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15 UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WASHINGTON

16 UNITED STATES OF AMERICA,

17 Plaintiff,

Civil No. 24-cv-3092

18 v.

COMPLAINT

19 COW PALACE, LLC; THE DOLSEN
COMPANIES; THREE D
20 PROPERTIES, LLC; GEORGE &

1 MARGARET, L.L.C.; GEORGE
2 DERUYTER AND SON DAIRY,
3 L.L.C.; D AND J DAIRY, L.L.C. (f/k/a
4 D AND A DAIRY, L.L.C.); LIBERTY
5 DAIRY, LLC; ARIZONA ACRES
6 LIMITED PARTNERSHIP; LIBERTY
7 ACRES LLC; BOSMA DAIRY
8 PARTNERS, LLC; BOSMA
9 ENTERPRISES, INC.; HENRY
10 BOSMA; HENRIETTA BOSMA; and
11 KATHLEEN NICOLAUS,

12 Defendants.

13 The United States of America (“United States”), by the authority of the
14 Attorney General of the United States, on behalf of the United States
15 Environmental Protection Agency (“EPA”), alleges as follows:

16 **NATURE OF ACTION**

17 1. This civil action seeks to address ongoing nitrate contamination of
18 groundwater from dairy operations in the Lower Yakima Valley of south-central
19 Washington State. This groundwater supplies drinking water for private wells and
20 public water systems and is used daily by residents of the Lower Yakima Valley—
including babies and adults with underlying health conditions—for whom
overconsumption of nitrate poses risks to health and life.

2. The United States brings this civil action pursuant to Section 1431 of
the Safe Drinking Water Act (“SDWA” or “the Act”), 42 U.S.C. § 300i, for

1 injunctive relief and civil penalties against Cow Palace, LLC; the Dolsen
2 Companies; Three D Properties, LLC; George & Margaret, L.L.C.; George
3 DeRuyter and Son Dairy, L.L.C., D and J Dairy, L.L.C. (f/k/a D and A Dairy,
4 L.L.C.); Liberty Dairy, LLC; Arizona Acres Limited Partnership; Liberty Acres
5 LLC; Bosma Dairy Partners, LLC; Bosma Enterprises, Inc.; Mr. Henry Bosma;
6 Ms. Henrietta Bosma; and Ms. Kathleen Nicolaus (collectively, “Defendants”) for
7 abatement of nitrate contamination of underground sources of drinking water that
8 may present an imminent and substantial endangerment to the health of residents
9 of the Lower Yakima Valley (“Residents”).

10 3. The relief sought is intended to address nitrate contamination of
11 drinking water supplied by aquifers in the Lower Yakima Valley by requiring
12 Defendants to:

- 13 a. Perform corrective measures to abate the imminent and substantial
14 endangerment posed by nitrate contamination of the aquifers; and
- 15 b. Pay civil penalties for their violations of the Administrative
16 Consent Order entered between EPA and a subset of Defendants in
17 2013.

18 4. Authority to bring this action is vested in the United States
19 Department of Justice by 28 U.S.C. §§ 516 and 519, and by 42 U.S.C. § 300i.
20

1 **JURISDICTION AND VENUE**

2 5. This Court has jurisdiction over the subject matter of this action under
3 28 U.S.C. §§ 1331, 1345, and 1355, as well as 42 U.S.C. § 300i.

4 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b)
5 and 1395(a), and under 42 U.S.C. § 300i(b), because the events giving rise to this
6 action arose within this judicial district.

7 **PARTIES**

8 7. Plaintiff is the United States of America, acting at the request of the
9 EPA, an agency of the United States.

10 8. Defendants Cow Palace, LLC and the Dolsen Companies are a
11 Washington limited liability company and Washington corporation that have, at all
12 times relevant to this Complaint, owned or operated a dairy facility in Granger,
13 Washington, located in Yakima County.

14 9. Defendant Three D Properties, LLC is a Washington limited liability
15 company that has, at all times relevant to this Complaint, owned property in
16 Granger, Washington, used by Cow Palace, LLC and the Dolsen Companies, in
17 connection with dairy operations.

18 10. Defendants George DeRuyter and Son Dairy, L.L.C., and D and J
19 Dairy, L.L.C. (f/k/a D and A Dairy, L.L.C.), are Washington limited liability
20

1 companies that have at all times relevant to this Complaint owned or operated a
2 dairy facility in Outlook, Washington, located in Yakima County.

3 11. Defendant George & Margaret, L.L.C. is a Washington limited
4 liability company that has at all times relevant to this Complaint owned property in
5 Outlook, Washington, used by Defendants George DeRuyter and Son Dairy,
6 L.L.C. and D and J Dairy, L.L.C., in connection with dairy operations.

7 12. Defendants Liberty Dairy, LLC, Bosma Dairy Partners, LLC and
8 Bosma Enterprises, Inc., are Washington corporations or limited liability
9 companies that have at all times relevant to this Complaint owned or operated
10 dairy facilities near Zillah, Washington, located in Yakima County. These dairy
11 facilities have operated under the names Bosma Dairy, Henry Bosma Dairy, Hank
12 Bosma Dairy, and H&S Bosma Dairy.

13 13. Defendants Arizona Acres Limited Partnership and Liberty Acres
14 LLC are a Washington limited liability partnership and a Washington limited
15 liability company that have at all times relevant to this Complaint owned property
16 in Zillah, Washington, used by Defendants Liberty Dairy, LLC, Bosma Dairy
17 Partners, LLC, and Bosma Enterprises, Inc., in connection with dairy operations.

18 14. Defendants Mr. Henry Bosma, Ms. Henrietta Bosma, and Ms.
19 Kathleen Nicolaus are individuals who have at all times relevant to this Complaint
20 owned property in Zillah, Washington, used by Defendants Liberty Dairy, LLC,

1 Bosma Dairy Partners, LLC, and Bosma Enterprises, Inc., in connection with dairy
2 operations.

3 **STATUTORY FRAMEWORK**

4 15. Under Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), EPA, upon
5 receipt of information that a contaminant which is present in or likely to enter an
6 underground source of drinking water, which may present an imminent and
7 substantial endangerment to the health of persons, and that appropriate State and
8 local authorities have not acted to protect the health of persons, may take such
9 actions as it may deem necessary in order to protect the health of such persons.

10 16. Under Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), the United
11 States is authorized to commence a civil judicial action for appropriate relief to
12 protect the health of persons who are or may be users of the underground source of
13 drinking water, including a restraining order or permanent or temporary injunction.

14 17. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), a civil
15 penalty may be assessed for a failure to comply with an administrative order issued
16 under Section 1431(a), not to exceed the statutory maximum per day of violation
17 as adjusted by the Federal Civil Penalties Inflation Adjustment Act of 1990,
18 amended by the Debt Collection Improvement Act of 1996, and the subsequent
19 Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. § 19.4. The current
20

1 statutory maximum for SDWA 42 U.S.C. § 300i violations occurring on or after
2 November 2, 2015, is \$29,154. *Id.*

3 GENERAL ALLEGATIONS

4 Health Effects of Nitrate in Drinking Water

5 18. Nitrate is a “contaminant” under the Act. 42 U.S.C. § 300f(6). It is
6 capable of causing acute adverse health effects, including methemoglobinemia in
7 infants (Blue Baby Syndrome), where red blood cells are unable to carry adequate
8 levels of oxygen throughout the body. Blue Baby Syndrome, so named because
9 babies with this syndrome may turn blue or grey because of oxygen deprivation,
10 can lead to death within days if not promptly treated.

11 19. Recent studies have concluded that increased nitrate intake is also
12 associated with increased risk of reproductive problems, such as spontaneous
13 abortion, intrauterine growth restriction, selected birth defects, and certain types of
14 cancers, such as colorectal, gastric, and non-Hodgkin’s lymphoma.

15 20. Infants, pregnant women, dialysis patients, and individuals with
16 gastrointestinal conditions or certain enzyme deficiencies are particularly sensitive
17 to nitrate exposure and are at higher risk of potential adverse health effects.

18 21. Pursuant to its authority under Section 1412 of the SDWA, 42 U.S.C.
19 § 300g-1, EPA has set the maximum contaminant level (“MCL”) and maximum
20 contaminant level goal (“MCLG”) for nitrate. 40 C.F.R. §§ 141.51, 141.62(b)(7).

1 22. MCLs are enforceable standards for public water systems and do not
2 apply to underground sources of drinking water. They represent the maximum
3 level of a contaminant allowed in a public water system and are developed in
4 consideration of contaminant detection limits and feasibility of treatment
5 technologies. 42 U.S.C. § 300f(3). MCLGs are the maximum level of a
6 contaminant in drinking water at which no known or anticipated adverse effect on
7 the health of persons would occur, allowing an adequate margin of safety.
8 40 C.F.R. § 141.2. MCLGs only consider known or anticipated effects on public
9 health.

10 23. At all times relevant to this Complaint, the MCL for nitrate is the
11 same as the MCLG: 10 milligrams per liter (“mg/L”). 40 C.F.R. §§ 141.51,
12 141.62(b)(7). The limit can also be expressed as 10 parts per million (“ppm”).

13 **Nitrate Contamination from Dairy Operations**

14 24. Defendants are at all times relevant to this Complaint “persons”
15 within the meaning of Section 1401(12) of the Act, 42 U.S.C. § 300f(12).

16 25. Defendants own or operate three large dairy facilities, or they own
17 land parcels used in connection with dairy facility operations such as land
18 application of manure.

19 26. Dairy facilities are generally comprised of several areas, including:
20

- 1 a. Animal confinement areas, such as cow pens, feedlots, and milking
- 2 parlors;
- 3 b. Areas for raw materials storage, such as feed silos and bedding;
- 4 c. Manure storage areas, such as compost piles and lagoons, which
- 5 are large liquid waste ponds;
- 6 d. Areas for waste containment, which include settling basins and
- 7 ditches to separate uncontaminated stormwater; and
- 8 e. Application fields, which are crop fields where liquid manure
- 9 waste is applied as fertilizer.

10 27. Each dairy facility is a concentrated animal feeding operation
11 (“CAFO”) that houses several thousand dairy cattle. In 2023, each facility reported
12 the following approximate numbers of total cattle:

- 13 a. Cow Palace, LLC: 13,050;
- 14 b. Liberty Dairy, LLC, Bosma Dairy Partners, LLC, and Bosma
- 15 Enterprises, Inc: 7,450;
- 16 c. George DeRuyter and Son Dairy, L.L.C., D and J Dairy, L.L.C.,
- 17 and George & Margaret, L.L.C.: 10,730.

18 28. Cattle at each dairy facility produce tens of millions of gallons of
19 liquid manure and hundreds of thousands of tons of solid manure each year, which
20 is stored in piles or large lagoons and applied to application fields as fertilizer.

1 29. Manure contains nitrogen in organic and inorganic forms, which
2 converts to nitrate as it moves in air, surface runoff, and through groundwater.
3 Organic nitrogen generally requires microbial activity before plants are able to
4 utilize it, whereas inorganic nitrogen—also referred to as “available nitrogen”—
5 reflects the amount of nitrogen immediately available to plants.

6 30. Nitrate is highly mobile in soil and water. It may easily leach
7 downward through soil into groundwater, which transports the nitrate in the
8 direction of groundwater flow to form plumes.

9 31. Crops uptake some nitrate through their roots, such that manure must
10 be applied agronomically—meaning at a rate consistent with crops’ ability to
11 uptake nutrients—to avoid excess nitrate traveling past the crop root zone. The
12 crop root zone is the depth at which crops can take up nitrate.

13 32. Excess nitrate travels past the crop root zone and downward through
14 the vadose zone, where it reaches groundwater. The vadose zone is the area
15 between the ground surface and the groundwater table.

16 33. An aquifer is a body of permeable rock, sand, or gravel that holds
17 groundwater. Two aquifers underlie the Lower Yakima Valley: a shallow alluvial
18 aquifer (“Alluvial Aquifer”) and a deeper basaltic aquifer (“Basalt Aquifer”)
19 (jointly, the “Aquifers”).
20

1 34. Most Residents of the Lower Yakima Valley living downgradient of
2 Defendants' facilities have no access to a public water system such that homes rely
3 on private residential wells ("Residential Wells") to draw groundwater from the
4 Aquifers.

5 35. The Aquifers are underground sources of drinking water within the
6 meaning of the Act, 40 C.F.R. § 144.3.

7 36. Water drawn from Residential Wells in the Aquifers is used by
8 Residents for human consumption, including drinking, cooking, and other
9 household purposes.

10 37. Contaminants in the Aquifers are present in drinking water that
11 Residents source from the Residential Wells.

