

## DOCKETED

<b>Docket Number:</b>	12-AFC-02
<b>Project Title:</b>	Huntington Beach Energy Project
<b>TN #:</b>	202604
<b>Document Title:</b>	Applicant's Correspondence to SCAQMD re Class II Visibility
<b>Description:</b>	Correspondence
<b>Filer:</b>	Kimberly Hellwig
<b>Organization:</b>	Stoel Rives LLP
<b>Submitter Role:</b>	Applicant
<b>Submission Date:</b>	6/25/2014 4:38:34 PM
<b>Docketed Date:</b>	6/25/2014

[REDACTED]

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**From:** Jerry.Salamy@CH2M.com  
**Sent:** Friday, May 16, 2014 4:04 PM  
**To:** tchico@aqmd.gov  
**Cc:** stephen.okane@AES.com; jbaker@aqmd.gov; JYee@aqmd.gov; CPerri@aqmd.gov; ctupac@aqmd.gov; ALee@aqmd.gov; Elyse.Engel@ch2m.com; Robert.Mason@CH2M.com; Cindy.Salazar@CH2M.com; Jerry.Salamy@CH2M.com  
**Subject:** RE: Huntington Beach Energy Project, 12-AFC-02, Monica Rudman Comments: Comments on SCAQMD Revised Preliminary Determination of Compliance  
**Attachments:** HBEP\_SCAQMD\_Class\_II\_Visibility\_Response\_05-16-14\_Final\_Hard\_Copy.pdf

Tom,

Attached is our response to the SCAQMD's request to assess HBEP's Class II visibility impairment on the Huntington State Beach. We are providing this assessment for informational purposes as there are no promulgated Class II visibility standards. Please let me know if you have any questions.

Thanks,

*Jerry Salamy*  
*Principal Project Manager*  
*CH2M HILL/Sacramento*  
*Phone 916-286-0207*  
*Fax 916-614-3407*  
*Cell Phone 916-769-8919*

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**From:** Tom Chico [<mailto:tchico@aqmd.gov>]  
**Sent:** Tuesday, May 13, 2014 8:35 AM  
**To:** Salamy, Jerry/SAC  
**Cc:** Stephen O'Kane; Jillian Baker; John Yee; Chris Perri; Charles Tupac; Andrew Lee  
**Subject:** FW: Huntington Beach Energy Project, 12-AFC-02, Monica Rudman Comments: Comments on SCAQMD Revised Preliminary Determination of Compliance  
**Importance:** High

Jerry,

We received one comment from the public on the PDOC for AES Huntington Beach; see the link below. We need your help addressing the comment on Class II visibility impacts; see the section titled "Effect on State Parks." To help us address the comment, we would like you to do a Level 1 and 2 visibility analyses for Huntington State Beach. We expect that visibility impacts will exceed the Class I thresholds. We will point out that the impacts are conservative since Class I thresholds were used for a Class II area and that no additional permitting actions are required by the impacts since the Class II visibility analysis is for informational purposes only.

Thanks in advance for your help.

Regards,  
Tom Chico  
(909) 396-3149

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**From:** Mohsen Nazemi  
**Sent:** Monday, May 05, 2014 11:46 PM  
**To:** Andrew Lee; Charles Tupac; John Yee; Tom Chico; Jillian Baker

**Cc:** Elaine Chang

**Subject:** FW: Huntington Beach Energy Project, 12-AFC-02, Monica Rudman Comments: Comments on SCAQMD Revised Preliminary Determination of Compliance

**Importance:** High

Please see attached comment letter on our PDOC for AES Huntington Beach. Andrew, please prepare a response letter and work with Tom and Jillian in trying to respond to the comments on air dispersion modeling and HRA. Thanks.

