

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 1 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-1 (8) SCC No: 10100226  
 (9) Description of Process: UTILITY BOILER, PULVERIZED COAL, TANGENTIAL (BIT.)  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 398,529.81  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>27</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>21</u>	<u>24</u>	<u>7</u>	<u>10</u>
<u>JUL</u>	<u>SEP</u>	<u>26</u>	<u>24</u>	<u>7</u>	<u>12</u>
<u>OCT</u>	<u>DEC</u>	<u>26</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-1 CE-2

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-1 ME-2 ME-3 ME-4  
ME-5

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.08E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			105.08
PARTICULATE MATTER	4.60E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			156.94
SULFUR DIOXIDE			CEM			2,280.10
NITROGEN OXIDES			CEM			1,478.94
VOLATILE ORGANIC COMPOUNDS	6.00E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			11.96
CARBON MONOXIDE	5.00E-01	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			99.63
LEAD						
DI(2-ETHYLHEXYL) PHTHALATE	7.30E-05	POUNDS PER TON	FIRE			0.01
METHYL CHLORIDE	5.30E-04	POUNDS PER TON	FIRE			0.11
TOLUENE	2.40E-04	POUNDS PER TON	FIRE			0.05
CHLOROETHANE	4.20E-05	POUNDS PER TON	FIRE			0.01
HEXANE	6.70E-05	POUNDS PER TON	FIRE			0.01
CARBON DISULFIDE	1.30E-04	POUNDS PER TON	FIRE			0.03
PROPIONALDEHYDE	3.80E-04	POUNDS PER TON	FIRE			0.08
1,2-DICHLOROETHANE	4.00E-05	POUNDS PER TON	FIRE			0.01
METHYL HYDRAZINE	1.70E-04	POUNDS PER TON	FIRE			0.03
ACROLEIN	2.90E-04	POUNDS PER TON	FIRE			0.06
FORMALDEHYDE	2.40E-04	POUNDS PER TON	FIRE			0.05
MERCURY COMPOUNDS	1.08E-04	POUNDS PER TON	OTHER - COAL ANALYSIS			0.02
CHLOROFORM	5.90E-05	POUNDS PER TON	FIRE			0.01
BENZENE	1.30E-03	POUNDS PER TON	FIRE			0.26
BROMOMETHANE	1.60E-04	POUNDS PER TON	FIRE			0.03

## FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
METHYL TERT BUTYL ETHER	3.50E-05	POUNDS PER TON	FIRE			0.01
BENZYL CHLORIDE	7.00E-04	POUNDS PER TON	FIRE			0.14
ACETALDEHYDE	5.70E-04	POUNDS PER TON	AP42			0.11
DICHLOROMETHANE	2.90E-04	POUNDS PER TON	FIRE			0.06
METHYL ETHYL KETONE	3.90E-04	POUNDS PER TON	FIRE			0.08
BROMOFORM	3.90E-05	POUNDS PER TON	FIRE			0.01
HYDROCHLORIC ACID	7.01E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			13.97
HYDROGEN FLUORIDE	8.12E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			16.18
XYLENE (MIXED ISOMERS)	3.70E-05	POUNDS PER TON	FIRE			0.01
ISOPHORONE	5.80E-04	POUNDS PER TON	FIRE			0.12
DIMETHYL SULFATE	4.80E-05	POUNDS PER TON	FIRE			0.01
ARSENIC COMPOUNDS	4.10E-04	POUNDS PER TON	FIRE			0.08
CADMIUM COMPOUNDS	5.10E-05	POUNDS PER TON	FIRE			0.01
COBALT COMPOUNDS	1.00E-04	POUNDS PER TON	FIRE			0.02
CHROMIUM COMPOUNDS	3.39E-04	POUNDS PER TON	FIRE			0.07
CYANIDE COMPOUNDS	2.50E-03	POUNDS PER TON	FIRE			0.50
TETRACHLOROETHYLENE	4.30E-05	POUNDS PER TON	FIRE			0.01
MANGANESE COMPOUNDS	4.90E-04	POUNDS PER TON	FIRE			0.10
NICKEL COMPOUNDS	2.80E-04	POUNDS PER TON	FIRE			0.06
LEAD COMPOUNDS	4.20E-04	POUNDS PER TON	FIRE			0.08
POLYCYCLIC ORGANIC MATTER	2.40E-06	POUNDS PER TON	FIRE			0.01
RADIONUCLIDES (INCLUDING RADON)	9.50E-02	POUNDS PER TON	OTHER - EPA-450			0.01
SELENIUM COMPOUNDS	1.30E-03	POUNDS PER TON	AP42			0.26
ETHYLBENZENE	9.40E-05	POUNDS PER TON	FIRE			0.02

