



PROPOSED

PT-70 MINOR REVISION PERMIT TO OPERATE NO. 12325

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EQUIPMENT OWNER/OPERATOR:

William Bolthouse Farms, Inc. (WBF)

220141

EQUIPMENT OPERATOR:

William Bolthouse Farms, Inc. (WBF)

EQUIPMENT LOCATION:

Intersection of State Highway 166 and the Cuyama River

STATIONARY SOURCE/FACILITY:

William Bolthouse Farms
William Bolthouse Farms

SSID: 10344
FID: 10459

AUTHORIZED MODIFICATION:

This permit allows the installation and operation of eight diesel-fired internal combustion engines used to power water distribution pumps.

EQUIPMENT DESCRIPTION:

See the Equipment List at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

This project consists of the installation and operation of eight existing diesel-fired internal combustion engines which power irrigation pumps at the Bolthouse Cuyama Farms facility. These engines were installed without a permit and are currently onsite and operating at this facility. This permit is being

issued to allow the operation of these engines conditional upon implementation of a compliance plan to electrify these engines or replace them with new Tier 3 engines by August 2008.

CONDITIONS:

SECTION 9.A CONDITIONS

Section A lists the standard administrative conditions for this permit. Conditions listed in this section are enforceable by the USEPA, the APCD, the State of California and the public. Where any reference contained in this section refers to any other part of this permit, that part of the permit referred to is federally enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

- A1. **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the APCD's project file) and the APCD's analyses under which this permit is issued as documented in the Permit Analyses prepared for and issued with the permit.
- A2. **Equipment Maintenance.** The equipment listed in this permit shall be properly maintained and kept in good condition at all times. The equipment manufacturer's maintenance manual, maintenance procedures and/or maintenance checklists (if any) shall be kept on site.
- A3. **Compliance.** Nothing contained within this permit shall be construed as allowing the violation of any local, state or federal rules, regulations, air quality standards or increments.
- A4. **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force.
- A5. **Conflict Between Permits.** The requirements or limits that are more protective of air quality shall apply if any conflict arises between the requirements and limits of this permit and any other permitting actions associated with the equipment permitted herein.
- A6. **Access to Records and Facilities.** As to any condition that requires for its effective enforcement the inspection of records or facilities by the APCD or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the APCD. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.
- A7. **Equipment Identification.** Identifying tag(s) or name plate(s) shall be displayed on the equipment to show manufacturer, model number, and serial number. The tag(s) or plate(s) shall be issued by the manufacturer and shall be affixed to the equipment in a permanent and conspicuous position.

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- A8. **Emission Factor Revisions.** The APCD may update the emission factors for any calculation based on USEPA AP-42 or APCD emission factors at the next permit modification or permit reevaluation to account for USEPA and/or APCD revisions to the underlying emission factors.
- A9. **Reimbursement of Costs.** All reasonable expenses, as defined in APCD Rule 210, incurred by the APCD, APCD contractors, and legal counsel for the activities listed below that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210. Reimbursable activities include work involving: permitting, compliance, CEMS, modeling/AQIA, ambient air monitoring and air toxics.
- A10. **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.*
- A11. **Compliance with Permit Conditions.**
- (a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and 9.C.
 - (b) This permit does not convey property rights or exclusive privilege of any sort.
 - (c) Any permit noncompliance with sections 9.A, 9.B, or 9.C constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
 - (d) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - (e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.
 - (f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
 - (i) compliance with the permit, or
 - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.
 - (g) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible.

[Re: 40 CFR Part 70.6.(a)(6), APCD Rules 1303.D.1]

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A12. **Emergency Provisions.** The permittee shall comply with the requirements of the APCD, Rule 505 (Upset/Breakdown rule) and/or APCD Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the APCD, in writing, a “notice of emergency” within two (2) working days of the emergency. The “notice of emergency” shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6(g), APCD Rule 1303.F*]

A13. **Compliance Plans.**

- (a) The permittee shall comply with all federally enforceable requirements that become applicable during the permit term in a timely manner.
- (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.

[*Re: APCD Rule 1302.D.2*]

A.14 **Right of Entry.** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:

- (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
- (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
- (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times. Monitoring of emissions can include source testing. [*Re: APCD Rule 1303.D.2*]

A.15 **Prompt Reporting of Deviations.** The permittee shall submit a written report to the APCD documenting each and every deviation from the requirements of this permit or any applicable federal requirements within seven (7) days after discovery of the violation, but not later than 6 months after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to APCD in accordance with Rule 505. Breakdown Conditions, or Rule 1303.F Emergency Provisions. [*APCD Rule 1303.D.1, 40 CFR 70.6(a) (3)*]

A.16 **Reporting Requirements/Compliance Certification.** The permittee shall submit compliance certification reports to the USEPA and the Control Officer every six months. These reports shall be submitted on APCD approved forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed

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information on the occurrence and correction of any deviations from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year. Supporting monitoring data shall be submitted in accordance with the “Semi-Annual Compliance Verification Report” condition in Section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c*]

A.17 **Federally Enforceable Conditions.** Each federally enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the APCD-only enforceable section of this permit are federally enforceable or subject to the public/USEPA review. [*Re: CAAA § 502(b)(6), 40 CFR 70.6(b)*]