12 38. EPA has received data indicating that nitrate above naturally
13 occurring background levels is present in the Alluvial Aquifer and is likely to enter
14 the Alluvial and Basalt Aquifers.

15 **Past Efforts to Address the Imminent and Substantial Endangerment**

16 39. In February 2010, EPA collected samples from some of the
17 Residential Wells located downgradient of Defendants' dairy facilities.

18 40. The February 2010 samples indicated the Residential Wells contained
19 nitrate far above the 10 mg/L MCL/MCLG for nitrate, including one well that
20 tested as high as 46.6 mg/L.

1 41. EPA is authorized to issue an emergency administrative order under
2 Section 1431 of the SDWA, 42 U.S.C. § 300i(a), when it receives information that
3 a contaminant is present in or is likely to enter an underground source of drinking
4 water, which may present an imminent and substantial endangerment to the health
5 of persons, and that the appropriate State and local authorities have not acted to
6 protect the health of such persons.

7 42. In March 2013, EPA exercised its emergency authority under
8 42 U.S.C. § 300i and entered into a consent order with a subset of Defendants (the
9 “Consent Order”).

10 43. The subset of Defendants subject to the Consent Order is: Cow
11 Palace, LLC (“Cow Palace Dairy”); D and J Dairy, L.L.C. (f/k/a D and A Dairy,
12 L.L.C.), George DeRuyter and Son Dairy, L.L.C., and George & Margaret, L.L.C.
13 (“DeRuyter Dairy”); Liberty Dairy, LLC and its associated Dairy Facility H&S
14 Bosma Dairy (“Bosma Dairy”) (collectively, “the Dairies”).

15 44. The Consent Order concluded that contaminants, including nitrate,
16 were present in or likely to enter an underground source of drinking water and that
17 it may present an imminent and substantial endangerment to the health of persons
18 residing in the Lower Yakima Valley within the meaning of Section 1431 of the
19 Act, 42 U.S.C. § 300i(a).

1 45. The Consent Order directed the Dairies to take immediate action
2 deemed necessary to address the imminent and substantial endangerment presented
3 by nitrate contamination from their operations, and required that the Dairies:

- 4 a. Offer homes using Residential Wells located on and within one
5 mile downgradient of the Dairies that exceeded 10 mg/L for nitrate
6 with alternative water supplies for all human consumption needs;
- 7 b. Take specific actions to control potential sources of nitrogen from
8 the Dairies, including storage lagoons and application fields;
- 9 c. Establish a network of groundwater monitoring wells (“Monitoring
10 Wells”) and conduct quarterly groundwater monitoring;
- 11 d. Improve nutrient management at the Dairies, including the rate at
12 which manure is applied to fields; and
- 13 e. Perform the foregoing actions in accordance with EPA-approved
14 plans, as specified.

15 46. The Consent Order included a statement of work describing the work
16 the Dairies are required to implement (“Statement of Work”). The Consent Order
17 required the Dairies to perform, at a minimum, all actions necessary to implement
18 the Statement of Work.

19 47. The Dairies took some of the actions that were required by the
20 Consent Order and Statement of Work, including performing quarterly

1 groundwater monitoring for eight years and providing some Residents with reverse
2 osmosis filters.

3 48. However, the Dairies failed to take all actions required by the Consent
4 Order and Statement of Work and failed to abate the imminent and substantial
5 endangerment.

6 49. On multiple occasions, EPA communicated with one or more of the
7 Dairies regarding the Dairies' efforts to comply with the Consent Order. This
8 correspondence documents the Dairies' ongoing failure to fully comply with the
9 Consent Order.

10 50. In 2013, citizen groups filed lawsuits in this Court under the Resource
11 Conservation and Recovery Act ("RCRA") against each of the Dairies and owners
12 of properties used by the Dairies regarding their ongoing nitrate contamination of
13 underground sources of drinking water in the Lower Yakima Valley.

14 51. In 2015, this Court concluded that as to nitrate contamination from the
15 operations at Cow Palace Dairy—including leakage from lagoons, nitrate
16 accumulation beneath the lagoons, and over-application of manure to crop fields—
17 "there can be no dispute that the Dairy's operations may present an imminent and
18 substantial endangerment to the public who is consuming the contaminated water."

19 *Community Ass'n for Restoration of the Env't, Inc. v. Cow Palace, LLC*, 80 F.
20 Supp. 3d 1180, 1228 (E.D. Wash. 2015).

1 52. Shortly thereafter, the Dairies and property owners entered into
2 judicial consent decrees with the citizen groups to address the Dairies' ongoing
3 nitrate contamination of the underground sources of drinking water in the Lower
4 Yakima Valley (collectively, "the RCRA Consent Decrees").

5 53. Notwithstanding the 2013 Consent Order and the RCRA Consent
6 Decrees, Defendants' activities have continued to result in nitrate contamination of
7 the underground sources of drinking water in the Lower Yakima Valley and,
8 therefore, Residents' drinking water.

9 **Present-Day Imminent and Substantial Endangerment**

10 54. As of the date of this Complaint, the imminent and substantial
11 endangerment to Residents posed by the nitrate contamination of the underground
12 sources of drinking water has not abated.

13 55. Each of the Dairies continues to generate tens of millions of gallons of
14 liquid cow manure and hundreds of thousands of tons of solid cow manure each
15 year.

16 56. The Dairies continue to apply manure at Defendants' properties at
17 rates that exceed the capacity of crops to take up the nitrogen contained in the
18 manure. Soil sampling from the Dairies' application fields shows that as of 2023,
19 several fields still contain moderate to high concentrations of nitrate. At least four
20 Bosma Dairy application fields contain between 15-30 ppm of nitrate, two Bosma

1 Dairy application fields contain 31-45 ppm of nitrate, and one DeRuyter Dairy
2 field, GDS-SUO4, exceeds 45 ppm of nitrate.

3 57. Excess nitrate from field application on Defendants' properties
4 continues to travel downward through the vadose zone and contaminates
5 groundwater.

6 58. Nitrate has also accumulated in the soil around or beneath lagoons due
7 to past or ongoing seepage from the lagoons. In September 2022, soil beneath
8 Bosma Dairy Lagoons 1, 2, and 3 tested as high as 1,331 ppm for available
9 nitrogen.

10 59. Nitrate accumulating in the soil around or beneath lagoons that have
11 not been properly lined or abandoned continues to migrate downward through the
12 soil and contaminates groundwater.

13 60. The Dairies' groundwater monitoring requirements under the Consent
14 Order expired in Summer 2021. The Dairies have continued to voluntarily sample
15 and report data from Monitoring Wells since Summer 2021, but that sampling and
16 reporting is no longer subject to the parameters and validation procedures required
17 under the Consent Order.

18 61. In 2022, groundwater monitoring data showed that nitrate
19 concentrations exceeded 10 mg/L at 17 of the 22 Monitoring Wells downgradient
20 of the Dairies for at least one quarter of the year. The highest nitrate concentration

1 reported was 182 mg/L at DC-03, located downgradient of Bosma Lagoons 2 and 3
2 and adjacent to Bosma Lagoon 1.

3 62. The Dairies reported more recent Monitoring Well data in 2023, but
4 that data was subject to validation errors—such as violations of sample holding
5 times—that decrease the reliability of the data.

6 63. Even with less reliable data, the fourth quarter 2023 Monitoring Well
7 data reported by the Dairies still indicates several nitrate “hot spots” on or
8 downgradient of Defendants’ properties, including:

- 9 a. DC-03 (137 mg/L), located downgradient of Bosma Dairy animal
10 confinement and manure storage areas, application fields, and
11 Bosma Lagoons 2 and 3, and adjacent to Bosma Lagoon 1.
- 12 b. DC-14 (43 mg/L), located downgradient of Cow Palace Dairy
13 animal confinement areas and manure storage areas, and near Cow
14 Palace Lagoon 1;
- 15 c. YVD-10 (64.3 mg/L), located downgradient of Cow Palace Dairy
16 and DeRuyter Dairy animal confinement and manure storage areas,
17 application fields, and Cow Palace lagoons;
- 18 d. YVD-14R (111 mg/L) and YVD-08 (52 mg/L), located
19 downgradient of Bosma Dairy and Cow Palace Dairy animal
20

1 confinement and manure storage areas and application fields, and
2 downgradient or near Bosma Dairy lagoons;

3 e. YVD-09 (66.9 mg/L), located at Bosma Dairy animal confinement
4 and compost areas and downgradient of Cow Palace Dairy animal
5 confinement and manure storage areas, and application fields; and

6 f. YVD-11 (72.4 mg/L), located downgradient of DeRuyter Dairy
7 animal confinement and manure storage areas, and application
8 fields.

9 64. Analytical modeling based on available Monitoring Well and
10 Residential Well data estimates that nitrate plumes from Defendants' properties
11 extend several miles downgradient ("Affected Area").

12 65. The Dairies do not monitor groundwater at certain locations along
13 their western and southern property boundaries. Consequently, some areas
14 hydraulically downgradient of Defendants' properties lack sufficient data to
15 estimate the extent of nitrate plumes from Defendants' properties. Modeling results
16 indicate that Defendants contribute to nitrate exceedances of 10 mg/L more than
17 one mile downgradient, such that Defendants may be contributing nitrate to
18 groundwater in these data-scarce areas ("Potentially Affected Area") and possibly
19 farther downgradient.

1 66. Nitrate plumes from Defendants' activities and properties may present
2 an imminent and substantial endangerment to Residents in the Affected Area and
3 Potentially Affected Area.

4 67. Recent data from Residential Wells is more limited than data from
5 Monitoring Wells, but some data is available through the State's Ambient
6 Groundwater Monitoring Network. The available data shows that Residential
7 Wells in the Affected and Potentially Affected Areas continue to exceed or nearly
8 exceed the nitrate MCL.

9 68. Between fall 2022 and summer 2023, Residential Wells in the
10 Affected and Potentially Affected Areas within one mile downgradient of
11 Defendants reported exceedances of the nitrate MCL, including but not limited to:
12 GG-068 (13.2 mg/L); GG-071 (11.4 mg/L); GG-165 (10.7 mg/L); and GG-166
13 (12 mg/L).

14 69. In May and June 2023, Residential Wells in the Affected Area within
15 three miles downgradient of Defendants reported exceedances of the nitrate MCL,
16 including but not limited to: GG-179 (14 mg/L) and GG-074 (45.9 mg/L).

17 70. Residents in the Affected and Potentially Affected Areas who rely on
18 drinking water from the Aquifers remain at risk of experiencing health problems
19 associated with consuming nitrate above the MCL, including but not limited to
20 Blue Baby Syndrome.

1 71. Babies born in the Affected and Potentially Affected Areas remain at
2 risk of Blue Baby Syndrome caused by consumption of nitrate above the MCL. In
3 2022, census data reported 3,449 births in Yakima County, which is the county
4 where the Affected and Potentially Affected Areas are located.

5 72. Defendants have individually and collectively caused or contributed
6 to, and continue to cause or contribute to, the contamination and threatened
7 contamination of an underground source of drinking water.

8 73. Defendants' historical and ongoing contamination of the underground
9 sources of drinking water may present an imminent and substantial endangerment
10 to the health of Residents in the Affected and Potentially Affected Areas within the
11 meaning of Section 1431 of the Act, 42 U.S.C. § 300i(a).

12 74. Washington Department of Ecology and Washington Department of
13 Health have agreed that continued application of federal resources is necessary to
14 address the public health threat posed by nitrate contamination of the underground
15 sources of drinking water downgradient of Defendants' properties.

16 75. The Washington Department of Ecology has issued and implements a
17 CAFO General Permit for Cow Palace and DeRuyter Dairies to limit nitrate
18 discharges from their dairy operations. Pursuant to a memorandum of
19 understanding with the Department of Ecology, the Washington Department of
20

1 Agriculture helps to administer the CAFO General Permit. As of the date of this
2 Complaint, Bosma Dairy remains unpermitted.

3 76. To date, the State's permitting efforts have not abated nitrate
4 contamination over 10 mg/L in Residents' drinking water.

5 77. Yakima County has started to conduct limited outreach to Lower
6 Yakima Valley residents to offer well testing and to provide alternative water. The
7 County's outreach plans do not include Residents within one mile downgradient
8 from Defendants and will not address source control measures.

9 78. State and local officials have therefore not acted as necessary to
10 protect the health of Residents in the Affected and Potentially Affected Areas, but
11 the Washington Departments of Health and Ecology have deferred to EPA to
12 protect the health of Residents endangered by Defendants' historical and ongoing
13 nitrate contamination of the Aquifers.

