**PROPOSED**
**Reviewed by: MR**
May 7, 2004

**Temporary Covered Source**
**Renewal Application Review (Existing with Modification)**

**Application File #:** 0219-04

**Permit No.:** 0219-01-CT

**Applicant:** Isemoto Contracting Company, Ltd.

**Facility Title:** Two (2) 357 TPH Portable Stone Processing Plants with One (1) 250 HP Diesel Engine, One (1) 125 TPH Stone Processing Plant, and One (1) 400 kW Diesel Engine Generator, One (1) 500 kW Diesel Engine Generator, and One (1) 725 kW Diesel Engine Generator

**Location :** Various Temporary Sites, State of Hawaii
Initial Location for proposed 125 TPH Plant and 725 kW DEG
Kukio Project, North Kona, Big Island
UTM: 2,192,850 m North and 813,900 m East

**SICC:** 1429

**Responsible Official:** Jerry Egami
Senior Vice President
(808) 329-8051 Fax no. (808) 329-3261

**Contact Person:**

| | |
|---|---|
| Fred Peyer | Denise |
| EMET Services, Inc. | Isemoto Contracting Co., Ltd. |
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**Mailing Address:** Isemoto Contracting Company, Limited
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Kailua-Kona, Hawaii 96740

**Equipment Description:**

**Table 1a - Proposed Stone Processing Equipment (Equipment to be Added)**

| Permit ID #A.1 | Type | Manufacturer | Model | Year | Description | Capacity | Fuel |
|---|---|---|---|---|---|---|---|
| f. | Portable Belt Feeder | Thunderbird II | 3613BF HP-D3946, ID No. 2201-03 | 2003 | Feed point for plant. | 150 TPH (per applicant) | driven by DEG listed below |
| Portable Closed Circuit VSI Impact Plant with Screen, Model No. 65V5163FC-D3947, ID No. 2202-03 consisting of: | | | | | | | |
| g. | Screen | Thunderbird II | Model # 5163-F3-O-D1917; ID # 2203-03; | 2003 | 3 deck 5' x 16' w/ largest opening of 3/4" | 384 TPH* | driven by DEG listed below |
| h. | Vertical Shaft Impact Crusher | Canica | 65 VSI; ID # 06514603 | 2003 | Crushing of basalt rocks | 125 TPH** | electric motor, power from DEG |
| l. | Various Conveyors | NP | NP | NP | transfer material from crusher & screen to stockpile | NP | driven by DEG listed below |
| m. | Water Spray System | N/A | N/A | N/A | Located at the feeder and conveyors to stockpile drop points | N/A | N/A |
| k. | Diesel Engine Generator | Caterpillar | 3412, ID # 7AJ01655 | 1999 | Drives equipment listed above | 725 kW** | Diesel No. 2 (max 52.5 gph)** |

*Basic Screen Capacity (TPH/$ft^2$) Formula
For 3/4 " screen opening (largest size screen opening), the Basic capacity = 4.80 TPH / sq ft. of screen.
Thus, 4.8 TPH x 5 ft x 16 ft = 384 TPH
Specifies capacities based on optimal conditions.
**Based on manufacturers specifications.
NP = not provided

## Table 1b - Existing Stone Processing Equipment

| Permit ID #A.1. | Type | Manu-facturer | Model | Year | Description | Capacity | Fuel |
|---|---|---|---|---|---|---|---|
| Plant A consisting of: | | | | | | | |
| b. | Grizzly Feeder | Minyu | 46" x 16" ID # 40-016 | 1989 | Feed point for Crusher A | 430 TPH (per applicant) | driven by one of the permitted DEGs |
| a. | Jaw Crusher | Pioneer | Model # 3042; ID # UH-3942 | 1989 | "Crusher A" Crushing of basalt rocks | 357 TPH** | driven by one of the permitted DEGs |
| c. | Cone Crusher with Triple Deck Screen | Pioneer | Model # PH44S; ID # 401605 | NP | 70 ½" x 48" w/ largest opening of 3" screen | crusher: 415 TPH** screen: 217 TPH* | driven by one of the permitted DEGs |
| Plant B consisting of: | | | | | | | |
| d. | Jaw Crusher with Grizzly Feeder | Pioneer | Model # 3042 JVDH-D2853; ID # 2046-00 | 2000 | "Crusher B" Crushing of basalt rocks | 357 TPH** | driven by 250 HP DE |
| d.i. | Diesel Engine | Caterpillar | Model # 3306; ID # 64Z30601 | 2000 | services the 357 TPH Jaw Crusher, Pioneer, Model # 3042 JVDH-D2853 | 250 HP** | Diesel No. 2 (max 17.2 gph**) |
| e. | Cone Crusher with Triple Deck Screen | Pioneer | Model # 44616F3CC-D3198; ID # 10169 | 1999 | 75" x 48" w/ largest opening of 3" screen | crusher: 415 TPH screen: 231 TPH* | driven by one of the permitted DEGs |
| Equipment in both Plants A and B: | | | | | | | |
| l. | Various Conveyors | NP | NP | NP | transfer material from crushers & screens to stockpiles | NP | driven by one of the permitted DEGs |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| m. | Water Spray System | N/A | N/A | N/A | located at the primary crusher to exit conveyor, conveyor to screen, screen to discharge conveyor, & conveyor to stockpile | N/A | N/A |
| j. | Diesel Engine Generator | Caterpillar | Model # 3412-DITT; ID # 81Z4731 | 1983 | | 500 kW** | Diesel No. 2 (max 40.8 gph**) |
| i. | Diesel Engine Generator | Detroit | Model 8V92T; ID # 80837416 | 2000 | | 400 kW** | Diesel No. 2 (max 28.5 gph**) |

* Based on Cedarapids Pocket Reference Book, 14 Edition.
For 3" screen opening (largest size screen opening), the Basic capacity = 9.25 TPH/sq ft. of screen.
Thus, 9.25 TPH x (75"/12) x (48"/12) = 231 TPH and
9.25 TPH x (70.5"/12) x (48"/12) = 217 TPH
Capacity based on optimal conditions.
** Based on manufacturer's specifications.
NP = not provided

Per discussion with Denise of Isemoto Contracting Co., Ltd., the facility does not utilize the 800 TPH 3 deck screen currently listed as item A.1.f. in the permit. Therefore, this screen was removed from the permit.

