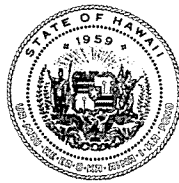


DAVID Y. IGE  
GOVERNOR OF HAWAII



ELIZABETH A. CHAR, M.D.  
DIRECTOR OF HEALTH

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
(7019 2280 0000 3440 7467)

**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**  
P.O. Box 3378  
HONOLULU, HAWAII 96801-3378

In reply, please refer to:  
File:  
21-402E CAB  
File No. 0863-02

September 1, 2021

Mr. Mark Dangler  
Vice President - Logistics  
IES Downstream, LLC  
91-480 Malakole Street  
Kapolei, Hawaii 96707-1883

Dear Mr. Dangler:

**SUBJECT: Amendment of Covered Source Permit (CSP) No. 0863-02-C**  
**Application for Significant Modification No. 0863-05**  
**IES Downstream, LLC**  
**Fluid Catalytic Cracking Unit (FCCU), Dimersol, and Alkylation Plants**  
**Located At: 91-480 Malakole Street, Kapolei, Oahu**  
**Date of Expiration: December 17, 2025**

In accordance with Hawaii Administrative Rules (HAR), Chapter 11-60.1, and pursuant to your application for a significant modification dated May 16, 2021, including your greenhouse gas (GHG) emission reduction plan, the Department of Health, Clean Air Branch (herein after referred to as Department), hereby amends CSP No. 0863-02-C issued on December 18, 2020. A receipt for the application filing fee of \$1,000.00 is enclosed for the significant modification to incorporate GHG emission caps.

In accordance with HAR, Chapter 11-60.1, Subchapter 11, the amendment incorporates provisions for partnering between the IES Process Units (CSP No.0863-02-C) and the IES Kapolei Bulk Storage Terminal (CSP No. 0863-01-C) to combine emissions for flexibility in achieving GHG reductions. Individual and total combined GHG emission caps established in each facility's GHG emission reduction plan are incorporated in the amendment with associated provisions pursuant to HAR §11-60.1-204(d)(6)(C).

This amendment designates CSP No. 0863-02-C for the IES Process Units as the main permit to specify the individual and total combined GHG emission caps for the partnering facilities. This will enable the modification of a single permit if the GHG emission caps need to be revised and reduce the burden of modifying all partnering permits had the caps been incorporated separately into each facility's permit. Although there are two (2) permits, the IES Process Units and IES Kapolei Bulk Storage Terminal are considered a single source for permitting purposes.

The following enclosed Attachment II – GHG and monitoring report form are hereby added to CSP No. 0863-02-C issued on December 18, 2020, to incorporate the GHG permitting provisions:

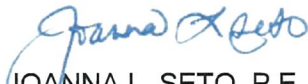
Attachment II – GHG: Special Conditions – GHG Reduction Requirements  
Monitoring Report Form: GHG Emissions

Mr. Mark Dangler  
September 1, 2021  
Page 2

All other permit conditions of CSP No. 0863-02-C issued on December 18, 2020, shall not be affected and shall remain valid.

If there are any questions regarding these matters, please contact Mr. Kai Erickson of the Clean Air Branch at (808) 586-4200.

Sincerely,



JOANNA L. SETO, P.E., CHIEF  
Environmental Management Division

CKE:tkg

Enclosures

**ATTACHMENT II - GHG: SPECIAL CONDITIONS  
GHG REDUCTION REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0863-02-C**

**Amended Date: September 1, 2021**

**Expiration Date: December 17, 2025**

In addition to the standard conditions of the CSP, the following state enforceable special conditions shall apply to the permitted facility:

**Section A. Equipment Description**

1. Attachment II – GHG of this permit encompasses the following plants, equipment, and associated appurtenances:

<b>Stationary Combustion Sources</b>	
<b>Unit No.</b>	<b>Description</b>
F-5300	FCC Furnace Heater
F-5310	FCC Startup Air Heater
-----	FCC Coke Combustion
Note: Fluid Catalytic Cracker (FCC).	

