



## Inland Empire Waterkeeper

*Advocacy • Education • Restoration • Enforcement*

6876 Indiana Avenue, Suite D  
Riverside, CA 92506  
Phone (951) 530-8823  
Fax (951) 530-8824  
Website [www.iewaterkeeper.org](http://www.iewaterkeeper.org)

January 15, 2013

*Sent via E-Mail*

Regional Water Quality Control Board – Santa Ana Region  
ATTN: Steve D. Mayville  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

RE: Inland Empire Waterkeeper Comments on R8-2013-0001

Dear Mr. Mayville,

Inland Empire Waterkeeper (“Waterkeeper”) is an environmental non-profit organization dedicated towards advocacy, education, restoration, and enforcement in the Santa Ana River watershed. Waterkeepers’ members use and enjoy the unique waterways of the Inland Empire and rely on our region’s groundwater on an everyday basis. For those reasons, we have focused our attention on the Tentative General Waste Discharge Requirements for Confined Animal Feeding Operations (Dairies and Related Facilities) within the Santa Ana Region (“Dairy Permit” or “R8-2013-0001”).

The following are Waterkeeper’s principle comments on the draft Dairy Permit and reflect many of the issues raised during the December 2012 public workshop. Waterkeeper, and our members, strongly encourage the Regional Water Quality Control Board – Santa Ana Region (“Regional Board”) to schedule at least one additional public workshop in order to discuss these issues in detail with the Regional Board members and the community at large.

- I. THE REGIONAL BOARD’S DAIRY PERMIT VIOLATES CALIFORNIA’S ANTIDEGRADATION POLICY BECAUSE IT PROVIDES FOR THE CONTINUED DISCHARGE OF POLLUTANTS THAT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY OBJECTIVES AND FAILS TO PROVIDE A MECHANISM TO DETERMINE COMPLIANCE.

The Dairy Permit violates the state’s antidegradation policy because the Regional Board’s mechanism for ensuring that ground water is not degraded is insufficient to enforce the Dairy Permit’s directive. The Dairy Permit prohibits the “discharge of wastes to the ground [that] cause or contribute to an exceedance of any applicable water quality objective specified in the Basin Plan.” R8-2013-0001, II.E. The applicable Basin Plan states that the primary drinking water standard for nitrate (as NO<sub>3</sub>) is 45 mg/L or 10 mg/L (as N). Basin Plan at 4-21. The water quality objectives for the San Jacinto River Basin for nitrate as nitrogen for Gardner Valley, Canyon, Hemet – South, Lakeview – Hemet North and Idllwild Area are 2.0, 2.5, 4.1, 1.8 and a narrative standard, respectively. Basin Plan at 4-51.

According to the San Jacinto Watershed Integrated Regional Dairy Management Plan, the nitrate as nitrogen ambient data for Lakeview – Hemet North is 4.3 mg/L. Table 4-2. This results is 2.4 times the water quality

objective the Lakeview – Hemet North. The data is similar to the other management zones in San Jacinto River Basin. As the Dairy Permit acknowledges with few exceptions, the San Jacinto River Basin lacks assimilative capacity for nitrate.

The Dairy Permit argues that an antidegradation analysis is not warranted because the discharges covered by the “Order are not permitted to adversely affect water quality and therefore are consistent with the antidegradation provision of 40 CFR 131.12 and State Board Resolution No. 68-16.” R8-2013-0001, Attachment D, VII.G. This language is borrowed from similar permits issued by the State and Regional Boards. In interpreting this language, Waterkeeper agrees with the California Court of Appeal when they stated, “[n]ot only is this reasoning circular, the mechanism for ensuring that groundwater will not be further degraded is the monitoring plan, which... is inadequate.” *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Board*, 210 Cal.App.4th 1255 (2012)(hereinafter referred to as “AGUA”).

Elsewhere in the Dairy Permit, the Regional Board states that a “further antidegradation analysis is not necessary for this general permit” because “the Regional Board approved the “Max Benefit” water quality objectives after a detailed antidegradation analysis. R8-2013-0001, Attachment D. VII.G. That is partially true. An anti-degradation analysis occurred for Chino Basin. No anti-degradation analysis has occurred for the San Jacinto River Basin.

As such, the antidegradation analysis provided in the Dairy Permit for the San Jacinto River Basin is inadequate. Furthermore, the federal Clean Water Act (“CWA”) requires that a permittee undertake a self-monitoring program sufficient to determine compliance with its NPDES permit. 40 CFR § 122.44(i)(l). Dischargers under the Dairy Permit cannot determine compliance with the prohibition against causing or contributing to an exceedance of a water quality objective specified in the Basin Plan for nitrate due to insufficient monitoring requirements.

