



Central Valley Regional Water Quality Control Board

9 March 2023

Jeff Jones, City Manager City of Arvin 200 Campus Drive Arvin, CA 93203 jeffjones@arvin.org CERTIFIED MAIL 7022 2410 0000 2157 7282

NOTICE TENTATIVE CEASE AND DESIST ORDER AND PUBLIC HEARING

FOR

CITY OF ARVIN ARVIN WASTEWATER TREATMENT FACILITY KERN COUNTY

Enclosed is a tentative Cease and Desist Order (CDO) proposed for consideration by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) pursuant to California Water Code sections 13301 and 13260. The tentative CDO alleges that the City of Arvin (City or Discharger) has violated its Waste Discharge Requirements Order 5-00-093 (WDRs Order) and that its wastewater treatment facility (WWTF) does not have adequate storage and disposal capacity necessary to comply with the WDRs Order. The tentative CDO proposes actions, including a restriction on new connections to the City's sewer collection system, and a time schedule to bring it back into compliance with its WDRs Order. The tentative CDO was previously noticed in October 2022, and the Prosecution Team has not made substantial changes to the required actions in the tentative CDO.

The Central Valley Water Board's Prosecution Team intends to bring this matter for a hearing before the Central Valley Water Board at the **26-28 April 2023** Board meeting in Bakersfield. The hearing will be governed by Hearing Procedures, including comment deadlines, that will be issued by the Central Valley Water Board's Advisory Team prior to the Board meeting.

The Prosecution Team proposes that any comments or recommendations you, or any member of the public, may have concerning the tentative CDO be submitted to this office in writing by 5:00 PM on **23 March 2023** to ensure that they may be considered

MARK BRADFORD, CHAIR | PATRICK PULUPA, Esq., EXECUTIVE OFFICER

CITY OF ARVIN

ARVIN WASTEWATER TREATMENT FACILITY

KERN COUNTY

prior to the meeting of the Central Valley Water Board. All comments should also be submitted by email to: omar.mostafa@waterboards.ca.gov

The proposed **23 March 2023** comment deadline may be superseded by comment deadlines established by the Advisory Team in the forthcoming Hearing Procedures.

In order to conserve resources, this letter transmits paper copies of the documents to the Discharger only. Interested persons may view the tentative CDO and related materials on the Central Valley Water Board's website at:

Tentative Orders Website

(https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/)

Copies of these documents can also be obtained by contacting or visiting the Central Valley Water Board's office weekdays between 8:00 AM and 5:00 PM.

If you have any questions regarding the tentative CDO or related materials, please contact Omar Mostafa at (559) 445-5197 or by email at omar.mostafa@waterboards.ca.gov.

W. Dale Harvey

Supervising Engineer

Enclosure: Tentative CDO

cc: Honorable David G. Valadao, U.S. Representative, United States House of Representatives, Washington, DC

Patrick Pulupa, Esq., Executive Officer, Central Valley Water Board, Rancho Cordova (email only)

Adam Laputz, Assistant Executive Officer, Central Valley Water Board, Rancho Cordova (email only)

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ccs Continued Next Page:

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- California Department of Fish and Wildlife, Region IV, Fresno
- California Department of Water Resources, San Joaquin District, Fresno
- Kern County Division of Environmental Health, Bakersfield
- Kern County Mosquito and Vector Control District, Bakersfield
- Chandrasekar Venkatraman, Director of Capital Program Management, Veolia North America, Rialto (email only)
- Gerry Lemus, Project Manager, Veolia North America, Arvin (email only)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

TENTATIVE CEASE AND DESIST ORDER AND CONNECTION RESTRICTION R5-2023-XXXX

FOR

CITY OF ARVIN

ARVIN WASTEWATER TREATMENT FACILITY

KERN COUNTY

FINDINGS

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

Facility

- 1. Waste Discharge Requirements Order 5-00-093 (WDRs), adopted by the Board on 28 April 2000, prescribes requirements for the Arvin Wastewater Treatment Facility (WWTF). The WDRs were originally issued to the City of Arvin and United States Filter Corporation. On 17 February 2022, the Board adopted Order R5-2022-0017 to update the owner and operator of the WWTF. The WWTF is currently owned by the City of Arvin (City) and is operated by Veolia Water West Operating Services, Inc. (Veolia) (collectively, Dischargers).
- 2. The WDRs authorize a monthly average discharge of up to 2.0 million gallons per day (2.3 mgd during the irrigation season 1 May to 31 October) of secondary-treated and undisinfected wastewater to the WWTF's effluent storage reservoirs and then to land application areas (LAAs). Historically, the LAAs have consisted of approximately 240 acres of City owned land and up to 1,208 acres of land owned and operated by Community Recycling and Resource Recovery, Inc. (now, Freedom Farms). The WWTF and storage ponds (Ponds 1 through 4) are shown on Attachment A. The City owned property permitted for recycling and the Community Recycling and Resource Recovery, Inc., land historically used for recycling are shown on Attachment B.
- 3. The WDRs incorporate Monitoring and Reporting Program 5-00-093 (MRP) and Standard Provisions and Reporting Requirements for Waste Discharge Requirements dated 1 March 1991 (Standard Provisions).
- 4. The WWTF is in Section 34, T31S, R29E, MDB&M at 18500 Rancho Drive in Arvin, Kern County.
- 5. The WWTF is an activated sludge treatment plant and consists of headworks with a mechanical bar screen, a screw lift, two oxidation ditches, and two clarification basins.
- 6. At the time of adoption of the WDRs, the Dischargers' monthly average flows were approximately 1.1 million gallons per day (mgd) and effluent was being