A.18 **Recordkeeping Requirements.** The permittee shall maintain records of required monitoring information that include the following:

- (a) The date, place as defined in the permit, and time of sampling or measurements;
- (b) The date(s) analyses were performed;
- (c) The company or entity that performed the analyses;
- (d) The analytical techniques or methods used;
- (e) The results of such analyses; and
- (f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the APCD upon request. [*Re: APCD Rule 1303.D.1.f, 40 CFR 70.6(a)(3)*]

A.19 **Credible Evidence.** Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding. [*Re: 40 CFR 52.12(c)*]

SECTION 9. B CONDITIONS

Section B lists the applicable 'generic' permit conditions, including emission standards for all equipment in this permit. Conditions listed in this section are enforceable by the USEPA, the APCD, the State of California and the public. Where any reference contained in this section refers to any other part of this permit, that part of the permit referred to is federally enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

- B.1 **Circumvention (Rule 301).** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of APCD Rule 303. [*Re: APCD Rule 301*]
- B.2 **Nuisance (Rule 303).** No pollutant emissions from any source at this facility shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business.
- B.3 **Specific Contaminants (Rule 309).** WBF shall not discharge into the atmosphere from any single source sulfur compounds, hydrogen sulfide, combustion contaminants and carbon monoxide in excess of the standards listed in Sections A, B and G of Rule 309. WBF shall not discharge into the atmosphere from any fuel burning equipment unit, sulfur compounds, nitrogen oxides or combustion contaminants in excess of the standards listed in Section E and F of Rule 309. [*Re: APCD Rule 309*]
- B.4 **Sulfur Content of Fuels (Rule 311).** WBF shall not burn fuels with a sulfur content in excess of 0.5% (by weight) for liquid fuels and 239 ppmvd or 15 gr/100scf (calculated as H₂S) for gaseous fuels. Compliance with this condition shall be based on fuel billing records or other data showing the certified sulfur content for each shipment. [*Re: APCD Rule 311*]
- B.5 **Agricultural and Prescribed Burning (Rule 401).** WBF shall comply with sections C.1, C.3 and C.4 (e-m) of Rule 401.
- B.6 **Abrasive Blasting Equipment.** All abrasive blasting shall be conducted in accordance with Title 17 of the California Code of Regulations. [*Re: Title 17 CCR 92000 et seq.*]
- (a) Abrasive blasting of items smaller than eight feet (8') shall be conducted within an enclosure or indoors.
 - (b) All dry, unconfined blasting shall utilize CARB certified abrasives.

SECTION 9.C REQUIREMENTS AND EQUIPMENT SPECIFIC CONDITIONS

Section C lists conditions affecting specific equipment in this permit. Conditions listed in this section are enforceable by the USEPA, the APCD, the State of California, and the public. Where any reference contained in this section refers to any other part of this permit, that part of the permit referred to is federally enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

1. **Emission Limitations.** The following emission limits shall apply:
 - a. Mass emissions from the equipment permitted herein shall not exceed the values listed in Table 1.0 and Table 2.0. Compliance shall be based on the operational monitoring, recordkeeping and reporting conditions of this permit
 - b. *Diesel-Fired Engines.* Emissions of NO_x from the diesel-fired engines shall not exceed 797 ppmvd at 15 percent oxygen. Compliance shall be based on quarterly inspections with a portable NO_x/CO analyzer. WBF shall perform quarterly NO_x monitoring during each calendar quarter in which an engine operated and in accordance with the compliance procedures outlined in Section E.3 of Rule 333.
2. **Operational Restrictions.** The equipment permitted herein is subject to the following operational restrictions:
 - a. *Heat Throughput Limits.* The hourly, daily and annual heat input limits to the internal combustion engines subject to this permit shall not exceed the values listed in Table 3.0. These limits are based on the design rating of each engine and the brake specific fuel consumption values as listed in the permit application.
 - b. *Diesel Fuel Requirements.* Only diesel fuel designated as “CARB diesel ¹” may be used in the engines subject to this permit. (Section 93116, Title 17, California Code of Regulations).
3. **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:
 - a. Bolthouse shall source test each stationary engine for Rule 333 emission standards in accordance with Condition 4 below
 - b. Bolthouse shall perform quarterly NO_x monitoring in accordance with Rule 333.E.4.
 - c. *Diesel Fuel Sulfur Content.* WFB shall provide fuel purchase records or other documentation from each fuel supplier that confirms that the fuel used in the engines subject to this permit is

¹ “CARB Diesel” means the diesel fuel meets the current fuel specifications mandated by the California Air Resources Board per the ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 bhp and Greater.

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CARB diesel fuel. WFB shall measure the total sulfur content of the diesel fuel on a biennial basis in accordance with ACPD approved methods.

- d. *Non-Resetable Hour Meter* - Each internal combustion engine subject to this permit shall have installed a non-resetable hour meter with a minimum display capability of 9,999 hours, unless the APCD has determined (in writing) that a non-resetable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. Hour meters shall be operational at all times the engines are operated.
- e. The volume of diesel fuel (in gallons) burned in each engine shall be measured through the use of an APCD-approved calibrated non-resetable fuel meter. As an alternative to in-line fuel meters, WFB may report individual engine hours of operation utilizing an APCD-approved elapsed time meter². A log shall be maintained that records the fuel usage (or hours of operation) of each engine.

