

- 34 6. The facility has the potential to emit (PTE) up to 342 tons (310 megagrams) per year of nitrogen oxides.
35 PTE of equipment that was originally permitted but not installed has been deleted from the original 491
36 tons (445 megagrams) per year PTE value.
- 37 7. The facility has the potential to emit up to 366 tons (332 megagrams) per year of carbon monoxide.
38 PTE of equipment that was originally permitted but not installed has been deleted from the original 473
39 tons (429 megagrams) per year PTE value.
- 40 8. The facility has the potential to emit up to 100 tons (90.7 megagrams) per year of sulfur dioxide. PTE
41 of equipment that was originally permitted but not installed has been deleted from the original 188 tons
42 (171 megagrams) per year PTE value.
- 43 9. The facility has the potential to emit up to 82 tons (74 megagrams) per year of volatile organic
44 compounds (VOC). PTE of equipment that was originally permitted but not installed has been deleted
45 from the original 91 (83 megagrams) tons per year PTE value.
- 46 10. The facility has the potential to emit up to 74 tons (67 megagrams) per year of total particulate matter
47 (PM). PTE of equipment that was originally permitted but not installed has been deleted from the
48 original 95 tons (86 megagrams) per year PTE value.
- 49 11. The facility has the potential to emit up to 70 tons (64 megagrams) per year of particulate matter less
50 than 10 micrometers (PM₁₀). PTE of equipment that was originally permitted but not installed has been
51 deleted from the original 87 tons (80 megagrams) per year PTE value.
- 52 12. The emissions of nitrogen oxides, carbon monoxide, sulfur dioxide, VOC, PM, and PM₁₀ are subject to
53 PSD review.
- 54 13. Best available control technology (BACT) will be used to control air pollutants from the proposed
55 project.
- 56 14. The project nitrogen oxides (as NO₂) emissions will consume up to 1.3 µg/m³ of the 25 µg/m³ PSD
57 increment. The project will have no other significant adverse impact on air quality.
- 58 15. The project is anticipated to have no noticeable affect on industrial, commercial, or residential growth.
- 59 16. Visibility will not be impaired in any Class I area due to the proposed emissions.
- 60 17. Ambient pollutant concentrations in any Class I area are not predicted to change due to the project.
- 61 18. Ecology finds that all requirements for PSD have been satisfied. Approval of the PSD application is
62 granted subject to the following conditions.

64 **APPROVAL CONDITIONS**

- 65 1. NO_x emissions from each gas turbine/heat recovery steam generator system stack when gas is fired
66 shall not exceed 7 parts per million on a volume basis (ppmdv) corrected to 15 percent oxygen on a
67 daily average, and also shall not exceed 33 pounds (15 kilograms) per hour on a daily average. NO_x
68 emissions from each gas turbine/heat recovery steam generator system stack when oil is fired shall
69 not exceed 12 ppmdv corrected to 15% O₂ on a daily average, and also shall not exceed 60 pounds
70 (27 kilograms) per hour on a daily average. Initial compliance shall be determined by EPA Reference
71 Method 20 of 40 CFR Part 60, Appendix A as of July 1, 1990. Compliance shall also be determined
72 for each stack by a continuous emission monitoring system (CEMS) which meets the requirements of
73 Condition 8.
- 74
- 75 2. CO emissions from each gas turbine/heat recovery steam generator system stack shall not exceed 20
76 ppmdv corrected to 15% O₂ on an hourly average. CO emissions from each gas turbine/heat recovery
77 steam generator system stack shall not exceed 44 pounds (20 kilograms) per hour. Compliance shall
78 be determined by annual EPA Reference Method 10 or 10A of 40 CFR Part 60, Appendix A as of
79 July 1, 1990. A test plan shall be submitted for Ecology approval at least 30 days prior to annual
80 testing.
- 81 3. The gas turbines shall burn either pipeline natural gas or No. 2 fuel oil with sulfur content of no more
82 than 0.05 weight percent. The heat recovery steam generator duct burners shall burn only pipeline
83 natural gas. The facility may burn no more than 20.4 million gallons (77.2 million liters) of low
84 sulfur No. 2 fuel oil per calendar year. Tenaska shall maintain records of fuel oil usage and sulfur
85 content as required by Ecology.
- 86 4. SO₂ emissions from each gas turbine/heat recovery steam generator system stack when gas is burned
87 in the turbines shall not exceed 12 pounds (5.4 kilograms) per hour on an hourly average. SO₂
88 emissions from each gas turbine/heat recovery steam generator system stack when fuel oil is burned
89 in the turbines shall not exceed 59 pounds (27 kilograms) on an hourly average. Initial compliance
90 shall be determined by EPA Reference Method 6 of 40 CFR Part 60 Appendix A as of July 1, 1990,
91 or an equivalent method approved by Ecology.
- 92 5. PM₁₀ emissions from each gas turbine/heat recovery steam generator system stack when gas or fuel
93 oil is burned in the turbines shall not exceed 0.0022 grain per dry standard cubic foot (0.0050 grams
94 per dry cubic meter) corrected to 15 percent oxygen (gr/DSCF at 15% O₂) and shall not exceed 13
95 pounds (5.9 kilograms) on an hourly average. Compliance shall be determined by EPA Reference