- supplied to a contract farmer (Community Recycling and Resource Recovery, Inc.) to grow fodder crops on 240-acres of City owned land.
- 7. The Dischargers submitted a Report of Waste Discharge (RWD) dated 21 September 1998 in support of a proposed WWTF expansion project to increase capacity to 2 mgd.
- 8. According to Finding 8 of the WDRs, in a technical report dated 8 January 1999, the Dischargers' consultant submitted a water balance of the WWTF's effluent storage and disposal capacity. The report indicated that to accommodate projected future flows of 2 mgd, the Dischargers would need to increase effluent storage capacity by 288 acre-feet and increase the water reclamation area by 248 acres. Finding 2 of the WDRs indicates that the City's reclamation area at the time was 240 acres. Therefore, based on the 8 January 1999 technical report, the City would need 488 acres of reclamation area to accommodate flows of 2 mgd.
- 9. The City submitted on 18 April 2007 an engineering report titled, *City of Arvin Wastewater Treatment Plant Expansion Project Report July 2006* (Engineering Report). The Engineering Report indicates Ponds 1 and 2 each have a storage capacity of 40-acre feet. Pond 3 has a storage capacity of 202-acre feet. Pond 4 has a reported storage capacity of 40-acre feet. The water balance in the Engineering Report, which does not include the storage capacity of Pond 4, indicates that with 282-acre feet of storage the WWTF would need 725 acres of LAAs for a discharge flow of 2 mgd. Ponds 1 through 3 are built largely above grade. It is not clear why the storage capacity of Pond 4 was not included in the water balance in the Engineering Report, although it is likely due to piping and pumping limitations and its limited delivery area. The Engineering Report indicated the City would approach 2.0 mgd (average annual daily flow) between 2015 and 2020.
- 10. On 8 December 2021, the City Engineer contacted Board staff by email to report that wastewater was seeping from beneath the levee of Pond 3. The City Engineer also reported that the Ponds were nearing capacity and that the City would likely need to oversaturate its permitted LAAs and potentially need to discharge wastewater to unpermitted LAAs for emergency disposal. The City Engineer also reported that the City's contract with its tenant farmer (Freedom Farms) had ended in March 2021. The email indicated that as a result, the City's permitted LAA was limited to approximately 225 acres. The email also indicated that the City intended to discharge to 73 acres of 100 acres that the City owns to the east of the authorized LAAs and to develop an additional 80 acres owned by another party. In the 8 December 2021 email, the City Engineer stated that the City was only going to use 73 of the 100 acres to the east because it intended to maintain a 400-foot buffer between the LAA and the subdivision to the north.

Board staff has determined that the overall reduction in LAAs has resulted in an unquantified, but substantial reduction in disposal capacity.

- 11. On 20 December 2021, Board staff inspected the WWTF to observe the effluent ponds and LAAs and evaluate compliance with the WDRs. Board staff observed pooled effluent that had seeped from the Effluent Pond 3 levee in areas south of the pond and along the shoulder of Rancho Drive, a public road adjacent to the WWTF property.
- 12. On 20 December 2021, Board staff also observed standing wastewater on the LAAs and observed that some of the alfalfa planted within the LAAs was turning yellow, indicating that the LAAs were oversaturated with wastewater.
- 13. On 22 December 2021, Board staff conducted an additional inspection of the WWTF and observed effluent seeping from Effluent Pond 3 and observed that the LAAs were oversaturated.
- 14. The seepage of effluent from beneath the toe of Pond 3 threatens to cause failure of the levee, which if the pond was full, would lead to the unauthorized discharge of up to 202 acre-feet of undisinfected effluent to public roads and adjacent properties not owned or controlled by the Dischargers.
- 15. In November 2021, the City began increasing its discharge of wastewater from Pond 3 in an effort to lower the water level in the pond and stop the seepage.
- 16. On 15 June 2022, City staff reported during a meeting with Board staff that Pond 3 was dry and out of service. The City is currently seeking funding for repairs. It is anticipated that the repairs will take approximately two years to complete. Without Pond 3, the WWTF only has 80 acre-feet of storage that has been contemplated in engineering water balances. This is approximately a 72% reduction in analyzed storage volume.
- 17. Based on the information in Finding 10, the City reportedly has 225 acres of permitted LAAs to which it can apply wastewater. Staff analysis of aerial photographs indicate that the actual irrigable area is only 216 acres, due to the existence of a stormwater pond and well pads, and other features that preclude irrigation.
- 18. On 8 December 2021, the City Engineer reported that the City has an additional 180 acres of nearby land to which it could apply wastewater. Given the buffer implemented by the City, Board staff estimates that about 140 acres are irrigable. Discharges to these 140 acres are not authorized by the WDRs.
- 19. On 23 August 2022, the City Manager submitted a draft letter report (Letter) prepared by Cannon Engineering that includes a water balance for the WWTF.

