

PROPOSED

[Issuance Date]

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

04-XXE CAB
File No. 0218-01

Mr. E. Alan Kennett
President
Gay and Robinson, Inc.
P.O. Box 156
Kaumakani, Hawaii 96747

Dear Mr. Kennett:

Subject: Renewal of Covered Source Permit (CSP) No. 0218-01-C
Application No. 0218-03
Gay and Robinson, Inc.
182 MMBtu/hr Bagasse/Oil-Fired Boiler and 6.695 MMBtu/hr Seed Plant Boiler
Located at: TMK: 1-7-06-1, Kaumakani, Kauai
Date of Expiration: [Five Year Period from Issuance Date]

The subject Covered Source Permit renewal is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit renewal is based on the plans, specifications, and information submitted as part of your December 10, 2001 renewal application. This Covered Source Permit supersedes CSP No. 0218-01-C, issued on January 2, 1998, and amended on February 7, 2001, in its entirety.

The Covered Source Permit renewal is issued subject to the conditions/requirements set forth in the following attachments:

Attachment I: Standard Conditions
Attachment II: Special Conditions
Attachment II - INSIG: Special Conditions - Insignificant Activities
Attachment III: Annual Fee Requirements
Attachment IV: Annual Emissions Reporting Requirement
Attachment V: Compliance Certification

The forms for submission are as follows:

Monitoring Report Form: Operating Hours
Monitoring Report Form: Used Oil Certification
Monitoring Report Form: Visible Emissions
Annual Emissions Report Form: Boilers
Annual Emissions Report Form: Visible Emissions

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This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment, and (c) in no manner implies or suggests that the Hawaii Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

KK:lk

Enclosures

c: Rodney Yama, EHS - Kauai
CAB Enforcement Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0218-01-C**

[Issuance Date]

[Expiration Date]

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

(Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be wilfully defaced, altered, forged, counterfeited, or falsified.

(Auth.: HAR §11-60.1-6; SIP §11-60-11)²

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)²

4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.

(Auth.: HAR §11-60.1-7)

5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the Regional Administrator for the U.S. Environmental Protection Agency (EPA).

(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)

6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:
- a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
 - b. The **actual date of construction commencement** within fifteen (15) days after such date; and
 - c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department of Health to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department of Health copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department of Health but also directly to the U.S. EPA Administrator along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department of Health in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)²

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit, the permittee shall immediately notify the** Department of Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:
- a. Identification of each affected emission point and each emission limit exceeded;
 - b. Magnitude of each excess emission;
 - c. Time and duration of each excess emission;
 - d. Identity of the process or control equipment causing each excess emission;
 - e. Cause and nature of each excess emission;
 - f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
 - g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
 - h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)²

18. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

(Auth.: HAR §11-60.1-90)

19. The permittee may request confidential treatment of any records in accordance with HAR Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

20. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

- a. Construction shall be commenced within eighteen (18) months after the permit takes effect, shall not be discontinued for a period of eighteen (18) months or more, and shall be completed within a reasonable time.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The Department of Health may extend the time periods specified in Standard Condition No. 20 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

22. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

23. All certifications shall be in accordance with HAR, Section 11-60.1-4.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

24. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

25. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)²

26. Each permit renewal application shall be submitted to the Department of Health no fewer than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Department of Health may allow a permit renewal application to be submitted no fewer than six (6) months prior to the permit expiration date, if the Department of Health determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5 (a)(1)(iii))¹

27. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

28. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA Regional Administrator once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

29. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

Clean Air Branch
Environmental Management Division
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

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Upon request, all correspondence to the State of Hawaii Department of Health associated with this Covered Source Permit shall have duplicate copies forwarded to:

**Chief
Permits Office, (Attention: Air-3)
Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

30. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received ("stamped") at the Clean Air Branch shall be used to determine the submittal date.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (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.

² 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.

