

July 30, 2001

Mr. Ruud van der Salm, President
Lewis River Flowers, Inc.
35702 NW Toenjes Road
Woodland, WA 98674

Subject: Final Approval for Two Cleaver Brooks Boilers

Dear Mr. Van der Salm:

We have not received any adverse response from the public relative to the Preliminary Determination of Order of Approval SWCAA 01-2374 for your Notice of Construction Number CL-1523 submittal. Based upon the lack of critical response and the fact that more than 15 days time has passed since your draft order was sent to you, we are pleased to issue your final Order of Approval.

This Order of Approval 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 of this Order as provided in RCW 43.21B. This Order may also be appealed as provided in SWCAA 400-250.

Thank you for your attention in this matter.

Sincerely,

Robert D. Elliott
Executive Director

RDE:wls
Attachment

1 IN THE MATTER OF COMPLIANCE WITH RCW)
2 70.94 AND THE GENERAL REGULATIONS FOR) SWCAA 01-2374
3 AIR POLLUTION SOURCES OF THE SOUTHWEST) ORDER OF APPROVAL
4 CLEAN AIR AGENCY)
5 Lewis River Flowers, Inc. RESPONDENT)
6 Woodland, Washington)

8 **BACKGROUND**

- 9 1. Respondent submitted Notice of Construction (NOC) number CL-1523 dated May 15, 2001
10 for installation and operation of two Cleaver Brooks boilers at 35702 Toenjes Road in
11 Woodland, Clark County, Washington.
- 12 2. Information contained in NOC CL-1523 indicated that:
- 13 a. Respondent operates a flower growing and processing facility located in northern
14 Clark County. The facility includes agricultural fields, greenhouses, processing
15 equipment, and product storage areas.
- 16 b. Respondent uses two Cleaver Brooks boilers to provide space heating and process
17 steam for the facility's greenhouses. The Cleaver Brooks boilers were installed at
18 the facility in June 1990. An NOC application was not submitted to SWCAA prior
19 to installation, and the boilers were not approved prior to operation. The two boilers
20 are described as:
- 21 (1) One Cleaver Brooks model CB 200-100 boiler. The CB 200-100 boiler is
22 fired solely on natural gas with a maximum rated heat input of 4.19
23 MMBtu/hr. The CB 200-100 boiler was manufactured on June 1, 1990.

1 Maximum rated fuel consumption is 68.5 cfm of natural gas (@1,020
2 Btu/ft³); and

3 (2) One Cleaver Brooks model CB 700-150 boiler. The CB 700-150 boiler is
4 fired solely on natural gas with a maximum rated heat input of 6.27
5 MMBtu/hr. The CB 700-150 boiler was manufactured on June 9, 1988.
6 Maximum rated fuel consumption is 102.5 cfm of natural gas (@1,020
7 Btu/ft³).

8 c. No other equipment has been installed at the facility that requires review by
9 SWCAA.

10 3. Field Notice of Correction (FNOC) number 2455 was issued to the Respondent on April
11 2, 2001 for installation of two natural gas fired boilers without prior review and approval
12 by SWCAA. Corrective action was identified as submission of a Notice of Construction
13 (NOC) application for the two boilers by May 14, 2001.

14 4. Emissions to the ambient atmosphere from the Cleaver Brooks boilers, as proposed in NOC
15 CL-1523, consist of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic
16 compounds (VOC), particulate matter (PM), sulfur dioxide (SO₂).

17 a. Data provided by the manufacturer indicate that exhaust gas emission concentrations
18 while firing on natural gas can be maintained below the following:

<u>Pollutant</u>	<u>Emission Concentration</u>
NO _x	100 ppmv @ 3% O ₂
CO	200 ppmv @ 3% O ₂

22 b. Data from combustion analyzer sampling of the proposed boilers show the following
23 emission concentrations while firing on natural gas:

1	<u>Pollutant</u>	<u>Emission Concentration</u>
2	NO _x	97 ppmv @ 5.7-5.8% O ₂
3	CO	2-8 ppmv @ 5.7-5.8% O ₂

4 Combustion analyzer results from the proposed Cleaver Brooks boilers indicate that
5 exhaust gas concentrations of CO can be maintained below 100 ppmv @ 3% O₂
6 while firing on natural gas.

