

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)", see Attachment A for the deviation details.

| Eq. # | Type of Limit | Emission Limit Citation | FEI Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|------------------------------------|-----------------------|---|----------|-----------------------|---|---|------------------------------|--|-------------------------------|
| Source: All Sources | | | | | | | | | |
| 1 | SO2 | BAAQMD 9-1-301 BAAQMD Condition 23181, part A.2 | Y | | Ground level SO2 concentrations (0.5 ppm for 3 min; 0.25 ppm for 60 min; 0.05 ppm for 24 hr) | 9-1-501 requires compliance with BAAQMD 1-510 | C | SO2 GLM | Y |
| 2 | NH3 | BAAQMD Condition 23181, part A.2 | Y | | Ammonia solution less than 20% by weight | BAAQMD Condition 23181, part A.2 | P/E | Records | Y |
| 3 | Organic compounds | BAAQMD 8-2-301 | Y | | Emission streams with 15 lb/day AND 300 ppm total carbon on a dry basis prohibited | None | N | None | Y |
| Source: S1 - Hydrogen Plant | | | | | | | | | |
| 1 | POC | BAAQMD 8-10-301 BAAQMD Condition 23178, part 4 | Y | | Abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg | 8-10-401.2 (SIP) and 8-10-501 & 502 (non-SIP) BAAQMD Condition 23178, part 9a | P/E | Records | Y |
| 2 | POC | BAAQMD Condition 23178, part 6 | Y | | Deaerator vent POC emissions < 4.35 lb/day | BAAQMD Condition 23178, part 18 | P/Q | Inspection and calculations | Y |
| 3 | POC | BAAQMD Condition 23181, part 2d | Y | | 13.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests, inspection data, and calculations | Y |
| 4 | Organic compounds | BAAQMD 8-2-301 BAAQMD Condition 23178, part 1 | Y | | Emission streams with 15 lb/day AND 300 ppm total carbon on a dry basis prohibited | BAAQMD Condition 23178, part 9a | P/A | Source test | Y |
| 5 | Throughput | BAAQMD 7-303 BAAQMD Condition 23178, part 5 | N | | 120 MMscf H2/day, annual average | BAAQMD Condition 23178, part 9b | P/D | Records | Y |
| 6 | NH3 | BAAQMD Condition 23178, part 2 | N | | 5000 ppm | BAAQMD Condition 23178, part 9b | P/A | Source test | Y |
| 7 | NH3 | BAAQMD Condition 23178, part 2 | N | | 0.64 lb/hr | BAAQMD Condition 23178, part 9b | P/A | Source test | Y |
| 8 | Electrical production | BAAQMD Condition 23178, part 2 | Y | | < 12 MW | BAAQMD Condition 23178, part 2 | C | Records | Y |
| 9 | Hydrogen production | BAAQMD Condition 23178, part 1 | Y | | 120 MMscf H2/day | BAAQMD Condition 23178, part 1 | C | Hydrogen flow monitoring | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
 Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| Eq # | Type of Limit | Emission Limit Citation | FE ¹ Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency ² (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|---|--------------------|-----------------------------------|----------------------|-----------------------|---|---|---|---|-------------------------------|
| 11 | NOx | BAAQMD Condition 23181, part 2a | Y | | 30.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CEM data and calculations | Y |
| 12 | SO2 | BAAQMD Condition 23181, part 2b | Y | | 5.0 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CEM and calculations | Y |
| 13 | PM10 | BAAQMD Condition 23181, part 2c | Y | | 13.8 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source test at S2 and calculations | Y |
| 14 | CO | BAAQMD Condition 23181, part 2e | Y | | 46.2 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CO CEM, annual source tests, and calculations | Y |
| 15 | Sulfuric acid mist | BAAQMD Condition 23181, part 2f | Y | | 0.43 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests, and calculations | Y |
| Source S2 - Hydrogen Plant Furnace | | | | | | | | | |
