

**PETITION FOR DECLARATORY STATEMENT  
BEFORE THE FLORIDA BUILDING COMMISSION**

<b>FILED</b>	
Department of Business and Professional Regulation Deputy Agency Clerk	
CLERK	Brandon Nichols
Date	<b>11/3/2015</b>
File #	

**Name:** Julien Croteau  
**Title:** Condo unit owner  
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Hollywood, FL 33019  
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**DS 2015-136**

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**Petitioner's Representative:**

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**Statute(s), Agency Rule(s), Agency Order(s) and/or Code Section(s) on which the  
Declaratory Statement is sought:**

2007 Florida Building Code Mechanical (FBC M) sections 401.6 501.2 908.3 101.4.2

**Background:**

Julien Croteau is a unit owner of Mainsail Condominium, City of Hollywood FL since April 2011. He observed then that Mainsail Cooling Tower discharged its vapor and potentially infected water droplets inside the building garage leading to major problems such as:

- Building Structural damages;
- Electrical and fire safety hazards;
- High risks to transmit Legionnaires' Disease...

An email send May 24<sup>th</sup> 2011 to Lee Andersen, president of Mainsail Condo Board of Directors, shows Mr. Croteau primary concern: *"checking the degradation of the water tower heat exchanger coming for an improper installation, causing mold and rust."*  
*"Lee, with your permission, I will contact the Hollywood engineer department to obtain*

*all the regulations about the installation and I will make drawings according with those regulations..." "Finally get a dry comfortable garage area."* That never occurred.

On February 1<sup>st</sup> 2012, Thermal Concepts, Mainsail mechanical contractor, applied to City of Hollywood for a permit to replace the Cooling Tower. To clarify the question, Mr. Croteau hired an engineer, Mr. Steve Bassett PE. Mr. Bassett issued an engineering report on Feb. 14<sup>th</sup> 2012 questioning Mainsail Cooling Tower Performance on site and recommending to *"Locate the tower in front of parking space 15."* On March 6<sup>th</sup>, a letter from the Cooling Tower manufacturer, SPX Cooling Technologies was send to City's Chief Inspector, Mr. Pete Micale. It stated that, based on facts previously presented, *"the Cooling Tower will perform as specified"*. March 27<sup>th</sup>, Mainsail Condo Association Board Election Meeting Minutes informed that the Cooling Tower has been replaced but the project has not been replaced as yet. Same date, March 27<sup>th</sup>, Mr. Basset issued a second report. He wrote about *Legionella a very deadly bio-organism*, and particularly about *"the discharge from this cooling tower load directly on anyone walking through the parking garage."* No attention was taken at this important point of design...

On October 30 2013, Mr. Ronaldo Soto send an email to Mr. Croteau which stated that *"... it is the opinion of the staff at the Board of Rules and Appeal that no violation of the Florida Building Code has occurred."* He also added: *"If you believe a provision of the Florida Building Code has been violated you have the right to appeal the decision..."*

At May 2015, Mr. Croteau hired Mr. Mario Bellavance, a senior engineer from Quebec to perform a risk analysis according to ASHRAE Standard 188. After Quebec outbreak at summer 2012, Mr. Bellavance has experiences in performing such analysis to prevent Legionella being transmitted by cooling towers. He confirmed the alternative proposal previously stated that Mainsail cooling tower should be relocated in a preventive mean to keep away a vulnerable population of elders from a source of infection, the cooling tower. After the failing of this new try to win Mainsail internal sympathy, it became obvious that a state intervention based on violation of Florida Building Code was the solution to this lasting problem...

First reading of Florida Building Code indicated that articles 501.1 and 502.1 seem to fit to the situation: Mainsail Cooling Tower violates Florida Building Code by discharging its vapor and water droplets potentially infected by Legionella inside the garage. An appeal to Broward County Board of Rules & Appeals was formulated and the case was heard on October 8<sup>th</sup> 2015. We respected completely the administrative rules of the Board, focused on the points or FBC articles that we think are violated and limited our intervention to 5 minutes even we had to say much more... On the other side, Mainsail attorney declared to the Board members that the question was simply a personal conflict over a parking lot. No one on the board even not the president of the assembly said that the attorney intervention was out of order. Then, the Board, by motion, voted to deny the appeal. A letter from Mr. James DiPietro, Administrative Director of Broward County Board of Rules and Appeals informed us that this decision can be the

object of an appeal to Florida Building Commission. In the following, several definitions, scopes and applications set forth in 2007 FBC and 2007 FBC will be found. Actual Mainsail Cooling Tower installation must be questioned. Technical clarification must be presented. Florida Building Code must be defended in its intent to safeguard the public health, safety and welfare as well as on the main points specifically highlighted below.

**401.6 Contaminant sources.** Stationary local sources producing air-borne particulates, heat, odors, fumes, spray, vapors, smoke or gases in such quantities as to be irritating or injurious to health shall be provided with an exhaust system in accordance with Chapter 5 or a means of collection and removal of the contaminants. Such exhaust shall discharge directly to an approved location at the exterior of the building.

**501.2 Exhaust discharge.** The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a nuisance and not less than the distances specified in Section 501.2.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic or crawl space.