The court in AGUA concluded that the antidegradation policy applies to milk cow dairies and that the Regional Board essentially had two options. First, it could implement an adequate monitoring system to ensure that no degradation of groundwater would occur as a result of the dairy industry. Alternatively, it could require any activity resulting in a discharge “use the best practicable treatment or control necessary to avoid a pollution or nuisance and to maintain the highest water quality consistent with the maximum benefit to the people of the State.” *See* State Board, Guidance Mem. (Feb. 16, 1995) p. 2.

Waterkeeper is prepared to engage the Regional Board in a thorough discussion regarding the applicability of the antidegradation policy to the Dairy Permit and possible solutions. Due to the complex nature of this issue, we feel it is best addressed in additional comments.

## II. THE REGIONAL BOARD’S DAIRY PERMIT VIOLATES THE FEDERAL PROHIBITION AGAINST BACKSLIDING BY ADOPTING A COMPLIANCE SCHEDULE THAT IS LESS STRINGENT THAN THE PREVIOUS PERMIT.

The Dairy Permit violates the federal prohibition against backsliding in NPDES permits by adopting effluent limitations, standards or conditions that are less stringent than in the previous Order. When NPDES permits are “renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.” 40 CFR 122.44(l)(1). As the general NPDES permit pursuant to Section 402 of the CWA), any violation of the previous permit constitutes a violation of the CWA and the California Water Code (“CWC”) and would be grounds for enforcement action, for permit termination or denial of permit renewal. *See* R8-2007-0001, Sec. VII.A.2.a.; R8-2007-0001, Attachment A, I.A.1 [citing 40 CFR § 122.41(a)]. U.S. EPA has determined the federal prohibition against backsliding in NPDES permits is not limited numeric, but applies similarly to the provision of “additional time to complete a task that was required by the previous permit” and constitutes a “less stringent condition and violates the prohibition against anti-backsliding.” Ltr. From Jon M. Capacasa,

Director, Water Protection Division, US. EPA Reg. III, to Jay Sakai, Water Management Administration, Re: Specific Objection to Prince George's County Phase I Municipal Separate Storm Sewer System (MS4) Permit MD0068284, 4 (Aug. 8, 2012).

The Dairy Permit contains at least one provision which violates this principle. For example, the Dairy Permit held dischargers subject to a compliance time schedule for "Effluent Limitations and Discharge Specifications V.B. of [the] order" that required dischargers to meet effluent limitations in the "San Jacinto Basin by September 6, 2012." Order No. R8-2007-0001, Sec. VII.C.4. If dischargers failed to fully implement a "final Work Plan" by September 6, 2012, then the discharges were required to "cease the discharge of process wastewater and land application of manure within the San Jacinto River Basin." Id. The Dairy Permit seeks to change the previous permit's compliance date from September 6, 2012 to March 13, 2018 to perform the same task. Order No. R8-2013-0001, Section III.F.1.a.; *see also* Attachment D.VIII. The addition of over five years to perform a task required to have been completed by a previous permit is a less stringent effluent limitation and is not permitted under the CWA.

Any individual dairy in the San Jacinto River Basin that has discharged wastewater or applied manure to land is in continuous and ongoing violation of the CWA and the CWC since September 6, 2012. **The Regional Board must direct enforcement staff to notify dischargers in the San Jacinto River Basin that each discharger is in noncompliance with the Dairy Permit and subject to civil and criminal liability.** Waterkeeper recommends Regional Board staff conclude a discharge is taking place that violates requirements prescribed by the Regional Board and require San Jacinto River Basin dairies to submit for approval of the Regional Board, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of the requirements. *See* CWC § 13300.

### III. THE REGIONAL BOARD'S DAIRY PERMIT VIOLATES THE STATE ANTIDegradation POLICY BY ALLOWING A DISCHARGER TO RETAIN CONTAMINATED SOIL AFTER THEY SUBMIT A NOTICE OF TERMINATION TO THE REGIONAL BOARD.

