

**DOCKETED**

|                         |                                        |
|-------------------------|----------------------------------------|
| <b>Docket Number:</b>   | 01-AFC-05C                             |
| <b>Project Title:</b>   | Valero Cogeneration Project-Compliance |
| <b>TN #:</b>            | 241807                                 |
| <b>Document Title:</b>  | 2021 CEC Cogen Compliance Report       |
| <b>Description:</b>     | N/A                                    |
| <b>Filer:</b>           | Victoria Croft                         |
| <b>Organization:</b>    | Valero Energy Corp                     |
| <b>Submitter Role:</b>  | Applicant                              |
| <b>Submission Date:</b> | 2/23/2022 11:27:55 AM                  |
| <b>Docketed Date:</b>   | 2/23/2022                              |



Benicia Refinery • Valero Refining Company - California  
3400 East Second Street • Benicia, California 94510-1097 • Telephone (707) 745-7011 • Facsimile (707) 745-7339

Submitted Electronically

February 22, 2022

Valero Cogeneration Project  
2021 CEC Annual Compliance Report  
Docket No. 01-AFC-05

Mr. Anwar Ali  
Compliance Project Manager  
Valero Cogeneration Project (01-AFC-05)  
California Energy Commission  
1516 Ninth Street (MS-2000)  
Sacramento, California 95814

Dear Mr. Ali:

Enclosed is a copy of the Annual Compliance Report for the calendar year 2021 for the Valero Cogeneration Project, as required by the General Conditions of the CEC's Commission Decision. Along with the compliance status information required by the CEC's General Conditions, documents are included in Section 3 of this report to comply with the following specific conditions:

- AQ-56 – Cooling Tower TDS Content
- HAZ-1 – List of Hazardous Materials Contained at Cogeneration Unit
- WASTE-2 – Waste Management Methods
- WQ-2 – Annual Monitoring Report to RWQCB
- WR-1 – Annual Water Use Summary

Please contact Ms. Victoria Croft at (707) 745-7881 should you have questions regarding this information.

Sincerely,

A handwritten signature in blue ink that reads 'Taryn Wier'.

Taryn Wier  
Manager - Environmental Engineering

TW/VEC

Enclosure



**VALERO COGENERATION PROJECT**

**2021 ANNUAL COMPLIANCE REPORT FOR  
THE CALIFORNIA ENERGY COMMISSION**

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

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**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 1: Updated Compliance Matrix (Open Conditions)**

## 2021 Annual Compliance Report

### Valero Cogeneration Project Conditions of Certification

| Item No. | Condition No. | Requirement                                                                                                     | Timing               | No. of Days Prior    | Status  |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------|----------------------|----------------------|---------|
| 2        | <u>AQ-2</u>   | SO <sub>2</sub> emissions offsets quarterly report                                                              | End of each quarter  | Within 30 days after | Ongoing |
| 13       | <u>AQ-13</u>  | Fire only refinery fuel or natural gas in gas turbines and HRSG duct burners                                    | On-going             | --                   | Ongoing |
| 14       | <u>AQ-14</u>  | Combined heat input rate to the power train limited to 810 MM Btu per hour, averaged over any 3-hr period       | On-going             | --                   | Ongoing |
| 15       | <u>AQ-15</u>  | Combined heat input rate to the power train limited to 19,440 MM Btu per calendar day                           | On-going             | --                   | Ongoing |
| 16       | <u>AQ-16</u>  | Combined cumulative heat input rate for each power train limited to 6,351,000 MM Btu per year                   | On-going             | --                   | Ongoing |
| 17       | <u>AQ-17</u>  | Properly operate and maintain SCR and CO Oxidation Catalyst abatement systems                                   | On-going             | --                   | Ongoing |
| 18       | <u>AQ-18</u>  | Gas turbines and HRSGs shall comply with criteria pollutant emission limits when firing natural gas exclusively | On-going             | --                   | Ongoing |
| 19       | <u>AQ-19</u>  | Gas turbines and HRSGs shall comply with criteria pollutant emission limits under all operating scenarios       | On-going             | --                   | Ongoing |
| 20       | <u>AQ-20</u>  | Sulfuric acid emissions limited to less than 7 tons in any consecutive 4 quarters                               | On-going             | --                   | Ongoing |
| 22       | <u>AQ-22</u>  | Total power train criteria pollutant emissions annual limits and annual report                                  | On-going             | --                   | Ongoing |
| 23       | <u>AQ-23</u>  | Calculate and record criteria pollutant emissions on a daily basis                                              | On-going             | --                   | Ongoing |
| 24       | <u>AQ-24</u>  | Notify District's Source Test Section prior to conducting any tests                                             | Prior to source test | 7                    | Ongoing |
| 25       | <u>AQ-25</u>  | Submit monitoring reports in accordance with District procedures and time limits                                | On-going             | --                   | Ongoing |
| 26       | <u>AQ-26</u>  | Maintain records on site at least 5 years                                                                       | On-going             | --                   | Ongoing |

## 2021 Annual Compliance Report

### Valero Cogeneration Project Conditions of Certification

| Item No. | Condition No.          | Requirement                                                                           | Timing                                                          | No. of Days Prior    | Status  |
|----------|------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------|---------|
| 27       | <u>AQ-27</u>           | Notify District of any violations of permit conditions per Title V                    | On-going                                                        | --                   | Ongoing |
| 31       | <u>AQ-31</u>           | Start up period for gas turbines no longer than 256 min or achieve 1 hr in compliance | Start Up mode                                                   | --                   | Ongoing |
| 34       | <u>AQ-34</u>           | Comply with Acid Rain program CEM requirements                                        | On-going                                                        | --                   | Ongoing |
| 36       | <u>AQ-36</u>           | Report H2S/TRS content of refinery fuel gas                                           | End of each quarter                                             | Within 60 days after | Ongoing |
| 38       | <u>AQ-38</u>           | Install/maintain CEM and recorder for NOX, CO and O2                                  | On-going                                                        | --                   | Ongoing |
| 39       | <u>AQ-39</u>           | POC and PM10 quarterly source testing                                                 | Quarterly                                                       | --                   | Ongoing |
| 40       | <u>AQ-40</u>           | SAM, SO2, SO3, ammonium sulfates quarterly source testing                             | Quarterly                                                       | --                   | Ongoing |
| 42       | <u>AQ-42</u>           | Inspect HC valves per Reg 8-18                                                        | Quarterly                                                       | --                   | Ongoing |
| 43       | <u>AQ-43</u>           | Equip connectors with graphitic-based gaskets and inspect per Reg 8-18                | Quarterly                                                       | --                   | Ongoing |
| 44       | <u>AQ-44</u>           | Equip HC centrifugal compressors with dual mechanical seals and inspect per Reg 8-18  | Quarterly                                                       | --                   | Ongoing |
| 54       | <u>AQ-56</u>           | Measured TDS content of cooling tower circulating water                               | Monthly, Annual; Annual Compl. Report                           | --                   | Ongoing |
| 80       | <u>HAZ-1</u>           | List of Haz Materials in reportable quantities                                        | Annual Compl. Report                                            | —                    | Ongoing |
| 85       | <u>NOISE-2</u>         | Noise Complaint Records                                                               | On-going                                                        | —                    | Ongoing |
| 116      | <u>WASTE-1</u>         | Notify CPM of any enforcement action by any local, state or federal agency            | As needed                                                       | —                    | Ongoing |
| 123      | <u>WATER QUALITY-2</u> | Notify CPM of any changes to NPDES permit, submit annual monitoring report            | Receipt of NPDES permit, annual reporting; Annual Compl. Report | 30 (after)           | Ongoing |
| 131      | <u>WATER RES-1</u>     | Water use metering, annual report                                                     | Annual Compl. Report                                            | --                   | Ongoing |

