From: Niles, Dan@Waterboards
To: "Glenn Tofani"
Cc: "(SCC-PW) Kimberly Finley"; Pat Hoban
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue
Date: Wednesday, September 30, 2020 09:05:00

Thank you Glenn for your further information. I am curious to see the follow up with specs. for gravel texture per your reply.

For landfill leachate collection and removal systems during construction of new waste management units, gravel size and texture are specified, as well as allowable fines to maintain effective porosities, for liquids of course. Typically, washed and well-rounded to sub-rounded gravel standards are specified to prevent underlying membrane liner punctures during installation and during dynamic loading conditions due to working surface ground pressures. I surmise for the project development, gravel parameters may be different due to the nature of loading, discrete placement control methodologies during installation, etc., but I thought I would still ask given what I've observed with challenges to maintaining liner integrity with gravel-membrane liner contact type barrier systems.

Thanks again,

Dan

805-549-3355 Direct
805-549-3147 Reception
805-543-0397 Facsimile
dan.niles@waterboards.ca.gov

Dan Niles
Engineering Geologist
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
http://www.waterboards.ca.gov/centralcoast/

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Wednesday, September 30, 2020 05:19
To: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>; Pat Hoban <pat@weber-hayes.com>
Cc: '(SCC-PW) Kimberly Finley' <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

EXTERNAL:

Thanks Dan. Answers to you questions are provided below in red.

From: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>
Sent: Tuesday, September 29, 2020 9:59 PM
To: Pat Hoban <pat@weber-hayes.com>; Glenn Tofani <glenn@geokinetics.org>
Cc: '(SCC-PW) Kimberly Finley' <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Great, not urgent, but nonetheless needed and informative. I think I mentioned my being out until Monday during our call. Also, FYI to all, I did complete the final edits to the "responsibility" response letter mentioned below, and it is now set to move up through our management chain for final review and distribution.

Dan

805-549-3355 Direct
805-549-3147 Reception
805-543-0397 Facsimile
dan.niles@waterboards.ca.gov

Dan Niles
Engineering Geologist
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
http://www.waterboards.ca.gov/centralcoast/

From: Pat Hoban <pat@weber-hayes.com>
Sent: Tuesday, September 29, 2020 21:48
To: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>; 'Glenn Tofani' <glenn@geokinetics.org>
Cc: '(SCC-PW) Kimberly Finley' <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

EXTERNAL:

Thank you Dan. We'll follow up with responses to your comments in the upcoming days. Appreciate your efforts!

All the best,
Pat

Pat Hoban, PG, QSD
Principal Geologist
Weber, Hayes and Associates
(831) 722-3580

believe that you have received this correspondence in error, please contact me through the information provided above and permanently delete this message. Thank you.

From: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>
Sent: Tuesday, September 29, 2020 9:45 PM
To: Glenn Tofani <glenn@geokinetics.org>; Pat Hoban <pat@weber-hayes.com>
Cc: (SCC-PW) Kimberly Finley <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Hi Glenn and Pat,

As requested, I reviewed the revised plans and preliminarily concur with the scope of work with the condition that a land use covenant will be established for ensuring performance of the systems as detailed prior to occupancies. I also referenced in our forthcoming responsible party disposition letter (a.k.a. "comfort letter") our intent to formally concur with the comprehensive set of plans for the systems with the above noted condition.

Some questions that may or may not necessitate updates:

- Intake filtering: Is intake filtering advised to prevent any relevant "clogging" of the gravel layer? Is this a factor to consider? Are the "Filter Socks" shown in the drawings piping perforations, or literally filtering socks? I am thinking along the lines of ash debris from fires, dust generation during grading for the various phases of development, or from possible future developments on surrounding properties; etc. Intake filtering should not be necessary – and it has not been an issue historically. Any particulate matter that enters the passive vent risers should be very small and capable of passing through the gravel blanket. Ash might not – but if that much ash enters the vent risers then we have much bigger problems to worry about. The passive vent risers could be shut-off completely and the system would still function as intended. However, providing the fresh air recharge with the cross-flow system reduces the VOC levels within the gravel blanket. The vent piping is perforated but the filter socks are separate. They are tubes made out of filter fabric that slide over the vent lines to ensure no sediment enters the lines if there is periodically nuisance water present beneath the barrier.
- Gravel layer specifications: What is the typical texture of gravel used; e.g., coarse/angular, subangular, sub-rounded, rounded? I was looking for a gravel texture specification to inform how placement technique(s) and static building load may affect probability for maintaining liner surfaces free of punctures. Gradations for either a sand or gravel alternative are provided on Sheet D1 of the plans. Either one would be acceptable with the specified barrier. Less than 2% fines (passing #200 sieve) are required for both to ensure high conductivity. We will review the material submittals prior to construction to make sure there are no issues with angularity, etc.