***Mohsen Nazemi, P.E.***

***Deputy Executive Officer***

*Engineering & Compliance*

*South Coast Air Quality Management District*

*21865 Copley Drive*

*Diamond Bar, CA 91765*

*Tel. (909)396-2662*

*Fax (909)396-3895*

[\*mnazemi1@aqmd.gov\*](mailto:mnazemi1@aqmd.gov)

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**From:** [efiling@energy.ca.gov](mailto:efiling@energy.ca.gov) [<mailto:efiling@energy.ca.gov>]

**Sent:** Monday, May 05, 2014 1:43 PM

**To:** [efilingPOSarchive@energy.ca.gov](mailto:efilingPOSarchive@energy.ca.gov); [kevin.w.bell@energy.ca.gov](mailto:kevin.w.bell@energy.ca.gov); [felicia.miller@energy.ca.gov](mailto:felicia.miller@energy.ca.gov); [publicadviser@energy.ca.gov](mailto:publicadviser@energy.ca.gov); [e-recipient@caiso.com](mailto:e-recipient@caiso.com); Mohsen Nazemi; [stephen.okane@aes.com](mailto:stephen.okane@aes.com); [jennifer.didlo@aes.com](mailto:jennifer.didlo@aes.com); [robert.mason@CH2M.com](mailto:robert.mason@CH2M.com); [mafoster@stoel.com](mailto:mafoster@stoel.com); [jasonpyle@me.com](mailto:jasonpyle@me.com); [tluster@coastal.ca.gov](mailto:tluster@coastal.ca.gov); [bketterer@parks.ca.gov](mailto:bketterer@parks.ca.gov); [jjames@surfcity-hb.org](mailto:jjames@surfcity-hb.org); [shess@surfcity-hb.org](mailto:shess@surfcity-hb.org); [aaron.klemm@surfcity-hb.org](mailto:aaron.klemm@surfcity-hb.org); [cfikes@surfcity-hb.org](mailto:cfikes@surfcity-hb.org); [johanna.stephenson@surfcity-hb.org](mailto:johanna.stephenson@surfcity-hb.org); [gstewart@waterboards.ca.gov](mailto:gstewart@waterboards.ca.gov); [jfk0480@aol.com](mailto:jfk0480@aol.com)

**Subject:** Huntington Beach Energy Project, 12-AFC-02, Monica Rudman Comments: Comments on SCAQMD Revised Preliminary Determination of Compliance

Dear Proof of Service List Members,

The following Comment submitted to Docket Number **12-AFC-02** has been published:

- Title: [Monica Rudman Comments: Comments on SCAQMD Revised Preliminary Determination of Compliance](#)  
5 page(s)  
Subject(s): Air Quality  
Document Type: Document

Thank you.

**This is an automated e-mail message. Please do not reply to this e-mail.**



AES Huntington Beach, LLC  
21730 Newland Street  
Huntington Beach, CA 92646

tel 562 493 7891  
fax 562 493 7320

May 16, 2013

Mr. Tom Chico  
Program Supervisor  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178

**Subject: Huntington Beach Energy Project Permit Application (Facility ID# 115389)**

Dear Mr. Chico:

AES Huntington Beach, LLC (AES) is submitting this letter in response to the South Coast Air Quality Management District's (SCAQMD) May 13, 2014 request to determine the Huntington Beach Energy Project (HBEP) Class II visibility impacts on the Huntington State Beach Park for informational purposes. This letter presents AES's responses to the requested information.

Currently, there are no promulgated regulatory criteria or thresholds available to evaluate the Huntington Beach Energy Project's (HBEP) impacts on visibility in federally designated Class II areas. Therefore, at the request of the South Coast Air Quality Management District (SCAQMD), the Applicant submitted an assessment addressing impacts on visibility at select state parks and wilderness areas located within federally designated Class II areas near the HBEP site. This assessment compared HBEP's ambient air quality impact concentrations to the secondary National Ambient Air Quality Standards (NAAQS). The secondary NAAQS were developed by the U.S. Environmental Protection Agency (EPA) to protect vegetation, welfare, and visibility. This assessment showed that HBEP is not expected to cause visibility impacts in any Class II areas.

