COMMUNITY
WATER CENTER

April 21, 2007

Polly Lowry
Central Valley Regional Water Quality Control Board
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CC: Pamela Creedon, Executive Officer
Karl Longley, Board Chair
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Christopher Cabaldon, Board Member
Kate Hart, Board Member
Sopac Mulholland, Board Member
Dan Odenweller, Board Member

RE: Comments on Tentative Waste Discharge Requirements General Order for Existing Milk Cow Dairies

Dear Ms. Lowry:

The Community Water Center submits these comments to the Central Valley Regional Water Quality Control Board ("Regional Board") on behalf of itself, the Center on Race, Poverty & the Environment, the Motherload Chapter of the Sierra Club and the Asociacion de Gente Unida por el Agua ("AGUA"), a coalition of communities and non-profit organizations whose mission is to secure safe, clean and affordable water for all.

This Tentative Waste Discharge Requirements General Order for Existing Milk Cow Dairies ("Draft WDR") is ineffective in protecting the groundwater quality on which 90% of the Central Valley relies as a drinking water source. This Draft WDR is illegal because it amounts to a permit to continue to contaminate groundwater in violation of the Porter Cologne Water Quality Control Act and the State's Anti-degradation Policy;[1] it fails to support the findings and therefore the terms of the Draft WDR, and disproportionately impacts low income communities of color.

The Central Valley Region has approximately 75% of the State's drinking water violations due to nitrate contamination of groundwater sources.[2] There is no question that Dairy facilities are responsible for some significant share of this groundwater contamination. Already studies show that at least one nitrate polluted well was found at 63% of dairies sampled in Tulare County, all due to existing dairy operations that may

[1] See Water Code Section 13000 et. Seq. and State Water Resources Control Board, Resolution 68-16 (Oct. 24, 1968).
[2] DHS Annual Compliance Report for Public Drinking Water Systems 2004, available at http://www.dhs.ca.gov/ps/ddwem/publications/AnnualComplianceReport2004.pdf

have been in compliance with Title 27 regulations.[3] Therefore, the Regional Board must ensure that this draft WDR imposes the highest standards in order to address this significant source of groundwater contamination plaguing our valley's drinking water.

I. This Draft WDR will allow for degradation of groundwater quality, in violation of the State Board's Anti-degradation Policy.

The State Water Resources Control Board, Resolution 68-16 (Oct. 24, 1968) [hereafter "Anti-degradation Policy"] requires that *prior* to allowing discharges to the surface or groundwater of the state, the Regional Board must impose the best practicable treatment or control standards necessary to ensure that 1) pollution or nuisance will not occur, and 2) the highest water quality consistent with the maximum benefit to the people of the State will be maintained.[4] This draft WDR will allow for continued discharge of pollutants into the region's groundwater, without imposing the best practicable control requirements and without first determining whether increased contamination of the groundwater is consistent with the maximum benefit to the people of California.

Specifically, this permit does not require the best available control technology or adequate performance standards in existing waste disposal ponds, corrals, wastewater conveyance systems, and fails to require enforceable permits for manure delivered off-site to third parties or financial assurances for closure and clean up. Additionally, the permit illegally fails to require adequate groundwater monitoring to ensure that facilities are not discharging waste that exceeds water quality objectives or otherwise contributes to the degradation of the water of the state. These failures render the permit illegal.

A. This Draft WDR fails to require the Best Practicable Control Technologies (BPCT) to prevent groundwater degradation.

This WDR should require the BPCT to ensure that the groundwater that 90% of us rely on for our drinking water is adequately protected.[5] However, this Draft WDR fails to require the BPCT in a number of important areas of discharge on existing dairy facilities.

