

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-07-26 to 2010-08-01.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>121.13</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	121.13
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	120.62
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.51

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

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NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

10 Excavators (290 hp) operating at a 1 load factor for 4.3 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

10 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 2.6 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 8 hours per day

10 Water Trucks (237.5 hp) operating at a 1 load factor for 4.8 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-08-02 to 2010-08-08.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>162.80</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	162.80
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	162.29
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.51

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

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NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

10 Excavators (290 hp) operating at a 1 load factor for 5.8 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

10 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 2.2 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 5 hours per day

10 Water Trucks (237.5 hp) operating at a 1 load factor for 8 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-08-09 to 2010-08-15.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>208.05</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	208.05
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	207.68
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.37

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

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NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

10 Excavators (290 hp) operating at a 1 load factor for 9.7 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

1 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 22 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 17 hours per day

10 Water Trucks (237.5 hp) operating at a 1 load factor for 8 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-08-16 to 2010-08-22.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>207.15</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	207.15
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	206.54
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.60

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

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NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

15 Excavators (290 hp) operating at a 1 load factor for 7.7 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

1 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 6.5 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 6 hours per day

20 Water Trucks (237.5 hp) operating at a 1 load factor for 4 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-08-23 to 2010-08-26.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>178.12</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	178.12
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	175.85
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.27

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

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NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

105.5 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

2 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 1 hours per day

5.5 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

32 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-08-27 to 2010-09-05.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>221.40</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	221.40
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	218.65
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.75

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

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Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

116 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

1 Pumps (80 hp) operating at a 1 load factor for 0 hours per day

1 Rubber Tired Loaders (265 hp) operating at a 1 load factor for 0 hours per day

11 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

48 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-09-06 to 2010-09-09.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>146.15</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	146.15
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	144.11
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.03

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

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Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

82.5 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

18 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

6 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

24 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-09-10 to 2010-09-16.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>215.59</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	215.59
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	212.72
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.87

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

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Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

117 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

19 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

8.5 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-09-17 to 2010-09-23.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>217.20</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	217.20
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	214.30
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.91

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Pumps, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

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Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

118 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

17.5 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

11.5 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-09-24 to 2010-09-30.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>226.68</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	226.68
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	223.73
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.95

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

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Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

124 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

14 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

12 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 2 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-10-01 to 2010-10-07.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>179.59</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	179.59
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	176.70
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.89

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

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Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

114 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

14 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

18 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-10-08 to 2010-10-14.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>163.90</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	163.90
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	161.31
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.60

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:16:00 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

105 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

10 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

12 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-10-15 to 2010-10-21.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>130.58</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	130.58
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	128.48
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.10

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:16:40 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

85 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

14 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

12 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

24 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:17:13 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-10-22 to 2010-10-28.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>229.94</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	229.94
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	226.32
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.62

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:17:13 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

161 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

7 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

17 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

48 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-10-29 to 2010-11-04.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>227.89</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	227.89
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	224.32
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.57

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:18:08 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

154 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

15 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

13 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

48 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:18:58 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-11-05 to 2010-11-11.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>190.31</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	190.31
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	187.29
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.01

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:18:58 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

129 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

10 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

15 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:19:35 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-11-12 to 2010-11-18.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>239.72</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	239.72
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	235.88
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.85

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:19:35 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

169 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

13 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

26 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-11-19 to 2010-11-25.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>154.68</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	154.68
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	152.24
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.44

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:31:17 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

109 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

14 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

10 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

24 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:32:06 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-11-26 to 2010-12-02.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>196.73</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	196.73
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	193.51
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.22

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:32:06 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

135 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

13 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

27 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

32 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-12-03 to 2010-12-09.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>239.60</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	239.60
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	235.55
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	4.05

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:32:52 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

160 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

11 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

50 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:33:47 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-12-10 to 2010-12-16.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>235.80</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	235.80
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	231.86
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.94

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:33:47 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

