

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DIXON  
ADDING PART XIV TO CHAPTER 17 OF ARTICLE I OF THE DIXON  
CITY CODE PROHIBITING THE INSTALLATION OF RESIDENTIAL BRINE  
DISCHARGING WATER SOFTENING AND CONDITIONING APPLIANCES**

**THE CITY COUNCIL OF THE CITY OF DIXON DOES HEREBY ORDAIN AS  
FOLLOWS:**

**SECTION 1:** Part XIV is hereby added to Chapter 17 of Article I of the Dixon City Code to read as follows:

**Part XIV Residential Brine Discharging Water Softening  
and Conditioning Appliances**

**17.14.1 Purpose**

The purpose of this Part is to protect the quality of the waters of the State and the environment, including, but not limited to, the groundwater around the City's POTW and to comply with the CDO No. R5-2008-0136 issued by the Regional Water Board.

**17.14.2 Authorization**

This Part is enacted pursuant to the police power authority contained in the California Constitution, Article XI Section 7 and also under the authority in the California Health and Safety Code Section 116775 *et seq.*

**17.14.3 Definitions**

The following definitions shall apply to the terms used in this Part, in addition to the definitions included in Section 17.1.4 of this Chapter:

- A. "CDO" means Cease and Desist Order.
- B. "ECO:Logic" means the City's wastewater consultant, ECO:Logic Engineers.
- C. "Regional Water Board" means the California Regional Water Quality Control Board-Central Valley Region, created and exercising its powers pursuant to the Porter-Cologne Water Quality Control Act, California Water Code Section 13000 *et seq.* "Residence" means a structure which is or is intended to be, in whole or in part, a place of dwelling, whether occupied or not, whether fully constructed or not, and includes, without limitation, homes, whether attached to another structure or not, duplexes, triplexes, apartments, condominiums and mobile homes.

**CERTIFIED AS A TRUE COPY**

OF Ordinance No. 08-018

1 of 7

12-01-08  
**DATE CERTIFIED**

Arnie M. Blaman  
**CITY CLERK, CITY OF DIXON**

- D. “Residential brine discharging water softening or conditioning appliance” means a water softening or conditioning appliance located within or adjacent to a residence located within the City which discharges sodium, chloride, or other saline substance into a community sewer system that is tributary to the POTW owned and operated by the City; whereby the capacity of the appliance to remove hardness from water is renewed by the on-site application of a chloride salt-containing brine solution to the active softening or conditioning material contained therein, followed by a subsequent rinsing of the active softening or conditioning material.

#### 17.14.4 Findings

- A. The State Legislature has found and declared that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society.
- B. The City owns and operates the City's wastewater treatment plant and POTW.
- C. The wastewater treatment plant and POTW are regulated by the Regional Water Board.
- D. On June 24, 1994, the Regional Water Board adopted waste discharge requirements under Order No. 94-187 applicable to the wastewater treatment plant and POTW.
- E. On June 24, 2005, the Regional Water Board adopted CDO No. R5-2005-0078, which required certain programs and projects, including improvements to the wastewater treatment plant and POTW, to ensure compliance with the groundwater limitations of the waste discharge requirements.
- F. The CDO No. R5-2005-0078 states that the City's "effluent is relatively saline due to a saline and hard water supply." Further, it states that the City "believes that many residences and businesses use water softeners, and that the discharge of brine from the water softeners accounts for most of the excess salinity in the effluent."
- G. The City was unsuccessful in satisfactorily implementing certain programs and projects within the timelines required under CDO No. R5-2005-0078.
- H. The City and ECO:Logic, have been working with the Regional Water Board for the past two years to obtain a revised CDO.
- I. On September 11, 2008, the Regional Water Board rescinded CDO No. R5-2005-0078 and adopted CDO No. R5-2008-0136 to address water quality issues at the wastewater treatment plant and POTW because the Regional Water Board asserts that the City is in violation of the groundwater limitations of the waste discharge requirements.
- J. The Regional Water Board found, in the CDO No. R5-2008-0136, that site-specific numeric groundwater limitations based on the approved *Background Groundwater Quality Report*, dated March 27, 2006 and included in Item 23 under Numeric Groundwater Limitations in the CDO No. R5-2008-0136, satisfied the groundwater limitations previously

