

Monthly Progress Report

April 15, 2022

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

From: Mark Larsen and Kristi Geris, Anchor QEA, LLC

cc: Don Clabaugh and Jennifer MacDonald, U.S. Environmental Protection Agency, Region 10
Henry Bosma, Liberty Dairy, LLC
Dan DeRuyter, George DeRuyter & Son Dairy, LLC
Adam Dolsen, Cow Palace, LLC
Lori Terry Gregory, Foster Garvey PC
Brendan V. Monahan, Stokes Lawrence, P.S.
Meredith Weinberg, Perkins Coie LLP

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

This progress report describes activities performed in compliance with Docket No. SDWA-10-2013-0080 between March 11, 2022, and April 10, 2022. This progress report is submitted on behalf of the Yakima Valley Dairies (Dairies), including the following: 1) George DeRuyter & Son Dairy, LLC; D&A Dairy, LLC (also known as D and A Dairy, LLC); and George & Margaret, LLC; 2) Liberty Dairy, LLC, and its associated dairy facility H&S Bosma Dairy; and with respect to the groundwater monitoring and reverse osmosis (RO) system maintenance program, 3) Cow Palace, LLC. Please refer to the separate progress report from Landau Associates (Landau) submitted on behalf of Cow Palace. That progress report discusses activities for Cow Palace's lagoon program, application field management activities and annual reporting activities.

1. Major Accomplishments and Issues

Major accomplishments during the current reporting period include the following:

- A supplemental groundwater monitoring event was conducted during First Quarter 2022 on March 15-16, 2022, consistent with the methods used for the Fourth Quarter 2021 monitoring event. These supplemental events are beyond the 8 years of groundwater monitoring contained in the AOC. The supplemental events are being performed voluntarily by the Dairies pending resolution of next steps under the AOC.
- Agrimanagement implemented repairs to irrigation sensors prior to the recent startup of the 2022 irrigation season. Repair of these sensors has been impacted by ongoing COVID-19 related supply chain issues. These have included 1) ongoing supply shortages; 2) delays in shipment of parts; and 3) defects in parts received (i.e., parts do not work upon arrival). Attachment A summarizes the status of these repairs.
- The lagoon lining and manure treatment projects were implemented as described below.

Liberty/H&S Bosma Dairies Lagoon Upgrades

- Backfilling of Lagoon 18 is nearing completion and is expected to be complete within next two weeks. The completion report for Lagoon 18 will then be submitted to EPA documenting the work.
- Lagoons 4a, 4b and 5 have been consolidated and liner installation has been completed. Anchor QEA submitted the completion report for lagoon lining activities on February 22, 2022, in compliance with the approved schedule and is awaiting EPA approval.
- Anchor QEA developed a revision of the Lagoon 3 Abandonment Plan which was submitted to EPA on January 18th. That plan documented the results of soil testing and included a plan for in situ treatment of soils containing elevated nitrogen levels. EPA provided comments on that plan in EPA Letter 281. That letter also provided comments on the abandonment of Lagoons 1 and 2 that are scheduled for implementation in 2022. Anchor QEA and the Dairy met with EPA on April 14th to discuss the comments and develop a path forward for the abandonments, including submittal of an updated abandonment plan. In the meantime, Lagoon 3 remains empty and dry and the use of Lagoons 1 and 2 has been terminated. Lagoon 2 has been drained to permit removal of solid manures. Lagoon 1 will be drained in the near future.

George DeRuyter & Son/D&A Dairies

- Backfilling of the D&A Dairy Take Up Pond is nearing completion and is expected to be completed by the end of the month. Testing data for the backfill materials confirms an available nitrogen concentration less than 15 mg N/kg (actual values 1.8 to 4.3 mg N/kg; measured as the sum of ammonia and nitrate nitrogen) in the backfill materials. Following completion, a completion report will then be prepared documenting completion of that work and submitted to EPA.
- The lining of George DeRuyter & Son Lagoon Nos. 2 and 3 has been completed, Anchor QEA submitted a completion report for lagoon construction and lining activities to EPA on February 23, 2022 and is awaiting EPA approval.
- The lining of George DeRuyter & Son Lagoon No. 1 remains in progress. The lagoon has been emptied and the NDN treatment equipment removed from the lagoon. Lagoon re-grading is underway. Lining activities are expected to be complete within the next two to three weeks depending on weather and contractor availability. A completion report will then be submitted to EPA documenting the performance of that work.
- The NDN system previously operating in George DeRuyter & Sons Lagoon 1 has been taken offline and the lagoon is being emptied to prepare it for lining. An optimization review has been completed and additional equipment (new baffle curtain and other replacement components) ordered. The equipment will be reinstalled in an updated configuration once lining of the lagoon has been completed.