7 c. Emissions from operation of the Cleaver Brooks boilers based on natural gas fuel,
8 emission factors from the manufacturer, emission factors calculated via EPA
9 Method 19, a maximum combined heat input rate of 10.46 MMBtu/hr, and 8760
10 hours of operation per year are estimated to be:

11	<u>Pollutant</u>	<u>Emissions Factor</u>	<u>Source</u>	<u>Emissions</u>
12	NO _x	0.12 lbs/MMBtu	Cleaver Brooks	5.50 tpy
13	CO	0.074 lbs/MMBtu	Method 19 (@ 100 ppmv)	3.39 tpy
14	PM	0.01 lbs/MMBtu	Cleaver Brooks	0.46 tpy
15	VOC	0.016 lbs/MMBtu	Cleaver Brooks	0.73 tpy
16	SO ₂	0.001 lbs/MMBtu	Cleaver Brooks	0.05 tpy

- 17 5. Respondent certifies that, based upon the above described parameters:
- 18 a. The equipment and systems as herein described are acceptable to other agencies
19 with jurisdiction.
- 20 b. No other emission sources, activities, or points of atmospheric discharge or
21 contemporaneous emission increases are being proposed for installation at this time.

22 **APPLICABLE REGULATIONS**

23 6. Regulations have been established for the control of air pollutants emitted to the ambient air.
24 Regulations applicable to the proposed facility which have been used to evaluate the

1 acceptability of the proposed facility and establish emission limits and control requirements
2 include, but are not limited to, the following regulations, codes or requirements. These
3 items establish maximum emission limits that could be allowed and are not to be exceeded
4 for new or existing facilities. More stringent limits are established in this Order consistent
5 with implementation of Best Available Control Technology:

6 a. Title 40 CFR 60.40c et seq. (Subpart Dc) "Standards of Performance for Small
7 Industrial-Commercial-Institutional Steam Generating Units" applies to any steam
8 generating unit with a heat input greater than or equal to 10 million Btu/hr, but less
9 than or equal to 100 million Btu/hr constructed, modified, or reconstructed after June
10 9, 1989. The Cleaver Brooks boilers listed in this Order are rated at less than 10.0
11 MMBtu/hr each. Therefore, this regulation is not applicable.

12 b. RCW 70.94.141 empowers any activated air pollution control authority to prepare
13 and develop a comprehensive plan or plans for the prevention, abatement and
14 control of air pollution within its jurisdiction. An air pollution control authority
15 may issue such orders as may be necessary to effectuate the purposes of the
16 Washington Clean Air Act [RCW 70.94] and enforce the same by all appropriate
17 administrative and judicial proceedings subject to the rights of appeal as provided
18 in Chapter 62, Laws of 1970 ex. sess.

19 c. RCW 70.94.152 requires that no approval to construct or alter an air contaminant
20 source shall be granted unless all known available and reasonable means of
21 emissions control are provided and that the operation will not aid in the
22 contravention of ambient air quality standards.

23 d. RCW 70.94.152 provides for the inclusion of conditions of operation as are
24 reasonably necessary to assure the maintenance of compliance with the applicable

1 ordinances, resolutions, rules and regulations when issuing an Order of Approval for
2 installation and establishment of an air contaminant source.

3 e. WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" requires Best
4 Available Control Technology for toxic air pollutants (T-BACT), identification and
5 quantification of emissions of toxic air pollutants and demonstration of protection of
6 human health and safety.

7 f. WAC 173-470 "Ambient Air Quality Standards for Particulate Matter" established
8 ambient air quality standards for total suspended particulate matter and for
9 particulate matter smaller than 10 microns (PM₁₀), which may not be exceeded more
10 than one day per year.

11 g. WAC 173-474 "Ambient Air Quality Standards for Sulfur Oxides" establishes
12 ambient air quality standards for sulfur oxides in the ambient air, measured as sulfur
13 dioxide, which shall not exceed:

14 (1) Four-tenths part per million (0.4 ppm) by volume average for a one-hour
15 period more than once per one-year period;

16 (2) Twenty-five one-hundredths part per million (0.25 ppm) by volume average
17 for a one-hour period more than twice in a consecutive seven-day period;

18 (3) One-tenth part per million (0.1 ppm) by volume average for a one-day period
19 more than once per one-year period; and

20 (4) Two one-hundredths part per million (0.02 ppm) by volume average for a
21 one-year period.

