<b>Docket Number:</b>	17-BSTD-02
<b>Project Title:</b>	2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking
TN #:	222846
<b>Document Title:</b>	Comments on Title-24 Standards 2019
Description:	N/A
Filer:	System
Organization:	Guttmann & Blaevoet Consulting Engineers/Ted M. Tiffany
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	3/5/2018 9:54:32 AM
<b>Docketed Date:</b>	3/5/2018

Comment Received From: Ted M. Tiffany

Submitted On: 3/5/2018 Docket Number: 17-BSTD-02

## **Comments on Title-24 Standards 2019**

Please find the attached comments for consideration.

Additional submitted attachment is included below.



To: California Energy Commission Staff March 5, 2018

## Guttmann & Blaevoet Consulting Engineers Comments for 45 Day public comment period on draft Title-24-2019 Language.

Dear Commissioners-

Please allow me to thank and congratulate you all on a very clean update from the 2016 to 2019 Standards revisions. Some very important elements were added and with your industry response and outreach a lot of our comments have already been addressed. Please accept these few additional items for your consideration:

- 1. With the regulated occupancies coming into Title-24-2019 language for Healthcare (OSHPD regulated) buildings we want to make sure the following elements of compliance are adequately addressed for this new building sector and plan check agency.
  - a. Most mechanical and electrical requirements are exempt under these newly developed sections and in performance based compliance software these exceptions need to be enabled and allowed in the software.
  - b. Forms must adequately reflect these exceptions as well.
  - c. "I" occupancy ventilation rates for both 100% Outside air and recirculation air systems must adequately be applied in the performance path software.
  - d. Training for OSHPD plan check teams is critical to understand the complexities of the forms and what new exemptions apply for this occupancy type. Again, forms really need to be clear about the exemptions noted.
- 2. Regarding Natural Ventilation Sections 120.1 2, I understand this section aligns with current ASHRAE 62.1 language but the Technical Committee is reviewing current language right now to "Fix" both the prescriptive and the "engineered system" language and the opening location and size requirements. CEC should be prepared to adopt these changes mid cycle as they are released in addendum format to align with these corrections.
- 3. Controls for systems with natural ventilation 140.4(n): An exception should be applied for single zone mechanical systems for these controls to be interlocked to the HVAC system. This is not practical or cost effective for single zone classroom buildings, single zone office buildings, or other simple natural ventilation designs. Controls in most cases need to be interlocked with HVAC through security sensors on windows and in most K-12 buildings this is cost prohibitive and encourages ONLY mechanical ventilation and discourages natural ventilation and connection to outdoors. Here is just one example of a classroom designed with effective high and low natural ventilation openings which prescriptively requires 13 sensors on individual openings. This example is a simple single zone furnace, no air conditioning and no central BMS control. There is



no functional cost effectiveness calculation that can justify the cost of this example for controls.

4. Lighting for plant growth in section 140.6 (a) 3 item G still exempts cannabis facilities now regulated by CALCannabis. With this newly regulated industry I was hoping to see this occupancy type

included in the Standards to regulate HVAC, lighting, and IAQ. With a 3-5% increase expected on the power grid from grow facilities I would expect to see some level of energy efficiency gains in this set of standards relating to this occupancy. Lighting for plant growth should no longer be in the "exempt" lighting section now that this occupancy is in the regulated market.

Sincerely,

Proud to be -

a Just. organization | "Best Place to Work" 2017 | Celebrating 60 years

Ted M. Tiffany, LEED AP BD+C, CEA, Associate Principal

Director of Sustainability

d 707.523.3010 x 302 c 707.595.0931



15 Third Street, Santa Rosa, CA 95401

HVAC, Plumbing, Fire Protection, Electrical, Lighting, Telecom/Technology Commissioning, Building Performance Modeling, Net Zero <a href="https://www.gb-eng.com">www.gb-eng.com</a> | San Francisco Green Business | San Francisco 2030 District

