

Pfeiffer, Jane K - DNR

From: Robert Reineke <rreineke@ksinghengineering.com>
Sent: Wednesday, March 20, 2024 6:23 PM
To: Pfeiffer, Jane K - DNR
Cc: Que El-Amin; Pratap Singh; Nobile, Trevor W - DNR; Mylotta, Pamela A - DNR; Hoverman, Robert R - DNR (Rob); Shane LaFave; Angy Singh
Subject: RE: Community Within the Corridor - West Block (02-41-587376) - Information Requested

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Jane,

Please find our responses below in **Red**.

Please let us know if you have any questions or need additional information. Thanks.

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From: Pfeiffer, Jane K - DNR <jane.pfeiffer@wisconsin.gov>
Sent: Monday, February 5, 2024 5:02 PM
To: Shane LaFave <Shane@roerscompanies.com>; Sameer Neve <sneve@ksinghengineering.com>
Cc: Que El-Amin <que@scott-crawford.com>; Pratap Singh <psingh@ksinghengineering.com>; Robert Reineke <rreineke@ksinghengineering.com>; Nobile, Trevor W - DNR <Trevor.Nobile@wisconsin.gov>; Mylotta, Pamela A - DNR <Pamela.Mylotta@wisconsin.gov>; Hoverman, Robert R - DNR (Rob) <robert.hoverman@wisconsin.gov>
Subject: Community Within the Corridor - West Block (02-41-587376) - Information Requested

Greetings,

On January 2, 2024, the DNR received *Remedial Action Documentation Report* (the Report) prepared by K. Singh and Associates, Inc. on behalf of Community Within the Corridor, Limited Partnership (CWC) for the site identified above. The Report includes an *Operation, Maintenance, and Monitoring Plan* (OMM Plan) for the vapor mitigation system (VMS) at the site. The Report was submitted with the applicable technical assistance fee for DNR review and response. After an initial review of the report, we request the following additional documentation:

- Provide a supplemental remedial action documentation report that includes the following information/documentation:

1. As requested in DNR's October 6, 2023 letter, review the most recent HVAC re-balancing report and determine whether any additional PFE measurements should be collected for the commissioning process. Discuss the HVAC re-balancing data and provide rationale for this determination.

The Air Balance Test was performed on September 21, 2023. Select readings within the residential building were performed on October 9, 2023 and demonstrated adequate vacuum was being achieved. The additional readings were documented in Table 8 of the Remedial Action Documentation Report.

The air balance test does not generally increase the air that is being pulled from the building, but generally just balances air flow so that exhaust vents generally pull the same amount of air per fan. The air balance test reported that typically between 20 and 25 CFM was pulled per fan, which is significantly less than the operating fans, and the air is separated from the subslab by the same vapor barriers.

Preliminary results from the telemetry installation also indicated that adequate vacuum was achieved throughout the buildings. Based on the data gathered to date, we do not recommend any additional PFE testing.

2. Provide the status of the elevator filling activities discussed in the Report.

All elevator pits that were proposed to be infilled, have been infilled and were done so prior to commissioning. Commissioning did not indicate the former elevators in Buildings 4 and 6 were a source of TCE. The elevator in Building 8A is not a source of TCE as indicated by Commissioning.

3. Provide updated as-built figures and photo log to show the site conditions once the fans (EP-1 to EP-11) are relocated to the roof. Also provide updated documentation showing the fan exhaust piping once these are moved to point away from the Building 4 windows.

Please find a link to photos documenting the conditions of Fans EP-1 to EP-11 [PDF Ep-1 to EP-11 Photos.pdf](#) No outlets point toward the windows of Building 4. The exhaust pipe locations have not changed from the RADR. An updated RADR will provide updated information on the fans and outlet arrangements.

4. As indicated in the DNR's October 6, 2023 letter, the DNR continues to recommend that the fan exhaust piping extend to at least a 45-degree angle pointing upwards to comply with industry best management practices. If CWC chooses to perform this change to the VMS, provide pictures showing the updated exhaust piping.