22 h. WAC 173-475 "Ambient Air Quality Standards for Carbon Monoxide, Ozone, and
23 Nitrogen Dioxide" establishes ambient air quality standards for carbon monoxide,
24 ozone, and nitrogen dioxide in the ambient air, which shall not be exceeded.

- 1 i. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new
2 and existing sources and emission units to meet certain performance standards with
3 respect to Reasonably Available Control Technology (RACT), visible emissions,
4 fallout, fugitive emissions, odors, emissions detrimental to persons or property,
5 sulfur dioxide, concealment and masking, and fugitive dust.
- 6 j. SWCAA 400-040(1) "Visible Emissions" requires that no emission of an air
7 contaminant from any emissions unit shall exceed twenty percent opacity for more
8 than three minutes in any one hour at the emission point, or within a reasonable
9 distance of the emission point.
- 10 k. SWCAA 400-040(3) "Fugitive Emissions," requires that reasonable precautions
11 shall be taken to prevent the fugitive release of air contaminants to the atmosphere.
- 12 l. SWCAA 400-040(4) "Odors" requires that any person who shall cause or allow the
13 generation of any odor from any source, which may unreasonably interfere with any
14 other property owner's use and enjoyment of their property must use recognized
15 good practices and procedures to reduce these odors to a reasonable minimum.
- 16 m. SWCAA 400-040(6) "Sulfur Dioxide" requires that no person shall emit a gas
17 containing in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected
18 to 7% O₂ or 12% CO₂ as required by the applicable emission standard for
19 combustion sources.
- 20 n. SWCAA 400-040(8) "Fugitive Dust Sources" requires that reasonable precautions
21 be taken to prevent fugitive dust from becoming airborne, and minimize
22 emissions.
- 23 o. SWCAA 400-050 "Emission Standards for Combustion and Incineration Units"
24 requires that all provisions of SWCAA 400-040 be met and that no person shall

1 cause or permit the emission of particulate matter from any general process
2 operation in excess of 0.23 grams per dry cubic meter (0.1 grains per dry standard
3 cubic foot) of exhaust gas at standard conditions.

4 p. SWCAA 400-110 "New Source Review" requires that a Notice of Construction
5 application be filed with SWCAA prior to the establishment of any new source or
6 emission unit or modification and that an Order of Approval be issued prior to
7 establishment of the new source or emission unit or modification.

8 q. SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable
9 Areas" requires that no approval to construct or alter an air contaminant source shall
10 be granted unless it is evidenced that:

11 (1) The equipment or technology is designed and will be installed to operate
12 without causing a violation of the applicable emission standards;

13 (2) Best Available Control Technology will be employed for all air
14 contaminants to be emitted by the proposed equipment;

15 (3) The proposed equipment will not cause any ambient air quality standard to
16 be exceeded; and

17 (4) If the proposed equipment or facility will emit any toxic air pollutant
18 regulated under WAC 173-460, the proposed equipment and control
19 measures will meet all the requirements of that Chapter.

20 **REGULATORY FINDINGS**

21 7. The proposed equipment and control systems incorporate Best Available Control
22 Technology (BACT) for the types and amounts of air contaminants emitted by the processes
23 as described below:

1 a. The use of low-sulfur fuel (natural gas), burner design, and combustion controls has
2 been determined to meet the requirements of BACT for the types and quantities of
3 emissions from boilers at this facility.

4 8. The Cleaver Brooks boilers, as proposed in NOC CL-1523, will not cause the ambient air
5 quality standards established by Washington Administrative Code (WAC) 173-470
6 "Ambient Air Quality Standards for Particulate Matter", WAC 173-474 "Ambient Air
7 Quality Standards for Sulfur Oxides", WAC 173-475 "Ambient Air Quality Standards for
8 Carbon Monoxide, Ozone, and Nitrogen Dioxide", and Title 40 Code of Federal
9 Regulations Part 50 (40 CFR 50) "National Primary and Secondary Ambient Air Quality
10 Standards" to be violated.

