

TO: Eric Winiacki, U.S. Environmental Protection Agency, Region 10

FROM: Eric Weber and Kaila Anderson, Landau Associates, Inc.

CC: Don Claybaugh and Jennifer MacDonald, U.S. Environmental Protection Agency, Region 10
Adam Dolsen, and Jeff Boivin, Cow Palace, LLC
Brendan V. Monahan and Mathew Harrington, Stokes Lawrence, P.S.

RE: **Docket No. SDWA-10-2013-0080; Yakima Valley Dairies
January 2022 Monthly Progress Report**

This progress report describes activities performed in compliance with Administrative Order on Consent (AOC) Docket No. SDWA-10-2013-0080 between January 11, 2022 and February 10, 2022. This progress report is submitted by Landau Associates, Inc. (Landau) on behalf of Cow Palace, LLC (Cow Palace).

1. Major Accomplishments and Issues

Cow Palace experienced no major issues during the current reporting period and has continued to meet its obligations under the AOC.

The Yakima Valley Dairies (Dairies) received Letter 262 from the U.S. Environmental Protection Agency (EPA) on December 14, 2021.¹ Letter 262 essentially reiterates EPA's previous proposal (originally documented in Letter 251)² for implementation of AOC Scope of Work elements beyond the AOC-mandated 8-Year report submittal. Cow Palace responded with a letter on January 20, 2022,³ which affirmed the Dairy's commitment to continuing the groundwater monitoring program in the interim period until approval of the 8-year report. The Dairies received Letter 276⁴ from the EPA on January 25, 2022, which suggested scheduling a technical meeting to discuss continuation of the groundwater monitoring program.

¹ EPA. 2021. Letter 262 re: Groundwater Monitoring; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080. Yakima Valley Dairies, Washington. From Eric Winiacki, U.S. Environmental Protection Agency; to Mark Larson, Anchor QEA, LLC; and Eric Weber, Landau Associates, Inc. December 14.

² EPA. 2021. Letter 251 re: Groundwater Monitoring; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080. Yakima Valley Dairies, Washington. From Eric Winiacki, U.S. Environmental Protection Agency; to Mark Larson, Anchor QEA, LLC; and Eric Weber, Landau Associates, Inc. September 23.

³ Landau. 2022. Letter Re: Groundwater Monitoring, dated December 14, 2021; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080. Yakima Valley Dairies, Washington. From Eric Weber, Landau Associates, Inc., to Eric Winiacki, U.S. Environmental Protection Agency. January 20.

⁴ EPA. 2022. Letter 276 re: Request for Continued Groundwater Monitoring; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080. Yakima Valley Dairies, Washington. From Eric Winiacki, U.S. Environmental Protection Agency; to Mark Larson, Anchor QEA, LLC; and Eric Weber, Landau Associates, Inc. January 25.

Cow Palace received Letter 277⁵ from the EPA on January 27, 2022 regarding the revised *Cow Palace Dairy Lagoon No. 1 and Safety Debris Catch Basin Completion Report*, dated November 24, 2021. The EPA addressed its concerns with the Lagoon 1 liner integrity and requested specific edits to the report. A revised report with supporting documentation will be submitted by February 25, 2022.

Agrimanagement, Inc. completed fall post-harvest soil sampling at the Dairies on November 19, 2021. In accordance with AOC Scope of Work Section III.A.3.e(2), the Post-Harvest Dairy Application Field Report is to be submitted within 60 days following the completion of sampling (i.e., January 19, 2022 for the current report). On January 12, 2021 Anchor QEA, LLC (Anchor) requested a report extension on behalf of the Dairies due to a delay in acquiring laboratory data. Anchor requested a four-week extension, making the new deliverable deadline February 18, 2022. EPA approved the extension request via email on January 13, 2022.

2. Other Actions Taken to Comply with the Administrative Order on Consent

Anchor is coordinating with Independent Water Service, Inc., for planned maintenance of the installed reverse osmosis systems at off-site residences. Associated reporting will be performed by Anchor.

3. Irrigation Sensor Management

Moisture data is not required to be collected outside of the irrigation season. All 17 stations have functioning data loggers, and five of the stations have one or more sensors that are malfunctioning. Agrimanagement is working to replace inoperable sensors by the end of February 2022, prior to the start of the irrigation season.