Following submission of the assessment described above, the SCAQMD requested that AES conduct a VISCREEN plume blight assessment to determine HBEP's plume effects on perceived contrast and color at specific Class II state parks and wilderness areas within 50-kilometers of HBEP. The VISCREEN model was developed to determine if visibility could be impacted at Class I areas, not Class II areas. To make such a determination, the results from the VISCREEN model are compared to the conservative Class I criteria<sup>1</sup> for change in contrast and color ( $\Delta E$ ) of 0.05 and 2.0, respectively. Congress established a goal to return Class I

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<sup>1</sup> Federal Land Managers, *Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report – Revised (2010)*, 2010.

areas to “natural conditions” devoid of any impairment attributable to man-made air pollution.<sup>2</sup> As EPA has described it, “Natural visibility conditions represent the long-term degree of visibility that is estimated to exist in a given mandatory Federal Class I area in the absence of human-caused impairment.”<sup>3</sup> Therefore, the Class I criteria are not appropriate criteria for Class II areas since Class II areas are not unpopulated, pristine wilderness areas or National Parks. However, the Class I criteria could be used as an indicator of whether a facility’s plume may be perceptible although the level of impairment (the Class I criteria) would not apply to Class II areas. Therefore, the Class I criteria are conservatively utilized in this analysis as a basis to determine possible visibility impairment.

The Class II areas initially evaluated by AES, and agreed upon by the SCAQMD, were Crystal Cove State Park, Water Canyon State Park, Chino Hills State Park, and San Mateo Canyon Wilderness Area. This analysis was included in the SCAQMD’s Preliminary Determination of Compliance and used the EPA-recommended VISCREEN model to demonstrate that HBEP would not exceed the conservative Class I criteria for visibility impairment at the Class II areas evaluated.

Huntington State Beach (State Beach) Class II area is a small swath of land which extends along the California Coast for 3.4 kilometers, located directly west of HBEP. The State Beach is bordered to the west by the Pacific Ocean and bordered to the east by California State Highway 1. On average, the width of the State Beach is about 160 meters (m), with a range of widths between 130 m to 230 m. A plume blight analysis using VISCREEN would evaluate the change in background contrast and color affecting an observer looking through the center of a plume. The viewer’s background *within* the limited area of interest can be defined as either an object (mountain side or building) or sky. A viewer standing on the border of the State Beach looking across the beach or up the beach would not have any terrain or building to observe *within* the State Beach. Therefore, the only feature *within* the State Beach that would be observable is the sky. Areas outside of the State Beach have not been identified and, therefore, were not evaluated.

The State Beach is open between the hours of 6:00 am and 10:00 pm.<sup>4</sup> Therefore, the frequency of atmospheric stability class and winds blowing from HBEP across the State Beach were determined for times when the State Beach would be open. Table 1 provides a breakdown of the frequency of atmospheric stability class and winds blowing across the State Beach toward the sectors of 120 degrees to 305 degrees from true north. The AERMET meteorological data<sup>5</sup> used for the previous HBEP Class II visibility assessment was also used for this assessment.

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<sup>2</sup> 42 U.S.C. 7491(a)(1).

<sup>3</sup> EPA, *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule*, page 1-1.

<sup>4</sup> Please refer to [http://www.parks.ca.gov/?page\\_id=643](http://www.parks.ca.gov/?page_id=643) for details.

<sup>5</sup> The SCAQMD-approved 2008-2012 John Wayne Airport AERMET meteorological dataset for the Prevention of Significant Deterioration modeling analysis was used for this analysis.

