

# OLYMPIC REGION CLEAN AIR AGENCY

2940 Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 – Fax 360-491-6308

## FORM 1- NOTICE OF CONSTRUCTION TO CONSTRUCT - INSTALL - ESTABLISH OR MODIFY AN AIR CONTAMINANT SOURCE

**Form 1 Instructions:**

1. Please complete all the fields below. **This NOC application is considered incomplete until signed.**
2. If the application contains any confidential business information, please complete a Request of Confidentiality of Records ([www.orcaa.org/forms](http://www.orcaa.org/forms)).
3. Duty to Correction Application: An applicant has the duty to supplement or correct an application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit supplementary factors or corrected information.

<b>Business Name:</b> City of Hoquiam	<b>For ORCAA use only</b>
<b>Mailing Address:</b> 609 8th Street Hoquiam, Wa 98550	File No: <u>279</u> County No: <u>27</u> Source No: <u>117</u> Application No: <u>22NOC1567</u>
<b>Physical Address of Project or New Source:</b> 107 Lincoln Street Hoquiam, WA 98550	Date Received: <div style="color: red; font-size: 1.2em; font-weight: bold;">Received</div> <div style="color: red; font-size: 1.2em; font-weight: bold;">JUN 21 2022</div> <div style="color: red; font-size: 1.2em; font-weight: bold;">ORCAA</div>
<b>Billing Address:</b> 609 8th Street Hoquiam, WA 98550	
<b>Project or Equipment to be installed/established:</b> 450 KW Diesel Powered Generator for Emergency use to provide power to Storm and Sewer Pumps	
Anticipated startup date: <u>11</u> / <u>1</u> / <u>2022</u> Is facility currently registered with ORCAA? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
This project must meet the requirements of the State Environmental Policy Act (SEPA) before ORCAA can issue final approval. Indicate the SEPA compliance option: <input checked="" type="checkbox"/> SEPA was satisfied by <u>WADOE</u> (government agency) on <u>3</u> / <u>18</u> / <u>21</u> (date) - Include a copy of the SEPA determination <input type="checkbox"/> SEPA threshold determination by _____ (government agency) is pending - Include a copy of the environmental checklist <input type="checkbox"/> ORCAA is the only government agency requiring a permit - Include ORCAA Environmental Checklist <input type="checkbox"/> This project is exempt from SEPA per _____ (WAC citation).	
<b>Name of Owner of Business:</b> City of Hoquiam	<b>Agency Use Only</b>
Title:	
Email: _____ Phone: (360) 532-5700	
<b>Authorized Representative for Application (if different than owner):</b> Josh Ambrose	
Title: Public Works Superintendent	
Email: <u>jambrose@cityofhoquiam.com</u> Phone: (360) 538-3972	
<b>I hereby certify that the information contained in this application is, to the best of my knowledge, complete and correct.</b>	
<b>Signature of Owner or Authorized Representative: (sign in Blue Ink)</b>	
	Date: 6/14/2022
<b>IMPORTANT:</b> Do not send via email or other electronic means. ORCAA must receive Original, hardcopy, signed application and payment prior to processing application.	

## OLYMPIC REGION CLEAN AIR AGENCY

2940 Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 – Fax 360-491-6308

### FORM 1D- Contact Information

<b>Business Name</b> City of Hoquiam	<b>FOR ORCAA USE</b>
	<b>FILE #</b>
<b>Physical Site Address (Street address, city, state, zip)</b> 107 Lincoln Street Hoquiam, WA 98550	<b>CTY #</b>
	<b>SRC #</b>
	<b>Date Received</b>
<b>Previous Business Name (if applicable)</b>	

#### Contact Information

<b>Inspection Contact</b>	
Name Thomas Carlyle	Title Pump Station Lead
Phone (360) 538-3972	Email tcarlyle@cityofhoquiam.com
<b>Billing Contact</b>	
Name Celina Batchelor	Title Asst. Finance Director
Phone (360) 538-3975	Email cbatchelor@cityofhoquiam.com
<b>Emission Inventory Contact</b>	
Name Josh Ambrose	Title Public Works Superintendent
Phone (360) 538-3972	Email jambrose@cityofhoquiam.com
<b>Complaint Contact</b>	
Name Josh Ambrose	Title Public Works Superintendent
Phone (360) 538-3972	Email jambrose@cityofhoquiam.com
<b>Permit Contact</b>	
Name Josh Ambrose	Title Public Works Superintendent
Phone (360) 538-3972	Email jambrose@cityofhoquiam.com

The **inspection contact** is the on-site person responsible for the everyday operation of the site and is available for inspections.

The **billing contact** is the person invoices are sent.

The **emission inventory contact** is the person requests for emissions information and material use information are sent.

The **complaint contact** is the person who receives and responds to complaints received on-site and who is contacted regarding complaints ORCAA receives.

The **permit contact** is the person responsible for filling out permit applications and receiving approval from ORCAA.



**OLYMPIC REGION CLEAN AIR AGENCY (ORCAA)**

2940 Limited Lane NW, Olympia, WA 98502  
Engineering Division (360) 539-7610  
Website: orcaa.org fax (360) 491-6308

**Form 18  
Internal Combustion Engines**

NOC #	Date	File #
-------	------	--------

Form 18 is to be completed for all internal combustion engines except turbines. (For turbines, submit Form 17). Submit one form for each engine. If this is a new engine or a modification to an existing engine, your application must also include Form 5 and an analysis of toxic air pollutant emissions in accordance with Chapter 173-460 of the Washington Administrative Code. Completion of Form 5 requires determining daily and annual toxic air pollutant emissions based on the maximum potential to emit of the engine. Additional forms and all ORCAA regulations and rules are available on the Agency's web site. Contact ORCAA's Engineering Division at the above telephone number if you need assistance completing this form. Please include the engine manufacturer's equipment specification sheet or brochure if one is available.

**1. SUMMARY**       New Engine       Engine Modification       New/Additional Fuel       Other:

Company Name City of Hoquiam      County No.\* \_\_\_\_\_

Source Description \_\_\_\_\_      Source No.\* \_\_\_\_\_

Initial Date of Operation Nov. 2022 (Not required for modification of an existing permitted source) \*(If unknown leave blank)

Operating Schedule    Typical hrs/day 2    Days/week 1    Weeks/yr 52    Maximum hrs/day 2

**2. ENGINE INFORMATION**       Check here if applying for approval of portable equipment.  
(See ORCAA Regulation 6.1.1 for portable equipment requirements)

Engine Type: (Check one)     4 Stroke     2 Stroke Compression Ignition (Diesel)    or     4 Stroke     2 Stroke Spark Ignition

Engine Manufacturer Cummins INC.    Model QSX15-G9    Model Year 2022

EPA/CARB Engine Family Name MXEXL015.AAJ    Engine Serial No. \_\_\_\_\_

Engine Displacement 912 (cu in)    Maximum rated output (bhp) 755    Typical load as % of bhp rating less than 50%

Is this an emergency/standby engine?     Yes     No

(Complete and check all that apply)

Certification:     EPA Certified     CARB Certified    MXEXL015.AAJ-024

None (If None is checked, please indicate below the items applicable to this engine.)

Naturally aspirated     Supercharged     Turbocharged     Inter-cooled     After-cooled

Timing retard ≥ 4°     Lean-burn     Rich-burn

Primary Use:     Electrical generation     Cogeneration     Pump driver     Fire pump driver

Compressor driver     Tub grinder driver     Other: \_\_\_\_\_

**3. CONTROL DEVICE INFORMATION** Complete this section only if the engine exhausts to an add-on control device.  
 Check here if the engine has more than one add-on control device and repeat this section for each. Include manufacturer's technical specification sheet or brochure for each control device.

Control device number    # \_\_\_\_\_ (If unknown leave blank)     New     Existing

Device type:     Diesel catalyzed particulate filter     Oxidation catalyst     Selective catalytic reduction (SCR)

Non-selective catalytic reduction (NSCR or 3-way catalyst)     Other: \_\_\_\_\_

Make, Model, and Rated Capacity \_\_\_\_\_

Control device control efficiencies at typical operation (Use the basis codes listed below. If unknown leave blank)

- Control Efficiency/Emission Factor Basis Codes: (Submit supporting documentation if available)
- (1) Source testing or other measurement by plant
  - (2) Source testing or measurement by ORCAA
  - (3) Specification from vendor
  - (4) Material balance by plant using knowledge of process
  - (5) Material balance by ORCAA
  - (6) EPA Document AP-42 Emission Factors
  - (7) Taken from literature other than AP-42
  - (8) Guess
  - (9) EPA/CARB Certification

Pollutant Name	Wt % Reduction	Basis Code
Particulates		
Organics		
Nitrogen Oxides		
Sulfur Dioxide		
Carbon Monoxide		
Others – <input type="checkbox"/> Check here and attach a separate list of pollutants. Include the basis code and the control efficiency.		