11 9. The Cleaver Brooks boilers, as proposed in NOC CL-1523, if properly installed and
12 maintained, can be operated without causing a violation of emission standards for sources as
13 established under Southwest Clean Air Agency General Regulations Sections 400-040
14 "General Standards for Maximum Emissions", 400-050 "Emission Standards for
15 Combustion and Incineration Units", and 400-060 "Emission Standards for General Process
16 Units".

17 **EMISSION LIMITS/REQUIREMENTS**

18 NOW, HAVING CONSIDERED THIS MATTER AND BEING DULY ADVISED, IT IS
19 HEREBY ORDERED:

20 **OPERATIONAL REQUIREMENTS**

21 10. THAT, the Cleaver Brooks boilers, as described in NOC CL-1523, be approved, subject to
22 the requirements presented below and in Appendices A, B, and C:

1 a. Emission concentrations from operation of the Cleaver Brooks boilers listed in this
2 Order shall not exceed:

3 <u>Pollutant</u>	<u>Emission Limit</u>
4 NOx	100 ppmv @ 3% O ₂
5 CO	100 ppmv @ 3% O ₂

6 b. Emissions from operation of the Cleaver Brooks boilers listed in this Order shall not
7 exceed:

8 <u>Pollutant</u>	<u>Emission Limit</u>
9 NOx	5.5 tpy
10 CO	3.4 tpy
11 VOC	0.75 tpy
12 PM	0.5 tpy

13 Compliance with the above emission limits shall be determined based on annual fuel
14 consumption and the emission factors listed in section 4.c of this Order.

15 c. Visible emissions from the Cleaver Brooks boilers shall not exceed zero percent
16 opacity for more than 3 minutes in any one hour period as determined by a Certified
17 Observer certified in accordance with 40 CFR 60, Appendix A, Method 9 "Visual
18 Determination of the Opacity of Emissions From Stationary Sources" with data
19 acquisition and reduction as provided in SWCAA 400, Appendix A "SWCAA
20 Method 9".

21 d. Operations that cause or contribute to a nuisance odor shall use recognized good
22 practice and procedures to reduce these odors to a reasonable minimum.

23 e. The Cleaver Brooks boilers shall be fired on natural gas only.

1 f. The Cleaver Brooks boilers shall be tuned annually with a combustion analyzer.
2 Emissions tuning shall include quantification of NO_x, CO, CO₂, and O₂ emission
3 concentrations. Corrective action shall be initiated within three (3) days if tuning
4 results indicate emissions in excess of the limits in Section 10.a of this Order.
5 Corrective action includes, but is not limited to, maintenance activity, retesting
6 with a calibrated combustion analyzer pursuant to Appendix C, or reference method
7 testing pursuant to Appendix B. Corrective action shall be pursued until NO_x and
8 CO emission concentrations are in compliance with the limits in Section 10.a of this
9 Order. Emissions data collected via calibrated analyzer or reference method testing
10 are considered to be a compliance demonstration, and may provide the basis for
11 enforcement action.

12 g. The Cleaver Brooks boilers shall be emissions tested within 180 days after issuance
13 of this Order. Emissions testing shall be performed in accordance with Appendix B
14 or Appendix C of this Order at the discretion of the owner/operator.

15 h. An Operations and Maintenance (O/M) log, including the date and name of the
16 person making each entry, shall be maintained for the Cleaver Brooks boilers listed
17 in this Order to document the following:

- 18 (1) Maintenance activity recorded for each occurrence;
- 19 (2) Combined boiler fuel consumption recorded monthly;
- 20 (3) Tuning results recorded for each occurrence; and
- 21 (4) Upset conditions or breakdowns recorded for each occurrence.

22 The O/M log shall be kept available on site for inspection by SWCAA
23 representatives. All records shall be maintained for a minimum period of three (3)
24 years.

1 i. The following records shall be reported to SWCAA as indicated below:

2 (1) Combined boiler fuel consumption reported by March 15th for the previous
3 calendar year;

4 (2) Tuning results reported within 15 days of tuning completion;

5 (3) Emissions testing results reported within 30 days of test completion;

6 (4) Estimate of air emissions reported by March 15th for the previous calendar
7 year; and

8 (5) Upset conditions reported to SWCAA as soon as possible in accordance with
9 SWCAA 400-107.