**Air Pollution Controls:**

The facility will control particulate emissions by employing water spray bars at the following points:

For the proposed plant: at the feeder and the discharge conveyors drop points (from conveyors to stockpiles).

For the existing plants: located at the primary crusher to exit conveyor, conveyor to screen, screen to discharge conveyor, & conveyors to stockpiles.

The applicant shall also adequately dampen the material before and after crushing and screening operations. An onsite water truck will be utilized for spraying the feed and finish stockpiles, as well as the unpaved roads during operation of the plant to minimize fugitive emissions.

Air pollution control is also achieved through the use of diesel No. 2 with a maximum sulfur content not to exceed 0.5% by weight in the diesel engines.

**Proposed Project:**

Isemoto Contracting Co., Ltd. proposes to add a new 125 TPH temporary stone processing plant (125 TPH is based on the crusher capacity) and 750 kW diesel engine generator to their existing covered source permit which permits two existing 357 TPH temporary stone processing plants, a 250 HP diesel engine, a 400 kW, and a 500 kW diesel engine generator operating at various locations.

The initial location for the proposed plant and generator will be at the Kukio Project in North Kona where it will be used in conjunction with one of the 357 TPH stone processing plants (Plant A) which is currently approved for operation at this site. The other 357 TPH stone processing plant (Plant B) shall remain at the Makalapua Business Center in North Kona.

As mentioned above, the 800 TPH 3 deck screen, previously identified as Permit Equipment No. A.1. f, is not used and will be removed from the permit.

As Stand Alone Plants:

The operation of the proposed 125 TPH stone processing plant would consist of feeding the portable belt feeder by wheel loader. Raw material (rock) dumped by the wheel loader enters the feeder which moves rocks to the Thunderbird II 3 deck screen. The Thunderbird screen is fitted with various sizes of screens, most typically 3/4" (top deck), 3/8" (middle deck), and no. 4 or 1/16" (bottom deck). Rocks larger than 3/4" (or those screened by the top deck) will proceed to the Canica Vertical Shaft Impact crusher. Rocks discharging from the Canica VSI crusher will fall on an under crusher conveyor which will then transfer to a return conveyor. The return conveyor goes back to the screen feed conveyor which feeds this recirculating material back to the screen again.

Rocks smaller than 3/4", but larger than 3/8" (rocks falling between the top and second decks of the screen) may also be directed to the Canica crusher or proceed to a finished product conveyor and then to stockpile. Rocks smaller than no. 4 will drop on to an underscreen conveyor and then be transferred to a radial stacker conveyor to stockpile. Rocks between 3/8" to no. 4 will also be discharged to conveyor and stockpile.

The proposed 725 kW Caterpillar 3412 diesel engine generator will provide the power for the various equipment.

The operation of either (one or the other, i.e., cannot operate together) existing 357 TPH stone processing plants consists of rocks being dumped into the grizzly feeder by wheel loader. From the feeder, the material is moved directly into the primary Pioneer jaw crusher. From the jaw crusher, the rocks are transported via conveyor to a 3 deck screen. The screens most commonly will be fitted with a 3" screen on the top deck (largest sized screen opening to be used), 1 ½" screen on the middle deck, and a 1 ½" screen on the bottom deck (only two decks are utilized). Rocks larger than 3" will proceed to the cone crusher. Rocks discharging from the cone crusher will fall on an under crusher conveyor which will then transfer to a return conveyor. The return conveyor goes back to the screen feed conveyor which feeds this recirculating material back to the screen again.

Rocks smaller than 3" but larger than 1 ½" (rocks falling between the top and second decks of the screen) may also be directed to the cone crusher or proceed to a finished product conveyor and then to stockpile. Rocks smaller than 1 ½" drop onto an under screen conveyor, and then are transferred to a finish product stockpile.

On some jobs, the material crushed by the jaw crusher will be transported directly onto a stockpile via conveyor without going through the secondary cone crusher and screen.

The Caterpillar 250 HP diesel engine services the Pioneer 357 TPH jaw crusher, Model 3042 JVDH-D2853 (Crusher B). The 400 and 500 kW diesel engine generators provide power for the remaining equipment.

Combined Operations:

The applicant is also requesting to operate the proposed 125 TPH plant with one or the other of the existing 357 TPH plants. In this scenario, the combined plant would consist of one of the 357 TPH plants (feeder, jaw crusher, screen, and cone crusher) with some of the material exiting the screen being fed directly into the feeder of the proposed plant, instead of being directed to stockpile or back to the cone crusher. The set up (except for source of feed) for the proposed plant would be exactly the same as described above.

Diesel Engine and Diesel Engine Generators Operations:

Currently, the permit limits each temporary site to the 250 HP diesel engine (powering Crusher B) and one diesel engine generator, either the 400 kW or 500 kW (powering the remaining equipment). The applicant is proposing to add the 725 kW diesel engine generator (powering the proposed equipment). In stand alone operations, this new generator would operate by itself. In combined operations, the maximum amount of engines required would be: the 250 HP diesel engine and two diesel engine generators (the 400 kW or 500 kW and the 725 kW).

As the diesel engine generators are not physically limited to power specific equipment, the applicant is requesting the flexibility to be able to operate the 250 HP diesel engine simultaneously with any two of the diesel engine generators (i.e., the 400 kw and the 750 kW, or the 400 kW and the 500 kW, or the 500 kW and the 725 kW).

The maximum amount of machinery at any site would be:

1 grizzly feeder
1 jaw crusher
1 cone crusher w/ triple deck screen
1 portable belt feeder
1 VSI crusher
1 5' x 16' triple deck screen
conveyor belts
250 HP diesel engine (for Crusher B)
and 2 diesel engine generators

The applicant proposed a production limit of 999,600 tons per rolling 12 month period (based on 2,800 hr per rolling 12 month period operating in the worst configuration) for each temporary location and a 2,800 hr per rolling 12 month period for the diesel engine and each diesel engine generator (same limit currently imposed on the existing engines). These limits were proposed to maintain emissions below major source limits and to ensure compliance with the ambient air quality standards.

Like the currently permitted diesel engine and diesel engine generators, the proposed diesel engine generator will also be run on Diesel No. 2, with sulfur content not to exceed 0.50% by weight.

Any changes to the proposed setup, operation, or materials processed in the plant shall warrant a re-evaluation of the maximum capacities.

The application fee for a temporary covered source renewal/significant modification (with an emissions increase of ≥40 tons/yr) of $1,000.00 was processed.