14 **Delays in Lining and Abandoning Manure Storage Lagoons**

15 79. Under Section III(F)(6) of the Statement of Work, the Dairies were
16 required to submit to EPA a Lagoon Review Report within 60 days of the Consent
17 Order's effective date, documenting that each of their existing manure storage
18 lagoons were constructed in accordance with Washington State Natural Resources
19
20

1 Conservation Service, Conservation Practice Standard No. 313 – Waste Storage
2 Facility (WA NRCS 313 standard).

3 80. Within 60 days of EPA approval of the Lagoon Review Report, for
4 any lagoons not constructed to meet the current WA NRCS 313 standard, the
5 Dairies were required to submit a plan for conducting an evaluation of each such
6 lagoon at the Dairies’ facilities, to determine whether each lagoon satisfies the
7 current WA NRCS 313 standard (“Lagoon Evaluation Plan”).

8 81. If the Lagoon Evaluation Plan concluded that a lagoon failed to meet
9 the WA NRCS 313 standard, the Dairies were required to submit and implement a
10 work plan describing, at the Dairies’ election, measures to address leakage or how
11 the Dairies will line those lagoons to meet the current standard at the rate of one
12 lagoon per Dairy Facility per year (“Lagoon Work Plan”).

13 82. These Lagoon Work Plans proposed deadlines for completion of the
14 lining or abandonment work.

15 83. Through the process of reviewing and approving each Lagoon Work
16 Plan, EPA imposed interim deadlines including but not limited to: submission of
17 initial, revised, and final work plans; performance of work for lining or
18 abandonment; performance of interim measures, such as soil testing and interim
19 containment of contamination; and submission of summaries of completed
20 construction activities (“As-Built Reports”).

1 84. As set forth below, Bosma Dairy and DeRuyter Dairy consistently
2 violated interim and final deadlines to complete lining or abandonment of their
3 manure storage lagoons.

4 85. Bosma and DeRuyter Dairies' delays in completing lining or
5 abandonment of their manure storage lagoons has prolonged nitrate contamination
6 of the Aquifers from the lagoons and/or underlying soil and delayed abatement of
7 the imminent and substantial endangerment to Residents.

8 *Bosma Dairy*

9 Lagoons 1-3

10 86. Bosma Dairy's Lagoons 1, 2, and 3 are among the largest and most
11 contaminated of the Dairies' lagoons, with concentrations of available nitrogen in
12 subsurface soils as high as 1,331 ppm.

13 87. Bosma Dairy elected to abandon Lagoons 1, 2, and 3 and submitted
14 multiple draft plans to address clean-up of nitrate contamination at these lagoons.

15 88. Bosma Dairy failed to submit its plans in accordance with the Consent
16 Order and EPA's approved deadlines.

17 89. Bosma Dairy submitted its Initial Abandonment Plan for Lagoons 1-3
18 on or around May 27, 2021.

19 90. Bosma Dairy was required to submit a Revised Abandonment Plan for
20 Lagoons 1-3 by August 3, 2021, pursuant to EPA's letter dated July 2, 2021.

1 91. Bosma Dairy did not submit its Revised Abandonment Plan for
2 Lagoons 1-3 until on or around January 18, 2022, and its Revised Abandonment
3 Plan failed to address EPA's comments set forth in EPA's letter dated July 2, 2021.

4 92. Bosma Dairy was required to submit a Second Revised Abandonment
5 Plan for Lagoons 1-3 by April 25, 2022.

6 93. Bosma Dairy submitted its Second Revised Abandonment Plan for
7 Lagoons 1-3 by the April 25, 2022 extended deadline but failed to address EPA's
8 comments set forth in EPA's letter dated March 9, 2022.

9 94. Bosma Dairy was required to submit its Third Revised Abandonment
10 Plan for Lagoons 1-3 by August 1, 2022 pursuant to EPA's letter dated May 12,
11 2022.

12 95. Bosma Dairy failed to submit its Third Revised Abandonment Plan
13 until on or around December 30, 2022.

14 96. Bosma Dairy repeatedly failed to address EPA's comment in its
15 revised plans for abandonment of Lagoons 1, 2, and 3, which directed Bosma
16 Dairy to include excavation of soil highly contaminated with nitrate in any
17 abandonment plan for these lagoons.

18 97. Bosma Dairy's Third Revised Abandonment Plan ignored EPA's
19 directive to include excavation of soil highly contaminated with nitrate, and instead
20 proposed a new plan: installation of an evapotranspiration cap ("ET cap").

1 98. EPA evaluated Bosma Dairy's ET cap proposal and determined that,
2 if implemented as drafted, Bosma Dairy's Third Revised Abandonment Plan will
3 not abate the high concentrations of nitrate discharged into the Aquifers from
4 Bosma Dairy's Lagoons 1-3.

5 99. Bosma Dairy's failure to submit an adequate abandonment plan for
6 Bosma Lagoons 1-3 has prolonged nitrate contamination of the Aquifers from
7 Lagoons 1, 2, and 3 and/or underlying soil and delayed abatement of the imminent
8 and substantial endangerment to Residents.

9 100. In addition to Bosma Dairy's failure to submit an adequate
10 abandonment plan to address the nitrate hot spot at Bosma Lagoons 1, 2, and 3,
11 Bosma Dairy also failed to complete interim work at Lagoons 1, 2, and 3 by EPA-
12 approved deadlines.

13 101. To minimize nitrate leaching into groundwater while Bosma Dairy
14 completed abandonment of Lagoons 1, 2, and 3, EPA required that Bosma Dairy
15 take interim measures including but not limited to re-grading the lagoons,
16 installing sumps with pumps to detect and remove accumulating water, and
17 installing cameras to ensure the sumps with pumps were functioning, as set forth in
18 Bosma Dairy's Interim Containment Action Plan dated December 16, 2022.

1 102. Bosma Dairy was required to complete installation of interim
2 containment measures by December 31, 2022 for Lagoons 1 and 2 pursuant to
3 EPA's letters dated November 15, 2022 and December 9, 2022.

4 103. Bosma Dairy was required to complete installation of interim
5 containment measures at Lagoon 3 by April 1, 2022 pursuant to EPA's letter dated
6 March 9, 2022.

7 104. Bosma Dairy did not complete interim containment measures for
8 Lagoons 1, 2, and 3 until on or around February 13, 2023.

9 105. Bosma Dairy's failure to timely complete interim containment
10 measures at Lagoons 1, 2, and 3 prolonged nitrate contamination of the Aquifers
11 from Lagoons 1, 2, and 3 and/or underlying soil and delayed abatement of the
12 imminent and substantial endangerment to Residents.

13 106. Bosma Dairy was also required to conduct soil sampling at Lagoons 1,
14 2, and 3 pursuant to Bosma Dairy's April 22, 2022 Second Revised Abandonment
15 Plan.

16 107. Bosma Dairy's Second Revised Abandonment Plan required Bosma
17 Dairy to conduct soil testing at specified locations within Lagoons 1-3, including
18 testing for total Kjeldahl nitrogen ("TKN"), sampling using a backhoe machine
19 ("backhoe testing"), and follow-up sampling using an auger depending on the
20 sampling results from backhoe testing.

1 108. Bosma Dairy failed to timely complete all required soil sampling for
2 Lagoons 1-3. Bosma Dairy's failure to timely complete soil sampling has
3 prevented a determination of the extent of nitrate contamination beneath the
4 lagoons. This determination is necessary to inform work to address nitrate leaching
5 from beneath Lagoons 1-3 into groundwater.

6 109. Bosma's failure to timely complete the required soil sampling has
7 delayed further work to address this nitrate source, which has prolonged nitrate
8 contamination of the Aquifers from Lagoons 1, 2, and 3 and/or underlying soil and
9 delayed abatement of the imminent and substantial endangerment to Residents.

10 Lagoon 18

11 110. Bosma Dairy initially elected to line Lagoon 18.

12 111. Bosma Dairy was required to complete Lagoon 18 soil testing by
13 April 1, 2020 and submit designs for the lagoon liner by June 1, 2020, pursuant to
14 EPA's letter dated February 18, 2020.

15 112. On August 27, 2020, EPA notified Bosma Dairy that its deliverables
16 were past due.

17 113. Bosma Dairy then elected to abandon Lagoon 18. On or around
18 September 17, 2020, Bosma Dairy submitted a lagoon abandonment plan to EPA
19 in lieu of a liner design for Lagoon 18.

1 114. Bosma Dairy was required to complete abandonment of Lagoon 18 by
2 December 31, 2020, pursuant to its Revised Abandonment Plan dated November 3,
3 2020.

4 115. Based on its completion report submitted on or around May 16, 2022,
5 Bosma Dairy claims it completed abandonment of Lagoon 18 on or around May
6 2022.

7 116. Bosma Dairy's failure to timely complete abandonment of Lagoon 18
8 prolonged nitrate contamination of the Aquifers from Lagoon 18 and/or underlying
9 soil and delayed abatement of the imminent and substantial endangerment to
10 Residents.

11 Lagoons 8, 9, and 19

12 117. Bosma Dairy elected to abandon Lagoons 8, 9, and 19.

13 118. Bosma Dairy was required to complete abandonment, including site
14 restoration, at these three lagoons by December 31, 2019, pursuant to EPA's letters
15 dated September 18, 2019 and November 7, 2019.

16 119. Bosma Dairy did not complete abandonment, including site
17 restoration, of Lagoons 8, 9, and 19 until on or around April 1, 2021.

18 120. Bosma Dairy's failure to timely complete abandonment of Lagoons 8,
19 9, and 19 prolonged nitrate contamination of the Aquifers from Lagoons 8, 9, and
20

1 19 and/or underlying soil and delayed abatement of the imminent and substantial
2 endangerment to Residents.

3 *DeRuyter Dairy*

4 Take-Up Pond

5 121. DeRuyter Dairy elected to abandon its Take-Up Pond. DeRuyter was
6 required to complete abandonment of its Take-Up Pond by December 31, 2021,
7 pursuant to EPA's letter dated January 8, 2021.

8 122. DeRuyter Dairy did not complete abandonment of its Take-Up Pond
9 until on or around June 10, 2022.

10 123. DeRuyter Dairy repeatedly failed to address EPA's comments in its
11 revised plans for abandonment of its Take-Up Pond. These failures resulted in
12 DeRuyter submitting five abandonment plans on or around June 1, 2021, August
13 18, 2021, October 8, 2021, November 16, 2021, and November 23, 2021, before it
14 submitted a final plan on or around December 21, 2021 that EPA approved.

15 124. DeRuyter Dairy's failure to timely complete abandonment of its Take-
16 Up Pond prolonged nitrate contamination of the Aquifers from the DeRuyter Take-
17 Up Pond and/or underlying soil and delayed abatement of the imminent and
18 substantial endangerment to Residents.

19 Lagoon 1

20 125. DeRuyter Dairy elected to line Lagoon 1.

1 126. DeRuyter Dairy was required to complete construction of the Lagoon
2 1 liner by December 31, 2021, pursuant to EPA's letter dated January 8, 2021.

3 127. DeRuyter Dairy did not complete lining of Lagoon 1 until on or
4 around June 9, 2022.

5 128. DeRuyter Dairy repeatedly failed to address EPA's comments in its
6 revised plans for lining Lagoon 1. These failures resulted in DeRuyter Dairy
7 submitting four liner construction plans on or around May 26, 2021, September 23,
8 2021, October 8, 2021, and December 21, 2021, before it submitted a final plan on
9 January 11, 2022 that EPA approved.

10 129. DeRuyter Dairy was required to complete soil testing on Lagoon 1 by
11 April 1, 2021, pursuant to EPA's letter dated January 8, 2021.

12 130. DeRuyter Dairy did not complete soil testing on Lagoon 1 until on or
13 around October 30, 2021.

14 131. DeRuyter Dairy's failure to timely complete soil testing at Lagoon 1
15 delayed determination of the extent of nitrate contamination beneath the lagoons,
16 which was necessary to inform work to address nitrate leaching from beneath
17 Lagoon 1 into groundwater.

18 132. DeRuyter Dairy's failure to timely complete the required soil
19 sampling delayed further work to address this nitrate source, which prolonged
20

1 nitrate contamination of the Aquifers from Lagoon 1 and/or underlying soil and
2 delayed abatement of the imminent and substantial endangerment to Residents.

3 **Failure to Report Liner Issues at Cow Palace Lagoon 1**

4 133. Cow Palace Dairy elected to line Lagoon 1.

5 134. On or about November 28, 2019, during installation of the liner for
6 Lagoon 1, a windstorm damaged the lower liner by ripping a 350-foot tear across
7 the middle of the liner.