In order to comply with the groundwater limitations set out in this Draft WDR General Order,[6] as well as with the Anti-degradation Policy, the permit must require the BPCT necessary to prevent degradation of groundwater. The minimum performance standard used should be no change in groundwater quality. A performance standard of no exceedances of water quality objectives would allow for some degradation, just not enough degradation to exceed water quality objectives. Therefore, a no exceedance

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[3] See Waste Discharge Requirements General Order for Existing Milk Cow Dairies, IS: 7 (3/23/07).
[4] State Water Resources Control Board, Resolution 68-16 (Oct. 24, 1968).
[5] BPCT is required by the State Water Resources Control Board Resolution 68-16 for to ensure that high quality groundwater is protected.
[6] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order, pg 17 (3/23/07).

standard would not comply with either the Anti-Degradation Policy or the stated groundwater limitations of the Draft WDR.

i. Retention Ponds

Specifically, this Draft WDR does not require the BPCT for existing retention ponds. Numerous studies, including one commissioned by the State Water Resources Control Board, concluded that existing retention pond requirements under Title 27 of the California Code of Regulations for confined animal facilities were ineffective to protect groundwater.[7] Yet, the WDR allows existing retention ponds to continue to be regulated by Title 27 standards. Because the WDR allows the retention ponds to continue to operate under these ineffectual old standards, the WDR fails to ensure that pollution and nuisance will be eliminated, in violation of the Anti-degradation Policy.

In fact, the Draft WDR admits that stricter standards must be imposed for new or reconstructed lagoons:[8]

> It would be impossible to determine if any proposed pond design would be protective of groundwater quality without an evaluation of site-specific information on depth to groundwater, existing groundwater quality beneath the facility, nature of the geologic material between the bottom of the retention pond and the first encountered groundwater, nature of the leachate from the retention pond, and proximity to existing supply wells. Any proposed pond design that does not include such an evaluation should be the most conservative possible to assure protection of groundwater under any conditions.[9]

Yet, it fails to apply these same standards for existing lagoons.

Instead the Draft WDR only requires "dischargers to provide an engineering evaluation of an existing pond and propose and implement approved remedial measures" *after* "groundwater monitoring demonstrates that the existing pond has adversely impacted groundwater quality."[10] But without a timeline in the Draft WDR requiring

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[7] Brown, Vence and Associates. 2003. Review of Animal Waste Management Regulations, Task 2 Report: Evaluate Title 27 Effectiveness to Protect Groundwater Quality. (finding that the NRCS Standards may not be sufficient for all geologic environments.); North Carolina Department of Environment and Natural Resources. 1998. Impact of Animal Waste Lagoons on Ground Water Quality, (finding that lagoons constructed to NRCS standards in either moderately vulnerable or vulnerable sites showed evidence of groundwater contamination.); Lee, G. Fred and Anne Jones-Lee. Feb. 2007. Groundwater Quality Protection Issues, available at http://www.gfredlee.com/plandfil2.htm#gwprotection (explains that a simple calculation reveals one foot of 10^{-6} cm/sec compacted clay under one foot of leachate head can be penetrated within a few months.); Arnold, Stephen D. and Edward A. Meister. 1999. Dairy Feedlot Contributions to Groundwater Contamination, A Preliminary Study in New Mexico, (finding that clay linings were less effective than synthetic liners for reducing groundwater contamination.).

[8] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Information Sheet, pg 19 (3/23/07).

[9] Id.

[10] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order, pg 12 (3/23/07).

existing dairies to implement a groundwater monitoring program that would demonstrate that a pond has adversely impacted groundwater quality, there is no assurance that existing discharges will ever implement BPCT for existing ponds.