| 1 | Heat Input | BAAQMD Condition 23179, part 2 | Y | | 9,636,000 MMBtu (HHV) in any 12 months | BAAQMD Condition 23179, part 20 | C | Fuel meters, fuel analyzers, and records | Y |
| 2 | Heat Input | BAAQMD Condition 23179, part 3 | Y | | 1,072 MMBtu (HHV) during any clock hour | BAAQMD Condition 23179, part 20 | C | Fuel meters, fuel analyzers, and records | Y |
| 3 | NOx | BAAQMD Condition 23179, part 5a | Y | | 5 ppmv @ 3% O2 on a clock hour basis except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 13 | C | CEM | Y |
| 4 | NOx | BAAQMD Condition 23179, part 7a.1 | Y | | 7.5 lb/clock hour except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 13 | C | CEM | Y |
| 5 | NOx | BAAQMD Condition 23179, part 7b | Y | | 50 lb per clock hour | BAAQMD Condition 23179, part 13 | C | CEM | Y |
| 6 | NOx | BAAQMD Condition 23179, part 10a | Y | | 28.1 tons per any consecutive 12 months | BAAQMD Condition 23179, part 13 | C | CEM | Y |
| 7 | NOx | BAAQMD Condition 23181, part 2a | Y | | 30.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CEM data and calculations | Y |
| 8 | NOx | 40 CFR 60.102a(g)(2) | Y | | 40 ppmv, dry, @ 0% O2 on a 24-hr rolling average basis (Stayed until further notice) | 40 CFR 60.107a(c) (Monitoring not stayed) | C | CEM | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| EGU # | Type of Limit | Emission Limit Citation | FE Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|-------|--------------------|-----------------------------------|---------|-----------------------|---|--|------------------------------|---|-------------------------------|
| 9 | CO | BAAQMD Condition 23179, part 5b | | | 10 ppmv @ 3% O2 on a clock hour basis except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 19b | C | CEM | Y |
| 10 | CO | BAAQMD Condition 23179, part 7a.2 | Y | | 9.1 lb/clock hour except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 19b | C | CEM | Y |
| 11 | CO | BAAQMD Condition 23179, part 10b | Y | | 34.2 tons per any consecutive 12 months | BAAQMD Condition 23179, part 19b | C | CEM | Y |
| 12 | CO | BAAQMD Condition 23181, part 2e | Y | | 46.2 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CO CEM, annual source tests, and calculations | Y |
| 13 | SO2 | BAAQMD Condition 23179, part 5e | Y | | 0.0072 lb/MMbtu on a clock hour basis except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 14 | SO2 | BAAQMD Condition 23179, part 7a.5 | Y | | 1.5 lb/clock hour except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 15 | SO2 | BAAQMD Condition 23179, part 10 | E | | 5.0 tons per any consecutive 12 months | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 16 | SO2 | BAAQMD Condition 23181, part 2b | Y | | 5.0 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Sulfur monitoring or CEM and calculations | Y |
| 17 | SO2 | 40 CFR 60.102a(g) (1) | Y | | 20 ppmvd @ 0% O2 on a rolling 3 clock hour basis; 8 ppmvd @ 0% O2 on a rolling 365 calendar day basis (Stayed until further notice) | 40 CFR 60.107a(a)(1) (Monitoring not stayed) | C | CEM | Y |
| 18 | Sulfuric acid mist | BAAQMD Condition 23179, part 9 | Y | | 0.098 lb/clock hour | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 19 | Sulfuric acid mist | BAAQMD Condition 23179, part 12 | Y | | 860 lb per any consecutive 12 months | BAAQMD Condition 23179, part 17 | P/A | Annual source tests, and calculations | Y |
| 20 | Sulfuric acid mist | BAAQMD Condition 23181, part 2f | Y | | 0.43 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests, and calculations | Y |