**4. EMISSION POINT/STACK INFORMATION**  Check here if the engine has more than one stack or has a continuous pollutant emission monitor and repeat this section for each.

Emission point number # \_\_\_\_\_ (If unknown leave blank)  New  Existing  
 Stack outlet height from ground level (ft) \_\_\_\_\_  
 Diameter of stack outlet (inches) 8 or Outlet cross-section area (square inches) \_\_\_\_\_  
 Direction of outlet (check one)  Horizontal  Vertical End of outlet (check one)  Open/hinged flap  Rain cap  
 Exhaust rate at typical operation (acfm) 3105 max Exhaust temperature at typical operation (°F) 865 max

**5. AIR TOXIC ASSESSMENT INFORMATION.**

Distance from engine to the property line of the nearest residence (ft) 7 or (check if)  Greater than one mile  
 Distance from engine to the property line of the nearest school<sup>1</sup> (ft) \_\_\_\_\_ or (check if)  Greater than 1000 ft  
 Describe the nearest non-residential, non-school site (check one)  Industrial  Commercial  Hospital  
 Day care center  Other \_\_\_\_\_

Distance from engine to the property line of the nearest non-residential, non-school site(ft) 20 or  Greater than one mile

1. K-12 and more than twelve children only.

**6. FUEL DATA** Complete the table below for each fuel burned. If you are using a fuel other than those listed in the fuel table, attach a **fuel analysis** indicating the higher heating value, sulfur content, and nitrogen content. Please clearly indicate the measurement unit that corresponds to the information you are submitting.  Check here if you are using more than two fuels, and attach a copy of this page listing the additional fuels.

Primary Fuel					Secondary Fuel				
Fuel <sup>1</sup>	Name				Fuel <sup>1</sup>	Name			
Diesel									
Maximum Fuel Use Rate <sup>2</sup>	<u>112 GPH</u> gal/hr or SCF/hr				Maximum Fuel Use Rate <sup>2</sup>	_____ gal/hr or SCF/hr			
Annual Fuel Usage <sup>3</sup>	<u>60 gal/yr</u> gal/yr or therm/yr or SCF/yr				Annual Fuel Usage <sup>3</sup>	_____ gal/yr or therm/yr or SCF/yr			
Typical Heat Content <sup>4</sup>	_____ BTU/gal or BTU/SCF				Typical Heat Content <sup>4</sup>	_____ BTU/gal or BTU/SCF			
Sulfur Content <sup>4</sup>	_____ wt% liquids or ppmv gases				Sulfur Content <sup>4</sup>	_____ wt% liquids or ppmv gases			
Emission Factors (Optional)					Emission Factors (Optional)				
Pollutant Name	Emission Factor	Units <sup>5</sup>	Basis Code <sup>6</sup>	Control Factor (✓) <sup>7</sup>	Pollutant Name	Emission Factor	Units <sup>5</sup>	Basis Code <sup>6</sup>	Control Factor (✓) <sup>7</sup>
Particulates				<input type="checkbox"/>	Particulates				<input type="checkbox"/>
Organics				<input type="checkbox"/>	Organics				<input type="checkbox"/>
Nitrogen Oxides				<input type="checkbox"/>	Nitrogen Oxides				<input type="checkbox"/>
Carbon Monoxide				<input type="checkbox"/>	Carbon Monoxide				<input type="checkbox"/>
Others – <input type="checkbox"/> Check here and attach a separate list under each fuel used.					Others – <input type="checkbox"/> Check here and attach a separate list under each fuel used.				

- Fuel Table:** Diesel Bio Diesel B100 Bio Diesel B20 Blend Gasoline  
 Natural Gas Landfill Gas Digester Gas Liquid Petroleum Gas (LPG)
- Maximum fuel use rate units: gallon/hr for liquid fuels and SCF/hr for gaseous fuels. (SCF = Standard Cubic Foot)
- The annual fuel usage is the actual or projected engine fuel consumption over a rolling 12-month time period. Annual usage units: gallons for liquid fuel, therms for natural gas, and SCF for other gaseous fuels. (therm = 100,000 BTUs, BTU = British Thermal Unit)
- If you are using diesel, natural gas, or gasoline, you may skip this entry. Heat content units: BTU/gallon for liquid fuels, BTU/SCF for gaseous fuels. Sulfur content units: weight % for liquid fuels, ppmv for gaseous fuels. (ppmv = parts per million by volume)
- Emission factors may be reported as gram/brakehp-hr, or as lb per gallon, or as lb per therm, or as lb per SCF.
- See the Control Efficiency/Emission Factor Basis Code table under Section 3 on page 1 of this form.
- Place a check in this column if the emission factor applies to emissions after an add-on control device.

**7. CERTIFICATION** I hereby certify that all information contained herein is true and correct. (Please sign and date this form)

Josh Ambrose Public Works Superintendent [Signature] 6/14/2022  
 Name of person certifying (print) Title of person certifying Signature of person certifying Date



December 9, 2021

Prepared by

Zach Schulte  
 (206) 794-9801  
 zach.t.schulte@cummins.com

We are pleased to provide you this quotation based on your inquiry.

Item	Description	Qty
1	<p><b>DFEJ Commercial Diesel Generator Set, 450kW Standby 60Hz</b></p> <p>U.S. EPA, Stationary Emergency Application            450DFEJ, Diesel Genset, 60Hz, 450kW-Standby Rating            Duty Rating - Standby Power (ESP)            EPA, Tier 2, NSPS CI Stationary Emergency Emissions Certification            Fuel Tank - Sub Base, 850 Gallon, UL142 Compliant            Compliance - Fuel Tank, Michigan            Listing, ULC - S601 - 07            None Standards &amp; Compliance            Alarm - High Fuel Level, External with OFPV Override            Fuel Water Separator            Spill / Fill Box - Fuel with OFPV            Vent Extensions - Fuel Tank, 5 Inch Diameter            Control Mounting - Left Facing            PowerCommand 2.3 Controller            LCD Control Display            Relays - Genset Status, User Configured            Alarm - Audible, Engine Shutdown            Signals - Auxiliary, 8 Inputs / 8 Outputs            Relay - Alarm Shutdown            Control Display Language - English            Circuit Breaker or EB or TB - Right Only            Circuit Breaker or Terminal Box, Left - None            Circuit Breaker - 600A, Right Circuit Breaker on Right side, 3 - Pole, UL 600, IEC 690, 100%            IBC Seismic Certification            CB or EB or TB - None            Bottom Entry, Right            Engine Air Cleaner - Normal Duty            External Battery Charger - 12 Amp, Regulated            Engine Cooling - Radiator, 40C Ambient            Shutdown - Low Coolant Level            Coolant Heater - 208 / 240 / 480 Volts AC, 40F Minimum Ambient Temperature            Voltage - 277 / 480, 3 Phase, Wye, 4 Wire            ST 5 Year 2500 Hour Parts + Labor + Travel            Alternator - 60Hz, 12 Lead, Extended Range, 125 / 105C            Literature - English            Packing - None, Base Mounted Housing            Aluminum Sound Attenuated Level 2 Enclosure, with Exhaust System            Enclosure Color-Sandstone, Aluminum            Wind Rating-150 MPH, Aluminum Housing</p>	1
2	<p><b>OTECSEC, OTEC Service Entrance Transfer Switch-Electronic Control: 600A</b></p> <p>OTECSE600, Service Entrance TransferSwitch, PowerCommand, 600 Amp            Listing-UL 1008            IBC Seismic Certification            Application-Utility to Genset            Transfer Switch Warranty-5 Year Comprehensive            Cabinet-Type 3R            Poles-3 (Solid Neutral)            Frequency-60 Hz            System-3 Phase, 3 or 4 Wire</p>	1



**Sales and Service**

Project: 900 Emersion St PS City of Hoquiam  
 Quotation: Q-89598-20211209-1140

	Voltage-480 Volts AC Genset Starting Battery-24V DC PC40 Control Auxiliary Relay-Switch in Emergency Position-24 Volts DC Auxiliary Relay-Switch In Normal Position-24 Volts DC	
3	PC Lon Gateway, Lon Modbus, Lon Modbus/TCP Gateway	1
4	Generator starting batteries, 4D	2
5	Delivery direct to site, off-loading by others. No storage or additional handling included.	1
6	Start up and 2 hour load test, generator starting battery to be installed at the time of start up	1
7	Sourcewell Contract # 25920	1

**TOTAL: \$ 113,548.00**

Quote value does not include any tax.

