## CHAPTER 2001-188

## Senate Bill No. 536

An act relating to demineralization concentrate; amending s. 403.0882, F.S.; reorganizing and clarifying the section; directing the Department of Environmental Protection to enter into rulemaking; creating a technical advisory committee to assist in rule development; providing permitting requirements relating to failure of toxicity tests due to naturally occurring constituents; amending s. 403.061, F.S.; providing an exemption allowing demineralization concentrate mixing zones in Outstanding Florida Waters with specific requirements; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Section 403.0882, Florida Statutes, is amended to read:

(Substantial rewording of section. See s. 403.0882, F.S., for present text.)

403.0882 Discharge of demineralization concentrate.—

(1) The Legislature finds and declares that it is in the public interest to conserve and protect water resources, provide adequate water supplies and provide for natural systems, and promote brackish water demineralization as an alternative to withdrawals of freshwater ground water and surface water by removing institutional barriers to demineralization and through research, including demonstration projects, to advance water and water byproduct treatment technology, sound waste byproduct disposal methods, and regional solutions to water resources issues. In order to promote the state objective of alternative water supply development, including the use of demineralization technologies, and to encourage the conservation and protection of the state's natural resources, the concentrate resulting from demineralization must be classified as potable water byproduct regardless of flow quantity and must be appropriately treated and discharged or re-used.

(2) For the purposes of this section, the term:

(a) "Demineralization concentrate" means the concentrated byproduct water, brine, or reject water produced by ion exchange or membrane separation technologies such as reverse osmosis, membrane softening, ultrafiltration, membrane filtration, electrodialysis, and electrodialysis reversal used for desalination, softening, or reducing total dissolved solids during water treatment for public water supply purposes.

(b) "Small water utility business" means any facility that distributes potable water to two or more customers with a concentrate discharge of less than 50,000 gallons per day.

(3) The department shall initiate rulemaking no later than October 1, 2001, to address facilities that discharge demineralization concen-

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trate. The department shall convene a technical advisory committee to assist in the development of the rules, which committee shall include one representative each from the demineralization industry, local government, water and wastewater utilities, the engineering profession, business, and environmental organizations. The technical advisory committee shall also include one member representing the five water management districts and one representative from the Florida Marine Research Institute. In convening the technical advisory committee, consideration must be given to geographical balance. The rules must address, at a minimum:

(a) Permit application forms for concentrate disposal;

(b) Specific options and requirements for demineralization concentrate disposal, including a standardized list of effluent and monitoring parameters, which may be adjusted or expanded by the department as necessary to protect water quality;

(c) Specific requirements and accepted methods for evaluating mixing of effluent in receiving waters; and

(d) Specific toxicity provisions.

(4)(a) For facilities that discharge demineralization concentrate, the failure of whole effluent toxicity tests predominantly due to the presence of constituents naturally occurring in the source water, limited to calcium, potassium, sodium, magnesium, chloride, bromide, and other constituents designated by the department, may not be the basis for denial of a permit, denial of a permit renewal, revocation of a permit, or other enforcement action by the department as long as the volume of water necessary to achieve water quality standards is available within a distance not in excess of two times the natural water depth at the point of discharge under all flow conditions.

(b) If failure of whole effluent toxicity tests is due predominately to the presence of the naturally occurring constituents identified in paragraph (a), the department shall issue a permit for the demineralization concentrate discharge if:

<u>1. The volume of water necessary to achieve water quality standards is available within a distance not in excess of two times the natural water depth at the point of discharge under all flow conditions; and</u>

2. All other permitting requirements are met.

<u>A variance for toxicity under the circumstance described in this paragraph</u> <u>is not required.</u>

(c) Facilities that fail to meet the requirements of this subsection may be permitted in accordance with department rule, including all applicable moderating provisions such as variances, exemptions, and mixing zones.

(5) Blending of demineralization concentrate with reclaimed water shall be allowed in accordance with the department's reuse rules.

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(6) This subsection applies only to small water utility businesses.

(a) The discharge of demineralization concentrate from small water utility businesses is presumed to be allowable and permittable in all waters in the state if:

1. The discharge meets the effluent limitations in s. 403.086(4), except that high level disinfection is not required unless the presence of fecal coliforms in the source water will result in the discharge not meeting applicable water quality standards;

2. The discharge of demineralization concentrate achieves a minimum of <u>4-to-1 dilution within a distance not in excess of two times the natural water</u> <u>depth at the point of discharge under all flow conditions; and</u>

<u>3. The point of discharge is located at a reasonably accessible point that minimizes water quality impacts to the greatest extent possible.</u>

(b) The presumption in paragraph (a) may be overcome only by a demonstration that one or more of the following conditions is present:

<u>1. The discharge will be made directly into an Outstanding Florida</u> <u>Water, except as provided in chapter 90-262, Laws of Florida;</u>

2. The discharge will be made directly to Class I or Class II waters;

<u>3. The discharge will be made to a water body having a total maximum daily load established by the department and the discharge will cause or contribute to a violation of the established load;</u>

<u>4. The discharge fails to meet the requirements of the antidegradation policy contained in the department rules;</u>

5. The discharge will be made to a sole-source aquifer;

6. The discharge fails to meet applicable surface water and groundwater quality standards; or

7. The results of any toxicity test performed by the applicant under paragraph (d) or by the department indicate that the discharge does not meet toxicity requirements at the boundary of the mixing zone under sub-paragraph (a)2.

(c) If one or more of the conditions in paragraph (b) has been demonstrated, the department may:

1. Require more stringent effluent limitations;

2. Require relocation of the discharge point or a change in the method of <u>discharge</u>;

3. Limit the duration or volume of the discharge; or

<u>4.</u> Prohibit the discharge if there is no alternative that meets the conditions of subparagraphs 1.-3.

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(d) For facilities owned by small water utility businesses, the department may not:

1. Require those businesses to perform toxicity testing at other than the time of permit application, permit renewal, or any requested permit modification, unless the initial toxicity test or any subsequent toxicity test performed by the department does not meet toxicity requirements.

2. Require those businesses to obtain a water-quality-based effluent limitation determination.

(7) The department may adopt additional rules for the regulation of demineralization and to administer this section and s. 403.061(11)(b).

Section 2. Paragraph (b) of subsection (11) of section 403.061, Florida Statutes, is amended to read:

403.061 Department; powers and duties.—The department shall have the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it and, for this purpose, to:

(11) Establish ambient air quality and water quality standards for the state as a whole or for any part thereof, and also standards for the abatement of excessive and unnecessary noise. The department is authorized to establish reasonable zones of mixing for discharges into waters.

(b) No mixing zone for point source discharges shall be permitted in Outstanding Florida Waters except for:

1. Sources <u>that</u> which have received permits from the department prior to April 1, 1982, or the date of designation, whichever is later;

2. Blowdown from new power plants certified pursuant to the Florida Electrical Power Plant Siting Act; and

3. Discharges of water necessary for water management purposes which have been approved by the governing board of a water management district and, if required by law, by the secretary: and.

4. The discharge of demineralization concentrate which has been determined permittable under 403.0882 and which meets the specific provisions of s. 403.0882(4)(a) and (b), if the proposed discharge is clearly in the public interest.

Nothing in this act shall be construed to invalidate any existing department rule relating to mixing zones. The department shall cooperate with the Department of Highway Safety and Motor Vehicles in the development of regulations required by s. 316.272(1).

Section 3. This act shall take effect upon becoming a law.

Approved by the Governor June 8, 2001.

Filed in Office Secretary of State June 8, 2001.

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