4. **Source Testing.** The following source testing provisions shall apply:

- a. WBF shall conduct source testing of air emissions and process parameters as listed in Table 5.0 of this permit. Within three months of issuance of this permit, Bolthouse shall complete testing of all the engines listed in Table 5.0 of this permit. Each engine shall be tested biennially (once every two years) after the initial source test unless the engines have been electrified. More frequent source testing may be required if the equipment does not comply with permitted limitations or if other compliance problems, as determined by the APCD, occur.
- b. WBF shall submit a written source test plan to the APCD for approval at least thirty (30) days prior to initiation of each source test. The source test plan may be used for testing of multiple engines identified in the plan. The source test plan shall be prepared consistent with the APCD's Source Test Procedures Manual (revised May 1990 and any subsequent revisions). WBF shall obtain written APCD approval of the source test plan prior to commencement of source testing. The APCD shall be notified at least ten (10) calendar days prior to the start of source testing activity to arrange for a mutually agreeable source test date when APCD personnel may observe the test.
- c. Source test results shall be submitted to the APCD within forty-five (45) calendar days following the date of source test completion and shall be consistent with the requirements approved within the source test plan. Source test results shall document WBF's compliance with the applicable Rule 333 emission limits. All APCD costs associated with the review and

² The hours of operation, along with the engine horsepower rating and BSFC value of 7,500 Btu/bhp-hr, a fuel correction factor of 1.06, and a high heating value of 137,000 Btu/gal will be used to determine the number of gallons of fuel consumed per time period for the diesel engines.

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approval of all plans and reports and the witnessing of tests shall be paid by WBF as provided for by APCD Rule 210.

- d. A source test for an item of equipment shall be performed on the scheduled day of testing (the test day mutually agreed to) unless circumstances beyond the control of the operator prevent completion of the test on the scheduled day. Such circumstances include mechanical malfunction of the equipment to be tested, malfunction of the source test equipment, delays in source test contractor arrival and/or set-up, or unsafe conditions on site. Except in cases of an emergency, the operator shall seek and obtain APCD approval before deferring or discontinuing a scheduled test, or performing maintenance on the equipment item on the scheduled test day. If the test can not be completed on the scheduled day, then the test shall be rescheduled for another time with prior authorization by the APCD. Once the sample probe has been inserted into the exhaust stream of the equipment unit to be tested (or extraction of the sample has begun), the test shall proceed in accordance with the approved source test plan. In no case shall a test run be aborted except in the case of an emergency or unless approval is first obtained from the APCD. Failing to perform the source test of an equipment item on the scheduled test day without a valid reason and without APCD's authorization shall constitute a violation of this permit. If a test is postponed due to an emergency, written documentation of the emergency event shall be submitted to the APCD by the close of the business day following the scheduled test day.
 - e. The timelines in (a), (b), and (c) above may be extended for good cause provided a written request is submitted to the APCD at least three (3) days in advance of the deadline, and approval for the extension is granted by the APCD.
5. **Recordkeeping.** The permittee shall record and maintain the following information. This data shall be maintained for a minimum of three (3) years from the date of each entry and made available to the APCD upon request:
- a. The total amount of diesel fuel combusted in each engine shall be recorded on a monthly and annual basis in units of standard cubic feet (scf) and gallons.
 - b. A log shall be maintained that details the cumulative total monthly and annual hours.
 - c. *CARB Diesel* - Identification that the fuel purchased is either CARB Diesel, or an alternative diesel fuel that meets the requirements of the Verification Procedure, or an alternative fuel, or CARB Diesel fuel used with additives that meet the requirements of the Verification Procedure, or any combination of the above.
 - d. IC engine calibration and maintenance logs, including quarterly inspection results, consistent with the requirements of Rule 333.H for the portable engines.

e. Biennially, diesel and natural gas fuel sulfur content and higher heating value.

6. **Compliance Verification Reports.** Twice a year, WBF shall submit a compliance verification report to the APCD. Each report shall document compliance with all permit, rule or other statutory requirements during the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and the second report shall cover calendar quarters 3 and 4 (July through December). The reports shall be submitted by March 1st and September 1st each year. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit and shall document compliance separately for each calendar quarter. These reports shall be in a format approved by the APCD. Compliance with all limitations shall be documented in the submittals. All logs and other basic source data not included in the report shall be made available to the APCD upon request. The second report shall also include an annual report for the prior four quarters. Pursuant to Rule 212, a completed *APCD Annual Emissions Inventory* questionnaire should be included in the annual report or submitted electronically via the APCD website. The report shall include the following information:

- a. the total gallons of diesel fuel combusted in each engine on a monthly basis.
- b. the number of operating hours of each engine on a monthly basis.
- c. IC engine calibration and maintenance logs, including quarterly inspection results, consistent with the requirements of Rule 333.H for each engine.
- d. records of sulfur content and higher heating value analyses shall be kept and made available for inspection by the APCD upon request.
- e. fuel purchase records that confirm that the fuel used in the engines subject to this permit is CARB diesel fuel.

