

February 18, 2021

Mr. Brett Horton
Senior Compliance Analyst
PacifiCorp Energy, Hydro Resources
825 NE Multnomah, Suite 1500
Portland, OR 97232

Subject: Final Approval to Install New Replacement Generator Engines

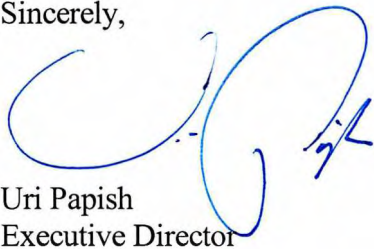
Dear Mr. Horton:

A final determination to issue Air Discharge Permit 21-3453 has been completed for Air Discharge Permit Application CO-1033 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for Air Discharge Permit Application CO-1033 was published on SWCAA's internet website on August 12, 2020. SWCAA did not receive a request for a public comment period in response to the public notice and has concluded that significant public interest does not exist for this determination. Therefore, a public comment period will not be provided for this permitting action. Electronic copies of Air Discharge Permit 21-3453 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (<http://www.swcleanair.org/permits/adpfinal.asp>). Original copies are enclosed for your files.

This Air Discharge Permit may be appealed directly to the Pollution Control Hearings Board (PCHB) at P.O. Box 40903, Olympia, Washington 98504-0903 within 30 days of receipt as provided in RCW 43.21B.

If you have any comments, or desire additional information, please contact me or Danny Phipps at (360) 574-3058, extension 124.

Sincerely,



Uri Papish
Executive Director

UP: dp

Enclosures: Air Discharge Permit ADP 21-3453 and Technical Support Document



SOUTHWEST CLEAN AIR AGENCY

**AIR DISCHARGE PERMIT
SWCAA 21-3453**

Issued: February 18, 2021

Facility Name: PacifiCorp Energy – Lewis River Hydroelectric Projects
Physical Location: Various

SWCAA ID: 1993

REVIEWED BY:


Paul T. Mairose, Chief Engineer



APPROVED BY:


Uri Papish, Executive Director

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. Equipment/Activity Identification	1
2. Approval Conditions	2
Emission Limits	2
Operating Limits and Requirements	4
Monitoring and Recordkeeping Requirements	4
Emission Monitoring and Testing Requirements	5
Reporting Requirements	5
3. General Provisions	6

1. Equipment/Activity Identification

ID No.	Generating Equipment/Activity	# of Units	Control Measure/Equipment	# of Units
1	Lewis River Hatchery Downstream Emergency Generator Engine	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - (≤ 100 hr/yr + emergency usage)	N/A
2	Lewis River Hatchery Upstream Emergency Generator Engine	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - (≤ 100 hr/yr + emergency usage) EPA Tier 1	N/A
3	Merwin Dam Emergency Generator Engine	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - (≤ 100 hr/yr + emergency usage)	N/A
4	Swift #1 Dam FSC Emergency Generator Engine	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - (≤ 100 hr/yr + emergency usage) EPA Tier 2	N/A
5	Woodland Release Ponds Emergency Generator Engine	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - (≤ 100 hr/yr + emergency usage) EPA Tier 3	N/A
6	Merwin Headquarters Emergency Generator Engine	1	Low ash fuel (propane) Limited operation - (≤ 100 hr/yr + emergency usage)	N/A
7	Speelyai Hatchery Emergency Generator Engine	1	Low ash fuel (propane) Limited operation - (≤ 100 hr/yr + emergency usage)	N/A
8	Yale Dam Emergency Generator Engine	1	Low ash fuel (propane) Limited operation - (≤ 100 hr/yr + emergency usage)	N/A
9	Swift #1 Dam Spillway Gate Emergency Generator Engine	1	Low ash fuel (propane) Limited operation - (≤ 100 hr/yr)	N/A
10	Camp Creek Radio Tower Generator Engine	1	Low ash fuel (propane) Limited operation - ($\leq 1,200$ hr/yr) EPA certification with 3-way catalyst	1
11	Marble Creek Radio Tower Generator Engine	1	Low ash fuel (propane) Limited operation - ($\leq 1,200$ hr/yr) EPA certification with 3-way catalyst	1
12	Swift Forest Camp Generator Engine #1	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - ($\leq 1,200$ hr/yr) EPA Tier 4 Final	N/A
13	Swift Forest Camp Generator Engine #2	1	Ultra low sulfur diesel ($\leq 0.0015\%$ S) Limited operation - ($\leq 1,200$ hr/yr) EPA Tier 4 Final	N/A

ID No.	Generating Equipment/Activity	# of Units	Control Measure/Equipment	# of Units
14	Merwin Hatchery Ozone Plant	1	1 ozone decomposer on headspace, 1 vertical stack from each of 2 stripping towers	3

2. Permit Terms and Conditions

The following tables detail the specific terms and conditions of this permit. In addition to the requirements listed below, equipment at this facility may be subject to additional federal, state, and local regulations. The permit term or requirement number is identified in the left hand column. The permit term or requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit term or condition applies is listed in the right hand column.

