

# Monthly Progress Report

April 15, 2017

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To: Eric Winiecki, U.S. Environmental Protection Agency, Region 10  
From: Mark Larsen and Nicole LaFranchise, Anchor QEA, LLC  
cc: Rene Fuentes and Jennifer MacDonald, U.S. Environmental Protection Agency, Region 10  
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**Re: Docket No. SDWA-10-2013-0080; Yakima Valley Dairies  
March 2017 Monthly Progress Report**

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This memorandum provides the monthly progress report for activities performed in compliance with Docket No. SDWA-10-2013-0080 between March 11 and April 10, 2017. This progress report is submitted on behalf of the Yakima Valley Dairies (Dairies), including: 1) Cow Palace Dairy, L.L.C.; 2) D & A Dairy, LLC (also known as D and A Dairy L.L.C.), George DeRuyter & Son Dairy, L.L.C., and George & Margaret, L.L.C.; and 3) Liberty Dairy LLC and its associated dairy facility H&S Bosma Dairy.

## 1. Major Accomplishments and Issues

- The 60% lagoon lining design documents for Liberty and DeRuyter dairies were completed and submitted to the U.S. Environmental Protection Agency (EPA) on April 3, 2017. A check-in meeting with EPA occurred on April 7, 2017, to discuss EPA's preliminary comments to the 60% lagoon lining design documents.
- Water & Environmental Technologies (WET) submitted Lagoon 2 design information to EPA on behalf of Cow Palace Dairy, including draft construction drawings, a quality assurance project plan, an operation maintenance and monitoring plan, and draft project specifications.
- The Third Quarter 2016 Groundwater Monitoring Report was resubmitted on March 16 after addressing EPA comments. EPA reviewed and approved that report as final (EPA Letter 145).
- The 2015 and 2016 Pre-plant and Post-harvest Dairy Application Field Reports for Cow Palace Dairy, Liberty/H&S Bosma Dairies, and George DeRuyter & Son/D & A Dairies were conditionally approved (pending updated signatures and removal of draft language) by EPA on March 27, 2017 (EPA Letter 143).

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

Per EPA Letter 133 (dated January 3, 2017), Specific Comment 6, Agrimanagement, Inc., is working with the Dairies to repair, replace, and upgrade damaged irrigation moisture sensors prior to the 2017 irrigation season. As of March 31, 2017, 70 of 83 loggers are active and working. All necessary components for upgrade and repair of the remaining 13 loggers are on hand. Some working loggers will also soon receive a modem upgrade. With snow gone and the fields drying up, repairs should be complete within a couple of weeks. Following these repairs, a few areas will require sensor replacement.

Currently, no irrigation is being performed, because the soil remains moist from the winter. Agrimanagement plans to begin compiling irrigation reports on April 7 or 8, 2017, which is similar to the time frame of the 2016 season. Once all repairs, replacements, and upgrades are complete, Agrimanagement will provide protocol for farming around the sensor stations to help prevent future damage. Agrimanagement will also provide GPS coordinates for the stations to the Dairies. In alfalfa fields where the crop is covering the sensors, Agrimanagement plans to clear the area around the sensors. Agrimanagement will also perform more frequent maintenance checks throughout the season.

## 3. Work in Progress

Table 1 outlines the updated deliverable schedule.

**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 4)
<b>GROUNDWATER MONITORING (III.E)</b>				
Fourth Quarter 2016 Quarterly Groundwater Monitoring Data Report (Draft)	--	5/1/2017 (EPA Letter 145)	5/1/2017	Yes Draft submitted to EPA on 2/15/2017. Revisions in progress per EPA Letter 145 comments.
First Quarter 2017 Quarterly Groundwater Monitoring Data Report (Draft)	--	5/12/2017 (60 days following data collection)	5/12/2017	Yes