Instead, the requirements for new ponds should apply to all ponds. Because the WDR does not apply BPCT standards to existing retention ponds, the WDR fails to comply with the Porter Cologne Water Quality Control Act and the state's Anti-degradation Policy. Furthermore, there is insufficient evidence to support any finding that the Draft WDR will not cause degradation of receiving waters and no explanation of the Board's reasoning in reaching the conclusions set forth in the General Order's Findings or Information Sheet.[11]

Additionally, the requirement that wastewater holding ponds that are below-grade should only be required to maintain a one (1) foot freeboard following a storm event, rather than the standard two (2) feet,[12] is additionally less than the BPCT, and therefore illegal.

ii. Corrals & Milk Parlor

The minimum BPCT that should be required in the Draft WDR to comply with the Antidegradation Policy and conform to the groundwater limitations set forth in this Draft WDR, are set forth in *The Summary of Minimum Criteria and BPCT to approach a no change in Groundwater Quality Performance Goal* in the State Water Board - commissioned report by Brown, Vence & Associates.[13] Virtually none of the criteria set forth in that report is required in this Draft WDR, despite citations to numerous studies in the report justifying the need for such criteria to protect groundwater.[14]

iii. Wastewater Conveyance

The Draft WDR allows ditches, swales, and/or earthen berm channels to be used for conveyance of process wastewater collected in the production area to the retention pond, and from the retention pond to the land application area, or other water management units.[15] Process wastewater should be required to be transported in lined or otherwise contained conveyance systems in order to comply with the Anti-degradation Policy and the Groundwater Limitations of this Draft WDR General Order. At the very least, testing should be required to determine whether water quality would be degraded

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[11] See *Topanga Assn. for Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515. See also Comments for this Draft WDR submitted by the Environmental Law Foundation (4/23/07) for further discussion of this issue.

[12] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order pg 13 (3/23/07). Cal. Code Regs. Tit. 2, Sec. 20375 (Title 27 requires a minimum two feet freeboard for all surface impoundments unless certain conditions are met.).

[13] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases (2004), pg 43 - 49.

[14] Id.

[15] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order pg 14 (3/23/07).

due to discharges from unlined conveyance systems before permitting such a low standard, particularly in vulnerable geologic environments.

iv. Off-Site Disposal

This Draft WDR fails to impose best management practices and BPCT for solid manure by failing to impose enforceable requirements on manure discharged to third parties. The Draft WDR only requires that a written agreement with the third party (which must specify plans for the use and management of the third party's land application area) be included in the Discharger's Nutrient Management Plan.[16] There is no nutrient management plan requirement for third parties receiving solid manure, nor is there any groundwater protection aspect of a nutrient management plan in the only other regulatory program that might apply to third parties, namely the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands[17]

By permitting solid manure to be transferred to third parties without an enforceable mechanism to ensure application at agronomic rates, the Board is failing to prevent groundwater degradation from one of the major sources of contamination.[18] We recommend that third parties receiving solid manure from dairy facilities be required to submit a nutrient management plan showing the nitrogen and salt balance for all land to which solid manure is applied.

B. Groundwater monitoring requirements are inadequate to protect groundwater.

Without groundwater monitoring wells that are sufficient to characterize groundwater quality up gradient and down gradient from contaminating areas on each facility, it will be impossible to ensure that the facility is not degrading groundwater. Therefore, unless *all* facilities are required to install monitoring wells, this Draft WDR fails to comply with the Anti-degradation Policy and the Groundwater Limitations set forth in the Draft WDR. Unfortunately, the Draft WDR does not require all facilities to install adequate groundwater monitoring systems. Instead, it requires only groundwater monitoring of existing supply wells, unless additional groundwater monitoring is required by the Executive Officer.[19] The additional monitoring requirements set forth in Attachment A states that the "Executive Officer will order 100 – 200 … [dairies] per

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[16] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order Pg 15 - 16. (3/23/07); Attachment C: Technical Standards for Nutrient Management for Existing Milk Cow Dairies C-3. (3/23/07).

[17] Order No. R5-2006-0053; Order No. R5-2006-0054.

[18] For an analysis done by the Santa Ana Regional Water Quality Control Board on this very issue, see Santa Ana Order No. 99-11. That regional board found that the vast majority of salt and nitrate contamination of groundwater from dairies occurred through application of solid manure.

[19] Monitoring and Reporting Program General Order for Existing Milk Cow Dairies, Monitoring and Reporting Program MRP-7 (3/23/07).

year" to install monitoring wells. However, there is no set timeframe for full implementation at all facilities.[20] Such a system is inadequate and illegal.