## SUPPORTING DOCUMENTS

Supporting Documents:

Description:

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 3 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-1 (8) SCC No: 10101302  
 (9) Description of Process: UTILITY BOILER: USED OIL CONSUMPTION  
 (10) Raw Material: OTHER  
 (11) Actual Throughput (Yearly Total): 0.00  
 (12) Units Raw Material: GALLONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>APR</u>	<u>JUN</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>JUL</u>	<u>SEP</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>OCT</u>	<u>DEC</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-1 CE-2

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-1 ME-2 ME-3 ME-4  
ME-5

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	5.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00		0.00
PARTICULATE MATTER	6.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00		0.00
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS	1.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
CARBON MONOXIDE	5.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
LEAD	1.68E+00	POUNDS PER 1000 GALLONS	AP42			0.00

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 4 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-1 (8) SCC No: 10100604  
 (9) Description of Process: UTILITY BOILER, NATURAL GAS COMBUSTION, TANGENTIAL  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 27.14  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>12</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>58</u>	<u>24</u>	<u>7</u>	<u>10</u>
<u>JUL</u>	<u>SEP</u>	<u>17</u>	<u>24</u>	<u>7</u>	<u>12</u>
<u>OCT</u>	<u>DEC</u>	<u>13</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-1 CE-2

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-1 ME-2 ME-3 ME-4  
ME-5

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	7.60E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.10
PARTICULATE MATTER	7.60E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.10
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS	5.50E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.07
CARBON MONOXIDE	2.40E+01	POUNDS PER MILLION CUBIC FEET	AP42			0.33
LEAD						
FORMALDEHYDE	7.50E-02	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
HEXANE	1.80E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.02

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 5 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-10 (5) Emission Point Description: #9 ASH BLOWER EXHAUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-10 (8) SCC No: 30510298  
 (9) Description of Process: FLY ASH STORAGE SILO-EP-9  
 (10) Raw Material: ASH  
 (11) Actual Throughput (Yearly Total): 17,593.10  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>26</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>23</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>26</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-7

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	<u>3.40E-04</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.00</u>
PARTICULATE MATTER	<u>9.90E-04</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.01</u>
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_





**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 8 of 34

**EMISSION POINTS**

(4) Emission Point ID (5) Emission Point Description  
EP-13 ACTIVE ASH POND  
EP-15 ACTIVE ASH POND

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-14 (8) SCC No: 30502507  
 (9) Description of Process: ACTIVE ASH POND - EP13  
 (10) Raw Material: ASH  
 (11) Actual Throughput (Yearly Total): 21.00  
 (12) Units Raw Material: ACRE

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-11

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	<u>8.20E+02</u>	<u>POUNDS PER ACRE YEAR</u>	<u>AP42</u>		<u>90</u>	<u>0.86</u>
PARTICULATE MATTER	<u>1.37E+03</u>	<u>POUNDS PER ACRE YEAR</u>	<u>AP42</u>		<u>90</u>	<u>1.44</u>
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 9 of 34

**EMISSION POINTS**

(4) Emission Point ID	(5) Emission Point Description
EP-13	ACTIVE ASH POND
EP-15	ACTIVE ASH POND

**PROCESS INFORMATION**

(6) Emission Year: <u>2002</u>	(7) Emission Unit No: <u>EU-14</u>	(8) SCC No: <u>30510499</u>
(9) Description of Process:	<u>ACTIVE BOTTOM ASH POND TRUCK LOADING - EP15</u>	
(10) Raw Material:	<u>ASH</u>	
(11) Actual Throughput (Yearly Total):	<u>4,564.60</u>	
(12) Units Raw Material:	<u>TONS</u>	

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>8</u>	<u>5</u>	<u>3</u>
<u>APR</u>	<u>JUN</u>	<u>0</u>	<u>8</u>	<u>5</u>	<u>1</u>
<u>JUL</u>	<u>SEP</u>	<u>36</u>	<u>8</u>	<u>5</u>	<u>1</u>
<u>OCT</u>	<u>DEC</u>	<u>64</u>	<u>8</u>	<u>5</u>	<u>2</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-11