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 2: Summary of Current Cogeneration Unit Operating Status**



# **VALERO COGENERATION PROJECT**

## **2021 ANNUAL COMPLIANCE REPORT**

### **Section 2: Cogeneration Unit Operating Status**

The Cogen Unit GT-4901 availability for 2021 was 88.47% including all unplanned and planned maintenance down times (total of 1009.82 shutdown hours).

Planned maintenance hours:

- Routine PMs were performed (filters, instrument calibrations, etc.)

Unplanned Outages for the year included:

- Fuel Gas Valve Driver Trip
- Vibration Monitoring Equipment Failure Trip
- High Oil Filter differential pressure Trip
- Trip on Flame Out due to solenoid valve failure
- Scavenger Oil Pump Failure
- Shutdown on 480V bus failure related to a trip of the blower motor

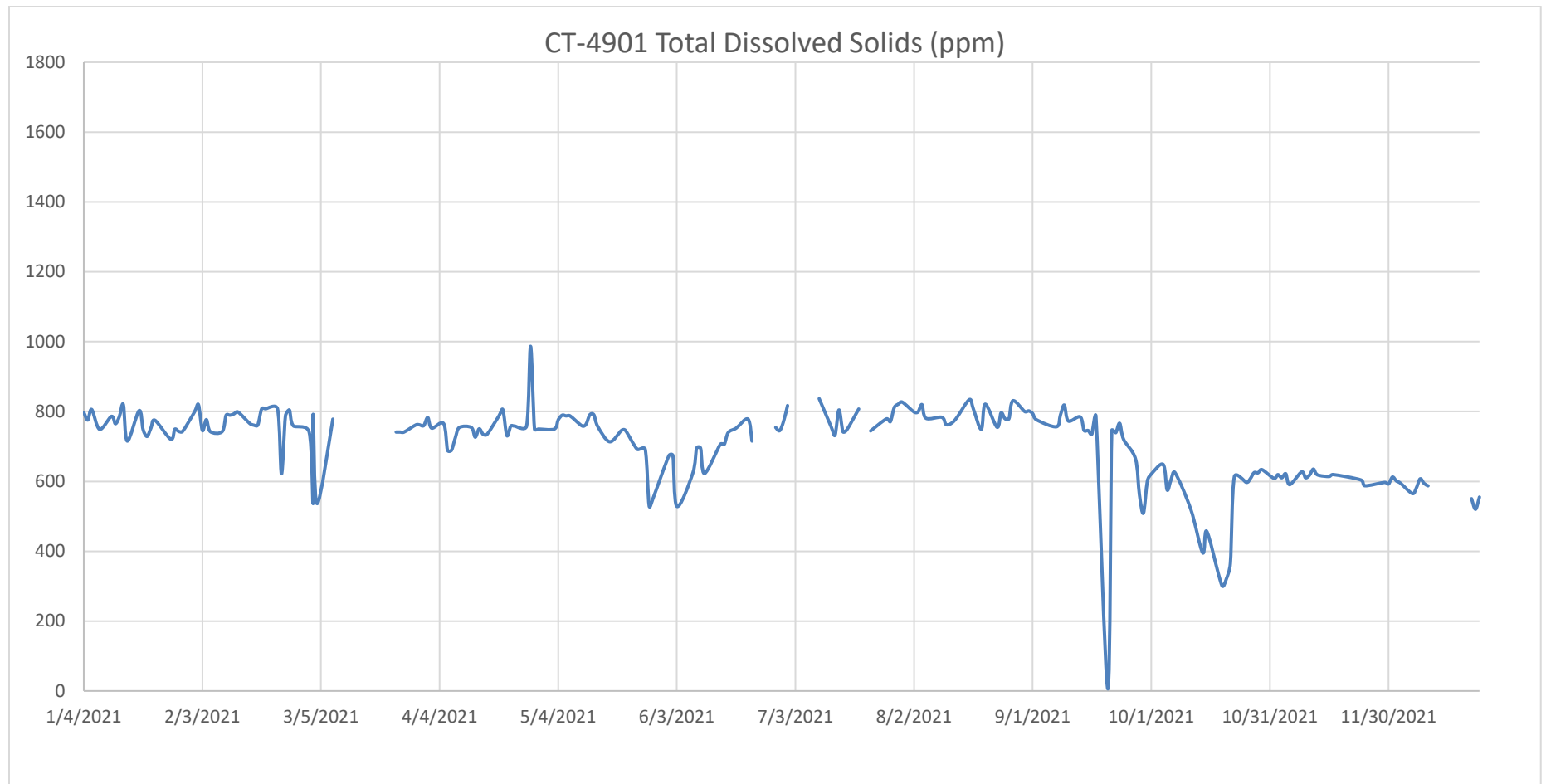
Major work:

- March Outage – Lease engine was removed to reinstall Valero engine following repair of LPT damage
- December Outage – Scheduled borescope inspection as well as maintenance including AGB oil leak repair, lube oil demister element changes, and blower motor replacements

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 3: Documents Required by Specific Conditions**

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**  
**AQ-56 Cooling Tower TDS Content**



**\* Please note breaks in data were due to Cogen downtime.**

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Compliance with monthly and annual TDS average limits**

| Month     | Monthly Average (ppm) |
|-----------|-----------------------|
| Jan       | 765                   |
| Feb       | 774                   |
| March     | 721                   |
| April     | 759                   |
| May       | 731                   |
| June      | 699                   |
| July      | 786                   |
| August    | 791                   |
| September | 691                   |
| October   | 526                   |
| November  | 611                   |
| December  | 594                   |

Annual Average = 718 ppm

**AQ-56:** The measured total dissolved solids (TDS) content of the circulating cooling water shall not exceed 1500 ppm TDS for any monthly average, or 1080 ppm TDS annual average, with a municipal water supply as cooling tower make-up. The use of alternative water supplies will require evaluation of new TDS limits for the cooling tower.