Firstly, the groundwater monitoring requirement to merely obtain groundwater data from existing domestic and agricultural supply wells on the facility violates the State Anti-degradation Policy by failing to adequately protect groundwater resources. Such a monitoring program cannot determine the risk a given dairy presents to groundwater, but instead will merely determine how polluted groundwater under the facility has already become. Existing domestic and irrigation supply wells are usually sited in areas least likely to be contaminated, i.e. up gradient of the facility or otherwise protected from contamination, and often at depths below the reach of recent groundwater pollution. Therefore, such testing will likely only show legacy pollution or pollution from a variety of sources, including up stream dischargers. Such monitoring requirements, while important to establish current levels of groundwater contamination, are insufficient to ensure that the requirements of this order comply with the Anti-degradation Policy, meet the Groundwater Limitations in this Draft WDR, or support its findings.

Second, because the Draft WDR does not contain any time schedule, progress reports or interim requirements for completing the Monitoring Well Program, there is no assurance that facilities will ever be required to install the additional monitoring wells required in Attachment A of the Monitoring and Reporting Program. As such, this WDR fails to require the minimum criteria and BPCT required to comply with the Anti-degradation Policy and the Groundwater Limitations of this Draft WDR.

While we understand that not all 1600 may be able to install groundwater monitoring systems immediately, and that the factors used for ranking groundwater monitoring priority in Table 5 are meant to prioritize those facilities that may be causing the highest risk of contamination of drinking water supplies, the lack of concrete deadlines and requirements for full implementation by all facilities is unacceptable. The Draft WDR must include stricter timeframes for installations and ultimately ensure that all facilities are required to install groundwater monitoring wells and appropriate mitigation within 10 years to ensure compliance with water quality objectives, as required by the Basin Plans.[21] Groundwater monitoring at all facilities would also meet the groundwater monitoring objectives set in the region's Basin Plans.[22]

Thirdly, the additional groundwater monitoring requirements in Attachment A are inadequate, even if required by the Executive Officer. Specifically, Attachment A must require Vadose Zone Monitoring in Retention Ponds, Corrals, and land application areas in order to adequately assess whether the facility is meeting the overall Groundwater Limitation objectives in the Draft WDR. Specifically, as set forth in Brown, Vence & Associates Task 4 Report,

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[20] Monitoring and Reporting Program General Order for Existing Milk Cow Dairies, Additional Groundwater Monitoring, Monitoring Well installation and Sampling Plan and Monitoring Well Installation Completion Report for Existing Milk Cow Dairies. MRP-17 (3/23/07).

[21] Sacramento and San Joaquin River Basin Plan and the Tulare Lake Basin Plan.

[22] See Tulare Lake Basin Plan VI.3. (1995); 2002 Triennial Review of the Water Quality Control Plan for the Tulare Lake Basin pg 3-4.

> Vadose zone monitoring should include: (1) a sufficient number of background monitoring points established at appropriate locations and depths to yield soil pore liquid samples or soil pore liquid measurements that represent the quality of soil pore liquid that has not been affected by a release from the retention pond or corral; and (2) a sufficient number of monitoring points established at appropriate occasions and depths to yield soil pre liquid samples or soil pore liquid measurements that provide the best assurance of the earliest possible detection of a release from the basin or corral [or land application area].[23]

Studies indicate that Vadose Zone Monitoring is necessary to detect contamination *before* widespread degradation has occurred.[24] Without adequate groundwater monitoring requirements at every facility to detect contamination *before* widespread degradation occurs, this Draft WDR will be illegally permitting discharges that degrade the waters of this state.

Additionally, the Monitoring Well Installation and Sampling Plan should require information on groundwater recharge basins within 2000 feet of each facility.[25]

C. Water sampling for surface and groundwater discharges and ground water monitoring requirements are inadequate to protect human health and therefore beneficial uses.

