

Monthly Progress Report

May 15, 2017

To: Eric Winiacki, U.S. Environmental Protection Agency, Region 10
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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
April 2017 Monthly Progress Report**

This memorandum provides the monthly progress report for activities performed in compliance with Docket No. SDWA-10-2013-0080 between April 11 and May 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

- On behalf of Cow Palace Dairy, Water & Environmental Technologies (WET) submitted updated design information to the U.S. Environmental Protection Agency (EPA) in response to EPA's conditional approval letter. WET is continuing to coordinate during the procurement and construction phase.
- The Fourth Quarter 2016 Groundwater Monitoring Report was resubmitted on May 1 after addressing EPA comments (EPA Letter 145). The Final 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 delivered to EPA on April 6, 2017 (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

The 90% lagoon lining design documents for Liberty and George DeRuyter & Son/D & A Dairies are being prepared and will be submitted to EPA as scheduled on May 26, 2017.

Per EPA Letter 133 (dated January 3, 2017), Specific Comment 6, Agrimanagement, Inc., is working with the Dairies to repair and replace damaged irrigation moisture sensors. Agrimanagement is also updating all loggers with new motherboards; this process is almost complete. Once all motherboards are updated, systems that were completely damaged beyond repair will be replaced. Finally, the sensors that have failed will be repaired. Each week, more loggers are being brought online.

Once all upgrades, replacements, and repairs 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.

Agrimanagement compiled the first soil moisture reports for the 2017 irrigation season on April 12, 2017 (for the week of April 5 to 11, 2017). Timing of these initial reports was similar to the 2016 irrigation season. Agrimanagement will continue compiling weekly reports for applications fields owned by Cow Palace Dairy, Liberty/H&S Bosma Dairies, and George DeRuyter & Son/D & A Dairies throughout the duration of the 2017 irrigation season.

Pre-plant sampling for the 2017 crop season is now underway. Manure samples were collected during the week of April 24, 2017. Soil sampling began during the week of May 1, 2017, and will continue over the next couple of weeks.

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)
GROUNDWATER MONITORING (III.E)				
Fourth Quarter 2016 Quarterly Groundwater Monitoring Data Report (Revised Draft)	--	5/1/2017 (Revised per EPA Letter 145)	Complete	Submitted to EPA on 5/1/2017
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)
IMMEDIATE SOURCE CONTROL ACTIONS (III.F)				
Basis of Design Report D & A Dairy Consolidated Lagoon No. 3, 90% Design	--	--	5/26/2017	Yes
Basis of Design Report, Liberty Dairy Consolidated Lagoon No. 15, 90% Design	--	--	5/26/2017	Yes
REPORTING (III.K)				
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 and replace damaged irrigation moisture sensors, 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

Work Product	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
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
Third Quarter 2016	4/3/2017	APPROVED
IMMEDIATE SOURCE CONTROL ACTIONS (III.F)		
Dairy Facility Application Field Management Plan(s) (III.F.1.)	11/18/2013	APPROVED; revised DAFAMPs 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

Work Product	Date	Status
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	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
REPORTING (III.K)		
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 ²

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