



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway, Suite 101
Temple Terrace, FL 33637-0926

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Ryan E. Matthews
Interim Secretary

PERMITTEE

Publix Super Markets, Inc.
3300 Publix Corporate Parkway
Lakeland, FL 33811

Authorized Representative:
Mr. Jeff Stephens, Vice President Manufacturing

Air Permit Nos. 1050177-009-AC
1050177-010-AO
Minor Air Construction and
Operation Permits

Publix Lakeland Danish Bakery
Polk County, Florida

PROJECT

This is the final air construction and operation permits, in one document. The construction permit adds a new flour silo (EU ID No. 011), with capacity to store 100,000 pounds of Winona flour. The proposed work was conducted and completed at the Publix Lakeland Danish Bakery on August 15, 2016. An after the fact application for construction and operation permit was submitted to the Department on February 9, 2017. The operation permit revises Air Operation Permit No. 1050177-008-AO, which is a bread, cake, and related products manufacturer (Standard Industrial Classification No. 2051). The facility is located in Polk County at 3260 New Tampa Highway in Lakeland, Florida. The UTM coordinates are Zone 17, 400.8 km East, and 3101.5 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

1050177-009-AC Effective Date: March 31, 2017

FINAL PERMIT

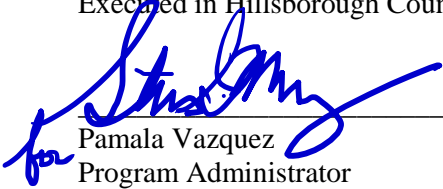
Expiration Date: May 31, 2017

1050177-010-AO Effective Date: March 31, 2017

Renewal Application Due Date: February 21, 2019

Expiration Date: April 22, 2019

Executed in Hillsborough County, Florida



Pamala Vazquez
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Jeff Stephens, Publix Super Markets, Inc. (jeff.stephens@publix.com)

Brenda Williams, Publix Super Markets, Inc. (brenda.williams@publix.com)

Michael W. Hewett, P.E., Publix Super Markets, Inc. (michael.hewett@publix.com)

Stephen Tafuni, Florida DEP Southwest District, (steven.tafuni@dep.state.fl.us)

Danielle Henry, Florida DEP Southwest District, (danielle.henry@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on
this date, pursuant to Section 120.52(7), Florida Statutes,
with the designated agency clerk, receipt of which is
hereby acknowledged.



March 31, 2017

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION (FINAL)

FACILITY DESCRIPTION

Existing Facility

This facility includes six permitted raw material storage silos (Silo Nos. 1, 2, 3, 4, 5, and 6) and a storage hopper (Hopper No. 10) that are used to store Rye, Winona, Cake, Pastry and other types of flours, granulated sugar and powdered sugar, as detailed in the table below. The silos and hopper are loaded pneumatically from trucks and monitored during loading by a computer based recording system that captures system loading pressures and material loading time. Each storage silo and the storage hopper is equipped with an independent baghouse to control particulate matter emissions.

This facility also includes two large natural gas fired pastry ovens (Winkler-Chubco (W-C) Oven No. 3 and Food Handling Systems (FHS) Oven No. 6.) each with a design heat input rate of 2.5 MMBtu/hour.

The existing facility consists of the following emissions units (EU).

Facility ID No. 1050177	
ID No.	Emission Unit Description
001	Flour Silo No. 1 (Perfect Diamond)
002	Flour Silo No. 2 (Rye)
003	Flour Silo No. 3 (Winona)
004	Sugar Silo No. 4 (granulated Sugar)
005	Flour Silo No. 5 (Cake)
006	Flour Silo No. 6 (Pastry)
008	Winkler-Chubco (W-C) Oven No. 3
009	Food Handling Systems (FHS) Oven No. 6
010	Hopper No. 10 (Powdered Sugar)

NOTE: Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc. The facility previously included EU ID No. 007 (Flour Silo No. 7) which was permanently shut down in 2010.

Proposed Project

This project is for the after-the-fact construction of Flour Silo No. 11 which can store 100,000 pounds of flour. It was added to increase Winona flour storage capacity for this facility. The maximum annual loading rate is approximately 73,900 tons per year. Flour Silo #11 is equipped with a WAMgroup, Polygonal Dust Collector, WAMAIR, Model, with Felt/Polyester filter medium, and reverse air jet cleaning system. This silo is not subject to the PM RACT rule (Rule 62-296.700, F.A.C.).

This project will add the following emissions unit.