**Applicable Requirements:**

Hawaii Administrative Rules (HAR)
- Title 11 Chapter 59, Ambient Air Quality Standards
- Title 11 Chapter 60.1, Air Pollution Control
  - Subchapter 1 - General Requirements
  - Subchapter 2 - General Prohibitions
    - 11-60.1.31 Applicability
    - 11-60.1-32 Visible Emissions
    - 11-60.1-33 Fugitive Dust
    - 11-60.1-38 Sulfur Oxides from Fuel Combustion
  - Subchapter 5 - Covered Sources
  - Subchapter 6 - Fees for Covered Sources, Noncovered Sources, and Agricultural Burning
    - 11-60.1-111 Definitions
    - 11-60.1-112 General Fee Provisions for Covered Sources
    - 11-60.1-113 Application Fees for Covered Sources
    - 11-60.1-114 Annual Fees for Covered Sources
  - Subchapter 8 - Standards of Performance for Stationary Sources
    - 11-60.1-161(25) Standards of Performance for Non-metallic Mineral Processing Plants
  - Subchapter 10 - Field Citations

New Source Performance Standards:
40 Code of Federal Regulations (CFR) Part 60 - Standards of Performance for New Stationary Sources

| | |
|---|---|
| Subpart A - | General Provisions |
| Subpart OOO - | Standards of Performance for Non-metallic Mineral Processing Plants |

40 CFR Part 60 Subpart OOO applies to portable crushed stone plants with capacities greater than 150 TPH that commence construction, reconstruction, or modification after August 31, 1983. The existing crushing plants have capacities greater than 150 TPH and were manufactured after this date. Thus, the crushing plants, including the conveying systems remain subject to Subpart OOO. The dates of manufacture for the equipment are shown in Table 1. Equipment for which dates were not provided were assumed to be after August 31, 1983.

At the initial location of the proposed plant, the new equipment shall be operated in combination with one of the existing 357 TPH plants, and thus is subject to NSPS Subpart OOO also.

This source is not subject to PSD requirements because it is not a major stationary source, as defined in HAR Title 11, Chapter 60.1, Subchapter 7 and 40 CFR Part 52, Section 52.21.

This source is not subject to NESHAPS as there are no standards in 40 CFR Part 61 applicable to this facility (stone processing plant operations).

This source is not subject to MACT as the facility is not a major or area source of HAPS, covered under 40 CFR Part 63.

A Best Available Control Technology (BACT) analysis is required for new sources or modifications to existing sources that would result in a net significant emission increase as defined in HAR, Section 11.60.1-1. The addition of the proposed stone processing plant is a modification to an existing source and the emissions increase operating with the limits of: 999,600 tons of material produced per site and 2,800 hours per rolling 12-month period for the diesel engine generator, as presented in Table 2, exceeds significant levels for PM and PM10. The definition of major (HAR 11-60.1-1) includes the consideration of fugitives in calculating potential emissions for major source determination and thus were considered in determining BACT applicability (i.e., vehicle traffic, stockpiles, etc.). The applicant addressed BACT by proposing water sprays to be maintained and operated at the proposed plant's feeder and material drop off to stockpiles, in addition to maintaining the water truck already utilized at the facility.

The applicant also previously addressed BACT for the existing plants as a part of previous permit evaluations with the use of water sprays located throughout the plants and a water truck that is operated on site for spraying stockpiles and roadways during operation of the plant. The facility is maintaining the use of water sprays on the existing plants and the water truck as originally proposed.

**Table 2 - Comparison of Significant Levels to Net Emissions[a]**

| POL-LU-TANT | Stone Process-ing[b] TPY | Agg Hand/ Storage Piles[c] TPY | Unpaved Roads[d] TPY | Diesel Engine Gen[e] TPY | TOTAL Emissions including fugitive TPY | Greater than or less than significant levels | Significant Level TPY |
|---|---|---|---|---|---|---|---|
| SOx | - | - | - | 5.177 | 5.18 | < | 40 |
| NOx | - | - | - | 32.22 | 32.22 | < | 40 |
| CO | - | - | - | 8.56 | 8.56 | < | 100 |
| PM | 37.36 | 4.25 | 15.12 | 1.01 | 57.74 | > | 25 |
| $PM_{10}$ | 17.80 | 2.01 | 3.70 | 0.58 | 24.09 | > | 15 |
| VOC | - | - | - | 0.91 | 0.91 | < | 40 |
| Pb | - | - | - | - | 0 | < | 0.6 |
| Be | - | - | - | - | 0 | < | 0.0004 |
| Hg | - | - | - | - | 0 | < | 0.1 |

[a] TPY are calculated for 999,600 tons of material produced and 2,800 hr of generator operation.
[b] Emission factors from AP-42 Table 11.19.2-2 (1/95).
[C] Emission factors from AP-42 Section 13.2.4 (1/95).
[d] Emission factors from AP-42 Section 13.2.2 (12/03). For consistency with other permit evaluations, only quarry trucks were considered in determining vehicle emissions from unpaved roads, as front end loaders and other light duty vehicles are normally not considered being that travel distance(s) and individual vehicle amount/weight information for these vehicles may be difficult to obtain/verify.
[e] Emission factors from AP-42 Section 3.3-1 and 2 (10/96).
Emissions reflect future potential emissions from the proposed plant operating as a stand alone unit. Past emissions for this modification (addition of the new plant) would be 0 TPY. Considering the proposed plant operating in combination with an existing 357 TPH plant, the emissions increases would be less, as there would be no change in emissions from aggregate handling and storage piles and unpaved roads as these emissions calculations would remain based on the production limit (based on 2,800 hr/yr operation).

Compliance Assurance Monitoring (CAM):
40 CFR Part 64
The purpose of Compliance Assurance Monitoring (CAM) is to provide reasonable assurance that compliance is being achieved with large emission units that rely on air pollution control device equipment to meet an emissions limit or standard. For CAM to be applicable, the emissions unit must: (1) be located at a major source; (2) be subject to an emissions limit or standard; (3) use a control device to achieve compliance; (4) have potential precontrol emissions that are greater than the major source level; and (5) not otherwise be exempt from CAM. CAM is not applicable to this facility since the source is not a major source.