**EXCEPTIONS AND CLARIFICATIONS:**

No specification or electrical drawings provided or reviewed for this proposal.

**COVID 19 SUPPLEMENTAL STATEMENT**

AS A RESULT OF THE OUTBREAK OF THE DISEASE COVID-19 ARISING FROM THE NOVEL CORONAVIRUS, TEMPORARY DELAYS IN DELIVERY, LABOUR OR SERVICES FROM CUMMINS AND ITS SUB-SUPPLIERS OR SUBCONTRACTORS MAY OCCUR. AMONG OTHER FACTORS, CUMMINS' DELIVERY OBLIGATIONS ARE SUBJECT TO CORRECT AND PUNCTUAL SUPPLY FROM OUR SUB-SUPPLIERS OR SUBCONTRACTORS, AND CUMMINS RESERVES THE RIGHT TO MAKE PARTIAL DELIVERIES OR MODIFY ITS LABOUR OR SERVICE. WHILE CUMMINS SHALL MAKE EVERY COMMERCIALY REASONABLE EFFORT TO MEET THE DELIVERY, SERVICE OR COMPLETION OBLIGATIONS SET FORTH HEREIN, SUCH DATES ARE SUBJECT TO CHANGE.

**INTERNATIONAL BUILDING CODE (IBC) CERTIFICATION**

The products in this quotation identified as meeting the requirements of the 2009 IBC have been certified by their respective manufactures via a combination of analytical testing and shaker table testing. Not all products have been shaker table tested.

**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT (OSHDP)**

OSHDP seismic requirements are continuing to evolve. Please contact Cummins for the most current requirements for meeting OSHDP applications.

**SELECTIVE COORDINATION FOR NATIONAL ELECTRIC CODE (NEC) ARTICLE 700 AND 701 LOADS**

Cummins generators are equipped with the manufacturer's recommended circuit breaker. Information regarding this device can be supplied upon request. This quotation is not valid if any changes to this circuit breaker(s) is required to coordinate with other devices in the electrical distribution system. If changes are required, the customer must provide a copy of the coordination study listing the manufacturers part number of the disconnect device to be supplied with the generator and a revised quotation will be issued.

**TRANSFER SWITCH WITHSTAND AND CLOSE RATINGS**

Transfer switch(es), if included in this quotation, require a withstand and closing rating (WCR) capable of meeting the available upstream fault current (kAIC). The WCR may be based on a specific breaker rating or a time-based rating, and it is the responsibility of a qualified facility designer or engineer to verify compatibility. In the event that the proposed transfer switch(es) are not compatible, the transfer switch(es) will need to be re-quoted to ensure compatibility. A full listing of the WCR can be provided upon request and will be included as part of the submittal package.

**CUMMINS STANDARD EXCLUSIONS**

**Exhaust System**

All off-engine piping, hangers, flanges, gaskets, bolts, insulation, other materials and labor to install.

**Fuel System**

All fuel piping and materials not limited to; supply, return, venting, valves, coolers, filters, pumps, fittings, primary fuel regulator, storage tank & senders, external to genset package. All fuel for testing and initial fill. Fuel tank vent extensions and flame arrestors unless specifically listed in the Bill of Materials.

**Cooling System**

Intake louvers, exhaust louvers, air dampers, sheet metal ducting, flex adapters, sound attenuators/baffles. All off engine piping, flexible connections, labor and coolant for remote cooling systems.

**Electrical**

All off-engine wiring, field terminations of wiring, and lugs other than those detailed in our submittal. Mounting



## Sales and Service

Project: 900 Emersion St PS City of Hoquiam  
Quotation: Q-89598-20211209-1140

Mounting bolts and anchors. Vibration isolators (if included) may be shipped loose for installation at the jobsite by others. Seismic engineering calculations.

### Electrical Testing

Not limited to International Electrical Testing Association (NETA), infrared scanning, harmonic content or other independent agency testing of switchgear, switchboards, protective relays, circuit breaker, electrical coordination studies, arc flash studies and reactive load site testing.

### Environmental Testing

Environmental Protection Agency (EPA), local air quality district or other Authority Having Jurisdiction (AHJ), including acoustical.

### Programming

All protective relay settings, breaker settings, PLC programming or other user configurable device programming.

### Documentation

Electronic submittals and operation and maintenance manuals will be provided. Printed copies are available upon request, additional charges may apply.

### Miscellaneous

Site specific labeling. Exhaust backpressure, airflow restriction or vibration analysis

### Design

Cummins is not responsible for system design or engineering and does not guarantee system performance standards. Cummins will supply documentation and reasonable assistance to others responsible for system engineering, design and performance.

### Taxes and Permit

Any applicable sales tax, permits, fees, licenses.

### Bonds

Any bid bond, payment or performance bond or other type of bond.

**All items listed above are excluded and will only be supplied by Cummins if agreed upon, in writing, by a sales representative for Cummins.**

### NOTES:

### LEAD TIME:

#### Submittals

Typical submittal lead time is 2 - 3 weeks after receipt of purchase order.

#### Equipment

Current lead-time is 38 - 40 weeks after submittal approval and release for production.

Please feel free to contact me if you require any additional information; or if you have any further questions or concerns that I may be of assistance with.

Thank you for choosing Cummins.

### Submitted by:

**Zach Schulte, Territory Manager**

[zach.t.schulte@cummins.com](mailto:zach.t.schulte@cummins.com)

(206) 794-9801

**SUBMITTALS.** An order for the equipment covered by this quotation will be accepted on a hold for release basis. Your order will not be released and scheduled for production until written approval to proceed is received in our office. Such submittal approval shall constitute acceptance of the terms and conditions of this quotation unless the parties otherwise agree in writing.

**THERE ARE ADDITIONAL CONTRACT TERMS AND CONDITIONS ATTACHED TO THIS QUOTATION, INCLUDING LIMITATIONS OF WARRANTIES AND LIABILITIES, WHICH ARE EXPRESSLY INCORPORATED HEREIN. BY ACCEPTING THIS QUOTATION, CUSTOMER ACKNOWLEDGES THAT THE CONTRACT TERMS AND CONDITIONS HAVE BEEN READ, FULLY UNDERSTOOD AND ACCEPTED.**



**Sales and Service**

Project: 900 Emersion St PS City of Hoquiam  
Quotation: Q-89598-20211209-1140

Brian J. Shay, City Administrator  
Authorized Signature

1/11/2021  
Date

City of Hoquiam  
Company Name

Brian J. Shay, City Administrator  
Printed Name & Title

N/A  
Purchase Order No

<Rest of the page is intentionally left blank>





**TERMS AND CONDITIONS FOR SALE OF POWER GENERATION EQUIPMENT**

These Terms and Conditions for Sale of Power Generation Equipment, together with the Quote, Sales Order, and/or Credit Application on the front side or attached hereto, are hereinafter referred to as this "Agreement" and shall constitute the entire agreement between the customer identified in the quote ("Customer") and Cummins Inc. ("Cummins") and supersede any previous representation, statements, agreements or understanding (oral or written) between the parties with respect to the subject matter of this Agreement. No prior inconsistent course of dealing, course of performance, or usage of trade, if any, constitutes a waiver of, or serves to explain or interpret, the Terms and Conditions set forth in this Agreement. Electronic transactions between Customer and Cummins will be solely governed by the Terms and Conditions of this Agreement, and any terms and conditions on Customer's website or other internet site will be null and void and of no legal effect on Cummins. In the event Customer delivers, references, incorporates by reference, or produces any purchase order or document, any terms and conditions related thereto shall be null and void and of no legal effect on Cummins.