**Verification:** The project owner shall maintain appropriate measurement data records, and submit the monthly and annual average TDS of the cooling tower circulating water.

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**HAZ-1 Hazardous Materials Contained at Cogeneration Unit**

## Hazardous Materials And Wastes Inventory Matrix Report

|                    |                                  |                   |                 |             |                                      |
|--------------------|----------------------------------|-------------------|-----------------|-------------|--------------------------------------|
| CERS Business/Org. | <b>Valero</b>                    | Chemical Location | <b>C5 COGEN</b> | CERS ID     | <b>10133161</b>                      |
| Facility Name      | <b>Valero Benicia Refinery</b>   |                   |                 | Facility ID | <b>48-000-020015</b>                 |
|                    | 3400 E 2nd Street, Benicia 94510 |                   |                 | Status      | <b>Submitted on 2/1/2022 7:26 PM</b> |

| DOT Code/Fire Haz. Class | Common Name                              | Unit          | Quantities               |                   |                     | Annual Waste Amount | Federal Hazard Categories | Hazardous Components (For mixture only) |      |     |            |
|--------------------------|------------------------------------------|---------------|--------------------------|-------------------|---------------------|---------------------|---------------------------|-----------------------------------------|------|-----|------------|
|                          |                                          |               | Max. Daily               | Largest Cont.     | Avg. Daily          |                     |                           | Component Name                          | % Wt | EHS | CAS No.    |
|                          | <b>EL-1515 VISCOSITY GRADE 10 TO 680</b> | <b>Pounds</b> | <b>1950</b>              | <b>487</b>        | <b>1950</b>         |                     | - Physical                | POLYALKYLENE GLYCOL MIXTURE             | 95 % |     | 9038-95-3  |
|                          | <u>CAS No</u>                            | <u>State</u>  | <u>Storage Container</u> |                   | <u>Pressue</u>      | <u>Waste Code</u>   | Flammable                 | PROPRIETARY ADDITIVES                   | 5 %  |     |            |
|                          |                                          | <u>Liquid</u> | Steel Drum               |                   | <u>Ambient</u>      |                     | - Health Acute            |                                         |      |     |            |
|                          |                                          | <u>Type</u>   | Mixture                  | Days on Site: 365 | <u>Temperature</u>  |                     | Toxicity                  |                                         |      |     |            |
|                          |                                          |               |                          |                   | <u>Ambient</u>      |                     | - Health Skin             |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Corrosion                 |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Irritation                |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     |                           |                                         |      |     |            |
|                          | <b>EMERACATM ADCAT CO CATALYST</b>       | <b>Pounds</b> | <b>4800</b>              | <b>4800</b>       | <b>4800</b>         |                     | - Health                  | ALUMINUM OXIDE                          |      |     | 1344-28-1  |
|                          | <u>CAS No</u>                            | <u>State</u>  | <u>Storage Container</u> |                   | <u>Pressue</u>      | <u>Waste Code</u>   | Carcinogenicity           | PLATINUM                                |      |     | 7440-06-4  |
|                          | 1344-28-1                                | <u>Solid</u>  | Other                    |                   | <u>Ambient</u>      |                     | - Health Acute            |                                         |      |     |            |
|                          |                                          | <u>Type</u>   | Mixture                  | Days on Site: 365 | <u>Temperature</u>  |                     | Toxicity                  |                                         |      |     |            |
|                          |                                          |               |                          |                   | <u>&gt; Ambient</u> |                     | - Health Skin             |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Corrosion                 |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Irritation                |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | - Health                  |                                         |      |     |            |
|                          | <b>FYREWASH F1</b>                       | <b>Pounds</b> | <b>3200</b>              | <b>400</b>        | <b>1600</b>         |                     | - Health                  | NON IONIC SURFACTANT                    | 25 % |     |            |
|                          | <u>CAS No</u>                            | <u>State</u>  | <u>Storage Container</u> |                   | <u>Pressue</u>      | <u>Waste Code</u>   | Carcinogenicity           | PETROLEUM DISTILLATES                   | 50 % |     | 64742-47-8 |
|                          | Combustible Liquid, Class II             | <u>Liquid</u> | Steel Drum               |                   | <u>Ambient</u>      |                     | - Health Acute            | HEAVY AROMATIC NAPHTHA                  | 25 % |     | 64742-94-5 |
|                          |                                          | <u>Type</u>   | Mixture                  | Days on Site: 365 | <u>Temperature</u>  |                     | Toxicity                  | 2-BUTOXYETHHOXY ETHANOL                 | 25 % |     | 112-34-5   |
|                          |                                          |               |                          |                   | <u>Ambient</u>      |                     | - Health Skin             |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Corrosion                 |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Irritation                |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | - Health Specific         |                                         |      |     |            |
|                          | <b>ION EXCHANGE RESIN USF C-211</b>      | <b>Pounds</b> | <b>710</b>               | <b>710</b>        | <b>710</b>          |                     | Target Organ              |                                         |      |     |            |
|                          | <u>CAS No</u>                            | <u>State</u>  | <u>Storage Container</u> |                   | <u>Pressue</u>      | <u>Waste Code</u>   | Toxicity                  | WATER                                   | 60 % |     | 7732-18-5  |
|                          |                                          | <u>Solid</u>  | Other                    |                   | <u>Ambient</u>      |                     | - Health Acute            | SULFONATED COPOLYMER OF                 | 70 % |     | 69011-22-9 |
|                          |                                          | <u>Type</u>   | Mixture                  | Days on Site: 365 | <u>Temperature</u>  |                     | Toxicity                  | STYRENE                                 |      |     |            |
|                          |                                          |               |                          |                   | <u>Ambient</u>      |                     | - Health Skin             |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Corrosion                 |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Irritation                |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | - Health Serious          |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Eye Damage Eye            |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Irritation                |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | - Health Specific         |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Target Organ              |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     | Toxicity                  |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     |                           |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     |                           |                                         |      |     |            |
|                          |                                          |               |                          |                   |                     |                     |                           |                                         |      |     |            |