In addition, the stone processing plant does not rely on air pollution control devices to achieve compliance with an applicable emission limit or standard. Passive control measures such as covers are not subject to CAM and per CAB discussion with Mr. Westlin from EPA, water sprays are not considered air pollution control devices per the CAM regulations. An air pollution control device must be involved with the source in order to trigger CAM applicability. However, periodic monitoring/inspection will be required to ensure that the control devices, i.e., water sprays, are working properly.

CER and CDS applicability:
40 CFR Part 51, Subpart A - Emission Inventory Reporting Requirements, determines CER based on facility wide emissions of each air pollutant at the CER triggering levels as shown in the table below.

| Pollutant | CER Triggering Levels Three-Year Cycle Type B Sources (tpy) | In-house Total Facility Triggering Levels (tpy) |
|---|---|---|
| $NO_x$ | ≥100 | ≥25 |
| $SO_x$ | ≥100 | ≥25 |
| CO | ≥1000 | ≥25 |
| $PM_{10}$ | ≥100 ($PM_{2.5}$ also) | ≥25 (PM also) |
| VOC | ≥100 | ≥25 |
| Pb | ≥ 5 | ≥5 |
| Ammonia | ≥100 | NA |

Type A trigger levels are higher than B and are not shown, as the facility does not trigger B levels.

This facility does not have any emissions at the CER triggering levels. Therefore, CER requirements are not applicable.

Although CER for the facility is not triggered, the Clean Air Branch requests annual emissions reporting from those facilities that have facility-wide emissions of a single air pollutant exceeding in-house triggering levels. Annual emissions from these facilities are used within the Department and are not inputted into the AIRS database. Total combined facility emissions for PM, PM10, and NOx exceed the in-house triggering levels, therefore, annual emissions will be required for in-house recordkeeping purposes. In addition, annual emissions reporting is required because this is a covered source.

Applicability of CDS reporting looks at emissions on a facility-wide basis and whether or not the facility is a covered source. Compliance Data System (CDS) requirements are applicable to all covered sources. This source is subject to CDS since this facility is a covered source.

**Insignificant Activities/Exemptions:**

Small storage tanks will be used to store diesel no. 2. The storage tanks are exempt from the air permit requirements per HAR, Section 11-60.1-82(f)(1) because the tanks each have a capacity of less than 40,000 gallons and are not subject to any standard or other requirement pursuant to Section 111 or 112 of the CAA. The tanks are not subject to NESHAPS as there are no standards in 40 CFR Part 61 applicable to these sources. The tanks are also not subject to NSPS as there are no applicable regulations in 40 CFR Part 60 pertaining to the fuel tanks.

- Subpart K (Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978) and Subpart Ka (Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984) are not applicable because the fuel stored in the subject tanks (diesel fuel oil no. 2) are not classified as a petroleum liquid. Per the definitions of these sections, petroleum liquids do not include diesel fuel oils Nos. 2-D through 4-D as specified in ASTM D975-78.

- Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984) is also not applicable. Per Section 60.110b(b), storage vessels with a design capacity less than 75 cubic meters (19, 815 gallons) are exempt from the General Provisions (Subpart A) and the provisions of this subpart.

**Alternative Operating Scenarios:**

None proposed

**Project Emissions:**

The emissions calculations provided on Form S-1 were checked and modified using the most current AP-42 Factors (Tables 3.3-1, 3.3-2, 10/96; 11.12-2, and 11.19.2-2, 1/95; and Sections 13.2.2, 12/03; and 13.2.4, 1/95)

The data below summarizes the Department of Health's emission calculations, performed in Enclosures (1) through (11). Worst case emissions using the maximum capacities of the plants from the crushed stone processing were calculated and are shown in Enclosures (1), (2), and (3) for the existing and proposed plants. Operations are based on 999,600 tons per site. Worst case emissions from aggregate handling and storage piles were calculated and are shown in Enclosures (4) and (5). Worst case emissions from unpaved road traffic (truck travel) are shown in Enclosures (6) and (7). Worst case emissions from the diesel engine and diesel engine generators were calculated assuming 2,800 hours of operation per rolling 12-month

period firing diesel No. 2. All emission calculations were based on a heating value for diesel No. 2 of 137,000 Btu/gal. Calculated emissions from the existing 250 HP diesel engine is shown in Enclosure (8). Calculated emissions from the existing 400 kW and 500 kW diesel engine generators and for the proposed 750 kW diesel engine generator are shown in Enclosures (9), (10), and (11), respectively. Please refer to the attached spreadsheets for details.

Per the applicant, the proposed stone processing plant being added to the permit may be used at times to process fines, whereas the existing plants will not. Therefore, conservatively, both the fines screening and crushing emission factors were utilized in calculating emissions for the proposed plant.

Emission calculations are included for unpaved roadways and stockpiles with a 70% control efficiency for fugitive dust due to water suppression. Emission control efficiencies are applied at stone processing operations and transfer points based on a 70% control efficiency at the point of water spray application. At each subsequent transfer point, a 35% control efficiency was utilized.

The Emissions for the proposed and existing plants and are summarized below. Please refer to the spreadsheets for details.

**Table 3a - Emissions Summary for Proposed 125 TPH Plant Operating Alone**

| POLLUTANT | Stone Processing TPY | Agg Hand/ Storage Piles TPY | Unpaved Roads TPY | 725 kW Diesel Engine Generator TPY | TOTAL Emissions including fugitive TPY |
|---|---|---|---|---|---|
| SOx | - | - | - | 5.18 | 5.18 |
| NOx | - | - | - | 32.22 | 32.22 |
| CO | - | - | - | 8.56 | 8.56 |
| PM | 37.36 | 4.25 | 15.12 | 1.01 | 57.74 |
| $PM_{10}$ | 17.8 | 2.01 | 3.70 | 0.58 | 24.09 |
| VOC | - | - | - | 0.91 | 0.91 |

See notes for Table 3b.