**SCOPE**

Cummins shall supply power generation equipment and any related parts, materials and/or services expressly identified in this Agreement (collectively, "Equipment"). No additional services, parts or materials are included in this Agreement unless agreed upon by the parties in writing. The Quote is based upon the assumption that the Equipment will be reasonably available and is not subject to unusual market fluctuations. In the event of unusual and/or unanticipated price fluctuations and/or shortage of materials ("Fluctuations"), Cummins reserves the right to adjust the estimated delivery time and/or the price to reflect such Fluctuations. Subject to the foregoing, any Quote is valid for 60 days, and the price is firm provided drawings are approved and returned within 60 days after submission and ship date is not extended beyond published lead times. Any delays may result in escalation charges. A Sales Order for Equipment is accepted on hold for release basis. The Sales Order will not be released and scheduled for production until written approval to proceed is received. A Quote is limited to plans and specifications section set forth in the Quote. No other sections shall apply. Additional requirements for administrative items may require additional costs. The Quote does not include off unit wiring, off unit plumbing, offloading, rigging, installation, exhaust insulation or fuel, unless otherwise stated. Cummins makes no representation or assurance as to the Equipment complying with any Buy America or Buy American laws, regulations, or requirements unless specifically provided in the Quote.

**SHIPPING; DELIVERY; DELAYS**

Unless otherwise agreed in writing by the parties, Equipment shall be delivered FOB origin, freight prepaid to first destination. For consumer and mobile products, freight will be charged to Customer. Unless otherwise agreed to in writing by the parties, packaging method, shipping documents and manner, route and carrier and delivery shall be as Cummins deems appropriate. Cummins may deliver in installments. A reasonable storage fee, as determined by Cummins, may be assessed if delivery of the Equipment is delayed, deferred, or refused by Customer. Offloading, handling, and placement of Equipment and crane services are the responsibility of Customer and not included unless otherwise stated. All shipments are made within normal business hours, Monday through Friday. Any delivery, shipping, installation, or performance dates indicated in this Agreement are estimated and not guaranteed. Further, delivery time is subject to confirmation at time of order and will be in effect after engineering drawings have been approved for production. Cummins shall use best efforts to meet estimated dates, but shall not be liable to customer or any third party for any delay in delivery, shipping, installation, or performance, however occasioned, including any delays in performance that result from Fluctuations or directly or indirectly from acts of Customer or any unforeseen event, circumstance, or condition beyond Cummins' reasonable control including, but not limited to, acts of God, actions by any government authority, civil strife, fires, floods, windstorms, explosions, riots, natural disasters, embargos, wars, strikes or other labor disturbances, civil commotion, terrorism, sabotage, late delivery by Cummins' suppliers, fuel or other energy shortages, or an inability to obtain necessary labor, materials, supplies, equipment or manufacturing facilities.

**AS A RESULT OF THE OUTBREAK OF THE DISEASE COVID-19 ARISING FROM THE NOVEL CORONAVIRUS, TEMPORARY DELAYS IN DELIVERY, LABOUR OR SERVICES FROM CUMMINS AND ITS SUB-SUPPLIERS OR SUBCONTRACTORS MAY OCCUR. AMONG OTHER FACTORS, CUMMINS' DELIVERY OBLIGATIONS ARE SUBJECT TO CORRECT AND PUNCTUAL SUPPLY FROM OUR SUB-SUPPLIERS OR SUBCONTRACTORS, AND CUMMINS RESERVES THE RIGHT TO MAKE PARTIAL DELIVERIES OR MODIFY ITS LABOUR OR SERVICE. WHILE CUMMINS SHALL MAKE EVERY COMMERCIALY REASONABLE EFFORT TO MEET THE DELIVERY, SERVICE OR COMPLETION OBLIGATIONS SET FORTH HEREIN, SUCH DATES ARE SUBJECT TO CHANGE.**

**PAYMENT TERMS; CREDIT; RETAINAGE**

Unless otherwise agreed to by the parties in writing and subject to credit approval by Cummins, payments are due thirty (30) days from the date of the invoice. If Customer does not have approved credit with Cummins, as solely determined by Cummins, payments are due in advance or at the time of supply of the Equipment. If payment is not received when due, in addition to any rights Cummins may have at law, Cummins may charge Customer eighteen percent (18%) interest annually on late payments, or the maximum amount allowed by law. Customer agrees to pay Cummins' costs and expenses (including reasonable attorneys' fees) related to Cummins' enforcement and collection of unpaid invoices, or any other enforcement of this Agreement by Cummins. Retainage is not acceptable nor binding, unless required by statute or accepted and confirmed in writing by Cummins prior to shipment.

**TAXES; EXEMPTIONS**

Unless otherwise stated, the Quote excludes all applicable local, state and federal sales and/or use taxes, permits and licensing. Customer must provide a valid resale or exemption certificate prior to shipment of Equipment or applicable taxes will be added to the invoice.

**TITLE; RISK OF LOSS**

Unless otherwise agreed in writing by the parties, title and risk of loss for the Equipment shall pass to Customer upon delivery of the Equipment by Cummins to freight carrier or to Customer at pickup at Cummins' facility.

**INSPECTION AND ACCEPTANCE**

Customer shall inspect the Equipment upon delivery, before offloading, for damage, defects, and shortage. Any and all claims which could have been discovered by such inspection shall be deemed absolutely and unconditionally waived unless noted by Customer on the bill of lading. Where Equipment is alleged to be non-conforming or defective, written notice of defect must be given to Cummins within three (3) days from date of delivery after which time Equipment shall be deemed accepted. Cummins shall have a commercially reasonable period of time in which to correct such non-conformity or defect. If non-conformity or defect is not eliminated to Customer's satisfaction, Customer may reject the Equipment (but shall protect the Equipment until returned to Cummins) or allow Cummins another opportunity to undertake corrective action. In the event startup of the Equipment is included in the services, acceptance shall be deemed to have occurred upon successful startup.

**LIEN; SECURITY AGREEMENT**

Customer agrees that Cummins retains all statutory lien rights. To secure payment, Customer grants Cummins a Purchase Money Security Interest in the Equipment. If any portion of the balance is due to be paid following delivery, Customer agrees to execute and deliver such security agreement, financing statements, deed of trust and such other documents as Cummins may request from time to time in order to permit Cummins to obtain and maintain a perfected security interest in the Equipment; or in the alternative, Customer grants Cummins a power of attorney to execute and file all financing statements and other documents needed to perfect this security interest. Cummins may record this Agreement, bearing Customer's signature, or copy of this Agreement in lieu of a UCC-1, provided that it shall not constitute an admission by Cummins of the applicability or non-applicability of the UCC nor shall the failure to file this form or a UCC-1 in any way affect, alter, or invalidate any term, provision, obligation or liability under this Agreement. The security interest shall be superseded if Customer and Cummins enter into a separate security agreement for the Equipment. Prior to full payment of the balance due, Equipment will be kept at Customer's location noted in this Agreement, will not be moved without prior notice to Cummins, and is subject to inspection by Cummins at all reasonable times.

**CANCELLATION; CHARGES**

Orders placed with and accepted by Cummins may not be cancelled except with Cummins' prior written consent. If Customer seeks to cancel all or a portion of an order placed pursuant to this Agreement, and Cummins accepts such cancellation in whole or in part, Customer shall be assessed cancellation charges as follows: (i) 10% of total order price if cancellation is received in Cummins' office after Cummins has provided submittals and prior to releasing equipment to be manufactured; (ii) 25% of total order price if cancellation is received in Cummins' office after receipt of submittal release to order, receipt of a purchase order for a generator already on order with the factory, or is asked to make any hardware changes to the equipment already on order with the factory; (iii) 50% of total order price if cancellation is received in Cummins' office 60 or fewer days before the scheduled shipping date on the order; or (iv) 100% of total order price if cancellation is received in Cummins' office after the equipment has shipped from the manufacturing plant.

**MANUALS**

Unless otherwise stated, electronic submittals and electronic operation and maintenance manuals will be provided, and print copies may be available upon Customer's request at an additional cost.

**TRAINING; START UP SERVICES; INSTALLATION**

Startup services, load bank testing, and owner training are not provided unless otherwise stated. Site startup will be subject to the account being current and will be performed during regular Cummins business hours, Monday to Friday. Additional charges may be added for work requested to be done outside standard business hours, on weekends, or holidays. One visit is allowed unless specified otherwise in the Quote. A minimum of two-week prior notice is required to schedule site startups and will be subject to prior commitments and equipment and travel availability. A signed site check sheet confirming readiness will be required, and Cummins personnel may perform an installation audit prior to the startup being completed. Any issues identified by the installation audit shall be corrected at the Customer's expense prior to the start-up. Portable load banks for site test (if offered in the Quote) are equipped with only 100 feet of cable. Additional lengths may be arranged at an extra cost. Cummins is not responsible for any labor or materials charged by others associated with start-up and installation of Equipment, unless previously agreed upon in writing. Supply of fuel for start-up and/or testing, fill-up of tank after start up, or change of oil is not included unless specified in the Quote. All installation/execution work at the site including, but not limited to: civil, mechanical, electrical, supply of wall thimbles, exhaust extension pipe, elbows, hangers, expansion joints, insulation and cladding materials, fuel/oil/cooling system piping, air ducts, and louvers/dampers is not included unless specified in the Quote. When an enclosure or sub-base fuel tank (or both) are supplied, the openings provided for power cable and fuel piping entries, commonly referred to as "stub-ups", must be sealed at the site by others before commissioning. All applications, inspections and/or approvals by authorities are to be arranged by Customer.