This WDR fails to require adequate monitoring for all chemicals that are discharged into waters of the state by existing dairy facilities. Specifically, pathogens and antibiotics (when used at a facility) should be among the constituents for which groundwater and surface water discharges are tested. Recent studies suggest that antibiotics used for growth in dairy cattle are not fully metabolized by the animals and instead pass through the body and then are discharged into the wastewater stream.[26] Additionally, studies indicate that humans can be exposed to pathogens from discharges by confined animal feeding operations into surface and groundwater supplies.[27]

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[23] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases (2004), pg 48.

[24] See Id; Lee, G. Fred and Anne Jones-Lee. Feb. 2007. Groundwater Quality Protection Issues, available at http://www.gfredlee.com/plandfil2.htm#gwprotection; Letey, J., Dilemma: Managing Ground Water Quality and irrigated Agriculture, In: DeVries, J.J. and Woled, J. (Ed.), "Are California's Groundwater Resources Sustainable?" Proceedings of the 19th Biennial Conference of Ground Water, Water Center Report No. 84, ISSN 0575-4968, University of California Centers for Water and Wildland Resources, California Department of Water Resources, State Water Resources Control Board, Sacramento, CA pp 97 – 104, December (1994).

[25] Monitoring and Reporting Program General Order for Existing Milk Cow Dairies, Additional Groundwater Monitoring, Monitoring Well installation and Sampling Plan and Monitoring Well Installation Completion Report for Existing Milk Cow Dairies. MRP-20 (3/23/07).

[26] See *Antibiotics Used for Growth in Food Animals Making Their Way into Waterways* (Oct. 25, 2004) at http://www.sciencedaily.com/releases/2004/10/041025120141.htm

[27] William R. MacKenzie, *et al*; "A Massive Outbreak in Milwaukee of Cryptosporidium Infection Transmitted through the Public Water Supply," 331 *The New England Journal of Medicine*, 161 (1994);

Therefore, groundwater and surface water discharges should be tested for pathogens and other chemicals that may be present in wastewater discharges.

To that end, the Existing Conditions Report in Attachment A should include antibiotics and hormones in its list of chemical use.[28] Those substances listed in a facility's Existing Conditions Report should be the basis of requirements for groundwater and surface water testing for each facility.

II. The Regional Board should conduct a CEQA process

The Regional Board should conduct the appropriate environmental review for this Draft WDR, as required by CEQA. As a matter of law, the categorical exemption for "existing facilities" cannot apply to this Draft WDR. The Regional Board's general dairy waste discharge permit for a class of 1600 existing dairies – does not fall within the type of project that section 15301 of Title 23, California Code of Regulations ("CEQA Guidelines") exempts. Even if the Regional Board could lawfully exempt the WDR, the cumulative impact and unusual circumstances exceptions to categorical exemptions apply and render the categorical exemption inoperative.

Firstly, the express terms of Section 15301 do not encompass permit *programs* applicable to a broad class of private facilities. The examples of "existing facilities" exempted by Section 15301 do not include general permits or analogous situations.[29]

Secondly, the term "facilities" in Section 15301 does not contemplate a *class* of facilities which would normally have a significant effect on the environment. Dairies, individually and cumulatively, have a significant effect on the environment.[30] Dairies are

