

Appendix D
Correspondence

Andrea Steinbach

From: Ted Ice
Sent: Thursday, March 31, 2011 6:27 PM
To: 'gsheehan@jls-inc.com'; 'Mike.Moore@dgs.ca.gov'; 'lsandhu@hygienetech.com'
Cc: 'Vince.Paul@boe.ca.gov'; Chris Corpuz; 'wfrey@hygienetech.com'; 'khsi@hygienetech.com'; 'mary.hoy@dgs.ca.gov'
Subject: Clearance - Periodic Housekeeping - M Floor Fan Room 3/4 Containment

Good Evening,

LaCroix Davis, LLC has received the lab data for the air quality testing performed 3/31/11 in the M Floor Fan Room 3/4 containment following periodic housekeeping activities performed by JLS and the testing results meet our clearance criteria.

Regards,

Ted Ice
Sr. Associate
LaCroix Davis, LLC
925.299.1140

Andrea Steinbach

From: Ted Ice
Sent: Saturday, April 02, 2011 4:34 PM
To: 'gsheehan@jls-inc.com'; 'Mike.Moore@dgs.ca.gov'; 'lsandhu@hygienetech.com'
Cc: 'Vince.Paul@boe.ca.gov'; Chris Corpuz; 'wfrey@hygienetech.com'; 'khsi@hygienetech.com'; 'mary.hoy@dgs.ca.gov'
Subject: Re: Clearance - M Floor Fan Room 3/4 Containment

Good Day,

LaCroix Davis, LLC has received the lab data for the clearance testing performed 4/02/11 in the M Floor Fan Room 3/4 containment and the results meet our clearance criteria.

Regards,

Ted Ice
Sr. Associate
LaCroix Davis, LLC
925.299.1140

Andrea Steinbach

From: Ted Ice
Sent: Sunday, April 03, 2011 4:26 PM
To: 'gsheehan@jls-inc.com'; 'Mike.Moore@dgs.ca.gov'; 'lsandhu@hygienetech.com'
Cc: 'Vince.Paul@boe.ca.gov'; Chris Corpuz; 'wfrey@hygienetech.com'; 'khsi@hygienetech.com'; 'mary.hoy@dgs.ca.gov'
Subject: Clearance - Periodic Housekeeping - M Floor Fan Room 1/2 Containment

Good Afternoon,

LaCroix Davis, LLC has received the lab data for the air quality testing performed 4/03/11 in the M Floor Fan Room 1/2 containment following periodic housekeeping activities performed by JLS and the testing results meet our clearance criteria.

Regards,

Ted Ice
Sr. Associate
LaCroix Davis, LLC
925.299.1140

Andrea Steinbach

From: Ted Ice
Sent: Monday, May 16, 2011 7:41 AM
To: 'gsheehan@jls-inc.com'; 'Mike.Moore@dgs.ca.gov'; 'lsandhu@hygienetech.com'
Cc: 'mary.hoy@dgs.ca.gov'; Chris Corpuz; 'khsi@hygienetech.com'; 'Vince.Paul@boe.ca.gov'; 'Joan.Armstrong@dgs.ca.gov'; 'James.beesley@dgs.ca.gov'
Subject: Re: Clearance - M Floor Fan Room 1/2 containment

Good Morning,

LaCroix Davis, LLC received lab data for the clearance testing performed 5/14/11 in the M Floor Fan Room 1/2 containment and the results meet our clearance criteria. Verbal notification was provided to JLS and HTI on Saturday.

Regards,

Ted Ice
Sr. Associate
LaCroix Davis, LLC
925.299.1140

Andrea Steinbach

From: Ted Ice
Sent: Wednesday, May 18, 2011 4:21 PM
To: 'gsheehan@jls-inc.com'; 'Mike.Moore@dgs.ca.gov'
Cc: Chris Corpuz; 'mary.hoy@dgs.ca.gov'
Subject: Clearance - M Floor Offices Containment

Good Afternoon,

LaCroix Davis, LLC has received lab data for the clearance testing performed 5/18/11 in the M Floor Offices containment and the lab results meet our clearance criteria.

