

# **Appendix R2.2**

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Air Quality

## Appendix R2.2 Air Quality

This appendix presents data supporting the analysis in Volume IV, Chapter IV.2. This appendix is organized as follows.

- Section R2.2.1 – No Action Alternative: Table R2.2-1
- Section R2.2.2 – Preferred Alternative: Table R2.2-2
- Section R2.2.3 – Alternative 1: Table R2.2-3
- Section R2.2.4 – Alternative 2: Table R2.2-4
- Section R2.2.5 – Alternative 3: Table R2.2-5
- Section R2.2.6 – Alternative 4: Table R2.2-6

**Note on Rounding of Data.** The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

## R2.2.1 No Action Alternative

**Table R2.2-1  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – No Action Alternative**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	43,500	39,800	—	—	3,700
Imperial Borrego Valley	28,900	20,200	2,000	900	5,800
Kingston and Funeral Mountains	16,500	16,500	—	—	—
Mojave and Silurian Valley	3,400	20	—	—	3,400
Owens River Valley	0	—	—	—	0
Panamint Death Valley	—	—	—	—	0
Pinto Lucerne Valley and Eastern Slopes	4,800	1,100	300	—	3,400
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	12,800	12,600	—	—	200
West Mojave and Eastern Slopes	36,300	18,300	9,500	—	8,500
<b>Total</b>	<b>146,000</b>	<b>109,000</b>	<b>12,000</b>	<b>1,000</b>	<b>25,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 2, No Action Alternative

## R2.2.2 Preferred Alternative

**Table R2.2-2  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – Preferred Alternative**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	32,500	25,700	3,100	—	3,700
Imperial Borrego Valley	56,000	40,200	400	9,600	5,800
Kingston and Funeral Mountains	3,100	3,100	—	—	—
Mojave and Silurian Valley	6,500	3,100	—	—	3,400
Owens River Valley	1,100	500	—	600	0
Panamint Death Valley	—	—	—	—	—
Pinto Lucerne Valley and Eastern Slopes	13,100	7,500	2,100	—	3,400
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	1,300	1,100	—	—	200
West Mojave and Eastern Slopes	48,700	36,900	3,300	—	8,500
<b>Total</b>	<b>162,000</b>	<b>118,000</b>	<b>9,000</b>	<b>10,000</b>	<b>25,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 3, Preferred Alternative

## R2.2.3 Alternative 1

**Table R2.2-3  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – Alternative 1**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	25,100	21,100	300	—	3,700
Imperial Borrego Valley	63,600	47,200	—	9,800	6,700
Kingston and Funeral Mountains	400	—	—	—	400
Mojave and Silurian Valley	8,100	4,800	—	—	3,400
Owens River Valley	6,100	5,800	—	—	200
Panamint Death Valley	—	—	—	—	—
Pinto Lucerne Valley and Eastern Slopes	16,700	11,900	700	—	4,100
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	2,200	1,900	—	—	300
West Mojave and Eastern Slopes	45,300	36,200	1,200	—	7,900
<b>Total</b>	<b>168,000</b>	<b>129,000</b>	<b>2,000</b>	<b>10,000</b>	<b>27,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 4, Alternative 1

## R2.2.4 Alternative 2

**Table R2.2-4  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – Alternative 2**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	21,900	16,700	3,400	—	1,800
Imperial Borrego Valley	48,800	33,700	2,400	9,600	3,100
Kingston and Funeral Mountains	2,000	1,500	300	—	200
Mojave and Silurian Valley	7,400	3,100	600	—	3,600
Owens River Valley	1,800	1,100	200	600	10
Panamint Death Valley	900	800	100	—	—
Pinto Lucerne Valley and Eastern Slopes	14,700	8,200	3,600	—	2,900
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	2,200	1,500	700	—	30
West Mojave and Eastern Slopes	57,200	35,600	3,700	—	17,900
<b>Total</b>	<b>157,000</b>	<b>102,000</b>	<b>15,000</b>	<b>10,000</b>	<b>30,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 5, Alternative 2

## R2.2.5 Alternative 3

**Table R2.2-5  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – Alternative 3**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	24,800	20,500	600	—	3,700
Imperial Borrego Valley	61,300	44,900	200	9,500	6,700
Kingston and Funeral Mountains	400	—	—	—	400
Mojave and Silurian Valley	7,300	4,000	—	—	3,400
Owens River Valley	3,000	2,100	—	600	200
Panamint Death Valley	2,300	1,900	—	—	500
Pinto Lucerne Valley and Eastern Slopes	17,600	12,100	1,400	—	4,100
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	2,300	2,100	—	—	300
West Mojave and Eastern Slopes	51,200	41,000	2,300	—	7,900
<b>Total</b>	<b>170,000</b>	<b>129,000</b>	<b>5,000</b>	<b>10,000</b>	<b>27,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 6, Alternative 3

## R2.2.6 Alternative 4

**Table R2.2-6  
Potential Acres of Dust Emission Sources by Technology Type by Subarea – Alternative 4**

Subarea	Potential Dust Sources in Subarea (acres)	Potential Dust Sources by Technology Type (acres)			
		Solar, including Distributed <sup>†</sup>	Wind*	Geothermal*	Transmission
Cadiz Valley and Chocolate Mountains	44,500	38,300	2,500	—	3,700
Imperial Borrego Valley	46,600	31,000	100	9,200	6,200
Kingston and Funeral Mountains	800	600	—	—	200
Mojave and Silurian Valley	6,500	2,900	—	—	3,600
Owens River Valley	2,500	1,800	—	700	0
Panamint Death Valley	800	800	—	—	—
Pinto Lucerne Valley and Eastern Slopes	12,800	6,400	1,300	—	5,100
Piute Valley and Sacramento Mountains	—	—	—	—	—
Providence and Bullion Mountains	1,100	1,100	—	—	30
West Mojave and Eastern Slopes	52,000	40,500	2,900	—	8,600
<b>Total</b>	<b>168,000</b>	<b>123,000</b>	<b>7,000</b>	<b>10,000</b>	<b>27,000</b>

<sup>†</sup> Includes ground-mounted distributed generation

\* Footprint acreage

Acreages derived from Volume II, Section 7, Alternative 4