8 135. Cow Palace Dairy was required to disclose the Lagoon 1 lower-liner
9 tear to EPA in December 2019, when it submitted its Monthly Progress Report.

10 136. Cow Palace Dairy did not disclose the Lagoon 1 lower-liner tear to
11 EPA until on or around March 31, 2020, when it submitted its As-Built Report
12 summarizing completion of Lagoon 1 lining activities.

13 137. Cow Palace Dairy was required to submit to EPA the As-Built Report
14 for completion of construction activities at Lagoon 1 by February 1, 2020, pursuant
15 to EPA's letter dated December 1, 2019.

16 138. Cow Palace Dairy's March 31, 2020 As-Built Report stated that Cow
17 Palace Dairy repaired the torn lower liner between November 29 and December 6,
18 2020 and installed it at Lagoon 1.

19 139. Beginning on or around February 2020, approximately 122,051
20 gallons of liquid manure leaked through the upper liner in Lagoon 1. The leak

1 required Cow Palace Dairy to make repairs to the Lagoon 1 upper liner in May
2 2020 before returning it to service.

3 140. Under the Cow Palace Dairy Facility Operations, Maintenance, and
4 Monitoring Plan (“O&M Plan”), approved by EPA on or around April 19, 2019,
5 Cow Palace Dairy is required to report large leaks—meaning leaks greater than or
6 equal to 2,800 gallons per day—to EPA within seven days of detection.

7 141. The February 2020 leak of approximately 122,051 gallons was a large
8 leak requiring disclosure to EPA within seven days of detection.

9 142. An inspection report, submitted to EPA with Cow Palace Dairy’s
10 2020 Annual Report, indicated that Cow Palace Dairy detected the leak at Lagoon
11 1 no later than March 4, 2020, such that reporting to EPA was required no later
12 than March 11, 2020.

13 143. Cow Palace Dairy did not disclose to EPA the February 2020 large
14 leak from Lagoon 1 until on or around March 1, 2021, when it submitted its 2020
15 Annual Report.

16 144. Cow Palace Dairy also did not disclose to EPA the February 2020
17 large leak from Lagoon 1 in any of its subsequent Monthly Progress Reports.

18 145. Cow Palace Dairy’s failure to timely report to EPA issues installing
19 and operating the liner at Cow Palace Lagoon 1 prevented EPA oversight of repair
20 efforts to ensure that Cow Palace Dairy implemented effective repairs.

1 146. EPA's inability to review Cow Palace Dairy's repair efforts has
2 potentially prolonged nitrate contamination of the Aquifers from Lagoon 1 and
3 delayed abatement of the imminent and substantial endangerment to Residents.

4 **Ongoing Leakage from Cow Palace Lagoon 1**

5 147. From September 2016 until June 2020, monitoring well DC-14,
6 located about 50 yards downgradient of Lagoon 1, consistently tested below
7 10 mg/L.

8 148. In June 2020, nitrate levels at DC-14 exceeded 10 mg/L for the first
9 time since September 2016.

10 149. On or around January 27, 2022, EPA wrote to Cow Palace Dairy
11 regarding its concern that the liner system in Lagoon 1 may be leaking based on
12 spiking nitrate levels at monitoring well DC-14.

13 150. On or around April 20, 2022, EPA directed Cow Palace Dairy to
14 prepare and submit by May 20, 2022 materials to address the potential leakage at
15 Cow Palace Lagoon 1, including an addendum to its Quality Assurance and
16 Quality Control Manual ("QA/QC Manual") for tests to determine whether Lagoon
17 1 was leaking and a schedule to test Lagoon 1 for leakage.

18 151. Cow Palace Dairy never submitted the addendum to the QA/QC
19 Manual and has not tested Lagoon 1 for leakage.

1 152. Since June 2020, monitoring well DC-14 has tested above 10 mg/L in
2 every quarter, with concentrations reaching as high as 57.4 mg/L in June 2022.
3 Based on the spiking nitrate levels at DC-14, Lagoon 1 is likely leaking due to a
4 liner failure such that immediate testing for leakage is appropriate.

5 153. Cow Palace's failure to test Cow Palace Lagoon 1 for leakage has
6 potentially prolonged nitrate contamination of the Aquifers from Cow Palace
7 Lagoon 1 and/or underlying soil and delayed abatement of the imminent and
8 substantial endangerment to Residents.

9 **Failure to Operate Moisture Sensors in Application Fields**

10 154. Under Section III(F)(2) of the Statement of Work, the Dairies must
11 work with a professional irrigation consultant to prepare and submit an Irrigation
12 Water Management Plan that describes a system for irrigation water management.

13 155. To minimize the amount of nitrate leaching past the root zone, the
14 Irrigation Water Management Plan requires the installation of electronic sensors in
15 and below the crop root zone in each application field to provide for automatic
16 shut-off of the irrigation system if moisture is detected below the root zone at the
17 three-foot depth.

18 156. The Dairies submitted their Irrigation Management Plans on August 4,
19 2014, which were conditionally approved by EPA on August 12, 2014. The Dairies
20 submitted their final Irrigation Water Management Plans on August 15, 2014.

1 157. Each Irrigation Water Management Plan requires monitoring of soil
2 moisture in application field soils at various depths during active irrigation.

3 158. Each Irrigation Water Management Plan prohibits irrigation of
4 application fields when moisture sensors are not in use.

5 159. Each Irrigation Water Management Plan requires either two or three
6 soil moisture monitoring locations in each of the Dairies' 34 application fields.
7 Each monitoring location includes three moisture sensors at different soil depths.

8 160. The Dairies installed moisture sensors as provided in the Irrigation
9 Water Management Plans on or around November 2014.

10 161. The Dairies, individually and collectively, failed to consistently
11 operate moisture sensors between 2019 and 2023, on or around the dates set forth
12 in Appendix A.

13 162. The Dairies' failure to consistently operate moisture sensors prevented
14 shut-off of the irrigation systems, which prolonged nitrate contamination of the
15 Aquifers from manure application fields and delayed abatement of the imminent
16 and substantial endangerment to Residents.

17 **Overapplication of Manure to Fields**

18 163. Section III(F)(7) of the Statement of Work requires the Dairies to
19 "endeavor to avoid transporting manure to locations where groundwater is known
20 by [the Dairies] to currently exceed 10 mg/L nitrate." It also prohibits manure

1 application to crop fields in such areas if the post-harvest soil sample exceeds 45
2 ppm nitrate at the 2-foot depth.

3 164. In 2019, DeRuyter Dairy transported and applied 1,116,000 gallons of
4 liquid manure to a field without having collected the requisite soil sampling data.

5 165. Based on the field's location on or near the 1-mile downgradient
6 boundary under the Consent Order, and nitrate data from nearby residential well
7 GG-068, groundwater in this area was known by DeRuyter Dairy to exceed 10
8 mg/L.

9 166. DeRuyter Dairy's excessive application of manure to fields and
10 failure to collect the requisite soil data before application has prolonged nitrate
11 contamination of the Aquifers and delayed abatement of the imminent and
12 substantial endangerment to Residents.

13 **Failure to Report Off-Site Transportation of Manure**

14 167. Section III(F)(7) of the Statement of Work requires the Dairies to
15 maintain records of locations to which manure is transported off-site from Dairies'
16 facilities and to submit those records in the Annual Report submitted to EPA.

17 168. In 2022, all the Dairies collectively reported that more than 16 million
18 gallons of liquid manure and over 110,000 tons of solid manure were transported
19 off-site that year, but failed to maintain and submit to EPA any records of where
20 that manure was transported.

1 a. Bosma Dairy reported approximately 1 million gallons of liquid
2 manure and 33,000 tons of solid manure transported off-site in
3 2022, without providing EPA with records of where the manure
4 was transported.

5 b. DeRuyter Dairy reported 12.78 million gallons of liquid manure
6 and 44,378 tons of solid manure transported off-site in 2022,
7 without providing EPA with records of where the manure was
8 transported.

9 c. Cow Palace Dairy reported 4.23 million gallons of liquid manure
10 and 33,600 tons of solid manure transported off-site in 2022,
11 without providing EPA with records of where the manure was
12 transported.

13 169. In 2023, all the Dairies collectively reported that more than 9 million
14 gallons of liquid manure and almost 80,000 tons of solid manure were transported
15 off-site that year, but failed to maintain and submit to EPA any records of where
16 that manure was transported.

17 a. Bosma Dairy reported approximately 2 million gallons of liquid
18 manure and 32,000 tons of solid manure transported off-site in
19 2023, without providing EPA with records of where the manure
20 was transported.

1 b. DeRuyter Dairy reported 2.4 million gallons of liquid manure and
2 19,339 tons of solid manure transported off-site in 2023, without
3 providing EPA with records of where the manure was transported.

4 c. Cow Palace Dairy reported 4.63 million gallons of liquid manure
5 and 28,483 tons of solid manure transported off-site in 2023,
6 without providing EPA with records of where the manure was
7 transported.

8 170. The Dairies' failure to provide to EPA records of the locations where
9 manure is transported has impeded EPA oversight of the Dairies' off-site transport
10 of manure to ensure that the Dairies are not applying manure to nitrate-saturated
11 fields. EPA's lack of oversight into the Dairies' off-site transport of manure has
12 potentially prolonged nitrate contamination of the Aquifers from manure
13 application fields and delayed abatement of the imminent and substantial
14 endangerment to Residents.

15 **Incomplete Soil Sampling and Reporting**

16 171. Under Section III(F)(1)(c) and (e) of the Statement of Work, the
17 Dairies must take spring "pre-planting" and fall "post-harvest" soil samples from
18 their manure application fields at specified locations and depths.

1 172. The soil samples are to provide information on soil nitrate
2 concentrations in and moving below the crop root zones in the Dairies' application
3 fields.

4 173. The soil samples must be collected in accordance with the Dairies'
5 Dairy Facility Application Field Management Plans, Nutrient Management Plans,
6 and U.S. Natural Resources Conservation Service's soil sampling guidance.

7 174. On September 23, 2021, EPA advised the Dairies that soil sampling of
8 manure application fields must continue until termination of the Consent Order.
9 Nevertheless, the Dairies stopped soil sampling required by the Consent Order at
10 their application fields in or around Spring 2022.

11 175. Instead, the Dairies have conducted soil sampling since Fall 2022
12 under the CAFO General Permit, which lacks sufficient information for EPA to
13 assess whether the Dairies complied with Consent Order requirements. The
14 missing information includes but is not limited to data validation reports and the
15 number and locations of samples collected from each application field.

16 176. The Dairies failed to provide the fall "post-harvest" soil samples for
17 2022 as required under Section III(F)(1)(c) and (e).

18 177. The Dairies failed to provide the spring "pre-planting" and fall "post-
19 harvest" soil samples for 2023 as required under Section III(F)(1)(c) and (e).

1 178. The Dairies' failure to provide current, accurate soil sampling data
2 prevents EPA oversight of nitrate levels in application fields to ensure that the
3 Dairies are not over-applying manure.

4 179. The Dairies' failure to comply with soil sampling and reporting
5 requirements for their manure application fields has potentially prolonged nitrate
6 contamination of the Aquifers from manure application fields and delayed
7 abatement of the imminent and substantial endangerment to Residents.

8 **FIRST CLAIM FOR RELIEF**

9 (Injunctive Relief – All Defendants – to Abate an Imminent and
10 Substantial Endangerment in Drinking Water)

11 180. Paragraphs 1 through 179 are realleged and incorporated by reference.

12 181. The Director of the Enforcement and Compliance Assurance Division
13 of EPA Region 10, upon authority delegated by the Administrator of EPA, is in
14 receipt of information that nitrate—a contaminant—is present in or likely to enter
15 the Aquifers, which may present an imminent and substantial endangerment to the
16 health of Residents in the Affected and Potentially Affected Areas that rely on the
17 Aquifers as an underground source of drinking water.

18 182. The Director of the Enforcement and Compliance Assurance Division
19 of EPA Region 10, by his authorized delegate, has consulted with the State and
20 local authorities in order to confirm the correctness of the information and to

1 ascertain that those authorities have not taken and will not take action necessary to
2 protect the health of the Residents.

3 183. The actions or inactions of Defendants, individually and collectively,
4 have caused or contributed to, and continue to cause or contribute to, the imminent
5 and substantial endangerment.