10 11. THAT, the emission units specified in NOC CL-1523 shall be maintained and operated in
11 total and continuous conformity with the emissions levels afforded by BACT. If the
12 requirements specified in this section and Appendix A cannot be maintained, then operation
13 of the affected emission unit shall be terminated until corrective action has been completed.

14 GENERAL REQUIREMENTS

15 12. THAT, for the purpose of ensuring compliance with this Order, duly authorized
16 representatives of the Southwest Clean Air Agency shall be permitted access to
17 Respondent's premises and the facilities being constructed, owned, operated and/or
18 maintained by Respondent for the purpose of inspecting said facilities. These inspections
19 are required to determine the status of compliance with this Order and applicable regulations
20 and to perform or require such tests as may be deemed necessary.

21 13. THAT, the provisions, terms and conditions of this Order shall be deemed to bind
22 Respondent, its officers, directors, agents, servants, employees, successors and assigns, and
23 all persons, firms, and corporations acting under or for it.

24 14. THAT, this Order shall be posted conspicuously at or be readily available near the source.

- 1 15. THAT, this Order does not supersede requirements of other Agencies with jurisdiction and
2 further, this Order does not relieve Respondent of any requirements of any other
3 governmental Agency. In addition to this Order, Respondent may be required to obtain
4 permits or approvals from other agencies with jurisdiction.
- 5 16. THAT, compliance with this Order of Approval and its requirements does not relieve
6 Respondent from the responsibility of compliance with SWCAA General Regulations for
7 Air Pollution Sources, previously issued Regulatory Orders, RCW 70.94, Title 173 WAC or
8 any other applicable emission control requirements, nor from the resulting liabilities and/or
9 legal remedies for failure to comply.
- 10 17. THAT, for the purpose of ensuring compliance with the terms of this Order and applicable
11 federal, state, and local requirements, the Southwest Clean Air Agency, in accordance with
12 RCW 70.94, retains the right to impose additional requirements on this source as necessary.
- 13 18. THAT, Respondent shall have the burden of proof regarding unavoidable conditions that
14 lead to excess emissions in accordance with SWCAA 400-107 "Excess Emissions." Excess
15 emissions shall be reported to SWCAA as soon as possible. Respondent shall call in the
16 upset condition via telephone as initial notification to SWCAA; a message may be left on
17 the answering machine for conditions outside of normal business hours. Respondent shall
18 record the upset conditions in the operations log for periodic inspection by SWCAA. A full
19 report may be required by SWCAA if determined to be necessary.

1 19. THAT, if any provision of this Order shall be declared invalid by any court of competent
2 jurisdiction, all unaffected provisions of this Order shall remain in effect and be enforceable.

3 20. THAT, the requirements of this Regulatory Order shall survive any transfer of ownership of
4 the source or any portion thereof.

5 DATED this 30th day of July, 2001

6
7 Reviewed by: _____

8 Paul T. Mairose, P.E.

9 Chief Engineer

10
11 Authorized by: _____

12 Robert D. Elliott

13 Executive Director

14 Southwest Clean Air Agency

Appendix A
Condensed Summary of Operational Requirements

Lewis River Flowers, Inc. Order of Approval No. 01-2374
Installation of Two Cleaver Brooks Boilers

1. Emissions Limitations:

Approval Limit/Requirements:

- | | | |
|----|---|------------------------------|
| a. | Combined emissions from boiler operation | Shall not exceed: |
| | (1) NO _x | 5.5 tpy |
| | (2) CO | 3.4 tpy |
| | (3) VOC | 0.75 tpy |
| | (4) PM | 0.5 tpy |
| b. | Emission concentrations from boiler operation | Shall not exceed: |
| | (1) NO _x | 100 ppmv @ 3% O ₂ |
| | (2) CO | 100 ppmv @ 3% O ₂ |
| c. | Visible emissions from boilers | 0% opacity* |

* Shall not exceed listed value for greater than 3 minutes in any one-hour period as determined by a Certified Observer certified in accordance with EPA Method 9 with data reduction as specified in SWCAA 400-040(1).