Air Discharge Permit 18-3309 is superseded in its entirety by this Air Discharge Permit.

Emission Limits

No.	Emission Limits	Equipment/Activity															
1.	<p>Annual emissions from the non-emergency Generator Engines must not exceed:</p> <table border="1"> <thead> <tr> <th>Generator Engine</th> <th>NO_x (tons)</th> <th>CO (tons)</th> </tr> </thead> <tbody> <tr> <td>Camp Creek Radio Tower</td> <td>0.005</td> <td>0.042</td> </tr> <tr> <td>Marble Creek Radio Tower</td> <td>0.005</td> <td>0.042</td> </tr> <tr> <td>Swift Forest Camp #1</td> <td>0.127</td> <td>0.042</td> </tr> <tr> <td>Swift Forest Camp #2</td> <td>0.127</td> <td>0.042</td> </tr> </tbody> </table> <p>Annual emissions must be calculated from actual hours of operation consistent with the methodology found in Section 6 of the Technical Support Document for this Permit.</p>	Generator Engine	NO _x (tons)	CO (tons)	Camp Creek Radio Tower	0.005	0.042	Marble Creek Radio Tower	0.005	0.042	Swift Forest Camp #1	0.127	0.042	Swift Forest Camp #2	0.127	0.042	10 - 13
Generator Engine	NO _x (tons)	CO (tons)															
Camp Creek Radio Tower	0.005	0.042															
Marble Creek Radio Tower	0.005	0.042															
Swift Forest Camp #1	0.127	0.042															
Swift Forest Camp #2	0.127	0.042															
2.	<p>Visible emissions from the Lewis River Hatchery Downstream Emergency Generator Engine, the Lewis River Hatchery Upstream Emergency Generator Engine, the Merwin Dam Emergency Generator Engine, the Swift #1 Dam FSC Caterpillar Emergency Generator Engine, Swift Forest Campground 1 and 2 Generator Engines, and the Woodland Release Ponds Emergency Generator Engine must not exceed five percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400) except during startup. For the purposes of this requirement, the startup period ends when the earlier of the following operating events occurs:</p> <ul style="list-style-type: none"> (a) The engine has reached normal operating temperature; or (b) The engine has been operating for 15 minutes. 	1 – 5, 12-13															

No.	Emission Limits	Equipment/ Activity									
3.	Visible emissions from the propane-fired generator engines (Merwin Headquarters Emergency Generator Engine, Speelyai Hatchery Emergency Generator Engine, Yale Dam Emergency Generator Engine, Swift #1 Dam Spillway Gate Emergency Generator Engine, Camp Creek Radio Tower Generator Engine, and Marble Creek Radio Tower Generator Engine) must not exceed zero percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400).	6 - 11									
4.	<p>Ozone emissions from the Merwin Hatchery Ozone Plant must not exceed:</p> <table border="1" data-bbox="203 577 1334 693"> <thead> <tr> <th data-bbox="203 577 576 613"><u>Source</u></th> <th data-bbox="576 577 1112 613"><u>Pounds per Hour (1-Hour Average)</u></th> <th data-bbox="1112 577 1334 613"><u>Tons Per Year</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="203 613 576 648">Ozone Decomposer</td> <td data-bbox="576 613 1112 648">0.10</td> <td data-bbox="1112 613 1334 648">0.46</td> </tr> <tr> <td data-bbox="203 648 576 684">Ozone Stripping Towers (combined)</td> <td data-bbox="576 648 1112 684">0.21</td> <td data-bbox="1112 648 1334 684">0.93</td> </tr> </tbody> </table> <p>Annual emissions must be calculated using the methodology described in the Technical Support Document for this Air Discharge Permit. Unless better information is developed, annual emissions from the ozone decomposer must be calculated using the annual air usage, a 3% conversion of oxygen to ozone, a 50% transfer of ozone to the water, and a 95% control efficiency in the ozone decomposer. Annual emissions from the ozone stripping towers must be calculated using a mass balance approach with the assumption that all ozone residual measured in the water is emitted out the stacks of the ozone stripping towers.</p>	<u>Source</u>	<u>Pounds per Hour (1-Hour Average)</u>	<u>Tons Per Year</u>	Ozone Decomposer	0.10	0.46	Ozone Stripping Towers (combined)	0.21	0.93	14
<u>Source</u>	<u>Pounds per Hour (1-Hour Average)</u>	<u>Tons Per Year</u>									
Ozone Decomposer	0.10	0.46									
Ozone Stripping Towers (combined)	0.21	0.93									