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ATTACHMENT II: SPECIAL CONDITIONS COVERED SOURCE PERMIT NO. 0218-01-C

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This permit encompasses the following equipment and associated appurtenances:
 - a. 182 MMBtu/hr Bagasse/Fuel-Oil Fired Combustion Engineering Model VU-50X Boiler (hereafter known as "Main boiler") ; maximum design capacity of 130,000 pounds of steam when firing bagasse;
 - b. 6.695 MMBtu/hr Orr and Sembower Model Powermester H-3 Seed Plant Boiler (200 horsepower);
 - c. Zurn Industries Model MTSA-224-9CYT-XD-NR-TA mechanical dust collector, servicing the bagasse/fuel-oil fired boiler;
 - d. Crews Evaporator & Drier Company Multi-Throated Jet Scrubber servicing the bagasse/fuel-oil fired boiler; and
 - e. One (1) -10,500 gallon fuel oil No. 2 storage tank, 28 feet in length with 8 foot diameter (tank 3).

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or name plate on each boiler, tank, and control device which identifies the model no., serial no. or identification no., and manufacturer. The identification tag or name plate shall be attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Main Boiler
 - a. Fuel Usage and Specifications
 - 1) The main boiler shall be fired only on bagasse or fuel oil No. 2, or any combination thereof.
 - 2) Fuel oil No. 2 shall contain no more than 0.5 percent sulfur by weight.

(Auth.: HAR §11-60.1-3, §11-60.1-38, §11-60.1-90)

b. Operational Limitation

The main boiler is categorized as a *biomass* boiler. The annual amount of biomass fuel burned in the boiler shall have a total BTU value greater than the “minimum biomass BTU” calculated in the equation below:

Actual annual heat input = (A) + (B) + (C)

A = total heat input for the year from biomass fuel

B = total heat input for the year from fossil fuels

C = total heat input for the year from other fuels

Potential annual heat input = boiler capacity (BTU/hr) x 8,760 hours

Annual capacity factor = $\frac{\text{actual annual heat input}}{\text{potential annual heat input}}$

Biomass qualification factor (BQF) = annual capacity x 0.50

Minimum biomass BTU = (BQF) x (potential annual heat input)

(Auth.: HAR §11-60.1-1, §11-60.1-3, §11-60.1-90)

c. Maximum Emission Limits

While fired on biomass fuel or in combination with fuel oil, particulate matter (PM) emissions shall not exceed 0.4 pounds per hundred pounds of biomass burned from the main boiler.

(Auth.: HAR §11-60.1-3, §11-60.1-36, §11-60.1-90)

d. Air Pollution Control Equipment

- 1) While fired on biomass fuel, fuel oil, or any combination thereof, all exhaust gases from the main boiler shall be ducted through the multi-throated jet scrubber dust collection system.
- 2) The following equipment shall be installed, maintained and operated, and remain a permanent part of the multi-throated jet scrubbing system:

- a) Water flow gages measured in gallons per minute (gpm) to monitor the flow rate to each of the first and second stages of the wet scrubber. A minimum water flow rate of 500 gpm distributed to the first and second stage of the multi-throated jet scrubber system shall be maintained; and
 - b) Water pressure gages measured in pounds per square inch (psi) placed in the water lines servicing the spray bars of the multi-throated jet scrubber to monitor the pressure distributed to the second stage of the wet scrubber. A minimum water pressure of 72 psi at the second stage shall be maintained.
- 3) The permittee shall follow a regular maintenance schedule as recommended by the manufacturer on the dust collection and wet scrubber system to ensure proper operation.
 - 4) The dust collection and wet scrubber system shall be operated continuously while the main boiler is in operation.
 - 5) The dust collection and wet scrubber system shall be inspected on a daily basis. If the inspection indicates there is a problem affecting the efficiency of these systems, the boiler shall not be operated. The permittee shall correct the problem before resuming operation.

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

e. Visible Emissions

For any six (6) minute averaging period, the main boiler shall not exhibit visible emissions of forty (40) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, the main boiler may exhibit visible emissions greater than forty, but not exceeding sixty (60) percent opacity for a period aggregating not more than six minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, SIP § 11-60-24)²

2. Seed Plant Boiler

a. Operational Limitations

- 1) The seed plant boiler shall be fired only on specification used oil, fuel oil No. 2, or a combination thereof.