Regards,

Ted Ice
Sr. Associate
LaCroix Davis, LLC
925.299.1140

Andrea Steinbach

From: Moore, Mike@DGS [Mike.Moore@dgs.ca.gov]
Sent: Monday, May 23, 2011 9:23 AM
To: Chris Corpuz; Ted Ice
Cc: Beesley, James@DGS; gsheehan@jls-inc.com; Sommerville, Jill@DGS
Subject: RE: BOE Chiller room pipe lagging and filters

Chris,

For now, let's collect and hold the samples. We may decide to have the samples read when samples are available for the duct interiors?

Mike

From: Chris Corpuz [mailto:ccorpuz@lacroixdavis.com]
Sent: Friday, May 20, 2011 6:51 AM
To: Moore, Mike@DGS; Ted Ice
Cc: Beesley, James@DGS; gsheehan@jls-inc.com; Sommerville, Jill@DGS
Subject: RE: BOE Chiller room pipe lagging and filters

Mike:

The duct insulation samples (once collected and analyzed) will most likely show a population of mold spores that represents the system's "collective history"; whereas, the primary filters (in front of the chiller coils) will represent only the most recent mold spore history. As Ted indicated, we will be able to use this information for comparison purposes; which is why we are recommending the collection of the filter samples. If appropriate, we can collect and bag a few filter samples and hold them for a short period of time before deciding if we want to have them analyzed.

Chris Corpuz MS, CIH
 Western Regional Manager
LaCroix Davis LLC
 3685 Mt. Diablo Blvd., Suite 210
 Lafayette, CA 94549
 (925) 299-1140 phone
 (925) 299-1185 fax
 ccorpuz@lacroixdavis.com
 www.lacroixdavis.com

Sacramento * San Francisco * Southern California * Las Vegas * Harrisburg

This message is confidential, intended only for the named recipient(s) and may contain information that is privileged, attorney work product or exempt from disclosure under applicable law. If you are not the intended recipient(s), you are notified that the dissemination, distribution or copying of this message is strictly prohibited. If you receive this message in error, or are not the named recipient(s), please notify the sender at either the e-mail address or telephone number above and delete this e-mail from your computer. Receipt by anyone other than the named recipient(s) is not a waiver of any attorney-client, work product, or other applicable privilege. Thank you.

From: Moore, Mike@DGS [mailto:Mike.Moore@dgs.ca.gov]
Sent: Thursday, May 19, 2011 3:54 PM
To: Ted Ice
Cc: Chris Corpuz; Beesley, James@DGS; gsheehan@jls-inc.com; Sommerville, Jill@DGS
Subject: RE: BOE Chiller room pipe lagging and filters

2/17/2012

If Chris and Steve recommend we do this then I'm OK with taking the samples.

Mike

From: Ted Ice [mailto:tice@lacroixdavis.com]
Sent: Thursday, May 19, 2011 3:52 PM
To: Moore, Mike@DGS
Cc: Chris Corpuz; Beesley, James@DGS; gsheehan@jls-inc.com; Sommerville, Jill@DGS
Subject: Re: BOE Chiller room pipe lagging and filters

Mike,

Comparitive information (inside vs. outside) may be useful since the filters are changed annually and they aren't 100% efficient - a percentage of particulates are trapped on the filters but the rest pass (over, under, around and) through them where they accumulate on the coils, in the duct insulation/lining or are distributed into the building.

When it's time to discuss the duct sample analytical results this information may be useful.

Thanks,
Ted

From: Moore, Mike@DGS [mailto:Mike.Moore@dgs.ca.gov]
Sent: Thursday, May 19, 2011 01:55 PM
To: Ted Ice
Cc: Chris Corpuz; Beesley, James@DGS <James.Beesley@dgs.ca.gov>; gsheehan@jls-inc.com <gsheehan@jls-inc.com>; Sommerville, Jill@DGS <Jill.Sommerville@dgs.ca.gov>
Subject: RE: BOE Chiller room pipe lagging and filters

Ted,

Yup, I still question the value of sampling these.

Mike

From: Ted Ice [mailto:tice@lacroixdavis.com]
Sent: Thursday, May 19, 2011 1:52 PM
To: Moore, Mike@DGS
Cc: Chris Corpuz; Beesley, James@DGS; gsheehan@jls-inc.com; Sommerville, Jill@DGS
Subject: Re: BOE Chiller room pipe lagging and filters

Mike,

These are the filters in the main filter banks upstream from the coils.