Operating Limits and Requirements

No.	Operating Limits and Requirements	Equipment/ Activity
5.	The diesel-fired generator engines must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engines must not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.	1 - 5, 12-13
6.	Operation of the emergency generator engines must be limited to maintenance checks, readiness testing, and as necessary to provide emergency power.	1 - 9
7.	Operation of each emergency generator engine for maintenance checks and readiness testing must not exceed 100 hours per year. A nonresettable time totalizer must be maintained on each engine and used to measure hours of operation.	1 - 9
8.	Operation of the Camp Creek Radio Tower Generator Engine, Marble Creek Radio Tower Generator Engine, and the Swift Camp Generator Engines must not exceed 1,200 hours per year each.	10 - 13
9.	The residual ozone concentration in the water immediately upstream of the stripping towers for the Merwin Hatchery Ozone Plant must not exceed 0.17 ppm (annual average).	14
10.	The Merwin Hatchery Ozone Stripping Tower and decomposer exhausts must be discharged vertically above the level of the adjacent buildings or structures. Any device that obstructs or prevents vertical discharge is prohibited.	14

No.	Operating Limits and Requirements	Equipment/ Activity
11.	Operations that cause or contribute to odors that unreasonably interfere with any other property owner's use and enjoyment of their property must use recognized good practice and procedures to reduce those odors to a reasonable minimum.	Facilitywide
12.	Emission units identified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.	Facilitywide

Monitoring and Recordkeeping Requirements

No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity
13.	<p>The following information must be collected, recorded at the intervals specified below, and readily available on-site for inspection:</p> <ul style="list-style-type: none"> (a) The number of hours each engine identified in this Permit is operated must be recorded for each calendar year; (b) Maintenance activities that may impact emissions from the generator engines or Merwin Hatchery Ozone Plant must be logged for each occurrence; (c) The sulfur content of the diesel fuel burned in the diesel-fired generator engines must be determined and recorded for each fuel delivery. A fuel supplier certification may be used in lieu of actual fuel testing; (d) The residual ozone concentration in the Merwin Hatchery Ozone Plant stripping tower influents must be determined and recorded at least once per week when in operation; (e) The total amount of water treated in the Merwin Hatchery Ozone Plant must be determined and recorded for each calendar year; (f) The total amount of air used in the Merwin Hatchery Ozone Plant must be determined and recorded for each calendar year. This may be accomplished by recording the air flow rate and pressure weekly during operation; (g) Upset conditions that cause excess emissions must be recorded for each occurrence; and (h) All air quality related complaints, including odor complaints, received by the permittee regarding activities controlled by the Permittee and the results of any subsequent investigation or corrective action must be recorded for each occurrence. 	Facilitywide
14.	With the exception of data logged by a computerized data acquisition system, each record required by this Air Discharge Permit must include the date and the name of the person making the record entry.	Facilitywide
15.	All records required by this Air Discharge Permit must be available on site for a minimum period of no less than three years and must be available for inspection by SWCAA representatives.	Facilitywide

Emission Monitoring and Testing Requirements

No.	Emission Monitoring and Testing Requirements	Equipment/ Activity
16.	<p>The ozone concentration in the exhaust of the ozone decomposer at the Merwin Hatchery Ozone Plant must be measured at least once every 6 calendar months with a colorimetric detector tube or other measurement technique pre-approved by SWCAA. At least one test must be conducted between October 15th and November 30th of each year. If the measured concentration exceeds 200 ppm, the Permittee must either determine the mass emission rate within one week for comparison with the permitted emission limit, or replace the ozone catalyst.</p> <p>The ozone concentration must be measured no later than one week after each catalyst replacement.</p>	14