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	1.00E-01	POUNDS PER TON	AP42		90	0.02
PARTICULATE MATTER	2.00E-01	POUNDS PER TON	OTHER - ENG. EST.		90	0.05
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 10 of 34

**EMISSION POINTS**

(4) Emission Point ID	(5) Emission Point Description
EP-16	TEMPORARY ASH STORAGE AREA
EP-17	TEMPORARY ASH STORAGE AREA

**PROCESS INFORMATION**

(6) Emission Year: <u>2002</u>	(7) Emission Unit No: <u>EU-15</u>	(8) SCC No: <u>30502507</u>
(9) Description of Process:	<u>TEMPORARY ASH STORAGE AREA-EROSION</u>	
(10) Raw Material:	<u>ASH</u>	
(11) Actual Throughput (Yearly Total):	<u>13.00</u>	
(12) Units Raw Material:	<u>ACRE</u>	

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-11

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	8.20E+02	POUNDS PER ACRE YEAR	AP42		85	0.80
PARTICULATE MATTER	1.37E+03	POUNDS PER ACRE YEAR	AP42		85	1.33
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 11 of 34

**EMISSION POINTS**

(4) Emission Point ID	(5) Emission Point Description
EP-16	TEMPORARY ASH STORAGE AREA
EP-17	TEMPORARY ASH STORAGE AREA

**PROCESS INFORMATION**

(6) Emission Year: <u>2002</u>	(7) Emission Unit No: <u>EU-15</u>	(8) SCC No: <u>30500707</u>
(9) Description of Process:	<u>TEMPORARY ASH STORAGE AREA TRUCK LOADING</u>	
(10) Raw Material:	<u>ASH</u>	
(11) Actual Throughput (Yearly Total):	<u>0.00</u>	
(12) Units Raw Material:	<u>TONS</u>	

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>APR</u>	<u>JUN</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>JUL</u>	<u>SEP</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>OCT</u>	<u>DEC</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-11

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	1.00E-01	POUNDS PER TON	AP42		85	0.00
PARTICULATE MATTER	2.00E-01	POUNDS PER TON	AP42		85	0.00
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 12 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-2 (8) SCC No: 10101302  
 (9) Description of Process: UTILITY BOILER, USED OIL COMBUSTION  
 (10) Raw Material: WASTE OIL  
 (11) Actual Throughput (Yearly Total): 0.00  
 (12) Units Raw Material: 1000 GALLONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	_____	_____	_____	_____
<u>APR</u>	<u>JUN</u>	_____	_____	_____	_____
<u>JUL</u>	<u>SEP</u>	_____	_____	_____	_____
<u>OCT</u>	<u>DEC</u>	_____	_____	_____	_____

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	5.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00	95	0.00
PARTICULATE MATTER	6.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00	95	0.00
SULFUR DIOXIDE	1.47E+02	POUNDS PER 1000 GALLONS	AP42	.50		0.00
NITROGEN OXIDES	2.00E+01	POUNDS PER 1000 GALLONS	AP42			0.00
VOLATILE ORGANIC COMPOUNDS	1.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
CARBON MONOXIDE	5.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
LEAD	1.68E+00	POUNDS PER 1000 GALLONS	AP42			0.00

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 13 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-2 (8) SCC No: 10100601  
 (9) Description of Process: UTILITY BOILER NATURAL GAS CONSUMPTION  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 117.108  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>35</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>29</u>	<u>24</u>	<u>7</u>	<u>10</u>
<u>JUL</u>	<u>SEP</u>	<u>14</u>	<u>24</u>	<u>7</u>	<u>5</u>
<u>OCT</u>	<u>DEC</u>	<u>22</u>	<u>24</u>	<u>7</u>	<u>7</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	7.60E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.45
PARTICULATE MATTER	7.60E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.45
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	AP42			0.04
NITROGEN OXIDES	2.80E+02	POUNDS PER MILLION CUBIC FEET	AP42			16.40
VOLATILE ORGANIC COMPOUNDS	5.50E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.32
CARBON MONOXIDE	8.40E+01	POUNDS PER MILLION CUBIC FEET	AP42			4.92
LEAD						
HEXANE	1.80E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.11