**Table 3b - Emissions Summary for a Existing 357 TPH Plant Operating Alone (Worst Case including 250 HP Diesel Engine and 500 kW DEG)**

| POLLUTANT | Stone Processing (TPY) | Agg Hand / Storage Piles (TPY) | Unpaved Roads (TPY) | 250 HP Diesel Engine (TPY) | 500 kW DEG (TPY) | TOTAL Emissions including fugitive (TPY) |
|---|---|---|---|---|---|---|
| SOx | | | | 1.37 | 4.02 | 5.39 |
| NOx | | | | 11.76 | 25.04 | 36.80 |
| CO | | | | 2.53 | 6.65 | 9.18 |
| PM | 14.67 | 4.25 | 15.12 | 0.83 | 0.78 | 35.65 |
| $PM_{10}$ | 7.00 | 2.01 | 3.70 | 0.83 | 0.45 | 13.99 |
| VOC | | | | 0.96 | 0.70 | 1.66 |

TPY are calculated for a production limit of 999,600 tons per site and 2,800 hours per rolling 12-month for the diesel engine and diesel engine generators.
Stone Processing Emission factors from AP-42 Table 11.19.2-2 (1/95). Fines crushing and screening emission factors used for the proposed crushing and screening plant.
Aggregate Handling and Storage Piles Emission factors from AP-42 Section 13.2.4 (1/95).
Unpaved Roads Emission factors from AP-42 Section 13.2.2 (12/03).
Emission factors from AP-42 Section 13.2.2 (9/98). For consistency with other permit evaluations, only quarry trucks were considered in determining vehicle emissions from unpaved roads, as front end loaders and other light duty vehicles are normally not considered being that travel distance(s) and individual vehicle amount/weight information for these vehicles may be difficult to obtain/verify.
Diesel Engine Emission factors from AP-42 Section 3.3-1, 3.3-2, 3.4-1, 3.4-3, and 3.4-4 (10/96).

**Table 3c - Emissions Summary**
**Worst Case Total Emission Estimates for the Entire Facility Operating in Combination**
**(Proposed 125 TPH Plant and a 357 TPH Existing Plant)**

| POLLU-TANT | Proposed 125 TPH Stone Processing Plant TPY | Existing 357 TPH Stone Processing Plant TPY | TOTAL Emissions including fugitive TPY | CER Levels TPY | In House/ CDS Levels TPY |
|---|---|---|---|---|---|
| **SOx** | 5.18 | 5.39 | 10.57 | 100 | 25/100 |
| **NOx** | 32.22 | 36.80 | 69.02 | 100 | 25/100 |
| **CO** | 8.56 | 9.18 | 17.74 | 1000 | 250/ 1000 |
| **PM** | 38.37 | 35.65 | 74.02 | - | 25/100 |
| **$PM_{10}$** | 18.38 | 13.99 | 32.37 | 100 | 25/100 |
| **VOC** | 0.91 | 1.66 | 2.57 | 100 | 25/100 |
| **Pb** | - | - | 0 | 5 | 5/5 |

TPY are calculated for a production limit of 999,600 tons per site and 2,800 hours per rolling 12-month for the diesel engine and diesel engine generators.
Combined operation of an existing 357 TPH plant with the proposed plant would not result in additional emissions from unpaved roads or aggregate handling and storage piles, as the facility would still be limited to 999,600 tons of production. The emissions from aggregate handling and storage piles and unpaved roads for the combined facility are reflected in the existing 357 TPH plants emissions above.
Emissions are reflective of the worst combination of diesel engine and generators. This would be where the 250 HP diesel engine operates with both the 750 kW and 500 kW diesel engine generators.

**Table 4**
**Worst Case Emissions Summary for Hazardous Air Pollutants (HAPS)**
**for Entire Facility Operating in Combination**
**(Proposed 125 TPH Plant and a 357 TPH Existing Plant)**

| POLLUTANT | Existing Caterpillar 3306 250 HP Diesel Engine Emissions (TPY) | Existing Caterpillar 3412-DITT 500 kW DEG Emissions (TPY) | Proposed Caterpillar 3412 725 kW DEG Emissions (TPY) | TOTAL EMISSIONS, All Diesel Engines (TPY) |
|---|---|---|---|---|
| Benzene* | 2.49e-03 | 6.07e-03 | 7.81e-03 | 1.64e-02 |
| Toluene* | 1.09e-03 | 2.20e-03 | 2.83e-03 | 6.12e-03 |
| Xylenes* | 7.60e-04 | 1.51e-03 | 1.94e-03 | 4.21e-03 |
| Propylene* | 6.88e-03 | 2.18e-02 | 2.81e-02 | 5.68e-02 |
| 1,3-Butadiene* | 1.04e-04 | -- | -- | 1.04e-04 |
| Formaldehyde* | 3.15e-03 | 6.17e-04 | 7.95e-04 | 4.56e-03 |
| Acetaldehyde* | 2.05e-03 | 1.97e-04 | 2.54e-04 | 2.50e-03 |
| Acrolein* | 2.47e-04 | 6.17e-05 | 7.94e-05 | 3.88e-04 |
| Naphthalene* | 2.26e-04 | 1.02e-03 | 1.31e-03 | 2.56e-03 |
| PAH (Polycyclic Aromatic HC's)* | 4.48e-04 | 1.66e-03 | 2.14e-03 | 4.25e-03 |
| **TOTAL HAPS* (TPY)** | 1.72e-02 | 3.41e-02 | 4.39e-02 | 9.53e-02 |

* hazardous air pollutants listed in the Clean Air Act and HAR 11-60.1 Subchapter 9.
TPY are calculated for 2,800 hours per rolling 12-month of operation.
Diesel Engine Emission factors from AP-42 Table 3.3-2 (10/96).
Emissions are reflective of the worst combination of diesel engine and generators. This would be where the 250 HP diesel engine operates with both the 750 kW and 500 kW diesel engine generators.

A major source as defined in Section 11-60.1-1 of HAR Title 11, has the potential to emit any HAP of 10 TPY or more, or 25 TPY or more of any combination of HAPs, or 100 TPY or more of any air pollutant. Calculated emissions do not meet these limits and thus, this facility is not classified as a major source

*Synthetic Minor Applicability:* A synthetic minor source is a facility that is potentially major (as defined in HAR 11-60.1-1), but is made nonmajor through federally enforceable permit conditions (e.g., limiting the facility's hours of operation and limiting the facility's production rate). This facility is a synthetic minor based on potential emissions of PM, $PM_{10}$, and NOx greater than "major" levels when the stone processing plant and diesel engine are operated at 8,760 hr/yr. See enclosures for detailed calculations.

**Air Quality Assessment:**

The ambient air quality standards seek to protect public health and welfare and to prevent the significant deterioration of air quality.

For new facilities and facilities proposing modifications, an ambient air quality assessment is required to analyze the maximum potential pollutant concentrations generated by a source and it's effect on the ambient air.