Thank you,

Dan

805-549-3355 Direct
805-549-3147 Reception
805-543-0397 Facsimile
dan.niles@waterboards.ca.gov

Dan Niles
Engineering Geologist
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
http://www.waterboards.ca.gov/centralcoast/

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Monday, September 28, 2020 13:46
To: Pat Hoban <pat@weber-hayes.com>; Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>
Cc: (SCC-PW) Kimberly Finley <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

EXTERNAL:

All:

Here is a link to the updated OM&M Plan and VIMS Plan Set:

https://www.dropbox.com/s/c3pm9f016phmu69/2020-09-28%20OM%26M%2C%20Santa%20Cruz%20-%20Capitola.pdf?dl=0

Please let me know if you have any additional questions or comments

Take-care,

Glenn

From: Pat Hoban <pat@weber-hayes.com>
Sent: Thursday, September 24, 2020 4:43 PM
To: 'Niles, Dan@Waterboards' <Dan.Niles@waterboards.ca.gov>
Cc: Glenn Tofani <glenn@geokinetics.org>; (SCC-PW) Kimberly Finley <Kimberly.Finley@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Awesome-much thanks Dan. Glenn can move forward with his revisions and ship the final off to you (I'll upload it to GeoTracker).

I'm (gently) getting beaten up in our weekly meetings about timelines because there are oodles

of financial and political approvals that immediately follow the final, Water Board VIMS approval letter. So, with this in mind, I respectfully ask:

- **Glenn**, when do you think you can forward the *Final VIMS (SSD system) Design + Final OM&M Plan* to Dan?
- **Dan,** how much time do you believe is needed to get an agency approval letter out to Kimberly (i.e., following you're the GeoTracker upload of the final GeoKinetics package)?

I apologize for the prodding as I've got a gazillion belated deliverables clogging my schedule, but I've been asked to ask.

All the best,
Pat

Pat Hoban, PG, QSD
Principal Geologist
Weber, Hayes and Associates
(831) 722-3580

From: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>
Sent: Thursday, September 24, 2020 4:17 PM
To: Pat Hoban <pat@weber-hayes.com>
Cc: Glenn Tofani <glenn@geokinetics.org>
Subject: Re: Santa Cruz/ Capitola -- Soil vapor issue

Hi Pat,

The revised plan meets project objectives and incorporates the outcomes from our discussions on the details over the last few months; therefore it's ready for approval as a component of the overall plans for mitigation measures. Thank you for efforts. From my understanding, it will be incorporated into a final VIMS package for approval. Let me know if you understand differently.

Thanks,

Dan Niles
Engineering Geologist
Central Coast Water Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
(805) 549-3355
www.waterboards.ca.gov/centralcoast/

From: Pat Hoban <pat@weber-hayes.com>
Sent: Wednesday, September 23, 2020 13:14
To: Niles, Dan@Waterboards <Dan.Niles@waterboards.ca.gov>
Subject: FW: Santa Cruz/ Capitola -- Soil vapor issue

EXTERNAL:

Dan,

My mantra – not enough hours in the day. Can you please confirm for the group below that you're OK with the SSDS design and the monitoring changes we discussed (see attached summary)? With your email blessing, GeoKinetics will finalize the drawings/OM&M for agency final review/approval and can develop construction/post-construction monitoring costs for the team.

I'm chained to my desk, so please call anytime if you'd like to discuss.