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 14 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-2 (8) SCC No: 10100222  
 (9) Description of Process: UTILITY BOILER, PULVERIZED COAL, DRY BOTTOM  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 49,193.50  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>35</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>29</u>	<u>24</u>	<u>7</u>	<u>10</u>
<u>JUL</u>	<u>SEP</u>	<u>14</u>	<u>24</u>	<u>7</u>	<u>5</u>
<u>OCT</u>	<u>DEC</u>	<u>22</u>	<u>24</u>	<u>7</u>	<u>7</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.08E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			12.97
PARTICULATE MATTER	4.60E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			19.37
SULFUR DIOXIDE	3.50E+01	POUNDS PER TON	FIRE	.31		266.87
NITROGEN OXIDES	1.20E+01	POUNDS PER TON	FIRE			295.16
VOLATILE ORGANIC COMPOUNDS	6.00E-02	POUNDS PER TON	FIRE			1.48
CARBON MONOXIDE	5.00E-01	POUNDS PER TON	FIRE			12.30
LEAD						
METHYL CHLORIDE	5.30E-04	POUNDS PER TON	FIRE			0.01
MANGANESE COMPOUNDS	4.90E-04	POUNDS PER TON	FIRE			0.01
FORMALDEHYDE	2.40E-04	POUNDS PER TON	FIRE			0.01
NICKEL COMPOUNDS	2.80E-04	POUNDS PER TON	FIRE			0.01
BENZENE	1.30E-03	POUNDS PER TON	FIRE			0.03
PROPIONALDEHYDE	3.80E-04	POUNDS PER TON	FIRE			0.01
ACETALDEHYDE	5.70E-04	POUNDS PER TON	FIRE			0.01
METHYL ETHYL KETONE	3.90E-04	POUNDS PER TON	FIRE			0.01
TOLUENE	2.40E-04	POUNDS PER TON	FIRE			0.01
ISOPHORONE	5.80E-04	POUNDS PER TON	FIRE			0.01
HYDROGEN FLUORIDE	8.12E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			2.00
ACROLEIN	2.90E-04	POUNDS PER TON	FIRE			0.01
ARSENIC COMPOUNDS	4.10E-04	POUNDS PER TON	FIRE			0.01
CHROMIUM COMPOUNDS	3.39E-04	POUNDS PER TON	FIRE			0.01
CYANIDE COMPOUNDS	2.50E-03	POUNDS PER TON	FIRE			0.06
HYDROCHLORIC ACID	7.01E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			1.72

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
DICHLOROMETHANE	2.90E-04	POUNDS PER TON	FIRE			0.01
LEAD COMPOUNDS	4.20E-04	POUNDS PER TON	FIRE			0.01
SELENIUM COMPOUNDS	1.30E-03	POUNDS PER TON	FIRE			0.03
BENZYL CHLORIDE	7.00E-04	POUNDS PER TON	FIRE			0.02

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 15 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-22 (5) Emission Point Description: SANDBLASTING - OUTSIDE

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-27 (8) SCC No: 99999999  
 (9) Description of Process: SANDBLASTING (OUTSIDE)  
 (10) Raw Material: SAND  
 (11) Actual Throughput (Yearly Total): 750.00  
 (12) Units Raw Material: POUNDS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>25</u>	<u>1</u>	<u>5</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>25</u>	<u>1</u>	<u>5</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>25</u>	<u>1</u>	<u>5</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>25</u>	<u>1</u>	<u>5</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	1.50E+01	POUNDS PER 100 POUNDS	OTHER - ENG.JUDGEMENT			0.06
PARTICULATE MATTER	3.00E+01	POUNDS PER 100 POUNDS	OTHER - ENG.JUDGEMENT			0.11
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 16 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-3 (8) SCC No: 50300501  
 (9) Description of Process: INDUSTRIAL INCINERATION (WASTE SOLVENTS)  
 (10) Raw Material: SOLVENTS  
 (11) Actual Throughput (Yearly Total): 0.00  
 (12) Units Raw Material: GALLONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	_____	_____	_____	_____
<u>APR</u>	<u>JUN</u>	_____	_____	_____	_____
<u>JUL</u>	<u>SEP</u>	_____	_____	_____	_____
<u>OCT</u>	<u>DEC</u>	_____	_____	_____	_____