**MANUFACTURER'S WARRANTY**

Equipment purchased hereunder is accompanied by an express written manufacturer's warranty ("Warranty") and, except as expressly provided in this Agreement, is the only warranty offered on the Equipment. A copy of the Warranty is available upon request. While this Agreement and the Warranty are intended to be read and applied in conjunction, where this Agreement and the Warranty conflict, the terms of the Warranty shall prevail.

**WARRANTY PROCEDURE**



Prior to the expiration of the Warranty, Customer must give notice of a warrantable failure to Cummins and deliver the defective Equipment to a Cummins location or other location authorized and designated by Cummins to make the repairs during regular business hours. Cummins shall not be liable for towing charges, maintenance items such as oil filters, belts, hoses, etc., communication expenses, meals, lodging, and incidental expenses incurred by Customer or employees of Customer, "downtime" expenses, overtime expenses, cargo damages and any business costs and losses of revenue resulting from a warrantable failure.

**LIMITATIONS ON WARRANTIES THE REMEDIES PROVIDED IN THE WARRANTY AND THIS AGREEMENT ARE THE SOLE AND EXCLUSIVE WARRANTIES AND REMEDIES PROVIDED BY CUMMINS TO THE CUSTOMER UNDER THIS AGREEMENT. EXCEPT AS SET OUT IN THE WARRANTY AND THIS AGREEMENT, AND TO THE EXTENT PERMITTED BY LAW, CUMMINS EXPRESSLY DISCLAIMS ALL OTHER REPRESENTATIONS, WARRANTIES, ENDORSEMENTS, AND CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY STATUTORY OR COMMON LAW IMPLIED REPRESENTATIONS, WARRANTIES AND CONDITIONS OF FITNESS FOR A PURPOSE OR MERCHANTABILITY.**

The limited warranty does not cover Equipment failures resulting from: (a) inappropriate use relative to designated power rating; (b) inappropriate use relative to application guidelines; (c) inappropriate use of an EPA-SE application generator set relative to EPA's standards; (d) normal wear and tear; (e) improper and/or unauthorized installation; (f) negligence, accidents, or misuse; (g) lack of maintenance or unauthorized or improper repair; (h) noncompliance with any Cummins published guideline or policy; (i) use of improper or contaminated fuels, coolants, or lubricants; (j) improper storage before and after commissioning; (k) owner's delay in making Equipment available after notification of potential Equipment problem; (l) replacement parts and accessories not authorized by Cummins; (m) use of battle short mode; (n) owner or operator abuse or neglect such as: operation without adequate coolant, fuel, or lubricants; over fueling; over speeding; lack of maintenance to lubricating, fueling, cooling, or air intake systems; late servicing and maintenance; improper storage, starting, warm-up, running, or shutdown practices, or for progressive damage resulting from a defective shutdown or warning device; or (o) damage to parts, fixtures, housings, attachments and accessory items that are not part of the generating set.

**INDEMNITY**

Customer shall indemnify, defend and hold harmless Cummins from and against any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, brought against or incurred by Cummins related to or arising out of this Agreement or the Equipment supplied under this Agreement (collectively, the "Claims"), where such Claims were caused or contributed to by, in whole or in part, the acts, omissions, fault or negligence of the Customer. Customer shall present any Claims covered by this Indemnity to its insurance carrier unless Cummins directs that the defense will be handled by Cummins' legal counsel at Customer's expense.

**LIMITATION OF LIABILITY NOTWITHSTANDING ANY OTHER TERM OF THIS AGREEMENT, IN NO EVENT SHALL CUMMINS, ITS OFFICERS, DIRECTORS, EMPLOYEES, OR AGENTS BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING WITHOUT LIMITATION DOWNTIME, LOSS OF PROFIT OR REVENUE, LOSS OF DATA, LOSS OF OPPORTUNITY, DAMAGE TO GOODWILL, ENHANCED DAMAGES, MONETARY REQUESTS RELATING TO RECALL EXPENSES AND REPAIRS TO PROPERTY, AND/OR DAMAGES CAUSED BY DELAY) IN ANY WAY RELATED TO OR ARISING FROM CUMMINS' SUPPLY OF EQUIPMENT UNDER THIS AGREEMENT OR THE USE OR PERFORMANCE OF EQUIPMENT SUPPLIED UNDER THIS AGREEMENT. IN NO EVENT SHALL CUMMINS' LIABILITY TO CUSTOMER OR ANY THIRD PARTY CLAIMING DIRECTLY THROUGH CUSTOMER OR ON CUSTOMER'S BEHALF UNDER THIS AGREEMENT EXCEED THE TOTAL COST OF EQUIPMENT SUPPLIED BY CUMMINS UNDER THIS AGREEMENT GIVING RISE TO THE CLAIM. BY ACCEPTANCE OF THIS AGREEMENT, CUSTOMER ACKNOWLEDGES CUSTOMER'S SOLE REMEDY AGAINST CUMMINS FOR ANY LOSS SHALL BE THE REMEDY PROVIDED HEREIN EVEN IF THE EXCLUSIVE REMEDY UNDER THE WARRANTY IS DEEMED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE.**

**DEFAULT; REMEDIES**

Customer shall be in breach and default if: (a) any of the payments or amounts due under this Agreement are not paid; (b) Customer fails to comply, perform, or makes any misrepresentation relating to any of the Customer's obligations or covenants under this Agreement; or (c) prior to full payment of the balance due, Customer ceases to do business, becomes insolvent, makes an assignment for the benefit of its creditors, appoints a receiver, commences an action for dissolution or liquidation, or becomes subject to bankruptcy proceedings, or the Equipment is attached, levied upon, seized under legal process, is subjected to a lien or encumbrance, or transferred by operation of law or otherwise to anyone other than Cummins. Upon the occurrence of any event of Customer's default, Cummins, at its sole option and without notice, shall have the right to exercise concurrently or separately any one or all of the following remedies, which shall be cumulative and not alternative: (a) to declare all sums due, and to become due, under this Agreement immediately due and payable; (b) to commence legal proceedings, including collection actions and specific performance proceedings, to enforce performance by Customer of any and all provisions of this Agreement, and to be awarded damages or injunctive relief for the Customer's breach; (c) to require the Customer to deliver the Equipment to Cummins' branch specified on the face of this Agreement; (d) to exercise one or more of the rights and remedies available to a secured party under applicable law; and (e) to enter, without notice or liability or legal process, onto any premises where the Equipment may be located, using force permitted by law, and there to disconnect, remove and repossess the Equipment, the Customer having waived further right to possession after default. A waiver of any event of default by Cummins shall not be a waiver as to any other or subsequent default.

**CUSTOMER REPRESENTATIONS; RELIANCE**

Customer is responsible for obtaining, at its cost, permits, import licenses, and other consents in relation to the Equipment, and if requested by Cummins, Customer shall make these permits, licenses, and consents available to Cummins prior to shipment. Customer represents that it is familiar with the Equipment and understands operating instructions and agrees to perform routine maintenance services. Until the balance is paid in full, Customer shall care for the Equipment properly, maintain it in good operating condition, repair and appearance; and Customer shall use it safely and within its rated capacity and only for purpose it was designed. Even if Customer's purchase of Equipment from Cummins under this Agreement is based, in whole or in part, on specifications, technical information, drawings, or written or verbal advice of any type from third parties, Customer has sole responsibility for the accuracy, correctness and completeness of such specifications, technical information, drawings, or advice. Cummins make no warranties or representations respecting the accuracy, correctness and completeness of any specifications, technical information, drawings, advice or other information provided by Cummins. Cummins makes no warranties or representations respecting the suitability, fitness for intended use, compatibility, integration or installation of any Equipment supplied under this Agreement. Customer has sole responsibility for intended use, for installation and design and performance where it is part of a power, propulsion, or other system. Limitation of warranties and remedies and all disclaimers apply to all such technical information, drawings, or advice. Customer acknowledges and agrees by accepting delivery of the Equipment that the Equipment purchased is of the size, design, capacity and manufacture selected by the Customer, and that Customer has relied solely on its own judgment in selecting the Equipment.