- | | | |
|----|--|---|
| d. | Emissions to the atmosphere which cause or contribute to a nuisance odor | Shall use recognized good practice and procedures to reduce these odors to a reasonable minimum |
|----|--|---|

2. Operational Limitations:

- | | | |
|----|-------------------|--|
| a. | Approved fuel | Pipeline quality natural gas only |
| b. | Emissions tuning | Each boiler shall be emissions tuned annually with a combustion analyzer. Corrective action shall be initiated within seven days if results indicate emissions in excess of the limits in section 1.b above. Corrective action shall be pursued until emissions no longer exceed the limits in section 1.b above |
| c. | Emissions testing | Each boiler shall be emissions tested within 180 days of issuance of this Order in accordance with Appendix B or Appendix C |

Appendix A
Condensed Summary of Operational Requirements

Lewis River Flowers, Inc. Order of Approval No. 01-2374
Installation of Two Cleaver Brooks Boilers

3. Monitoring/Recordkeeping Requirements:

Approval Limit/Requirements:

- | | | |
|----|-------------------------------------|---|
| a. | Operation and Maintenance (O/M) log | Shall be kept onsite. Each entry shall include the date and name of the person making the entry, and be maintained for a minimum period of 3 years. |
| b. | Maintenance activity | Shall be recorded in O/M log for each occurrence |
| c. | Combined boiler fuel consumption | Shall be recorded in O/M log monthly |
| d. | Tuning results | Shall be recorded in O/M log for each occurrence |
| e. | Upset condition or breakdown | Shall be recorded in O/M log for each occurrence |

4. Reporting Requirements:

- | | | |
|----|----------------------------------|--|
| a. | Combined boiler fuel consumption | Reported to SWCAA by March 15 th for the previous calendar year |
| b. | Tuning results | Reported to SWCAA within 15 days of tuning completion |
| c. | Emissions testing results | Reported to SWCAA within 45 days of tuning completion |
| d. | Estimate of air emissions | Reported to SWCAA by March 15 th for the previous calendar year |
| e. | Upset conditions | Reported to SWCAA via telephone in accordance with SWCAA 400-107 |

Appendix B
Emission Testing Requirements – Cleaver Brooks Boilers

Lewis River Flowers, Inc. Order of Approval No. 01-2374

1. Introduction:

- a. The purpose of this testing is to quantify emissions from the Cleaver Brooks boilers when fueled on natural gas at maximum operating conditions and to demonstrate compliance with the requirements of this Order of Approval.
- b. Compliance testing shall be performed within 180 days of issuance of this Order.
- c. A comprehensive test plan shall be submitted to SWCAA for review and approval two weeks prior to each test.
- d. SWCAA personnel shall be informed at least five business days prior to testing so that a representative may be present during testing.
- e. A minimum of three (3) test runs of at least one hour duration shall be performed to ensure the data are representative.
- f. Testing shall include all constituents identified below. The sampling methods identified in Section 2 below shall be used unless alternate methods submitted in a test plan by the Respondent are approved by SWCAA in advance of the source testing.

2. Testing Requirements:

- | | | |
|----|---|-----------------------------|
| a. | Constituents to be measured: | Test Methods or Equivalent: |
| | (1) Volumetric flow rate, gas velocity, and temperature | EPA Methods 1 & 2 |
| | (2) Oxygen, CO ₂ , & N ₂ | EPA Method 3A |
| | (3) Moisture content of stack gas | EPA Method 4 |
| | (4) NO _x (reported as NO ₂) | EPA Method 7E |
| | (5) CO | EPA Method 10 |
| b. | Process Points to Be Tested: | |
| | (1) Outlet of the exhaust stack for all constituents. | |

Emission Testing Requirements – Cleaver Brooks Boilers

Lewis River Flowers, Inc. Order of Approval No. 01-2374

3. Source Operation:

- a. A complete record of production related parameters including natural gas usage, steam production rate, process startups, shutdowns, and adjustments shall be kept during emissions testing to correlate operations with emissions and shall be recorded in the test results report.
- b. Source operations during the emissions test must be representative of maximum intended operating conditions.

4. Reporting:

- a. Compliance shall be determined by averaging the results of the three individual test runs.
- b. A final emission test report shall be prepared and submitted to SWCAA within 45 calendar days of test completion and, at a minimum, shall contain the following information:
 - (1) A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
 - (2) Time and date of the test and identification and qualifications of the personnel involved;
 - (3) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit;
 - (4) A summary of control system or equipment operating conditions;
 - (5) A summary of production related parameters;
 - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation;
 - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation;
 - (8) Copies of field data and example calculations;
 - (9) Chain of custody information;
 - (10) Calibration documentation;
 - (11) Discussion of any abnormalities associated with the results; and
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- c. Test results shall be reported corrected to 3% oxygen in the stack gas.

