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August 1, 2008

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

Document No. 20808001.1

Attention: David J. Gau

Regarding: Discovery of Evidence of Water Intrusion in Multiple Elevator Shafts

Dear Mr. Gau:

On July 24, 2008, Hygiene Technologies International, Inc. (HygieneTech) industrial hygienists performed visual inspections of multiple elevator shafts in the Board of Equalization building at the above-referenced address. The primary purpose of the inspections were to eliminate those shafts as possible sources of mold growth odors that had been noticed during the winter months on varying floor levels, particularly at the elevator lobby on Floor 21.

During the inspections, we joined the assessment team that primarily included hygienists from LaCroix-Davis, and while HygieneTech did not inspect all areas of all shafts entered on that day, HygieneTech did receive information concerning observations recorded by LaCroix-Davis in those areas not inspected by HygieneTech, the descriptions of which I have included below along with the Hygiene Tech observations.

- Elevator 1 – Efflorescence was seen on the elevator pit walls just above the pit floor level. Water staining was seen on the southern wall as viewed from the 11th Floor; and suspect fungal growth was observed on eastern wall near the 10th Floor (the latter viewed only by LaCroix-Davis).

- Elevator 2 – Efflorescence was seen on the elevator pit walls just above the pit floor level.

- Elevator 4 – Water staining was seen periodically at the northwestern corner walls at various floor levels (viewed by LaCroix-Davis).

- Elevator 5 – Water staining and rust was observed in the lower two feet of the pit walls, which was believed to be due to previous flooding and/or perhaps water table-related issues. Note that, at the time, the elevator operator mentioned that that pit floods periodically in the winter season. Water staining was observed in the northeastern corner on 10th and 11th Floors (the latter viewed only by LaCroix-Davis).

- Elevator 8 – Water staining and suspect fungal growth was observed on the northern shaft wall. The southern wall viewed from the 21st Floor had staining believed to have been from water

exposure. LaCroix-Davis indicated that numerous water stains existed from that point down to the 7th Floor; mostly at the northern wall, and at times accompanied by periodic suspect fungal growth. LaCroix-Davis reported that the word *Mold* was written in marker pen on the eastern shaft wall at one location.

- Freight Elevator – Very faint water streaks were seen on the southern wall as viewed from the 22nd Floor.

- Elevator 11 – Water staining was seen on the southern and western shaft walls. Efflorescence was seen on the elevator pit walls just above the pit floor level.

- Elevator 12 – Water staining was seen on the western shaft wall. Efflorescence was seen on the elevator pit walls just above the pit floor level. Water staining was observed on southern shaft wall as viewed from the vent at the roof level.

My initial reaction to these preliminary findings is that the elevators shafts are generally potential targets of water intrusion and therefore are sources of mold growth and associated odors, due to the ample evidence seen in nearly all of the shafts. Note that the two elevators located within the parking structure away from the main building were not inspected, and therefore I have no background information on those. Be advised that the water intrusion in selected areas of some of the shafts may be related to rainwater water entering perhaps at roof locations and/or mechanical rooms, but I also want you to consider that other sources, such as internal plumbing systems, may also be causing staining and mold growth in the elevator shafts.

Given that mold growth-like odors were more noticeable on Floor 21 during the past winter months in which we had rain, and the odor episodes have declined dramatically during the past dry months may strongly support the rain-related water intrusion theory; however, as I noted above, other sources of water are possible. For example, perhaps the decline of odor episodes on Floor 21 is related to completion of the mold growth abatement on the upper vacant floors. But, now I am speculating, because I still cannot be sure where or what the source(s) of mold growth odors were.

To that end, additional investigation is required in order to more fully assess the potential for mold growth in the building areas that are not easily accessed, such as the locked areas at the Floor 21 core and the Floor 21 ceiling plenums, both of which should be thoroughly inspected for sources of water intrusion and mold growth. And, each of the elevator plenums should be more thoroughly inspected for evidence of water intrusion and mold growth. I would also recommend that wall cavity samples be collected from selected areas on Floor 21 and lower floor levels, at the discretion of Kenny Hsi, CIH or Wes Frey, so that HygieneTech may evaluate the possibility of mold growth in such cavities. To date, I do not believe that HygieneTech has been provided with unfettered access to those building areas, a claim that I offer not as a criticism of DGS, but merely as a point in fact. Now, given that our preliminary odor investigation work has led us to suggest that further assessment in those specific areas is necessary, I believe that the investigation should proceed without delay, particularly in light of the possibility that the coming winter season may lead to additional mold growth and the associated odors.

Once a more thorough mold growth odor investigation has been completed, then mold growth abatement protocols may be created. Note that abatement of mold growth in elevator shafts and in ceiling plenums may be as simple as superficial treatment and encapsulation; however, in some cases, gypsum board removal may be required, which is of course much more destructive and will likely require closure of some discrete portions of building for varying periods of time. As of today, I cannot offer any specifics on the abatement protocols that will most likely be recommended.

Another reaction to our preliminary odor investigation findings is that, presumably, one or more building maintenance personnel knew that water intrusion and potential mold growth had occurred in Shaft 8 and perhaps other shafts, given that *mold graffiti* was found on one of the elevator shaft walls. If this is a reasonable possibility, then I would recommend that building maintenance be contacted in order to secure all possible water intrusion history documents involving the elevator shafts, because after receipt of that information, the investigation may perhaps proceed more rapidly.

If you have any comments or questions regarding the information contained in this correspondence, please feel free to contact me directly at (310) 370-8370.

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

Brian P. Daly

Brian P. Daly, CIH, PE
President