159 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

11 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

44 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

6/3/2011 12:34:29 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-12-17 to 2010-12-23.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>92.20</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	92.20
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	90.62
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	1.58

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:34:29 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

57 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

4 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

20 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

20 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-12-24 to 2010-12-30.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>61.61</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	61.61
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	60.54
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	1.07

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:35:21 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

32 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

2 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

14 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

20 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2010-12-31 to 2011-01-06.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>122.97</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	122.97
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	120.85
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.12

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:36:07 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

77 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

6 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

29 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

24 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-01-07 to 2011-01-13.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>223.86</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	223.86
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	220.15
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.71

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:37:46 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

154 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

6 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

39 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-01-14 to 2011-01-20.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>211.38</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	211.38
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	207.93
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.45

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:38:26 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

146 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

6 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

30 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-01-21 to 2011-01-27.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>234.12</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	234.12
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	230.04
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	4.08

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:40:16 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Crawler Tractors (185 hp) operating at a 1 load factor for 0 hours per day

152 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

9 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

1 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 0 hours per day

60 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-01-28 to 2011-02-03.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>266.63</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	266.63
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	262.90
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.73

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/7/2011 4:04:12 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

16 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

118 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

6 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

32 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

28 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-02-04 to 2011-02-10.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>246.77</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	246.77
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	243.29
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	3.48

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/7/2011 4:07:14 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

17 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

134 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

8 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

14 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

11 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-02-11 to 2011-02-17.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>345.00</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	345.00
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	340.38
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	4.62

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/7/2011 4:09:28 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

41 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

150 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

7 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

29 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

23 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

48 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-02-18 to 2011-02-24.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>332.69</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	332.69
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	328.11
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	4.58

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/7/2011 4:11:07 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

30 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

154 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

10 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

32 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

29 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-02-25 to 2011-03-03.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>326.61</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	326.61
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	322.22
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	4.39

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/7/2011 4:13:20 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

33 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

157 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

8 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

28 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

17 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-03-04 to 2011-03-10.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>189.62</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	189.62
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	187.02
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	2.60

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Generator Sets, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

6/3/2011 12:44:43 PM

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

15 Crawler Tractors (185 hp) operating at a 1 load factor for 1 hours per day

73 Excavators (290 hp) operating at a 1 load factor for 1 hours per day

1 Generator Sets (90 hp) operating at a 1 load factor for 0 hours per day

3 Pumps (80 hp) operating at a 1 load factor for 1 hours per day

21 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 1 hours per day

15 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 1 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-03-11 to 2011-03-17.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>82.59</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	82.59
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	81.92
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.66

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

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Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (290 hp) operating at a 1 load factor for 15 hours per day

1 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 13 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 9 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-03-18 to 2011-03-24.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>73.54</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	73.54
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	72.87
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.66

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

6/3/2011 12:45:55 PM

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (290 hp) operating at a 1 load factor for 17 hours per day

1 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 9 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 1 load factor for 0 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: P:\PRJ4\CAWP\HC1243\Completion Report\IRM Completion Rpt_Appendices\Appendix O-MMRP Air Quality Measures\O-5 Urbemis Files\superseded\2011-03-25 to 2011-03-31.urb924

Project Name: 2010-07-29

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>NOx</u>
Time Slice 7/29/2010-7/29/2010	<u>134.56</u>
Active Days: 1	
Mass Grading 07/29/2010-07/29/2010	134.56
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	133.90
Mass Grading On Road Diesel	0.00
Mass Grading Worker Trips	0.66

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

Phase Assumptions

Phase: Mass Grading 7/29/2010 - 7/29/2010 - Grading (Preparation for Lagoon Excavation)

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

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Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (290 hp) operating at a 1 load factor for 15 hours per day

1 Rubber Tired Loaders (287 hp) operating at a 1 load factor for 13 hours per day

1 Tractors/Loaders/Backhoes (98 hp) operating at a 14 load factor for 9 hours per day

40 Water Trucks (237.5 hp) operating at a 1 load factor for 1 hours per day