- 2) The sulfur content of fuel oil no. 2 shall not exceed 0.5 percent by weight.
- 3) The seed plant boiler shall not burn more than 530 gallons per day of specification used oil.
- 4) The seed plant boiler shall operate no more than twelve (12) hours per day.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

b. Combustion of Specification Used Oil

- 1) The permit conditions prescribed herein may be revised at any time by the Department of Health to reflect federal or state promulgated rules on specification (spec) used oil.
- 2) This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing and burning of specification used oil in the seed plant boiler.
- 3) The specification used oil shall be from the following sources only:
 - a) Plantation motor vehicle lubricating oil;
 - b) Plantation factory hydraulic oil and gear box lubricants;
 - c) Plantation turbine oils;
 - d) Pacific Missile Range Facility/ ITT Industries; and
 - e) Senter Petroleum.

Spec used oil may be obtained from other sources, provided a written notification identifying the new source is submitted to the Department of Health, and approved, prior to the acceptance of the spec used oil. An analysis must accompany the delivery of each batch of spec used oil.

- 4) For used oil generated within Gay and Robinson:

Samples of the used oil generated from within Gay and Robinson shall be taken from the specification used oil tank, holding tanks, or drums, as applicable, and composited and analyzed for compliance with the limits in Attachment II, Special Condition No. B.2.b.6) prior to being emptied into the blend tank and burned. These samples shall be taken in such a manner that the composite sample is representative of all the used oil in that batch. Each composite sample shall be submitted in a timely manner to a qualified laboratory and analyses obtained for the constituents/properties which limits are given in Special Condition No. B.2.b.6).

Additional used oil may be added to the batch provided that

- (a) The used oil in the specification used oil tank is retested after the addition of untested used oil; or
- (b) The holding tanks or drums of untested used oil are tested prior to addition to the specification used oil tank,

and the results are verified to meet the requirements of Attachment II, Special Condition No. B.2.b.6.

- 5). In no case, shall any used oil that has not been tested and verified (by laboratory analysis or as specified in Attachment II, Special Condition No. B.2.b.6.) to meet the specification used oil requirements of Attachment II, Special Condition No. B.2.b.6. be added to the blend tank and burned.
- 6) The following constituents/properties of the specification used oil shall not exceed the specified limits listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogen	1,000 ppm maximum
Sulfur	0.5% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	< 2 ppm

- 7) Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment II, Special Condition No. B.2.b.6. is allowable only for used oil that were not deemed hazardous.
- 8) If fuel blending is used to meet Attachment II, Special Condition No. C.3.f, the permittee shall retest or perform calculations to verify that the blended fuel meets the specification used oil limits in Special Condition No. B.2.b.6. Blended fuel oil meeting Special Condition No. B.2.b.6. is considered specification used oil and requires additional blending with fuel oil no. 2.

- 9) This permit does not authorize the permittee to burn hazardous waste or off-specification used oil. The permittee shall not accept or burn used oil that has been declared or determined to be hazardous waste and shall not burn off-specification used oil.

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

c. Visible Emissions

For any six (6) minute averaging period, the seed plant boiler shall not exhibit visible emissions of forty (40) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, the seed plant boiler may exhibit visible emissions greater than forty, but not exceeding sixty (60) percent opacity for a period aggregating not more than six minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be compiled in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

1. Main Boiler

a. The permittee shall maintain records of the following:

- 1) The annual bagasse feed rate for the purpose of emissions reporting. The feed rate may be determined from the amount measured with a weigh scale or other reasonable method (i.e., truck loads).
- 2) Receipts on the amount and type of fuel oil delivered to the facility.
- 3) The amount of bagasse and fuel oil no. 2 burned on a daily basis for purposes of annual emissions reporting requirements.

4) Inspection, maintenance, and repair log. The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in this attachment. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

5) Source performance test plans and results.

b. The Department of Health at any time may require the permittee to install and operate a transmissometer (opacity meter) and/or continuous emissions monitor; and/or to conduct ambient air quality monitoring and/or additional stack testing.