Much thanks!
Pat

Pat Hoban, PG, QSD
Principal Geologist
Weber, Hayes and Associates
(831) 722-3580

From: Pat Hoban <pat@weber-hayes.com>
Sent: Tuesday, September 22, 2020 5:55 PM
To: 'Glenn Tofani' <glenn@geokinetics.org>; 'Ashley Schweickart' <aschweickart@midpen-housing.org>
Cc: 'Alan Hendry' <alanh@wrdarch.com>; 'Michael Keaster' <mkeaster@elementse.com>; 'Peter Silva' <peters@wrdarch.com>; 'Todd McIntyre' <todd@waypointconsulting.biz>; 'Joanna Carman' <joanna.carman@midpen-housing.org>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Hi Glenn and Ashley,

I'll double check with Dan Niles at the Water Board about getting a confirmation email regarding his approval of the proposed revisions (i.e., make it an active SSD system from the start and reduce the post construction monitoring obligations as noted on the **attached** summary). Dan has given his verbal approval of these revisions and I can see I didn't make that clear in my previous emails. My apologies for that miscommunication.

Dan will need the final *SSD System Design* package and the revised *OM&M Plan* before he can issue his final approval letter.

All the best,
Pat

Pat Hoban, PG, QSD
Principal Geologist
Weber, Hayes and Associates
(831) 722-3580

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Tuesday, September 22, 2020 4:25 PM
To: Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Alan Hendry <alanh@wrdarch.com>; Michael Keaster <mkeaster@elementse.com>; Peter Silva <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>; Joanna Carman <joanna.carman@midpen-housing.org>; Pat Hoban <pat@weber-hayes.com>
Subject: Re: Santa Cruz/ Capitola -- Soil vapor issue

I've seen references in recent emails to operation as an SSD system right out of the gate as opposed to an optional SSD system in the future. That edit would probably need to be made and any other edits that might be required based on comments to the OM&M Plan. Not aware of anything else at this point.

> On Sep 22, 2020, at 4:17 PM, Ashley Schweickart <aschweickart@midpen-housing.org> wrote:
>
> Hi Glenn,
>
> I'm a little confused by your response, as I was told weeks ago by Dan Niles at the Water Board that they approve of your VIMS design. My understanding is that the OM&M Plan is still seeking final approval, but that the design has been vetted and approved.
>
> Thanks,
> Ashley
>
> **Ashley Schweickart | Senior Project Manager**
> **MidPen Housing Corp.**
> Watsonville Development Office

275 Main Street, Suite 204, Watsonville, CA 95076
t. 831.707.2133 c. 831.291.1104 f. 831.761.7218
aschweickart@midpen-housing.org

<image001.jpg>

NOTE: MidPen Development Staff are working remotely. If you need to call me, please use the cell phone number above. Mail or other deliveries to the office may not be immediately received.

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Tuesday, September 22, 2020 4:02 PM
To: Alan Hendry <alanh@wrdarch.com>; Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Peter Silva <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Still waiting on RWQCB comments.

From: Alan Hendry <alanh@wrdarch.com>
Sent: Tuesday, September 22, 2020 3:29 PM
To: Glenn Tofani <glenn@geokinetics.org>; Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Peter Silva <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Good afternoon Glenn –

Have you updated your drawings yet? We are submitting our 85% CD sets to MidPen today, and although it is too late now to coordinate your updates we would like to address them as soon as we can.

Highest Regards,

ALAN HENDRY, RA
WALD, RUHNKE & DOST ARCHITECTS, LLP
PROJECT MANAGER

MAILING: 2340 Garden Road, Ste 100, Monterey, CA 93940
EMAIL: alanh@wrdarch.com
OFFICE: (831) 649-4642 xt 145
CELL: (559) 960-9753
WEB: www.wrdarch.com
FACEBOOK: www.facebook.com/wrdarch

From: Glenn Tofani [mailto:glenn@geokinetics.org]
Sent: Friday, September 4, 2020 8:21 AM
To: Alan Hendry <alanh@wrdarch.com>; Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Peter Silva <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Thanks. We will review and adjust the vent riser configurations, as necessary.

From: Alan Hendry <alanh@wrdarch.com>
Sent: Friday, September 4, 2020 8:18 AM
To: Glenn Tofani <glenn@geokinetics.org>; Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Peter Silva <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Good morning Glenn –

Please find attached for your use and reference DWG files of our current Roof Plans showing the locations of all solar panels. Please note that the exterior stair towers have a large steel wide-flange moment frame at the ends and we will not be able to accommodate a vent pipe on the end wall.

Please feel free to contact me with any questions or comments.