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E-01	POUNDS PER MILLION BTU	AP42		95	0.00
PARTICULATE MATTER	3.00E-01	POUNDS PER MILLION BTU	AP42		95	0.00
SULFUR DIOXIDE	1.30E-01	POUNDS PER MILLION BTU	AP42			0.00
NITROGEN OXIDES	1.40E-01	POUNDS PER MILLION BTU	AP42			0.00
VOLATILE ORGANIC COMPOUNDS	3.00E-01	POUNDS PER MILLION BTU	AP42			0.00
CARBON MONOXIDE	5.00E-01	POUNDS PER MILLION BTU	AP42			0.00
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 17 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-3 (8) SCC No: 10101302  
 (9) Description of Process: UTILITY BOILER, USED OIL CONSUMPTION  
 (10) Raw Material: WASTE OIL  
 (11) Actual Throughput (Yearly Total): 0.00  
 (12) Units Raw Material: 1000 GALLONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	_____	_____	_____	_____
<u>APR</u>	<u>JUN</u>	_____	_____	_____	_____
<u>JUL</u>	<u>SEP</u>	_____	_____	_____	_____
<u>OCT</u>	<u>DEC</u>	_____	_____	_____	_____

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	5.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00	95	0.00
PARTICULATE MATTER	6.10E+01	POUNDS PER 1000 GALLONS	AP42	3.00	95	0.00
SULFUR DIOXIDE	1.47E+02	POUNDS PER 1000 GALLONS	AP42	.50		0.00
NITROGEN OXIDES	2.00E+01	POUNDS PER 1000 GALLONS	AP42			0.00
VOLATILE ORGANIC COMPOUNDS	1.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
CARBON MONOXIDE	5.00E+00	POUNDS PER 1000 GALLONS	AP42			0.00
LEAD	1.68E+00	POUNDS PER 1000 GALLONS	AP42			0.00

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 18 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-3 (8) SCC No: 10100601  
 (9) Description of Process: UTILITY BOILER NATURAL GAS CONSUMPTION  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 127.75  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>37</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>5</u>	<u>24</u>	<u>7</u>	<u>1</u>
<u>JUL</u>	<u>SEP</u>	<u>22</u>	<u>24</u>	<u>7</u>	<u>8</u>
<u>OCT</u>	<u>DEC</u>	<u>36</u>	<u>24</u>	<u>7</u>	<u>12</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	7.60E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.49
PARTICULATE MATTER	7.60E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.49
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.04
NITROGEN OXIDES	2.80E+02	POUNDS PER MILLION CUBIC FEET	FIRE			17.89
VOLATILE ORGANIC COMPOUNDS	5.50E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.35
CARBON MONOXIDE	8.40E+01	POUNDS PER MILLION CUBIC FEET	FIRE			5.37
LEAD						
HEXANE	1.80E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.11

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 19 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-1 (5) Emission Point Description: BOILER #7-#8-#9 COMMON STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-3 (8) SCC No: 10100222  
 (9) Description of Process: UTILITY BOILER, PULVERIZED COAL, DRY BOTTOM  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 53,665.70  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>37</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>5</u>	<u>24</u>	<u>7</u>	<u>1</u>
<u>JUL</u>	<u>SEP</u>	<u>22</u>	<u>24</u>	<u>7</u>	<u>8</u>
<u>OCT</u>	<u>DEC</u>	<u>36</u>	<u>24</u>	<u>7</u>	<u>12</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-4

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

ME-4

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.08E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			14.15
PARTICULATE MATTER	4.60E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			21.13
SULFUR DIOXIDE	3.50E+01	POUNDS PER TON	FIRE	.31		291.14
NITROGEN OXIDES	1.20E+01	POUNDS PER TON	FIRE			321.99
VOLATILE ORGANIC COMPOUNDS	6.00E-02	POUNDS PER TON	FIRE			1.61
CARBON MONOXIDE	5.00E-01	POUNDS PER TON	FIRE			13.42
LEAD						
METHYL CHLORIDE	5.30E-04	POUNDS PER TON	FIRE			0.01
MANGANESE COMPOUNDS	4.90E-04	POUNDS PER TON	FIRE			0.01
FORMALDEHYDE	2.40E-04	POUNDS PER TON	FIRE			0.01
NICKEL COMPOUNDS	2.80E-04	POUNDS PER TON	FIRE			0.01
BENZENE	1.30E-03	POUNDS PER TON	FIRE			0.03
PROPIONALDEHYDE	3.80E-04	POUNDS PER TON	FIRE			0.01
ACETALDEHYDE	5.70E-04	POUNDS PER TON	FIRE			0.02
METHYL ETHYL KETONE	3.90E-04	POUNDS PER TON	FIRE			0.01
TOLUENE	2.40E-04	POUNDS PER TON	FIRE			0.01
ISOPHORONE	5.80E-04	POUNDS PER TON	FIRE			0.02
HYDROGEN FLUORIDE	8.12E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			2.18
ACROLEIN	2.90E-04	POUNDS PER TON	FIRE			0.01
ARSENIC COMPOUNDS	4.10E-04	POUNDS PER TON	FIRE			0.01
CHROMIUM COMPOUNDS	3.39E-04	POUNDS PER TON	FIRE			0.01
CYANIDE COMPOUNDS	2.50E-03	POUNDS PER TON	FIRE			0.07
HYDROCHLORIC ACID	7.01E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			1.88