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

2. Seed Plant Boiler

a. The permittee shall maintain records of the following:

1) Date and start and end times of operation;

2) Number of hours operated on a daily basis;

3) The sampling date for every used oil analysis, amount of used oil the sample represents, date of analyses, and results of the analyses;

4) Date when the used oil is blended or burned and the total amount blended;

5) The total amount of specification used oil combusted on a daily and monthly basis;

6) Amount of spec used oil and date received from other sources; analyses accompanying the spec used oil; date the spec used oil was blended or burned; and documentation identifying the source of the spec used oil; and

7) Inspection, maintenance, and repair log. The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in this attachment. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

3. Petroleum Storage Tanks

The permittee shall keep readily accessible records showing the dimensions and the capacity of the fuel oil No. 2 storage tank (tank 3) for the life of the tank.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR 60.116b(b))¹

4. Visible Emissions (V.E.).

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for the main boiler and the seed plant boiler in accordance with Method 9 or by use of a Ringlemann Chart as provided. For each period, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for the main boiler and the seed plant boiler by a certified reader in accordance with Method 9. For the opacity limits specified in Special Condition B.1.e, the annual source performance test shall satisfy visible emission monitoring requirements for the month the source test was performed. For each period, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions 16, 17 and 25, respectively:
 - a. Intent to shut down air pollution control equipment for necessary scheduled maintenance;

- b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- c. 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)

2. The permittee shall submit **semi-annually** the following written reports to the Department of Health. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.
 - a. The used oil analysis which indicated exceedances of the limits specified in this permit. If there were no exceedances, the permittee shall submit in writing a statement indicating that there were no exceedances for that semi-annual period.
 - b. The total amount of spec used oil burned in the seed plant boiler on a daily basis.
 - c. All dates when the Seed Plant Boiler spec used oil consumption was more than 530 gallons per day.
 - d. All dates when the seed plant boiler operated in excess of twelve (12) hours.
 - e. Any opacity exceedances as determined by the required visible emissions monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reasons for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed Monitoring Report Forms: **Visible Emissions, Used Oil Certification, and Operating Hours**, shall be used.

(Auth.: HAR §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

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

(Auth.: HAR §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

4. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, *Attachment V: Compliance Certification* 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:
- 1) The identification of each term or condition of the permit that is the basis of the certification;
 - 2) The compliance status;
 - 3) Whether compliance was continuous or intermittent;
 - 4) The methods used for determining the compliance status of the source currently and over the reporting period;
 - 5) 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; and
 - 6) Any additional information as required by the Department of Health including information to determine compliance.

*The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by an authorized representative.*

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

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

5. Annual Emissions

- a. As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons/yr. emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The enclosed Annual Emissions Report Form, *Boilers*, shall be used.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. The permittee shall submit within sixty (60) days after the end of each calendar year the calculations showing the boiler is operating as a biomass boiler as defined in Special Condition No. B.1.b.

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

7. Performance Test Reports

- a. **At least 30 days prior to conducting a performance test**, the permittee shall submit a written performance test plan to the Department of Health that describes the test duration, test locations, test methods, source operation and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.
- b. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the Department of Health the test report which includes the operating conditions of the facility at the time of the test (e.g., water pressure for dust suppression), the summarized test results, other pertinent support calculations, and field/laboratory data. The results shall be recorded and reported in accordance with 40 CFR Part 60 Appendix A and 40 CFR §60.8.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.675, SIP §11-60-15)^{1,2}

Section E. Testing Requirements

1. On an annual basis or at such other times as specified by the Department of Health, the permittee shall conduct or cause to be conducted stack performance tests to determine the mass rate of discharge of particulate matter from the exhaust stack of the main boiler while fired on 100 percent biomass fuels.

The Department of Health may waive a specific performance test upon prior written request of the permittee. Such a request would require justification on the basis that prior test(s) had shown compliance by a wide margin, operations of the source have not changed since the previous source test, and adequate means exist to show continuing compliance.

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

2. Performance tests shall be conducted and results reported in accordance with the test methods and procedures set forth in Appendix A of 40 CFR, Part 60. The following test methods or EPA-approved equivalent methods with written consent from the Department of Health shall be used:

- a. Method 5 for concentration of particulate matter and associated moisture content;
- b. Method 1 for sample and velocity traverse;
- c. Method 2 for velocity and volumetric flow rate; and
- d. Method 3 for gas analysis.

(Auth.: HAR §11-60.1-11, §11-60.1-90; SIP §11-60.1-15)²

3. Note that Method 5 cannot be used under the following conditions:

- a. Cyclonic or swirling gas flow at the sampling location;
- b. Stack or duct with a diameter less than 12 inches or a cross-sectional area less than 113 square inches; or
- c. Sampling location less than two stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

(Auth.: HAR §11-60.1-11, §11-60.1-90, 40 CFR 60, Appendix A)¹

4. For Method 5, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be at least thirty (30) dry cubic feet at standard conditions (dscf).