General Reporting Requirements:

- f. Quarterly NO_x monitoring log and results.
- g. a quarterly basis, the emissions from each permitted emission unit for each criteria pollutant.
- h. The fourth quarter report shall include tons per year totals for all pollutants, by each emission unit and totaled.
- i. a quarterly basis, the emissions from each exempt emission unit including any CARB registered portable equipment used at the facility, for each criteria pollutant. The fourth quarter report shall include tons per year totals for all pollutants, by each emission unit and totaled.
- j. list of the stationary compression ignition engines rated at less than 50 bhp, that began initial operation on or after January 1, 2005, and the emission limits with which they comply as found in Title 13 CCR Section 2423.
- k. summary of each and every occurrence of non-compliance with the provisions of this permit, with excess emissions that accompanied each occurrence.
- l. A copy of the Rule 202 De Minimis Log for the stationary source.

7. **Engine Electrification/Compliance Plan Implementation.** WBF shall electrify or replace the engines subject to this permit with Tier 3 engines (certified to meet Tier 3 standards per 40 CFR Part

89) by August 1, 2008. If installation of PG&E power lines necessary for electrification of these engines has not commenced by February 1, 2008, WFB shall submit an ATC application to the APCD for the purpose of installing Tier 3 engines. WFB shall provide a written status report to the APCD by the first day of each calendar quarter which provides the status of the electrification of these engines. The first report shall be submitted September 1, 2007 and shall include: (1) the status of the construction activities related to the installation of PG&E power supply lines; (2) the status of the purchase and installation of the electric motors that will replace the ICEs; (3) the status of the WFB PG&E application for the installation of the power lines and any other permitting requirements from any other agencies, and; (4) any anticipated delays in meeting the August 1, 2008 electrification date.

Termination of Operations. In no case shall WFB operate the engines subject to this permit after January 1, 2008 unless they have been electrified or replaced with Tier 3 engines.

8. **Process Monitoring Systems - Operation and Maintenance.** All Bolthouse Farms- Cuyama facility process monitoring devices shall be properly operated and maintained according to manufacturer recommended specifications.
9. **New Stationary Diesel Engines.** Prior to the installation of any additional stationary compression ignition engines rated greater than 50 bhp which are not listed in this permit, WBF shall submit an application for an Authority to Construct (ATC) permit to the APCD. All new stationary diesel engines shall comply with all applicable provisions of the stationary ATCM (Section 93115, Title 17, California Code of Regulations).
10. **Diesel IC Engines - Particulate Matter Emissions.** To ensure compliance with APCD Rules 205.A, 302, 309 and the California Health and Safety Code Section 41701, WBF shall implement manufacturer recommended operational and maintenance procedures to ensure that all project diesel-fired engines minimize particulate emissions. WBF shall implement the APCD approved *IC Engine Particulate Matter Operation and Maintenance Plan* for the life of the project. This Plan details the manufacturer recommended maintenance and calibration schedules that WBF will implement. Where manufacturer guidance is not available, the recommendations of comparable equipment manufacturers and good engineering judgment shall be utilized
11. **Temporary Engine Replacements.** Any reciprocating internal combustion engine subject to this permit may be replaced temporarily only if the requirements (a – f) listed herein are satisfied.
 - (a) The permitted engine is in need of routine repair or maintenance.
 - (b) The permitted engine that is undergoing routine repair or maintenance is returned to its original service within 60 days of placement of the temporary engine. For good cause, and with advance written APCD approval, this time period may be extended.
 - (c) The temporary replacement engine has the same or lower manufacturer, or orifice plate, rated horsepower and same or lower potential to emit of each pollutant as the permitted engine that is being temporarily replaced.

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- (d) The temporary replacement engine shall comply with all rules and permit requirements that apply to the permitted engine that is undergoing routine repair or maintenance.
- (e) For each permitted engine to be temporarily replaced, the permittee shall submit a completed *Temporary IC Engine Replacement Notification* form (Form ENF-94) within 14 days of the temporary engine being installed. This form shall be sent electronically to: temp-engine@sbcapcd.org or may be transmitted in hardcopy to the ECD Engineering Supervisor.
- (f) Within 14 days upon return of the original permitted engine to service, the permittee shall submit a completed *Temporary IC Engine Replacement Report* form (Form ENF-95). This form shall be sent electronically to: temp-engine@sbcapcd.org or may be transmitted in hardcopy to the ECD Engineering Supervisor.
- (g) Any engine in temporary replacement service shall be immediately shut down if the APCD determines that the requirements of this condition have not been met. This condition does not apply to engines that have experienced a cracked block (unless under manufacturer's warranty), to engines for which replacement parts are no longer available, or new engine replacements. Such engines are subject to the provisions of New Source Review.

AIR POLLUTION CONTROL OFFICER

DATE

Notes:

- (1) Reevaluation Due Date: 2009

Attachment: Permit Evaluation for ATC/PTO 12325

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TABLE 1.0 - IC ENGINE SHORT-TERM EMISSION LIMITATIONS ATC/PTO No. 12325 Bolthouse Farms, Inc.												
Item ⁽¹⁾	NOx		ROC		CO		SOx		PM		PM10	
	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day
1	10.84	260.27	1.05	7.10	2.57	61.58	0.17	4.03	0.15	3.55	0.15	3.55
2	11.50	275.96	0.21	25.11	8.89	213.44	0.18	4.27	0.42	10.04	0.42	10.04
3	5.81	139.43	0.40	5.07	1.37	32.99	0.09	2.16	0.08	1.90	0.08	1.90
4	14.52	348.58	1.05	9.52	3.44	82.47	0.22	5.39	0.20	4.76	0.20	4.76
5	11.50	275.96	0.33	25.11	8.89	213.44	0.18	4.27	0.42	10.04	0.42	10.04
6	12.10	290.48	0.56	7.93	2.86	68.72	0.19	4.49	0.17	3.96	0.17	3.96
7	5.45	130.72	0.38	13.32	1.29	30.93	0.08	2.02	0.07	1.78	0.07	1.78
8	14.92	101.09	4.27	9.20	3.26	78.19	0.07	1.56	0.15	3.68	0.15	3.68
Total⁽²⁾	86.64	1,822.50	3.97	102.36	32.57	781.73	1.17	28.19	1.66	39.73	1.66	39.73

Notes:

- (1) Item # refers to the ICE Item # in Table 3.0
- (2) Totals may not appear correct due to rounding. Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

TABLE 2.0 - IC ENGINE LONG-TERM EMISSION LIMITATIONS ATC/PTO No. 12325 Bolthouse Farms, Inc.												
Item ⁽¹⁾	NOx		ROC		CO		SOx		PM		PM10	
	ton/qtr	ton/yr	ton/qtr	ton/yr	ton/qtr	ton/yr	ton/qtr	ton/yr	ton/qtr	ton/yr	ton/qtr	ton/yr
1	11.88	16.27	0.32	0.44	2.81	3.85	0.18	0.25	0.16	0.22	0.16	0.22
2	12.59	17.25	1.15	1.57	9.74	13.34	0.19	0.27	0.46	0.63	0.46	0.63
3	6.36	8.71	0.23	0.32	1.51	2.06	0.10	0.13	0.09	0.12	0.09	0.12
4	15.90	21.79	0.43	0.59	3.76	5.15	0.25	0.34	0.22	0.30	0.22	0.30
5	12.59	17.25	1.15	1.57	9.74	13.34	0.19	0.27	0.46	0.63	0.46	0.63
6	13.25	18.16	0.36	0.50	3.14	4.30	0.21	0.28	0.18	0.25	0.18	0.25
7	5.96	8.17	0.61	0.83	1.41	1.93	0.09	0.13	0.08	0.11	0.08	0.11
8	4.61	6.32	0.42	0.57	3.57	4.89	0.07	0.10	0.17	0.23	0.17	0.23
Totals⁽²⁾	83.152	113.906	4.670	6.398	35.667	48.858	1.286	1.762	1.813	2.483	1.813	2.483

Notes:

- (1) Item # refers to the ICE Item # in Table 3.0
- (2) Totals may not appear correct due to rounding. Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

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Table 3.0 - Engine Data Sheet ATC/PTO No. 12325 Bolthouse Farms, Inc.																			
Item	Equipment	Manufacturer	Model	Serial No./ Tag No.	Used As	Engine Specifications			Operating Limitations						Fuel Properties				
						Max BHP ⁽¹⁾⁽²⁾ @ RPM	BSFC ⁽³⁾ (Btu/BHP-hr)		On-line			Fuel Use (MMBtu)			Fuel	HHV		Total Sulfur	
									(hr/day)	(hr/qtr)	(hr/yr)	(per day)	(per qtr)	(per yr)					
1	IC Engine	John Deere	6125H	ENG00263	Water Distribution	448	900	7800	24	2,190	3,000	83.866	7,652.74	10,483.2	Diesel #2	140,000	Btu/gal	0.05	wt. % S
2	IC Engine	Cummins	N14	ENG00066	Water Distribution	475	900	7800	24	2,190	3,000	88.920	8,113.95	11,115.0	Diesel #2	140,000	Btu/gal	0.05	wt. % S
3	IC Engine	Cummins	QSC 8.3	ENG00288	Water Distribution	240	900	7800	24	2,190	3,000	44.928	4,099.68	5,616.0	Diesel #1	140,000	Btu/gal	0.05	wt. % S
4	IC Engine	Volvo	TAD164VE	ENG00279	Water Distribution	600	900	7800	24	2,190	3,000	112.320	10,249.20	14,040.0	Diesel #0	140,000	Btu/gal	0.05	wt. % S
5	IC Engine	Cummins	N14	ENG00113	Water Distribution	475	900	7800	24	2,190	3,000	88.920	8,113.95	11,115.0	Diesel #1	140,000	Btu/gal	0.05	wt. % S
6	IC Engine	Cummins	QSX 15	ENG00069	Water Distribution	500	900	7800	24	2,190	3,000	93.600	8,541.00	11,700.0	Diesel #2	140,000	Btu/gal	0.05	wt. % S
7	IC Engine	John Deere	RG6076A	ENG00291	Water Distribution	225	900	7800	24	2,190	3,000	42.120	3,843.45	5,265.0	Diesel #2	140,000	Btu/gal	0.05	wt. % S
8	IC Engine	Cummins	6B 5.9	ENG00071	Water Distribution	174	900	7800	24	2,190	3,000	32.573	2,972.27	4,071.6	Diesel #2	140,000	Btu/gal	0.05	wt. % S
Totals ⁽⁴⁾						3,137						587.246	53,586.23	73,405.8					

Notes:

- (1) The BHP stated here is the maximum continuous rated BHP. This BHP value is used to calculate permitted engine emissions. The engine's absolute maximum BHP capability is greater than stated here.
- (2) Engine BHP per engine nameplate.
- (3) Engine BSFC values are based on SBC APCD Piston IC Engine Technical Reference Document (Table 6). The BSFCs are based on the fuel high heating value, (HHV).
- (4) Totals may not appear correct due to rounding.

