

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2018-0043

AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R5-2014-0082  
FOR  
BIDART BROS.,  
BAKERSFIELD POTATO SHED  
KERN COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board or Board) finds that:

**Background**

1. On 6 June 2014, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2014-0082, prescribing requirements for the Bidart Bros., Bakersfield Potato Shed in Kern County.
2. On 12 August 2016 a consultant for the Discharger submitted an amended Report of Waste Discharge and technical report to reflect a reduction in land application area, a new irrigation reservoir, and a reduction of monitoring frequency for supplemental irrigation water during the off-season.
3. The technical report explains that the proposed reduction in land application area is due to potential land use and ownership changes, and proposes to remove 40 acres of grapes and 102 acres of almonds from the land application area, leaving 133.5 acres available for land application. The 2017 annual report indicates that only the north land application area (133.5 acres) was irrigated with process wastewater.
4. A new irrigation reservoir was constructed on the north side of Etchart Road approximately 200 feet northeast of the previously used reservoir. Attachment A – Site Location Map is attached and made part of this order by reference. The new irrigation reservoir has a holding capacity of 404,056 gallons (1.24 acre-feet), and was designed by a California registered Professional Engineer.
5. The Discharger requested that flow and load monitoring be limited to only when wastewater is discharged to the irrigation reservoir. The changes in the Monitoring and Reporting Program reflected in this Amended Order address this request.
6. Order R5-2014-0082 contains Findings 7, 8, 34 and 35 as follows:

...

  7. *In order to control the concentration of salts accumulating in the process wash water, the Discharger routinely removes process wash water from recirculation and replaces it with water from the*

*Beardsley Canal and/or the Oildale Mutual Water District. Water from the second pond is pumped, at a rate of 400 gallons per minute for approximately seven hours per day (total of 168,000 gallons per day), to a nearby irrigation reservoir (hereafter referred to as Etchart Reservoir).*

...

8. *Process wash water and irrigation water are mixed in the Etchart Reservoir and pumped through a sand filter and drip irrigation system and applied to 40 acres of table grapes and 232 acres of almonds (hereafter referred to as the Land Application Area or LAA). The LAA is approximately 1 mile south of the facility*

...

34. *The Western Fertilizer Handbook, Eighth Edition, produced by the California Plant Health Association, indicates almonds and grapes will take up 200 pounds per acre per year (lbs/acre/year) and 125 lbs/acre/year, respectively.*

...

35. *With an average total nitrogen concentration of 4.8 mg/L (based on 2012 data) and approximately 9.4 million gallons (168,000 gallons per day, 7 days per week, and 8 weeks per season) of process wash water used to irrigate the LAA, the total nitrogen loading from the process wash water to the LAA is 1.3 pounds per acre per year.*

...

7. Monitoring and Reporting Program R5-2014-0082 contains MONITORING LOCATIONS, EFFLUENT MONITORING EFF-001, and LAND APPLICATION AREA MONITORING LAA-001 as follows:

...

#### **MONITORING LOCATIONS**

<u>Monitoring Location Name</u>	<u>Monitoring Location Description</u>
EFF-001	<i>Combined process wash water and irrigation water that is mixed in the Etchart Reservoir and applied to the Land Application Area (LAA).</i>
LAA-001	<i>40 acres of table grapes and 232 acres of almonds where water from the Etchart Reservoir is applied. Also referred to the Land Application Area or LAA.</i>
PND-001	<i>First pond (or west pond) in series following the 30,000 gallon storage tank. This pond is unlined and has an estimated capacity of 400,000 gallons.</i>
PND-002	<i>Second pond (or east pond) in series following the first pond. This pond is unlined and has an estimated capacity of 200,000 gallons.</i>
SPL-001	<i>Source water used to wash potatoes.</i>

...

**EFFLUENT MONITORING EFF-001**

*Effluent samples shall be collected after wash water from the facility and irrigation water are mixed in Etchart Reservoir and prior to discharge to the LAA and shall include at least the following:*

...

**LAND APPLICATION AREA MONITORING LAA-001**

*The Discharger shall perform the following routine monitoring and loading calculations for the LAA. In addition, the Discharger shall keep a log of routine monitoring observations for example: areas of ponding, broken irrigation pipes, odors and/or flies within the LAA. Data shall be collected and presented in tabular format and shall include the following:*

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
1/Day	Location of process wash water application area	Field # & Acreage	n/a
1/Day	Process wash water flow	gpd	Metered
1/Day	Process wash water loading	inches/day	Calculated
1/Day	Supplemental irrigation <sup>1</sup>	gpd	Metered
1/Day	Precipitation <sup>1</sup>	inches	Rain gauge <sup>2</sup>
1/Day	BOD <sub>5</sub> loading (day of application) <sup>3</sup>	lbs/acre	Calculated
1/Day	BOD <sub>5</sub> loading (cycle average) <sup>3</sup>	lbs/acre-day	Calculated
1/Month	Nitrogen loading from wastewater <sup>4</sup>	lbs/acre	Calculated
1/Month	Nitrogen loading from fertilizer	lbs/acre	Calculated
1/Year	Cumulative nitrogen loading <sup>1</sup>	lbs/acre-year	Calculated
1/Month	Salt loading <sup>4</sup>	lbs/acre	Calculated
1/Year	Cumulative salt loading <sup>1</sup>	lbs/acre-year	Calculated