## Hazardous Materials And Wastes Inventory Matrix Report

|                    |                                  |                   |             |                                      |
|--------------------|----------------------------------|-------------------|-------------|--------------------------------------|
| CERS Business/Org. | <b>Valero</b>                    | Chemical Location | CERS ID     | <b>10133161</b>                      |
| Facility Name      | <b>Valero Benicia Refinery</b>   | <b>C5 COGEN</b>   | Facility ID | <b>48-000-020015</b>                 |
|                    | 3400 E 2nd Street, Benicia 94510 |                   | Status      | <b>Submitted</b> on 2/1/2022 7:26 PM |

| DOT Code/Fire Haz. Class                 | Common Name                  | Unit          | Quantities                    |               |             | Annual Waste Amount | Federal Hazard Categories                  | Hazardous Components (For mixture only) |      |             |
|------------------------------------------|------------------------------|---------------|-------------------------------|---------------|-------------|---------------------|--------------------------------------------|-----------------------------------------|------|-------------|
|                                          |                              |               | Max. Daily                    | Largest Cont. | Avg. Daily  |                     |                                            | Component Name                          | % Wt | EHS CAS No. |
|                                          | <b>MOBIL DTE 25</b>          | <b>Pounds</b> | <b>800</b>                    | <b>400</b>    | <b>400</b>  |                     | - Health Acute Toxicity                    | NON HAZARDOUS PROPRIETARY MIXTURE       |      |             |
|                                          | CAS No                       | State         | Storage Container             |               | Pressue     | Waste Code          |                                            |                                         |      |             |
|                                          |                              | Liquid        | Steel Drum                    |               | Ambient     |                     |                                            |                                         |      |             |
|                                          |                              | Type          |                               |               | Temperature |                     |                                            |                                         |      |             |
|                                          |                              | Mixture       | Days on Site: 365             |               | Ambient     |                     |                                            |                                         |      |             |
|                                          | <b>MOBIL JET OIL II</b>      | <b>Pounds</b> | <b>2490</b>                   | <b>1250</b>   | <b>2490</b> |                     | - Health Acute Toxicity                    | TRICRESYL PHOSPHATE                     | 5 %  | 1330-78-5   |
|                                          | CAS No                       | State         | Storage Container             |               | Pressue     | Waste Code          |                                            | 1-NAPHTHYLAMINE, N-PHENYL               | 5 %  | 90-30-2     |
|                                          |                              | Liquid        | Aboveground Tank, Steel Drum, |               | Ambient     |                     | - Health Reproductive Toxicity             |                                         |      |             |
|                                          |                              | Type          | Other                         |               | Temperature |                     | - Health Skin Corrosion Irritation         |                                         |      |             |
|                                          |                              | Mixture       | Days on Site: 365             |               | Ambient     |                     | - Health Serious Eye Damage Eye Irritation |                                         |      |             |
|                                          |                              |               |                               |               |             |                     | - Health Specific Target Organ Toxicity    |                                         |      |             |
| DOT: 8 - Corrosives (Liquids and Solids) | <b>Nalco 3DTrasar 3DT230</b> | <b>Pounds</b> | <b>966</b>                    | <b>506</b>    | <b>506</b>  |                     | - Physical Gas Under Pressure              | Sulfuric Acid                           | 5 %  | ✓ 7664-93-9 |
|                                          | CAS No                       | State         | Storage Container             |               | Pressue     | Waste Code          |                                            | Phosphoric Acid                         | 5 %  | 7664-38-2   |
|                                          | 7664-93-9                    | Liquid        | Tote Bin                      |               | Ambient     |                     | - Physical Explosive                       | Benzotriazole                           | 5 %  | 95-14-7     |
|                                          |                              | Type          |                               |               | Temperature |                     | - Physical Corrosive To Metal              |                                         |      |             |
|                                          |                              | Mixture       | Days on Site: 365             |               | Ambient     |                     | - Health Acute Toxicity                    |                                         |      |             |
|                                          |                              |               |                               |               |             |                     | - Health Skin Corrosion Irritation         |                                         |      |             |
|                                          |                              |               |                               |               |             |                     | - Health Respiratory Skin Sensitization    |                                         |      |             |
|                                          |                              |               |                               |               |             |                     | - Health Serious Eye Damage Eye Irritation |                                         |      |             |

## Hazardous Materials And Wastes Inventory Matrix Report

|                    |                                  |                   |                 |             |                                      |
|--------------------|----------------------------------|-------------------|-----------------|-------------|--------------------------------------|
| CERS Business/Org. | <b>Valero</b>                    | Chemical Location | <b>C5 COGEN</b> | CERS ID     | <b>10133161</b>                      |
| Facility Name      | <b>Valero Benicia Refinery</b>   |                   |                 | Facility ID | <b>48-000-020015</b>                 |
|                    | 3400 E 2nd Street, Benicia 94510 |                   |                 | Status      | <b>Submitted</b> on 2/1/2022 7:26 PM |