The Letter and water balance indicate that the City has available to it 387 acres of irrigable LAAs. This includes a 75-acre (referred to as 80-acre parcel in Finding 10) parcel owned by a private farmer named Mr. Garcia. All of the available LAAs will reportedly be used to grow alfalfa. The parcels reportedly available for irrigation with wastewater include Assessor Parcel Numbers (APN) 189-340-27, 189-351-94, 189-3521-90, 446-010-73, 446-010-59, 446-010-60, and 446-010-62. Parcel 446-010-62 is owned by Mr. Garcia, and the remaining parcels are owned by the City. The parcels are shown on Figure 1. The Letter and water balance assumed that Pond 3 would be repaired and in service in the second half of 2022 (did not occur), and that Ponds 1 and 2 would be deep ripped every other year. The Letter concludes that the City can manage its current flows of 1.3 mgd with the 387 acres of LAA. The Letter notes that to increase WWTF disposal capacity to the permitted flow of 2.0 mgd, the City would need to develop an additional 88 acre-feet of storage or increase the LAAs to increase irrigation demand during the winter months.

- 20. Review of the Letter and water balance indicated the following issues:
 - a. The LAAs associated with Assessor Parcel Numbers 189-351-94, 189-351-90, and 446-010-62 are not covered under the WDRs and the application of wastewater to them has not undergone review under the California Environmental Quality Act (CEQA). For this reason, it is not clear that these parcels could be incorporated into revised WDRs for the WWTF.
 - b. Parcel 446-010-62 is not owned by the City, and the City has not provided a copy of a long-term agreement with Mr. Garcia indicating that the LAA will be available long-term to receive City wastewater. Discharges to this parcel are not covered under the WDRs and have not undergone CEQA review. For these reasons, it is not clear that this parcel could be incorporated into revised WDRs for the WWTF.
 - c. Staff analysis of the parcels designated to receive wastewater indicates an irrigable area of approximately 367 acres, 20 acres less than the reported 387 acres. This discrepancy may be due to the Letter's failure to take into account the 20-acre buffer area the City has implemented between the northern section of parcels 189-351-94-90 and 189-351-94 and the residential area to the north.
 - d. The Letter indicates that Ponds 1 and 2 must be deep-ripped every other year to maintain percolation capacity. Such an operation would require draining of the ponds to be ripped and sufficient drying time prior to ripping. Board staff estimates this process would take six months to a year. This is not accounted for in the water balance; the water balance

assumes that both ponds are in operation throughout the year. Having one pond out of service would significantly reduce storage capacity and the ability of the City to dispose of its wastewater through percolation. It could also adversely affect the City's ability to apply the wastewater at agronomic rates.

- e. The evaporation rates used in the water balance do not seem to comport with the appropriate months. For example, Table 1 in the Letter indicates that the highest pan evaporation rates for the Arvin area occur March through June, with peaks in April and May. The highest rates shown for the Arvin Station in the California Department of Water Resources publication cited by the Letter show the highest pan evaporation rates occur May through August, with a peak in July. Pond evaporation losses are similarly skewed in the water balance. It is unclear how this has affected the results of the water balance. It is also unclear if this issue has affected the Irrigation Demand presented in the water balance.
- 21. The documents provided by the City, including the Letter and previous emails and attachments submitted by the City Engineer and City Manager, refer to various acreages for various parcels. Board staff has reviewed the parcel maps generated by Kern County and Google Earth images and developed the table below. Irrigable acreages were calculated by subtracting from the assessed acreage cutouts including buffer areas, roads, drainage features and canals that cannot be irrigated.

APN	Authorized LAA	Approximate Acreage	· · · · · · · · · · · · · · · · · · ·	
189-340-27	Yes	79.09	15.38	63.71
446-010-73	Yes	77	14.23	62.77
446-010-59	Yes	52.3	2.26	50.04
446-010-60	Yes	52.3	0.59	51.71
189-351-94	No	49.27	12.29	36.98
189-351-90	No	52.77	13.57	39.2
446-010-62	No	75.5	2.85	72.65

