



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

March 23, 2016

Warren Miller
ALK-Abello Source Materials, Inc.
448 S. Lochsa St.
Post Falls ID, 83854

RE: Facility ID No. 055-00072, ALK-Abello Source Materials, Post Falls
Final Permit Letter

Dear Mr. Warren Miller:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2008.0176 Project 61641 to ALK-Abello Source Materials located at Post Falls for the construction of a second MITIZAX dust mite facility (MTX Cell 2). This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received December 31, 2015.

This permit is effective immediately and replaces PTC No. P-2008.0176, issued on May 29, 2013. This permit does not release ALK-Abello Source Materials from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Regional Office, 2110 Ironwood Pkwy, Coeur d'Alene, ID 83814, Fax (208) 769-1404.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Almer Casile, Air Quality Analyst at (208) 769-1422 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Tom Burnham at (208) 373-0502 or tom.burnham@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\tlb
Permit No. P-2008.0176 Project 61641
Enclosures

AIR QUALITY

PERMIT TO CONSTRUCT

Permittee ALK-Abelló Source Materials, Inc.
Permit Number P-2008.0176
Project ID 61641
Facility ID 055-00072
Facility Location 448 S. Lochsa St.
Post Falls, ID 83854

Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued March 23, 2016



Tom Burnham, Permit Writer



Mike Simon, Stationary Source Manager

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1. Permit Scope

Purpose

- 1.1 This permit to construct (PTC) modification adds equipment for a second dust mite facility, to be installed adjacent to existing building.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-2008.0176 Project 61167, issued on May 29, 2013.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1. Regulated sources.

Permit Section	Source	Control Equipment
2	Boiler HB-1 125 bhp 5.1 MMBtu/hr Natural gas	None
2	Boiler HB-2 125 bhp 5.1 MMBtu/hr Natural gas	None
2	Boiler HB-3 125 bhp 5.1 MMBtu/hr Natural gas	None
2	Boiler SRC 5 (Same as SB-2) 30 bhp Natural gas	None
2	1000 KW generator SRC 6 (100 Hr/yr) EG-1 (Same as EG-2)	None
2	1000 KW generator SRC 6 (100 Hr/yr) EG-2 (Same as EG-1)	None
2	Greenhouse Boiler GB-1 300,000 Btu/hr Natural gas	None
2	Greenhouse Boiler GB-2 300,000 Btu/hr Natural gas	None
2	Air Make-up unit MAU-9-1 450,000 Btu/hr Natural gas	None
2	Boiler SB-1 70 bhp	None

	Natural gas	
2	Cell 2 Minox Dehumidifier AHU-20 54,300 BTU/hr Natural gas	None
3	House Vacuum EF-Vac	Baghouse
3	House Vacuum EF-Vac 2	Baghouse
3	U. S. Mites Processing	USM Hoods EF 2-1
3	Small Scale Manufacturing	SSM Hoods EF 3-1
3	Source Material Development Labs (SMD)	SMD Hoods EF-4
3	MTX Lab Hoods	None
3	Class 2 B2 Biological Safety Cabinet Hood EF 3-4	HEPA filter
3	TPA Lab Hoods	HEPA filter
3	Mitizax Dust Mite (MTX) Lab Hoods, permitted under FEC EF 10-1	None
3	MTX Ethanol Drying Cabinets	None
3	Minox Screener, part of Mitizax EF 10-2	Baghouse
3	Minox Screener, part of Mitizax EF 20-1	Baghouse
3	Mitizax Fluid Bed Dryer EF10-3	HEPA filter
3	Mitizax Fluid Bed Dryer EF19-1	HEPA filter
3	Mitizax Purification 1 Hood EF10-4	None
3	Mitizax Purification 1 Hood EF16-4	None

[March 23, 2016]

2. Combustion Equipment

2.1 Process Description

The facility uses boilers, emergency generators, an air make-up unit, and a dehumidifier in the processes.

[March 23, 2016]

2.2 Control Device Descriptions

Table 2.1. Fuel burning equipment description.