(Auth.: HAR §11-60.1-11, §11-60.1-90)

5. The permittee shall provide sampling and testing facilities at its own expense.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

6. The performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-11, §11-60.1-90; 40 CFR 60.8; SIP §11-60-1-15)^{1,2}

7. Particulate emissions shall be reported in two categories:
- Front half (filter and probe); and
 - Front and back half (probe, filter and impingers). When conducting back half clean-up, all connectors and tubing of the back half sampling train up to and including the first impinger shall be properly rinsed with acetone. Connecting glassware after the first impinger and the other impingers shall be rinsed with water. All rinses shall be included in the analysis for back half.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

8. For each run, the emission rate of particulate matter shall be determined by the equation pounds/hour = $Q_s \times cs$, where Q_s = volumetric flow rate of the total effluent in dscf/hour as determined in accordance with Method 2, and cs = concentration of particulate matter in pounds/dscf as determined in accordance with Method 5.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

9. For each run, the bagasse feed rate in pounds/hour shall be provided. The permittee shall document the methodology by which the feed rate was determined. Separate determinations shall be made for each run, including bagasse analyses.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

10. The tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the source. The Department of Health may monitor the tests.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

11. In addition to the stack test data, the following data shall be recorded during the test and made a part of the final performance test report:

- Water ratio in gallons per minute (gpm);
- Total water injection rate and pressure at the spray bar; and

- c. Pressure drop through each of the first and second stages of the multi-throated jet scrubber.

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

12. Submittal of the performance test plan and performance test report shall be done in accordance with Special Condition D.7.

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

13. Any deviation from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

(Auth.: HAR §11-60.1-11, §11-60.1-90; SIP §11-60-1-15)²

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 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (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.

² 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.

PROPOSED

ATTACHMENT III: ANNUAL FEE REQUIREMENTS COVERED SOURCE PERMIT NO. 0218-01-C

[Issuance Date]

[Expiration Date]

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1.

1. Annual fees shall be paid in full:
 - a. **Within sixty (60) days** after the end of each calendar year; and
 - b. **Within thirty (30) days** after the permanent discontinuance of the covered source.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department of Health.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378**

PROPOSED

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0218-01-C**

[Issuance Date]

[Expiration Date]

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 nature and amounts of emissions.

1. Complete the attached form(s) for: **Boilers.**
2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

**Clean Air Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information by submitting a written request to the Director of Health and clearly identifying the specific information that is to be accorded confidential treatment.

ATTACHMENT V: COMPLIANCE CERTIFICATION
COVERED SOURCE PERMIT NO. 0218-01-C

[Issuance Date]

[Expiration Date]

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 certification at least annually, or more frequently as set by an applicable requirement:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

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 Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Complete the following information for each applicable requirement and/or term or condition of the permit that applies to each emissions unit at the source. Also include any additional information as required by the director. The compliance certification may reference information contained in a previous compliance certification submittal to the director, provided such referenced information is certified as being current and still applicable.

1. Current permit number: _____

2. Emissions Unit No./Description: _____

3. Identify the applicable requirement(s), and/or permit term(s) or condition(s) that is/are the basis of this certification:

4. Compliance status during the reporting period:

a. Has the emissions unit been in compliance with the identified applicable requirement(s) and/or permit term(s) or condition(s)?

YES NO

b. If YES, was compliance continuous or intermittent?

Continuous Intermittent

c. If NO, explain.

5. The methods used for determining the compliance status of the emissions unit currently and over the reporting period (e.g., monitoring, recordkeeping, reporting, test methods, etc.):

Provide a detailed description of the methods used to determine compliance: (e.g., monitoring device type and location, test method description, or parameter being recorded, frequency of recordkeeping, etc.)

6. Statement of Compliance with Enhanced Monitoring and Compliance Certification Requirements.

a. Is the emissions unit identified in this application in compliance with applicable enhanced monitoring and compliance certification requirements?