Thanks,
Ted

From: Moore, Mike@DGS [mailto:Mike.Moore@dgs.ca.gov]
Sent: Thursday, May 19, 2011 01:43 PM

To: Ted Ice

Cc: Chris Corpuz; Beesley, James@DGS <James.Beesley@dgs.ca.gov>; GSheehan@jls-inc.com <GSheehan@jls-inc.com>; Sommerville, Jill@DGS <Jill.Sommerville@dgs.ca.gov>

Subject: RE: BOE Chiller room pipe lagging and filters

Ted,

Either JLS or BPM can remove and repair the jacketing for your inspection. I question the value of sampling the used filters, other than to get a range of specific species of mold, etc?

Mike

From: Ted Ice [mailto:tice@lacroixdavis.com]

Sent: Thursday, May 19, 2011 1:30 PM

To: Moore, Mike@DGS

Cc: Chris Corpuz

Subject: Re: BOE Chiller room pipe lagging and filters

Mike,

Four of the samples I collected were from the bottom of stained insulation near/below bleed valves on chill water pipes (without the plastic jacket). I understand that you would like me to also look at insulation that is covered with the vinyl jackets. Should I have JLS perform the repairs to the damaged jackets?

Also, I noticed many boxes of filters arrived at BOE this week. Would you like to collect some representative used filter samples from each area when they are replaced to be used as comparison for the interior duct insulation sampling task?

Thanks,

Ted

From: Moore, Mike@DGS [mailto:Mike.Moore@dgs.ca.gov]

Sent: Monday, May 16, 2011 03:54 PM

To: Ted Ice; Beesley, James@DGS <James.Beesley@dgs.ca.gov>; Hoy, Mary@DGS <Mary.Hoy@dgs.ca.gov>

Cc: Chris Corpuz; Armstrong, Joan@DGS <Joan.Armstrong@dgs.ca.gov>; Sommerville, Jill@DGS <Jill.Sommerville@dgs.ca.gov>; GSheehan@jls-inc.com <GSheehan@jls-inc.com>

Subject: BOE Chiller room pipe lagging

Ted,

In a telephone conference with Bob Courtner today, the question was asked if pipe lagging in the chiller rooms was tested for mold (I don't believe it was). Please sample this area at your earliest opportunity so that we can document status.

Thank you,

Mike

Andrea Steinbach

From: Lakhpreet Sandhu [lsandhu@hygienetech.com]
Sent: Friday, August 12, 2011 5:20 PM
To: Chris Corpuz; Steve Davis
Cc: khsi@hygienetech.com; bpdaly@hygienetech.com; Ted Ice
Subject: Additional PCR analysis for M Floor samples

Hello Chris,

As per our conference call, sample numbers for Bulk or Microvac samples are as following

- 1) 2372-061711-4 BO3A Fan unit #4 (Bulk sample)
- 2) 2372-072911-P02 SF4 Access door 3 (Mircovac sample)

Corresponding tape lifts collected along with above mentioned two samples indicated minimal mold growth indicating Alternaria or Penc/ASP.

Also what do you guys think about analyzing one of this samples for PCR custom panel for Cladosporium apart from PCR 23 analysis which we might run on it ?

Only reason I think we should do it because, PCR 15 and PCR23 does not include **Clado. S** and since three samples for duct liner collected from Fan units 1, 2,and 3 consistently showed **Clado.S** to be the predominating species on the duct liner, it won't hurt to analyze one additional sample for fan unit 4 duct liner (For all 4 Clado), then atleast at M Floor level we can confirm that **Clado.s** is in fact the predominant species on duct liner. Both the samples mentioned above are from fan unit 4 duct liner.

Ted:- Can you please verify and confirm the sample numbers for me.

Best Regards,
Lakhpreet (Larry) Sandhu
Hygiene Technologies International, Inc.
Phone: (310) 370-8370
Cell:(559)-213-3411
Email: lsandhu@hygienetech.com
Web: www.hygienetech.com

Do not dwell in the past; do not dream of the future, concentrate the mind on the present moment:-
Buddha

Andrea Steinbach

From: lsandhu@hygienetech.com
Sent: Saturday, August 13, 2011 10:50 PM
To: Chris Corpuz
Subject: RE: Additional PCR analysis for M Floor samples

Hello Chris,

Sincere apologies for not being able to see your email in time before sending one out. Have a blessed weekend.

