

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-BSTD-01
<b>Project Title:</b>	2022 Energy Code Update Rulemaking
<b>TN #:</b>	239079
<b>Document Title:</b>	Hawthorne Gardening Company Comments - Title 24 Comments
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Hawthorne Gardening Company
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/29/2021 6:39:33 AM
<b>Docketed Date:</b>	7/29/2021

*Comment Received From: Hawthorne Gardening Company  
Submitted On: 7/29/2021  
Docket Number: 21-BSTD-01*

## **Title 24 Comments**

Comments Attached Below in .docx file

*Additional submitted attachment is included below.*



July 28, 2021

California Energy Commission  
Docket Unit, MS-4  
Re: Docket No. 21-BTSD-01  
1516 Ninth Street  
Sacramento, California 95814-5512

(Submitted Electronically to Docket 21-BSTD-01)

Re: Hawthorne Gardening Company Comments - Title 24-2022 15-Day Express Terms [Docket No. 21-BTSD-01]

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CEC Staff:

Hawthorne Gardening Company respectfully submits the following comments in response to the California Energy Commission (CEC) 15 day Express Terms 2022 Energy Code - Residential and Nonresidential for Project Title 2022 Energy Code Update Rulemaking published on July 14, 2021.

Hawthorne Gardening Company is the world's largest hydroponic agriculture equipment supplier and distributor and has a significant presence in the HVAC category. Hawthorne's mission is to provide innovative products and solutions and enable success for growers in a competitive market.

Hawthorne is a leading distributor of Quest and Ideal Air brand dehumidifiers, which service the controlled environment horticulture market (CEH) with premium dehumidification equipment. The changes as proposed to the title 24 regulation for CEH would dramatically affect the number of dehumidification solutions Hawthorne could offer. Implementing this change would also negatively impact the efficiency and worsen the environmental impact of indoor growing in the State of California.

As a leading producer and distributor of CEH products, we feel that Hawthorne Gardening Company is uniquely positioned to provide actionable feedback to the CEC and State of California. Thank you to CEC staff for your tireless efforts and ongoing collaboration.

**Revision to Mandatory Requirements for Covered Processes - Section 120.6 (h)**  
**Mandatory Requirements for Controlled Environment Horticulture (CEH)**

The draft regulation sent out for public review on May 6th, 2021 (Docket Number:21-BSTD-01, TN#:237717) included the following language to permit the use of stand-alone dehumidifiers for indoor growing dehumidification of Controlled Environment Horticulture (CEH) spaces:

- A. Stand-alone dehumidifiers that meet the following minimum integrated energy factors measured by the test conditions in Appendix X1 to Subpart B of 10 CFR Part 430:
  - I. Minimum integrated energy factor of 1.77 L/kWh for product case volumes of 8.0 cubic feet or less;
  - II. Minimum integrated energy factor of 2.41 L/kWh for product case volumes greater than 8.0 cubic feet;

This language was developed by the CASE CEH team with the cooperation and input of many industry stakeholders including representatives from Hawthorne Gardening Company and distributed brands including Quest and Quest IQ.

On July 14th, a new set of proposed changes was released (Docket Number:21-BSTD-01, TN#: 238848) with the requirements for the use of stand-alone dehumidifiers, now called “dehumidifiers”, altered to the following:

- A. Dehumidifiers subject to regulation under federal appliance standards tested in accordance with 10 CFR 430.23(z) and Appendix X or X1 to Subpart B of 10 CFR Part 430 as applicable, and complying with 10 CFR 430.32(v)2.ng with 10 CFR 430.32(v)2.

It is our understanding this wording revision was implemented to prevent the preemption of federal requirements for dehumidification equipment subject to 10CFR430.

We further understand that while 10CFR430 is specifically focused on “Consumer Products” (i.e. products purchased in small quantities by individuals for residential use), the justification to require all units be subject to 10CFR430 is based on the fact that there is no capacity, compressor size or other size limit listed in 10CFR430. While we cannot fully dispute this reasoning, this decision creates potential collateral impacts that will negatively affect our product offerings and the energy consumption of the CEH industry.

Hawthorne Gardening Company respectfully urges that the CEC and the State of California reconsider this revision and return the language to the wording in the May 6th release.

### **Potential Impacts of the Revised Regulation: Manufacturers and California**

Revision of this language to subject all dehumidifiers formerly, stand-alone dehumidifiers) to 10CFR430

has two primary implications that may affect the sale of these units to the California CEH market:

1. Dehumidifiers will now be defined as either “portable” or “whole-home” as defined in 10CFR430. These narrow categories and associated testing requirements will negatively impact the industry by narrowing scope of qualifying dehumidification equipment.