Section I.D. of the Dairy Permit violates Resolution No. 68-16 when it fails to require the removal of contaminated soil that overlies high quality ground water and discharges or threatens to discharge to such high quality ground water or surface water before approving a Notice of Termination. Resolution 68-16 requires such a discharge to be subject to best practicable treatment or control, which in the case of contaminated soil, would include removal. State Water Resources Control Board, Questions and Answers Resolution No. 68-16, 13 (Feb. 16, 1995). Section I.D. of the Dairy Permit mandates that discharger "ensure the facility has been completely cleaned out and there is no remaining potential for a discharge of pollutants from the facility, including manure, litter and process wastewater." The Dairy Permit continues by stating that "standard procedures may include...filling in the containment pond(s) with clean dirt." Id. The addition of "clean dirt" to otherwise contaminated soil does not, in and of itself, eliminate the potential for the discharge of pollutants from a dairy to high quality groundwater.

Where contaminated soil discharges or threatens to discharge to non-high quality water, then the Regional Board retains the authority under California Water Code Section 13304 to require the discharger to cleanup and abate the discharge or threatened discharge so as to protect the beneficial uses of waters of the State. Q&A pg 13-14, *see* SWRCB Resolution No. 92-49.

Waterkeeper recommends the revision of Section I.D. of the Dairy Permit to add "contaminated soil" to the list of potential pollutants in the first sentence. The revised sentence would read:

"Upon ceasing operation at a facility, the Discharger shall ensure that the facility has been completely cleaned out and there is no remaining potential for a discharge of pollutants from the facility, including manure, litter, *contaminated soil*, and process wastewater." (emphasis added)

Additionally, Waterkeeper recommends the revision of the second sentence in Section I.D. of the Dairy Permit to require the removal of contaminated soil from containment ponds prior to “filling in...with clean dirt.” This would apply to those areas where contaminated soil overlies high quality water as understood in Resolution No. 68-16.

#### IV. THE REGIONAL BOARD MUST ADOPT A DAIRY PERMIT THAT PROTECTS SURFACE AND GROUND WATER QUALITY FROM POLLUTANTS KNOWN TO IMPACT WATER QUALITY.

The Regional Board must adopt a final dairy permit that seeks to understand and regulate the true impacts of the dairy industry on our regional water quality by collecting data on each of the likely pollutants that impact our waters. California dairies are an essential part of the state’s future, but also a principle source of severe groundwater pollutants such as nitrates, salts, bacteria, such as E. coli, and pharmaceuticals like antibiotics and hormones. *See* R8-2013-0001, Attachment D.IV. Currently, the Dairy Permit requires dischargers to sample and analyze for total dissolved solids (TDS), total coliform bacteria, E. coli, total nitrogen, total phosphorus and total suspended solids (TSS). R8-2013-0001, Attachment B.IV. Waterkeeper acknowledges the addition of this section to this version of the Dairy Permit, however, the Regional Board should seek additional information in order to gather an accurate representation of our water quality.

Waterkeeper recommends the addition of hormone and antibiotic testing to the Dairy Permit. Hormones are commonly injected into beef and dairy cows to increase productivity. The cows excrete physiologically active steroidal hormones in their waste which ends up in manure lagoons. Animal waste has been found to contain estrogen, estradiol, progesterone, testosterone, and synthetic hormones. “What’s in the Water?: Industrial Dairies, Groundwater Pollution and Regulatory Failure in California’s Central Valley,” Food & Water Watch, (citing *Kolodziej, Edwards, et al. “Dairy wastewater, aquaculture and spawning fish as sources of steroid hormones in the aquatic environment.” Environmental Science and Technology. Vol. 38. 2004 at 6377-6384*) at 9. Manure containing hormones is then spread on cropland. The USDA’s Agricultural Research Service has determined that “clearly, CAFOs provided elevated releases’ of endocrine-disrupting chemicals, including hormones, into the environment.” *Id.* (citing *Rice, Cliff. “CAFOs and hormones: Overview of ARS research.” Presentation at “Fate and Effects of Hormones in Waste from Con. An Fe. Op,” U.S. EPA workshop, Chicago IL. August 20-22, 2007 at 3.” Pg. 9*).