Please refer to the link showing the updated exhaust arrangements. [PDF Ep-1 to EP-11 Photos.pdf](#)

5. In addition to the information presented on Table 4 of the Report, provide the waste disposal manifests from the landfill or a receipt from the landfill documenting the waste disposal activities.

Manifests documenting waste disposal were provided in the Interim RADR dated June 10, 2022. Please refer to Appendix B of the Interim RADR. You may also download the manifests via the following link.

[PDF Combined Manifests.pdf](#)

6. Table 10 of the Report does not include the October 2023 commissioning data. Update this table to include all applicable data.

We will update Table 10 of the RADR so that it includes the October 2023 commissioning data. This data has already been submitted separately to the WDNR but we appreciate the need for a combined table.

The DNR requests the above information be provided as a standalone document and be submitted to the DNR's RR electronic submittal portal.

An updated RADR will be prepared and submitted via the DNR's RR electronic submittal portal following the completion of installation of telemetry, a backup power generator, and the completion of alterations to the exhaust fans.

- The DNR cannot approve the OMM Plan until all necessary components are installed, operating, and documented. This includes the installation of the telemetry system and the back-up generator, and implementation of the planned revisions to the VMS. Provide a revised OMM Plan that includes the following revisions and additional information:
 1. The purpose of a telemetry system is to continuously monitor the differential pressure of a VMS and provide an alert if the pressure induced by a VMS varies outside the desired operating ranges. The DNR understands that the telemetry system has not yet been installed for the VMS. The DNR provides the following comments on the telemetry system proposed in the OMM Plan:
 - Complete vacuum measurements from each of the 19 fans to establish their baseline conditions. The baseline measurements will likely differ slightly between the 19 fans that currently exist at the site. Establishing baseline conditions is critical for the maintenance and monitoring of the VMS. If these measurements were already collected during the past commissioning events, then provide these measurements in tabulated format.
 - The Report indicates that pressure field extension (PFE) measurements will be collected during planned VMS monitoring events. The DNR recommends that PFE measurements be collected concurrently to the baseline fan vacuum measurements described above.
 - The Report proposes to use a differential fan vacuum threshold value of -1-inch H₂O for the GBR 25T pressure gauges at each fan. Additionally, the Report proposes to use a differential vacuum threshold value of -0.004 inches H₂O for the EDG-DPT pressure transmitters at select extraction points. The DNR recommends that each of the proposed pressure gauges/transmitters for the telemetry system be individually programmed to provide alerts when operating parameters are outside specific ranges indicative of acceptable VMS performance at each fan/extraction point. These specific ranges should be determined using the baseline measurements described above. The DNR recommends that the alert thresholds be set to capture a % change (e.g., 20%) in pressure from the established baseline measurement of a given fan/extraction point. The specific pressure differential setting that will trigger an alert at each gauge/transmitter should be provided and the rationale for the values chosen provided. Specific thresholds that will trigger alerts for parameters other than pressure differential or vacuum (for example velocity, amperage) should be provided. Provide this information in a table format.
 - Given the complexity of the telemetry system, DNR recommends that all elements that comprise the system be provided on a single figure. This should include:
 - Location of the EDG-DPT sub-slab differential pressure gauges
 - Location of the GBR 25T differential pressure (fan) gauges
 - Location of system gateway
 - Location of visual gauges and alarm panels (if different)
 - To compliment the figure requested above, provide a table that lists the thresholds that will provide an alert for each parameter at each monitoring point displayed on the figure, and identification of staff who will receive alerts. Consider whether on-site personnel (e.g., building manager and/or maintenance person) should be alerted. Update Section 5.3 of the OMM Plan to incorporate any additional emergency contacts that may be appropriate.

Tables and Figures will be provided upon completion of the telemetry system as part of an updated OMM Plan. As components are likely to be on multiple floors, we anticipate that we will need to provide multiple figures for clarity.

