunflower permit allows for the most mitigated plant in Kansas history.

- The plant will have nearly 40 percent fewer CO₂ emissions than the 2007 Sunflower permit application.
- The settlement agreement contains a 30% renewable component:
 - 20% wind development
 - 10% biomass used as fuel

Difference of Environmental Impact between the 2007 Sunflower Draft Permit and the 2010 Sunflower Permit

Pollutant Type	Sunflower 2 Post-Permit Potential to Emit**		% Reduction
	2007 Draft Permit (1400 MW - 2 units)	2010 Permit (895 MW - 1 unit)	
	<i>tons/yr</i>		
Nitrogen oxides (NO _x)	2,867	1,910	33%
Carbon monoxide (CO)	8,573	4,579	47%
Sulfur dioxide (SO ₂)	4,843	3,240	33%
Volatile organic compounds (VOC)	202	119	41%
Particulate matter (PM/PM ₁₀)	2,056	512	*
Particulate matter <10 μm (PM ₁₀)	n/a	748	*
Particulate matter <2.5 μm (PM _{2.5})	n/a	727	*
Sulfuric acid mist (H ₂ SO ₄)	240	141	41%
	<i>lbs/yr</i>		
Elemental lead (Pb)	1860	1060	43%
Mercury (Hg)	232	156	33%

* 2007 Draft Permit had PM/PM₁₀ limit only.

**Potential-to-emit (PTE) estimates are based on operation at full capacity for 8,760 hours per year while in compliance with all conditions of this permit.

Environmental Impact of Settlement Agreement on Current Sunflower Plant (Holcomb 1)

Pollutant Type	Sunflower Holcomb 1 (360 MW)	Sunflower Holcomb 1 PTE after Implementing Settlement Agreement	% Reduction
	<i>tons/yr</i>		
Nitrogen oxides (NO _x)	7,422	3,266	66%
Sulfur dioxide (SO ₂)	7,125**	1,781	75%
	<i>lbs/yr</i>		
Mercury (Hg)	no limit	327*	32%

* Total lbs/yr. of Hg from H1 and H2.

** Permit also included a 70% reduction on the inlet concentration.