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
DICHLOROMETHANE	2.90E-04	POUNDS PER TON	FIRE			0.01
LEAD COMPOUNDS	4.20E-04	POUNDS PER TON	FIRE			0.01
SELENIUM COMPOUNDS	1.30E-03	POUNDS PER TON	FIRE			0.03
BENZYL CHLORIDE	7.00E-04	POUNDS PER TON	FIRE			0.02

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 20 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-2 (5) Emission Point Description: BOILER #6 STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-4 (8) SCC No: 10100601  
 (9) Description of Process: UTILITY BOILER NATURAL GAS COMBUSTION  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 21.292  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>APR</u>	<u>JUN</u>	<u>68</u>	<u>24</u>	<u>7</u>	<u>9</u>
<u>JUL</u>	<u>SEP</u>	<u>5</u>	<u>24</u>	<u>3</u>	<u>1</u>
<u>OCT</u>	<u>DEC</u>	<u>27</u>	<u>24</u>	<u>7</u>	<u>2</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

CE-5

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	7.60E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.08
PARTICULATE MATTER	7.60E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.08
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.01
NITROGEN OXIDES	2.80E+02	POUNDS PER MILLION CUBIC FEET	FIRE			2.98
VOLATILE ORGANIC COMPOUNDS	5.50E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.06
CARBON MONOXIDE	8.40E+01	POUNDS PER MILLION CUBIC FEET	FIRE			0.89
LEAD						
HEXANE	1.80E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.02

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 21 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-2 (5) Emission Point Description: BOILER #6 STACK

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-4 (8) SCC No: 10100222  
 (9) Description of Process: UTILITY BOILER, PULVERIZED COAL, DRY BOTTOM  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 8,944.30  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>APR</u>	<u>JUN</u>	<u>68</u>	<u>24</u>	<u>7</u>	<u>9</u>
<u>JUL</u>	<u>SEP</u>	<u>5</u>	<u>24</u>	<u>3</u>	<u>1</u>
<u>OCT</u>	<u>DEC</u>	<u>27</u>	<u>24</u>	<u>7</u>	<u>2</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

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**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	2.39E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			1.83
PARTICULATE MATTER	3.57E-02	POUNDS PER MILLION BTU	OTHER - COMPLIANCE TEST TSP			2.73
SULFUR DIOXIDE	3.50E+01	POUNDS PER TON	FIRE	.32		48.52
NITROGEN OXIDES	1.20E+01	POUNDS PER TON	FIRE			53.67
VOLATILE ORGANIC COMPOUNDS	6.00E-02	POUNDS PER TON	FIRE			0.27
CARBON MONOXIDE	5.00E-01	POUNDS PER TON	FIRE			2.24
LEAD						
SELENIUM COMPOUNDS	1.30E-03	POUNDS PER TON	FIRE			0.01
CYANIDE COMPOUNDS	2.50E-03	POUNDS PER TON	FIRE			0.01
HYDROGEN FLUORIDE	8.12E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			0.36
HYDROCHLORIC ACID	7.01E-02	POUNDS PER TON	OTHER - COAL ANALYSIS			0.31
BENZENE	1.30E-03	POUNDS PER TON	FIRE			0.01

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 22 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-35 (5) Emission Point Description: PROCESS HEATER VAPORIZER 1 STACK 1 LNG

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-42 (8) SCC No: 10500206  
 (9) Description of Process: PROCESS HEATER VAPORIZER - LNG # 1 STACK # 1  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 0.439  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>100</u>			
<u>APR</u>	<u>JUN</u>	<u>24</u>			
<u>JUL</u>	<u>SEP</u>	<u>6</u>			
<u>OCT</u>	<u>DEC</u>	<u>2</u>			