The Department of Health generally exempts an applicant from performing an ambient air quality impact analysis for (1) existing sources with no proposed modifications, (2) exempt activities, (3) fugitive emission sources (e.g., storage tanks, storage piles, pipe leaks, etc.), and (4) intermittent operating non-combustion sources.

This facility is proposing the addition of a new stone processing plant. However, being that the Department of Health does not require an ambient air quality impact analysis for fugitive emissions of particulate, an ambient air quality impact analysis was not performed for the additional portable stone processing plant.

The proposed 725 kW Caterpillar 3412 diesel engine generator which will be used to run various plant equipment requires an ambient air quality analysis.

Previous modeling (see previous evaluation dated March 5, 2001) was performed considering the existing engines and the following scenarios and showed compliance with the ambient air quality standards.

- Scenario 1 - 250 HP diesel engine and 400 kW DEG (determined to be worst case)
- Scenario 2 - 250 HP diesel engine and 500 kW DEG

The applicant is proposing to add an additional 725 kW diesel engine generator and to operate the 250 HP diesel engine with any two of the three diesel engine generators (400 kW and 500 kW, 400 kW and 725 kW, or 500 kW and 725 kW). The proposed scenarios are:

- Scenario 1A - 250 HP diesel engine and 400 kW DEG + 725 kW DEG
- Scenario 2A - 250 HP diesel engine and 500 kW DEG + 725 kW DEG
- Scenario 3A - 250 HP diesel engine and 400 kW DEG + 500 kW DEG

Scenario 1A is the same as Scenario 1 with the addition of the proposed 725 kW DEG.
Scenario 2A is the same as Scenario 2 with the addition of the proposed 725 kW DEG.
Scenario 3A is the same as Scenario 1 with the addition of the existing 500 kW DEG.

The facility has been operating in Scenarios 1 or 2 in the Kona area since the issuance of the amended permit in May of 2001 and thus these operations were considered to be in the background concentrations for the Kona area. As modeling is not required for existing sources without change, these scenarios were not remodeled. In the ambient air analysis performed, the Department considered the addition of the 725 kW DEG plus background (Scenarios 1A and 2A) and the addition of the existing 500 kW DEG plus background (Scenario 3A).

A full ambient air quality analysis was performed for the 725 kW DEG. As the 500 kW DEG was previously modeled in the March 5, 2001 review, these numbers were used as part of this analysis. Although this analysis is comparing only the 500 kW DEG plus background (includes the 250 HP diesel engine and 400 kW DEG) to the ambient air quality standards, the previous modeling for the 500 kW DEG done with ISCST3 also included the 250 HP diesel engine. These numbers were conservatively used (250 HP diesel engine actually being considered twice). It was also noted that this review showed a very slight increase in the 500 kW engine's g/sec emission rate, as emissions were recalculated with an updated fuel feed rate provided by the applicant (40.8 gal/hr versus 38 ga/hr). This small increase is not expected to cause a significant change in the modeling results, and the results are still considered conservative, as the 250 HP engine is included both in the modeling results used and in the background added.

Conservatively, the largest piece of equipment that would be located at any site (jaw crusher) was used for building downwash for the proposed 725 kW diesel engine generator stack.

The dimensions for this structure were entered into the SCREEN3 model used to predict maximum ground level pollutant concentrations resulting from the 725 kW diesel engine generator. See Enclosure (12) for modeling results.

**Table 5 - Source Emission Rates and Stack Parameters for Air Modeling**

| Source | Emission Rates | | | | Stack Parameters | | | |
|---|---|---|---|---|---|---|---|---|
| Equipment | $SO_2$ (g/s) | NOx (g/s) | CO (g/s) | $PM_{10}$ (g/s) | Height (m) | Temp (K) | Velocity (m/s) | Diameter (m) |
| Proposed 725 kW DEG Cat 3412 | 0.4659 | 2.9000 | 0.7703 | 0.0519 | 6.0 | 784.7 | 160.2 | 0.1524 (6 inches) |

Grams per second emission rates are based on AP-42 emission factors. See Enclosure (11).

The proposed site consists of land under development. The closest structures/buildings outside of the property would be located more than 3,000 feet away.

Review of the USGS map for the area indicated simple and complex terrain. Elevations were obtained from the USGS map and receptors placed at 10 meter increments out to where the elevation reaches stack height and varying increments (10, 20, 50 and 100 meters) were used at elevations above stack height. Receptors were not placed beyond 860 meters being that modeled concentrations continued to decrease beyond 600 meters, for both valley and simple complex terrain.

The air quality analysis performed considered ambient air at the stack.

SCREEN3 was used to determine ambient concentrations for flat, simple elevated, and complex terrain (as detailed by the USGS map) from the diesel engine generator. The highest 24 hour concentrations from the models using complex terrain for the proposed 725 kW diesel engine generator was: 146.5 $g/m^3$ per g/sec occurring at a distance of 80 meters from the stack for complex simple terrain and 18.81 $g/m^3$ per g/sec occurring at a distance of 600 meters from the stack for complex valley. The simple elevated terrain model showed a maximum 1 hour concentration of 994.2 $g/m^3$ per g/sec occurring at a distance of 60 meters from the stack and the flat terrain model showed a maximum 1 hour concentration of 201.0 $\mu g/m^3$ per g/sec occurring at a distance of 71 meters from the stack. These numbers were conservatively considered in the analysis and did not consider the applicant's assumption that approximately 100 meters from the source are level to allow for truck and front-end loader traffic.

See attached SCREEN3 models for details. Other settings used: 1) rural designation, 2) default met data and 3) ambient temperature of 298 degrees K.

**Table 6 - Conversion Factors and Normalized Concentrations from Modeling Results, Proposed 725 kW Caterpillar 3412 Diesel Engine**

| | **Simple Terrain** | | **Complex Terrain Valley** | | **Complex Terrain Simple** | |
|---|---|---|---|---|---|---|
| Averaging Period | Conversion Factor | Normalized Concentration ($\mu g/m^3$ per g/sec) | Conversion Factor | Normalized Concentration ($\mu g/m^3$ per g/sec) | Conversion Factor | Normalized Concentration ($\mu g/m^3$ per g/sec) |
| 1-hour | NA | **994.2** | .25 | 75.24 | .4 | 366.3 |
| 3-hour | 0.9 | 894.8 | .9 | 67.72 | .9 | 329.6 |
| 8-hour | 0.7 | 695.9 | .7 | 52.67 | .7 | 256.4 |
| 24-hour | 0.4 | 397.7 | NA | **18.81*** | NA | **146.5*** |
| Annual | 0.2 | 198.8 | .2 | 15.05 | .2 | 73.3 |

Bold entries are model results.