YES NO

b. If YES, identify those requirements:

c. If NO, describe below which requirements are not being met:

PROPOSED

**MONITORING REPORT FORM
OPERATING HOURS
COVERED SOURCE PERMIT NO. 0218-01-C**

[Issuance Date]

[Expiration Date]

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: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

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): _____

For the reporting period identify:

1. All dates when the Seed Plant Boiler spec used oil consumption was more than 530 gallons per day:

Date	Reason	Remarks

2. All dates when the seed plant boiler operated in excess of 12 hours:

Date	Reason	Remarks

Please indicate in the appropriate table(s) if no such incidences occurred.

**MONITORING REPORT FORM
USED OIL CERTIFICATION**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health **semi-annually** the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, etc.)

Serial/ID No.: _____

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 Department of Health as public record

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Fuel Usage (Gallons per year): _____

Number of used oil analyses received/performed for this report period: _____

Did any of the used oil analyses indicate exceedances of the permitted limits: YES NO

If Yes, indicate the number of exceedances: _____

Indicate the average of the Used Oil analyses results received/performed:

<u>Constituent/Property</u>	<u>Average Results</u>
Arsenic	_____ ppm by weight
Cadmium	_____ ppm by weight
Chromium	_____ ppm by weight
Lead	_____ ppm by weight
Total Halogens	_____ ppm by weight
Sulfur	_____ % by weight
Flash Point	_____ ° F
Polychlorinated Biphenyls (PCB)	_____ ppm by weight

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII**

The following Visible Emissions (V.E.) Form shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in 5 percent increments (i.e., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.
4. Two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at maximum permitted capacity.
7. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed V.E. Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

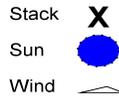
**VISIBLE EMISSIONS FORM
STATE OF HAWAII**

(Make copies for Future Use For Each Equipment)

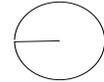
Permit No.: 0218-01-C

Company Name: _____

Equipment and Fuel: _____



Draw North Arrow



Site Conditions:

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

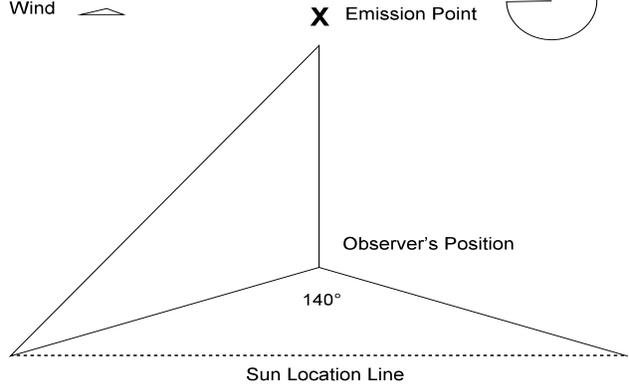
Sky conditions (% cloud cover): _____

Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____



Observation Date and Start Time: _____

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: _____

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

**ANNUAL EMISSIONS REPORT FORM
BOILERS AND KILNS
COVERED SOURCE PERMIT NO. 0218-01-C**

[Issuance Date] _____

[Expiration Date] _____

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 nature and amounts of emissions.

Fill out a separate form for each Boiler/Kiln.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

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): _____

Classification of Boiler or Kiln by Heat Input (Check one):

- _____ Utility: > 106 x 10⁹ J/hr. (> 100 x 10⁶ BTU/hr.)
 Tangentially-fired *Vertical-fired* *Other*
- _____ Industrial: 10.6 x 10⁹ to 106 x 10⁹ J/hr. (10 x 10⁶ to 100 x 10⁶ BTU/hr.)
- _____ Commercial: 0.5 x 10⁹ to 10.6 x 10⁹ J/hr. (0.5 x 10⁶ to 10 x 10⁶ BTU/hr.)
- _____ Residential: < 0.5 x 10⁹ J/hr. (< 0.5 x 10⁶ BTU/hr.)

Type of Fuel Fired	Fuel Usage Gallons per year	% Sulfur Content by weight	Identify % Nitrogen, % Ash, & % Lead, if applicable

- Types of Fuel:
- Residual Oil: Specify Grade, No. 6, 5, or 4;
 - Distillate Oil (No. 2);
 - Fuel Oil Reclaimed or Spec Used Oil;
 - Liquefied Petroleum Gas, Butane or Propane;
 - Bagasse in tons/yr;
 - If Other, specify.

Type of Air Pollution Control	In Use?	Pollutant Controlled	Control Efficiency, % Reduction
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____