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
PARTICULATE MATTER	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
NITROGEN OXIDES	1.00E+02	POUNDS PER MILLION CUBIC FEET	FIRE			0.02
VOLATILE ORGANIC COMPOUNDS	5.30E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
CARBON MONOXIDE	2.00E+01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 23 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-36 (5) Emission Point Description: PROCESS HEATER VAPORIZER 1 STACK 2 LNG

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-42A (8) SCC No: 10500206  
 (9) Description of Process: PROCESS HEATER VAPORIZER LNG - # 1 STACK # 2  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 0.439  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>100</u>	<u></u>	<u></u>	<u></u>
<u>APR</u>	<u>JUN</u>	<u>24</u>	<u></u>	<u></u>	<u></u>
<u>JUL</u>	<u>SEP</u>	<u>6</u>	<u></u>	<u></u>	<u></u>
<u>OCT</u>	<u>DEC</u>	<u>2</u>	<u></u>	<u></u>	<u></u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
PARTICULATE MATTER	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
NITROGEN OXIDES	1.00E+02	POUNDS PER MILLION CUBIC FEET	FIRE			0.02
VOLATILE ORGANIC COMPOUNDS	5.30E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
CARBON MONOXIDE	2.00E+01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 24 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-37 (5) Emission Point Description: PROCESS HEATER VAPORIZER 2 STACK 1 LNG

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-43 (8) SCC No: 10500206  
 (9) Description of Process: PROCESS HEATER VAPORIZER - LNG # 2 STACK # 1  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 0.439  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>100</u>	<u>24</u>	<u>6</u>	<u>2</u>
<u>APR</u>	<u>JUN</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>JUL</u>	<u>SEP</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>OCT</u>	<u>DEC</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

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**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

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**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
PARTICULATE MATTER	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
NITROGEN OXIDES	1.00E+02	POUNDS PER MILLION CUBIC FEET	FIRE			0.02
VOLATILE ORGANIC COMPOUNDS	5.30E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
CARBON MONOXIDE	2.00E+01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 25 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-38 (5) Emission Point Description: PROCESS HEATER VAPORIZER 2 STACK 2 LNG

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-43A (8) SCC No: 10500206  
 (9) Description of Process: PROCESS HEATER VAPORIZER # 2 - LNG - STACK # 2  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 0.439  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>100</u>			
<u>APR</u>	<u>JUN</u>	<u>24</u>			
<u>JUL</u>	<u>SEP</u>	<u>6</u>			
<u>OCT</u>	<u>DEC</u>	<u>2</u>			

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
PARTICULATE MATTER	3.00E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
NITROGEN OXIDES	1.00E+02	POUNDS PER MILLION CUBIC FEET	FIRE			0.02
VOLATILE ORGANIC COMPOUNDS	5.30E+00	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
CARBON MONOXIDE	2.00E+01	POUNDS PER MILLION CUBIC FEET	FIRE			0.00
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 26 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-39 (5) Emission Point Description: REGENERATION HEATER EXHAUST-LNG

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-44 (8) SCC No: 10500206  
 (9) Description of Process: REGENERATION HEATER EXHAUST - LNG  
 (10) Raw Material: NATURAL GAS  
 (11) Actual Throughput (Yearly Total): 0.549  
 (12) Units Raw Material: MILLION CUBIC FEET

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>APR</u>	<u>JUN</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>JUL</u>	<u>SEP</u>	<u>26</u>	<u>24</u>	<u>7</u>	<u>1</u>
<u>OCT</u>	<u>DEC</u>	<u>74</u>	<u>24</u>	<u>7</u>	<u>4</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

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**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