**908.3 Location.** Cooling towers, evaporative condensers and fluid coolers shall be located to prevent the discharge vapor plumes from entering occupied spaces. Plume discharges shall be not less than 5 feet (1524 mm) above or 20 feet (6096 mm) away from any ventilation inlet to a building. Location on the property shall be as required for buildings in accordance with the *Florida Building Code, Building*.

**101.2 Scope.** The provisions of the *Florida Building Code, Existing Building*, shall apply to the repair, alteration, change of occupancy, addition and relocation of existing buildings.... Existing buildings undergoing repair, alterations or additions and change of occupancy shall comply with Chapter 34 of this code.

**3401.1 Scope.** Alteration, repair, addition, relocation and change of occupancy of existing structures and buildings shall comply with the provisions of the *Florida Building Code, Existing Building*.

**101.3 Intent.** The intent of this code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard the public health, safety and welfare insofar as they are affected by the repair, alteration, change of occupancy, addition and relocation of existing buildings.

**302.8 Mechanical.** Additions, alterations, renovations or repairs to mechanical installations shall conform to the *Florida Building Code, Mechanical* without requiring the existing installation to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing installation to become unsafe,

hazardous or overloaded. [M]

Minor additions, alterations, renovations and repairs to existing installations shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved.

**303.2 Hazardous locations.** Appliances shall not be located in a hazardous location unless listed and approved for the specific installation.

**901.1 Scope.** This chapter shall govern the approval, design, installation, construction, maintenance, alteration and repair of the appliances and equipment specifically identified herein and factory-built fireplaces. The approval, design, installation, construction, maintenance, alteration and repair of gas-fired appliances shall be regulated by the *Florida Building Code, Fuel Gas*.

**901.2 General.** The requirements of this chapter shall apply to the mechanical equipment and appliances regulated by this chapter, in addition to the other requirements of this code.

**908.1 General.** A cooling tower used in conjunction with an air-conditioning appliance shall be installed in accordance with the manufacturer's installation instructions. The design of such cooling tower shall be in accordance with the requirements of the *Florida Building Code, Building* for a structure. Unless otherwise stated in this code, water cooling towers shall comply with NFPA 214.

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### Questions

**Considering that Mainsail Cooling Tower is a contaminant source;**

**Considering that Mainsail Cooling Tower is exhausting its vapor and potentially infected water droplets inside a building garage in complete violation of FBCEB articles 401.6; 501.2; 908.3;**

**Considering that a cooling tower is a technology at risk to transmit Legionnaires' Disease;**

**Considering that Legionnaires' Disease is a grave infection as illustrated by Quebec City outbreak of summer 2012 which infected 181 peoples and cause the death of 14 of them and the recent New York City outbreak which infected 127 peoples and caused the death of 12 of them;**

**Considering that there's no need for one more death at Mainsail before getting into ACTION;**

**In compliance with FBCEB Article 308.2, should Mainsail Cooling Tower actual arrangement be declared hazardous as a condition to invalidate the recent Cooling Tower replacement as was in the existing system?**

**In the intent of FBCEB to safeguard the public health, safety and welfare, should an alternative solution be achieved in accordance with Florida Building Code and Florida Fire Prevention Code?**

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**Summary**

Petitioner respectfully believes the answer to both questions highlighted above is "YES". How the answer can be "NO"? In fact, an alteration can be done as was in the existing system, in the absence of signs like building structural damages, electrical safety hazards and so on. The observation reported by Mr. Julien Croteau in his May 24<sup>th</sup> 2011 e-mail should have raised a red flag.

A further investigation would have lead City of Hollywood and Broward County technical services to identify a cooling tower as a contaminant source, a technology at risk to transmit Legionnaires' Disease. Mainsail construction dated from 1967 at a time when Legionella was unknown. So, designer could not indentify it. Same at the time of the first replacement in 1980 when Legionella just came to be identified 4 years before. However, at the time of the actual replacement, Legionella was the object of tons of documents and guides. So, how this life and death hazard could be ignored? The Cooling Tower arrangement should have been questioned leading to the implementation of an alternative solution such as the one exposed in Steven Basset, PE Feb 14<sup>th</sup> 2012 engineering report.

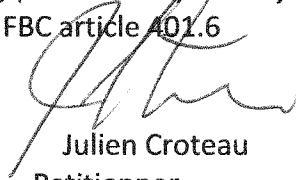
In a quality insurance improvement, two questions should be asked :

- Are we doing the right thing?
- Are we doing it well?


Broward County and City of Hollywood technical services focused on the second question justifying the whole process of issuing a permit. They ignored completely the main point which is: *Is something previously wrong?* Mr. Croteau, once again, in his May 24<sup>th</sup> 2011 e-mail invoked *"an improper installation, causing mold and rust"*. Considering his effort to inform everyone about these evident facts, how these responsible persons could ignore it?

Lastly, *"possible contamination with legionella bacteria"* by Mainsail cooling tower was recognized in the Analysis of Appeal 15-06. The whole issue of prevention was reduced to *"systematic maintenance"* avoiding the main point which is a bad or wrong design exposing the garage occupants to water droplets potentially infected by Legionella. It passed under silence the complete violation of FBCEB. Also, this hazard can only be corrected by *discharging (the exhaust) directly to an approved location at the exterior of the building* as stated in FBC article 401.6

Signed on Nov. 3, 2015,



Julien Croteau  
Petitioner



Mario Bellavance, ing.  
Petitioner's Representative