2. Clarify the schedule for the quarterly monitoring that is scheduled to occur over the next two years. Section 3.1 of the OMM Plan provides a list of actions that will occur "during the semi-annual and annual monitoring events." Clarify whether this is meant to state "during the *quarterly* and annual monitoring events," as the way it is currently written appears to contradict the "quarterly monitoring phase" presented in this section. Update Section 3 of the OMM Plan to provide a clear schedule of what inspections will occur (including the monthly inspections) when and by what personnel. You may choose to present this in a table format to provide a clear schedule.

We will update the schedule as requested and submit it as part of an updated OMM Plan.

3. Update Section 4.3.4. of the OMM Plan to indicate that residents will be notified of a VAL exceedance identified during the system inspections, per Wis. Admin. Code NR § 716.14. The DNR must be copied on these notifications.

We will update the notification plan as requested and submit it as part of an updated OMM Plan.

4. Update the applicable figures and Appendix A of the OMM Plan once the exhaust fans (EP-1 to EP-11) are relocated to the roof. Also provide photo documentation showing the updated fan exhaust piping once these are moved to point away from Building 4.

We will update the applicable figures and Appendix A of the OMM Plan once the telemetry and backup power have been fully installed. Please refer to the photos linked above for documentation of the updated fan exhaust piping.

5. Update Table 1 of Appendix A of the OMM plan to include information on EP-12 to EP-19.

We will update Table 1 of Appendix A of the OMM plan following completion of telemetry and backup power installation.

6. Update the OMM Plan to include an annual inspection of the telemetry system and back-up power generator to verify it is operating as intended. Update Attachment C to include these, as is appropriate.

We will update the OMM Plan as requested.

7. The DNR recommends that the VMS inspection log in Attachment C be updated to show photos of the site-specific system components, as opposed to the general photos provided by the DNR on the inspection log template. As may be appropriate, update any other instructions/descriptions presented on the log to be as site-specific as possible. All of the components listed in the inspection log should be clearly labeled on a site figure(s) that is attached to the VMS inspection log.

We will update the inspection log as requested.

8. The operation and maintenance monitoring log in Attachment C has a response column for TCE readings $>8.8 \text{ ug/m}^3$. Considering the residential vapor exposure scenario applies at all site buildings, this should be changed to list the residential vapor action level for TCE (i.e., " $>2.1 \text{ ug/m}^3$ "). Update this attachment accordingly.

We will update the monitoring log as requested.

9. Update Appendix D to specify the meaning of the orange boxes. Include a legend and/or description for the table as may be needed.

We will update Appendix D to indicate that the orange boxes refer to the monitoring schedule.

10. Update Appendix F of the OMM plan to display the planned indoor air sample locations for Buildings 4 and 5.

We will add Buildings 4 and 5 to the indoor air sample locations figures.

11. A copy of the OMM plan and on-going testing results and inspection logs should be kept on the property, and by the Responsible Party in a location identified in the OMM plan. If any part of the inspection work will be conducted by property management personnel, a copy of the OMM plan and inspection logs should also be kept at the property management offices. Discuss this topic in the revised OMM Plan.

We will clarify where the OMM plan, test results, and inspection logs will be kept on the property and provide a discussion in the revised OMM plan. Please clarify whether an electronic copy will be sufficient.

Please submit an updated OMM Plan to incorporate all of the information requested above. The updated OMM Plan should be submitted after installation of the telemetry system and back-up power generator and relocation of the blower locations and exhaust piping.

A revised and updated OMM Plan will be submitted after installation of the telemetry system, installation of the back-up power system, blower relocations and exhaust piping alterations are completed.

The DNR will review the documents requested above to determine whether approval can be provided. Once approval of the Report is appropriate, the DNR will commence with implementing an interim action continuing obligation for maintaining the VMS at this site. The DNR will provide additional information on this process in the future response letter.

Please do not hesitate to reach out should you have any questions.

Thank you, Jane

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Jane K. Pfeiffer

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