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Table 4.0 - ICE Emission Factors ATC/PTO No. 12325 Bolthouse Farms, Inc.						
Item	NOx	ROC	CO	SOx	PM	PM10
	g/bhp-hr	g/bhp-hr	g/bhp-hr	g/bhp-hr	g/bhp-hr	g/bhp-hr
1	10.990	0.3000	2.600	0.170	0.150	0.150
2	10.990	1.0000	8.500	0.170	0.400	0.400
3	10.990	0.4000	2.600	0.170	0.150	0.150
4	10.990	0.3000	2.600	0.170	0.150	0.150
5	10.990	1.0000	8.500	0.170	0.400	0.400
6	10.990	0.3000	2.600	0.170	0.150	0.150
7	10.990	1.1200	2.600	0.170	0.150	0.150
8	10.990	1.0000	8.500	0.170	0.400	0.400

Notes:

- (1) Item # refers to the ICE Item # in Table 3.0
 - (2) All emission factors are higher heating value (HHV) based.
 - (3) Emission factor basis: NOx - APCD Rule 333; other pollutants - applicable Tier Standards per 40 CFR part 89.
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Table 5.0. Source Testing Requirements for the Internal Combustion Engines

Emission & Limit Test Points	Pollutants	Parameters ^(b)	Test Methods ^{(a),(c)}
IC Engine Exhaust ^(b)	NO _x ROC CO Sampling Point Det. Stack Gas Flow Rate O ₂ Moisture Content	ppmv, lb/hr ppmv, lb/hr ppmv, lb/hr Dry, Mol. Wt	EPA Method 7E, ARB 1-100 EPA Method 18 EPA Method 10, ARB 1-100 EPA Method 1 EPA Method 2 or 19 EPA Method 3 EPA Method 4
Fuel Gas	Fuel Gas Flow Rate Higher Heating Value Total Sulfur Content ^(d)	Btu/lb ppmw	Fuel Gas Meter ^(f) ASTM D 240 ASTM D 2622-94

Notes:

^(a) Alternative methods may be acceptable on a case-by-case basis.

^(b) The emission rates shall be based on EPA Methods 2 and 4, or Method 19 along with the heat input rate.

^(c) For NO_x, ROC, CO and O₂ a minimum of three 40-minute runs shall be obtained during each test.

^(d) Total sulfur content fuel samples shall be obtained using EPA Method 18 with Tedlar Bags (or equivalent) equipped with Teflon tubing and fittings. Turnaround time for laboratory analysis of these samples shall be no more than 72 hours from sampling.

^(e) Source testing shall be performed for the IC engine in an "as found" condition operating at a representative, APCD-approved, IC engine load (gal/hr).

^(f) Fuel meter shall meet the calibration and metered volume corrections specified in Rule 333, §G.3.a.

Permit Evaluation for
Pt-70 Minor Revision Modification Permit to Operate No. 12325

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1.0 BACKGROUND

- 1.1 General: State Senate Bill 700, which removed the permitting exemption for agricultural sources from State law, came into effect in September, 2003. SB700 required William Bolthouse Farms, Inc. (WBF) to submit a Part 70 application to USEPA in 2003 which demonstrated that actual and potential emissions exceeded 100 TPY in Santa Barbara County. As a result WBF applied to the APCD for an initial Part 70 permit on January 5, 2004. This application was deemed complete on August 3, 2005. Draft PTO 11378 was issued on July 12, 2006. It is anticipated that final PTO 11378 will be issued during the third quarter of 2007.

SB700 requires that equipment subject to permit under APCD rules and regulations be permitted, however, only the equipment existing onsite prior to January 1, 2004 is considered equipment to be “previously exempt from permit”, and as such, was not subject to APCD Rule 801 - *New Source Review*, i.e., BACT and offsets. Hence, Permit to Operate 11387 is being issued for this equipment (i.e., no Authority to Construct was required).

Comments received from WBF during the draft issuance of PTO 11387 indicated that eight internal combustion engines were installed to replace eight failed ICEs after the January 1, 2004 date. After obtaining more complete information from WBF, it was determined that WBF violated APCD Rule 201 by failing to obtain an Authority to Construct permit for these engines prior to installing them. Additionally, these engines did not comply with APCD Best Available Control Technology (BACT) or with the State Airborne Toxic Control Measure (ATCM) requirements in effect for stationary diesel engines at the time the engines were installed. Engines meeting Tier 3 emissions standards would meet both these requirements.

WBF informed the APCD that these eight engines are currently operating and are critical for ongoing crop irrigation. To bring these engines into compliance, WBF submitted a Compliance Plan consistent with APCD rule 1302.D.2. This plan, submitted July 3, 2007, contained two primary elements: (1) an ATC/PTO application for the eight unpermitted engines, and (2) a commitment to either electrify these engines or replace them with Tier 3 engines by August 1, 2008. The ATC/PTO application (# 12325) was submitted on July 16, 2007. Permit condition #7 (*Engine Electrification/Compliance Plan Implementation*) has been included to enforce the August 1, 2008 deadline to electrify or replace the eight engines with Tier 3 engines. The eight engines and the compliance plan condition will be incorporated into Pt70 PTO 11387 upon final issuance.