| 21 | Sulfuric acid mist | BAAQMD Condition 23181, part 3 | Y | | 2.35 lb/day for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests and calculations | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| § | Type of Limit | Emission Limit Citation | FE¹ Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency² (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|----------|----------------------|--|----------------------------|------------------------------|--|---|---|--|--------------------------------------|
| 22 | POC | BAAQMD Condition 23179, part 5c | Y | | 0.0027 lb/MMbtu on a clock hour basis except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 23 | POC | BAAQMD Condition 23179, part 7a.3 | Y | | 3.5 lb/clock hour except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 24 | POC | BAAQMD Condition 23179, part 10c | Y | | 11.5 tons per any consecutive 12 months | BAAQMD Condition 23179, part 17 and 28181, part B.4.f | P/A | Source test | Y |
| 25 | POC | BAAQMD Condition 23181, part 2d | Y | | 13.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests, inspection data, and calculations | Y |
| 26 | NH3 | BAAQMD Condition 23179, parts 6 and 21 | N | | 10 ppmv @ 3% O2, 1-hr average | BAAQMD Condition 23179, part 17a | P/A | Source test | Y |
| 27 | NH3 | N/A | N | | None | BAAQMD Condition 23179, part 22 | C | Monitoring of ammonia injection rates | Y |
| 28 | NH3 | BAAQMD Condition 23179, part 8 | N | | 6.5 lb/clock hour | BAAQMD Condition 23179, part 17a | P/A | Source test | Y |
| 29 | NH3 | BAAQMD Condition 23179, part 11 | N | | 48,200 lb per any consecutive 12 months | BAAQMD Condition 23179, part 23 | P/A or 4 times per year | Annual or quarterly source tests and calculations | Y |
| 30 | NH3 | BAAQMD Condition 23181, part 2g | N | | 26.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Ammonia injection and heat input monitoring | Y |
| 31 | O2 | | Y | | No limit | BAAQMD 1-520.1 | C | O2 Monitor | Y |
| 32 | Opacity | BAAQMD 6-1-301 | N | | Ringelmann 1 for no more than 3 minutes in any hour | None | N | None | Y |
| 33 | Opacity | SIP 6-301 | Y | | any hour | None | N | None | Y |
| 34 | FP | BAAQMD 6-1-305 | N | | Prohibition of nuisance | None | N | None | Y |
| 35 | FP | SIP 6-305 | Y | | Prohibition of nuisance | None | N | None | Y |
| 36 | FP | BAAQMD 6-1-310.3 | N | | 0.15 grain/dscf @ 6% O2 | None for gaseous fired sources | N | None | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| Seq # | Type of Limit | Emission Limit Citation | FE ¹ Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency ² (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|--|---------------|--|----------------------|-----------------------|--|--|---|---|-------------------------------|
| 37 | FP | SIP 6-310.3 | Y | | 0.15 grain/dscf @ 6% O2 0.037 lb/MMbtu on a clock hour basis except during startup, shutdown, or drying of refractory | None for gaseous fired sources | N | None | Y |
| 38 | PM10 | BAAQMD Condition 23179, part 5d BAAQMD Condition 23179, part 7a.4 | | | 4.8 lb/clock hour except during startup, shutdown, or drying of refractory | BAAQMD Condition 23179, part 17 BAAQMD Condition 23179, part 17 | P/A | Source test | Y |
| 39 | PM10 | BAAQMD Condition 23179, part 7a.4 | Y | | 13.8 tons per any consecutive 12 months | BAAQMD Condition 23179, part 17, and part 28181, part B.4.f | P/A | Source test and annual source test calculations | Y |
| 40 | PM10 | BAAQMD Condition 23179, part 10d | Y | | 13.8 tons per any consecutive 12 months | BAAQMD Condition 23181, part 4 | P/A | Visible emissions monitoring | Y |
| 41 | PM10 | BAAQMD Condition 23181, part 2c | Y | | 13.8 tons per year for S1, S2, and S3 | BAAQMD Condition 23180, parts 8-10 | P/E | Visible emissions monitoring | Y |
| Source: S3 Hydrogen Plant Flare | | | | | | | | | |