| DOT Code/Fire Haz. Class                 | Common Name                     | Unit          | Quantities               |               |             | Annual Waste Amount | Federal Hazard Categories | Hazardous Components (For mixture only) |      |             |
|------------------------------------------|---------------------------------|---------------|--------------------------|---------------|-------------|---------------------|---------------------------|-----------------------------------------|------|-------------|
|                                          |                                 |               | Max. Daily               | Largest Cont. | Avg. Daily  |                     |                           | Component Name                          | % Wt | EHS CAS No. |
| DOT: 8 - Corrosives (Liquids and Solids) | <b>NALCO H-550</b>              | <b>Pounds</b> | <b>2400</b>              | <b>2400</b>   | <b>1800</b> |                     | - Physical                | GLUTARALDEHYDE                          | 60 % | 111-30-8    |
|                                          | CAS No                          | State         | Storage Container        |               | Pressue     | Waste Code          | Corrosive To              |                                         |      |             |
|                                          | 111-30-8                        | Liquid        | Tote Bin                 |               | Ambient     |                     | Metal                     |                                         |      |             |
|                                          | Combustible Liquid, Class III-A | Type          | Days on Site: 365        |               | Temperature |                     | - Health Acute            |                                         |      |             |
|                                          |                                 | Mixture       |                          |               | > Ambient   |                     | Toxicity                  |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health Skin             |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Corrosion                 |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Irritation                |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health                  |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Respiratory Skin          |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Sensitization             |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health Serious          |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Eye Damage Eye            |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Irritation                |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health Specific         |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Target Organ              |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Toxicity                  |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health                  |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Aspiration Hazard         |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health Germ             |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Cell Mutagenicity         |                                         |      |             |
|                                          | <b>NALCO STABREX ST70</b>       | <b>Pounds</b> | <b>850</b>               | <b>850</b>    | <b>425</b>  |                     | - Health Acute            | SODIUM HYDROXIDE                        | 5 %  | 1310-73-2   |
|                                          | CAS No                          | State         | Storage Container        |               | Pressue     | Waste Code          | Toxicity                  |                                         |      |             |
|                                          |                                 | Liquid        | Tote Bin                 |               | Ambient     |                     | - Health Skin             |                                         |      |             |
|                                          |                                 | Type          | Days on Site: 365        |               | Temperature |                     | Corrosion                 |                                         |      |             |
|                                          |                                 | Mixture       |                          |               | Ambient     |                     | Irritation                |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health                  |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Respiratory Skin          |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Sensitization             |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | - Health Serious          |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Eye Damage Eye            |                                         |      |             |
|                                          |                                 |               |                          |               |             |                     | Irritation                |                                         |      |             |
| DOT: 8 - Corrosives (Liquids and Solids) | <b>Nalco Trasar Trac 104</b>    | <b>Pounds</b> | <b>35</b>                | <b>35</b>     | <b>35</b>   |                     | - Health Acute            | Sodium Molybdate                        | 5 %  | 7631-95-0   |
|                                          | CAS No                          | State         | Storage Container        |               | Pressue     | Waste Code          | Toxicity                  |                                         |      |             |
|                                          | 7631-95-0                       | Liquid        | Plastic/Non-metalic Drum |               | Ambient     |                     | - Health Skin             |                                         |      |             |
|                                          |                                 | Type          | Days on Site: 365        |               | Temperature |                     | Corrosion                 |                                         |      |             |
|                                          |                                 | Mixture       |                          |               |             |                     | Irritation                |                                         |      |             |
| DOT: 8 - Corrosives (Liquids and Solids) | <b>NALCO Trasar Trac 104</b>    | <b>Pounds</b> | <b>570</b>               | <b>50</b>     | <b>570</b>  |                     | - Health Acute            | Sodium Molybdate                        | 7 %  | 7631-95-0   |
|                                          | CAS No                          | State         | Storage Container        |               | Pressue     | Waste Code          | Toxicity                  |                                         |      |             |
|                                          | 7631-95-0                       | Liquid        | Plastic/Non-metalic Drum |               | Ambient     |                     |                           |                                         |      |             |
|                                          |                                 | Type          | Days on Site: 365        |               | Temperature |                     |                           |                                         |      |             |
|                                          |                                 | Mixture       |                          |               |             |                     |                           |                                         |      |             |



## Hazardous Materials And Wastes Inventory Matrix Report

|                    |                                  |                   |                 |             |                                      |
|--------------------|----------------------------------|-------------------|-----------------|-------------|--------------------------------------|
| CERS Business/Org. | <b>Valero</b>                    | Chemical Location | <b>C5 COGEN</b> | CERS ID     | <b>10133161</b>                      |
| Facility Name      | <b>Valero Benicia Refinery</b>   |                   |                 | Facility ID | <b>48-000-020015</b>                 |
|                    | 3400 E 2nd Street, Benicia 94510 |                   |                 | Status      | <b>Submitted</b> on 2/1/2022 7:26 PM |

| DOT Code/Fire Haz. Class           | Common Name                | Unit          | Quantities        |               |              | Annual Waste Amount | Federal Hazard Categories | Hazardous Components (For mixture only) |      |             |
|------------------------------------|----------------------------|---------------|-------------------|---------------|--------------|---------------------|---------------------------|-----------------------------------------|------|-------------|
|                                    |                            |               | Max. Daily        | Largest Cont. | Avg. Daily   |                     |                           | Component Name                          | % Wt | EHS CAS No. |
|                                    | <b>NATURAL GAS</b>         | <b>Pounds</b> | <b>297</b>        | <b>3240</b>   | <b>297</b>   |                     | - Physical                | METHANE                                 | 99 % | 74-82-8     |
|                                    | CAS No                     | State         | Storage Container |               | Pressue      | Waste Code          | Flammable                 | ETHANE                                  | 1 %  | 74-84-0     |
|                                    |                            | Gas           | Steel Drum, Other |               | > Ambient    |                     | - Physical Gas            |                                         |      |             |
|                                    |                            | Type          |                   |               | Temperature  |                     | Under Pressure            |                                         |      |             |
|                                    |                            | Mixture       | Days on Site: 365 |               | > Ambient    |                     | - Physical                |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Explosive                 |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health Acute            |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Toxicity                  |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health Simple           |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Asphyxiant                |                                         |      |             |
|                                    | <b>PLATE TYPE CATALYST</b> | <b>Pounds</b> | <b>52000</b>      | <b>52000</b>  | <b>52000</b> |                     | - Physical                | MOLYBDENUM TRIOXIDE                     | 10 % | 1313-27-5   |
|                                    | CAS No                     | State         | Storage Container |               | Pressue      | Waste Code          | Corrosive To              | TITANIUM DIOXIDE                        | 80 % | 13463-67-7  |
|                                    |                            | Solid         | Other             |               | > Ambient    |                     | Metal                     | VANADIUM PENTOXIDE                      | 2 %  | ✓ 1314-62-1 |
|                                    |                            | Type          |                   |               | Temperature  |                     | - Health Acute            |                                         |      |             |
|                                    |                            | Mixture       | Days on Site: 365 |               | > Ambient    |                     | Toxicity                  |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health                  |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Respiratory Skin          |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Sensitization             |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health Specific         |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Target Organ              |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Toxicity                  |                                         |      |             |
|                                    | <b>REFINERY FUEL GAS</b>   | <b>Pounds</b> | <b>407</b>        | <b>3240</b>   | <b>407</b>   |                     | - Health Acute            | FUEL GAS                                |      | 68308-27-0  |
| Flammable Liquid, Class I-A        | CAS No                     | State         | Storage Container |               | Pressue      | Waste Code          | Toxicity                  |                                         |      |             |
|                                    |                            | Gas           | Steel Drum, Other |               | > Ambient    |                     | - Health Skin             |                                         |      |             |
|                                    |                            | Type          |                   |               | Temperature  |                     | Corrosion                 |                                         |      |             |
|                                    |                            | Mixture       | Days on Site: 365 |               | > Ambient    |                     | Irritation                |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health Serious          |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Eye Damage Eye            |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Irritation                |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | - Health Simple           |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Asphyxiant                |                                         |      |             |
| DOT: 9 - Misc. Hazardous Materials | <b>SOUR WASTEWATER</b>     | <b>Pounds</b> | <b>20</b>         | <b>220</b>    | <b>20</b>    |                     | - Physical                | HYDROGEN SULFIDE                        | 1 %  | ✓ 7783-06-4 |
|                                    | CAS No                     | State         | Storage Container |               | Pressue      | Waste Code          | Flammable                 |                                         |      |             |
| Flammable Liquid, Class I-A        |                            | Liquid        | Steel Drum, Other |               | > Ambient    |                     | - Health Acute            | WATER                                   |      | 7732-18-5   |
|                                    |                            | Type          |                   |               | Temperature  |                     | Toxicity                  |                                         |      |             |
|                                    |                            | Mixture       | Days on Site: 365 |               | > Ambient    |                     | - Health                  |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Respiratory Skin          |                                         |      |             |
|                                    |                            |               |                   |               |              |                     | Sensitization             |                                         |      |             |