**CONFIDENTIALITY**

Each party shall keep confidential any information received from the other that is not generally known to the public and at the time of disclosure, would reasonably be understood by the receiving party to be proprietary or confidential, whether disclosed in oral, written, visual, electronic, or other form, and which the receiving party (or agents) learns in connection with this Agreement including, but not limited to: (a) business plans, strategies, sales, projects and analyses; (b) financial information, pricing, and fee structures; (c) business processes, methods, and models; (d) employee and supplier information; (e) specifications; and (f) the terms and conditions of this Agreement. Each party shall take necessary steps to ensure compliance with this provision by its employees and agents.

**GOVERNING LAW AND JURISDICTION**

This Agreement and all matters arising hereunder shall be governed by and construed in accordance with the laws of the State of Indiana without giving effect to any choice or conflict of law provision. The parties agree that the courts of the State of Indiana shall have exclusive jurisdiction to settle any dispute or claim arising in connection with this Agreement.

**INSURANCE**

Upon Customer's request, Cummins will provide to Customer a Certificate of Insurance evidencing Cummins' relevant insurance coverage.

**ASSIGNMENT**

This Agreement shall be binding on the parties and their successors and assigns. Customer shall not assign this Agreement without the prior written consent of Cummins.

**INTELLECTUAL PROPERTY**

Any intellectual property rights created by either party, whether independently or jointly, in the course of the performance of this Agreement or otherwise related to Cummins pre-existing intellectual property or subject matter related thereto, shall be Cummins' property. Customer agrees to assign, and does hereby assign, all right, title, and interest to such intellectual property to Cummins. Any Cummins pre-existing intellectual property shall remain Cummins' property. Nothing in this Agreement shall be deemed to have given Customer a license or any other rights to use any of the intellectual property rights of Cummins.

**MISCELLANEOUS**

Cummins shall be an independent contractor under this Agreement. All notices under this Agreement shall be in writing and be delivered personally, mailed via first class certified or registered mail, or sent by a nationally recognized express courier service to the addresses set forth in this Agreement. No amendment of this Agreement shall be valid unless it is in writing and signed by the parties hereto. Failure of either party to require performance by the other party of any provision hereof shall in no way affect the right to require such performance at any time thereafter, nor shall the waiver by a party of a breach of any of the provisions hereof constitute a waiver of any succeeding breach. Any provision of this Agreement that is invalid or unenforceable shall not affect the validity or enforceability of the remaining terms hereof. These terms are exclusive and constitute entire agreement. Customer acknowledges that the provisions were freely negotiated and bargained for and Customer has agreed to purchase of the Equipment pursuant to these terms and conditions. Acceptance of this Agreement is expressly conditioned on Customer's assent to all such terms and conditions. Neither party has relied on any



statement, representation, agreement, understanding, or promise made by the other except as expressly set out in this Agreement. In the event of a conflict in the terms of this Agreement with any Customer terms or conditions or agreement (whether referenced in an order submitted by Customer as the terms that govern the purchase of the Equipment or otherwise) or any terms set forth in any other documentation of Customer with respect to the Equipment, the terms of this Agreement shall govern. Cummins may incur additional charges which will be passed on to the Customer, as applicable.

#### COMPLIANCE

Customer shall comply with all laws applicable to its activities under this Agreement, including, without limitation, any and all applicable federal, state, and local anti-bribery, environmental, health, and safety laws and regulations then in effect. Customer acknowledges that the Equipment, and any related technology that are sold or otherwise provided hereunder may be subject to export and other trade controls restricting the sale, export, re-export and/or transfer, directly or indirectly, of such Equipment or technology to certain countries or parties, including, but not limited to, licensing requirements under applicable laws and regulations of the United States, the United Kingdom and other jurisdictions. It is the intention of Cummins to comply with these laws, rules, and regulations. Any other provision of this Agreement to the contrary notwithstanding, Customer shall comply with all such applicable all laws relating to the cross-border movement of goods or technology, and all related orders in effect from time to time, and equivalent measures. Customer shall act as the importer of record with respect to the Equipment and shall not resell, export, re-export, distribute, transfer, or dispose of the Equipment or related technology, directly or indirectly, without first obtaining all necessary written permits, consents, and authorizations and completing such formalities as may be required under such laws, rules, and regulations. In addition, Cummins has in place policies not to distribute its products for use in certain countries based on applicable laws and regulations including but not limited to UN, U.S., UK, and European Union regulations. Customer undertakes to perform its obligations under this Agreement with due regard to these policies. Strict compliance with this provision and all laws of the territory pertaining to the importation, distribution, sales, promotion and marketing of the Equipment is a material consideration for Cummins entering into this Agreement with Customer and continuing this Agreement for its term. Customer represents and warrants that it has not and shall not, directly or through any intermediary, pay, give, promise to give or offer to give anything of value to a government official or representative, a political party official, a candidate for political office, an officer or employee of a public international organization or any other person, individual or entity at the suggestion, request or direction or for the benefit of any of the above-described persons and entities for the purposes of inducing such person to use his influence to assist Cummins in obtaining or retaining business or to benefit Cummins or any other person in any way, and will not otherwise breach any applicable laws relating to anti-bribery. Any failure by Customer to comply with these provisions will constitute a default giving Cummins the right to immediate termination of this Agreement and/or the right to elect not to recognize the warranties associated with the Equipment. Customer shall accept full responsibility for any and all civil or criminal liabilities and costs arising from any breaches of those laws and regulations and will defend, indemnify, and hold Cummins harmless from and against any and all fines, penalties, claim, damages, liabilities, judgments, costs, fees, and expenses incurred by Cummins or its affiliates as a result of Customer's breach.

**To the extent applicable, this contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability. The employee notice requirements set forth in 29 CFR Part 471, Appendix A to Subpart A, are hereby incorporated by reference into this contract.**

Check if this Agreement pertains to government work or facilities

## Generator set data sheet



**Model:** DFEJ  
**Frequency:** 60 Hz  
**Fuel type:** Diesel  
**kW rating:** 450 Standby  
 410 Prime  
**Emissions level:** EPA NSPS Stationary Emergency Tier 2

Exhaust emission data sheet:	EDS-184
Exhaust emission compliance sheet:	EPA-1025
Sound performance data sheet:	MSP-183
Cooling performance data sheet:	MCP-106
Prototype test summary data sheet:	PTS-145
Standard set-mounted radiator cooling outline:	0500-3326
Optional set-mounted radiator cooling outline:	
Optional heat exchanger cooling outline:	
Optional remote radiator cooling outline:	

Fuel consumption	Standby				Prime				Continuous
	kW (kVA)				kW (kVA)				kW (kVA)
Ratings	450 (563)				410 (513)				
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full	Full
US gph	10.8	17.4	23.4	30.1	10.2	16.2	21.9	27.7	
L/hr	41	66	89	114	39	61	83	105	

Engine	Standby rating	Prime rating	Continuous rating
Engine manufacturer	Cummins Inc.		
Engine model	QSX15-G9		
Configuration	Cast iron with replaceable wet cylinder liners, In-Line 6 cylinder		
Aspiration	Turbocharged and air-to-air after-cooled		
Gross engine power output, kW <sub>m</sub> (bhp)	563.0 (755.0)	507.3 (680.0)	
BMEP at set rated load, kPa (psi)	2192.5 (318.0)	2006.4 (291.0)	
Bore, mm (in.)	136.9 (5.39)		
Stroke, mm (in.)	168.9 (6.65)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	10.1 (1995.0)		
Compression ratio	17.0:1		
Lube oil capacity, L (qt)	83.3 (88.0)		
Overspeed limit, rpm	2150 ± 50		
Regenerative power, kW	52.00		

<b>Fuel flow</b>	<b>Standby rating</b>	<b>Prime rating</b>	<b>Continuous rating</b>
Maximum fuel flow, L/hr (US gph)	423.9 (112.0)		
Maximum fuel inlet restriction, mm Hg (in Hg)	127.0 (5.0)		
Maximum return restriction, mm Hg (in Hg)	165.1 (6.5)		

### **Air**

Combustion air, m <sup>3</sup> /min (scfm)	38.3 (1355.0)	36.8 (1300.0)	
Maximum air cleaner restriction, kPa (in H <sub>2</sub> O)	6.2 (25.0)		
Alternator cooling air, m <sup>3</sup> /min (cfm)	62.0 (2190.0)		