Approximate Acreage Total: 438.23

Irrigable Acreage Total: 377.06

- 22. The Engineering Report projected that by the year 2020, the City's population would increase to 26,953 and the average annual daily flow for the WWTF would increase to 2.34 mgd. Publicly available data, including data from the United States Census Bureau and wastewater flow data from the City's self-monitoring reports (SMRs), indicates that the City's projected population growth and increased wastewater flows did not materialize. US Census Bureau information indicates that the City's population was 19,495 as of 1 April 2020. The population was growing gradually until 2020 and has declined significantly since. Also, reported WWTF flows have generally been declining since at least 2014, although it is unclear why. Current WWTF monthly average flows are about 1.12 mgd.
- 23. The City's permitted irrigable acreage of approximately 228 acres is 68% less than the 725 acres deemed necessary in the Engineering Report for a discharge flow of 2.0 mgd. The approximately 377 irrigable acres (228 permitted + 149 non-permitted) that the City has available to it for discharges is 48% less than the 725 acres deemed necessary in the Engineering Report for a discharge flow of 2.0 mgd. This suggests that with adequate storage, the existing disposal capacity of the LAAs, both permitted and unpermitted may be about 1.0 mgd.
- 24. However, Pond 3 will be out of service for approximately two years until repairs can be completed. This effectively reduces the maximum storage capacity of the WWTF from 282 acre-feet to 80 acre-feet, until Pond 3 is repaired. This is a reduction of approximately 72% of storage capacity. Also, based on the water balance Letter, Ponds 1 and 2 will be out of service every other year, or part of every other year, for deep-ripping and maintenance. If either Pond 1 or 2 were to be out of service within the next several years while Pond 3 is also out of service, this would reduce the storage capacity of the WWTF from 282 acre-feet to 40 acre-feet. This is a reduction of approximately 86% of storage capacity.
- 25. On 6 December 2022, the City Manager submitted a 5 December 2022 letter and 16 November 2022 revised Water Balance and Use Area Management Plan Report (Revised Report).
- 26. Board staff review of the 5 December 2022 letter and Revised Report indicated the following issues:
 - a. The Revised Report is not properly signed and stamped by a California licensed engineer, as required by the California Business and Professions Code.
 - b. The Revised Report is missing appropriate supporting data, citations, and calculations, particularly regarding the nitrogen balances therein. Without appropriate data, citations, and calculations, Board staff is unable to verify the validity of the claims made in the Revised Report.

- c. The water balance in the Revised Report concludes that the City has enough storage and disposal area for its current flows of 1.3 mgd. However, the water balance is dependent on the City's use of its largest effluent storage pond, Pond 3, which is currently out of service and will remain out of service for approximately two years, as explained in Finding 33. Additionally, the schedule for deep ripping Ponds 1 and 2 described in the Revised Report has been changed from every other year (per the 23 August 2022 Letter) to "potentially every five years". The Revised Report does not provide any data or analysis to support the proposed change in the maintenance schedule for Ponds 1 and 2.
- d. The disposal capacity described in the Revised Report is based on the assumption that the City has 370 acres to grow alfalfa and use for disposal of its wastewater. As indicated previously, approximately 102 acres of City owned land proposed to be used for wastewater disposal has not undergone environmental or technical reviews, including CEQA review and an antidegradation analysis, to determine if it is suitable for wastewater application. Additionally, the City has built berms around these unpermitted land areas and is discharging to them at un-agronomic rates. By discharging in such a manner, the City is essentially creating unauthorized shallow wastewater ponds.
- e. The City is also proposing to use approximately 75 acres of private land owned by Mr. Garcia to dispose of its wastewater. As indicated previously, this land area has also not undergone necessary environmental or technical reviews, and although Board staff has requested it during meetings, including one on 15 February 2023, the City has not yet provided any evidence in the form of a written agreement or contract that it has any long term authorization to discharge wastewater to the subject property.
- f. The nitrogen balance in the Revised Report is technically deficient. The nitrogen balance states that effluent total nitrogen is estimated to be 30 mg/L based on effluent nitrate results as high as 26 mg/L. This contradicts an earlier section of the Revised Report, which states that effluent total nitrogen is estimated to be 50 mg/L. The nitrogen balance needs to be based on analytical data including total nitrogen, total Kjeldahl nitrogen (TKN), ammonia, and nitrate nitrogen.
- g. The nitrogen balance in the Revised Report indicates that at a flow rate of 2.0 mgd, 462 pounds of nitrogen will be applied per acre of LAAs (based on an estimated effluent nitrate concentration of 30 mg/L), and that the alfalfa nitrogen uptake is 480 pounds per acre. Based on these loading and uptake rates, the Revised Report indicates that the LAAs cannot be

overloaded with nitrogen. However, the nitrogen balance does not contain example calculations or citations for the data used therein (e.g., an uptake rate of 480 pounds per acre for alfalfa). Without the calculations, citations, or data, Board staff is unable to verify the validity of the nitrogen balance presented in the Revised Report.