In surface water, hormones have been linked to male fish feminization. *Id.* Groundwater testing has identified higher concentrations of hormones down gradient from dairy operations. *Id.* (citing Arnon, Shai, et al. “Transport of testosterone and estrogen from dairy-farm waste lagoons to groundwater.” *Environmental Science and Technology. Vol. 42 2008 at 5521-5526.*) The impacts of hormones to aquatic life are being seen, but the larger connection between those same hormones and human impacts are less concrete. Human exposure to these types of hormones has been linked to reproductive and metabolic abnormalities and cancers. *Id.*

Antibiotics have been found in groundwater beneath dairies and are a vehicle for human exposure to antibiotic-resistant pathogens. *Id.* at 10. A 2007 USDA study of dairy producers in California and other major dairy producing states, found widespread antibiotic use throughout the life of the cow. Antibiotics are used to treat respiratory diseases, mastitis, and non-therapeutic purposes. *Id.* These antibiotics, including tetracycline, penicillin and ionophores, are excreted by cows in both metabolized and unmetabolized forms. *Id.* These constituents of emerging concern can persist in the “environment for extended periods of time; for example, erythromycin has been found to persist for longer than one year.” *Id.* (citing *Zuccato, E., et al. “Presence of therapeutic drugs in the environment.” Lancet. Vol. 355, iss. 9217. 2000 at 1789*).

The Dairy Permit’s sampling and testing requirements are an improvement over the existing Dairy Permit. However, Waterkeeper encourages the Regional Board to strengthen the Dairy Permit by requiring regular

sampling and testing of pollutants known to exist on dairies statewide and nationally in order to properly prepare the Regional Board for the next dairy permit.

V. THE REGIONAL BOARD SHOULD REQUIRE ALL DISCHARGERS ELECTRONICALLY SUBMIT ALL ANNUAL REPORTS AND ELECTRONIC DATA TO THE REGIONAL BOARD.

The Regional Board should require the mandatory electronic submittal of Annual Reports and other materials by dischargers. The State Board and Regional Boards are transitioning from a traditional paper submittal process to an electronic submittal process through secure online systems like the Storm Water Multiple Action and Report Tracking System (“SMARTS”) or the California Integrated Water Quality System (“CIWQS”). The Dairy Permit grants the Regional Board or the State Board the ability, at any time and after proper notice, to require a discharger to electronically submit Self-Monitoring Reports using CIWQS. R8-2013-0001, Attachment B.X.A.2. Currently, if a member of the public wished to comment on a discharger’s Nutrient Management Plan or Engineered Waste Management Plan, both foundational documents directly impacting water quality, then they would need to travel to the Regional Board’s office in Riverside. This runs counter to the state’s desire to improve transparency and public participation.

Publicly accessible electronic databases provide the public with an opportunity to review important water quality data and act as more effective watershed stewards. In furtherance of transparency and good governance, Waterkeeper recommends that the Regional Board mandate the electronic submittal of dischargers Self-Monitoring Reports.

VI. CONCLUSION

In conclusion, Waterkeeper appreciates the amount of effort the Regional Board and staff have dedicated towards the development of the Dairy Permit. This Dairy Permit builds on some of the successes of the previous permit and seeks to advance the industry in our region and ensure it remains a critical part of an economically and environmentally successful Inland Empire.

Waterkeeper remains concerned that the Regional Board has not fully reflected on the demands of the environment and the recommendations put forward by the industry itself. The existing permit contains serious deficiencies regarding compliance with California’s anti-degradation policy and the state and federal government’s backsliding prohibition. Similarly, the Dairy Permit fails to responsibly position the Regional Board to address constituents of emerging concern (e.g., hormones and antibiotics) originating from area dairies for the next Dairy Permit. The Dairy Permit also affirms the policy of hard copy submission of Annual Reports and similar data to the Regional Board despite California’s trend towards electronic submission of information. Finally, Waterkeeper strongly encourages the Regional Board to revisit the industry recommendations made in the San Jacinto Watershed Integrated Regional Dairy Management Plan and attempt to incorporate some of the practical solutions put forward by local dairymen that already have industry support. For example, the implementation of a Manure Manifest System should be considered and seriously discussed.

The Dairy Permit is a foundational document for the Inland Empire and will govern the direction of the industry in this region for at least five years. The Regional Board owes the people of the Inland Empire develop a well-reasoned and transparently negotiated Dairy Permit that responsibly addresses ground and surface water quality. Therefore, Waterkeeper reiterates our request for at least one additional Regional Board workshop to discuss the issues surrounding this Dairy Permit.

On behalf of Waterkeeper, I look forward to working with you on the Diary Permit. If you have any questions or comments, then please do not hesitate to contact me directly at (714) 850-1965 ext. 307 or email me at [colin@iewaterkeeper.org](mailto:colin@iewaterkeeper.org).

Regards,

A handwritten signature in black ink, appearing to read "Colin Kelly". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Colin Kelly  
Staff Attorney  
Inland Empire Waterkeeper