Reporting Requirements

No.	Reporting Requirements	Equipment/ Activity
17.	<p>Excess emissions must be reported to SWCAA as follows:</p> <ul style="list-style-type: none"> (a) As soon as possible, but no later than 12 hours after discovery for emissions that represent a potential threat to human health or safety; (b) As soon as possible, but no later than 48 hours after discovery for emissions which the permittee wishes to claim as unavoidable pursuant to SWCAA 400-107(1); and (c) No later than 30 days after the end of the month of discovery for all other excess emissions. 	Facilitywide
18.	Deviations from permit conditions must be reported no later than 30 days after the end of the month during which the deviation is discovered.	Facilitywide
19.	All air quality related complaints received by the Permittee regarding activities controlled by the Permittee must be reported to SWCAA within three days of receipt.	Facilitywide
20.	<p>The following emissions related records must be reported to SWCAA by March 15th for the previous calendar year:</p> <ul style="list-style-type: none"> (a) The number of hours each generator engine was operated; (b) The average residual ozone concentration in the Merwin Hatchery Ozone Plant stripping tower influents; (c) The total amount of water treated in the Merwin Hatchery Ozone Plant; and (d) The total amount of air used in the Merwin Hatchery Ozone Plant. 	Facilitywide
21.	Air emissions of criteria air pollutants, volatile organic compounds, toxic air pollutants (TAPs), and hazardous air pollutants (HAPs) must be reported annually to SWCAA by March 15 th for the previous calendar year.	Facilitywide

3. General Provisions

No.	General Provisions
A.	The equipment specified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.
B.	For the purpose of ensuring compliance with this Permit, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the permittee's premises and the facilities being constructed, owned, operated and/or maintained by the permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this Permit and applicable regulations and to perform or require such tests as may be deemed necessary.
C.	The provisions, terms and conditions of this Permit shall be deemed to bind the permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the permittee.
D.	The requirements of this Permit shall survive any transfer of ownership of the source or any portion thereof.
E.	This Permit must be posted conspicuously at or be readily available near the source.
F.	Approval to construct, install, or modify specific pollution generating equipment becomes invalid if construction or installation is not commenced within eighteen months after the date of issuance of this Permit, if construction or installation is discontinued for a period of eighteen months or more, or if construction or installation is not completed within a reasonable time.
G.	This Permit does not supersede requirements of other Agencies with jurisdiction and further, this Permit does not relieve the permittee of any requirements of any other governmental Agency. In addition to this Permit, the permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
H.	Compliance with the terms of this Permit does not relieve the permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70A.15, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
I.	If any provision of this Permit is held to be invalid, all unaffected provisions of the Permit shall remain in effect and be enforceable.
J.	No change in this Permit shall be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the permittee for the relief sought.
K.	The Southwest Clean Air Agency may, in accordance with RCW 70.94 impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this Permit, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

State Environmental Policy Act

DETERMINATION OF SEPA EXEMPT - SWCAA 21-003

Description of proposal:

ADP Application CO-1033: Replacement of propane and diesel generators with new diesel and propane generators. The proposed project is limited to replacement of existing emission units with new emission units of similar type and configuration. This project is exempt from SEPA requirements pursuant to WAC 197-11-800(3) since it only involves repair, remodeling, maintenance, or minor alteration of existing structures, equipment, or facilities, and does not involve material expansions or changes in use.

Proponent: Pacificorp Energy (Brett Horton, Senior Compliance Analyst)

Location of proposal, including street address if any:

Swift Forest Campground and Swift Dam Spillway Gate

Lead agency: Southwest Clean Air Agency

The lead agency for this proposal has determined that the proposed project is exempt from SEPA under WAC 197-11-800(3) as follows: "The repair, remodeling, maintenance, or minor alteration of existing private or public structures, facilities or equipment, including utilities, recreation, and transportation facilities involving no material expansions or changes in use beyond that previously existing; ..." The proposed project is identified as maintenance of existing equipment and as such it does not have a probable significant impact on the environment. Neither an environmental checklist nor an environmental impact statement (EIS) is required under RCW 43.21C.030(2)(c). This decision was made by the lead agency after review of the proponent's proposal and the information on file with the lead agency. This information is available to the public on request.

This project/permitting action by SWCAA is SEPA exempt.

Responsible official: Paul T. Mairose, P.E.

Position/title: Chief Engineer

Address: Southwest Clean Air Agency
11815 NE 99th St, Suite 1294
Vancouver, WA 98682-2322

Phone: (360) 574-3058, ext 130

Signature: Paul T. Mairose

Date: 2/18/2021