Table 1

Frequency and Stability of Winds Blowing from HBEP Toward Huntington State Beach between 6 am and 10 pm

Stability	Count <sup>1</sup>	Average Wind Speed (m/s)	Frequency (%) <sup>2</sup>	VISCREEN Results (contrast/ $\Delta E$ ) <sup>3</sup>
F	937	1.6	2.1	N/A
E	714	2.0	1.6	N/A
D	1,266	3.2	2.9	-0.13 / 12.04
C	636	2.3	1.5	-0.10 / 9.48
B	359	1.8	0.8	-0.06 / 3.67
A	18	1.8	0.0	0.19 / 10.28

Notes:

m/s = meter(s) per second

N/A = not applicable

1. The count of hours is based on the 5-year AERMET meteorological data set.

2. The frequency is based on a total of 43,848 hours in the 5-year AERMET meteorological data set.

3. Class I criteria of  $|0.05|$  for contrast and 2.0 for  $\Delta E$ .

Air dispersion modeling categorizes the effects of atmospheric turbulence and wind speed into six different atmospheric stability classes, A through F. Of these, A is the most unstable and F is the most stable. A plume is most likely to remain coherent in E or F stability conditions and least likely to remain coherent in A or B stability conditions; however, due to the close proximity of HBEP to the State Beach, the A or B stability conditions may not have the distance or time to disperse the plume downwind of the HBEP exhaust stacks. Hours associated with the E and F atmospheric stability classes would, by definition, never occur during daylight hours.<sup>6</sup> Therefore, none of the Table 1 values associated with E or F stability conditions would have an effect on visibility at the State Beach because those conditions would not occur during the daytime hour assessment period.

A VISCREEN Class II visibility analysis of the remaining atmospheric stability classes (A through D) and corresponding wind speeds identified in Table 1 was conducted. The procedures outlined in the *Workbook for Plume Visual Impact Screening and Analysis* (EPA, 1992) were followed to conduct the analysis. The modeling files and results of this analysis are included in Attachment A. Based on the frequency of winds blowing across the State Beach from HBEP and the modeled impacts, an observer looking across the State Beach would have the sky background Class I thresholds exceeded for either contrast or color during hours associated with stability classes A, B, C, and D. Table 2 presents the results of this assessment. On average, this corresponds to 5.1 percent of the time or 451 hours<sup>7</sup> per year when the sky background would be obstructed compared to the extremely conservative Class I area thresholds.

<sup>6</sup> D.B. Turner, *Workbook of Atmospheric Dispersion Estimates*, at page 6 (1969).

<sup>7</sup> Cumulative frequency of stability classes A, B, C, and D multiplied by 8,760 hours per year.

Table 2  
HBEP VISCREEN Analysis Results for Huntington State Beach

Stability	VISCREEN Results (contrast/ $\Delta E$ ) <sup>1</sup>
F	N/A
E	N/A
D	-0.13 / 12.04
C	-0.10 / 9.48
B	-0.06 / 3.67
A	0.19 / 10.28

Notes:

m/s = meter(s) per second

N/A = not applicable

1. Class I criteria of |0.05| for contrast and 2.0 for  $\Delta E$ .

As noted above, this analysis is extremely conservative and only evaluates HBEP's plume impacts on color and contrast in comparison to the more restrictive, and not necessarily appropriate, Class I area thresholds. Also, the VISCREEN model only allows for one source or exhaust stack to be evaluated. Therefore, in order to assess all 6 HBEP exhaust stacks, we assume that emissions from all 6 exhaust stacks are emitted from a single exhaust stack, which overestimates HBEP's visibility impacts. Additionally, this analysis conservatively uses the annual average background visual range at the State Park, when visual impacts associated with inland emission sources or regional haze may have a greater negative impact on the background visual range than HBEP. Specifically, fires on the beach within the specified fire pits may have a greater negative impact on visibility at the State Beach compared to HBEP. This analysis also conservatively does not discount present natural weather conditions, such as fog or rain, where the background would be naturally obscured and a plume from HBEP would not be perceptible.

Therefore, based on the limited and infrequent number of perceptibility impacts compared to the conservative Class I criteria identified using the VISCREEN model, HBEP would not cause an adverse impairment to perceptibility at the State Beach.

**References**

Federal Land Managers (FLM). 2010. *Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report – Revised (2010)*. October.