Highest Regards,

ALAN HENDRY, RA
WALD, RUHNKE & DOST ARCHITECTS, LLP
PROJECT MANAGER

MAILING: 2340 Garden Road, Ste 100, Monterey, CA 93940
EMAIL: alanh@wrdarch.com
OFFICE: (831) 649-4642 xt 145
CELL: (559) 960-9753
WEB: www.wrdarch.com
FACEBOOK: www.facebook.com/wrdarch
Please consider the environment before printing this email

From: Glenn Tofani [mailto:glenn@geokinetics.org]
Sent: Wednesday, September 2, 2020 11:58 AM
To: Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Alan Hendry <alanh@wrdarch.com>; Peter Silva <peters@wrdarch.com>; Todd

McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Will do.

From: Ashley Schweickart <aschweickart@midpen-housing.org>
Sent: Wednesday, September 2, 2020 11:50 AM
To: Glenn Tofani <glenn@geokinetics.org>
Cc: Michael Keaster <mkeaster@elementse.com>; Alan Hendry <alanh@wrdarch.com>; Peter Silva - Wald Ruhnke & Dost (peters@wrdarch.com) <peters@wrdarch.com>; Todd McIntyre <todd@waypointconsulting.biz>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Hi Glenn,

Disclaimer: this request is NOT as time sensitive as updating the OM&M Plan per the Water Board's request.

I wanted to connect you with representatives from MidPen's architect (Alan and Peter at Wald, Ruhnke & Dost) and structural engineer (Michael at Element). Both parties have reviewed the updated VIMS design (the subslab depressurization system) and provided feedback in the attached emails. The needed changes are relatively minor (won't impact the Water Board's approval of the design), but the coordination will be necessary in advance of MidPen submitting our building permit application to the County, as the County expects GeoKinetics plans to be incorporated into our submittal.

Once you get through the OM&M Plan work, can you touch base with Alan, Peter, and Michael?

Thanks!
Ashley

Ashley Schweickart | Senior Project Manager
MidPen Housing Corp.
Watsonville Development Office
275 Main Street, Suite 204, Watsonville, CA 95076
t. 831.707.2133 c. 831.291.1104 f. 831.761.7218
aschweickart@midpen-housing.org

NOTE: MidPen Development Staff are working remotely. If you need to

call me, please use the cell phone number above. Mail or other deliveries to the office may not be immediately received.

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Tuesday, August 25, 2020 5:06 AM
To: Ashley Schweickart <aschweickart@midpen-housing.org>; Nicholas.Targ@hklaw.com
Cc: Joanna Carman <joanna.carman@midpen-housing.org>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Ashley:

Here is a link to the OM&M Plan that includes the updated VIMS plans:

https://www.dropbox.com/s/o4ce6ftaaeboyyv/2020-08-04%20OM%26M%2C%20Santa%20Cruz%20Capitola%20Rd.pdf?dl=0

Take-care,

Glenn

From: Ashley Schweickart <aschweickart@midpen-housing.org>
Sent: Monday, August 24, 2020 4:07 PM
To: Glenn Tofani <glenn@geokinetics.org>; Nicholas.Targ@hklaw.com
Cc: Joanna Carman <joanna.carman@midpen-housing.org>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Hi Glenn,

Can you send over the revised plan sheets for the SSD system? I'd like to distribute to my design team.

Thanks,
Ashley

Ashley Schweickart | Senior Project Manager
MidPen Housing Corp.
Watsonville Development Office
275 Main Street, Suite 204, Watsonville, CA 95076
t. 831.707.2133 c. 831.291.1104 f. 831.761.7218
aschweickart@midpen-housing.org

<image001.jpg>

NOTE: MidPen Development Staff are working remotely. If you need to call me, please use the cell phone number above. Mail or other deliveries to the office may not be immediately received.

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Wednesday, August 19, 2020 5:09 AM
To: Nicholas.Targ@hklaw.com; Ashley Schweickart <aschweickart@midpen-housing.org>; Kimberly.Finley@santacruzcounty.us
Cc: Joanna Carman <joanna.carman@midpen-housing.org>; Julie.Conway@santacruzcounty.us; Peter.Detlefs@santacruzcounty.us
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Yes, AQMD would hopefully agree that a permit is not necessary after the first year. It would probably take some supplemental testing / analysis during the first year to collect the necessary data to convince them – they typically only require monthly PID readings as a permit condition. $16k/Year without AQMD permitting is certainly possible. The SSD system that has been specified for the buildings is as simple and reliable as it can get for one where automated monitoring is required. The components are reliable, tend to last a long time, and are relatively easy / inexpensive to replace when they wear out.