- 1.2 Permit History: There have been no APCD permits issued to this facility, however, as indicated above in section 1.1, the primary permit for this facility will be Pt70 PTO 11387 which is expected to be issued final during the fourth quarter of 2007.

Permit Evaluation for
Pt-70- Minor Revision Permit to Operate No..12325

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1.3 Compliance History: The installation and operation of these engines constitutes a violation of APCD Rule 201 - *Permits Required*. As of the final issuance date of this permit, the APCD is currently processing a Notice of Violation (NOV) for this violation, however, an NOV number has not yet been assigned. Additionally, all eight of the engines failed to comply with the stationary ATCM and BACT standards based on the August 2005 dates of installation.

2.0 ENGINEERING ANALYSIS

2.1 Equipment/Processes: WBF operates these eight diesel-fired internal combustion engines for use in deep well irrigation and to power booster pumps.

2.2 Emission Controls: These engines are not equipped with emission controls however they were manufactured to meet USEPA Tier 0, 1 and 2 emission standards and are classified as such..

2.3 Emission Factors: The NO_x emission factor is based on APCD Rule 333. All other emission factors are based on the applicable Tier standards per 40 CFR Part 89. See Table 4.0 (*Emission Factors*) for these factors.

2.4 Reasonable Worst Case Emission Scenario: Table 3.0 (*Engine Data*) of the permit defines the operational characteristics and operating hours that comprise the reasonable worst case-operating scenario for this permit.

2.5 Emission Calculations: The emissions listed in Table 1.0 (*IC Engine Short Term Emission Limits*) and Table 2.0 (*IC Engine Long Term Emission Limits*) are determined by the equations listed below. See Tables 3.0 and 4.0 for the variables required by these equations.

$$E1, \text{ lb/day} = \text{Engine Rating (bhp)} * \text{EF (g/bhp-hr)} * \text{Daily Hours (hr/day)} * (\text{lb}/453.6 \text{ g})$$

$$E2, \text{ tpy} = \text{Engine Rating (bhp)} * \text{EF (g/bhp-hr)} * \text{Annual Hours (hr/yr)} * (\text{lb}/453.6 \text{ g}) * (\text{ton}/2000 \text{ lb})$$

2.6 Net Emission Increase (NEI) Calculations: This project was a replacement project, with the eight new engines replacing older, existing engines that broke down. The actual emissions from the older engines that were replaced constitute an emissions decrease (D-term), thereby reducing the increases from the new engines installed. For NEI purposes, Tier 3 emission factors were used for the new engines given that the compliance plan requires Tier 3 or cleaner engines to be installed. The NEI calculations are documented in Attachment A.

2.7 BACT Analyses: The subject engines are Tier 0, 1 and 2 engines and, with the exception of one ICE, do not qualify as Best Available Control Technology based on the engine installation dates or the requirements of the ATCM. Therefore, WFB is required to electrify these engines or install Tier 3 engines. As indicated above in section 1.0, this permit includes a compliance condition that requires the electrification of the ICEs or replacement with Tier 3 engines.

2.8 Enforceable Operational Limits: The permit has enforceable operating conditions that ensure the permitted equipment is operated properly.

2.9 Monitoring Requirements: Monitoring of NO_x emissions, fuel use and engine hours are required to enforce permit limits.

2.10 Recordkeeping and Reporting Requirements: The permit requires that the data which is monitored be recorded and reported to the APCD.

3.0 REEVALUATION REVIEW (not applicable)

4.0 REGULATORY REVIEW

4.1 Partial List of Applicable Rules: This project is anticipated to operate in compliance with the following rules:

Rule 201.	Permits Required
Rule 202.	Exemptions to Rule 201
Rule 301.	Circumvention
Rule 302.	Visible Emissions
Rule 303.	Nuisance
Rule 311.	Sulfur Content of Fuels
Rule 333.	Control of Emissions from Reciprocating Internal Combustion Engines

4.2 Rules Requiring Review:

Rule 333 *Control of Emissions from Reciprocating Internal Combustion Engines*. These engines are subject to the emission limits and monitoring requirements of this rule.

5.0 AQIA

An Air Quality Impact Analysis was not required for this project.

6.0 OFFSETS/ERCs

6.1 General: The lb/day emission offset threshold for NO_x of Regulation VIII is exceeded, however, the ton/quarter emission offset threshold for NO_x is not, and since offsets are based on the quarterly increase, offsets are not required for this project. See Attachment A for the NEI calculation.

6.2 Offsets: Offsets are not required for this permitting action.

6.3 ERCs: This source does not generate emission reduction credits.

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this project.

8.0 CEQA / LEAD AGENCY

Our initial analysis indicates that this project is exempt from CEQA review due to the fact that emissions are below the APCD significant thresholds.

ATTACHMENT “A”

Emission Calculations

FNEI-90

I = Project Emission Increase

D = Project Emission Decrease

P2 = 0.0

NEI = I + (P2 - P1) - D

Note: The above NEI equation results in negative NEI totals for several pollutants, however, since NEI can not be reduced below zero, 0.00 has been entered for those values that would otherwise be negative.