6 184. Because the imminent and substantial endangerment to Residents in
7 the Affected and Potentially Affected Areas remains ongoing, the Defendants are
8 liable for injunctive relief for corrective measures as provided under Section
9 1431(a) of the SDWA, 42 U.S.C. § 300i(a), including but not limited to immediate
10 well testing and provision of alternate water based on test results to Residents in
11 the Affected and Potentially Affected Areas, until the imminent and substantial
12 endangerment is abated.

13 **SECOND CLAIM FOR RELIEF**

14 (Violation of the Consent Order – All Dairies – Failure to Implement Plans
15 or Documents as Approved by EPA in Accordance with EPA-Approved Schedule)

16 185. Paragraphs 1 through 179 are realleged and incorporated by reference.

17 186. As set forth in Paragraphs 42-46, EPA and the Dairies entered into a
18 Consent Order on March 19, 2013, requiring compliance with its requirements.

19 187. Paragraph 14(b) of the Consent Order required the Dairies to
20 implement each plan or document as approved in writing by EPA, in accordance

1 with the schedule approved by EPA, or to submit revised submissions as specified
2 by EPA.

3 188. As set forth in Paragraphs 79-132, 139-146, 147-153, 154-162, 167-
4 70, and 171-179, the Dairies, individually and collectively, failed to timely comply
5 with Paragraph 14(b) of the Consent Order with respect to lining or abandonment
6 of storage lagoons; reporting large leaks from lagoons; testing for potential leaks at
7 lagoons; operation of moisture sensors; and soil sampling of application fields and
8 reporting the same.

9 189. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), the Dairies
10 are liable for civil penalties of up to \$29,154 per day for each violation of the 2013
11 Consent Order for penalties assessed after December 27, 2023 as codified at
12 40 C.F.R. § 19.4.

13 **THIRD CLAIM FOR RELIEF**

14 (Violation of Consent Order – Bosma Dairy – Failure to Timely Provide
15 Information As to Lagoon 18)

16 190. Paragraphs 1 through 179 are realleged and incorporated by reference.

17 191. Paragraph 21 of the Consent Order requires the Dairies to provide to
18 EPA, upon request, copies of all documents and information within their
19 possession or control or that of their contractors, employees, or agents relating to
20 implementation of the Consent Order.

1 192. This information includes, but is not limited to, sampling, analysis,
2 chain of custody records, manifests, trucking logs, receipts, reports,
3 correspondence, or other documents relating to the Dairies' work performed under
4 the Consent Order.

5 193. On or about November 1, 2021, EPA requested documents including,
6 but not limited to, plans, drawings, and descriptions relating to the presence of
7 water in Bosma Dairy's Lagoon 18 and construction of the sump adjacent to
8 Lagoon 18.

9 194. EPA required that Bosma Dairy provide the requested information by
10 November 29, 2021 and include the certification required by Paragraph 17 of the
11 Consent Order as to the truth, accuracy, and completeness of the documents.

12 195. On November 29, 2021, Bosma Dairy responded to EPA without
13 providing all information requested in EPA's letter.

14 196. Bosma Dairy's November 29, 2021 response to EPA's request for
15 information also did not include the certification required by Paragraph 17 of the
16 Consent Order.

17 197. On March 18, 2022, EPA notified Bosma Dairy that its November 29,
18 2021 response was deficient and EPA renewed its request for the Lagoon 18
19 information.

1 198. Bosma Dairy did not respond to EPA's second request for information
2 related to Lagoon 18.

3 199. As set forth in Paragraphs 195-198, Bosma Dairy failed to comply
4 with Paragraph 21 of the Consent Order.

5 200. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), Bosma
6 Dairy is liable for civil penalties of up to \$29,154 per day for each violation of the
7 2013 Consent Order for penalties assessed after December 27, 2023 as codified at
8 40 C.F.R. § 19.4.

9 **FOURTH CLAIM FOR RELIEF**

10 (Violation of Consent Order – Cow Palace Dairy – Failure to Perform All
11 Actions Necessary to Implement the Statement of Work As to Lagoon 1)

12 201. Paragraphs 1-179 are realleged and incorporated by reference.

13 202. Paragraph 14(a) of the Consent Order required the Dairies to perform,
14 at a minimum, all actions necessary to implement the Statement of Work.

15 203. Paragraph III(K)(1) of the Statement of Work requires the Dairies to
16 submit Monthly Progress Reports, which must describe all problems encountered
17 and any anticipated problems and actual or anticipated delays, and solutions
18 developed and implemented to address any actual or anticipated problems or
19 delays.

1 204. As set forth in Paragraphs 133-153, Cow Palace Dairy violated
2 Paragraph 14(a) of the Consent Order and Paragraph III(K)(1) of the Statement of
3 Work by failing to submit Monthly Progress Reports describing all problems
4 encountered as to Lagoon 1.

5 205. The lower-liner tear for the Cow Palace Lagoon 1 liner that occurred
6 during the November 2019 windstorm was a “problem encountered” as defined
7 under Paragraph III(K)(1) of the Statement of Work that required flagging in a
8 Monthly Progress Report.

9 206. Cow Palace Dairy did not report the November 2019 Lagoon 1 lower-
10 liner tear to EPA until on or around March 31, 2020.

11 207. After the November 2019 liner tear, Cow Palace Dairy submitted four
12 Monthly Progress Reports to EPA pursuant to Paragraph III(K)(1) that did not
13 report the Lagoon 1 liner tear.

14 208. For each Monthly Progress Report that Cow Palace Dairy submitted
15 to EPA without reporting the Lagoon 1 liner tear, Cow Palace Dairy violated
16 Paragraph 14(a) of the Consent Order and Paragraph III(K)(1) of the Statement of
17 Work and is liable for civil penalties for each day of violation.

18 209. The large leak at Lagoon 1 in February 2020 that required repairs to
19 the upper liner was a “problem encountered” as defined under Paragraph III(K)(1)
20 of the Statement of Work.

1 210. Cow Palace Dairy did not report the February 2020 Lagoon 1 upper-
2 liner leak to EPA until on or around March 1, 2021.

3 211. After the February 2020 liner leak, Cow Palace Dairy submitted
4 eleven Monthly Progress Reports to EPA pursuant to Paragraph III(K)(1) that did
5 not report the Lagoon 1 upper-liner leak.

6 212. For each Monthly Progress Report that Cow Palace Dairy submitted
7 to EPA without reporting the Lagoon 1 upper-liner leak, Cow Palace Dairy
8 violated Paragraph 14(a) of the Consent Order and Paragraph III(K)(1) of the
9 Statement of Work and is liable for civil penalties for each day of violation.

10 213. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), Cow
11 Palace Dairy is liable for civil penalties of up to \$29,154 per day for each violation
12 of the 2013 Consent Order for penalties assessed after December 27, 2023 as
13 codified at 40 C.F.R. § 19.4.

14 **FIFTH CLAIM FOR RELIEF**

15 (Violation of the Consent Order – DeRuyter Dairy – Failure to Perform All
16 Actions Necessary to Implement the Statement of Work as to
17 Land Application of Manure)

18 214. Paragraphs 1 through 179 are realleged and incorporated by reference.

19 215. Paragraph 14(a) of the Consent Order required the Dairies to perform,
20 at a minimum, all actions necessary to implement the Statement of Work.

1 216. As set forth in Paragraphs 163-166, DeRuyter Dairy failed to comply
2 with Paragraph 14(a) of the Consent Order with respect to land application of
3 manure.

4 217. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), DeRuyter
5 Dairy is liable for civil penalties of up to \$29,154 per day for each violation of the
6 2013 Consent Order for penalties assessed after December 27, 2023 as codified at
7 40 C.F.R. § 19.4.

8 **SIXTH CLAIM FOR RELIEF**

9 (Violation of the Consent Order – All Dairies – Failure to Perform All
10 Actions Necessary to Implement the Statement of Work As to
11 Off-Site Transportation of Manure)

12 218. Paragraphs 1 through 179 are realleged and incorporated by reference.

13 219. Paragraph 14(a) of the Consent Order required the Dairies to perform,
14 at a minimum, all actions necessary to implement the Statement of Work.

15 220. As set forth in Paragraphs 167-170, the Dairies, individually and
16 collectively, failed to timely comply with Paragraph 14(a) of the Consent Order
17 with respect to reporting off-site transportation of manure.

18 221. Under Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), the Dairies
19 are liable for civil penalties of up to \$29,154 per day for each violation of the 2013
20

1 Consent Order for penalties assessed after December 27, 2023 as codified at
2 40 C.F.R. § 19.4.

3 **PRAYER FOR RELIEF**

4 WHEREFORE, Plaintiff, the United States, prays that the Court:

- 5 1. Order injunctive relief as necessary to abate the imminent and substantial
6 endangerment posed by nitrate contamination of drinking water;
- 7 2. Order the Dairies to comply with all outstanding requirements under the
8 2013 Consent Order;
- 9 3. Enter a money judgment against the Dairies for civil penalties not to
10 exceed \$29,154 for each day for each violation of the 2013 Consent
11 Order, pursuant to Sections 1431(a) and (b) of the SDWA, 42 U.S.C.
12 §§ 300i(a) and (b);
- 13 4. Award court costs to the United States; and
- 14 5. Grant such other relief as this Court deems just and proper.

15 Respectfully submitted this 26th day of June 2024.

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17 Assistant Attorney General
18 Environment & Natural Resources Division
U.S. Department of Justice

19 /s/Andrene E. Dabaghi
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**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: DERUYTER DAIRY**

YEAR: 2019			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
GDS-SUO1-1-1	4/22/2019	10/7/2019	9/6/2019-10/7/2019
GDS-SUO1-1-2	4/22/2019	10/7/2019	9/6/2019-10/7/2019
GDS-SUO1-1-3	4/22/2019	10/7/2019	9/6/2019-10/7/2019
GDS-SUO1-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO1-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO1-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO2-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO3-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO3-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO3-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO3-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO5-1-1	4/22/2019	10/7/2019	6/27/2019-10/7/2019
GDS-SUO5-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO5-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO5-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO6-1-3	4/22/2019	10/7/2019	7/13/2019-10/7/2019
GDS-SUO6-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019

GDS-SUO6-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO6-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO7-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO7-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO7-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO7-2-1	4/22/2019	10/7/2019	4/22/2019-5/27/2019
GDS-SUO7-2-2	4/22/2019	10/7/2019	4/22/2019-5/27/2019
GDS-SUO7-2-3	4/22/2019	10/7/2019	4/22/2019-5/27/2019
GDS-SUO8-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO8-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO8-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO9-2-2	4/22/2019	10/7/2019	6/16/2019-10/7/2019
GDS-SUO9-3-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO9-3-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SUO9-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU10-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU10-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU10-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU10-3-1	4/22/2019	10/7/2019	6/4/2019-10/7/2019
GDS-SU10-3-2	4/22/2019	10/7/2019	6/4/2019-10/7/2019
GDS-SU10-3-3	4/22/2019	10/7/2019	6/4/2019-10/7/2019
GDS-SU11-1-1	4/22/2019	10/7/2019	9/23/2019-10/7/2019
GDS-SU11-1-2	4/22/2019	10/7/2019	9/23/2019-10/7/2019
GDS-SU11-1-3	4/22/2019	10/7/2019	9/23/2019-10/7/2019
GDS-SU11-2-1	4/22/2019	10/7/2019	7/10/2019-10/7/2019
GDS-SU11-2-2	4/22/2019	10/7/2019	7/10/2019-10/7/2019
GDS-SU11-2-3	4/22/2019	10/7/2019	7/10/2019-10/7/2019
GDS-SU13-3-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019

GDS-SU13-3-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU13-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-3-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-3-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
GDS-SU14-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: DERUYTER DAIRY**

YEAR: 2020			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
GDS-SUO1-1-1	4/13/2020	10/12/2020	8/3/2020-8/17/2020; 9/28/2020-10/12/2020
GDS-SUO1-1-2	4/13/2020	10/12/2020	8/3/2020-8/17/2020; 9/28/2020-10/12/2020
GDS-SUO1-1-3	4/13/2020	10/12/2020	8/3/2020-8/17/2020; 9/28/2020-10/12/2020
GDS-SUO1-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO1-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO1-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO2-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO2-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO2-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO3-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO3-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO3-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO4-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO5-1-1	4/13/2020	10/12/2020	6/8/2020-8/3/2020