## Hazardous Materials And Wastes Inventory Matrix Report

|                    |                                  |                   |             |                                      |
|--------------------|----------------------------------|-------------------|-------------|--------------------------------------|
| CERS Business/Org. | <b>Valero</b>                    | Chemical Location | CERS ID     | <b>10133161</b>                      |
| Facility Name      | <b>Valero Benicia Refinery</b>   | <b>C5 COGEN</b>   | Facility ID | <b>48-000-020015</b>                 |
|                    | 3400 E 2nd Street, Benicia 94510 |                   | Status      | <b>Submitted</b> on 2/1/2022 7:26 PM |

| DOT Code/Fire Haz. Class | Common Name                         | Unit           | Quantities               |               |                     | Annual Waste Amount | Federal Hazard Categories                                                                                                                                                                                                                        | Hazardous Components (For mixture only)                                                                    |       |             |
|--------------------------|-------------------------------------|----------------|--------------------------|---------------|---------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------|-------------|
|                          |                                     |                | Max. Daily               | Largest Cont. | Avg. Daily          |                     |                                                                                                                                                                                                                                                  | Component Name                                                                                             | % Wt  | EHS CAS No. |
|                          | <b>SUVA 123</b>                     | <b>Pounds</b>  | <b>1990</b>              | <b>1010</b>   | 1990                |                     | - Health Acute<br>Toxicity                                                                                                                                                                                                                       | EHTANE, 1,1 - DICHLORO-2,2,2-<br>TRIFLUORO                                                                 | 100 % | 306-83-2    |
|                          | <u>CAS No</u>                       | <u>State</u>   | <u>Storage Container</u> |               | <u>Pressue</u>      | <u>Waste Code</u>   | - Health Skin<br>Corrosion<br>Irritation<br>- Health<br>Respiratory Skin<br>Sensitization<br>- Health Serious<br>Eye Damage Eye<br>Irritation<br>- Health Specific<br>Target Organ<br>Toxicity<br>- Health Hazard<br>Not Otherwise<br>Classified |                                                                                                            |       |             |
|                          |                                     | <u>Liquid</u>  | <u>Other</u>             |               | <u>&gt; Ambient</u> |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Type</u>    |                          |               | <u>Temperature</u>  |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Mixture</u> | Days on Site: 365        |               | <u>&gt; Ambient</u> |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          | <b>TRANE OIL 22</b>                 | <b>Pounds</b>  | <b>60</b>                | <b>70</b>     | 60                  |                     |                                                                                                                                                                                                                                                  | WHITE MINERAL OIL                                                                                          | 100 % | 8042-47-5   |
|                          | <u>CAS No</u>                       | <u>State</u>   | <u>Storage Container</u> |               | <u>Pressue</u>      | <u>Waste Code</u>   |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Liquid</u>  | <u>Other</u>             |               | <u>&gt; Ambient</u> |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Type</u>    |                          |               | <u>Temperature</u>  |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Mixture</u> | Days on Site: 365        |               | <u>&gt; Ambient</u> |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          | <b>USF A-284 ION EXCHANGE RESIN</b> | <b>Pounds</b>  | <b>1060</b>              | <b>1060</b>   | 1060                |                     | - Health Acute<br>Toxicity                                                                                                                                                                                                                       | Trimethylamine<br>functionalized,CHLOROMETHELAT<br>ED COPOLYMER OF STYRENE AND<br>DIVINYL BENZENE<br>WATER | 70 %  | 609011-18-3 |
|                          | <u>CAS No</u>                       | <u>State</u>   | <u>Storage Container</u> |               | <u>Pressue</u>      | <u>Waste Code</u>   | - Health Skin<br>Corrosion<br>Irritation<br>- Health<br>Respiratory Skin<br>Sensitization<br>- Health Specific<br>Target Organ<br>Toxicity                                                                                                       |                                                                                                            |       | 7732-18-5   |
|                          |                                     | <u>Solid</u>   | <u>Other</u>             |               | <u>Ambient</u>      |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Type</u>    |                          |               | <u>Temperature</u>  |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |
|                          |                                     | <u>Mixture</u> | Days on Site: 365        |               | <u>Ambient</u>      |                     |                                                                                                                                                                                                                                                  |                                                                                                            |       |             |

## VALERO COGENERATION PROJECT

### 2021 ANNUAL COMPLIANCE REPORT

#### WASTE-2 Documentation of Waste Management Methods

I certify that all wastes generated at the Valero Cogeneration Facility are properly characterized and managed according to waste management practices described in CTEMS EPL-4001 Container Labeling and Closure Policy and the Benicia Refinery Waste Management Compliance Manual.

Taryn Wier      2/22/22  
Taryn Wier      Date  
Manager - Environmental Engineering

# **VALERO COGENERATION PROJECT**

## **2021 ANNUAL COMPLIANCE REPORT**

### **VALERO COGENERATION PROJECT 2021 ANNUAL COMPLIANCE REPORT Valero Benicia Refinery NPDES CA0005550**

#### **WQ-2: Annual Monitoring Data Submitted to RWQCB**

The Valero Cogeneration Project sends a small amount of wastewater to the refinery's wastewater treatment system, which after treatment becomes a part of the refinery's effluent. Valero submits its self-monitoring data for the refinery's effluent monthly to the RWQCB electronically via the Internet to eSMR, the State Board electronic reporting system.