Tuning Requirements – Clever Brooks Boilers

Lewis River Flowers, Inc. Order of Approval No. 01-2374

1. Introduction:

- a. The purpose of this tuning is to determine emission concentrations from the Cleaver Brooks boilers when fired on natural gas at maximum operating conditions, and assure compliance with the requirements of this Order of Approval.
- b. Tuning shall be conducted pursuant to this appendix whenever the source chooses to use a calibrated analyzer to demonstrate compliance with the emission limits in section 10.a of this Order.
- c. Any combustion analyzer used to perform tuning pursuant to this appendix shall be calibrated before testing commences, and after testing has concluded. The results of the test shall not be valid if the pre and post calibration results vary by more than 10% of the span value.
- d. The CO and NO_x span gas concentrations shall be no less than 25% and no more than 200% of the emission concentration corresponding to the permitted emission limit. Ambient air may be used to zero the CO and NO_x cells/analyzer(s) and span the oxygen cells/analyzer.
- e. Alternative testing methodologies may be pre-approved by SWCAA.

2. Testing Requirements:

- a. A minimum of three (3) tuning runs, each of at least five (5) minutes in duration, shall be performed to ensure representative data. Instrument readings must be allowed to stabilize prior to commencing a tuning run. Readings shall be taken every 30 seconds during the tuning run. Results shall be reported as the average of all readings taken during a single run.
- c. Tuning shall include all constituents identified below. Sampling and analysis shall be performed via calibrated combustion analyzer unless alternate methods submitted in a test plan by the Respondent are approved by SWCAA in advance of the source testing.
- d.

Constituents to be measured:	Tuning Method or Equivalent:
(1) Oxygen	Combustion analyzer
(2) CO ₂	Combustion analyzer
(3) NO _x	Combustion analyzer
(4) CO	Combustion analyzer
- e. Process Points to Be Tested:
 - (1) Outlet of the exhaust stack after control equipment for all constituents.

Tuning Requirements – Cleaver Brooks Boilers

Lewis River Flowers, Inc. Order of Approval No. 01-2374

3. Source Operation:

- a. Source operations during the emissions test must be representative of maximum intended operating conditions.

4. Reporting:

- a. Compliance shall be determined by comparing the average of the results of each tuning run with the requirements of this Order.
- b. All tuning results shall be recorded in the O/M log for the boiler. Each entry shall include the following:
 - (1) Time and date of the emissions tuning;
 - (2) Identification of the personnel involved;
 - (3) A summary of results, reported in units consistent with the applicable emission standard or limit;
 - (4) A summary of control system or equipment operating conditions;
 - (5) A description of the tuning methods or procedures used including all field data, quality assurance/quality control procedures and documentation; and
 - (6) Calibration documentation.
- c. Reported tuning results shall be corrected to 3% O₂.
- d. Tuning results shall be reported to SWCAA within 15 calendar days of tuning completion.

State Environmental Policy Act

DETERMINATION OF NONSIGNIFICANCE (DNS)

Description of proposal:

NOC CL-1523: Installation of two Cleaver Brooks boilers. The proposed boilers will be installed at an existing a commercial flower growing and processing facility. Boiler output will be used to provide space heating and process steam for greenhouses at the facility. Low sulfur fuel (natural gas) and combustion controls will be used to minimize emissions to the atmosphere.

Proponent:

Lewis River Flowers, Inc. (Ruud van der Salm, President)

Location of proposal, including street address if any:

35702 NW Toenjes Road in Woodland, Washington 98674

Lead agency: Southwest Clean Air Agency

The lead agency for this proposal has determined that it does not have a probable significant impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

- There is no comment period for this DNS.**
- This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by _____.**

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

Position/title: Chief Engineer

Address: Southwest Clean Air Agency
1308 NE 134th Street
Vancouver, WA 98685-2747

Phone: (360) 574-3058 ext 30

Signature: _____

Date: _____