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Neil J. Hoxie, *et al*; "Cryptosporidiosis-Associated Mortality Following a Massive Waterborne Outbreak in Milwaukee, Wisconsin," 87 *American Journal of Public Health*, 2032 (1997); Atwill, Edward R. (1998). Microbial pathogens excreted by livestock and potentially transmitted to humans through water. http://vric.ucdavis.edu/issues/bulletinboard/progress.pdf; Dewailly E., Poirier C. Meyer F.M. (1986) Health hazards associated with windsurfing on polluted water. American Journal of Public health 76:690-1; Kolpin, D.W., et al. (2002) Pharmaceuticals, hormones, and other organic wastewater contaminants in US streams, 1999-2000: A National reconnaissance. *Environ. Sci. Technol.* 36:1202; Krewski D., et al. (2002) Managing health risks from drinking water – a report to the Walkerton inquiry. *J. Toxicol Environ. Health A.* Nov. 8;65(21):1635-823; McDermott, P.F. et al., (2002) The food safety perspective of antibiotic resistance. *Animal Biotechnology* 13:71-82; Nicholson F.A. et al., (2000). A study on farm manure applications to agricultural land and an assessment of the risks of pathogen transfer into the food chain. A report to the Ministry of Agriculture Fisheries and Food; Nicholson F. A. et al., (2004). Assessing and managing the risks of pathogen transfer from livestock manures into the food chain. *Water and Environment Journal*18 (3):155-160.

[28] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, A-3. (3/23/07).

[29] *See* CEQA Guidelines §§ 15301(a)-(p).

[30] See Sharp, Renee & Bill Walker, *Particle Civics; How Cleaner Air in California Will Save Lives and Save Money*, Environmental Working Group; San Joaquin Valley Air Pollution Control District, *Air Pollution Control Officer's Determination of VOC Emission Factors for Dairies*. Aug. 1, 2005; American Lung Association, *State of the Air 2005; Protect the Air You Breathe*, Spring, 2005; Susan S. Schiffman, "The Effect of Environmental Odors Emanating from Commercial Swine Operations on the Mood of Nearby Residents," 37 *Brain Research Bulletin*, 369 (1995); Ken Silvertstein, "Meat Factories," *Sierra* (January-February, 1999); Elliot Diringer, "In Central Valley, Defiant Dairies Foul the Water," *San Francisco Chronicle,* July 7, 1997 at A1; Marla Cone, "State Dairy Farms Try to Clean Up their Act," *Los*

therefore not within the class of facilities entitled to a categorical exemption under CEQA Guidelines Section 15301.[31]

Thirdly, even if the categorical exemption were applicable here, the Regional Board must still prepare an Environmental Impact Report ("EIR") because the "cumulative impact" and "unusual circumstance" exceptions to the categorical exemptions apply.[32] A lead agency cannot use the existing facilities categorical exemption when the cumulative impact of successive projects in the same place, over