- established by the Regional Water Board in the waste discharge requirements contained in Order No. 94-187 and CDO No. R5-2005-0078.
- K. The Regional Water Board further found, in the CDO No. R5-2008-0136, specifically in Item 24 under Numeric Groundwater Limitations, that the City has caused pollution in violation of the groundwater limitations, which are 143 milligrams per liter ("mg/l") for sodium and 106 mg/l for chloride.
- L. The CDO No. R5-2008-0136 established immediate and temporary effluent limitations for sodium and chloride, two of the primary constituents of salinity, which are 330 milligrams per liter ("mg/l") for sodium and 340 mg/l for chloride.
- M. The CDO No. R5-2008-0136 also established maximum long-term final effluent limitations for sodium and chloride of 143 mg/l and 106 mg/l, respectively, by January 1, 2014.
- N. The CDO No. R5-2008-0136 ordered the City to submit a salinity source study as described in California Health and Safety Code Section 116786, by September 30, 2008, to identify sources of salinity prior to implementing regulations to control those sources.
- O. A salinity source study, entitled *Wastewater Salinity Characterization and Regulatory Compliance*, was completed by ECO:Logic and submitted to the Regional Water Board on September 30, 2008. As required by California Health and Safety Code Section 116786, this salinity source study is an independent study that analyzes all sources of salinity, including, but not limited to, the groundwater supply, residential water softening and conditioning appliances, residential consumptive use, industrial and commercial discharges, and direct groundwater infiltration and inflow into the sewer collection system and quantifies the total discharge from each source of salinity.
- P. Further, the City staff and ECO:Logic have provided additional information to the City Council for the record regarding the remedial actions taken by the City to reduce the discharge of salinity into the wastewater treatment plant from each salinity source, to the extent technologically and economically feasible, to bring the City into compliance with the waste discharge requirements, including the adoption and enforcement of Chapter 17, "Sewers," of Article I of the Dixon City Code and the local limits contained therein; the isolating and repairing of significant leaks in sewer lines causing groundwater infiltration caused largely by agricultural irrigation and land use along the sewer line route; and inspections performed by City staff of certain industrial facilities the housekeeping practices of which have resulted in excessive salts being introduced into the sewer, which have largely been corrected. The City has also taken steps to educate the public about the discharge of salinity into the POTW by regular residential activities and the use of brine discharging water softening and conditioning appliances through a public outreach program, including the distribution of pamphlets and other materials targeted to inform the public. The salinity source study and

additional information provided to the City Council as described above are collectively referred to as the "Study." A copy of the Study is on file at the City Clerk's Office located at 600 East A Street, Dixon, CA, 95620-3697.

- Q. The Study identified chloride as a constituent of major concern because existing chloride effluent levels are the farthest above the final effluent limitations established in the CDO No. R5-2008-0136.
- R. The Study also showed that approximately 1,520 pounds per day ("lbs/day") of chloride enters the wastewater treatment plant ("total chloride load").
- S. The Study concluded that approximately 1,124 lbs/day, or 73.9% of the total chloride load, comes from residential uses.
- T. The Study further concluded that approximately 580 lbs/day, or 48.4% of the total chloride load, comes from residential brine discharging water softening or conditioning appliances.
- U. The CDO No. R5-2008-0136 requires the City to adopt an ordinance prohibiting the installation of new residential water softening or conditioning appliances that discharge sodium, chloride, or other saline substances to the community sewer system by November 30, 2008.
- V. The Study assessed the technological and economic feasibility of alternatives to the ordinance, including evaluating and updating local limits; education, monitoring and enforcement of local limits as part of a non-residential source pretreatment program; improvements to water supply wells; and education and enforcement actions taken to lower chloride and sodium discharge into the community sewer system from residential sources from toilet use, bathing, laundry, cleaning, food preparation and home businesses. The Study concluded that some of these alternatives are not technologically and economically feasible and those that are will not reach the level of effectiveness necessary for the City to achieve compliance with the waste discharge requirements.
- W. The economic viability of solutions to the salinity issue and alternatives to the ordinance is also limited by the decision of the City of Dixon electorate in November of 2006 to adopt initiative Measure "L" which had the effect of repealing sewer rate increases.
- X. The Study concluded that, with reference to brine discharging water softening and conditioning appliances, "[e]ven if some businesses and other residential source control efforts are reasonably effective about 400 pounds per day additional chloride, most practically from control of existing residential [brine discharging water softening and conditioning appliances] must be removed to attain compliance with the [waste discharge requirements], unless salinity treatment or dilution strategies can be implemented at the [wastewater treatment plant]. Therefore, control of new residential [brine discharging water softening and conditioning appliance] installation is a necessary means of compliance with the adopted [waste discharge requirements]."