SCREEN3 outputs a 1-hour concentration for simple terrain and a 24-hour concentration for complex terrain (simple and valley). Conversion factors were used to convert the 1-hour concentration to represent 3-hour, 8-hour, 24-hour, and annual estimates and to convert the 24-hour concentration to represent 1-hour, 3-hour, 8-hour, and annual estimates. The conversion factors are based on EPA and State of Hawaii (annual) scaling factors as shown in the table above.

SCREEN3 values were provided by the applicant and verified by the DOH. The highest values of the 1-hr, 3-hr, 8-hr, 24-hr, and annual concentrations were identified in the simple terrain models and used in determining ambient air impacts.

Results of the ambient air quality analysis are shown in Tables 7a and b.

**Table 7a - Predicted Ambient Air Quality Impacts Considering Scenarios 1A & 2A (Addition of Proposed Caterpillar 725 kW 3412 DEG to Scenarios 1 & 2)**

| POLLUTANT | AVER. TIME | IMPACT (µg/m$^3$) | Background (µg/m$^3$) | TOTAL IMPACT (µg/m$^3$) | SAAQS (µg/m$^3$) | Percent of Standard |
|---|---|---|---|---|---|---|
| CO | 1-hr | 766 | 969 (Huehue) | 1735 | 10000 | 17.35% |
| | 8-hr | 536 | 736 (Huehue) | 1272 | 5000 | 25.44% |
| $NO_2$** | Annual * | 61 | 2 (Puna) | 63 | 70 | 90.00% |
| $SO_2$ | 3-hr | 417 | 588 (Puna) | 1005 | 1300 | 77.31% |
| | 24-hr | 185 | 119 (Puna) | 304 | 365 | 83.29% |
| | Annual * | 30 | 8 (Kona) | 38 | 80 | 47.50% |
| $PM_{10}$ | 24-hr | 21 | 32 (Puna) | 53 | 150 | 35.33% |
| | Annual* | 3 | 18 (Kona) | 21 | 50 | 42.00% |
| Lead | Qtr | — | 0.1(Liliha) | 0.1 | 1.5 | 6.67% |

Notes for Table 7a:

(Model conc) x (Potential emissions) x (Time factor) = Potential Ambient Air Impact
EPA time factors of 0.9, 0.7, and 0.4 for the 3 hour, 8 hour, and 24 hour concentrations respectively, and State of Hawaii time factor of 0.2 for the annual concentrations were applied.
For Potential emissions (g/s), see Enclosure (11).
*Annual hour limitation factor of 0.32 applied.
Hour limitation factor = (2,800 hr/year) / (8,760 hr/year) = 0.32
** Ozone Limiting Method applied.

**Table 7b - Predicted Ambient Air Quality Impacts Considering Scenario 3A (Addition of Existing Caterpillar 500 kW 3412-DITT DEG to Scenario 1)**

| POLLUTANT | AVER. TIME | IMPACT ($\mu g/m^3$) | Background ($\mu g/m^3$) | TOTAL IMPACT ($\mu g/m^3$) | SAAQS ($\mu g/m^3$) | Percent of Standard |
|---|---|---|---|---|---|---|
| CO | 1-hr | 782 | 969 (Huehue) | 1751 | 10000 | 17.51% |
| | 8-hr | 445 | 736 (Huehue) | 1181 | 5000 | 23.62% |
| $NO_2$* | Annual * | 30 | 2 (Puna) | 32 | 70 | 45.71% |
| $SO_2$ | 3-hr | 355 | 588 (Puna) | 943 | 1300 | 72.54% |
| | 24-hr | 147 | 119 (Puna) | 266 | 365 | 72.88% |
| | Annual * | 5 | 8 (Kona) | 13 | 80 | 16.25% |
| $PM_{10}$ | 24-hr | 26 | 32 (Puna) | 58 | 150 | 38.67% |
| | Annual* | 2 | 18 (Kona) | 20 | 50 | 40.00% |
| Lead | Qtr | — | 0.1(Liliha) | 0.1 | 1.5 | 6.67% |

Notes for Table 7b:

(Model conc) x (Potential emissions) x (Time factor) = Potential Ambient Air Impact
EPA time factors of 0.9, 0.7, and 0.4 for the 3 hour, 8 hour, and 24 hour concentrations respectively, and State of Hawaii time factor of 0.2 for the annual concentrations were applied.
*Annual hour limitation factor of 0.32 applied.
Hour limitation factor = (2,800 hr/year) / (8,760 hr/year) = 0.32
** Assumes 75% conversion NOx to $NO_2$ per Tier 2 Ambient Ration Method (ARM).

The DOH applied the highest background concentrations to the source considering data from Kona, Huehue, and Puna. The background air quality data shown in Tables 7a and b was obtained from Site 063, Huehue, Kona, Big Island (only 1999 available), Kona (highest of 2000 - 2002) and Puna (only 1993 available), Hawaii. Because of the lack of current background ambient air data for Puna, 1993 Puna Hawaii Air Quality Data (DOH/CAB) background data was used. Being that background concentrations for lead were not available from the Kona, Puna, or Huehue areas, lead background concentrations were taken from Liliha. The highest data from each site was compared and the highest value was utilized.

State Ambient Standards are stricter than National; therefore, only State Standards are listed. Although background concentrations were taken from areas other than the proposed location, these areas are considered representative or more conservative than the initial location due to their population and industrial development.

Analysis of the stone processing plant is based on operation of its diesel engine generators at 2,800 hours/year.

The combined effect of 1) maximum concentrations generated by the proposed 725 kW Caterpillar 3412 diesel engine generator and 2) ambient background concentrations, demonstrate compliance with the State Ambient Air Quality Standards and Federal Ambient Air Quality Standards.

The combined effect of 1) maximum concentrations generated by the existing 500 kW Caterpillar 3412-DITT diesel engine generator and 2) ambient background concentrations, demonstrate compliance with the State Ambient Air Quality Standards and Federal Ambient Air Quality Standards.

**Significant Permit Conditions:**

Condition: 40 CFR Part 60 Subpart OOO provisions shall be applicable to the proposed 125 TPH stone processing plant, as well as the 357 TPH existing stone processing plants. The permittee shall comply with all applicable provisions of these standards, including all emission limits and all notification, testing, monitoring, and reporting requirements.

