Salinity-1/31/06
Workshop

January 20, 2006

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SWRCB
Executive Ofc.

Selica Potter
Acting Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Dear Ms. Potter:

On behalf of Hilmar Cheese Company, I would like to submit the following comments for the SWRCB and CVRWQCB Joint Public Workshop on Salinity Issues in the Central Valley to be held on January 31.

Hilmar Cheese Company would like to express our appreciation to the State & Regional Boards for conducting this Workshop on such a timely and important issue. We look forward to working with the respective Boards toward this end.

Sincerely,

Warren J. Climo
Director – Environmental Management

WJC:mkm

Enclosure

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COMMENTS OF HILMAR CHEESE COMPANY

STATE WATER RESOURCES CONTROL BOARD AND CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD WORKSHOP ON SALINITY ISSUES IN THE CENTRAL VALLEY

Hilmar Cheese Company (HCC) would like to express its appreciation to the State Water Resources Control Board and the Central Valley Regional Water Quality Control Board for conducting this joint workshop on salt management. The need to manage and control salts in the San Joaquin Valley is a complex issue that poses a significant challenge for public agencies, farming, business and the residents of this state. It is important for regulators and policymakers to understand that this issue was not created overnight and that it will not be solved overnight. Resolving this issue will take significant research, extensive stakeholder input and careful action by regulators to ensure that long-term environmentally- and economically-sustainable and balanced regulatory approaches are developed and real solutions identified.

We also want to commend Dr. Karl Longley, a long-time regulator with the Central Valley Regional Water Quality Control Board, and Art Baggett, Jr., State Water Resources Control Board Member, for leading the effort to bring statewide attention and focus to this emerging issue so that comprehensive solutions can be sought. Dr. Longley has taken the time to more fully understand this issue and has provided great perspective on the challenge that lies ahead for regulators as we all seek to solve the "dilemma" that faces our state.

While HCC has received more than our fair share of criticism, there are a number of valuable lessons that can be garnered from our company's first-hand experience. Board Members must, however, be prepared to dig below the media headlines and truly understand the underlying issues:

Lesson 1: Developing unprecedented and unachievable requirements, and then trying to enforce those requirements, is not a solution. No comprehensive or consistent statewide standards for the regulation or discharge of salts currently exist. HCC is one of only a small handful of companies currently facing salt discharge limits.

HCC is being held to an unparalleled and unachievable limit for salts. To put this in perspective, if HCC simply connects a hose to a tap inside our processing plant and then connects that same hose to a drain, also inside the plant, and discharges that tap water, Hilmar would be in violation of its salt discharge (or "EC") limits. Compliance with our existing permit would require us to remove salts in our treated process water to a level that is superior to the tap water coming into our plant; an unachievable standard that no one else is being asked to meet. It is this inconsistent, unreasonable and unworkable regulatory environment that is at the heart of HCC'S specific compliance dilemma. Placing unachievable regulatory requirements, such as the "negative degradation" requirement facing HCC, on dischargers and then seeking multi-million dollar fines from those same companies, which have cooperated with regulators to achieve compliance, is <u>not a solution</u>.

Lesson 2: There are no proven treatment technologies for salt. Reverse Osmosis is not an environmentally- or economically-sustainable solution. As HCC'S experience clearly shows, there are currently no available or easy solutions to managing salts. Even after investing more than $38 million in a state-of-the-art onsite water treatment facility, and an additional $45 million operating it, we have yet to arrive at a sustainable solution.

It is important to understand that no technologies exist for treating salt. We have been immensely successful in removing the sugars, fats, proteins and other organics left over from the cheese making process. As part of our 4-stage treatment process, tiny bugs actually eat or "digest" most of these organics and make them disappear. Unlike organics, salts cannot be treated. The only option is to separate or filter them out. Once separated, they must be disposed of, and that creates its own dilemma.

The only option currently available to HCC is to separate salts using highly energy intensive reverse-osmosis (RO) or membrane technology. Operational problems with RO stem from the need to concentrate the removed salts to such a high level. Such concentration results in heavy scaling of the membranes. This, in turn, decreases processing capacity and increases the frequency of chemical washes (at least daily washes are needed under these conditions). These cleaning agents directly result in increased salt and mineral loads, adding to the problem RO is designed to solve – **a vicious and unproductive cycle**. At HCC's facility, more than 50% of our overall chemical use is driven by the RO process.

The State and several Regional Boards have also correctly recognized that there is no sustainable disposal option for the salty "brine" byproduct that results from reliance on reverse-osmosis. While the highly treated process water can be safely recycled to surrounding agricultural lands, the highly concentrated "salty brine," which is filtered out, must be trucked to the Bay Area for treatment and disposal in the ocean. Some ten trucks leave the HCC facility each and every day, 365 days a year. That amounts to nearly four-thousand truck trips annually on already congested highways, contributing significantly to the Valley's recognized air quality problems. And that is from just one source.

Consider the economic and environmental costs to all community wastewater treatment facilities, businesses and the public, if all dischargers were required to meet the same standards and implement the same technology as HCC. Clearly, reverse-osmosis is not an environmentally- or economically-sustainable solution for HCC or any other food processing operation.

Lesson 3: A long-term viable disposal solution for salts must be developed. Much of the salt management problem that faces the Central Valley would not exist if a salt drain were available to remove salts from the region as envisioned under the CVRWQCB's Water Quality Control (or "Basin") Plan. It is this lack of a viable disposal solution that is the fundamental flaw in the existing regulatory approach utilized by the CVRWQCB staff in setting HCC's waste discharge permit. Lack of an effective disposal option is also at the heart of the larger issue of developing real, sustainable, and balanced long-term solutions. Any short-term solutions must therefore focus on available management practices rather than unsustainable salt separation technologies and unavailable disposal solutions.

Lesson 4: We must better understand the problem before reacting. It is critical that a fuller diagnosis of the problem be achieved before options and solutions can be best considered, adopted and implemented. The Supplemental Environmental Project (SEP) contained in the proposed HCC settlement will be an appropriate, timely and insightful next step to better understanding the role of the food processing industry in this issue and how best to approach it. The comprehensive ***Proposal to Study the Management of Salinity in Wastewater in the California Food Processing Industry*** will properly characterize industry salt discharges and the implications from a water quality perspective. It will also identify and evaluate short- and long-term salt management disposal options. In total, it will provide regulators with an effective forum and foundation to continue and further this important discussion.

In conclusion, we look forward to working with the State and Regional Boards, and other stakeholders, in a good-faith discussion to find real, sustainable and balanced solutions to this significant challenge.

1/20/06