FACILITY:	Bolthouse Farms								
FID:	10459								
				ROC	NOx	CO	SOx	PM₁₀	PM
Original Eight ICEs (D)			lbs/day	42.04	353.42	339.21	0.32	17.52	17.52
			tpy	3.78	31.81	30.53	0.03	1.58	1.58
New ICEs (I)			lbs/day	31.30	464.33	431.16	0.83	24.87	24.87
			tpy	2.07	29.02	26.95	0.05	1.55	1.55
NEI			lbs/day	0.00	110.91	91.95	0.05	7.35	7.35
			tpy	0.00	0.00	0.00	0.02	0.00	0.00

1. Totals are based on the *New IC Engine Emission* and *Original IC Engine Emission* tables below.
2. The following calculation methodology was used for these emission calculations:

lb/day = Engine Rating (bhp) * EF (g/bhp-hr) * Daily Hours (hr/day) * (lb/453.6 g)

tpy = Engine Rating (bhp) * EF (g/bhp-hr) * Annual Hours (hr/yr) * (lb/453.6 g) * (ton/2000 lb)

New IC Engine Emissions

ATC/PTO No. 12325

Bolthouse Farms, Inc.

Item ⁽¹⁾	NOx		ROC		CO		SOx		PM		PM10	
	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/hr	tpy
1	66.31	4.14	4.73	0.30	61.58	3.85	0.12	0.01	3.55	0.22	3.55	0.22
2	70.31	4.39	5.02	0.31	65.29	4.08	0.13	0.01	3.77	0.24	3.77	0.24
3	35.52	2.22	2.53	0.16	32.99	2.06	0.06	0.00	1.90	0.12	1.90	0.12
4	88.81	5.55	6.34	0.40	82.47	5.15	0.16	0.01	4.76	0.30	4.76	0.30
5	70.31	4.39	5.02	0.31	65.29	4.08	0.13	0.01	3.77	0.24	3.77	0.24
6	74.01	4.63	5.28	0.33	68.72	4.30	0.13	0.01	3.96	0.25	3.96	0.25
7	33.30	2.08	2.38	0.15	30.93	1.93	0.06	0.00	1.78	0.11	1.78	0.11
8	25.76	1.61	1.84	0.11	23.92	1.49	0.05	0.00	1.38	0.09	1.38	0.09
Total⁽²⁾	464.33	29.02	31.30	2.07	431.16	26.95	0.83	0.05	24.87	1.55	24.87	1.55

Notes:

(1) Item # refers to the ICE Item # in Table 1.0

(2) Totals may not appear correct due to rounding. Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

Original IC Engine Emissions
ATC/PTO No. 12325
Bolthouse Farms, Inc.

Item ⁽¹⁾	NOx		ROC		CO		SOx		PM		PM10	
	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day
1	6.40	71.14	1.06	11.81	9.04	100.44	0.01	0.06	0.43	4.73	0.43	4.73
2	7.72	85.80	1.28	14.24	10.90	121.14	0.00	0.07	0.51	5.70	0.51	5.70
3	1.95	21.70	0.17	1.93	1.13	12.54	0.00	0.02	0.07	0.72	0.07	0.72
4	2.48	27.53	0.17	1.83	1.43	15.91	0.00	0.03	0.08	0.92	0.08	0.92
5	5.02	55.80	0.33	3.72	2.90	32.24	0.00	0.06	0.17	1.86	0.17	1.86
6	4.10	45.52	0.27	3.03	2.37	26.30	0.00	0.05	0.14	1.52	0.14	1.52
7	2.44	27.14	0.25	2.77	0.67	7.48	0.00	0.01	0.09	0.99	0.09	0.99
8	1.69	18.79	0.24	2.72	2.08	23.15	0.00	0.01	0.10	1.09	0.10	1.09
Total⁽²⁾	31.81	353.42	3.78	42.04	30.53	339.21	0.02	0.32	1.58	17.52	1.58	17.52

Notes:

(1) Item # refers to the ICE Item # in Table 3.0

(2) Totals may not appear correct due to rounding. Because of rounding, values in this table shown as 0.00 are less than 0.005 but greater than zero.

ATTACHMENT “B”

IDS Tables

Permitted Potential to Emit (PPTE)

	NO_x	ROC	CO	SO_x	PM	PM₁₀
ATC 12325						
lb/day	1822.50	102.36	781.73	28.19	39.73	39.73
tons/qtr	83.15	4.67	35.66	1.28	1.81	1.81
tons/year	113.90	6.39	48.85	1.76	2.48	2.48

Facility Potential to Emit (FPTE)

	NO_x	ROC	CO	SO_x	PM	PM₁₀
ATC 12325						
lb/day	1822.50	102.36	781.73	28.19	39.73	39.73
tons/qtr	83.15	4.67	35.66	1.28	1.81	1.81
tons/year	113.90	6.39	48.85	1.76	2.48	2.48

Facility Net Emission Increase Since 1990 (FNEI-90)

	NO_x	ROC	CO	SO_x	PM	PM₁₀
ATC 12325						
lb/day	110.91	0.00	91.95	0.05	7.35	7.35
tons/year	0.00	0.00	0.00	0.02	0.00	0.00