4. Work in Progress

Table 1 outlines the updated deliverable schedule. Please note that completed deliverables referenced in Table 1 have been submitted to EPA but remain in Table 1 pending confirmation from EPA. Groundwater monitoring deliverables will continue to be submitted by Anchor and are not included in this table.

⁵ EPA. 2022. Letter 277 re: Cow Palace Dairy Lagoon 1 Closure Report; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080. Yakima Valley Dairies, Washington. From Eric Winiacki, U.S. Environmental Protection Agency; to Mark Larson, Anchor QEA, LLC; and Eric Weber, Landau Associates, Inc. January 27

Table 1 - Deliverable Schedule

Deliverable Name or Event	Date of Most Recent EPA Comment Letter (If Any)	Current Due Date (If Any) Established by AOC/Date Indicated in EPA Comment Letter	Anticipated Start/End Date	On Track to Meet Due Date/Start or End Date? (Yes/No; If No, Explain in Item 5)
GROUNDWATER MONITORING (III.E)				
Final Groundwater Monitoring QAPP	2/28/2018 (Conditional Approval, EPA Letter 164)	4/1/2018	Complete	QAPP revised and resubmitted to EPA on 3/8/20
Third Quarter 2020 Groundwater Monitoring Data Report (Revised)	12/22/2021 (EPA Letter 264)	1/22/2022	Complete	First revision submitted by Anchor to EPA on 3/21/2021. Second revision submitted by Anchor to EPA on 5/13/2021. Third revision submitted to Anchor to EPA.
Fourth Quarter 2021 Groundwater Monitoring Data Report	--	2/14/2022	In Progress	Yes
IMMEDIATE SOURCE CONTROL ACTIONS (III.F)				
Lagoon No. 1 and Safety Debris Catch Basin As-Built Report	1/27/2022 (EPA Letter 277)	Revision due 2/25/2022	In Progress	Revised report submitted to EPA 11/24/2021.
Settling Basins A & B As-Built Report	2/18/2020 (EPA Letter)	2/28/2021	Complete	Submitted to EPA 2/26/2021
2021 Post-Harvest Dairy Application Field Report Memorandum	—	2/18/2022	In Progress	Extension request submitted to EPA 1/12/2022
REPORTING (III.K)				
Monthly Progress Report	10/18/2018 (EPA Letter 184)	15th of each month (AOC)	15th of each month	Yes
2013 Annual Report (Revised)	12/30/2015 (EPA Letter 95)	2/27/2016 (EPA Letters 104, 116, 121, and 128)	Complete	Submitted by Anchor to EPA on 11/18/2016
2014 Annual Report (Revised)	2/2/2016 (EPA Letter 101)	4/1/2016 (EPA Letters 109 and 128)	Complete	Submitted by Anchor to EPA on 11/18/2016
2015 Annual Report (Revised)	1/3/2017 (EPA Letter 133)	1/31/2017 (EPA Letter 133)	Complete	Submitted by Anchor to EPA on 1/31/2017
2016 Annual Report	—	3/1/2017	Complete	Submitted by Anchor to EPA on 3/1/2017
2017 Annual Report (Revised)	3/21/2018 (EPA Letter 166)	4/18/2018	Complete	Submitted by Anchor to EPA on 4/17/2018
2020 Annual Report	1/24/2022 (EPA Letter 274)	Revision due 2/23/2022	In Progress	Submitted 2/28/2021. Revision submitted on 7/16/2021. EPA comments received 1/24/2022.

Deliverable Name or Event	Date of Most Recent EPA Comment Letter (If Any)	Current Due Date (If Any) Established by AOC/Date Indicated in EPA Comment Letter	Anticipated Start/End Date	On Track to Meet Due Date/Start or End Date? (Yes/No; If No, Explain in Item 5)
2021 Annual Report	—	3/1/2022	In Progress	Yes

Notes:

— = not applicable

5. Encountered Issues and Anticipated Actions

As with the rest of Washington State, Cow Palace and its service providers have been affected directly and indirectly by the COVID-19 public health emergency. Cow Palace and its service providers are using best efforts to move forward with planned work under the AOC. However, the full extent of COVID-19-related impacts on Cow Palace, required health and safety procedures, contractor and materials availability is unknown. Cow Palace will bring to the attention of the EPA as soon as practicable any scheduled activities for which it appears the schedule may be affected by response to this epidemic.