Yes, the 5-year review sampling / report would be more expensive. That could cost $20k alone depending upon what the RWQCB requires. As you know, the PCE levels at this site are quite high. Is there going to be a clean-up action at the source site?

From: Nicholas.Targ@hklaw.com <Nicholas.Targ@hklaw.com>
Sent: Tuesday, August 18, 2020 5:26 PM
To: Glenn Tofani <glenn@geokinetics.org>; aschweickart@midpen-housing.org; Kimberly.Finley@santacruzcounty.us
Cc: joanna.carman@midpen-housing.org; Julie.Conway@santacruzcounty.us; Peter.Detlefs@santacruzcounty.us
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Glenn,
Many thanks. The cost differential is impressive. I also agree that we should be able to push AQMD down based on the double system. However, I also agree the they will want to see, at least, a year's data

before agreeing to back down. By year three do you think $16K is reasonable? I note that five year review would probably require subslab sampling with SSD on and off.
Best,
NT

Nicholas Targ | **Holland & Knight**
Partner
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nicholas.targ@hklaw.com | www.hklaw.com

Add to address book | View professional biography

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Tuesday, August 18, 2020 9:37 AM
To: Targ, Nicholas W (SFO - X56926) <Nicholas.Targ@hklaw.com>; aschweickart@midpen-housing.org; Kimberly.Finley@santacruzcounty.us
Cc: joanna.carman@midpen-housing.org; Julie.Conway@santacruzcounty.us; Peter.Detlefs@santacruzcounty.us
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

[External email]

Nick:

Sorry I did not get back to you yesterday . . . The costs will of course be dependent upon what is ultimately required by the RWQCB. Here are what I would describe as Best Case and Most Likely scenarios for passive operation:

Best Case: Assume monitoring of the sub-barrier probe pairs 6 months after occupancy then annually thereafter. There are a total of 15 probe pairs (30 probes total). The sampling / analytical cost is typically about $450 per probe plus approximately $1,500 for a report. So roughly $15k per round for monitoring.

Most Likely Case: Assume monitoring of the probes, and the collection of an average of three indoor air samples per building, and two outdoor air samples, every six months. The indoor / outdoor air samples have to be collected into Summa cannisters over 24-hour periods – so they are more expensive – and the report preparation costs would be higher. Under these conditions, a complete round of monitoring with a report would cost

approximately $30k – or about $60k per year.

SSD Operation: For active operation, the variables are (1) will a long term AQMD permit be required; and (2) will the RWQCB still require any soil gas or indoor air sampling if the systems are operated in SSD mode. I'll assume that an AQMD permit will be required – although with the double barrier system an argument can be made that one should not be necessary. I'll also assume that the RWQCB will not require soil gas or indoor air monitoring in SSD mode. I'll also assume annual inspection of the SSD systems as set forth in the OM&M Plan. I estimate the non-AQMD operating costs for the SSD systems at the six buildings should be around $15k per year (combined). That would include the automated monitoring systems, power for the blowers, the annual inspections, and periodic replacement of parts as they wear out. The cost for the initial AQMD permit is about $6k with annual renewals around $1k. The permit would likely require the installation of activated carbon filters on the blower riser outlets and monthly monitoring of the VOC levels at the outlets. The typical filter monitoring and replacement requirements associated with an AQMD permit would add about $15k to the annual O&M costs. I estimate total annual O&M costs under this scenario of about $31k.

These estimates are preliminary and for planning purposes only. The actual costs could be higher – depending upon what is required by the RWQCB and AQMD. It would be a good idea to include a contingency for higher costs.

I hope this is helpful. Please let me know if you have any additional questions or comments.