Emissions Units / Processes	Control Devices
Boiler HB-1 125 bhp 5.1 MMBtu/hr Natural gas	None
Boiler HB-2 125 bhp 5.1 MMBtu/hr Natural gas	None
Boiler HB-3 125 bhp 5.1 MMBtu/hr Natural gas	None
Boiler SRC 5 (Same as SB-2) 30 bhp Natural gas	None
1000 KW generator SRC 6 (100 Hr/yr) EG-1 (Same as EG-2)	None
1000 KW generator SRC 6 (100 Hr/yr) EG-2 (Same as EG-1)	None
Greenhouse Boiler GB-1 300,000 Btu/hr Natural gas	None
Greenhouse Boiler GB-2 300,000 Btu/hr Natural gas	None
Air make-up units MAU- 9-1 450,000 Btu/hr Natural gas	None
Boiler SB-1 70 bhp Natural gas	None
Cell 2 Minox Dehumidifier AHU-20 54,300 BTU/hr Natural gas	None

[March 23, 2016]

Emission Limits

2.3 Opacity Limit

Emissions from any of the boiler stacks, generator engine stacks, or any other stack, vent, or functionally equivalent opening, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

2.4 Sulfur Content

In accordance with IDAPA 58.01.01.725, the permittee shall not sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 2 fuel oil – 0.5% by weight.

2.5 40 CFR 60 Subpart III - Fuel Requirements for Owners and Operators

In accordance with 40 CFR 80.510(b) and 40 CFR 60.4207(b), the permittee shall use diesel fuel with a maximum sulfur content of 15 ppm maximum and a minimum of Cetane index of 40 or a maximum aromatic content of 35 volume percent.

[July 11, 2012]

2.6 40 CFR 60 Subpart III – Other Requirements for Owners and Operators

In accordance with 40 CFR 60.4211, the permittee shall:

- (a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (b) Change only those emission-related settings that are permitted by the manufacturer;

[July 11, 2012]

2.7 40 CFR 60 Subpart III – Maximum Hours of Operation for Emergency Generator

In accordance with 40 CFR 60.4211(f), any operation of the emergency engines other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours each per year, as described in (1) through (3) of this permit condition, is prohibited.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) The engines may be operated for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this permit condition for a maximum of 100 hours each per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this permit condition counts as part of the 100 hours per calendar year allowed by this permit condition.
 - (i) Emergency stationary ICE's may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of each emergency ICE beyond 100 hours per calendar year.

- (ii) Emergency stationary ICE's may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary ICE's may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE's may be operated for up to 50 hours each per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) of this permit condition.

[March 23, 2016]

2.8 Hours of Operation

The operation of the emergency generators for non-emergency situations shall not exceed a maximum of 100 hours per ICE in any consecutive 12-calendar month period. Operations during emergency situations is not limited.

[March 23, 2016]

Monitoring and Recordkeeping Requirements

2.9 Fuel Oil Sulfur Monitoring

The permittee shall maintain fuel oil supplier certification records that contain the following:

- A statement from the fuel oil supplier that the fuel oil complies with the specifications ASTM D 396-05, Grade No. 2, and;
- The sulfur content of the oil from which the shipment came (or of the shipment itself)

Records of this information shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request in accordance with General Provision 4.10.

[July 13, 2007]

2.10 Operating Hours Monitoring

The permittee shall record the hours that the ICE is used for non-emergency situations on a daily basis and on a monthly basis, summing the monthly totals for the previous consecutive 12-calendar month period, to demonstrate compliance with the limit on use for non-emergency situations. Records of this information shall be maintained in accordance with General Provision 4.10.

[March 23, 2016]

3. Processes

3.1 Process Description

ALK-Abelló Source Materials, Inc (ALK) operates an allergen source material purification facility in an industrial park on Lochsa Street in Post Falls, Idaho. The facility receives and purifies harvested pollens, hairs, insects, and other allergenic materials from various sources for further processing elsewhere to produce a vaccine for individuals with allergies. Two additional processes at the facility involve the growing, harvesting and purification of dust mites for similar processing into a vaccine at other facilities.