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**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	3.00E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.00
PARTICULATE MATTER	3.00E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.00
SULFUR DIOXIDE	6.00E-01	POUNDS PER MILLION CUBIC FEET	AP42			0.00
NITROGEN OXIDES	1.00E+02	POUNDS PER MILLION CUBIC FEET	AP42			0.03
VOLATILE ORGANIC COMPOUNDS	5.30E+00	POUNDS PER MILLION CUBIC FEET	AP42			0.00
CARBON MONOXIDE	2.00E+01	POUNDS PER MILLION CUBIC FEET	AP42			0.01
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 27 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-4 (5) Emission Point Description: FUGITIVE COAL DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-5 (8) SCC No: 30501046  
 (9) Description of Process: VEHICLE ACTIVITY AT STOCK-OUT PILE RECLAIM-EP4  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 1,713.00  
 (12) Units Raw Material: HOURS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>15</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>30</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>31</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>24</u>	<u>10</u>	<u>6</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	1.33E+01	POUNDS PER HOUR	FIRE			11.36
PARTICULATE MATTER	4.94E+01	POUNDS PER HOUR	FIRE			42.31
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 28 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-4 (5) Emission Point Description: FUGITIVE COAL DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-5 (8) SCC No: 30501008  
 (9) Description of Process: VEHICLE ACTIVITY AT HOPPER CAR UNLOADING-EP3  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 743,141.31  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>24</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>23</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>26</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>27</u>	<u>10</u>	<u>6</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	6.00E-03	POUNDS PER TON	FIRE			2.23
PARTICULATE MATTER	2.00E-02	POUNDS PER TON	FIRE			7.43
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 29 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-5 (5) Emission Point Description: COAL STOCK OUT PILE-FUGITIVE DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-6 (8) SCC No: 30501011  
 (9) Description of Process: S BELT TO BOOM BELT  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 232,182.41  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>15</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>30</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>31</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>24</u>	<u>10</u>	<u>6</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

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**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

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**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	<u>8.50E-04</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.10</u>
PARTICULATE MATTER	<u>1.80E-03</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.21</u>
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 30 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-5 (5) Emission Point Description: COAL STOCK OUT PILE-FUGITIVE DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-6 (8) SCC No: 30501043  
 (9) Description of Process: COAL PILE WIND EROSION  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 4.70  
 (12) Units Raw Material: ACRE

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>25</u>	<u>24</u>	<u>7</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

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**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

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**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	<u>1.71E+04</u>	<u>POUNDS PER ACRE</u>	<u>FIRE</u>			<u>40.09</u>
PARTICULATE MATTER	<u>3.41E+04</u>	<u>POUNDS PER ACRE</u>	<u>FIRE</u>			<u>80.18</u>
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 31 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-5 (5) Emission Point Description: COAL STOCK OUT PILE-FUGITIVE DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-6 (8) SCC No: 30501011  
 (9) Description of Process: COAL HANDLING AT STOCK-OUT PILE(BOOM CONV)  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 232,182.41  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

Begin Month	End Month	(13) Percent of Total Operating Time	(14) Hours/Day	(15) Days/Week	(16) Weeks/Quarter
<u>JAN</u>	<u>MAR</u>	<u>15</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>APR</u>	<u>JUN</u>	<u>30</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>JUL</u>	<u>SEP</u>	<u>31</u>	<u>10</u>	<u>6</u>	<u>13</u>
<u>OCT</u>	<u>DEC</u>	<u>24</u>	<u>10</u>	<u>6</u>	<u>13</u>

**(17) ASSOCIATED CONTROL EQUIPMENT ID'S**

**(18) ASSOCIATED MONITORING EQUIPMENT ID'S**

**ACTUAL EMISSIONS**

(19) Pollutant	(20) Emission Factor	(21) Emission Factor Units	(22) Source of Emission Factor	(23) Ash or Sulfur %	(24) Combined Control Effic. %	(25) Actual Emissions (tons/year)
PM-10	<u>8.50E-04</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.10</u>
PARTICULATE MATTER	<u>1.80E-03</u>	<u>POUNDS PER TON</u>	<u>AP42</u>			<u>0.21</u>
SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
LEAD						

**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_

**FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS**

(1) Company/Facility Name: MIDAMERICAN ENERGY CO - RIVERSIDE (2) EIQ No: 92-2692 (3) Page 32 of 34

**EMISSION POINTS**

(4) Emission Point ID: EP-5 (5) Emission Point Description: COAL STOCK OUT PILE-FUGITIVE DUST

**PROCESS INFORMATION**

(6) Emission Year: 2002 (7) Emission Unit No: EU-6 (8) SCC No: 30501011  
 (9) Description of Process: COAL HANDLING AT STOCK-OUT PILE (PILE DEP)  
 (10) Raw Material: COAL  
 (11) Actual Throughput (Yearly Total): 232,182.41  
 (12) Units Raw Material: TONS

**ACTUAL OPERATING RATES/SCHEDULE**

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<u>JUL</u>	<u>SEP</u>	<u>31</u>	<u>10</u>	<u>6</u>	<u>13</u>
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SULFUR DIOXIDE						
NITROGEN OXIDES						
VOLATILE ORGANIC COMPOUNDS						
CARBON MONOXIDE						
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**SUPPORTING DOCUMENTS**

Supporting Documents: \_\_\_\_\_ Description: \_\_\_\_\_