GDS-SUO5-1-2	4/13/2020	10/12/2020	9/14/2020-9/28/2020
GDS-SUO5-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO5-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO5-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO5-3-1	4/13/2020	10/12/2020	4/18/2020-10/12/2020
GDS-SUO5-3-2	4/13/2020	10/12/2020	6/8/2020-6/22/2020; 8/17/2020-8/30/2020
GDS-SUO5-3-3	4/13/2020	10/12/2020	6/8/2020-6/22/2020; 8/17/2020-8/30/2020
GDS-SUO6-2-1	4/13/2020	10/12/2020	4/12/2020-8/5/2020
GDS-SUO6-2-2	4/13/2020	10/12/2020	4/12/2020-8/5/2020
GDS-SUO6-2-3	4/13/2020	10/12/2020	4/12/2020-8/5/2020
GDS-SUO7-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO7-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO7-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO7-2-1	4/13/2020	10/12/2020	7/6/2020-10/12/2020
GDS-SUO8-1-1	4/13/2020	10/12/2020	4/12/2020-8/18/2020
GDS-SUO8-1-2	4/13/2020	10/12/2020	4/12/2020-8/18/2020
GDS-SUO8-1-3	4/13/2020	10/12/2020	4/12/2020-8/18/2020
GDS-SUO9-1-2	4/13/2020	10/12/2020	6/20/2020-10/12/2020
GDS-SUO9-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO9-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO9-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SUO9-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020

GDS-SU10-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU10-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU11-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU11-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU11-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU12-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU12-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU12-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU12-2-3	4/13/2020	10/12/2020	8/3/2020-10/12/2020
GDS-SU13-1-2	4/13/2020	10/12/2020	7/1/2020-10/10/2020
GDS-SU13-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU13-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU13-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU14-1-1	4/13/2020	10/12/2020	4/13/2020-8/21/2020
GDS-SU14-1-2	4/13/2020	10/12/2020	4/13/2020-8/21/2020
GDS-SU14-1-3	4/13/2020	10/12/2020	4/13/2020-8/21/2020
GDS-SU14-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU14-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
GDS-SU14-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: DERUYTER DAIRY**

YEAR: 2021			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
GDS-SUO2-1-1	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SUO2-1-2	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SUO2-1-3	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SUO2-2-1	4/12/2021	10/11/2021	9/2/2021-10/11/2021
GDS-SUO2-2-2	4/12/2021	10/11/2021	9/2/2021-10/11/2021
GDS-SUO2-2-3	4/12/2021	10/11/2021	9/2/2021-10/11/2021
GDS-SUO5-1-1	4/12/2021	10/11/2021	5/16/2021-6/10/2021; 7/5/2021-7/19/2021; 8/20/2021-10/11/2021
GDS-SUO5-3-3	4/12/2021	10/11/2021	6/21/2021-8/10/2021; 8/16/2021-10/11/2021
GDS-SUO6-1-3	4/12/2021	10/11/2021	9/1/2021-10/11/2021
GDS-SUO6-2-1	4/12/2021	10/11/2021	4/4/2021-4/22/2021
GDS-SUO6-2-2	4/12/2021	10/11/2021	4/4/2021-4/22/2021
GDS-SUO6-2-3	4/12/2021	10/11/2021	4/4/2021-4/22/2021
GDS-SUO7-1-1	4/12/2021	10/11/2021	5/25/2021-6/25/2021
GDS-SUO7-1-2	4/12/2021	10/11/2021	5/25/2021-6/25/2021
GDS-SUO7-1-3	4/12/2021	10/11/2021	5/25/2021-6/25/2021
GDS-SUO7-3-3	4/12/2021	10/11/2021	8/24/2021-10/11/2021
GDS-SUO8-1-3	4/12/2021	10/11/2021	4/20/2021-8/14/2021
GDS-SUO9-3-1	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SUO9-3-2	4/12/2021	10/11/2021	4/12/2021-10/11/2021

GDS-SU09-3-3	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SU10-1-1	4/12/2021	10/11/2021	9/25/2021-10/11/2021
GDS-SU10-1-2	4/12/2021	10/11/2021	9/25/2021-10/11/2021
GDS-SU10-1-3	4/12/2021	10/11/2021	9/25/2021-10/11/2021
GDS-SU10-2-2	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SU10-3-1	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SU10-3-2	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SU10-3-3	4/12/2021	10/11/2021	4/12/2021-10/11/2021
GDS-SU11-1-1	4/12/2021	10/11/2021	5/30/2021-7/22/2021; 9/10/2021-10/5/2021
GDS-SU11-1-2	4/12/2021	10/11/2021	5/30/2021-7/22/2021; 9/10/2021-10/5/2021
GDS-SU11-1-3	4/12/2021	10/11/2021	5/30/2021-7/22/2021; 9/10/2021-10/5/2021
GDS-SU12-2-1	4/12/2021	10/11/2021	7/2/2021-8/20/2021
GDS-SU12-2-2	4/12/2021	10/11/2021	7/2/2021-8/20/2021
GDS-SU12-2-3	4/12/2021	10/11/2021	7/2/2021-8/20/2021
GDS-SU14-2-1	4/12/2021	10/11/2021	7/25/2021-10/11/2021
GDS-SU14-2-2	4/12/2021	10/11/2021	7/25/2021-10/11/2021
GDS-SU14-2-3	4/12/2021	10/11/2021	7/25/2021-10/11/2021

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: DERUYTER DAIRY**

YEAR: 2022			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
GDS-SUO1-2-1	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO1-2-2	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO1-2-3	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO2-1-1	4/11/2022	10/24/2022	4/11/2022-4/30/2022
GDS-SUO2-1-2	4/11/2022	10/24/2022	4/11/2022-4/30/2022
GDS-SUO2-1-3	4/11/2022	10/24/2022	4/11/2022-4/30/2022
GDS-SUO2-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO2-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO2-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO3-2-1	4/11/2022	10/24/2022	8/29/2022-10/24/2022
GDS-SUO3-2-2	4/11/2022	10/24/2022	8/29/2022-10/24/2022
GDS-SUO3-2-3	4/11/2022	10/24/2022	8/29/2022-10/24/2022
GDS-SUO4-1-3	4/11/2022	10/24/2022	5/20/2022-10/24/2022
GDS-SUO4-2-1	4/11/2022	10/24/2022	6/30/2022-10/24/2022
GDS-SUO4-2-2	4/11/2022	10/24/2022	7/18/2022-10/24/2022
GDS-SUO4-2-3	4/11/2022	10/24/2022	7/18/2022-10/24/2022
GDS-SUO5-1-1	4/11/2022	10/24/2022	4/11/2022-7/4/2022; 8/1/2022-10/24/2022
GDS-SUO5-1-2	4/11/2022	10/24/2022	4/11/2022-4/28/2022
GDS-SUO5-1-3	4/11/2022	10/24/2022	4/11/2022-4/28/2022
GDS-SUO5-2-1	4/11/2022	10/24/2022	4/11/2022-4/25/2022; 5/7/2022-5/9/2022

GDS-SUO5-3-2	4/11/2022	10/24/2022	5/23/2022-5/24/2022
GDS-SUO5-3-3	4/11/2022	10/24/2022	4/11/2022-5/24/2022
GDS-SUO6-1-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO6-1-2	4/11/2022	10/24/2022	6/6/2022-10/24/2022
GDS-SUO6-1-3	4/11/2022	10/24/2022	8/29/2022-10/24/2022
GDS-SUO7-1-1	4/11/2022	10/24/2022	4/11/2022-4/15/2022; 6/25/2022-10/24/2022
GDS-SUO7-1-2	4/11/2022	10/24/2022	4/11/2022-4/15/2022; 6/25/2022-10/24/2022
GDS-SUO7-1-3	4/11/2022	10/24/2022	4/11/2022-5/1/2022; 6/25/2022-10/24/2022
GDS-SUO7-2-1	4/11/2022	10/24/2022	7/18/2022-10/24/2022
GDS-SUO7-2-2	4/11/2022	10/24/2022	7/18/2022-10/24/2022
GDS-SUO7-2-3	4/11/2022	10/24/2022	7/15/2022-10/24/2022
GDS-SUO7-3-1	4/11/2022	10/24/2022	4/11/2022-4/18/2022; 9/12/2022-10/24/2022
GDS-SUO7-3-2	4/11/2022	10/24/2022	4/11/2022-4/18/2022; 9/12/2022-10/24/2022
GDS-SUO7-3-3	4/11/2022	10/24/2022	4/11/2022-4/18/2022; 9/12/2022-10/24/2022
GDS-SUO8-1-1	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO8-1-2	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO8-1-3	4/11/2022	10/24/2022	7/4/2022-10/24/2022
GDS-SUO9-1-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO9-3-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO9-3-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SUO9-3-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU10-1-2	4/11/2022	10/24/2022	7/5/2022-8/22/2022

GDS-SU10-2-1	4/11/2022	10/24/2022	4/11/2022-4/20/2022; 7/11/2022-10/24/2022
GDS-SU10-2-2	4/11/2022	10/24/2022	4/11/2022-4/20/2022; 7/11/2022-10/24/2022
GDS-SU10-2-3	4/11/2022	10/24/2022	4/11/2022-4/20/2022; 7/11/2022-10/24/2022
GDS-SU10-3-1	4/11/2022	10/24/2022	4/11/2022-4/25/2022; 6/10/2022-7/10/2022; 8/29/2022-10/24/2022
GDS-SU10-3-2	4/11/2022	10/24/2022	4/11/2022-4/25/2022; 6/10/2022-7/10/2022; 7/25/2022-10/24/2022
GDS-SU10-3-3	4/11/2022	10/24/2022	4/11/2022-4/25/2022; 6/10/2022-7/10/2022; 8/29/2022-10/24/2022
GDS-SU11-1-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU11-1-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU11-1-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU12-2-1	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU12-2-2	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU12-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU13-2-1	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU13-2-2	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU13-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU14-1-1	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU14-1-2	4/11/2022	10/24/2022	4/11/2022-4/18/2022
GDS-SU14-1-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU14-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022

GDS-SU14-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU14-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
GDS-SU14-3-1	4/11/2022	10/24/2022	9/26/2022-10/24/2022
GDS-SU14-3-2	4/11/2022	10/24/2022	9/26/2022-10/24/2022
GDS-SU14-3-3	4/11/2022	10/24/2022	9/26/2022-10/24/2022

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: DERUYTER DAIRY**

YEAR: 2023			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
GDS-SUO2-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO2-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO2-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO4-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO4-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO4-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO5-2-1	4/8/2023	10/20/2023	4/8/2023-4/30/2023
GDS-SUO5-2-2	4/8/2023	10/20/2023	4/8/2023-4/20/2023
GDS-SUO5-2-3	4/8/2023	10/20/2023	4/8/2023-4/21/2023
GDS-SUO5-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO5-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO5-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-1-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-1-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-1-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO6-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO7-1-1	4/8/2023	10/20/2023	6/24/2023-10/20/2023
GDS-SUO7-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO7-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO7-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023

GDS-SUO8-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO8-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO8-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO9-1-1	4/8/2023	10/20/2023	4/8/2023-4/23/2023
GDS-SUO9-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO9-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SUO9-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU10-1-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU10-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU10-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU10-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU11-1-1	4/8/2023	10/20/2023	8/6/2023-10/20/2023
GDS-SU11-1-2	4/8/2023	10/20/2023	8/6/2023-10/20/2023
GDS-SU11-1-3	4/8/2023	10/20/2023	8/6/2023-10/20/2023
GDS-SU11-2-1	4/8/2023	10/20/2023	9/3/2023-10/20/2023
GDS-SU11-2-2	4/8/2023	10/20/2023	9/3/2023-10/20/2023
GDS-SU11-2-3	4/8/2023	10/20/2023	9/3/2023-10/20/2023
GDS-SU13-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU13-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU13-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU14-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU14-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
GDS-SU14-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: BOSMA (LIBERTY) DAIRY**

YEAR: 2019			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
LD-SUO2-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-3-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-3-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO2-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO3-1-1	4/22/2019	10/7/2019	5/28/2019-10/7/2019
LD-SUO3-1-3	4/22/2019	10/7/2019	7/26/2019-10/7/2019
LD-SUO3-2-1	4/22/2019	10/7/2019	7/20/2019-10/7/2019
LD-SUO3-2-2	4/22/2019	10/7/2019	7/20/2019-10/7/2019
LD-SUO3-2-3	4/22/2019	10/7/2019	7/20/2019-10/7/2019
LD-SUO4-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO4-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO4-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO5-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO6-1-1	4/22/2019	10/7/2019	6/14/2019-8/17/2019
LD-SUO6-1-2	4/22/2019	10/7/2019	6/14/2019-8/17/2019
LD-SUO6-1-3	4/22/2019	10/7/2019	6/14/2019-8/17/2019
LD-SUO6-2-1	4/22/2019	10/7/2019	9/23/2019-10/7/2019
LD-SUO6-2-2	4/22/2019	10/7/2019	8/20/2019-10/7/2019