- The manure digester at GDS Dairy remains in operation. The biogas is cleaned and injected using the on-site pipeline extension.

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

The Dairies continue to maintain the source control measures defined in the AOC.

During the First Quarter 2022 groundwater monitoring event, several of the groundwater pressure transducers were non-functional. Malfunctioning transducers have been returned to the factory to attempt to recover available data. Replacement transducers have been ordered and will be reinstalled in the wells to sustain ongoing transducer monitoring data.

Representatives of the Dairies have met with EPA to discuss next steps under the AOC following completion of the first 8-years of required work. The Dairies are compiling additional information as requested by EPA including the costs of groundwater monitoring and other information.

Agrimanagement, Inc., plans to initiate spring pre-plant manure sampling during April, and expects to initiate soil sampling in late April or early May 2022 (depending on weather conditions). Please consider this progress report to represent notification of these upcoming field activities.

A supplemental round of groundwater monitoring is planned for Second Quarter 2022. This work is currently scheduled for early June, 2022. Please consider this progress report to represent notification of these upcoming field activities.

Contractor coordination for the 2022 rounds of RO system maintenance has been completed and outreach activities with area residents has begun. The first round of maintenance visits will be completed in May or early June.

3. George DeRuyter & Son Dairy NDN System Update

The manure digester at George DeRuyter & Son Dairy continues to operate efficiently and produce low-carbon biogas. The cleaned biogas is now directly injected into the pipeline installed for this purpose, eliminating the need for truck transportation of the finished biogas.

The DAF system continues to operate as intended in line with the manure digester. Ongoing maintenance and repairs have been conducted as required for all manure treatment equipment. The NDN has been temporarily removed from operation to prepare Lagoon 1 for lining. After lining installation has been completed, the NDN treatment system will be reinstalled within the lined lagoon.

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.

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 3/8/2018
Third Quarter 2020 Quarterly Groundwater Monitoring Data Report (Revised Draft)	12/22/2021 (EPA Letter 264)	1/22/2022	Complete	Submitted to EPA on 2/15/2022
Fourth Quarter 2021 Quarterly Groundwater Monitoring Data Report	—	2/14/2022	Complete	Submitted to EPA on 2/15/2022
First Quarter 2022 Quarterly Groundwater Monitoring Data Report	—	5/16/22	5/16/22	Yes
IMMEDIATE SOURCE CONTROL ACTIONS (III.F)				
2019 Post-Harvest Dairy Application Field Report Memorandum	1/4/2022 (EPA Letter 267)	1/31/2022	Complete	Revised report resubmitted to EPA on 1/12/2022
2021 Pre-Plant Dairy Application Field Report Memorandum	1/4/2022 (EPA Letter 267)	1/31/2022	Complete	Revised report resubmitted to EPA on 1/12/2022
2021 Post-Harvest Dairy Application Field Report Memorandum	2/11/2022 (Email approval of extension request)	2/25/2022 (per approved extension request)	Complete	Submitted to EPA on 2/25/2022
Liberty Dairy Red Water Pond BODR – 100% Design	10/22/2018 (EPA Letter 185)	11/19/2018	Complete	Submitted to EPA on 11/19/2018
Liberty Dairy Red Water Pond OMMP	10/22/2018 (EPA Letter 185)	11/19/2018	Complete	Submitted to EPA on 11/19/2018

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)
H&S Bosma Dairy Lagoon No. 6 Basin of Design Report 100% Design Submittal	9/4/2019 (EPA Letter 214)	8/30/2019	Complete	Submitted to EPA on 10/2/2019
H&S Bosma Dairy Lagoon No. 6 and Consolidated Lagoon No. 10 Completion Report	1/5/2022 (EPA Letter 269)	2/2/2022	Complete	Submitted to EPA on 2/15/2022
H&S Bosma Dairy Lagoon Nos. 8, 9, 19, and 20 Lagoon Abandonment Completion Report	4/1/2021 (EPA Letter 243)	4/29/21	Complete	Revised report submitted to EPA on 6/1/2021
Revised Liberty Dairy Lagoon 18 QAPP and Lagoon Abandonment Completion Report	7/14/2021 (EPA Letter 246)	The Lagoon is being backfilled and re-graded consistent with the EPA-approved abandonment plan. The completion report will be updated and resubmitted following completion of the work. Submittal of this report is currently expected on or about May 1 st , 2022.		
Detailed Response to EPA Letter 283 Regarding Lagoon 18	3/18/2022 (EPA Letter 283)	Not defined	5/1/2022	Yes
H&S Bosma Abandonment Plan for Lagoon 3	3/9/2022 (EPA Letter 281)	4/15/2022	5/1/2022	The Dairy met with EPA on April 14 th to discuss EPA comments and define a path forward to complete the required work at Lagoons 1, 2 and 3.
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 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 to EPA on 11/18/2016
2015 Annual Report (Revised)	1/3/2017 (EPA Letter 133)	1/31/2017 (EPA Letter 133)	Complete	Submitted to EPA on 1/31/2017
2016 Annual Report	—	3/1/2017	Complete	Submitted to EPA on 3/1/2017
2017 Annual Report (Revised)	3/21/2018 (EPA Letter 166)	4/18/2018	Complete	Submitted to EPA on 4/17/2018