Take-Care,

Glenn

From: Nicholas.Targ@hklaw.com <Nicholas.Targ@hklaw.com>
Sent: Sunday, August 16, 2020 1:41 PM
To: Glenn Tofani <glenn@geokinetics.org>; aschweickart@midpen-housing.org; Kimberly.Finley@santacruzcounty.us
Cc: joanna.carman@midpen-housing.org; Julie.Conway@santacruzcounty.us; Peter.Detlefs@santacruzcounty.us
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Glenn, Can you let us know the comparative estimated O&M cost of the

passive versus the active system? Best, NT

Nicholas Targ | **Holland & Knight**
Partner
Holland & Knight LLP
50 California Street, Suite 2800 | San Francisco, California 94111
Phone 415.743.6926 | Fax 415.743.6910
nicholas.targ@hklaw.com | www.hklaw.com

Add to address book | View professional biography

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Thursday, August 6, 2020 1:40 PM
To: Ashley Schweickart <aschweickart@midpen-housing.org>; Kimberly Finley <Kimberly.Finley@santacruzcounty.us>
Cc: Joanna Carman <joanna.carman@midpen-housing.org>; Julie Conway <Julie.Conway@santacruzcounty.us>; Peter Detlefs <Peter.Detlefs@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

The changes are pretty minor. It should not impact the RWQCB's review.

More and more we are seeing the RWQCB and the DTSC either require SSD systems when the available data indicates passive operation of a system is acceptable, or require expensive ongoing sampling / testing if the vent system is operated passively. The system for this site is still designed to be operated passively. But one of the vent riser locations for each building has been changed so that a blower could be easily added if the RWQCB required SSD operation in the future.

From: Ashley Schweickart <aschweickart@midpen-housing.org>
Sent: Thursday, August 6, 2020 1:34 PM
To: Glenn Tofani <glenn@geokinetics.org>; Kimberly Finley <Kimberly.Finley@santacruzcounty.us>
Cc: Joanna Carman <joanna.carman@midpen-housing.org>; Julie Conway <Julie.Conway@santacruzcounty.us>; Peter Detlefs <Peter.Detlefs@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Hi Glenn,

The modification of the VIMS plan is surprising. Can you tell me what the impetus for this change was – did the Water Board request it? I'm

concerned that the County already submitted the original VIMS design to the Water Board 2.5 weeks ago and we're on a tight schedule for their review and approval. So if this change is not a requirement of a regulatory body then I would question whether its prudent to change course at this juncture.

Thanks,
Ashley

Ashley Schweickart | Senior Project Manager
MidPen Housing Corp.
Watsonville Development Office
275 Main Street, Suite 204, Watsonville, CA 95076
t. 831.707.2133 c. 831.291.1104 f. 831.761.7218
aschweickart@midpen-housing.org

NOTE: MidPen Development Staff are working remotely. If you need to call me, please use the cell phone number above. Mail or other deliveries to the office may not be immediately received.

From: Glenn Tofani <glenn@geokinetics.org>
Sent: Thursday, August 6, 2020 1:11 PM
To: Kimberly Finley <Kimberly.Finley@santacruzcounty.us>; Ashley Schweickart <aschweickart@midpen-housing.org>
Cc: Joanna Carman <joanna.carman@midpen-housing.org>; Julie Conway <Julie.Conway@santacruzcounty.us>
Subject: RE: Santa Cruz/ Capitola -- Soil vapor issue

Kimberly:

Here is a link to the draft OM&M Plan for your review:

https://www.dropbox.com/s/o4ce6ftaaeboyyv/2020-08-04%20OM%26M%2C%20Santa%20Cruz%20Capitola%20Rd.pdf?dl=0

We made some modifications to the VIMS plans while preparing the OM&M Plan. The VIMS is designed to be protective with the sub-slab vent system operating passively. However, the soil gas PCE levels are high enough at this site such that a regulatory agency could require that the system be operated actively as a Sub-

Slab Depressurization (SSD) system even if testing results show it is effective when operating passively. To deal with that possibility, the vent system has been configured so that it can function in either mode. For operation as an SSD system, a blower would be added to one of the vent risers at each building – at the roof of the Health Center buildings or in the crawl space beneath the stairwells for the apartment buildings. We have relocated one of the vent risers to a stairwell at the apartment buildings and provided an access panel to get to the blower without entering the building. We have also added details and specifications for the "Optional Future" blowers and associated automated monitoring equipment. I suggest that power (120 VAC / 20 Amp circuit) be provided at all of the optional blower locations at the time of construction so that they could easily be added and activated if the need ever arose. Please look this over and let me know if you have any questions or comments.

Take-Care,

Glenn
