



HYGIENETECH

Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180
Torrance, California 90503-1643
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

August 3, 2011

State of California
Board of Equalization
450 N Street
Sacramento, California 94279

Document No. 21107001.2

Attention: David Gau

Regarding: Response to California Department of General Services Letter Dated July 22, 2011

Dear Mr. Gau:

On July 26, 2011, Hygiene Technologies International, Inc. (HygieneTech) was provided a letter from the California Department of General Services (DGS) dated July 22, 2011 that was addressed to the California State Board of Equalization (BOE). In that letter, DGS commented on the investigation of the heating, ventilating, and air conditioning (HVAC) ducts associated with supply fan units 3 and 4 and also referenced portions of HygieneTech Document No. 21107001.1 dated July 15, 2011. After my review of the DGS letter, I have the following responses.

- Data that were generated by LaCroix Davis (LCD), consultant to DGS, consistently confirmed growth of *Cladosporium* species in the HVAC system in the BOE building. Note that the types of samples collected by LCD did not allow the laboratory to identify the species of *Cladosporium*, however. HygieneTech has no criticism of the sample collection or analytical methodologies used by their LCD or their contractor laboratory; in fact, the methodologies used are standard in the industry.
- Because the species within the *Cladosporium* genus identified by LCD is unknown at this time and because some persons in the BOE building may experience allergy-type or perhaps other adverse ill effects upon exposure to one or more *Cladosporium* species, HygieneTech and LCD have agreed that species identification is necessary in order to more fully evaluate the potential health impacts on the BOE building occupant population. And, beginning on Friday evening, July 29, 2011, species identification sample collection commenced, and data concerning those samples will be published as soon as they are available.
- One of the issues that will be closely evaluated is whether the presence of the *Cladosporium* growth in the HVAC system adversely affects the indoor air quality in the building. And, if that growth does adversely affect the indoor air quality, then HygieneTech would intend to determine where those effects are occurring from an analytical standpoint, and when those effects occur (in case a timing pattern is relevant).
- In their letter of July 22, 2011, DGS cites a portion of text in a recent HygieneTech letter dated July 15, 2011 in which HygieneTech stated, "Overall, these data (air sample results recorded by



HygieneTech on June 19, 2011) were considered unremarkable and are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.” That statement was true at the time that letter was published and remains true as of the date of this letter—and that statement is supported by the fact that HygieneTech knows of no increase in worker allergy symptom-related illnesses in recent weeks in the BOE building. Note, however, that the samples collected by HygieneTech on June 19, 2011 did not identify species and therefore those data will not ultimately be used to provide the definitive answer with respect to exposure potentials for the BOE building population or the potential health impacts. Again, while the data recorded to date are unremarkable and HygieneTech knows of no cause for alarm concerning the growth of *Cladosporium* in the building HVAC system, the opinions by both HygieneTech and LCD on the relevant related issues have not been finalized. Most certainly, any conclusion concerning future data cannot be made until the data are known.

- Note that, at the outset of learning of the *Cladosporium* growth in the HVAC system, HygieneTech suggested that a comprehensive assessment be performed in the BOE building and in several other buildings of like kind in the Sacramento valley area. The latter assessments were proposed in an attempt to ascertain if *Cladosporium* growth is common in HVAC systems in high-rise buildings. HygieneTech was informed that DGS declined to have the HygieneTech/LCD team perform assessments in other buildings owned by DGS. DGS did agree to a BOE building assessment and, as I indicated above, that team did commence with that assessment last Friday evening. Be advised, though, that given that HygieneTech and LCD were not able to conclude that *Cladosporium* growth is normal in high-rise buildings in the Sacramento valley area, HygieneTech is therefore compelled to recommend that the *Cladosporium* growth in the BOE building HVAC system be remediated—regardless of assessment data concerning relevant issues that may be made available in the coming weeks. HygieneTech would also recommend that, following remediation of the mold growth in the HVAC systems, periodic monitoring within the HVAC system should be performed over the next calendar year so that factors related to changes in seasons or short-term environmental conditions may be properly evaluated, and so that the involved parties may identify recurring mold growth patterns, if such growth recurs.
- Be advised that the opinions of HygieneTech regarding remediation of the HVAC system mold growth are inconsistent with the opening statements that appear in the DGS dated July 22, 2011, given that DGS stated, “...(DGS) does not believe the remediation of the fungal growth identified within the HVAC system is necessary at this time.” Fortunately, based on my conversations with LCD representatives, HygieneTech and LCD agree that remediation of the mold growth in the HVAC is not only advisable, but is the only response that is consistent with the general remediation strategies that have applied to the BOE building throughout this project.

HygieneTech and LCD plan to meet and confer on these and other related matters on August 4, 2011. I will update you on the outcome of that meeting. If in the meantime you have any comments or questions regarding the information presented, please feel free to contact our offices directly at (310) 370-8370.

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

Brian P. Daly, CIH, PE
President