| 1 | Opacity | BAAQMD 6-1-301 | N | | Ringelmann 1 for no more than 3 minutes in any hour | BAAQMD Condition 23180, parts 8-10 | P/E | Visible emissions monitoring | Y |
| 2 | Opacity | SIP 6-301 | Y | | Ringelmann 1 for no more than 3 minutes in any hour | BAAQMD Condition 23180, parts 8-10 | P/E | Visible emissions monitoring | Y |
| 3 | FP | BAAQMD 6-1-305 | N | | Prohibition of nuisance | None | N | None | Y |
| 4 | FP | SIP 6-305 | Y | | Prohibition of nuisance | None | N | None | Y |
| 5 | FP | BAAQMD 6-1-310.3 | N | | 0.15 grain/dscf @ 6% O2 | None for gaseous fired sources | N | None | Y |
| 6 | FP | SIP 6-310.3 | Y | | 0.15 grain/dscf @ 6% O2 | None for gaseous fired sources | N | None | Y |
| 7 | SO2 | 60.100a(g)(1) BAAQMD Condition 23180, part 4a | Y | | (Standard stayed until further notice) | BAAQMD Condition 23180, part 5 | N | None | Y |
| 8 | NOx | BAAQMD Condition 23180, part 4c | Y | | 2.8 tons per any consecutive 12 months | BAAQMD Condition 23180, part 5 | P/M | Flow data and calculations | Y |
| 9 | NOx | BAAQMD Condition 23180, part 4c | Y | | 129 lb per any consecutive 60 minutes | BAAQMD Condition 23180, part 5 | P/M | Flow data and calculations | Y |
| 10 | NOx | BAAQMD Condition 23181, part 2a | Y | | 30.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CEM data and calculations | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| <u>§</u> | <u>Type of Limit</u> | <u>Emission Limit Citation</u> | <u>FE¹ Y/N?</u> | <u>Future Effective Date</u> | <u>Emission Limits</u> | <u>Monitoring Requirements Citation</u> | <u>Monitoring Frequency² (P/C/N)</u> | <u>Monitoring Type</u> | <u>Monitoring Compliance Y or N?</u> |
|----------|--|---|----------------------------|------------------------------|--|---|---|--|--------------------------------------|
| 11 | POC | BAAQMD Condition 23181, part 2d | Y | | 13.9 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source tests, inspection data, and calculations | Y |
| 12 | PM10 | BAAQMD Condition 23181, part 2c | Y | | 13.8 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Annual source test at S2 and calculations | Y |
| 13 | CO | BAAQMD Condition 23180, part 4b | Y | | 12.1 tons per any consecutive 12 months | BAAQMD Condition 23180, part 5 | P/M | Flow data and calculations | Y |
| 14 | CO | BAAQMD Condition 23181, part 2e | Y | | 46.2 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | CO CEM, annual source tests, and calculations | Y |
| 15 | SO2 | BAAQMD Condition 23181, part 2b | Y | | 5.0 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | Sulfur monitoring or CEM and calculations | Y |
| 16 | Sulfuric acid mist | BAAQMD Condition 23181, part 2F | Y | | 0.43 tons per year for S1, S2, and S3 | BAAQMD Condition 23181, part 4 | P/A | annual source tests, and calculations | Y |
| 17 | VE | 40 CFR 60.18(c)(1) | Y | | No visible emissions except for 5 min in any two hours | 40 CFR 60.18(f)(1) | P/E | Method 22 | Y |
| 18 | Presence of flame | 40 CFR 60.18(c)(2) | Y | | Flame present at all times | 40 CFR 60.18(f)(2) | C | Thermocouple or equivalent device | Y |
| 19 | Velocity and heat content requirements | 40 CFR 60.18(c)(3) (i) -- OR -- 40 CFR 60.18(c)(3) (ii) & (c)(4)(i) OR -- 40 CFR 60.18(c)(3) (iii) & (c)(4)(ii) | | | 1) If hydrogen content is equal to or greater than 8% by volume, velocity must be less than 122 ft/sec and less than Vmax, OR; 2) Net heating value of gas greater than 300 btu/scf and less than 1000 btu/scf and velocity less than 60 ft/sec; OR 3) Net heating value of gas greater than 1000 btu/scf and velocity greater than 60 ft/sec and less than 400 ft/sec | 40 CFR 60.18(f)(3), (4), and 5 | C | Volume measurements gas analysis | Y |