Best Regards,
Lakhpreet (Larry) Sandhu
Hygiene Technologies
International, Inc.
Phone: (310) 370-8370
Cell: (559) 213-3411
Email: lsandhu@hygienetech.com

> Thanks Larry. Take a look at the e-mail I sent out regarding EMLab PCR
> Panels. Let me know what you think. Have a great weekend.
>
>
>
>
> Chris Corpuz MS, CIH
> Western Regional Manager
> LaCroix Davis LLC
> 3685 Mt. Diablo Blvd., Suite 210
> Lafayette, CA 94549
> (925) 299-1140 phone
> (925) 299-1185 fax
> ccorpuz@lacroixdavis.com
> www.lacroixdavis.com
>
> Sacramento * San Francisco * Southern California * Las Vegas *
> Harrisburg
> This message is confidential, intended only for the named recipient(s)
> and may contain information that is privileged, attorney work product or
> exempt from disclosure under applicable law. If you are not the
> intended recipient(s), you are notified that the dissemination,
> distribution or copying of this message is strictly prohibited. If you

> receive this message in error, or are not the named recipient(s), please
> notify the sender at either the e-mail address or telephone number above
> and delete this e-mail from your computer. Receipt by anyone other
> than the named recipient(s) is not a waiver of any attorney-client, work
> product, or other applicable privilege. Thank you.

>
>
>
>

From: Lakhpreet Sandhu [mailto:lsandhu@hygienetech.com]

> Sent: Friday, August 12, 2011 5:20 PM

> To: Chris Corpuz; Steve Davis

> Cc: khsi@hygienetech.com; bpdaly@hygienetech.com; Ted Ice

> Subject: Additonal PCR analysis for M Floor samples

>
>
>

> Hello Chris,

>

> As per our conference call, sample numbers for

> Bulk or Microvac samples are as following

>
>
>

> 1) 2372-061711-4 BO3A Fan unit #4 (Bulk sample)

>

> 2) 2372-072911-P02 SF4 Access door 3 (Mircovac sample)

>
>
>

> Corresponding tape lifts collected along with above mentioned two

> samples indicated minimal mold growth indicating Alternaria or Penc/ASP.

>
>
>

>

> Also what do you guys think about analyzing one of this samples for PCR

> custom panel for Cladosporium apart from PCR 23 analysis which we might

> run on it ?

>
>
>

> Only reason I think we should do it because, PCR 15 and PCR23 does not

> include Clado. S and since three samples for duct liner collected from

> Fan units 1, 2,and 3 consistently showed Clado.S to be the predominating

> species on the duct liner, it won't hurt to analyze one additional

> sample for fan unit 4 duct liner (For all 4 Clado), then atleast at M

> Floor level we can confirm that Clado.s is in fact the predominant

> species on duct liner. Both the samples mentioned above are from fan

> unit 4 duct liner.

>

>
>
> Ted:- Can you please verify and confirm the sample numbers for me.

>
>
>
>
>
>
>
>
>

> Best Regards,
>
> Lakhpreet (Larry) Sandhu
>
> Hygiene Technologies International, Inc.
>
> Phone: (310) 370-8370
>
> Cell:(559)-213-3411
>
> Email: lsandhu@hygienetech.com
>
> Web: www.hygienetech.com

>
>
>

> Do not dwell in the past; do not dream of the future, concentrate the
> mind on the present moment:- Buddha

>
> *****
> *****

>
>
>
>
>

Andrea Steinbach

From: Lakhpreet Sandhu [lsandhu@hygienetech.com]

Sent: Tuesday, August 23, 2011 12:39 PM

To: Chris Corpuz; Ted Ice

Cc: khsi@hygienetech.com

Subject: Additional QPCR sampling

Hello Chris,

As per our conversation earlier today, I have informed Kenny regarding additional QPCR sampling to be performed on floors, where your PCR analysis indicated species other than Cladosporium. Having additional data on our hand will only help us in our entire evaluation process. Once all your data is in we should discuss the findings as a team and in case of additional QPCR sampling, **we should run by BOE regarding additional sampling and inform them of time and locations for the additional sampling.**

Talking to Simone, so far we have confirmation that all of our data should be in by this Friday including the custom panel for Cladosporium and PCR 23 analysis (For all samples). As soon as we get our data, we will shoot our set of data to you along with the tables.