<b>Petroleum Refineries (Fugitive Venting Columns)</b>	
<b>Unit No.</b>	<b>Description</b>
C-6660	Dimersol Unit
C-5850	Alkylation Unit
C-5860	Alkylation Unit
C-5330	FCC Fugitive Emission Column
C-5340	FCC Fugitive Emission Column
C-5350	FCC Fugitive Emission Column
C-5400	FCC Fugitive Emission Column
C-5405	FCC Fugitive Emission Column
C-5410	FCC Fugitive Emission Column
C-5420	FCC Fugitive Emission Column
C-5450	FCC Fugitive Emission Column
Note: Fluid Catalytic Cracker (FCC).	

(Auth.: HAR §11-60.1-3)

2. The plants and equipment are subject to GHG emission reduction requirements of HAR, Chapter 11-60.1, Subchapter 11, and associated permit conditions based on information from the GHG emission reduction plan and permit application for significant modification. The GHG emission reduction plan shall become a part of the CSP application process for renewals and any required modifications pursuant to HAR, Chapter 11-60.1, Subchapter 5. With each subsequent GHG reduction plan submittal, the permittee shall report:
  - a. The GHG emission reduction status;
  - b. Factors contributing to the emission changes;
  - c. Any control measure updates; and

- d. Any new developments or changes that would affect the basis of the facility-wide GHG emissions cap.

(Auth.: HAR §11-60.1-5, §11-60.1-204(g))

## **Section B. GHG Permit Conditions**

1. Permit conditions specified in Attachment II – GHG, including provisions to limit maximum potential GHG emissions, are state-only enforceable requirements which are not federally enforceable under the federal Clean Air Act.

(Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161; 40 CFR §70.6)<sup>1</sup>

2. The permittee shall comply with all applicable provisions of these conditions, including all emission limits, notification, testing, monitoring, and reporting requirements. The major requirements of these provisions are detailed in the special conditions of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161)<sup>1</sup>

## **Section C. GHG Emission Limitations**

1. GHG Emission Caps

- a. Each partnering facility shall not emit or cause to be emitted carbon dioxide equivalent (CO<sub>2</sub>e) emissions in excess of the following individual caps, except as specified in Attachment II – GHG, Special Condition No. C.1.c.iv:

Partnering Facility	Permit No.	CO <sub>2</sub> e Emission Cap <sup>a</sup>	
		Metric Tons per Calendar Year	Short Tons per Calendar Year
IES Kapolei Bulk Storage Terminal	CSP No. 0863-01-C	38	42
IES Process Units	CSP No. 0863-02-C	192,886	212,621

<sup>a</sup>Metric Tons = (0.90718474) x (Short Tons)

- b. All partnering facilities shall not emit or cause to be emitted total combined CO<sub>2</sub>e emissions in excess of 212,662 short tons (192,924 metric tons) per calendar year.
- c. For purposes of the CO<sub>2</sub>e emission limits in Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b:
- The CO<sub>2</sub>e emissions shall have the same meaning as that specified in HAR §11-60.1-1;
  - In accordance with HAR §11-60.1-204(d)(6)(B), biogenic carbon dioxide (CO<sub>2</sub>) emissions shall not be included when determining compliance with the emissions limit;

- iii. The permittee shall be in compliance with the emissions limits by the end of 2019 and each calendar year thereafter;
- iv. The permittee may exceed the emissions cap specified in Attachment II – GHG, Special Condition No. C.1.a, if the GHG emissions limit specified in Attachment II – GHG, Special Condition No. C.1.b, is met; and
- v. At no time shall the permittee exceed Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, simultaneously over a calendar year. For incidences when Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, are exceeded simultaneously, emissions in excess of the total combined cap shall be allocated according to the following equation for compliance purposes:

$$X = XG \frac{(A - C)}{\sum_{A_i > C_i} (A_i - C_i)}$$

Where:

- X = Adjusted portion in metric tons or short tons of GHG emissions that are in excess of total combined cap specified in Attachment II – GHG, Special Condition No. C.1.b. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Special Condition Nos. C.1.a and C.1.b, respectively.
- XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO<sub>2</sub> emissions.
- A = Actual GHG emissions from the affected facility.
- C = GHG emissions cap for the affected facility.
- $\sum_{A_i > C_i} (A_i - C_i)$  = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility-wide GHG emissions cap.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

## 2. GHG Emission Cap Revisions

- a. The facility-wide GHG emissions cap may be re-evaluated and revised by the Department in accordance with HAR §11-60.1-204(h).
- b. Any revision to the facility-wide GHG emissions caps shall be considered a significant modification subject to the application and review requirements of HAR §11-60.1-104. For each GHG emission cap revision, the Department may impose additional emission limits or requirements, or limit the time-frame allowed for the revised GHG emissions cap.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

**Section D. Monitoring and Record Keeping Requirements**

**1. GHG Emissions (Stationary Fuel Combustion Sources)**

For calculating GHG emissions from stationary fuel combustion and quality assurance (QA)/quality control (QC) requirements, the permittee shall:

- a. Monitor mass emissions data with the appropriate methods specified in 40 Code of Federal Regulations (CFR) §98.34;
- b. Estimate missing data in accordance with the applicable procedures in 40 CFR §98.35; and
- c. Determine the metric tons of CO<sub>2</sub>, methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) in accordance with the appropriate calculation methodology in 40 CFR §98.33.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.33, §98.34, §98.35)

**2. GHG Emissions (Petroleum Refineries Source Category)**

For calculating GHG emissions from sources in the petroleum refineries source category and QA/QC requirements, the permittee shall:

- a. Monitor the GHG emissions data in accordance with the applicable procedures of 40 CFR §98.254;
- b. Estimate missing data in accordance with the applicable procedures in 40 CFR §98.255; and
- c. Calculate CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions with the appropriate methods specified in 40 CFR §98.253.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.253, §98.254, §98.255)

**3. Total CO<sub>2</sub>e Emissions**

For determining CO<sub>2</sub>e emissions for purposes of determining compliance with the GHG emission caps and assessing fees, the permittee shall:

- a. Sum the emission estimates from Attachment II – GHG, Special Condition Nos. D.1 and D.2 using Equation A-1 of 40 CFR §98.2;
- b. Convert the metric tons of CO<sub>2</sub>e emissions to short tons for monitoring and annual emissions reporting as applicable. For the conversion, one (1) short ton is equal to 0.90718474 metric tons; and
- c. Report CO<sub>2</sub>e emissions to the Department in accordance with Attachment II – GHG, Special Condition No. E.4.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.2)

#### 4. Records

All records, including support information, shall be maintained for **at least five (5) years** from the date of the monitoring sample, measurement, test, report, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and be made available to the Department or authorized representative(s) upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

### **Section E. Notification and Reporting Requirements**

#### 1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 17 and 24, respectively:

- a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- b. Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, SIP §11-60-16)<sup>2</sup>

#### 2. Deviations

The permittee shall report in writing **within five (5) working days** any deviations from permit requirements, including those attributed to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

#### 3. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. Environmental Protection Agency, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- i. The identification of each term or condition of the permit that is the basis of the certification;
  - ii. The compliance status;
  - iii. Whether compliance was continuous or intermittent;
  - iv. The methods used for determining the compliance status of the source currently and over the reporting period;
  - v. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
  - vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and which the excursion or exceedances as defined in 40 CFR Part 64 occurred; and
  - vii. Any additional information as required by the Department, including information to determine compliance.
- b. The compliance certification shall be submitted within **sixty (60) days after** the end of each calendar year and shall be signed and dated by a responsible official.
- c. Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

#### 4. Monitoring Reports

- a. The permittee shall complete and submit **semi-annual** monitoring reports to the Department that provide the metric tons and short tons of CO<sub>2</sub>e emitted by all partnering facilities, except that biogenic CO<sub>2</sub> shall be excluded from the total CO<sub>2</sub>e emissions. All reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 – June 30 and July 1 – December 31). The following enclosed form, or equivalent form, shall be used for reporting and shall be signed and dated by a responsible official:

##### **Monitoring Report Form: GHG Emissions**

- b. For calendar years 2019 and 2020, the permittee shall report the CO<sub>2</sub>e emissions **within sixty (60) days** after the issuance of this permit. The Monitoring Report Form: GHG Emissions, or equivalent form, for the 2019 and 2020 calendar years shall be used for reporting and shall be signed and dated by a responsible official.
- c. For calendar year 2021, the permittee shall report the CO<sub>2</sub>e emissions **within sixty (60) days** after the issuance of this permit or **within sixty (60) days** after the end of the semi-annual calendar period, whichever is later. The Monitoring Report Form: GHG Emissions, or equivalent form, for the 2021 calendar year shall be used for reporting and shall be signed and dated by a responsible official.



- d. Upon written request by the permittee, the deadline for submitting the monitoring report may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

#### **Section F. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup>The citations to the CFR identified under a particular condition indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup>The citations to the State Implementation Plan (SIP) identified under a particular condition indicate that the permit condition complies with the specified provision(s) of the SIP.

**MONITORING REPORT FORM  
GHG EMISSIONS  
COVERED SOURCE PERMIT NO. 0863-02-C  
(PAGE 1 OF 2)**

**Amended Date: September 1, 2021**

**Expiration Date: December 17, 2025**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

**(Make Copies for Future Use)**

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Location: \_\_\_\_\_

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

1. Report the carbon dioxide equivalent (CO<sub>2</sub>e) emitted by IES Process Units during each reporting period for purposes of the facility's individual GHG emissions cap:

Emission Year Reporting For _____					
Reporting Period	IES Process Units Emissions (Metric Tons of CO <sub>2</sub> e)			IES Process Units Emissions (Total CO <sub>2</sub> e)	
	CO <sub>2</sub> (Non-Biogenic)	CH <sub>4</sub>	N <sub>2</sub> O	Metric Tons	Short Tons
January 1 – June 30 (1 <sup>st</sup> Semi-Annual Period)					
July 1 – December 31 (2 <sup>nd</sup> Semi-Annual Period)					
Total Emissions →					

**MONITORING REPORT FORM**  
**GHG EMISSIONS**  
**COVERED SOURCE PERMIT NO. 0863-02-C**  
**(PAGE 2 OF 2)**

**Amended Date: September 1, 2021**

**Expiration Date: December 17, 2025**

2. Report the total combined CO<sub>2</sub>e emitted by all partnering facilities during each reporting period for purposes of the total combined GHG emissions cap for these facilities:

Emission Year Reporting For _____					
Reporting Period	Total Combined Emissions from all Partnering Facilities (Metric Tons of CO <sub>2</sub> e)			Total CO <sub>2</sub> e	
	CO <sub>2</sub> (Non-Biogenic)	CH <sub>4</sub>	N <sub>2</sub> O	Metric Tons	Short Tons
January 1 – June 30 (1 <sup>st</sup> Semi-Annual Period)					
July 1 – December 31 (2 <sup>nd</sup> Semi-Annual Period)					
Total Emissions →					

3. For incidences when the individual cap for IES Process Units and total combined cap for all partnering facilities is exceeded, report the emissions in excess of the total combined cap using the following equation:

$$X = XG \frac{(A-C)}{\sum_{A_i > C_i} (A_i - C_i)} = \underline{\hspace{2cm}}$$

Where:

X = Adjusted portion in metric tons or short tons of GHG emissions that are in excess of total combined cap specified in Attachment II – GHG, Special Condition No. C.1.b. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, respectively.

XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO<sub>2</sub> emissions.

A = Actual GHG emissions from the affected facility.

C = GHG emissions cap for the affected facility.

$\sum_{A_i > C_i} (A_i - C_i)$  = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility-wide GHG emissions cap.