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)
2020 Annual Report	1/24/2022 (EPA Letter 274)	2/23/2022	2/23/2022	Yes
2021 Annual Report	2/25/2022 (Email approval of extension request)	3/4/2022 (per approved extension request)	Complete	Submitted to EPA on 3/4/2022

Notes:

—: not applicable

BODR: Basis of Design Report

OMMP: Operations, Maintenance, and Monitoring Plan

5. Encountered Issues and Anticipated Actions

As noted in Section 2 several of the groundwater pressure transducers were non-functional during the First Quarter 2022 supplemental groundwater monitoring event. The transducers are being repaired/replaced as necessary to continue transducer measurements as requested by EPA.

Agrimanagement continues to repair/replace irrigation sensors as required to sustain the irrigation monitoring network. The status of that work is summarized in Attachment A.

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)	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)) ¹		
Third Quarter 2013	10/14/2015	APPROVED
Fourth Quarter 2013	10/14/2015	APPROVED
First Quarter 2014	10/14/2015	APPROVED

Work Product	Submittal Date (Report Cover Date)	Status
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
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

Work Product	Submittal Date (Report Cover Date)	Status
Fourth Quarter 2018	2/11/2019 (Cover: February 11, 2019)	APPROVED 8/19/2019
First Quarter 2019	5/21/2019 (Cover: May 20, 2019)	APPROVED 8/19/2019
Second Quarter 2019	8/05/2019 (Cover: August 5, 2019)	APPROVED 8/19/19
Third Quarter 2019	1/15/21 (Cover: January 15, 2021)	APPROVED 1/25/2021
Fourth Quarter 2019	1/15/21 (Cover: January 15, 2021)	APPROVED 1/25/2021
First Quarter 2020	2/3/21 (Cover: February 3, 2021)	APPROVED 12/22/2021
Second Quarter 2020	2/3/21 (Cover: February 3, 2021)	APPROVED 12/22/2021
Fourth Quarter 2020	5/13/2021 (Cover: May 13, 2021)	APPROVED 12/22/2021
First Quarter 2021	4/28//2021 (Cover: April 28, 2021)	APPROVED 12/22/2021
Second Quarter 2021	8/9/2021 (Cover: August 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

Work Product	Submittal Date (Report Cover Date)	Status
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: January 1, 2019)	APPROVED 8/30/2019
2019 Pre-Plant Dairy Application Field Report Memorandum	Uploaded to FTP 9/12/2019 (Cover: August 10, 2019)	APPROVED 8/30/2019
2020 Pre-Plant Dairy Application Field Report Memorandum	Uploaded to FTP 2/2/2021 (Cover: February 2, 2021)	APPROVED 2/11/2021
2020 Post-Harvest Dairy Application Field Report Memorandum	Uploaded to FTP 2/2/2021 (Cover: February 2, 2021)	APPROVED 2/11/2021
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
Liberty/H&S Bosma Dairies Modified Lagoon Work Plan (III.F.6)	1/3/2017 (Cover: December 15, 2016)	APPROVED 1/6/2017
George DeRuyter & Son/D&A Dairies Lagoon Work Plan (III.F.6)	1/3/2017 (Cover: December 15, 2016)	APPROVED 1/6/2017
Final BODR, Liberty Dairy Consolidated Lagoon No. 15, 100% Design	7/20/2017 (Cover: July 19, 2017) 08/17/2017 (Mods cover: August 11, 2017)	APPROVED WITH MODIFICATIONS 7/25/2017
Final BODR, D&A Dairy Consolidated Lagoon No. 3, 100% Design	7/20/2017 (Cover: July 19, 2017) 08/17/2017 (Mods cover: August 11, 2017)	APPROVED WITH MODIFICATIONS 7/25/2017
H&S Bosma Dairy Abandonment Plan for Lagoon Nos. 8, 9, 19, and 20	8/29/2018 (Cover: August 29, 2018)	APPROVED 9/18/2018
H&S Bosma Dairy Lagoon No. 10 OMMP	8/29/2018 (Cover: September 18, 2018)	APPROVED WITH EPA-MODIFIED VERSION 9/18/2018
George DeRuyter & Son Dairy Stormwater Catch Basin and D&A Dairy Lagoon Nos. 1 and 2 Modified BODR – 100% Design Submittal	8/29/2018 (Cover: September 18, 2018)	APPROVED WITH EPA-MODIFIED VERSION 9/18/2018