Brief summary for our QPCR sampling on 07-31-11, 08-01-11 & 08-19-11 is given below.

Two samples taken at outdoors on 07-31-11 and two samples collected at outside air intake areas of M Floor on 08-01-11.

Total eight samples taken at indoor locations on 07-31-11, which includes floors 1, 3, 5,9,14,16,19 and 23.

Two samples collected at outdoors on 08-19-11.

Six samples collected at indoor locations on 08-19-11, which includes Floors 1, 3, 4, 19, 20 & 24.

Total of 14 samples for indoors, four samples outdoors and two samples on M Floor at outside air intake area. Most of the air samples were taken for four to five hours duration with Volume ranges from 2300 to 3000 Liters.

Best Regards,
Lakhpreet (Larry) Sandhu
Hygiene Technologies International, Inc.
Phone: (310) 370-8370
Cell:(559)-213-3411
Email: lsandhu@hygienetech.com
Web: www.hygienetech.com

Do not dwell in the past; do not dream of the future, concentrate the mind on the present moment:-
Buddha

Andrea Steinbach

From: Lakhpreet Sandhu [lsandhu@hygienetech.com]
Sent: Wednesday, August 24, 2011 11:47 AM
To: khshi@hygienetech.com; wfrey@hygienetech.com; bpdaly@hygienetech.com
Cc: Chris Corpuz; Ted Ice; Steve Davis
Subject: PCR Analysis Results (Dr. Berg (EMLAB))
Attachments: Vesper-2007 (ERMI JOEM).pdf

Hello Guys,

I spoke with Dr. Michael Berg, Technical Director with EMLAB earlier this morning in regards to our PCR analysis data for Microvac or bulk samples, which showed few other species in very low concentrations. Dr. Berg agrees with the comparison of surface assessment data and PCR analysis, which when compared for our tape samples indicates Cladosporium growth and the fact it matches well with millions or hundreds of thousands of spores equivalent of different species of Cladosporium in particularly (Clado.S).

In regards to very low concentrations of other species when compared with hundreds of thousand or million spores of Cladosporium, Dr. Berg stated following:

- 1) Their system is calibrated to spores and hence data is reported in Spore Equivalent.
- 2) Such low numbers of any species can indicate that they might be loose spores or might be just hyphal fragments.
- 3) They could be viable or non-viable spores.
- 4) PCR analysis also has its set of limitations.

He also suggested to look at one of the publication , which is attached. (You might have seen it before but attaching it anyways to facilitate your quick reference).

Best Regards,

Lakhpreet (Larry) Sandhu

Hygiene Technologies International, Inc.

Phone: (310) 370-8370

Cell:(559)-213-3411

Email: lsandhu@hygienetech.com

Web: www.hygienetech.com

Do not dwell in the past; do not dream of the future, concentrate the mind on the present moment:-
Buddha

Andrea Steinbach

From: Moore, Mike@DGS [Mike.Moore@dgs.ca.gov]
Sent: Friday, October 21, 2011 9:32 AM
To: Steve Davis; Chris Corpuz; Lyle Coe
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS
Subject: RE: BOE Odor Issues

Hello Steve,

As discussed after our weekly meeting this past Wednesday, BOE advised us that (during rainy weather) they receive odor complaints from tenants on many floors within the building. In addition to this comment, I learned that BPM does not run the chillers/cooling coils during winter – this means that there is no mechanism available to them currently to dehumidify return air (and outside MU air) during winter months. Finally, we have done some checking (Google sources) and read that *Cladosporium Spherispermum* (as a mold species) is quite odorous (even when detectable spore counts in the ambient air are very low). Please use this information (verify where needed) in the development of your assessment. Obviously, we are most interested in your recommendations regarding available means to dehumidify building air, as well as comments on the “genesis” of odors within the building as may be attributable to verified mold growth within the duct system.