LD-SUO6-2-3	4/22/2019	10/7/2019	9/23/2019-10/7/2019
LD-SUO7-1-3	4/22/2019	10/7/2019	5/21/2019-10/7/2019
LD-SUO7-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO7-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO7-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO8N-1-1	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 6/7/2019-10/7/2019
LD-SUO8N-1-2	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 6/7/2019-10/7/2019
LD-SUO8N-1-3	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 6/7/2019-10/7/2019
LD-SUO8N-2-1	4/22/2019	10/7/2019	4/22/2019-5/2/2019
LD-SUO8N-2-2	4/22/2019	10/7/2019	4/22/2019-5/2/2019
LD-SUO8N-2-3	4/22/2019	10/7/2019	4/22/2019-5/2/2019
LD-SUO8N-3-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO8N-3-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO8N-3-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO8S-1-1	4/22/2019	10/7/2019	9/29/2019-10/7/2019
LD-SUO8S-2-1	4/22/2019	10/7/2019	9/15/2019-10/7/2019
LD-SUO9-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO9-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SUO9-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU10-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU10-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU10-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU14-1-1	4/22/2019	10/7/2019	9/9/2019-10/7/2019
LD-SU14-1-2	4/22/2019	10/7/2019	9/9/2019-10/7/2019
LD-SU14-1-3	4/22/2019	10/7/2019	9/9/2019-10/7/2019

LD-SU14-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU14-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU14-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU16-1-1	4/22/2019	10/7/2019	10/6/2019-10/7/2019
LD-SU16-1-2	4/22/2019	10/7/2019	10/6/2019-10/7/2019
LD-SU16-1-3	4/22/2019	10/7/2019	10/6/2019-10/7/2019
LD-SU16-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU16-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU16-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
LD-SU17-2-1	4/22/2019	10/7/2019	7/3/2019-10/7/2019

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: BOSMA (LIBERTY) DAIRY**

YEAR: 2020			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
LD-SUO2-1-1	4/13/2020	10/12/2020	5/25/2020-10/12/2020
LD-SUO2-1-2	4/13/2020	10/12/2020	5/25/2020-10/12/2020
LD-SUO2-1-3	4/13/2020	10/12/2020	5/25/2020-10/12/2020
LD-SUO2-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO2-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO2-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO2-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO2-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO2-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO3-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO3-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO3-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO4-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO4-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO4-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO4-2-1	4/13/2020	10/12/2020	5/25/2020-8/10/2020; 9/28/2020-10/12/2020
LD-SUO4-2-2	4/13/2020	10/12/2020	5/25/2020-8/10/2020; 9/28/2020-10/12/2020
LD-SUO4-2-3	4/13/2020	10/12/2020	5/25/2020-8/10/2020; 9/28/2020-10/12/2020
LD-SUO5-3-3	4/13/2020	10/12/2020	7/20/2020-10/12/2020
LD-SUO6-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020

LD-SUO6-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO6-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO7-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO7-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO7-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8N-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO8S-1-1	4/13/2020	10/12/2020	6/8/2020-6/15/2020; 8/5/2020-9/26/2020
LD-SUO8S-1-2	4/13/2020	10/12/2020	6/8/2020-6/15/2020; 8/5/2020-9/26/2020
LD-SUO8S-1-3	4/13/2020	10/12/2020	6/8/2020-6/15/2020; 8/5/2020-9/26/2020
LD-SUO8S-2-1	4/13/2020	10/12/2020	4/13/2020-9/25/2020
LD-SUO8S-2-2	4/13/2020	10/12/2020	4/13/2020-9/25/2020
LD-SUO8S-2-3	4/13/2020	10/12/2020	4/13/2020-9/25/2020
LD-SUO9-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO9-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SUO9-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020

LD-SU10-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU10-3-1	4/13/2020	10/12/2020	9/7/2020-10/8/2020
LD-SU10-3-2	4/13/2020	10/12/2020	9/7/2020-10/8/2020
LD-SU10-3-3	4/13/2020	10/12/2020	5/11/2020-10/8/2020
LD-SU14-1-1	4/13/2020	10/12/2020	4/13/2020-5/9/2020
LD-SU14-1-2	4/13/2020	10/12/2020	4/13/2020-5/9/2020
LD-SU14-1-3	4/13/2020	10/12/2020	4/13/2020-5/9/2020
LD-SU14-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU14-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU14-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU16-1-1	4/13/2020	10/12/2020	7/10/2020-7/18/2020; 9/7/2020-9/9/2020
LD-SU16-1-2	4/13/2020	10/12/2020	7/10/2020-7/18/2020; 9/7/2020-9/9/2020
LD-SU16-1-3	4/13/2020	10/12/2020	7/10/2020-7/18/2020; 9/7/2020-9/9/2020
LD-SU16-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU16-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU16-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU17-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU17-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
LD-SU17-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: BOSMA (LIBERTY) DAIRY**

YEAR: 2021			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
LD-SUO2-1-1	4/12/2021	10/11/2021	9/21/2021-10/11/2021
LD-SUO2-1-2	4/12/2021	10/11/2021	9/21/2021-10/11/2021
LD-SUO2-1-3	4/12/2021	10/11/2021	9/21/2021-10/11/2021
LD-SUO2-2-1	4/12/2021	10/11/2021	4/12/2021-5/3/2021
LD-SUO2-2-2	4/12/2021	10/11/2021	4/12/2021-5/3/2021
LD-SUO2-2-3	4/12/2021	10/11/2021	4/12/2021-5/3/2021
LD-SUO2-3-1	4/12/2021	10/11/2021	4/12/2021-4/20/2021
LD-SUO2-3-2	4/12/2021	10/11/2021	4/12/2021-4/20/2021
LD-SUO2-3-3	4/12/2021	10/11/2021	4/12/2021-4/20/2021
LD-SUO3-2-1	4/12/2021	10/11/2021	4/12/2021-10/11/2021
LD-SUO3-2-2	4/12/2021	10/11/2021	6/21/2021-7/5/2021; 8/16/2021-10/11/2021
LD-SUO3-2-3	4/12/2021	10/11/2021	6/21/2021-7/5/2021; 8/16/2021-10/11/2021
LD-SUO4-2-1	4/12/2021	10/11/2021	4/12/2021-10/11/2021
LD-SUO4-2-2	4/12/2021	10/11/2021	4/12/2021-10/11/2021
LD-SUO4-2-3	4/12/2021	10/11/2021	4/12/2021-10/11/2021
LD-SUO5-2-3	4/12/2021	10/11/2021	6/20/2021-10/11/2021
LD-SUO5-3-1	4/12/2021	10/11/2021	7/19/2021-8/14/2021
LD-SUO5-3-2	4/12/2021	10/11/2021	7/19/2021-8/14/2021
LD-SUO5-3-3	4/12/2021	10/11/2021	4/12/2021-8/14/2021
LD-SUO6-1-3	4/12/2021	10/11/2021	8/16/2021-10/11/2021
LD-SUO6-2-1	4/12/2021	10/11/2021	8/19/2021-10/11/2021

LD-SUO6-2-2	4/12/2021	10/11/2021	8/19/2021-10/11/2021
LD-SUO6-2-3	4/12/2021	10/11/2021	8/19/2021-10/11/2021
LD-SUO7-2-1	4/12/2021	10/11/2021	7/13/2021-10/11/2021
LD-SUO9-2-1	4/12/2021	10/11/2021	6/7/2021-7/1/2021; 8/14/2021-10/11/2021
LD-SUO9-2-2	4/12/2021	10/11/2021	6/7/2021-7/1/2021; 8/14/2021-10/11/2021
LD-SUO9-2-3	4/12/2021	10/11/2021	6/7/2021-7/1/2021; 8/14/2021-10/11/2021
LD-SU10-3-3	4/12/2021	10/11/2021	4/12/2021-10/11/2021
LD-SU14-2-1	4/12/2021	10/11/2021	4/20/2021-7/5/2021
LD-SU14-2-2	4/12/2021	10/11/2021	4/20/2021-7/5/2021
LD-SU14-2-3	4/12/2021	10/11/2021	4/20/2021-7/5/2021
LD-SU16-1-1	4/12/2021	10/11/2021	9/19/2021-10/11/2021
LD-SU16-1-2	4/12/2021	10/11/2021	9/19/2021-10/11/2021
LD-SU16-1-3	4/12/2021	10/11/2021	9/19/2021-10/11/2021
LD-SU17-2-1	4/12/2021	10/11/2021	9/27/2021-10/11/2021
LD-SU17-2-2	4/12/2021	10/11/2021	9/27/2021-10/11/2021
LD-SU17-2-3	4/12/2021	10/11/2021	9/27/2021-10/11/2021

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: BOSMA (LIBERTY) DAIRY**

YEAR: 2022			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
LD-SUO2-1-1	4/11/2022	10/24/2022	4/11/2022-4/26/2022; 6/17/2022-7/8/2022; 8/28/2022-10/24/2022
LD-SUO2-1-2	4/11/2022	10/24/2022	4/11/2022-4/26/2022; 6/17/2022-7/8/2022; 8/28/2022-10/24/2022
LD-SUO2-1-3	4/11/2022	10/24/2022	4/11/2022-4/26/2022; 6/17/2022-7/8/2022; 8/28/2022-10/24/2022
LD-SUO3-1-1	4/11/2022	10/24/2022	5/21/2022-10/24/2022
LD-SUO3-1-2	4/11/2022	10/24/2022	5/21/2022-10/24/2022
LD-SUO3-1-3	4/11/2022	10/24/2022	5/21/2022-10/24/2022
LD-SUO3-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO4-1-1	4/14/2022	10/24/2022	4/14/2022-10/24/2022
LD-SUO4-1-2	4/14/2022	10/24/2022	4/14/2022-10/24/2022
LD-SUO4-1-3	4/14/2022	10/24/2022	4/14/2022-10/24/2022
LD-SUO4-2-1	4/14/2022	10/24/2022	5/12/2022-10/24/2022
LD-SUO4-2-2	4/14/2022	10/24/2022	5/12/2022-10/24/2022
LD-SUO4-2-3	4/14/2022	10/24/2022	5/12/2022-10/24/2022
LD-SUO5-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO5-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO5-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022

LD-SUO6-1-1	4/11/2022	10/24/2022	8/15/2022-10/1/2022; 10/10/2022-10/24/2022
LD-SUO6-1-2	4/11/2022	10/24/2022	8/15/2022-10/1/2022; 10/10/2022-10/24/2022
LD-SUO6-1-3	4/11/2022	10/24/2022	8/15/2022-10/1/2022; 10/10/2022-10/24/2022
LD-SUO6-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO7-1-3	4/11/2022	10/24/2022	4/11/2022-6/20/2022
LD-SUO7-2-1	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SUO7-2-2	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SUO7-2-3	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SUO8N-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO8N-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO8N-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO8N-3-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO8N-3-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SUO8N-3-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
LD-SU10-3-1	4/11/2022	10/24/2022	9/12/2022-10/24/2022
LD-SU10-3-2	4/11/2022	10/24/2022	9/12/2022-10/24/2022
LD-SU10-3-3	4/11/2022	10/24/2022	4/11/2022-5/23/2022; 8/15/2022-10/24/2022
LD-SU16-1-1	4/11/2022	10/24/2022	5/23/2022-10/24/2022
LD-SU16-2-1	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SU16-2-2	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SU16-2-3	4/11/2022	10/24/2022	6/20/2022-10/24/2022
LD-SU17-2-1	4/11/2022	10/24/2022	4/11/2022-5/23/2022
LD-SU17-2-2	4/11/2022	10/24/2022	4/11/2022-5/23/2022

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: BOSMA (LIBERTY) DAIRY**

YEAR: 2023			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
LD-SUO2-1-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO2-1-2	4/8/2023	10/20/2023	4/8/2023-5/11/2023; 8/21/2023-10/20/2023
LD-SUO2-1-3	4/8/2023	10/20/2023	4/8/2023-5/11/2023; 8/21/2023-10/20/2023
LD-SUO2-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO2-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO2-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO3-1-1	4/8/2023	10/20/2023	5/9/2023-10/20/2023
LD-SUO3-1-2	4/8/2023	10/20/2023	5/9/2023-10/20/2023
LD-SUO3-1-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO3-2-1	4/8/2023	10/20/2023	4/8/2023-6/11/2023
LD-SUO3-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO3-2-3	4/8/2023	10/20/2023	4/8/2023-6/11/2023
LD-SUO4-1-1	4/8/2023	10/20/2023	5/10/2023-10/20/2023
LD-SUO4-1-2	4/8/2023	10/20/2023	5/10/2023-10/20/2023
LD-SUO4-1-3	4/8/2023	10/20/2023	5/10/2023-10/20/2023
LD-SUO4-2-1	4/8/2023	10/20/2023	5/9/2023-10/20/2023
LD-SUO4-2-2	4/8/2023	10/20/2023	5/9/2023-10/20/2023
LD-SUO4-2-3	4/8/2023	10/20/2023	4/8/2023-4/19/2023; 5/9/2023-10/20/2023
LD-SUO5-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO5-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023