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Angeles Times, April 28, 1998 at A1; Statement of Michael Cook, Director of the Office of Wastewater Management and Elaine Stanley, Director of the Office of Compliance at the U.S. Environmental Protection Agency before the Subcommittee on Livestock, Dairy and Poultry and the Subcommittee on Forestry, Resource Conservation and Research of the Committee on Agriculture U.S. House of Representatives, May 13, 1998, "Reducing Water Pollution from Animal Feeding Operations;" Harter, Thomas et al., *Shallow Groundwater quality on diary farms with irrigated forage crops*, Journal of Contaminant Hydrology 55 (2002) 287-315; Richard T. Estrada, "Commotion over manure; Dangerous side of dairy farms; Nitrate-laden waste water poses hazards to residents' health," *The Fresno Bee,* December 28, 1997 at C1; Regional Water Quality Control Board Santa Ana Region, *Dairies and their Relationship to Water Quality Problems in the Chino Basin, California* (July 1990), at I-1; Central Valley Regional Water Quality Control Board, *Staff Report: Administrative Draft NPDES General Permit for Milk Cow Dairies.* Dec. 2004; Brown Vence & Associates, *Review of Animal Waste Management Regulations; Task 2 Report: Evaluate Title 27 Effectiveness to Protect Groundwater Quality.* San Jose State University Foundation Oct. 2003; Brown Vence & Associates, *Review of Animal Waste Management Regulations; Task 3 Report: Comparison of Regulations Designed to Protect Groundwater Quality from Releases of Confined Animal Facilities*. San Jose State University Foundation Oct. 2003; Anna M. Fan *et al*; "Evaluation of the Nitrate Drinking Water Standard with Reference to Infant Methemoglobinemia and Potential Reproductive Toxicity," *Regulatory Toxicology and Pharmacology*, 135, 136-137 (1987); L. Knobeloch *et al*; "Methemoglobinemia in an Infant - Wisconsin, 1992," 42 *Morbidity and Mortality Weekly Report*, 217; Anna M. Fan and Valerie E. Steinberg, "Health Implications of Nitrate and Nitrite in Drinking Water: An update on Methemoglobinemia Occurrence and Reproductive and Developmental Toxicity," 23 *Regulatory Toxicology and Pharmacology* 35, 36-37 (1996); William R. MacKenzie, *et al*; "A Massive Outbreak in Milwaukee of Cryptosporidium Infection Transmitted through the Public Water Supply," 331 *The New England Journal of Medicine*, 161 (1994); Neil J. Hoxie, *et al*; "Cryptosporidiosis-Associated Mortality Following a Massive Waterborne Outbreak in Milwaukee, Wisconsin," 87 *American Journal of Public Health*, 2032 (1997); Axtell, Richard C., *Fly Control in Confined Livestock and Poultry Production.* CIBA-CEIGY Corporation (1985) 1-59; Atwill, Edward R. (1998). Microbial pathogens excreted by livestock and potentially transmitted to humans through water. http://vric.ucdavis.edu/issues/bulletinboard/progress.pdf; Dewailly E., Poirier C. Meyer F.M. (1986) Health hazards associated with windsurfing on polluted water. American Journal of Public health 76:690-1; Kolpin, D.W., et al. (2002) Pharmaceuticals, hormones, and other organic wastewater contaminants in US streams, 1999-2000: A National reconnaissance. *Environ. Sci. Technol.* 36:1202; Krewski D., et al. (2002) Managing health risks from drinking water – a report to the Walkerton inquiry. *J. Toxicol Environ. Health A.* Nov. 8;65(21):1635-823; McDermott, P.F. et al., (2002) The food safety perspective of antibiotic resistance. *Animal Biotechnology* 13:71-82; Nicholson F.A. et al., (2000). A study on farm manure applications to agricultural land and an assessment of the risks of pathogen transfer into the food chain. A report to the Ministry of Agriculture Fisheries and Food; Nicholson F. A. et al., (2004). Assessing and managing the risks of pathogen transfer from livestock manures into the food chain. *Water and Environment Journal*18 (3):155-160.

[31] *See Azusa Land Reclamation Company v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1192-1193, 1196 (definition of facilities in § 15301 should not extend to a class of businesses that normally would have a significant effect on the environment).

[32] *See* CEQA Guidelines §§ 15300.2(b), 15300.2(c).

time, is significant.[33] Nor can the lead agency rely upon the existing facilities exemption when there is a reasonable chance that the activity will have a significant effect due to unusual circumstances.[34] Dairies have a cumulatively significant impact on surface water quality, groundwater quality, and air quality.[35]

Ultimately, the only way the public can be sure that this new general WDR program will not result in substantial harm to public health or the environment is through the CEQA process. Of particular importance, the CEQA process would ensure that cumulative impacts are adequately analyzed and addressed. Cumulative impacts from this Draft WDR are a major concern since it will result in continued discharges to groundwater from approximately1600 dairy facilities of contaminants, such as nitrate, that are already causing major impacts on valley communities.[36]

III. This Draft WDR does not establish effective mechanisms to ensure enforcement and compliance with clean up of groundwater contamination.