U.S. Environmental Protection Agency (EPA). 1992. *Workbook for Plume Visual Impact Screening and Analysis (EPA-454/R-92-023)*. October.

Mr. Tom Chico  
Page 5  
May 16, 2014

If you require further information, please don't hesitate contacting me at 562-493-7840.

Sincerely,

A handwritten signature in blue ink that reads "S. O'Kane". The signature is cursive and stylized, with the first letter of the first name being a large, prominent 'S'.

Stephen O'Kane  
Manager  
AES Huntington Beach, LLC  
Attachments

cc: Robert Mason/CH2M HILL  
Jennifer Didlo/AES  
Melissa Foster/Stoel Rives  
Jerry Salamy/CH2M HILL  
Felicia Miller/CEC  
Chris Perri/SCAQMD  
Jillian Baker/SCAQMD



**Attachment A**  
**Huntington Beach Energy Project**  
**Class II Visibility Assessment**

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**Table A-1: Viscreen Output Stability Class D Wind Speed 3 m/s**

Visual Effects Screening Analysis for  
 Source: HBEP  
 Class I Area: Huntington Beach State P

\*\*\* User-selected Screening Scenario Results \*\*\*

Input Emissions for

Particulates	99.30 TON/YR
NOx (as NO2)	242.30 TON/YR
Primary NO2	0.00 TON/YR
Soot	0.00 TON/YR
Primary SO4	0.00 TON/YR

PARTICLE CHARACTERISTICS

	Density	Diameter
	=====	=====
Primary Part.	2.5	6
Soot	2.0	1
Sulfate	1.5	4

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	102.50 km
Source-Observer Distance:	0.06 km
Min. Source-Class I Distance:	0.06 km
Max. Source-Class I Distance:	2.30 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	4
Wind Speed:	3.00 m/s

R E S U L T S

Asterisks (\*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
=====	=====	=====	=====	=====	=====	=====	=====	=====
SKY	10.	168.	1.0	1.	2.83	12.041*	0.05	0.127*
SKY	140.	168.	1.0	1.	2.00	8.063*	0.05	-0.129*
TERRAIN	10.	150.	0.1	19.	2.00	98.086*	0.16	0.416*
TERRAIN	140.	150.	0.1	19.	2.00	19.904*	0.16	0.093

Maximum Visual Impacts OUTSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	5.	0.0	164.	8.09	18.091*	0.14	0.340*
SKY	140.	5.	0.0	164.	3.35	6.019*	0.14	-0.187*
TERRAIN	10.	5.	0.0	164.	2.00	*****	0.14	0.458*
TERRAIN	140.	5.	0.0	164.	2.00	25.422*	0.14	0.108

**Table A-2: Viscreen Output Stability Class C Wind Speed 2 m/s**

Visual Effects Screening Analysis for  
 Source: HBEP  
 Class I Area: Huntington Beach State P

\*\*\* User-selected Screening Scenario Results \*\*\*

Input Emissions for

Particulates	99.30 TON/YR
NOx (as NO2)	242.30 TON/YR
Primary NO2	0.00 TON/YR
Soot	0.00 TON/YR
Primary SO4	0.00 TON/YR

PARTICLE CHARACTERISTICS

	Density =====	Diameter =====
Primary Part.	2.5	6
Soot	2.0	1
Sulfate	1.5	4

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	102.50 km
Source-Observer Distance:	0.06 km
Min. Source-Class I Distance:	0.06 km
Max. Source-Class I Distance:	2.30 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	3
Wind Speed:	2.00 m/s

R E S U L T S

Asterisks (\*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
=====	=====	=====	=====	=====	=====	=====	=====	=====
SKY	10.	168.	1.0	1.	5.28	9.488*	0.09	0.099*
SKY	140.	168.	1.0	1.	2.19	6.306*	0.09	-0.101*
TERRAIN	10.	145.	0.1	24.	2.46	94.110*	0.28	0.337*
TERRAIN	140.	145.	0.1	24.	2.00	18.569*	0.28	0.068