Mike

From: Moore, Mike@DGS
Sent: Monday, October 17, 2011 11:01 AM
To: 'Steve Davis'; 'Chris Corpuz'
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS; Hoy, Mary@DGS
Subject: RE: BOE Odor Issues

Steve/Chris,

What is the status of your investigation regarding this matter?

Mike

From: Moore, Mike@DGS
Sent: Thursday, October 06, 2011 10:10 AM
To: Steve Davis; 'Chris Corpuz'
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS
Subject: BOE Odor Issues

Hello Steve & Chris,

Confirming our discussion and subsequent direction given to LCD during our pre-status meeting yesterday at BOE, it was stated that the presence of MVOC's in air samples indicates the presence of active mold growth. It was also stated that (depending upon the media and mold type) it is possible to have mold growth without the production of MVOC's. Therefore, LCD was directed to determine if the presence of active mold growth in the building ductwork (verified previously by HTI and LCD) produces MVOC's;

this would take into account the species of cladosporium present as well as the media (fiberglass duct liner, drywall) on which the mold has been found. In addition to this directive, LCD was asked to determine if the odor detected on floor 21 (long after the removal of VCT) could be attributed to the ductwork mold (with or without the presence of MVOC's). As we presume these questions will be forthcoming from BOE, please expedite this request.

Thank you,

Mike

Andrea Steinbach

From: Moore, Mike@DGS [Mike.Moore@dgs.ca.gov]
Sent: Monday, November 14, 2011 1:13 PM
To: Steve Davis; Chris Corpuz; Lyle Coe
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS
Subject: RE: BOE Odor Issues
Importance: High

Hello Steve and Chris,

As you (Chris) know, Bob asked the question at our progress meeting last Wednesday – “does CS produce odors?” Please provide the answer to us without further delay.

Mike

From: Moore, Mike@DGS
Sent: Friday, October 21, 2011 9:32 AM
To: 'Steve Davis'; 'Chris Corpuz'; 'lcoe@lacroixdavis.com'
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS
Subject: RE: BOE Odor Issues

Hello Steve,

As discussed after our weekly meeting this past Wednesday, BOE advised us that (during rainy weather) they receive odor complaints from tenants on many floors within the building. In addition to this comment, I learned that BPM does not run the chillers/cooling coils during winter – this means that there is no mechanism available to them currently to dehumidify return air (and outside MU air) during winter months. Finally, we have done some checking (Google sources) and read that *Cladosporium Spherispermium* (as a mold species) is quite odorous (even when detectable spore counts in the ambient air are very low). Please use this information (verify where needed) in the development of your assessment. Obviously, we are most interested in your recommendations regarding available means to dehumidify building air, as well as comments on the “genesis” of odors within the building as may be attributable to verified mold growth within the duct system.

Mike

From: Moore, Mike@DGS
Sent: Monday, October 17, 2011 11:01 AM
To: 'Steve Davis'; 'Chris Corpuz'
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS; Hoy, Mary@DGS
Subject: RE: BOE Odor Issues

Steve/Chris,

What is the status of your investigation regarding this matter?

Mike

2/17/2012

From: Moore, Mike@DGS
Sent: Thursday, October 06, 2011 10:10 AM
To: Steve Davis; 'Chris Corpuz'
Cc: Sommerville, Jill@DGS; Karlsson, Nik@DGS
Subject: BOE Odor Issues

Hello Steve & Chris,

Confirming our discussion and subsequent direction given to LCD during our pre-status meeting yesterday at BOE, it was stated that the presence of MVOC's in air samples indicates the presence of active mold growth. It was also stated that (depending upon the media and mold type) it is possible to have mold growth without the production of MVOC's. Therefore, LCD was directed to determine if the presence of active mold growth in the building ductwork (verified previously by HTI and LCD) produces MVOC's; this would take into account the species of cladosporium present as well as the media (fiberglass duct liner, drywall) on which the mold has been found. In addition to this directive, LCD was asked to determine if the odor detected on floor 21 (long after the removal of VCT) could be attributed to the ductwork mold (with or without the presence of MVOC's). As we presume these questions will be forthcoming from BOE, please expedite this request.

Thank you,

Mike