Work Product	Submittal Date (Report Cover Date)	Status
George DeRuyter & Son Dairy Stormwater Catch Basin and D&A Dairy Lagoon Nos. 1 and 2 Modified OMMP	8/29/2018 (Cover: September 18, 2018)	APPROVED WITH EPA-MODIFIED VERSION 9/18/2018
Cow Palace Abandonment Plan for Northeast Catch Basin	9/10/2018 (Cover: September 11, 2018)	APPROVED 9/12/2018
Liberty/H&S Bosma Dairies Lagoon Pre-Design Data Collection QAPP (III.F.6)	1/27/2017 (Cover: January 26, 2017)	APPROVED 2/2/2017
George DeRuyter & Son/D&A Dairies Lagoon Pre-Design Data Collection QAPP (III.F.6)	1/27/2017 (Cover: January 26, 2017)	APPROVED 2/2/2017
George DeRuyter & Son Dairy Stormwater Catch Basin NDN QAPP	10/30/2018 (Cover: October 2018)	APPROVED 3/21/2019
George DeRuyter & Son Dairy As-Built Report for Stormwater Catch Basin	3/15/21 (Cover: March 15, 2021)	APPROVED 1/5/22
Cow Palace Safety Debris Catch Basin 100% Basis of Design Report	7/10/2019 (Cover: June 25, 2019; Modified cover: July 17, 2019)	APPROVED WITH MODIFICATIONS 7/17/2019
H&S Bosma Dairy Modified Lagoon No. 10 BODR – 100% Design Submittal	7/10/2019 (Cover: July 10, 2019)	APPROVED WITH MODIFICATIONS 7/17/2019
Uniform Lagoon Lining Basis of Design Report – Bosma and DeRuyter Dairies	8/27/2020 (Cover: 8/24/2020)	CONDITIONALLY APPROVED 7/31/2020
Liberty/H&S Bosma Dairies Lagoon No. 14 and Consolidated Lagoon No. 7 Project Specific Liner Construction Plans	8/27/2020 (Cover: 8/17/2020)	CONDITIONALLY APPROVED 7/31/2020
D&A Dairy Consolidated Lagoon No. 1 Project Specific Liner Construction Plans	8/27/2020 (Cover: 8/17/2020)	CONDITIONALLY APPROVED 7/31/2020
D&A Consolidated Lagoon No. 3 Completion Report	3/15/21 (Cover: March 15, 2021)	APPROVED 1/5/22
D&A Dairy Lagoon No. 4 Project Specific Liner Construction Plans	11/3/2020 (Cover: October 29, 2020)	APPROVED 11/16/2020
Liberty Dairy Consolidated Lagoon No. 15 Completion Report	3/15/21 (Cover: March 15, 2021)	APPROVED 1/5/22
Liberty Dairy Lagoon No. 18 Abandonment Plan	11/3/2020 (Cover: November 3, 2020)	APPROVED 11/16/2020
Revised H&S Bosma Consolidated Lagoon No. 4 Project-Specific Plans	11/12/21 (Cover: November 12, 2021)	CONDITIONALLY APPROVED 11/17/22

Work Product	Submittal Date (Report Cover Date)	Status
Revised D&A Dairy Take-Up Pond Abandonment Plan	12/12/21 (Cover: 12/21/21)	APPROVED WITH MODIFICATIONS 12/27/21
Liberty Dairy As-Built Report for Lining of Red Water Pond	3/15/21 (Cover: March 15, 2021)	APPROVED 1/5/22
Cow Palace Completion Report for Northeast Catch Basin Abandonment	1/31/2019 (Cover: February 15, 2019)	APPROVED 2/2/2021
Revised George DeRuyter & Son Dairy Lagoons 1, 2 and 3 Project-Specific Plans	Submitted to EPA on 01/12/2022	APPROVED 1/19/2022
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 ²
2018 Annual Report	3/6/2020 (Cover: March 6, 2020)	APPROVED 2/6/2020
2019 Annual Report	9/1/2020	APPROVED WITH MODIFICATIONS 9/17/2020