Attached is the 2021 NPDES Compliance Summary Table for the Valero Benicia Refinery, which provides a listing of the refinery's NPDES permit monitoring points and compliance parameters, along with a monthly accounting of the compliance status and number of samples taken each month.

For each month, the entry made in each row (e.g., 0/31) corresponds to the number samples exceeding the limit versus the number of samples taken during the month. An entry of 0/31 means that no samples exceeded the limit out of 31 (i.e., daily) samples that month.

During the 2021 reporting year, Oil and Grease and TSS limits were exceeded during the Month of December at storm water outfall E-017.

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**  
2021 COMPLIANCE SUMMARY TABLE  
Valero Benicia Refinery NPDES CA0005550

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]

**2021 COMPLIANCE SUMMARY TABLE****VALERO BENICIA REFINERY NPDES #CA0005550**

| PARAMETER                                     | LIMIT     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Total |
|-----------------------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-003-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/2   |
| Oil and Grease Eff Monthly Average mg/L       | Max 8     | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/2   |
| pH Eff Daily Minimum SU                       | Min 6.5   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| pH Eff Daily Maximum SU                       | Max 8.5   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| Chromium (Total) Eff Daily Maximum mg/L       | Max 0.6   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (Total) Eff Monthly Average mg/L     | Max 0.21  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Daily Maximum mg/L          | Max 0.062 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-004-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/2   |



**VALERO BENICIA REFINERY NPDES #CA0005550**

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]

**2021 COMPLIANCE SUMMARY TABLE****VALERO BENICIA REFINERY NPDES #CA0005550**

| PARAMETER                                     | LIMIT     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Total |
|-----------------------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-008-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/2   |
| Oil and Grease Eff Monthly Average mg/L       | Max 8     | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/2   |
| pH Eff Daily Minimum SU                       | Min 6.5   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| pH Eff Daily Maximum SU                       | Max 8.5   | 0/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/3   |
| Chromium (Total) Eff Daily Maximum mg/L       | Max 0.6   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (Total) Eff Monthly Average mg/L     | Max 0.21  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Daily Maximum mg/L          | Max 0.062 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-009-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1 | 0/3   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1 | 0/3   |

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]

**2021 COMPLIANCE SUMMARY TABLE**
**VALERO BENICIA REFINERY NPDES #CA0005550**

| PARAMETER                                     | LIMIT     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Total |
|-----------------------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-013-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1   |
| Oil and Grease Eff Monthly Average mg/L       | Max 8     | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1   |
| pH Eff Daily Minimum SU                       | Min 6.5   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1   |
| pH Eff Daily Maximum SU                       | Max 8.5   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/1   |
| Chromium (Total) Eff Daily Maximum mg/L       | Max 0.6   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (Total) Eff Monthly Average mg/L     | Max 0.21  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Daily Maximum mg/L          | Max 0.062 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chromium (VI) Eff Monthly Average mg/L        | Max 0.028 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Daily Maximum mg/L         | Max 0.35  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Phenols, Total Eff Monthly Average mg/L       | Max 0.17  | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| <b>Monitoring Point EFF-014-A1</b>            |           |     |     |     |     |     |     |     |     |     |     |     |     | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 48    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Biochemical Oxygen Demand (BOD) (5-day @      | Max 26    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Daily Max    | Max 360   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Chemical Oxygen Demand (COD) Eff Monthly A    | Max 180   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Daily Maximu | Max 33    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Suspended Solids (TSS) Eff Monthly Aver | Max 21    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0   |
| Total Organic Carbon (TOC) Eff Daily Maximum  | Max 110   | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/1   |
| Oil and Grease Eff Daily Maximum mg/L         | Max 15    | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/1 | 0/0 | 0/0 | 0/1   |

**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]



**VALERO BENICIA REFINERY NPDES #CA0005550**[illegible]



## 2021 COMPLIANCE SUMMARY TABLE

**VALERO BENICIA REFINERY NPDES #CA0005550**

[illegible]

**VALERO COGENERATION PROJECT**

**2021 ANNUAL COMPLIANCE REPORT**

**WR-1 Annual Cogeneration Unit Water Use Summary**

# Valero Cogeneration Project 2021

| MONTHLY |             |         |       |        |           |     |                |           |
|---------|-------------|---------|-------|--------|-----------|-----|----------------|-----------|
| Gallons | Water Usage |         |       |        |           |     | Recycled Water | Off-Set   |
|         | GPD         |         |       |        | Acre-Feet |     | Acre-Feet      | Acre-Feet |
|         | Average     | GPM     | (min) | (max)  | Total     |     | Total          | Net       |
| Jan-21  | 2,645,443   | 85,337  | 59    | 50,232 | 99,030    | 8.1 | 12.6           | 4.5       |
| Feb-21  | 2,228,851   | 79,602  | 55    | 55,425 | 95,186    | 6.8 | 8.3            | 1.5       |
| Mar-21  | 1,491,022   | 48,097  | 33    | 0      | 105,109   | 4.6 | 12.6           | 8.0       |
| Apr-21  | 2,704,360   | 90,145  | 63    | 64,595 | 104,813   | 8.3 | 13.5           | 5.2       |
| May-21  | 2,755,974   | 88,902  | 62    | 78,889 | 103,110   | 8.5 | 16.2           | 7.7       |
| Jun-21  | 2,500,800   | 83,360  | 58    | 38,787 | 100,813   | 7.7 | 17.4           | 9.7       |
| Jul-21  | 2,422,824   | 78,156  | 54    | 3      | 110,104   | 7.4 | 16.4           | 9.0       |
| Aug-21  | 3,018,292   | 100,610 | 70    | 73,092 | 110,012   | 9.3 | 18.4           | 9.2       |
| Sep-21  | 1,624,133   | 54,138  | 38    | 3      | 105,713   | 5.0 | 16.5           | 11.5      |
| Oct-21  | 2,927,362   | 94,431  | 66    | 53,611 | 116,069   | 9.0 | 16.1           | 7.1       |
| Nov-21  | 2,030,887   | 67,696  | 47    | 49,910 | 93,578    | 6.2 | 15.8           | 9.5       |
| Dec-21  | 1,762,256   | 56,847  | 39    | 0      | 98,380    | 5.4 | 12.8           | 7.4       |

| ANNUAL      |     |       |       |           |  |                |           |
|-------------|-----|-------|-------|-----------|--|----------------|-----------|
| Water Usage |     |       |       |           |  | Recycled Water | Off-Set   |
| GPD         |     |       |       | Acre-Feet |  | Acre-Feet      | Acre-Feet |
| Average     | GPM | (min) | (max) | Total     |  | Total          | Net       |

|             |               |           |          |                |           |            |           |
|-------------|---------------|-----------|----------|----------------|-----------|------------|-----------|
| <b>2021</b> | <b>77,277</b> | <b>54</b> | <b>0</b> | <b>116,069</b> | <b>86</b> | <b>177</b> | <b>90</b> |
| <b>2020</b> | <b>80,661</b> | <b>56</b> | <b>9</b> | <b>175,693</b> | <b>90</b> | <b>170</b> | <b>80</b> |

GPD: Gallons per day

CEC Condition of Certification, Water Use Metering, WATER RES-1 & WATER RES-2

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 4: Post-Certification Changes**

No changes were made in 2021.