1. Supplemental irrigations, precipitation, cumulative nitrogen loading, and cumulative salt loading shall be monitored for the entire year, not just during the potato processing season.
2. National Weather Service data from the nearest weather station is acceptable.
3. BOD loading rates shall be calculated using the applied volume of process wash water and irrigation water, applied acreage, and the average of the two samples of BOD collected during the current potato processing season from monitoring location EFF-001. The BOD loading rate shall be divided by the number of days between applications to determine cycle average.
4. Nitrogen and salt loading shall be calculated using the applied volume of process wash water and irrigation water, applied acreage, and the average concentration of the two samples of total nitrogen and FDS collected during the current potato processing season from monitoring location EFF-001.

...

8. Order R5-2014-0082 Information Sheet Background section contains the following:

...

*On 9 April 2004, Bidart Bros., (Bidart) submitted a RWD that described potato washing and sorting activities at the facility. Additional information to complete the RWD was submitted on 12 May 2004. On 23 June 2004, Central Valley Water Board staff issued Monitoring and*

*Reporting Program (MRP) No. R5-2004-0826 for the potato shed. Since 2004, Bidart has been submitting annual monitoring reports as required by the MRP.*

...

*Approximately 168,000 gallons per day of process water are discharged from the potato washing process to an irrigation pond identified as the Etchart Reservoir. Process wash water and irrigation water from the nearby Beardsley Canal (Kern River Water) are mixed in the Etchart Reservoir and pumped through a sand filter and drip irrigation system and applied to 40 acres of table grapes and 232 acres of almonds (also referred to as the Land Application Area or LAA).*

...

### **California Environment Quality Act**

9. This action to amend WDRs Order R5-2014-0082 is exempt from the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) in accordance with California Code of Regulations, title 14, section 15301, which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review.

### **Public Notice**

10. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Central Valley Water Board, in a public meeting, heard, and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that, Waste Discharge Requirements Order R5-2014-0082 is amended to change Finding 7, Finding 8, Finding 34, and Finding 35; and Monitoring and Reporting Program R5-2014-0082 sections on Monitoring Locations, Effluent Monitoring, Land Application Area Monitoring, and the Information Sheet. Bidart Bros., its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with amended Order R5-2018-0043 as follows:

Findings 7, 8, 34 and 35 shall be replaced by the following:

...

7. *In order to control the concentration of salts accumulating in the process wash water, the Discharger routinely removes process wash water from recirculation and replaces it with water from the Beardsley Canal and/or the Oildale Mutual Water District. Water from the second pond is pumped, at a rate of 400 gallons per minute (approximately 168,000 gallons per day in 2012), to a nearby irrigation reservoir.*

...

8. *Process wash water and irrigation water are mixed in the irrigation reservoir and pumped through a sand filter and drip irrigation system and applied to 133.5 acres of almonds (hereafter referred to as the Land Application Area or LAA). The LAA is approximately 1 mile south of the facility.*

...

34. *The Western Fertilizer Handbook, Eighth Edition, produced by the California Plant Health Association, indicates almonds will take up 200 pounds of nitrogen per acre per year (lbs/acre/year).*

...

35. *With an average total nitrogen concentration of 4.8 mg/L (based on 2012 data) and approximately 9.4 million gallons (168,000 gallons per day, 7 days per week, and 8 weeks per season) of process wash water used to irrigate the LAA, the total nitrogen loading from the process wash water to the LAA is 2.8 pounds per acre per year.*

...

Monitoring and Reporting Program R5-2014-0082 MONITORING LOCATIONS, EFFLUENT MONITORING, and LAND APPLICATION AREA MONITORING sections shall be replaced by the following:

...

#### **MONITORING LOCATIONS**

<i>Monitoring Location Name</i>	<i>Monitoring Location Description</i>
<i>EFF-001</i>	<i>Combined process wash water and irrigation water that is mixed in the irrigation reservoir and applied to the Land Application Area (LAA).</i>
<i>LAA-001</i>	<i>133.5 acres of almonds where water from the irrigation reservoir is applied. Also referred to the Land Application Area or LAA.</i>
<i>PND-001</i>	<i>First pond (or west pond) in series following the 30,000 gallon storage tank. This pond is unlined and has an estimated capacity of 400,000 gallons.</i>
<i>PND-002</i>	<i>Second pond (or east pond) in series following the first pond. This pond is unlined and has an estimated capacity of 200,000 gallons.</i>
<i>SPL-001</i>	<i>Source water used to wash potatoes.</i>

...

**EFFLUENT MONITORING EFF-001**

Effluent samples shall be collected after wash water from the facility and irrigation water are mixed in the irrigation reservoir and prior to discharge to the LAA and shall include at least the following:

...