- 96 Method 5 of 40 CFR Part 60 Appendix A as of July 1, 1990, EPA Method 201 or 201A of 40 CFR
97 Part 51, Appendix M as of July 1, 1990, or an equivalent method approved by Ecology.
- 98 6. VOC emissions from each gas turbine/heat recovery steam generator system stack shall not exceed 15
99 pounds (6.8 kilograms) per hour on an hourly average. Compliance shall be determined by EPA
100 Reference Method 25A of 40 CFR Part 60, Appendix A as of July 1, 1990 or an equivalent method
101 approved by Ecology.
- 102 7. Opacity from each gas turbine/heat recovery steam generator system stack shall not exceed 5 percent
103 as measured by EPA Reference Method 9 of 40 CFR Part 60, Appendix A as of July 1, 1990.
- 104 8. Any CEMS used by Tenaska to measure NO_x or O₂ emissions shall, at a minimum, conform to EPA
105 Title 40 Code of the Federal Regulations, Part 60, Appendix B Performance Specifications as of
106 July 1, 1990. In addition, before initial start-up a continuous emission monitoring quality control plan
107 conforming with 40 CFR 60 Appendix F and acceptable to Ecology shall be made available and
108 Ecology may require the plan to be periodically updated.
- 109 9. CEMS and process data shall be reported in written form to the Northwest Air Pollution Authority
110 (NWAPA) and Ecology at least monthly (unless a different testing and reporting schedule has been
111 approved by Ecology) within thirty days of the end of each calendar month and in a format approved
112 by Ecology. For each occurrence of monitored emissions in excess of the standard the report shall
113 include the following:
- 114 9.1. The time of the occurrence.
115 9.2. Magnitude of the emission or process parameters excess.
116 9.3. The duration of the excess.
117 9.4. The probable cause.
118 9.5. Corrective actions taken or planned.
- 119 10. Within 60 days after achieving maximum production, but not later than 180 days after startup,
120 Tenaska shall conduct performance tests for NO_x, SO₂, CO, VOC, PM₁₀, opacity, and ammonia on
121 each combustion turbine, to be performed by an independent testing firm. A test plan shall be
122 submitted for Ecology approval at least 30 days prior to testing.
- 123 11. Tenaska must participate in an ambient air monitoring program directed by the U. S. Forest Service in
124 consultation with Ecology.
- 125 12. Operation of the equipment must be conducted in compliance with all data and specifications
126 submitted as part of the PSD application unless otherwise approved by Ecology.

127 13. This approval shall become void if construction of the project is not commenced within eighteen (18)
128 months after receipt of final approval, or if construction of the project is discontinued for a period of
129 eighteen (18) months.

130 14. Any activity undertaken by Tenaska Washington or others, in a manner that is inconsistent with the
131 application and this determination, shall be subject to enforcement under applicable regulations.
132 Nothing in this determination shall be construed so as to relieve Tenaska Washington of its
133 obligations under any state, local, or federal laws or regulations.

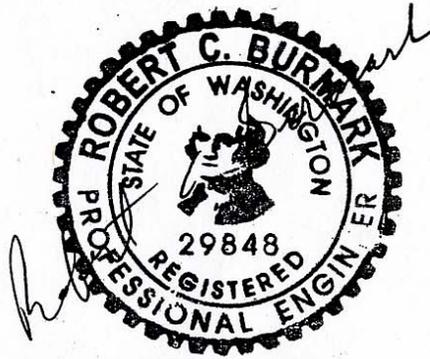
134 15. Tenaska Washington shall notify the department in writing at least thirty days prior to startup.

135 16. Access to the facility by the U.S. Environmental Protection Agency (EPA), department, state or local
136 regulatory personnel shall be permitted upon request for the purpose of compliance assurance
137 inspections. Failure to allow access is grounds for enforcement under federal and state law.

138 Reviewed by:

139 Robert C. Burmark
140 Robert C. Burmark, P.E.
141 Engineering and Technical Services
142 Washington Department of Ecology

11/12/99
Date



143 Approved by:

144 Mary E. Burg
145 Mary E. Burg
146 Program Manager, Air Quality Program
147 Washington Department of Ecology

11.17.99
Date

148 Barbara McAllister
149 Barbara McAllister
150 Director, Office of Air Quality
151 US Environmental Protection Agency Region 10

1/19/00
Date

EXPIRES 1-4-02

Summary of Permit Conditions for each Gas Turbine/Heat Recovery Steam Generator Stack³					
Pollutant	Permit Limit	Averaging Time	Approved Test Method	Source Test Frequency	Reporting Frequency
NO_x	Natural Gas Fired ¹ : 7 ppmdv @ 15% O ₂ and 33 lb/hr (15 Kg/hr) (Duct burners may burn gas only, not oil) Oil Fired ² : 12 ppmdv @ 15% O ₂ and 60 lb/hr (27 Kg/hr)	Daily	RM 20 , CEM	Initial Annual RATA	Monthly
CO	20 ppmdv @ 15% O ₂ 44 lb/hr (20 Kg/hr)	Hourly	RM 10 or 10A,	Annual	Annual
SO₂	Natural Gas Fired: 12 lb/hr (5.4 Kg/hr) Oil Fired: 59 lb/hr (27 Kg/hr)	Hourly	RM 6 , Fuel monitoring	Initial test and fuel monitoring	Monthly
PM₁₀	0.0022 grains per dry standard cubic foot (0.0050 grams per standard cubic meter) @ 15% O ₂ 13 lb/hr (5.9 Kg/hr)	Hourly	RM 5, RM 201 or 201A, or equivalent method approved by Ecology	Initial	Annual
VOC	15 lb/hr (6.8 Kg/hr)	Hourly	RM 25A or equivalent method approved by Ecology	Initial	Annual
Opacity	5%		RM 9		Monthly

1. “Natural Gas fired” means combusting pipeline quality natural gas only
2. “Oil Fired” means combusting No. 2 fuel oil with sulfur content of no more than 0.05 weight percent The two turbines in total are limited to combusting 20.4 million gallons (77.2 million liters) of oil per calendar year.
3. This table is a summary of the permit’s conditions. If there is a conflict between this table and a permit provision, the written permit provision takes precedence.