The Draft WDR requires that the dischargers submit a closure plan at least 90 days before ceasing operations, and a closure report 30 days after completion of site closure.[37] However, the Order requires no bonding, insurance, or other financial guarantee that a facility will be able to pay for closure and clean up. Studies show that the greatest risk of groundwater contamination from retention ponds and corrals may occur after a facility is no loner in use.[38] Therefore, it is vital for the Regional Board to ensure that dairy facilities will have adequate resources to clean up closed facilities properly.[39] Additionally, the requirements should state that closure requirements will require at least the minimum criteria and BPTC to meet the performance goal required by the Anti-degradation Policy -- no change in groundwater quality.[40]

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[33] CEQA Guidelines § 15300.2(b).
[34] CEQA Guidelines § 15300.2(c).
[35] See note 30 of these comments.
[36] For public well impacts see DHS Annual Compliance Report for Public Drinking Water Systems 2004, available at http://www.dhs.ca.gov/ps/ddwem/publications/AnnualComplianceReport2004.pdf; for private well impacts see the Tulare County Voluntary Domestic Well Assessment Program 2006, available at http://www.waterboards.ca.gov/gama/docs/table_summary_dec06.pdf; See also Waste Discharge Requirements General Order for Existing Milk Cow Dairies Information Sheet, pg 6 (11/22/06)
[37] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, General Order, pg. 18 (3/23/07).
[38] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases, 2.1.3 (2004), citing Sweeten, J.M. undated. Groundwater Quality Protection for Livestock Feeding Operations. Texas Agricultural Extension Service; Chang, et al. 1973. Waste Accumulation on a Selected Dairy Corral and Its Effect on the Nitrate and Salt of the Underlying Soil Strata; Journal of Environmental Quality, Volume 2, No. 2, pp. 233-327.
[39] Brown, Vence & Associates, Task 3 Report: Comparison of Regulations Designed to Protect Groundwater Quality From Releases of Confined Animal Facilities, Table 4-1 (2004).
[40] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases. (2004), pg. 48 - 49.

IV. This Draft WDR must include strong enforcement actions for groundwater contamination violations.

Additionally, this Draft WDR requires no mandatory enforcement action and does not list groundwater quality violations in its list of high priority violations for enforcement.[41] Much of the requirements in the Draft WDR that are meant to protect groundwater rely on signed certification statements of completion and results of groundwater monitoring.[42] However, without effective enforcement policies and monitoring requirements, the Draft WDR fails to support its findings and comply with the Anti-degradation Policy. The Draft WDR should include *mandatory* fines and enforcement for fraud if a signed certification is found to be knowingly inaccurate. Additionally, full implementation of all additional groundwater monitoring requirements must be required for each facility in order to make the water quality limitations enforceable.

IV. This Draft WDR will disproportionately impact low income communities and communities of color because it does not protect groundwater from continued degradation from existing dairies.

This Draft WDR will allow further groundwater degradation from existing dairies, particularly nitrate contamination, which is the number one cause of drinking water well closure and contamination in the State. Already Latino and low-income communities are more likely to have contaminated drinking water in the Central Valley Region, and this is most often due to high levels of nitrate in the groundwater.[43] Additionally, Latino and low-income communities are less likely to have health care and access to treatment or substitute water sources, and are more likely to be exposed to cumulative impacts through other media (such as air). Therefore, this Draft WDR would disproportionately impact low income communities and communities of color, in violation of California Government Code Section 11135.

Conclusion

The Regional Board must act to address the impact of the 1600 existing dairies in the Central Valley and effectively protect the groundwater that nearly all valley communities rely on as drinking water sources. This Draft WDR fails to protect the beneficial uses of the waters of the state in the ways outlined above. We are also concerned that the 50% reduction on annual fees offered to facilities certified by a quality assurance program must not allow this program to be inadequately funded. While we support the idea of creating incentives for good actors, we urge the Board to carefully

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[41] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, IS:26-27 (3/23/07).
[42] See requirements in Waste Discharge Requirements General Order for Existing Milk Cow Dairies, IS:24-26 (3/23/07).
[43] Environmental Justice Coalition for Water, *Thirsty for Justice: A People's Blueprint for California Water* (2005).

consider whether this would in fact hamper the program's ability to fully staff and implement the Board's mandate. We look forward to continuing to work with the Board to ensure that our waters are adequately protected.

Sincerely,

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Ingrid Brostrom
Staff Attorney
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Dale Stocking
Mother Lode Chapter Chair
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