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**Section 5: Resolution to Unmet Submittals**

There were no unmet submittals or resolutions to unmet submittals in 2021.

# VALERO COGENERATION PROJECT

## 2021 ANNUAL COMPLIANCE REPORT

### Section 6: Permits and Filings Involving Other Governmental Agencies

#### Bay Area Air Quality Management District (BAAQMD)

- Valero Cogeneration Project – 2021 Annual Mass Emissions Report to BAAQMD
- Routine Reports to BAAQMD:
  - Monthly Cogen NOx Report
  - Monthly Cogen CO Report
  - Monthly Cogen Fuel Gas Report (H2S/TRS)
  - Quarterly Cogen SO2 Curtailment Report
  - Quarterly Fuel Gas Sulfur Report
- Source Testing Reports:
  - Quarterly source test reports for SAM measurements
  - Annual source test reports for PM10, POC, SO2 measurements
- Form CEC-1304 - Quarterly Report for Power Plants 10 MW or Greater
- Title V, Renewed - Issued by BAAQMD April 30, 2013

#### Regional Water Quality Control Board (RWQCB)

- Valero Refinery NPDES Permit Renewal (including Cogeneration operations) RWQCB Order No. R2-2020-0033, CA 0005550: Adopted by RWQCB on December 16, 2020, effective January 1, 2021 through December 31, 2025
- Valero Refinery SWPPP Update (including Cogeneration operations)

#### Department of Energy (DOE) Energy Information Administration (EIA) reports

- EIA – 860 “Annual Electric Generator Report”
- EIA – 923 “Monthly Power Plant Operations Report”

#### Solano County CUPA / City of Benicia Fire Dept

- Valero Benicia Refinery 2021 Hazardous Materials Business Plan (including Cogeneration operations)

#### U. S. EPA

- Valero Benicia Refinery NSPS/MACT Semiannual Reports

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 7: Projection of 2022 Compliance Activities**

Operations:

Maintain cogeneration unit operations in compliance with emission limits and other permit conditions.

Recordkeeping:

Continue collection of data and records and maintain compliance files.

Reporting:

Prepare and submit monthly CEM reports.

Prepare and submit required quarterly, semiannual, and annual reports.

Source Testing:

Conduct quarterly source testing for SAM. Conduct annual source testing for PM10, POC, and SO2.

Continuous Emissions Monitoring Systems (CEMS):

Continue to conduct quarterly accuracy audits (CGA & RATA).

## VALERO COGENERATION PROJECT

### 2021 ANNUAL COMPLIANCE REPORT

#### Section 8: 2021 Files

The following onsite compliance files have been established for the Valero Cogeneration unit and contain the information described for the previous year's operating period.

| File Number         | File Name                       | File Description                                                                                |
|---------------------|---------------------------------|-------------------------------------------------------------------------------------------------|
| CGN<br>AI-03-02     | CEC Annual Compliance Report    | Annual Compliance Reports for Cogen required by general conditions of CEC's Commission Decision |
| CGN<br>AI-03-02     | Routine Cogen Quarterly Reports | Cogen Quarterly SO2 Containment Report                                                          |
| CGN<br>AI-03-03     | Annual Mass Emissions Report    | Cogen Report as required by Permit Conditions #22 and #23                                       |
| CGN<br>EA-17-00     | CGN CEC Compliance Fees         | Invoices, Cogen Facility Compliance Fees                                                        |
| CGN<br>WA-03-02     | Monthly Cogen Water Use Reports | Cogen Cooling Tower TDS by Conductivity<br>Cogen H2O Report                                     |
| Fed 60a<br>AI-24-16 | FED-60A QA/QC GT-4901/SG-4901   | Cogen – CEMS Quality Assurance Plan                                                             |
| SRCTST<br>AI-03-03  | BAAQMD Notifications            | Notifications of source tests for Cogen                                                         |
| SRCTST<br>AI-03-03  | Cogen – Monthly CEMS Report     | Cogen - Monthly Gas Turbine and HRSG Monitoring Report Reg. 1-522.8                             |
| SRCTST<br>AI-24-00  | Monthly CEMS Down & OOC LOGS    | 2021 Monthly CEMS Downtime & Out of Control Logs                                                |
| SRCTST<br>AI-21-03  | Cogen – Stack Source Tests      | Source test for the Cogen Stack and Quarterly Source Test Submittals                            |
| SRCTST<br>AI-21-03  | SRCTST GT-4901 S-1030           | Source Test Reports                                                                             |



# **VALERO COGENERATION PROJECT**

## **2021 ANNUAL COMPLIANCE REPORT**

### **Section 9: Evaluation of the Onsite Contingency Plan**

#### Onsite Contingency Plan for Unexpected Temporary & Permanent Closure

The Onsite Contingency Plan for Unexpected Temporary and Permanent Closure is reviewed and updated annually.

#### Cogeneration Unit Operating Procedures

The normal and emergency procedures in the operating procedures manual are reviewed and updated annually.

**VALERO COGENERATION PROJECT**  
**2021 ANNUAL COMPLIANCE REPORT**

**Section 10: Complaints, NOVs, Warnings and Citations**

2021 Complaints:

The refinery received no complaints that have been determined to be related to the Cogeneration Unit.

2021 Notices of Violation (NOVs):

The BAAQMD issued the following NOVs for events that were related to the Cogeneration Unit (GT/SG-4901 stack emissions):

| BAAQMD<br>NOV # | Date<br>Issued | Date of<br>Event | Description |
|-----------------|----------------|------------------|-------------|
| None            |                |                  |             |

2021 Warnings and Citations:

The refinery received no other warnings or citations that have been determined to be related to the Cogeneration Unit.