**LAND APPLICATION AREA MONITORING LAA-001 (PROCESSING SEASON)**

The Discharger shall perform the following routine monitoring and loading calculations for the LAA. In addition, the Discharger shall keep a log of routine monitoring observations for example: areas of ponding, broken irrigation pipes, odors and/or flies within the LAA. Data shall be collected and presented in tabular format and shall include the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Daily	Location of process wash water application area	Field # & Acreage	n/a
Daily	Process wash water flow	gpd	Metered
Daily	Process wash water loading	inches/day	Calculated
Daily	Supplemental irrigation <sup>1</sup>	gpd	Metered
Daily	Precipitation <sup>1</sup>	inches	Rain gauge <sup>2</sup>
<b><u>BOD Loading Rates:</u></b>			
Daily	On Day of Application <sup>3</sup>	lbs/acre	Calculated
Daily	Cycle Average <sup>3</sup>	lbs/acre-day	Calculated
<b><u>Nitrogen Loading Rates:</u></b>			
Monthly	From Wastewater <sup>4</sup>	lbs/acre	Calculated
Monthly	From Fertilizer	lbs/acre	Calculated
Annually	Cumulative nitrogen loading <sup>1</sup>	lbs/acre-year	Calculated
<b><u>Salt Loading Rates:</u></b>			
Monthly	Salt loading <sup>4</sup>	lbs/acre	Calculated
Annually	Cumulative salt loading <sup>1</sup>	lbs/acre-year	Calculated

- Supplemental irrigations, precipitation, cumulative nitrogen loading, and cumulative salt loading shall be monitored for the entire year, not just during the potato processing season.
- National Weather Service data from the nearest weather station is acceptable.
- BOD loading rates shall be calculated using the applied volume of process wash water and irrigation water, applied acreage, and the average of the two samples of BOD collected during the current potato processing season from monitoring location EFF-001. The BOD loading rate shall be divided by the number of days between applications to determine cycle average.
- Nitrogen and salt loading shall be calculated using the applied volume of process wash water and irrigation water, applied acreage, and the average concentration of the two samples of total nitrogen and FDS collected during the current potato processing season from monitoring location EFF-001.

**LAND APPLICATION AREA MONITORING LAA-001 (NON-PROCESSING SEASON)**

The Discharger shall perform the following routine monitoring and loading calculations during the non-processing season for the LAA's that received process wastewater during the year.

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Monthly	Application Location	Field # & Acreage	n/a

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Monthly	Supplemental Irrigation <sup>1</sup>	gallons	Metered
Monthly	Precipitation <sup>1</sup>	inches	Rain gauge <sup>2</sup>
<u>Nitrogen Loading Rates:</u>			
Monthly	From Fertilizer	lbs/acre	Calculated
Annually	Cumulative nitrogen loading <sup>1</sup>	lbs/acre-year	Calculated

1. Supplemental irrigations, precipitation, cumulative nitrogen loading, and cumulative salt loading shall be monitored for the entire year, not just during the potato processing season.
2. National Weather Service data from the nearest weather station is acceptable.

...

Order R5-2014-0082 Information Sheet Background section shall be replaced by the following:

...

*On 9 April 2004, Bidart Bros., (Bidart) submitted a RWD that described potato washing and sorting activities at the facility. Additional information to complete the RWD was submitted on 12 May 2004. On 23 June 2004, Central Valley Water Board staff issued Monitoring and Reporting Program (MRP) No. R5-2004-0826 for the potato shed. Since 2004, Bidart has been submitting annual monitoring reports as required by the MRP.*

*On 12 August 2016, Bidart submitted an amended RWD that described a reduction in LAA, a new irrigation reservoir, and requested a reduction of monitoring frequency for supplemental irrigation water during the off season.*

...

*Approximately 168,000 gallons per day of process water are discharged from the potato washing process to an irrigation reservoir. Process wash water and irrigation water from the nearby Beardsley Canal (Kern River Water) are mixed in the irrigation reservoir and pumped through a sand filter and drip irrigation system and applied to 133.5 acres of almonds (also referred to as the Land Application Area or LAA).*

...

Attachment A – Site Location Map, which is attached replaces the site plan included as Attachment A of the Waste Discharge Requirements Order R5-2014-0082.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

This Order is effective as of the date of adoption.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 May 2018.

*ORIGINAL SIGNED BY*

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PATRICK PULUPA, Executive Officer

Order Attachment:

Attachment A - Site Location Map





Drawing Reference:  
**OILDALE**  
 U.S.G.S TOPOGRAPHIC MAP  
 7.5 MINUTE QUADRANGLE  
**2012**

**ATTACHMENT A – SITE LOCATION MAP**  
**WASTE DISCHARGE REQUIREMENTS**  
 ORDER R5-2014-0082 (Amended by Order R5-2018-0043)  
**BIDART BROS.**  
**BAKERSFIELD POTATO SHED**  
**KERN COUNTY**