Purpose: To specify equipment subject to 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. As the existing plants are subject to Subpart OOO and the proposed plant will be operated in conjunction with these plants, it too is applicable to Subpart OOO.

Condition: For each temporary stone processing plant location, the maximum amount of equipment shall be as follows:

a. One (1) jaw crusher;
b. One (1) grizzly feeder;
c. One (1) cone crusher with triple deck screen;
d. One (1) portable belt feeder;
e. One (1) VSI crusher;
f. One (1) Thunderbird II 5' x 16' screen;
g. One (1) 250 HP diesel engine;
h. Any two (2) of the three (3) diesel engine generators;
I. Various conveyors; and
j. Various water sprays.

The permittee may also operate in configurations where less equipment than that specified above is used at a site.

Purpose: Emission calculations, ambient air quality analysis, and permit issuance are based on this condition.

Condition: For each location, the total combined maximum potential emissions from the equipment covered by this Temporary Covered Source Permit and all other stone processing equipment owned or operated by the permittee (i.e., crushers, screens, diesel engines, etc. permitted under other Isemoto Contracting Company, Ltd. air permits) shall not exceed the threshold limits for a "major source" as defined in HAR §11-60.1-1.

Purpose: Proposed by the applicant to maintain emission levels for each location below “major source” as defined in HAR §11-60.1-1.

Condition: For each location, the total production of material shall not exceed 999,600 tons per rolling twelve (12) month period. Applicable recordkeeping and reporting requirements shall be incorporated into the permit.

Purpose: Proposed by the applicant to maintain emission levels for each location below “major source” as defined in HAR §11-60.1-1.

Condition: For each location, the permittee shall maintain a log including:

a. the total production of material at that location on a monthly and 12-month rolling basis;
b. identification of and corresponding dates each diesel engine and diesel engine generator is used at that location; and
c. the total hours of operation for each diesel engine and diesel engine generator used at that location on a monthly and 12-month rolling basis.

Purpose: To ensure the 999,600 ton per site production limit is met and to maintain emission levels for each location below “major source” as defined in HAR §11-60.1-1. To provide supportive information that no more than two diesel engine generators are used at a site at any time, and to verify the limit of 2,800 hours of operation per rolling twelve (12) month period is satisfied.

Condition: The total operating hours of each diesel engine generator, shall not exceed two-thousand eight hundred (2,800) hours in any rolling twelve (12) month period.

And

The total operating hours of the 250 HP diesel engine shall not exceed two-thousand eight hundred (2,800) hours in any rolling twelve (12) month period.

Purpose: The applicant has proposed 2,800 hours as the maximum hours of operation per year for each engine to ensure the facility complies with the ambient air quality standards for $NO_2$ considering the diesel engine and two of the three generators operating at the same location and to remain below the major source limit. Monitoring of the annual limitation will be achieved through the use of a non-resetting hour meter on each diesel engine and generator.

Condition: The permittee shall submit to the Department of Health an ambient air quality impact assessment if the proposed location is situated:

a. At or adjacent to a current temporary stone processing plant owned or operated by the permittee; or
b. At or adjacent to a previous temporary stone processing plant owned or operated by the permittee, where the total combined operating hours of the previous and proposed diesel engine generators exceeds 5,600 hours on a rolling 12-month basis; or
c. Such that the Department of Health determines that an ambient air quality impact assessment is necessary.

The permittee shall not operate each temporary stone processing plant until the Department of Health has reviewed and approved the ambient air quality impact assessment.

Purpose: Emission calculations, ambient air quality analysis, and permit issuance based on this condition.

Condition: Water spray bars shall be installed, maintained, and utilized as needed during operation of the plant to minimize fugitive dust at the following material drop off points:

i. At each primary jaw crusher to conveyor (both 357 TPH stone processing plants);
ii. From each screen feed conveyor to screen (both 357 TPH stone processing plants);
iii. From each screen to stacking conveyor (both 357 TPH stone processing plants);
iv. At the portable belt feeder (125 TPH stone processing plant); and
v. At each conveyor discharge to stockpile transfer point (all stone processing plants).

In addition, the permittee shall adequately dampen material prior and subsequent to crushing and screening operations to minimize fugitive dust. The Department of Health at any time may require additional water sprays, manual water spraying, and/or enclosures at pertinent locations if an inspection indicates that more fugitive dust control is needed.

Purpose: The applicant proposes the use of the water spray system with location points listed above to control PM and PM-10 emissions from stone processing plant.

**Conclusion and Recommendation:**

Actual emissions and modeled concentrations from this facility should be lower than estimated based on the following reasons:

a. The calculated project emissions were based on the potential worst possible conditions (maximum equipment capacities) of the crushing and screening plants. Actual plant capacities will vary depending on product size and the type of material and typically result in a lower than manufacturer published capacity.

b. Calculations were based on a production of 999,600 tons per year at any site and 2,800 hours per rolling twelve month period of operations for each diesel engine and generator. However, stone processing operations will be on a temporary basis with intermittent periods of operation, contingent upon jobs performed. The applicant projected far less than 999,600 tons per year at any site and less than 2,800 hours per year of operations for the diesel engines/generators.

   The permit hour limitations and method of tracking production per site is conservative as the production limit was based on the worst case scenario of the proposed 125 TPH plant operating with a 357 TPH plant at the same location. Actual operational conditions will vary with the proposed plant operating alone or a 357 TPH plant operating alone. These types of operations would result in much lower emissions at a site.

c. The ambient air quality analysis performed considered the worst case of the diesel engine with two diesel engine generators operating at the same location at the same time. Per the applicant, more typically operations would involve one generator or the diesel engine and one generator being operated at any one time.

Based on the information submitted by Isemoto Contracting Co. Ltd., it is the determination of the Department of Health (DOH), that the proposed project will be in compliance with the Hawaii Administrative Rules (HAR), Chapter 11-60.1 and State and Federal ambient air quality standards. Therefore, recommend issuance of a Temporary Covered Source Permit for Isemoto Contracting Co., Ltd. subject to the incorporation of the significant permit conditions, 30-day public comment period, and 45-day review by EPA.

This renewal/modification, when issued, will supersede in its entirety, CSP No. 0219-01-CT as issued on October 18, 1999 and amended on May 3, 2001 and September 10, 2001.