LD-SUO5-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-1-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-1-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-1-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SUO8N-3-1	4/8/2023	10/20/2023	4/28/2023-5/6/2023
LD-SUO8N-3-2	4/8/2023	10/20/2023	4/8/2023-5/6/2023
LD-SUO8N-3-3	4/8/2023	10/20/2023	4/28/2023-5/6/2023
LD-SU10-2-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU10-2-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU10-2-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU10-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU10-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU10-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
LD-SU16-1-1	4/8/2023	10/20/2023	4/8/2023-4/25/2023; 6/7/2023-10/20/2023
LD-SU16-1-2	4/8/2023	10/20/2023	6/7/2023-10/20/2023
LD-SU16-1-3	4/8/2023	4/8/2023	6/7/2023-10/20/2023
LD-SU16-2-3	4/8/2023	10/20/2023	4/8/2023-4/16/2023

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: COW PALACE**

YEAR: 2019			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
CP-SUO1-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO2-1-2	4/22/2019	10/7/2019	9/27/2019-10/7/2019
CP-SUO2-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-1-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-1-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-1-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO3-3-1	4/22/2019	10/7/2019	10/3/2019-10/7/2019
CP-SUO3-3-2	4/22/2019	10/7/2019	10/3/2019-10/7/2019
CP-SUO3-3-3	4/22/2019	10/7/2019	10/3/2019-10/7/2019
CP-SUO4A-1-1	4/22/2019	10/7/2019	7/24/2019-10/7/2019
CP-SUO4A-1-2	4/22/2019	10/7/2019	7/24/2019-10/7/2019
CP-SUO4A-1-3	4/22/2019	10/7/2019	7/24/2019-10/7/2019
CP-SUO4A-2-1	4/22/2019	10/7/2019	6/18/2019-7/18/2019
CP-SUO4B-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO4B-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO4B-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO5-1-1	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 7/17/2019-10/7/2019
CP-SUO5-1-2	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 7/17/2019-10/7/2019

CP-SUO5-1-3	4/22/2019	10/7/2019	4/22/2019-5/28/2019; 7/17/2019-10/7/2019
CP-SUO6-2-1	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO6-2-2	4/22/2019	10/7/2019	4/22/2019-10/7/2019
CP-SUO6-2-3	4/22/2019	10/7/2019	4/22/2019-10/7/2019

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: COW PALACE**

YEAR: 2020			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
CP-SUO1-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO1-2-1	4/13/2020	10/12/2020	5/11/2020-5/20/2020
CP-SUO1-2-2	4/13/2020	10/12/2020	5/11/2020-5/20/2020
CP-SUO1-2-3	4/13/2020	10/12/2020	5/11/2020-5/20/2020
CP-SUO2-1-1	4/13/2020	10/12/2020	6/8/2020-10/12/2020
CP-SUO2-1-2	4/13/2020	10/12/2020	6/8/2020-10/12/2020
CP-SUO2-1-3	4/13/2020	10/12/2020	6/8/2020-10/12/2020
CP-SUO3-1-1	4/13/2020	10/12/2020	6/8/2020-7/20/2020; 9/20/2020-10/12/2020
CP-SUO3-1-2	4/13/2020	10/12/2020	6/8/2020-7/20/2020; 9/20/2020-10/12/2020
CP-SUO3-1-3	4/13/2020	10/12/2020	6/8/2020-7/20/2020; 9/20/2020-10/12/2020
CP-SUO3-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO3-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO3-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO3-3-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO3-3-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO3-3-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4A-1-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4A-1-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4A-1-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4A-2-1	4/13/2020	10/12/2020	5/31/2020-8/17/2020

CP-SUO4A-2-2	4/13/2020	10/12/2020	5/31/2020-8/3/2020
CP-SUO4A-2-3	4/13/2020	10/12/2020	5/31/2020-8/3/2020
CP-SUO4B-1-3	4/13/2020	10/12/2020	9/6/2020-10/12/2020
CP-SUO4B-2-1	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4B-2-2	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO4B-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020
CP-SUO5-1-1	4/13/2020	10/12/2020	5/20/2020-7/8/2020
CP-SUO5-1-2	4/13/2020	10/12/2020	5/20/2020-7/8/2020
CP-SUO5-1-3	4/13/2020	10/12/2020	4/13/2020-9/14/2020
CP-SUO5-2-1	4/13/2020	10/12/2020	8/3/2020-8/25/2020
CP-SUO5-2-2	4/13/2020	10/12/2020	8/3/2020-8/25/2020
CP-SUO5-2-3	4/13/2020	10/12/2020	8/3/2020-8/25/2020
CP-SUO6-2-1	4/13/2020	10/12/2020	6/8/2020-7/20/2020; 9/1/2020-10/12/2020
CP-SUO6-2-2	4/13/2020	10/12/2020	4/13/2020-7/20/2020; 9/1/2020-10/12/2020
CP-SUO6-2-3	4/13/2020	10/12/2020	4/13/2020-10/12/2020

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: COW PALACE**

YEAR: 2021			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
CP-SUO1-1-1	4/12/2021	10/11/2021	5/11/2021-10/11/2021
CP-SUO1-1-2	4/12/2021	10/11/2021	5/11/2021-10/11/2021
CP-SUO1-1-3	4/12/2021	10/11/2021	5/11/2021-10/11/2021
CP-SUO1-3-1	4/12/2021	10/11/2021	5/11/2021-6/25/2021
CP-SUO1-3-2	4/12/2021	10/11/2021	5/11/2021-6/25/2021
CP-SUO1-3-3	4/12/2021	10/11/2021	5/11/2021-6/25/2021
CP-SUO2-1-3	4/12/2021	10/11/2021	5/8/2021-10/11/2021
CP-SUO2-2-1	4/12/2021	10/11/2021	7/4/2021-7/8/2021; 9/7/2021-10/11/2021
CP-SUO2-2-2	4/12/2021	10/11/2021	7/4/2021-7/8/2021; 9/7/2021-10/11/2021
CP-SUO2-2-3	4/12/2021	10/11/2021	7/4/2021-7/8/2021; 9/7/2021-10/11/2021
CP-SUO3-2-1	4/12/2021	10/11/2021	5/30/2021-6/24/2021; 8/15/2021-10/15/2021
CP-SUO3-2-2	4/12/2021	10/11/2021	5/30/2021-6/24/2021; 8/15/2021-10/15/2021
CP-SUO3-2-3	4/12/2021	10/11/2021	5/30/2021-6/24/2021; 8/15/2021-10/15/2021
CP-SUO4A-2-1	4/12/2021	10/11/2021	6/6/2021-7/22/2021
CP-SUO4A-2-2	4/12/2021	10/11/2021	6/6/2021-7/22/2021
CP-SUO4A-2-3	4/12/2021	10/11/2021	6/6/2021-7/22/2021
CP-SUO4B-1-1	4/12/2021	10/11/2021	9/27/2021-10/11/2021

CP-SUO4B-1-2	4/12/2021	10/11/2021	9/27/2021-10/11/2021
CP-SUO4B-1-3	4/12/2021	10/11/2021	9/27/2021-10/11/2021
CP-SUO4B-2-1	4/12/2021	10/11/2021	9/7/2021-10/11/2021
CP-SUO4B-2-2	4/12/2021	10/11/2021	9/7/2021-10/11/2021
CP-SUO4B-2-3	4/12/2021	10/11/2021	9/7/2021-10/11/2021
CP-SUO6-1-1	4/12/2021	10/11/2021	9/25/2021-10/11/2021
CP-SUO6-1-2	4/12/2021	10/11/2021	9/25/2021-10/11/2021
CP-SUO6-1-3	4/12/2021	10/11/2021	9/25/2021-10/11/2021
CP-SUO6-2-1	4/12/2021	10/11/2021	4/12/2021-4/14/2021
CP-SUO6-2-2	4/12/2021	10/11/2021	4/12/2021-4/14/2021
CP-SUO6-2-3	4/12/2021	10/11/2021	4/12/2021-4/14/2021

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: COW PALACE**

YEAR: 2022			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
CP-SUO1-1-1	4/11/2022	10/24/2022	4/11/2022-5/24/2022; 7/14/2022-10/24/2022
CP-SUO1-1-2	4/11/2022	10/24/2022	4/11/2022-5/24/2022; 7/14/2022-10/24/2022
CP-SUO1-1-3	4/11/2022	10/24/2022	4/11/2022-5/24/2022; 6/27/2022-10/24/2022
CP-SUO1-2-1	4/11/2022	10/24/2022	5/14/2022-10/24/2022
CP-SUO1-2-2	4/11/2022	10/24/2022	7/16/2022-10/24/2022
CP-SUO1-3-1	4/11/2022	10/24/2022	5/25/2022-10/24/2022
CP-SUO1-3-2	4/11/2022	10/24/2022	5/25/2022-10/24/2022
CP-SUO1-3-3	4/11/2022	10/24/2022	5/25/2022-10/24/2022
CP-SUO2-1-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO2-1-2	4/11/2022	10/24/2022	4/29/2022-10/24/2022
CP-SUO2-1-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO2-2-1	4/11/2022	10/24/2022	5/5/2022-10/24/2022
CP-SUO2-2-2	4/11/2022	10/24/2022	5/5/2022-10/24/2022
CP-SUO2-2-3	4/11/2022	10/24/2022	5/5/2022-10/24/2022
CP-SUO3-1-1	4/11/2022	10/24/2022	7/25/2022-10/24/2022
CP-SUO3-1-2	4/11/2022	10/24/2022	7/25/2022-10/24/2022
CP-SUO3-1-3	4/11/2022	10/24/2022	7/25/2022-10/24/2022
CP-SUO3-2-2	4/11/2022	10/24/2022	7/15/2022-8/15/2022
CP-SUO4A-1-2	4/11/2022	10/24/2022	8/20/2022-10/24/2022

CP-SUO4A-1-3	4/11/2022	10/24/2022	4/11/2022-5/24/2022
CP-SUO4A-2-1	4/11/2022	10/24/2022	6/10/2022-10/24/2022
CP-SUO4A-2-2	4/11/2022	10/24/2022	6/10/2022-10/24/2022
CP-SUO4A-2-3	4/11/2022	10/24/2022	6/10/2022-10/24/2022
CP-SUO4B-2-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO4B-2-2	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO4B-2-3	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO5-2-1	4/11/2022	10/24/2022	5/30/2022-10/24/2022
CP-SUO6-1-1	4/11/2022	10/24/2022	4/11/2022-10/24/2022
CP-SUO6-3-1	4/11/2022	10/24/2022	9/20/2022-10/24/2022
CP-SUO6-3-2	4/11/2022	10/24/2022	9/20/2022-10/24/2022
CP-SUO6-3-3	4/11/2022	10/24/2022	9/20/2022-10/24/2022

**VIOLATIONS OF IRRIGATION WATER MANAGEMENT PLANS
DEFENDANT: COW PALACE**

YEAR: 2023			
Sensor Number	Irrigation Start Date	Irrigation End Date	Non-operational Period(s)
CP-SUO1-1-2	4/8/2023	10/20/2023	6/11/2023-10/20/2023
CP-SUO1-2-2	4/8/2023	10/20/2023	5/26/2023-10/20/2023
CP-SUO1-2-3	4/8/2023	10/20/2023	6/11/2023-10/20/2023
CP-SUO1-3-1	4/22/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO1-3-2	4/22/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO1-3-3	4/22/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO3-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO3-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO3-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO4A-1-1	4/8/2023	10/20/2023	6/15/2023-10/20/2023
CP-SUO4A-1-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO4A-1-3	4/8/2023	10/20/2023	6/15/2023-10/20/2023
CP-SUO4A-2-3	4/8/2023	10/20/2023	7/20/2023-10/20/2023
CP-SUO6-1-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO6-1-2	4/8/2023	10/20/2023	5/13/2023-10/20/2023
CP-SUO6-1-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO6-3-1	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO6-3-2	4/8/2023	10/20/2023	4/8/2023-10/20/2023
CP-SUO6-3-3	4/8/2023	10/20/2023	4/8/2023-10/20/2023