Facility ID No. 1050177	
ID No.	Emission Unit Description
011	Flour Silo No. 11 (Winona Flour)

Exempt Emission Sources/Activities

- Two natural gas fired Cleaver-Brooks 4.2 MMBtu/hour boilers [Rule 210.300(3)(a)34., F.A.C.];
- One natural gas fired Cleaver-Brooks 8.4 MMBtu/hour boiler [Rule 210.300(3)(a)34., F.A.C.];

SECTION 1. GENERAL INFORMATION (FINAL)

- Six small natural gas fired bakery ovens (i.e., Oven Nos. 1-6) used to bake non-yeast containing products [Rule 210.300(3)(b)1., F.A.C.]; and
- One natural gas fired Food Lab Oven, and two rack/pan washers [Rule 210.300(3)(b)1., F.A.C.].

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for the pollutants (1) particulate matter (PM) and PM₁₀ with an aerodynamic diameter of up to 10 µm (PM₁₀) and (2) volatile organic compounds (VOC). The emissions limitations and restrictions on the type or amount of material processed in this permit will ensure that the facility's PM₁₀ and VOC emissions will be below the threshold for a Title V source.

PERMIT HISTORY/AFFECTED PERMITS

These permits revise and replace Operation Permit No. 1050177-008-AO and incorporated the terms and conditions of Construction Permit No. 1050177-009-AC.

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Southwest District of the Department of Environmental Protection (Department). The mailing address, phone number and e-mail address is:

Florida Department of Environmental Protection
Southwest District Office
Air and Solid Waste Permitting Program
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700
E-mail: SWD_Air_Permitting@dep.state.fl.us

All documents related to applications for permits shall be submitted to the above e-mail address and/or address.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance Assurance Program. The mailing address, phone number and e-mail address is:

Florida Department of Environmental Protection
Southwest District Office
Compliance Assurance Program
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700
E-mail: SWD_Air@dep.state.fl.us

3. Appendices: The following Appendices are attached as a part of this permit:
- Appendix A (Citation Formats and Glossary of Common Terms);
 - Appendix B (General Conditions);
 - Appendix C (Common Conditions); and
 - Appendix D (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Renewal. Prior to 60 days before the expiration date of this permit, the permittee shall apply for a renewal of the permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 60 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department. To properly apply for an operation permit, the applicant shall submit the following:
- a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
 - b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.; and
 - c. copies of the most recent month of records/logs specified in Specific Condition No(s). A.6. and B.5.
[Rules 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]
8. Annual Operating Report (AOR): The information required by the Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's (DEP) District Office. All synthetic non-Title V sources shall submit a completed DEP Form 62-210.900(5) unless the annual operating report is submitted using the DEP's electronic annual operating report software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C.
[Rule 62-210.370(3), F.A.C.]
- {Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}*

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU Nos. 001, 002, 003, 004, 005, 006, 010, 011 – Raw Material Storage Silos

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
001	<u>Flour Silo No. 1 (Winona)</u> - This silo is used to store Winona flour and has a maximum annual loading rate of approximately 123,400 tons per year. It is equipped with a Reinmelt Corporation Model BF-600-1800-2 baghouse which is rated at 525 ACFM. The baghouse vents inside an enclosure on top of the silo (separate enclosure for each baghouse) and then from the enclosure, exhausts through two vents shared by silos 1 through 5. This silo is an older silo and is subject to the PM RACT rule (Rule 62-296.700, F.A.C.)
002	<u>Flour Silo No. 2 (Rye)</u> - This silo is used to store rye flour and has a maximum annual loading rate of approximately 131,000 tons per year. It is equipped with a Reinmelt Corporation Model BF-600-1800-2 baghouse which is rated at 525 ACFM. The baghouse vents inside an enclosure on top of the silo (separate enclosure for each baghouse) and then from the enclosure, exhausts through two vents shared by silos 1 through 5. This silo is subject to the PM RACT rule (Rule 62-296.700, F.A.C.)
003	<u>Flour Silo No. 3 (Winona)</u> - This silo is used to store Winona flour and has a maximum annual loading rate of approximately 127,100 tons per year. It is equipped with a Reinmelt Corporation Model BF-600-1800-2 baghouse which is rated at 525 ACFM. The baghouse vents inside an enclosure on top of the silo (separate enclosure for each baghouse) and then from the enclosure, exhausts through two vents shared by silos 1 through 5. This silo is subject to the PM RACT rule (Rule 62-296.700, F.A.C.)
004	<u>Sugar Silo No. 4 (Granulated Sugar)</u> -This silo is used to store granulated sugar and has a maximum annual loading rate of approximately 101,800 tons per year. It is equipped with a Reinmelt Corporation Model BF-600-1800-2 baghouse which is rated at 525 ACFM. The baghouse vents inside an enclosure on top of the silo (separate enclosure for each baghouse) and then from the enclosure, exhausts through two vents shared by silos 1 through 5. This silo is subject to the PM RACT rule (Rule 62-296.700, F.A.C.)
005	<u>Flour Silo No. 5 (Cake)</u> -This silo is used to store cake flour and has a maximum annual loading rate of approximately 104,700 tons per year. It is equipped with a Reinmelt Corporation Model BF-600-1800-2 baghouse which is rated at 525 ACFM. The baghouse vents inside an enclosure on top of the silo (separate enclosure for each baghouse) and then from the enclosure, exhausts through two vents shared by silos 1 through 5. This silo is subject to the PM RACT rule (Rule 62-296.700, F.A.C.)
006	<u>Flour Silo No. 6 (Pastry)</u> - This silo is used to store pastry flour and has a maximum annual loading rate of approximately 92,200 tons per year. It is equipped with a Pfening Company Model No. A20063 baghouse. This silo is not subject to the PM RACT rule.
010	<u>Hopper No. 10 (Powdered Sugar)</u> - This silo is used to store powdered sugar and has a maximum annual loading rate of approximately 30,660 tons per year. It is equipped with a MAC Process Model 55AVRC80 Style III baghouse. This silo is not subject to the PM RACT rule.
011	<u>Flour Silo No. 11 (Winona Flour)</u> – This silo is used to store Winona flour and has a maximum annual loading rate of approximately 73,900 tons per year. It is equipped with a WAMGroup, WAMAIR, Polygonal Dust Collector, Model MK-504 discharge adapter for FF126-FF08 WAM Housing and WAM FPIT R 24 filter, which is rated at 6191 dscfm. This silo is not subject to the PM RACT rule.