6. List of Completed Administrative Order on Consent Work

Table 2 lists AOC work that has been completed and approved by EPA.

Table 2 - Work Product Status Update

Work Product	Submittal Date (Report Cover Date) ¹	Status
PROVISION OF WATER (III.D)		
Residential Well Sampling QAPP (III.D.2)	4/26/2013	APPROVED
Residential Well Sampling Report	12/20/2013	APPROVED
GROUNDWATER MONITORING (III.E)		
Groundwater Monitoring Well Installation Report (III.E.2)	10/06/2014	APPROVED
Data Usability Report (III.A.3.e.(1)) ²		
Third Quarter 2013	10/14/2015	APPROVED
Fourth Quarter 2013	10/14/2015	APPROVED
First Quarter 2014	10/14/2015	APPROVED
Second Quarter 2014	10/14/2015	APPROVED
Third Quarter 2014	10/14/2015	APPROVED
Fourth Quarter 2014	5/21/2015	APPROVED
First Quarter 2015	5/21/2015	APPROVED
Second Quarter 2015	10/14/2015	APPROVED

Work Product	Submittal Date (Report Cover Date) ¹	Status
Quarterly Groundwater Monitoring Data Report (III.E.3)		
Third Quarter 2013	1/14/2016	APPROVED
Fourth Quarter 2013	1/14/2016	APPROVED
First Quarter 2014	1/14/2016	APPROVED
Second Quarter 2014	9/4/2015	APPROVED
Third Quarter 2014	1/14/2016	APPROVED
Fourth Quarter 2014	1/14/2016	APPROVED
First Quarter 2015	1/14/2016	APPROVED
Second Quarter 2015	1/14/2016	APPROVED
Third Quarter 2015	12/14/2015	APPROVED
Fourth Quarter 2015	3/31/2016	APPROVED
First Quarter 2016	5/31/2016	APPROVED
Second Quarter 2016	9/6/2016	APPROVED
Third Quarter 2016	3/20/2017 (Cover: March 2017)	APPROVED 4/3/2017
QAPP Addendum No. 1	11/10/2016 (Cover: November 2016)	APPROVED 1/13/2017
Fourth Quarter 2016	5/1/2017 (Cover: May 1, 2017)	APPROVED 5/26/2017
First Quarter 2017	8/18/2017 (Cover: August 22, 2017)	APPROVED 8/19/2019
Second Quarter 2017	08/07/2017 (Cover: August 7, 2017)	APPROVED 8/19/2019
Third Quarter 2017	11/27/2017 (Cover: November 27, 2017)	APPROVED 8/19/2019
Fourth Quarter 2017	Uploaded to FTP 9/11/2019 (Cover: February 2, 2018)	APPROVED 8/19/2019
First Quarter 2018	Uploaded to FTP 9/10/2019 Cover: May 21, 2018	APPROVED 8/19/2019
Second Quarter 2018	Uploaded to FTP 9/11/2019 Cover: August 10, 2018	APPROVED 8/19/2019
Third Quarter 2018	Uploaded to FTP 9/11/2019 Cover November 9, 2018	APPROVED 8/19/2019
Fourth Quarter 2018	2/11/2019	APPROVED 8/19/2019
First Quarter 2019	5/21/2019	APPROVED 8/19/2019
Second Quarter 2019	8/05/2019	APPROVED 8/19/2019