- h. Based on research reviewed by Board staff, the amount of nitrogen taken up by alfalfa depends largely on its yield. Alfalfa can uptake nitrogen at a rate of 50 lbs/acre/ton, however, the nitrogen balance in the Revised Report does not discuss yields. An uptake rate of 480 pounds per acre would require a crop yield of 9.6 tons of alfalfa per acre, which is abnormally high. Based on research reviewed by Board staff, alfalfa yields in California are typically around 7 tons per acre.
- i. The nitrogen balance in the Revised Report does not take into account nitrogen loading to the LAAs from other sources, including: atmospheric deposition, nitrogen in supplemental irrigation water, fertilizers, and nitrogen fixation by the alfalfa itself. This accounting is necessary, as these sources will contribute toward the total amount of nitrogen being loaded to the LAAs.
- j. The nitrogen balance also does not take into account that, due to the City's lack of effluent storage capacity, the City will be forced to apply wastewater to its crops during the winter when alfalfa is largely dormant and unable to effectively uptake nitrogen. This will result in higher nitrogen loading to the LAAs during winter months, and the potential for unused nitrogen to percolate to groundwater and cause or exacerbate groundwater degradation and/or pollution with nitrate.
- k. The 5 December 2022 letter indicates that the City has begun the process of obtaining additional LAAs through eminent domain. The City has provided no evidence that it has begun the process to obtain additional LAAs through eminent domain. The eminent domain process typically takes several years to complete. Also, Board staff is not aware of which land areas are proposed to be acquired through eminent domain or how many acres are proposed to be acquired. Land areas acquired through eminent domain would still need to go through environmental and technical reviews to determine if they are suitable for wastewater disposal.
- I. The 5 December 2022 letter also indicates that the City is in negotiations with Freedom Farms to reinstitute use of some or all of the acreage that was previously contracted. The City has not provided evidence or documentation other than the 5 December 2022 letter that it has reentered

negotiations with Freedom Farms, nor has it provided any specific updates on the status of those negotiations.

- 27. On 22 December 2022, Board staff inspected the WWTF and land disposal areas. Board staff observed that the unpermitted disposal areas were bermed and contained standing water, indicating that they were oversaturated and that wastewater was not being applied at reasonable rates. Board staff did not observe any signage near the unpermitted disposal areas indicating that they contained wastewater or any other measures in place to preclude public access from the wastewater disposal areas.
- 28. On 18 January 2023, Board staff conducted an additional inspection of the WWTF and land disposal areas. Board staff observed that Pond 3 contained a small amount of wastewater, and Veolia staff explained that Pond 3 had recently been used to contain an emergency discharge. Veolia staff did not know the volume of wastewater discharged into Pond 3 during the emergency. Board staff observed that the unpermitted disposal areas remained bermed and contained approximately 6-inches to 1-foot of standing water. Board staff observed that signage intended to preclude public access had been installed near the disposal areas, however it appeared to be ineffective, as Board staff observed members of the public recreating near a stormwater pond adjacent to the unpermitted land disposal areas.
- 29. During the 18 January 2023 inspection, Board staff collected water samples for laboratory analysis of nitrogen constituents. The laboratory results are summarized in the below table. Sample 1 was collected from the WWTF effluent lift station, Sample 2 was collected from effluent pond 1, and Sample 3 was collected from a bermed unpermitted disposal area (APN 189-351-94). The results for nitrate as nitrogen ranged from 1.0 to 1.7 mg/L, and results for total nitrogen ranged from 18 to 21 mg/L. These results are lower than the values used in the nitrogen balance in the Revised Report (30 mg/L for effluent nitrate and 50 mg/L for effluent total nitrogen).

Sample	Nitrate as Nitrogen (mg/L)	Nitrite as Nitrogen (mg/L)	Organic Nitrogen (mg/L)	Ammonia- Nitrogen (mg/L)	Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)
1	1.5	0.62	2.0	15	17	19
2	1.0	0.54	5.0	14	19	21
3	1.7	0.58	3.0	13	16	18

- 30. The City's current practice of discharging wastewater exceeding agronomic rates to its unpermitted LAAs threatens to negatively impact groundwater quality. As indicated by the sample results, the wastewater being applied to the LAAs has a total nitrogen exceeding 10 mg/L. The wastewater also has significant concentrations of ammonia, which will convert to nitrate as it percolates through the vadose zone. The City's continued application of wastewater in excess of agronomic rates to its unpermitted LAAs will likely result in groundwater concentrations exceeding the maximum contaminant level (MCL) for nitrate. This may lead to drinking water from two City municipal wells adjacent to the LAAs to also exceed the MCL for nitrate.
- 31. On 15 February 2023, during a meeting between Board staff and City staff, the City Manager reported that effluent had recently been discharged again into Pond 3 due to another undefined emergency. The volume of the discharge was reportedly unknown. The emergency discharges to Pond 3 further indicate that the City does not have adequate storage capacity for its current wastewater flows.
- 32. The City has applied to the State Water Resources Control Board Division of Financial Assistance (DFA) for funding to repair Pond 3. The application consists of four parts all of which must be deemed complete before a funding agreement can be executed. The four parts are: General Package; Technical Package; Financial Package; and Environmental Package.
- 33. As of 7 March 2023, the City has submitted the General, Technical, Financial, and Environmental Packages to DFA. However, documents required to be part of the Technical and Environmental packages remain outstanding. Once DFA staff determine that all four packages are complete, it will take a minimum of nine to twelve months to get a funding agreement in place, after which the City will need to request bids, approve a contractor, and construct repairs/improvements. Based on this, Board staff estimates Pond 3 will be out of service for approximately two years and the City will not have adequate storage capacity during this time for its current wastewater flows.
- 34. Generally, a city's ability to manage reclamation of its wastewater depends on its available storage and disposal capacity, among other things. The City is currently operating with 80 acre-feet of storage capacity, half of which may be off-line at any given time to be deep-ripped, and approximately 377 irrigable acres of disposal area, 149 acres of which are not currently permitted for wastewater reclamation. As described in the findings above and per the City's Engineering Report, for a discharge flow of 2.0 mgd, the City would need 282 acre-feet of storage capacity and 725 acres of disposal capacity. This means that as it stands, the City is operating with approximately 28% of its necessary storage capacity and approximately 52% of its necessary disposal capacity for a