- Y. The Study also concluded that the potential saline discharge reduction of the ordinance, based on projections in the 1993 General plan of a population of the City at buildout of about 22,000 residents, in 7,000 households a reduction of 200 lbs/day.
- Z. Based upon the Study, the City has determined and finds that prohibiting the installation, of residential brine discharging water softening or conditioning appliances is a necessary means of achieving compliance with the waste discharge requirements and CDO No. R5-2008-0136 issued by the Regional Water Board.
- AA. The City Council has considered the technological and economic feasibility of alternatives to this Part, as well as the potential saline discharge reduction achievable as a consequence of adopting this Part.
- BB. The City has adopted and is enforcing regulatory requirements that limit the volumes and concentrations of saline discharges from nonresidential sources in the POTW to the extent technologically and economically feasible, including enforcement of local limits and related regulations provided in Chapter 17 of Article I of the Dixon City Code.

#### **17.14.5 Prohibition**

No person shall install or in any manner assist in the installation of a residential brine discharging water softening or conditioning appliance that discharges into the POTW owned and operated by the City, or that discharges into a private sewer or community sewer system that is tributary to the POTW owned and operated by the City, or that discharges to land within the City.

A violation of this Section is unlawful and punishable by a fine not to exceed \$1,000. A violation of this Section is also declared to constitute a public nuisance, which nuisance may be abated by civil action brought by the City Attorney, or by the issuance of administrative citations pursuant to Part 6 of Title 9 of the Dixon Municipal Code.

#### **17.14.6 Enforcement**

The Director shall administer, implement and enforce the provisions of this Part. In addition to any other provision of this Chapter (including Part 10 relating to Administrative Enforcement Remedies, Part 11 relating to Judicial Enforcement Remedies and Part 12 relating to Supplemental Enforcement Action which shall be applicable to this Part), the Director may enforce this Part by disconnecting any property on which a residential brine discharging water softening or conditioning appliance is unlawfully installed from the POTW.

#### **17.14.7 Medical Exemption**

The Director shall have the authority to allow medical exemptions and may permit the installation of individual residential brine discharging water softening or conditioning appliances provided that all of the following conditions are met:

- A. An application for medical exemption has been made on forms prescribed by the Director and the exemption shall not be effective until approved by the Director.
- B. The medical need for soft water is verified in writing by the applicant's physician.
- C. The applicant has a situation that, in the opinion of the Director, precludes the use of an alternative water softening or conditioning appliance that does not discharge brine into the POTW.

The Director shall have the authority to rescind medical exemptions if the City is in violation of State chloride waste discharge requirements, and in the opinion of the Director it is essential that the medical exemption be terminated. Such termination shall become effective after sixty (60) days written notice from the City to the subject resident.

**SECTION 2:** Severability. The provisions of this Ordinance are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of this Ordinance or their applicability to other persons or circumstances.

**SECTION 3:** Effective Date. This Ordinance shall take effect and be enforced thirty (30) days following its adoption.

**SECTION 4:** Publication. The City Clerk shall cause this Ordinance to be published in the Dixon Tribune, a newspaper of general circulation within the City, within fifteen (15) days of its enactment.

The foregoing ordinance was introduced and read at a regular meeting of the City Council of the City of Dixon on the 10<sup>th</sup> day of November, 2008, and was adopted and enacted at a duly held regular meeting of the City Council held on the 25<sup>th</sup> day of November, 2008 by the following vote on roll call:

AYES: Alexander, Batchelor, Coppes, Smith, Courville

NOES: None

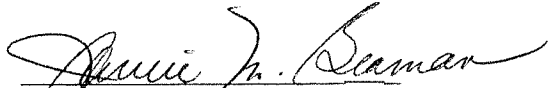
ABSTAIN: None

ABSENT: None

APPROVED:

  
 MARYANN COURVILLE, Mayor

ATTEST:

  
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JANICE BEAMAN, City Clerk  
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