Maximum Visual Impacts OUTSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	5.	0.0	164.	11.83	17.006*	0.22	0.317*
SKY	140.	5.	0.0	164.	4.90	5.609*	0.22	-0.175
TERRAIN	10.	5.	0.0	164.	2.00	*****	0.22	0.435*
TERRAIN	140.	5.	0.0	164.	2.00	24.523*	0.22	0.099

**Table A-3: Viscreen Output Stability Class B Wind Speed 2 m/s**

Visual Effects Screening Analysis for  
 Source: HBEP  
 Class I Area: Huntington Beach State P

\*\*\* User-selected Screening Scenario Results \*\*\*

Input Emissions for

Particulates	99.30 TON/YR
NOx (as NO2)	242.30 TON/YR
Primary NO2	0.00 TON/YR
Soot	0.00 TON/YR
Primary SO4	0.00 TON/YR

PARTICLE CHARACTERISTICS

	Density	Diameter
	=====	=====
Primary Part.	2.5	6
Soot	2.0	1
Sulfate	1.5	4

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	102.50 km
Source-Observer Distance:	0.06 km
Min. Source-Class I Distance:	0.06 km
Max. Source-Class I Distance:	2.30 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	2
Wind Speed:	2.00 m/s

R E S U L T S

Asterisks (\*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
=====	=====	=====	=====	=====	=====	=====	=====	=====
SKY	10.	168.	1.0	1.	8.77	5.567	0.16	0.058
SKY	140.	168.	1.0	1.	3.64	3.655*	0.16	-0.059
TERRAIN	10.	84.	0.1	84.	2.32	68.552*	0.45	0.117
TERRAIN	140.	84.	0.1	84.	2.00	12.465*	0.45	0.018

Maximum Visual Impacts OUTSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	5.	0.0	164.	15.01	12.543	0.28	0.228
SKY	140.	5.	0.0	164.	6.22	4.016	0.28	-0.126
TERRAIN	10.	5.	0.0	164.	2.00	99.977*	0.28	0.336*
TERRAIN	140.	5.	0.0	164.	2.00	20.657*	0.28	0.067

**Table A-4: Viscreen Output Stability Class A Wind Speed 2 m/s**

Visual Effects Screening Analysis for  
 Source: HBEP  
 Class I Area: Huntington Beach State P

\*\*\* User-selected Screening Scenario Results \*\*\*

Input Emissions for

Particulates	99.30 TON/YR
NOx (as NO2)	242.30 TON/YR
Primary NO2	0.00 TON/YR
Soot	0.00 TON/YR
Primary SO4	0.00 TON/YR

PARTICLE CHARACTERISTICS

	Density =====	Diameter =====
Primary Part.	2.5	6
Soot	2.0	1
Sulfate	1.5	4

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	102.50 km
Source-Observer Distance:	0.06 km
Min. Source-Class I Distance:	0.06 km
Max. Source-Class I Distance:	2.30 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	1
Wind Speed:	2.00 m/s

R E S U L T S

Asterisks (\*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
=====	=====	=====	=====	=====	=====	=====	=====	=====
SKY	10.	155.	0.1	14.	16.87	10.275	0.32	0.185
SKY	140.	155.	0.1	14.	6.99	3.330	0.32	-0.104
TERRAIN	10.	84.	0.1	84.	2.42	61.967*	0.47	0.092
TERRAIN	140.	84.	0.1	84.	2.00	10.939*	0.47	0.014



Maximum Visual Impacts OUTSIDE Class I Area  
 Screening Criteria ARE Exceeded

Backgrnd	Thet	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	5.	0.0	164.	17.18	9.982	0.32	0.179
SKY	140.	5.	0.0	164.	7.12	3.165	0.32	-0.100
TERRAIN	10.	5.	0.0	164.	2.20	92.161*	0.32	0.275
TERRAIN	140.	5.	0.0	164.	2.00	18.237*	0.32	0.051