“Portable” units may be defined as unducted units. As it relates to the CEH industry portable units are most commonly hung in the growing space. These units are subject to minimum efficacy standards listed in 10 CFR 430.32(v)2, under many conditions they are held to higher efficacy standards than whole home units and as a result many previously compliant units will no longer be compliant to hang in a grow space.

“Whole Home” units may be defined as ducted units. These units are subject to testing standards listed in 10 CFR 430.32(v)2, these standards are achievable by most units across the CEH dehumidification industry.

2. All dehumidifiers that are subject to 10CFR430, regardless of size or application could be considered “residential”. Under pending CARB (California Air Resources Board) all “residential dehumidifiers” must use refrigerants with a GWP (Global Warming Potential) of 750 or less by 2023. Compliance by this date is unlikely due to required component changes and associated supply chain risks.

If CARB regulations are not altered to enforce compliance by 1/1/2025 like with other air condition equipment, there will be an extreme supply chain constraint on the industry and there will likely be a period where units cannot be sold into the CEH market.

If stand-alone dehumidifiers were banned from sale, the closest alternative would be less efficient unitary air conditioning equipment with hot gas reheat. These units have been shown to be significantly less efficient than standalone units.

### **Hawthorne Gardening Companies Reasoning**

Hawthorne Gardening Company requests that requirements for the use of stand-alone from the draft regulation sent out for public review on 6 May, 2021 be reinstated for the following reasons.

1. The previous draft did not differentiate between stand alone and whole home (or “whole facility”) units based on their installation.
2. Allows flexibility for the grower to use the optimal solution for their facility layout and design.
3. Previous draft did not preempt federal regulations.

By making all dehumidifiers subject to 10 CFR 430, standalone units may be misconstrued as residential units which potentially would force compliance by January 2023, a premature date that vendors and growers will largely fail to meet (due to CARB <750 refrigerant use).

It has always been the consensus of our brands and customers that the larger CEH dehumidification units were not subject to regulation as “residential” units and as such, these units should not be subject to CARB residential unit compliance date of January 1st, 2023.

Hawthorne does not believe that the previous draft regulations (circulated for public review May 6, 2021) preempted federal regulation.

We contend that the standalone dehumidifiers distributed and sold by Hawthorne Gardening company do not fall under the regulations of DOE (Dept. of Energy) or any other federal agency, building code or other ANSI accredited standard. As no regulations exist governing these units there is no precedent for federal regulation.

The precedent that has instead been used was set by the 2019 Denver Amendments to the 2018 Edition of the International Energy Conservation Code, Chapter 4: C403.13.1 Dehumidification:

C403.13.1 Dehumidification. All indoor plant grow operations that require dehumidification shall utilize one of the following dehumidification options

1. Free-standing dehumidification units with a minimum energy factor of 1.9 l/kWh. The test method for minimum energy factor shall be as specified in 10 CFR Part 430, Subpart B - Appendix X.
2. Chilled water system with heat recovery from the condenser coil to achieve dehumidification reheat.
3. Integrated HVAC system with heat recovery from the condenser coil (hot gas reheat) to achieve dehumidification reheat.

This was the regulation that the CASE team used as the basis for the previously written drafts and that was reviewed - and generally supported - by stakeholders during the 12 month public review process.

It has been the widely accepted view of the dehumidifier industry that the Denver code does not preempt federal regulation, but rather requires adherence to the performance requirements of 10CFR430. Since there is no other regulation covering non-consumer and non-residential dehumidifiers, it has been considered valid precedent.

## **Hawthorne Gardening Company Solution**

Hawthorne believes that if the CEC and State of California will not agree to return the the language found in the May 6th version of the draft regulation, then we ask that they consider the following revisions to the current language found in Title 24 Section 120.6(h)1.A:

Dehumidifiers subject to regulation under federal appliance standards tested in accordance with 10 CFR 430.23(z) and Appendix X or X1 to Subpart B of 10 CFR Part 430 as applicable and complying with 10 CFR 430.32(v)2. ng with 10 CFR 430.32(v)2, or non-consumer product dehumidifiers that meet the same performance requirements as those dehumidifiers subject to 10 CFR 430.23(z).

The intention of these revisions is to allow the use of standalone dehumidifiers designed for commercial, industrial and agricultural applications in California CEH facilities and not make them subject to 10CF430.

Hawthorne Gardening Company appreciates that the CEC will review these comments. If you have any questions or concerns regarding our comments please reach out to our team.

Sincerely,

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