ARVIN WASTEWATER TREATMENT FACILITY
KERN COUNTY

discharge flow of 2.0 mgd. Based on this, the findings herein, observations made during Board staff's inspections, and additional information received from the Dischargers, the WWTF does not appear to have adequate firm storage and disposal capacity for currently permitted flows and likely has less storage and disposal capacity needed for its existing flows. Board staff anticipate that it will take at least two years to repair Pond 3. It is currently unknown how long it will take for the City to acquire and/or properly permit additional LAAs. The addition of connections to the WWTF will only exacerbate ongoing WWTF storage and disposal capacity issues.

35. Since December 2021, Board staff has been holding monthly meetings with the Dischargers to discuss its progress towards repairing Pond 3, acquiring additional LAA acreage, and updates regarding use of the unpermitted LAAs.

Applicable Requirements and Violations

- 36. Sections A.7 and A.12 of the Standard Provisions, incorporated as part of the WDRs, state:
 - **A.7** The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
 - **A.12** The discharge shall remain within the designated disposal area at all times.
- 37. Designated Reclamation Area Specification C.4 of the WDRs states:
 - **C.4** Application of reclaimed water to the application area shall be at reasonable rates considering the crops, soil, climate, and irrigation management system.
- 38. Based on Board staff observations made during the 20 and 22 December 2021 inspections, the Dischargers are in violation of Standard Provision A.7 for failure to maintain the Effluent Pond 3 levee in good working order.
- 39. The Dischargers are also in violation of Standard Provision A.12 for failure to keep discharges within designated disposal areas at all times based on Board staff's 20 and 22 December 2021 observations that effluent had seeped from the Effluent Pond 3 levee and flowed to unpermitted areas. In addition, due to inadequate storage capacity and LAA acreage, the Dischargers have had to dispose of its wastewater by discharging to unpermitted LAAs.

- 40. The Dischargers are also in violation of Designated Reclamation Area Specification C.4 for failure to apply reclaimed wastewater to LAAs at reasonable rates, as observed by Board staff during inspections.
- 41. On 11 July 2022, Board staff issued a Notice of Violation (NOV) to the Dischargers for violations of Standard Provisions A.7 and A.12, as well as Designated Reclamation Area Specification C.4. The NOV required that, pursuant to California Water Code section 13260, the Dischargers submit by 10 October 2022 a Report of Waste Discharge containing the following:
 - a. A signed Form 200 (General Information Form for Waste Discharge Requirements or NPDES Permit)
 - b. A technical report and proposed time schedule for implementing short term measures to bring the WWTF back into compliance with the WDRs. The technical report must provide a schedule for completing necessary repairs to the Pond 3 levee by 11 July 2023, including detailed design plans; and engineering analysis of existing effluent flows, current WWTF storage, a determination of how much LAA acreage is needed to comply with the WWTF's existing and currently permitted flows; and a time schedule not to exceed 2 years to obtain the necessary LAA acreage to ensure full compliance with WDRs.
 - c. A technical report and proposed time schedule for upgrading the WWTF to provide for treatment and disposal of wastes in the long-term. At a minimum, the technical report must include a description of the proposed treatment system to be used, proposed disinfection system (if applicable), and a detailed time schedule for completing tasks associated with the planning, design, and construction phases for upgrading the WWTF. The technical report must also describe the City's plans for securing funding necessary for completing the upgrades.
- 42. The 11 July 2022 NOV also required that, pursuant to California Water Code section 13267, the Dischargers shall submit written progress reports to Board staff three days prior to scheduled monthly progress meetings. The NOV specified that at a minimum, the progress reports must contain updates regarding the City's efforts to repair Effluent Pond 3, updates regarding the City's use of the unpermitted LAA and any progress made to acquire additional LAAs, and updates regarding the City's efforts to preclude public access to areas within and around the LAAs where the public may be exposed to wastewater.

Legal Authority

43. This Cease and Desist Order (Order) is issued pursuant to Water Code section 13301, which provides in relevant part as follows:

When a regional board finds that a discharge of waste is taking place.

or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board..., the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. Cease and desist orders may be issued directly by a board, after notice and hearing.

44. Title 23, California Code of Regulations, section 2244(b) states:

> Prohibitions or appropriate restrictions on additional discharges should be included in a cease and desist order if the further addition in volume, type, or concentration of waste entering the sewer system would cause an increase in violation of waste discharge requirements or increase the likelihood of violation of requirements.