EQUIPMENT

- A.1. Flour Silo: The permittee is authorized to install a new, 100,000 lb. capacity flour silo to store Winona flour. Particulate emissions are controlled by a WAM baghouse, MK-504 discharge adapter for FF126-FF08 WAM Housing with WAM FPIT R 24 filter. The dust collection system uses compressed air in counter current at a specific interval to remove accumulated dust from filters.
[Construction Permit No. 1050177-009-AC]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU Nos. 001, 002, 003, 004, 005, 006, 010, 011 – Raw Material Storage Silos

PERFORMANCE RESTRICTIONS

- A.2. Permitted Capacity for EU Nos. 001 through 005 - The following silos are limited to the maximum throughput limits specified in the table below:

EU ID No.	Maximum Silo Throughput (Tons per any consecutive 12 month period)
001	123,400
002	131,000
003	127,100
004	101,800
005	104,700

{Permitting Note: Compliance with the silo throughput limits listed in the table above also demonstrates compliance with the particulate matter standard listed in Specific Condition No A.3. This is based on the fact that each silo has a dust factor of 0.01 (i.e., 1% emissions, uncontrolled) and a dust collector PM control efficiency of 99.985%.}

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.; Construction Permit No. 1050177-007-AC]

- A.3. Restricted Operation: The hours of operation are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

- A.4. Particulate Matter Emissions Standards for EU Nos. 001 through 005: The following silos are limited to the maximum particulate matter emissions standards specified in the table below:

EU ID No.	Maximum Particulate Matter Emissions (Tons per any consecutive 12- month period)
001	0.99
002	0.99
003	0.99
004	0.99
005	0.99

{Permitting Note: Each silo listed in the table above is subject to Rule 62-296.700, F.A.C. (PM RACT). To qualify for the exemption from the requirements of PM RACT, the PM allowable has been limited below 1 ton per year. Compliance with the silo throughput limits of Specific Condition No. A.1. will be considered a demonstration of compliance with the particulate matter emissions standard of this condition}

[Rules 62-4.070(3) and 62-296.700(2)(c), F.A.C., Construction Permit No. 1050177-007-AC]

EMISSIONS AND CONTROLS REQUIREMENTS

- A.5. Circumvention: The permittee shall not circumvent the air pollution control equipment (i.e. the baghouse /dust collection control devices used on EU ID Nos. 001, 002, 003, 004, 005, 006, 010, & 011 or allow emissions of air pollutants without this equipment operating properly.

[Rule 62-210.650, F.A.C.; Construction Permit No. 1050177-007-AC and 1050177-009-AC.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU Nos. 001, 002, 003, 004, 005, 006, 010, 011 – Raw Material Storage Silos

RECORDS AND REPORTS

- A.6. Silo Loading for EU ID Nos. 001 through 005: To document compliance with the silo throughput limits of Specific Condition A.2., the permittee shall maintain the following daily and monthly records:
- a. Daily Records – Daily records shall show each time a silo is loaded and shall include at a minimum the following:
 - (1) Facility name, facility number (1050177), and the date;
 - (2) The type of material being loaded into the silo (i.e. type of flour, or sugar); and
 - (3) The quantity of material loaded, in tons.
 - b. Monthly Records – Monthly records shall include the following:
 - (1) Facility name, facility number (1050177), and the date;
 - (2) The total quantity of material loaded (in tons) for the month; and
 - (3) The total quantity of material loaded (in tons) for the most recent consecutive 12-month total.

