



Jolly, Becky <becky.jolly@dnr.iowa.gov>

RE: Permit No. 17-SDP-08-99P: Heidelberg Materials CKD Monofill - 2025 Annual Water Quality Report Comments

1 message

Jensen, Kevin <KJensen@scsengineers.com>

Tue, Jul 7, 2026 at 10:12 AM

To: "Rath, Brian" <brian.rath@dnr.iowa.gov>, "Karamaga, Patrick (Mason City) USA" <patrick.karamaga@heidelbergmaterials.com>, "Bumgardner, Kimberlie (Mason City) USA" <kimberlie.bumgardner@heidelbergmaterials.com>

Cc: Becky Jolly <becky.jolly@dnr.iowa.gov>, "Omerovic, Semir" <SOmerovic@scsengineers.com>, "Buelow, Tim" <TBuelow@scsengineers.com>

Hi Brian,

Thank you for your review of the 2025 AWQR and LCSPE Report for the Heidelberg Materials US Cement CKD Monofill. Below are responses to your comments.

Leachate Management

LHP-1 level data shows a dramatic increase. Please provide an action plan to address this, including leachate level measurements obtained after the 2025 reporting period **by July 15, 2026**.

- The leachate pump for Phase 1 was repaired in December 2025. The leachate level in LHP-1 has been consistently measured below one foot since December 2025. Below are records of the leachate measurements made at LHP-1 for the 2026 reporting period to date. No further action appears necessary at this time.

Date of Measurement	Column in Piezometer (ft)
	LHP-1
11/19/2025	2.27
12/4/2025	2.22
1/29/2026	0.19
2/23/2026	0.08
3/19/2026	0.26
4/14/2026	0.52

5/27/2026	0.19
6/18/2026	0.88

Water Quality Trends

We remain concerned about the levels of multiple parameters at LDR-3. and potential groundwater impact. Further, the DNR is concerned that using parametric-based statistics may not apply if this or other data is non-parametric. Therefore, we request that you evaluate the data to determine if non-parametric data analysis is warranted and submit an updated statistical plan **by September 15, 2026**. Once approved by the DNR, the updated statistical plan shall be used to prepare the forthcoming AWQR. Meanwhile, the DNR concurs with the recommendations in Section 6.2, Proposed Monitoring.

- We are agreeable to changing the statistical analysis performed in the AWQRs from control limit statistics to prediction limit statistics which will account for non-parametric datasets. We plan to discuss this with you further before submitting a statistical plan by September 15, 2026, to determine if inter-well or intra-well prediction limits are the best fit for this particular site.

Quality Control

The following anomalies were noted in the report: Matrix Spike/Matrix Spike Duplicate recovery concerns in both events; arsenic and TOC present in blanks during the fall event; and duplicate RPD exceedances in the fall event. However, the potential impact on the resulting data was not directly addressed. Please clarify and include how this will be addressed in future reports **by July 15, 2026**.

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results outside the recovery limits could indicate an inaccuracy in the laboratory analysis methods. Presence of detectable analytes in QA/QC blanks may indicate an inaccuracy with the laboratory results and could have influenced the results higher. Statistically significant differences in the relative percent difference (RPD) between laboratory duplicate samples indicate an inconsistency and inaccuracy with laboratory analysis procedures. We will characterize and comment on the potential effect to the data of laboratory QA/QC failures in our data validation review for each laboratory report in future AWQRs.

If you have any further comments on these responses, please let me know. Otherwise, we will submit the statistical plan by September 15, 2026.

Thank you,

Kevin Jensen

Project Manager

SCS Engineers

1690 All-State Court, Suite 100

West Des Moines, Iowa 50265

515-368-3155 (C)

515-631-6154 (O)

kjensen@scsengineers.com

Driven by Client Success

www.scsengineers.com

From: Rath, Brian <brian.rath@dnr.iowa.gov>

Sent: Thursday, May 28, 2026 3:50 PM

To: Jensen, Kevin <KJensen@scsengineers.com>; Karamaga, Patrick (Mason City) USA <patrick.karamaga@heidelbergmaterials.com>; Bumgardner, Kimberlie (Mason City) USA <kimberlie.bumgardner@heidelbergmaterials.com>

Cc: Becky Jolly <becky.jolly@dnr.iowa.gov>; Omerovic, Semir <SOmerovic@scsengineers.com>; Buelow, Tim <TBuelow@scsengineers.com>

Subject: Permit No. 17-SDP-08-99P: Heidelberg Materials CKD Monofill - 2025 Annual Water Quality Report Comments

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

The DNR has completed our review of the 2025 Annual Water Quality Report and Leachate Control System Performance Evaluation Report (Doc 114804) and has the following comments.

Well Depth Discrepancies

Persistent physical variations relative to original installation logs continue at MW-101R, MW-102R, MW-202R, and MW-205. Although these wells continue to produce sufficient water for sampling, the DNR is concerned that interpreting the varying groundwater flow directions may be compromised by these discrepancies. Therefore, the DNR requests that these discrepancies be resolved as part of the forthcoming plans for Phases IV through VI.

Leachate Management

LHP-1 level data shows a dramatic increase. Please provide an action plan to address this, including leachate level measurements obtained after the 2025 reporting period **by July 15, 2026**.

Water Quality Trends

We remain concerned about the levels of multiple parameters at LDR-3. and potential groundwater impact. Further, the DNR is concerned that using parametric-based statistics may not apply if this or other data is non-parametric. Therefore, we request that you evaluate the data to determine if non-parametric data analysis is warranted and submit an updated statistical plan **by September 15, 2026**. Once approved by the DNR, the updated statistical plan shall be used to prepare the forthcoming AWQR. Meanwhile, the DNR concurs with the recommendations in Section 6.2, Proposed Monitoring.

Quality Control

The following anomalies were noted in the report: Matrix Spike/Matrix Spike Duplicate recovery concerns in both events; arsenic and TOC present in blanks during the fall event; and duplicate RPD exceedances in the fall event. However, the potential impact on the resulting data was not directly addressed. Please clarify and include how this will be addressed in future reports **by July 15, 2026.**

Closing

If you would like to meet to discuss this, you can see my availability at the following link. Although you can schedule an appointment with me at this link, feel free to schedule utilizing your own meeting platform. As an alternative, you can reserve a meeting time with me through this link, send a meeting invite using your own meeting platform, and I will delete the original request.

<https://calendar.app.google/rB1pPdpGxZXma59A>

Thanks,

Brian

Brian Rath, P.E.

Environmental Engineer Senior

Solid Waste and Contaminated Sites Section

Iowa Department of Natural Resources

6200 Park Ave, Suite 200

Des Moines, IA 50321

515-537-4051

brian.rath@dnr.iowa.gov

www.iowadnr.gov