- 45. The Central Valley Water Board finds that there is an existing and threatened violation of waste discharge requirements in the operation of the WWTF due to the Discharger's lack of adequate storage and disposal capacity.
- 46. The Central Valley Water Board finds that a sewage connection restriction is necessary because the Dischargers do not have the necessary wastewater storage and disposal capacity to prevent violations of the WDRs.
- 47. The ability to continue discharging waste, either into its effluent storage reservoirs or land application areas, is a privilege and is not a vested right and may be revoked by the Central Valley Water Board. (Wat. Code, § 13263, subd. (g).)
- 48. This Order does not specify the particular manner in which the Dischargers shall achieve compliance with the provisions of the existing WDRs. (See Wat. Code, § 13360, subd. (a).)

Other Regulatory Considerations

49. The issuance of this Order constitutes an enforcement action, which is categorically exempt from procedural requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), in accordance with the CEQA Guidelines. (Cal. Code Regs., tit. 14, § 15321.)

- 50. The Dischargers and interested persons were notified of the Central Valley Water Board's intent to issue this Order and were provided an opportunity to submit their written views and recommendations at a public hearing.
- 51. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharge regulated under this Order.

REQUIRED ACTIONS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13260 and 13301, that the Dischargers (including its agents, employees, and affiliates) shall comply with the following. The compliance dates specified below supersede the compliance dates specified in the 11 July 2022 NOV and Directive Order except for enforcement purposes.

- 1. By (no later than 2 years from date of adoption) and consistent with the time schedules below, the Dischargers shall comply with all aspects of WDRs Order 5-00-093 and subsequent WDRs that rescind and replace Order 5-00-093.
- 2. By **(XX July 2023)** the Dischargers shall submit a complete Report of Waste Discharge (RWD) containing the following:
 - a. Signed Form 200.

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(https://www.waterboards.ca.gov/publications forms/forms/docs/form200.pdf)

- b. A technical report and proposed time schedule for implementing short-term measures to bring the WWTF back into compliance with the WDRs. The technical report must include a time schedule for completing necessary repairs and improvements to Pond 3 by no later than (two years from the date of adoption), including detailed design plans; an engineering analysis of existing effluent flows; current WWTF storage and disposal capacities; a determination of how much LAA acreage is needed to comply with the WWTF's existing and currently permitted flows; and a time schedule not to exceed two years to obtain the necessary LAA acreage to ensure compliance with the existing WDRs. The technical report must also describe the City's progress towards securing funding necessary to complete the Pond 3 repairs and improvements and an anticipated date for receiving the funding. The technical report and time schedule are subject to Executive Officer approval.
- c. A technical report and proposed time schedule for upgrading the WWTF to provide for treatment and disposal of wastes in the long-term. At a minimum, the technical report must include a description of the proposed treatment system to be used, proposed disinfection system (if applicable),

and a detailed time schedule for completing tasks associated with the planning, design, and construction phases for upgrading the WWTF. The technical report must also describe the Dischargers' plans for securing funding necessary for completing the upgrades. The technical report and time schedule are subject to Executive Officer approval.

3. By no later than **(30 days from the date in 2.b.),** the Dischargers shall submit a final construction report. At a minimum, the final construction report must include detailed descriptions of the work done to repair and improve Pond 3 and as-built construction plans.

Sewage Connection Restriction—

KERN COUNTY

- 4. Connections to the City's sewage collection system by individual households or businesses that did not have a building permit approved prior to the XX April 2023 Public Hearing (for CDO R5-2023-XXXX) are prohibited.
- 5. The following may be excluded from the sewage connection restriction upon a project-specific determination of eligibility by the Central Valley Water Board:
 - a. Projects which normally do not require a building permit and for which construction commenced prior to the XX April 2023 Public Hearing.
 - b. Projects that would alleviate an extreme public hardship or public health problem.
- 6. The sewage connection restriction will remain in effect until removed by the Central Valley Water Board. The Central Valley Water Board may remove the restriction upon finding that the violations of requirements which were the basis for imposing the restriction have ceased and consistent compliance with those requirements has been achieved.
- 7. The Central Valley Water Board may, prior to removing the sewage connection restriction, grant a limited exception to allow additional connections to the sewage collection system upon finding that the Dischargers have met the following conditions:
 - Consistent compliance with requirements can be achieved only by construction of a facility which will take a substantial period of time to complete.
 - b. The Dischargers have the capacity, authority, and financial resources to complete the corrective measures necessary to achieve compliance and is currently proceeding with such corrective measures.

- c. The corrective measures necessary to achieve compliance will be completed and placed in operation by the Dischargers in the shortest practicable time.
- d. All practicable interim repairs and improvements which can be made have been made; and
- e. During the interim period of time until compliance with requirements can be fully achieved, the discharge will be managed, operated, maintained, and repaired so as to reduce to a minimum the violations which resulted in the imposition of the connection restriction, and that such minimum violations for the interim period of time involved will not significantly impair water quality or beneficial uses.
- 8. Requests for exceptions to the sewage connection restriction shall be submitted in writing to the Central Valley Water Board and include justification for the exception request.
- 9. The Central Valley Water Board shall, upon finding that the above conditions are no longer met by the Dischargers, revoke the exception, and re-impose the sewage connection restriction.