### **Exhaust**

Exhaust flow at set rated load, m <sup>3</sup> /min (cfm)	87.9 (3105.0)	82.4 (2910.0)	
Exhaust temperature, °C (°F)	462.8 (865.0)	440.6 (825.0)	
Maximum back pressure, kPa (in H <sub>2</sub> O)	10.2 (41.0)		

### **Standard set-mounted radiator cooling**

Ambient design, °C (°F)	40 (104)		
Fan load, kW <sub>m</sub> (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m <sup>3</sup> /min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O)	0.12 (0.5)		

### **Optional set-mounted radiator cooling**

Ambient design, °C (°F)	50 (122)		
Fan load, kW <sub>m</sub> (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m <sup>3</sup> /min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O)	0.12 (0.5)		

<b>Optional heat exchanger cooling</b>	<b>Standby rating</b>	<b>Prime rating</b>	<b>Continuous rating</b>
Set coolant capacity, L (US gal)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, after-cooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US gal/min)			
Maximum raw water flow, aftercooler circuit, L/min (US gal/min)			
Maximum raw water flow, fuel circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, after-cooler circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)			
Raw water delta P at min flow, jacket water circuit, kPa (psi)			
Raw water delta P at min flow, aftercooler circuit, kPa (psi)			
Raw water delta P at min flow, fuel circuit, kPa (psi)			
Maximum jacket water outlet temp, °C (°F)			
Maximum after-cooler inlet temp, °C (°F)			
Maximum after-cooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			
Maximum fuel return line restriction, kPa (in Hg)			

### **Optional remote radiator cooling<sup>1</sup>**

Set coolant capacity, L (US gal)			
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)			
Max flow rate at max friction head, aftercooler circuit, L/min (US gal/min)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum friction head, jacket water circuit, kPa (psi)			
Maximum friction head, aftercooler circuit, kPa (psi)			
Maximum static head, jacket water circuit, m (ft)			
Maximum static head, aftercooler circuit, m (ft)			
Maximum jacket water outlet temp, °C (°F)			
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			
Maximum aftercooler inlet temp, °C (°F)			
Maximum fuel flow, L/hr (US gph)			
Maximum fuel return line restriction, kPa (in Hg)			

## Weights<sup>2</sup>

Unit dry weight kgs (lbs)	4098 (9035)
Unit wet weight kgs (lbs)	4234 (9335)

### Notes:

<sup>1</sup> For non-standard remote installations contact your local Cummins representative.

<sup>2</sup> Weights represent a set with standard features. See outline drawing for weights of other configurations.

## Derating factors

<b>Standby</b>	<p>Genset may be operated at up to 2100 m (6889 ft) and 40°C (104°F) without power deration. For sustained operation above these conditions, derate by 3.0% per 305 m (1000 ft), and 9.5% per 10°C (9% per 18°F).</p> <p>Genset may be operated at up to 1350 m (4429 ft) and 50°C (122°F) without power deration. For sustained operation above these conditions, derate by 3.2% per 305 m (1000 ft), and 9.5% per 10°C (9% per 18°F).</p>
<b>Prime</b>	<p>Genset may be operated at up to 3200 m (10500 ft) and 40°C (104°F) without power deration. For sustained operation above these conditions, derate by 3% per 305 m (1000 ft), and 16.6% per 10°C (16.6% per 18°F).</p> <p>Genset may be operated at up to 2260 m (7414.7 ft) and 50°C (122°F) without power deration. For sustained operation above these conditions, derate by 3.2% per 305 m (1000 ft), and 16.6% per 10°C (16.6% per 18°F).</p>
<b>Continuous</b>	

## Ratings definitions

<b>Emergency Standby Power (ESP):</b>	<b>Limited-Time Running Power (LTP):</b>	<b>Prime Power (PRP):</b>	<b>Base Load (Continuous) Power (COP):</b>
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

## Alternator data

Three phase table <sup>1</sup>	105 °C	105 °C	125 °C	125 °C	125 °C	125 °C	125 °C	150 °C	150 °C	150 °C	150 °C
Feature code	B259	B301	B258	B252	B414	B246	B300	B426	B413	B424	B419
Alternator data sheet number	308	306	307	306	307	305	305	307	306	305	305
Voltage ranges	110/190 thru 139/240 220/380 thru 277/480	347/600	110/190 thru 139/240 220/380 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	277/480	347/600	110/190 thru 139/240 220/380 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	277/480	347/600
Surge kW	515	516	513	512	515	513	511	513	512	513	511
Motor starting kVA (at 90% sustained voltage)	Shunt										
	PMG	2429	1896	2208	1896	2208	1749	1749	2208	1896	1749
Full load current amps at Standby rating	$\frac{110/190}{1711}$	$\frac{120/208}{1563}$	$\frac{110/220}{1478}$	$\frac{115/230}{1414}$	$\frac{139/240}{1355}$	$\frac{220/380}{856}$	$\frac{230/400}{813}$	$\frac{240/416}{782}$	$\frac{255/440}{739}$	$\frac{277/480}{677}$	$\frac{347/600}{542}$

### Notes:

<sup>1</sup> Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor. Also see Note 3 below.

### Formulas for calculating full load currents:

#### Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

#### Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

**Warning:** Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor  
or visit [power.cummins.com](http://power.cummins.com)

**Our energy working for you.™**







# 2021 EPA Tier 2 Exhaust Emission Compliance Statement 450DFEJ Stationary Emergency 60 Hz Diesel Generator Set

**Compliance Information:**

The engine used in this generator set complies with Tier 2 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII.

Engine Manufacturer: Cummins Inc.  
 EPA Certificate Number: MCEXL015.AAJ-024  
 Effective Date: 06/10/2020  
 Date Issued: 06/10/2020  
 EPA Engine Family (Cummins Emissions Family): MCEXL015.AAJ

**Engine Information:**

Model: QSX/QSX15/QSX15-G/QSX15-G9      Bore: 5.39 in. (137 mm)  
 Engine Nameplate HP: 755      Stroke: 6.65 in. (169 mm)  
 Type: 4 Cycle, In-line, 6 Cylinder Diesel      Displacement: 912 cu. in. (15 liters)  
 Aspiration: Turbocharged and CAC      Compression ratio: 17.0:1  
 Emission Control Device: Electronic Control      Exhaust stack diameter: 8 in. (203 mm)

**Diesel Fuel Emission Limits**

**D2 Cycle Exhaust Emissions**

	Grams per BHP-hr			Grams per kWm-hr		
	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>	<u>NO<sub>x</sub> + NMHC</u>	<u>CO</u>	<u>PM</u>
Test Results	4.3	0.4	0.10	5.7	0.6	0.13
EPA Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20

**Test methods:** EPA emissions recorded per 40 CFR Part 60, 89, 1039, 1065 and weighted at load points prescribed in the regulations for constant speed engines.

**Diesel fuel specifications:** Cetane number: 40-50, Reference: ASTM D975 No. 2-D, 300-500 ppm Sulfur

**Reference conditions:** Air Inlet Temperature: 25 °C (77 °F), Fuel Inlet Temperature: 40 °C (104 °F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H<sub>2</sub>O/lb) of dry air; required for NO<sub>x</sub> correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to a maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.