3.2 Control Device Descriptions

Table 3.1 Processes Equipment Description

Emissions Units / Processes	Control Devices
House Vacuum EF-Vac, EF-Vac 2	HEPA filter
U. S. Mites Processing, USM Hoods EF 2-1	None
Small Scale Manufacturing, SSM Hoods EF 3-1	None
Source Material Development Labs (SMD), SMD Hoods EF 4-1	None
Class 2 B2 Biological Safety Cabinet Hood EF 3-4	HEPA filter
TPA Lab Hoods EF 9-4	HEPA filter
Mitizax Dust Mite (MTX) Lab Hoods, permitted under FEC	None
Cell 2 MTX Lab Hoods, MTX Hoods, EF 16-5	None
Cell 2 Purification 1 Hood EF 16-4	None
Minox Screeners EF 10-2, EF 20-1 (part of Mitizax)	Baghouse
Mitizax Fluid Bed Dryer EF 10-3	HEPA filter
Cell 2 MTX Ethanol Drying Cabinets EF 16-3	None
Cell 2 MTX Fluid Bed Dryer	None

[March 23, 2016]

Emission Limits

3.3 Emissions Limits

The perchloroethylene and HAP emissions from the permittee's stacks from sources listed in Table 3.1 shall not exceed any corresponding limits listed in Table 3.2.

Source Description	Perchloroethylene	Individual HAP	Aggregate HAPs
	T/yr	T/yr	T/yr
Processes	0.166	<8.0	<20.0

[March 23, 2016]

3.4 Opacity Limit

Emissions from any facility stack, vent, or functionally equivalent opening associated with the facility shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[July 13, 2007]

Operating Requirements

3.5 HEPA Filters

The permittee shall install and operate HEPA filters to control PM and PM₁₀ emissions from the Biological Safety Cabinet EF 3-4, the TPA lab hoods EF 9-4, the fluid bed dryer EF 10-3, the Spencer House Vacuum, the EF-Vac, and the Spencer House Vacuum, EF- Vac 2, and the Minox Screener

[March 23, 2016]

3.6 Minox Screeners

The permittee shall install and operate a baghouse to control PM and PM₁₀ emissions from the Minox screeners EF 10-2 and EF 20-1.

[March 23, 2016]

3.7 Within 60 days of permit issuance, the permittee shall have developed a Baghouse/Filter System Procedures document for the inspection and operation of the baghouses/filter system which controls emissions from EF 3-4, EF 9-4, EF 10-3, EF-Vac, EF- Vac 2, EF 10-2 and EF 20-1. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse/Filter System Procedures document shall describe the procedures that will be followed to comply with General Provision 4.2 and shall contain requirements for monthly see-no-see visible emissions inspections of the baghouse and HEPA filters. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at anytime. At a minimum the document shall include:

- procedures to determine if bags or cartridges are ruptured; and
- procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse/filter system inspections in accordance with General Provision 4.10. The records shall include , but not be limited to, the following:

- Date and time of inspection;
- Equipment inspected (e.g. exterior housing of baghouse, filter housing, fan motor, inlet air ducting);

- Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.
- Date corrective action was taken.

The Baghouse/Filter System Procedures document shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. Any changes to the Baghouse/Filter System Procedures document shall be submitted within 15 days of the change.

The Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

[March 23, 2016]

3.8 Tablet Pollen Area

The particulate emissions from the Tablet Pollen Area shall be controlled by the TPA lab hoods.

[May 29, 2013]

3.9 HAP and Perchloroethylene Facility Emissions

For the facility's emission sources listed in Table 3.1, the permittee shall calculate and record rolling 12-month totals of perchloroethylene and of each HAP known to be emitted. Monthly estimates of actual emissions shall be used to calculate rolling 12-month total emissions of each pollutant to demonstrate compliance with the annual emissions limits. Records shall be maintained in accordance with General Provision 4.10.

[July 11, 2012]

4. General Provisions

General Compliance

4.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the “Rules for the Control of Air Pollution in Idaho.” The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the “Rules for the Control of Air Pollution in Idaho,” and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

4.2 The permittee shall at all times (except as provided in the “Rules for the Control of Air Pollution in Idaho”) maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

4.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

4.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee’s premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

4.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

4.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 4.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 4.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 4.9 Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 4.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date 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 existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 4.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

- 4.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 4.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 4.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 4.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 4.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]