Source: S4 - Cooling Tower

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| Eq # | Type of Limit | Emission Limit Citation | FE ¹ Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency ² (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|---------------------------|-------------------|--------------------------------|----------------------|-----------------------|--|--|--|---------------------------------|-------------------------------|
| 1 | Opacity | BAAQMD Regulation 6-1-301 | N | | Ringelmann No. 1 for no more than 3 minutes/hour | None | N | None | Y |
| 2 | Opacity | SIP 6-301 | Y | | Ringelmann 1 for no more than 3 minutes in any hour | None | N | None | Y |
| 3 | FP | BAAQMD 6-1-310 | N | | 0.15 grain/dscf | None | N | None | Y |
| 4 | FP | SIP 6-310 | Y | | 0.15 grain/dscf | None | N | None | Y |
| 5 | FP | BAAQMD 6-1-311 | N | | 40 lb/hr | None | N | None | Y |
| 6 | FP | SIP 6-311 | Y | | 4.10P0.67 lb/hr, where P is process weight, ton/hr | None | N | None | Y |
| 7 | PM | BAAQMD Condition 23414, part 2 | Y | | Dissolved solids < 3000 ppm | BAAQMD Condition 23414, part 6 | P/M | Analysis total dissolved solids | Y |
| 8 | Organic compounds | BAAQMD 8-2-301 | Y | | 300 ppm as carbon and 15 lb organic compounds/day | BAAQMD Condition 23414, part 3 | P/D | Visual inspection | Y |
| 9 | Organic compounds | BAAQMD 8-2-301 | Y | | 300 ppm as carbon and 15 lb organic compounds/day | BAAQMD Condition 23414, part 4 | P/3 times per week | Analysis of chlorine content | Y |
| 10 | Organic compounds | BAAQMD 8-2-301 | Y | | 300 ppm as carbon and 15 lb organic compounds/day | BAAQMD Condition 23414, part 4 | P/M | Analysis of VOC content | Y |
| 11 | Organic compounds | BAAQMD 8-2-301 | Y | | 300 ppm as carbon and 15 lb organic compounds/day | BAAQMD Condition 23414, part 8 | P/VW, after indication of hydrocarbon leak | Estimate of daily VOC loss | Y |
| 12 | Chloroform | | | | None | BAAQMD Condition 23414, part 5 | P/M | Records of NaOCl usage | Y |
| Source: Components | | | | | | | | | |
| 1 | POC | BAAQMD 8-18-301 | Y | | General equipment leak < 100 ppm | BAAQMD 8-18-401.2 | P/Q | Inspection | Y |
| 2 | POC | BAAQMD 8-18-302 | Y | | Valve leak < 100 ppm | BAAQMD 8-18-401.2 | P/Q | Inspection | Y |
| 3 | POC | BAAQMD 8-18-303 | Y | | Pump and compressor leak < 500 ppm | BAAQMD 8-18-401.2 | P/Q | Inspection | Y |
| 4 | POC | BAAQMD 8-18-304 | Y | | Connection leak < 100 ppm | BAAQMD 8-18-401.2e & BAAQMD Condition 23178, part 18 | P/Q | Inspection | Y |
| 5 | POC | BAAQMD 8-18-305 | Y | | Pressure relief valve leak < 500 ppm | BAAQMD 8-18-401.2 | P/Q | Inspection | Y |
| 6 | POC | BAAQMD 8-18-306.1 | Y | | Valve, pressure relief, pump or compressor must be repaired within 5 years or at the next scheduled turnaround | BAAQMD 8-18-502.4 | P/quarterly | Report | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
Rodeo, CA 94572

Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)", see Attachment A for the deviation details.

| Eq # | Type of Limit | Emission Limit Citation | FE Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
|------|---------------|---|---------|-----------------------|---|----------------------------------|---|--|-------------------------------|
| 7 | POC | BAAQMD 8-18-306.2 | Y | | Awaiting repair Valves: < 0.5% Pressure Relief < 1% Pump and Connector < 1% | BAAQMD 8-18-401.5 | P/within 24 hours | Inspection | Y |
| 8 | POC | BAAQMD 8-18-306.3.2 | Y | | Mass emissions & non-repairable equipment allowed: Valve < 0.1 lb/day & <1.0%; Pressure Relief < 0.2 lb/day & < 5%; and Pump and Connector < 0.2 lb/day & < 5% | BAAQMD 8-18-401.3 | P/D | Inspection | Y |
| 9 | POC | BAAQMD 8-18-306.3.3 | Y | | Total valve, pressure relief, pump or compressor leaks > 15 lb/day, they must be repaired within 7 days | BAAQMD 8-18-502.4 | P/Q | Sampling or equivalent | Y |
| 10 | POC | BAAQMD 8-28-303 | Y | | Vent Pressure Relief Devices to an Abatement Device with at least 95% by weight control efficiency or Meet Prevention Measures Procedures | BAAQMD 8-28-405 | P/turn-around | None | Y |
| 11 | POC | BAAQMD 8-28-304 | Y | | PHA within 90 days and meet Prevention Measures Procedures. After 2nd release Vent Pressure Relief Devices to an Abatement Device with at least 95% by weight control efficiency. | BAAQMD 8-28-405 | P/release per 5 calendar year | None | Y |
| 12 | POC | 40 CFR 60 Subpart V/a -60.482-2a (b)(1) | Y | | Pump leak less than 2,000 ppm | 40 CFR 60.482-2a (a)(1) | P/M | Measure for leaks | Y |
| 13 | POC | 40 CFR 60 Subpart V/a -60.482-2a (b)(2) | Y | | Pump leak indicated by dripping liquid Designated "No detectable emissions" less than 500 ppm | 40 CFR 60.482-2a (a)(2) | P/W | Visual Inspection | Y |
| 14 | POC | 40 CFR 60 Subpart V/a -60.482-2a (e) | Y | | | 40 CFR 60.482-2(e)(3) | P/A | Measure for leaks | Y |
| 15 | POC | 40 CFR 60 Subpart V/a -60.482-3a (f) | Y | | Leak is failure of seal or barrier system | 40 CFR 60.482-3a(d)-(f) | C | Sensor for detection of seal or barrier system failure | Y |
| 16 | POC | 40 CFR 60 Subpart V/a -60.482-7a (b) | Y | | Valve leak > 500 ppm | 40 CFR 60.482-7a (a)(1) | P/M unless 2 successive months w/o leak | Measure for leaks | Y |