# Exhaust Emission Data Sheet

## 450DFEJ

### 60 Hz Diesel Generator Set EPA NSPS Stationary Emergency

#### Engine Information:

Model:	Cummins Inc. QSX15-G9 NR 2	Bore:	5.39 in. (137 mm)
Nameplate BHP @ 1800 RPM:	755	Stroke:	6.65 in. (169 mm)
Type:	4 cycle, in-line, 6 cylinder diesel	Displacement:	912 cu. in. (14.9 liters)
Aspiration:	Turbocharged with air-to-air charge air cooling		
Compression Ratio:	17:1		
Emission Control Device:	Turbocharged with charge air-cooled		

<u>Performance Data</u>	<u>1/4</u> <u>Standby</u>	<u>1/2</u> <u>Standby</u>	<u>3/4</u> <u>Standby</u>	<u>Full</u> <u>Standby</u>	<u>Full</u> <u>Prime</u>
Engine HP @ Stated Load (1800 RPM)	185	344	502	661	605
Fuel Consumption (gal/Hr)	10.6	17.4	23.6	30.3	28.0
Exhaust Gas Flow (CFM)	1360	2000	2605	3110	2920
Exhaust Gas Temperature (°F)	735	820	810	865	825
 <u>Exhaust Emission Data</u>					
HC (Total Unburned Hydrocarbons)	0.22	0.08	0.06	0.12	0.11
NOx (Oxides of Nitrogen as NO <sub>2</sub> )	2.97	3.31	4.20	4.00	3.66
CO (Carbon Monoxide)	0.52	0.31	0.37	0.35	0.32
PM (Particulate Matter)	0.08	0.05	0.04	0.02	0.02
Smoke (Pierburg)	0.47	0.40	0.38	0.19	0.18

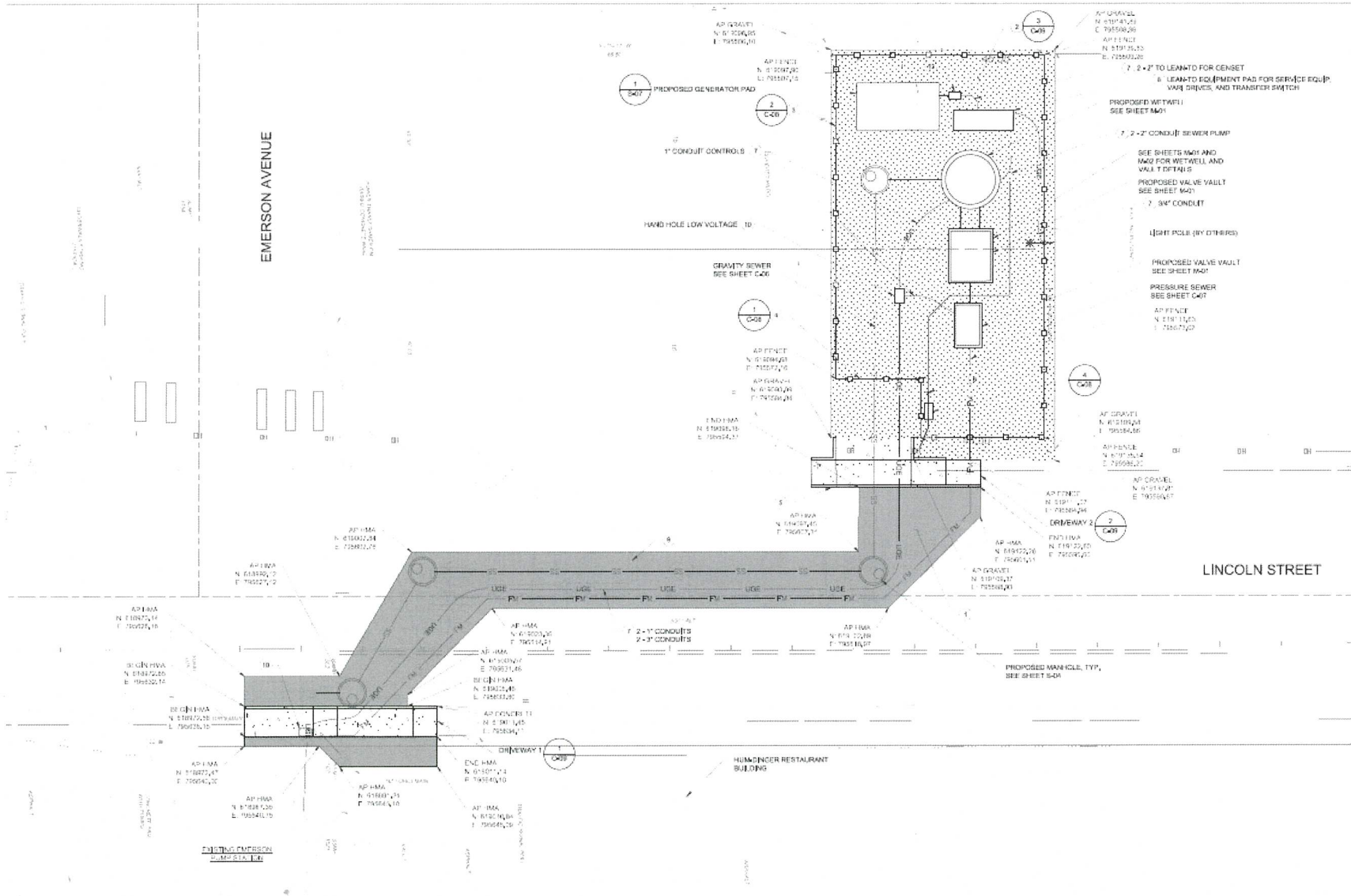
All values (except smoke) are cited: g/BHP-hr

#### Test Methods and Conditions

Steady-state emissions recorded per ISO8178-1 during operation at rated engine speed (+/- 2%) and stated constant load (+/- 2%) with engine temperatures, pressures and emission rated stabilized.

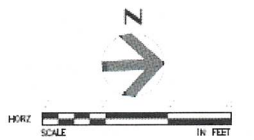
Fuel specification:	40-48 Cetane Number, 0.05 Wt.% max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.
Air Inlet Temperature:	25 °C (77 °F)
Fuel Inlet Temperature:	40 °C (104 °F)
Barometric Pressure:	100 kPa (29.53 in Hg)
Humidity:	10.7 g/kg (75 grains H <sub>2</sub> O/lb) of dry air (required for NOx correction)
Intake Restriction:	Set to maximum allowable limit for clean filter
Exhaust Back Pressure:	Set to maximum allowable limit

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.






- CONSTRUCTION NOTES**
1. H-H L L S S H-H S S E E H-H E E H-H E E
  2. H-H L L S S H-H S S E E H-H E E H-H E E
  3. H-H L L S S H-H S S E E H-H E E H-H E E
  4. H-H L L S S H-H S S E E H-H E E H-H E E
  5. H-H L L S S H-H S S E E H-H E E H-H E E
  6. H-H L L S S H-H S S E E H-H E E H-H E E
  7. H-H L L S S H-H S S E E H-H E E H-H E E
  8. H-H L L S S H-H S S E E H-H E E H-H E E
  9. H-H L L S S H-H S S E E H-H E E H-H E E
  10. H-H L L S S H-H S S E E H-H E E H-H E E

- GENERAL NOTES**
1. H-H L L S S H-H S S E E H-H E E H-H E E
  2. H-H L L S S H-H S S E E H-H E E H-H E E
  3. H-H L L S S H-H S S E E H-H E E H-H E E
  4. H-H L L S S H-H S S E E H-H E E H-H E E
  5. H-H L L S S H-H S S E E H-H E E H-H E E
  6. H-H L L S S H-H S S E E H-H E E H-H E E
  7. H-H L L S S H-H S S E E H-H E E H-H E E
  8. H-H L L S S H-H S S E E H-H E E H-H E E
  9. H-H L L S S H-H S S E E H-H E E H-H E E
  10. H-H L L S S H-H S S E E H-H E E H-H E E



PLEASE CALL 811 BEFORE YOU DIG

			DRAWN BY: T. PARENTEAU DESIGNED BY: D. KUHN CHECKED BY: D. APPELDATE SCALE: --- DATE: ---	CITY OF HOQUIAM PUBLIC WORKS DEPARTMENT EMERSON AVENUE WASTEWATER PUMP STATION ENLARGED SITE PLAN	SHEET NAME C-05
			1 NO.		ISSUE FOR BID REVISION



Search 202101364 - Hoquiam City of

## 202101364 - Hoquiam City of

**Lead Agency**  
Hoquiam City of**File #**  
SEPA 21-01**Contact**  
Brian Shay  
(360) 532-5700  
bshay@cityofhoquiam.com**County**  
GRAYS  
HARBOR**Region**  
Southwest**SEPA #** 202101364**Document Type** DNS**Date Issued** 03/18/2021**Comments Due** 04/01/2021**Proposal Name****Proposal Description**

Emerson Avenue Wastewater Pump Station Replacement. The City of Hoquiam (applicant) is proposing to construct a sanitary sewer wet well and associated equipment within 200 feet of the Shoreline. The new wet well facility would reduce or eliminate maintenance issues with the present combined sewer / storm water facility that is located within the shoreline on Lincoln at Emerson streets.

**Related Record****Location**  
Address 107 Lincoln Street, Hoquiam, WA  
Longitude -123.886000 Latitude 46.981360  
Parcel 053401001501**Applicant** City of Hoquiam**Applicant Contact****Documents**

-  202101364 ECV Comments.pdf (138 KB)
-  SEPA #21-01.pdf (2 MB)
-  SEPA #21-01 Determination & Amends.doc (50 KB)
-  SMA2 1-02 Notice of Application.docx (31 KB)