Daily records shall be completed within three (3) business days. Monthly records shall be completed no later than three (3) weeks after the end of each month. These records shall be maintained at the facility for at least three (3) years and made available to the Department upon request.

[Rule 62-4.070, F.A.C., Construction Permit No. 1050177-007-AC]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 008 and 009 – Bakery Ovens

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
008	<u>Winkler-Chubco (W-C) Oven No. 3</u> - This emissions unit consists of a natural gas fired pastry oven which has a maximum design heat input rate of 2.5 MMBtu/hour. This oven is a source of VOC emissions.
009	<u>Food Handling Systems (FHS) Oven No. 6</u> - This emissions unit consists of a natural gas fired pastry oven which has a maximum design heat input rate of 2.5 MMBtu/hour. This oven is a source of VOC emissions.

PERFORMANCE RESTRICTIONS

- B.1. Authorized Fuel: The bakery ovens shall be fired with natural gas or propane only.
[Construction Permit No. 1050177-007-AC and Rule 62-210.200(PTE), F.A.C.]
- B.2. Restricted Operation: The hours of operation are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Construction Permit No. 1050177-007-AC]

EMISSIONS STANDARDS

- B.3. VOC Emissions Standards: VOC emissions from the bakery ovens shall be limited as follows:
- E.U. ID No. 008 - VOC emissions from Winkler-Chubco Oven No. 3 shall not exceed 25 tons per any 12 consecutive month period;
 - E.U. ID No. 009 - VOC emissions from the Food Handling System Oven No. 6 shall not exceed 74 tons per any 12 consecutive month period;
 - The two permitted ovens (E.U. ID No. 008 and 009) shall be the primary ovens used to process yeast containing (i.e. VOC producing) products. Minor amounts of yeast containing products may be baked in other ovens with the limitation that total VOC emissions from all ovens shall not exceed 99 tons per any 12-consecutive month period.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1050177-007-AC]

[Title V Applicability Note: The VOC potential to emit from natural gas combustion at this facility (including exempt emission sources and assuming 8,760 hours/year operation) is 0.60 TPY. The VOC potential to emit at the facility (including the permitted bakery oven limit and exempt emissions sources) is 99.6 TPY. This is less than the Title V major source level of 100 TPY, and therefore this facility is considered a synthetic Non-Title V source for the pollutant VOC.]

RECORDS AND REPORTS

- B.4. VOC Emissions Calculations: Compliance with the VOC limitations of Specific Condition No. B.3. shall be based upon calculation of VOC emission rates from actual product line production rate and the VOC emission factors for each product line based on the equation contained in Section 9.9.6-1 of U.S. EPA AP-42 -Compilation of Air Pollutant Emission Factors as follows:

$$\text{VOC Ef} = 0.95Y_i + 0.195t_i - 0.51S - 0.86t_s + 1.90$$

where:

VOC Ef = pounds VOC/ton of baked product
Y_i = initial baker's percent of yeast

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 008 and 009 – Bakery Ovens

Ti = total yeast action time in hours
S = final (spike) baker's percent of yeast *
Ts = spiking time in hours *

(* Note: Spiking is not currently a part of the baking process at this facility.)

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1050177-007-AC]

- B.5. Oven Production and VOC Records - To document compliance with VOC emission limitations of Specific Condition No. B.3., the permittee shall maintain monthly product line records for each of the two main baking ovens (i.e., W-C Oven No. 3 and FHS No. 6), and for all yeast containing products baked in any other ovens at this facility (excluding the laboratory ovens used for product testing only.) These records shall include at a minimum the following:
- facility name, facility number (1050177), month, year;
 - pounds of product produced by product line designation (i.e., by bread type) by that oven;
 - initial yeast content, total yeast action time, final (spike) % of yeast (if any), and spiking time (if any) for each product line;
 - calculated VOC emission factor for each product line based upon Specific Condition No. B.4. above;
 - calculated VOC emissions for that oven for each product line based upon b. and d. above for the month (pounds or tons VOC per month);
 - total VOC emissions for that oven for the month, and for the most recent 12 consecutive month period (tons VOC per 12 consecutive month period); and
 - total facility VOC emissions for all ovens combined for the most recent 12 consecutive month period (facility total tons VOC per 12 consecutive month period).

Monthly records shall be completed no later than three (3) weeks after the end of each month. Supporting documentation which includes sufficient information to verify the data above (i.e., basis for yeast content, yeast action time, spike information (if any)) shall also be kept. These records shall be maintained at the facility for at least 3 years and made available to the Department upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1050177-007-AC]