**Air Liquide Rodeo Hydrogen Plant
Title V Semi-Annual Monitoring Report**

Site ID: B7419
Address: 1391 San Pablo Avenue
 Rodeo, CA 94572


Date: September 30, 2012
Period: March 1, 2011 to August 31, 2012

During the reporting period specified above, all required monitoring of the applicable limits as listed in Section VII of the Title V Major Facility Review Permit was conducted, except where indicated below. If a "No" is indicated in the column "Monitoring Compliance (Y or N)," see Attachment A for the deviation details.

| 20 | 21 | 22 | 23 | | | | | |
|---------------|---|----------------------|-----------------------|--|------------------------------------|--|---|-------------------------------|
| Type of Limit | Emission Limit Citation | FE ¹ Y/N? | Future Effective Date | Emission Limits | Monitoring Requirements Citation | Monitoring Frequency ² (P/C/N) | Monitoring Type | Monitoring Compliance Y or N? |
| 17 | POC 40 CFR 60 Subpart VVa -60.482-7a | Y | | Valve leak < 500 ppm; 2 successive months w/o leaking | 40 CFR 60.482-7(c) | P/Q unless leak found, then monthly monitoring | Measure for leaks | Y |
| 18 | POC 40 CFR 60 Subpart VVa -60.482-7(f) | Y | | Designated "No detectable emissions" < 500 ppm | 40 CFR 60.482-7 (f)(3) | P/A | Measure for leaks | Y |
| 19 | POC 40 CFR 60 Subpart VVa -60.482-8a(a) | Y | | Pumps and valves in heavy liquid service, Pressure Relief devices (light or heavy liquid), Flanges, Connectors leak shall be measured for leak in 5 days if detected by inspection | 40 CFR 60.482-8a(a) | P/E | Visible, Audible, or olfactory inspection | Y |
| 20 | POC 40 CFR 60 Subpart VVa -60.482-8a(b) | Y | | Pressure Relief devices (liquid), Flanges, Connectors leak > 10,000 ppm | 40 CFR 60.482-8a(b) | P/E | Measure for leaks | Y |
| 21 | POC BAAQMD Condition 23178, part 6 | Y | | Fugitive emissions of POC from hydrogen plant components < 3,000 lb/yr | BAAQMD Condition 23178, part 18 | P/Q | Method 21 and calculations | Y |
| 22 | TOC BAAQMD Condition 23178, part 11b | Y | | < 100 ppm of TOC (measured as C1) at valves | BAAQMD Condition 23178, part 17 | P/Q | Method 21 | Y |
| 23 | TOC BAAQMD Condition 23178, part 15 | Y | | < 100 ppm of TOC (measured as C1) at pumps and compressors | BAAQMD Condition 23178, part 17 | P/Q | Method 21 | Y |

¹ FE = Federally enforceable
² Monitoring Frequency: P = Periodic; C = Continuous; N = None; Under Periodic: A = Annual; Q = Quarterly; M = Monthly; W = Weekly; D = Daily; H = Hourly; E = Per Event
³ Monitoring Compliance: Y = All required monitoring of the applicable limit was conducted; N = Not all required monitoring of the applicable limit was conducted. See noted deviation in Attachment A for details.

I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate and complete.



Jared Witly
 Print Name

Plant Manager
 Title

9/30/12
 Date