Work Product	Submittal Date (Report Cover Date)¹	Status
Third Quarter 2019	1/15/2021	APPROVED 1/25/2021
Fourth Quarter 2019	1/15/2021	APPROVED 1/25/2021
First Quarter 2020	2/3/2021	APPROVED 12/22/2021
Second Quarter 2020	2/3/2021	APPROVED 12/22/2021
Fourth Quarter 2020	5/13/2021	APPROVED 12/22/2021
First Quarter 2021	4/28/2021	APPROVED 12/22/2021
Second Quarter 2021	8/9/2021	APPROVED 12/22/2021
IMMEDIATE SOURCE CONTROL ACTIONS (III.F)		
Dairy Facility Application Field Management Plan(s) (III.F.1)	11/18/2013	APPROVED; revised DFAFMPs submitted to EPA on 5/31/2016; updated DFAFMPs submitted to EPA on 5/15/2018
2013 Post-Harvest Dairy Application Field Reports	8/29/2015	APPROVED
2014 Pre-Plant Dairy Application Field Reports	8/13/2015	APPROVED
2014 Post-Harvest Dairy Application Field Reports	8/14/2015	APPROVED
2015 Pre-Plant Dairy Application Field Reports	3/27/2017	APPROVED
2015 Post-Harvest Dairy Application Field Reports	3/27/2017	APPROVED
2016 Pre-Plant Dairy Application Field Reports	3/27/2017	APPROVED
2016 Post-Harvest Dairy Application Field Reports	1/3/2017 (Cover: January 3, 2017)	APPROVED 3/27/2017
2017 Pre-Plant Dairy Application Field Reports	7/31/2017 (Cover: July 2017)	APPROVED 8/1/2017
2017 Post-Harvest Dairy Application Field Reports	Uploaded to FTP 9/13/2019 (Cover: December 2017)	APPROVED 8/30/2019
2018 Pre-Plant Dairy Application Field Reports	Uploaded to FTP 9/13/2019 (Cover: July 2018)	APPROVED 8/30/2019
2018 Post-Harvest Dairy Application Field Report Memorandum	Uploaded to FTP 9/12/2019 Cover: 1/1/2019)	APPROVED 8/30/2019
2019 Pre-Plant Dairy Application Field Report Memorandum	Uploaded to FTP 9/12/2019 (Cover: 8/10/2019)	APPROVED 8/30/2019
2019 Post-Harvest Dairy Application Field Report Memorandum	1/8/2020, revised cover 1/31/2022	APPROVED 1/13/2022

Work Product	Submittal Date (Report Cover Date) ¹	Status
2020 Pre-Plant Dairy Application Field Report Memorandum	2/2/2021	APPROVED 2/11/2021
2020 Post-Harvest Dairy Application Field Report Memorandum	2/2/2021	APPROVED 2/11/2021
2021 Pre-Plant Dairy Application Field Report Memorandum	8/13/2021, revised cover 1/31/2022	APPROVED 1/13/2022
Irrigation Water Management Plan(s) (III.F.2)	8/15/2014	APPROVED
Lagoon Review Report(s) (III.F.6)	8/22/2013	APPROVED
Lagoon Evaluation Plans (III.F.6)	2/6/2015	NOT REQUIRED; Dairies elected to line lagoons
Cow Palace Lagoon Work Plan (III.F.6)	3/11/2016	APPROVED
Cow Palace Lagoon QAPP (III.F.6)	3/11/2016	APPROVED
Cow Palace NW Catch Basin 100% Design (III.F.6)	6/20/2016	APPROVED
Cow Palace Abandonment Plan for Northeast Catch Basin	9/10/2018 (Cover: 9/11/2018)	APPROVED 9/12/2018
Cow Palace Safety Debris Catch Basin 100% Basis of Design Report	7/10/2019 (Cover: 6/25/2019; Modified cover: 7/17/2019)	APPROVED WITH MODIFICATIONS 7/17/2019
Completion Report for Northeast Catch Basin Abandonment	1/31/2019	APPROVED 2/2/2021
Settling Basin AB Design Plans	7/15/20 (Modified 8/19/20, 9/15/20, and 9/22/20)	APPROVED WITH MODIFICATIONS 9/18/20
REPORTING (III.K)		
Monthly Progress Reports (III.K.1)	15th of the following month	Current through the current month
Health and Safety Plan	9/13/2016 (Cover: September 2016)	Current version ³
2018 Annual Report	3/6/2020 (Cover: March 6, 2020)	APPROVED 2/6/2020
2019 Annual Report	3/1/2020 (Modified 9/1/2020)	APPROVED WITH MODIFICATIONS 9/17/2020

Notes:

(1) Deliverables dated prior to April 15, 2020 were submitted by Anchor on behalf of Cow Palace.

(2) Following the second quarter of 2015, Data Usability Reports are no longer required as separate deliverables.

(3) This is the current version of the project Health and Safety Plan. EPA does not provide formal review and approval of the Health and Safety Plan, though it is provided for use.

Abbreviations and Acronyms:

DFAFMP = Dairy Facility Application Field Management