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 4)
<b>IMMEDIATE SOURCE CONTROL ACTIONS (III.F)</b>				
Basis of Design Report D & A Dairy Consolidated Lagoon No. 3, 60% Design	--	--	Complete	Submitted to EPA on 4/3/2017
Basis of Design Report, Liberty Dairy Consolidated Lagoon No. 15, 60% Design	--	--	Complete	Submitted to EPA on 4/3/2017
<b>REPORTING (III.K)</b>				
Monthly Progress Report	--	15th of each month (AOC)	15th of each month	Yes
2013 Annual Report (Revised)	5/5/2016 (Letter 121)	2/27/2016 (Letters 104, 116, and 128)	Complete	Submitted to EPA on 11/18/2016
2014 Annual Report (Revised)	5/5/2016 (Letter 121)	4/1/2016 (Letters 109, 116, and 128)	Complete	Submitted to EPA on 11/18/2016
2015 Annual Report (Revised)	1/3/2017 (Letter 133)	1/31/2017 (Letter 133)	Complete	Submitted to EPA on 1/31/2017
2016 Annual Report	--	3/1/2017	Complete	Submitted to EPA on 3/1/2017

Notes:

AOC: Administrative Order on Consent

EPA: U.S. Environmental Protection Agency

## 4. Encountered Issues and Anticipated Actions

Issues encountered and anticipated actions are as follows:

- Per EPA Letter 133 (dated January 3, 2017), Specific Comment 6, Agrimanagement is working with the Dairies to repair, replace, and upgrade damaged irrigation moisture sensors prior to the 2017 irrigation season, as described in Section 2 of this progress report.

## 5. List of Completed Administrative Order on Consent Work

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

**Table 2**  
**Work Product Status Update**

<b>Work Product</b>	<b>Date</b>	<b>Status</b>
<b>PROVISION OF WATER (III.D)</b>		
Residential Well Sampling QAPP (III.D.2)	4/26/2013	APPROVED
Residential Well Sampling Report	12/20/2013	APPROVED
<b>GROUNDWATER MONITORING (III.E)</b>		
Groundwater Monitoring Well Installation Report (III.E.2)	10/06/2014	APPROVED
Data Usability Report (III.A.3.e.(1)) <sup>1</sup>		
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
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	3/16/2017	APPROVED
QAPP Addendum No. 1	1/13/2017	APPROVED
<b>IMMEDIATE SOURCE CONTROL ACTIONS (III.F)</b>		
Dairy Facility Application Field Management Plan(s) (III.F.1.)	11/18/2013	APPROVED; revised DAFMPs submitted to EPA on 5/31/2016
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

<b>Work Product</b>	<b>Date</b>	<b>Status</b>
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	3/27/2017	APPROVED
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 Quality Assurance Project Plan (III.F.6)	3/11/2016	APPROVED
Cow Palace NW Catch Basin 100% Design (III.F.6)	6/20/2016	APPROVED
Liberty and H&S Bosma Dairies Modified Lagoon Work Plan (III.F.6)	11/10/2016 and 1/3/2017	APPROVED
George DeRuyter & Son and D & A Dairies Lagoon Work Plan (III.F.6)	11/10/2016 and 1/3/2017	APPROVED
Liberty and H&S Bosma Dairies Lagoon Pre-design Data Collection QAPP (III.F.6)	2/2/2017	APPROVED
George DeRuyter & Son and D & A Dairies Lagoon Pre-design Data Collection QAPP (III.F.6)	2/2/2017	APPROVED
<b>REPORTING (III.K)</b>		
Monthly Progress Reports (III.K.1)	15th of the following month	Current through March 15, 2017
Health and Safety Plan	9/13/2016	Current version <sup>2</sup>

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. The Health and Safety Plan will be updated periodically if applicable to address additional work or field activities.

DFAFMP: Dairy Facility Application Field Management Plan

EPA: U.S. Environmental Protection Agency

QAPP: Quality Assurance Project Plan