Notes:

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

BODR: Basis of Design Report

DFAFMP: Dairy Facility Application Field Management

OMMP: Operations, Maintenance, and Monitoring Plan

Attachment A

2022 Pre-Season Irrigation Sensor Status - DeRuyter and Liberty/Bosma Dairies

Field ID	Individual Station ID	3-Foot Sensor Operational as of April 13, 2022	Corrective Measures in Progress
George DeRuyter & Son/D&A Dairies			
GDS-SU01	GDS-SU01-I-1	Yes	
	GDS-SU01-I-2	Yes	
GDS-SU02	GDS-SU02-I-1	No	Logger scheduled for repair
	GDS-SU02-I-2	No	Logger scheduled for repair
GDS-SU03	GDS-SU03-I-1	Yes	
	GDS-SU03-I-2	Yes	
GDS-SU04	GDS-SU04-I-1	Yes	
	GDS-SU04-I-2	Yes	
	GDS-SU04-I-3	Yes	
GDS-SU05	GDS-SU05-I-1	Yes	
	GDS-SU05-I-2	Yes	
	GDS-SU05-I-3	No	3-ft sensor to be replaced
GDS-SU06	GDS-SU06-I-1	Yes	
	GDS-SU06-I-2	Yes	
GDS-SU07	GDS-SU07-I-1	No	3-ft sensor to be replaced
	GDS-SU07-I-2	Yes	
	GDS-SU07-I-3	No	All sensors to be replaced
GDS-SU08	GDS-SU08-I-1	Yes	
	GDS-SU08-I-2	Yes	
	GDS-SU08-I-3	Yes	
GDS-SU09	GDS-SU09-I-1	Yes	
	GDS-SU09-I-2	Yes	
GDS-SU10	GDS-SU10-I-1	Yes	
	GDS-SU10-I-2	No	All sensors to be replaced
	GDS-SU10-I-3	Yes	
GDS-SU11	GDS-SU11-I-1	No	Logger scheduled for repair
	GDS-SU11-I-2	Yes	
GDS-SU12	GDS-SU12-I-1	Yes	
	GDS-SU12-I-2	No	All sensors to be replaced
GDS-SU13	GDS-SU13-I-1	Yes	
	GDS-SU13-I-2	Yes	
	GDS-SU13-I-3	Yes	
GDS-SU14	GDS-SU14-I-1	Yes	
	GDS-SU14-I-2	No	Logger scheduled for repair
	GDS-SU14-I-3	Yes	

Attachment A

2022 Pre-Season Irrigation Sensor Status - DeRuyter and Liberty/Bosma Dairies

Field ID	Individual Station ID	3-Foot Sensor Operational as of April 13, 2022	Corrective Measures in Progress
Liberty/H&S Bosma Dairies			
LD-SU02	LD-SU02-I-1	Yes	
	LD-SU02-I-2	Yes	
	LD-SU02-I-3	Yes	
LD-SU03	LD-SU03-I-1	Yes	
	LD-SU03-I-2	Yes	
LD-SU04	LD-SU04-I-1	No	Logger damaged; needs to be replaced
	LD-SU04-I-2	Yes	
LD-SU05	LD-SU05-I-1	Yes	
	LD-SU05-I-2	No	3-foot sensor to be replaced
	LD-SU05-I-3	Yes	
LD-SU06	LD-SU06-I-1	No	3-foot sensor to be replaced
	LD-SU06-I-2	Yes	
LD-SU07	LD-SU07-I-1	No	3-foot sensor to be replaced
	LD-SU07-I-2	Yes	
LD-SU08 N	LD-SU08N-I-1	Yes	
	LD-SU08N-I-2	No	Logger scheduled for repair
	LD-SU08N-I-3	Yes	
LD-SU08 S	LD-SU08S-I-1	Yes	
	LD-SU08S-I-2	Yes	
LD-SU09	LD-SU09-I-1	Yes	
	LD-SU09-I-2	Yes	
LD-SU10	LD-SU10-I-1	Yes	
	LD-SU10-I-2	Yes	
	LD-SU10-I-3	No	3-foot sensor to be replaced
LD-SU14	LD-SU14-I-1	Yes	
	LD-SU14-I-2	Yes	
LD-SU16	LD-SU16-I-1	Yes	
	LD-SU16-I-2	Yes	
LD-SU17	LD-SU17-I-1	Yes	
	LD-SU17-I-2	Yes	

Notes:

- Agrimanagement will assess the non-operational loggers and repair/replace damaged loggers as soon as supplies are available.