In addition to the above, the Dischargers shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order. As required by the California Business and Professions Code, all technical reports submitted to comply with this Order shall be prepared by, or under the supervision of, a California Licensed Engineer or Professional Geologist and signed/stamped by the licensed professional.

All documents submitted under this Order shall be submitted electronically via e-mail to: centralvalleyfresno@waterboards.ca.gov. The following information shall be included in the body of the e-mail: Attention Dale Harvey, City of Arvin, Arvin WWTF, CDO R5-2023-XXXX, CIWQS Place ID 237104.

This Order shall remain in effect until it is rescinded by the Central Valley Water Board.

ENFORCEMENT

If the Dischargers fail to comply with the provisions of this Order, the Central Valley Water Board may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to

the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 PM on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 PM on the next business day. Copies of the law and regulations applicable to filing petitions are available on the Internet (at the address below) and will be provided upon request.

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

CERTIFICATION

· ·	fficer, do hereby certify that the foregoing is a full, adopted by the California Regional Water Quality on on April 2023.
	PATRICK PULUPA,

Order Attachments and Figures:

KERN COUNTY

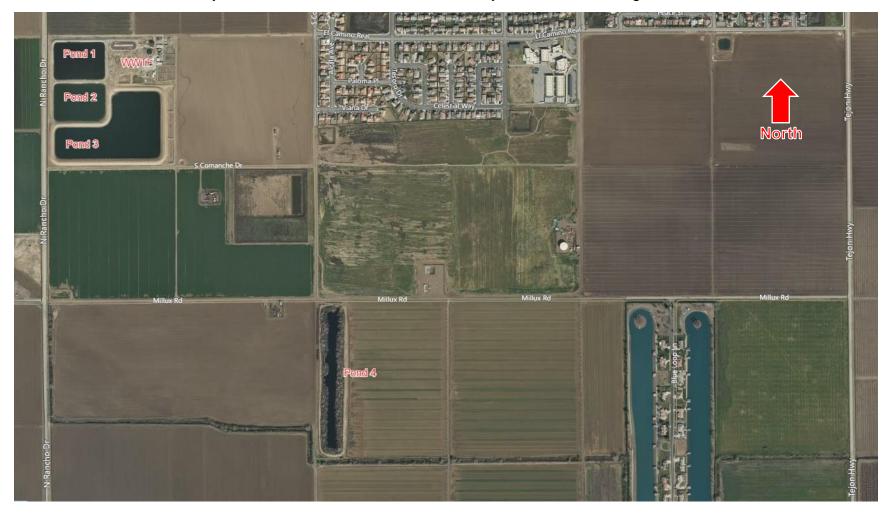
Attachment A – City of Arvin WWTF and Effluent Storage Ponds Attachment B – LAAs Historically Used for Wastewater Recycling Figure 1 – LAAs Currently Available for Wastewater Recycling

Figure 1
Land Application Areas Currently Available for Wastewater Recycling

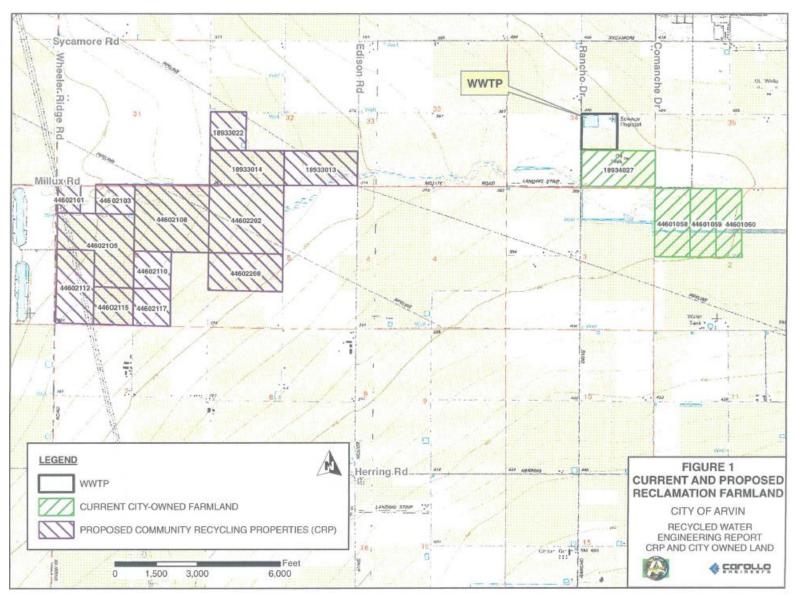


The map shown in Figure 1 was provided by the City of Arvin in a Water Balance Report dated 21 July 2022

Attachment A
City of Arvin Wastewater Treatment Facility and Effluent Storage Ponds



Attachment B
Land Application Areas Historically Used for Wastewater Recycling



The map shown in Attachment B was provided by the City of Arvin in an Engineering Report dated July 2006