

By: Callegari

H.B. No. 50

A BILL TO BE ENTITLED

AN ACT

relating to research on and the treatment of saline water.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 341.001, Health and Safety Code, is amended by adding Subdivisions (2-a) and (6-a) to read as follows:

(2-a) "Desalination facility" means a facility used for the treatment of saline water to remove dissolved mineral salts and other dissolved solids.

(6-a) "Saline water" means water that contains a total dissolved solids concentration of more than 1,000 milligrams per liter.

SECTION 2. Subchapter C, Chapter 341, Health and Safety Code, is amended by adding Section 341.0361 to read as follows:

Sec. 341.0361. DESALINATION OF WATER FOR DRINKING WATER.

(a) This section applies only to a desalination facility that is intended to produce water for the public drinking water supply. This section does not apply to a desalination facility used to produce nonpotable water.

(b) The commission shall adopt rules to:

(1) allow water treated by a desalination facility to be used as public drinking water; and

(2) ensure that water treated by a desalination facility meets the requirements of Section 341.031 and rules adopted under that section.

1 (c) A person may not begin construction of a desalination
2 facility unless the commission approves in writing the plans and
3 specifications for the facility.

4 (d) A person may not begin construction of a desalination
5 facility that treats saline water for the purpose of removing
6 primary or secondary drinking water contaminants unless the
7 commission approves in writing a report containing:

8 (1) a computer model acceptable to the commission;

9 (2) a pilot study with a minimum 40-day run duration
10 without treatment intervention to meet federal and state safe
11 drinking water standards;

12 (3) data from a similar system installed at another
13 saline water desalination facility that treats source water of a
14 similar or lower quality; or

15 (4) a full-scale verification study with a minimum
16 40-day run duration without treatment intervention to meet federal
17 and state safe drinking water standards.

18 (e) Not later than the 100th day after the date the
19 commission receives the report for a proposed desalination
20 facility, the commission shall review the report and issue an
21 exception response letter that may contain conditions for approval.

22 (f) Not later than the 60th day after the date the
23 commission receives the plans and specifications for a proposed
24 desalination facility, the commission shall review the plans and
25 specifications and issue a response letter that may contain
26 conditions for approval.

27 (g) A person violates this section if the person fails to

1 meet a condition for approval in a letter issued to the person under
2 Subsection (e) or (f).

3 SECTION 3. Chapter 111, Education Code, is amended by
4 adding Subchapter J to read as follows:

5 SUBCHAPTER J. TEXAS CENTER FOR INNOVATIVE

6 DESALINATION TECHNOLOGY

7 Sec. 111.131. DEFINITIONS. In this subchapter:

8 (1) "Boards" means the board of regents of the
9 University of Houston System and the board of regents of The
10 University of Texas System.

11 (2) "Center" means the Texas Center for Innovative
12 Desalination Technology established under this subchapter.

13 Sec. 111.132. ESTABLISHMENT. (a) The Texas Center for
14 Innovative Desalination Technology is established as a partnership
15 between the University of Houston, The University of Texas at
16 Brownsville, and The University of Texas at El Paso.

17 (b) The organization, control, and management of the center
18 are vested in the boards, and the respective institutions shall
19 execute a memorandum of understanding for that purpose.

20 (c) The center shall be hosted by the University of
21 Houston's Cullen College of Engineering, The University of Texas at
22 Brownsville's College of Science, Mathematics and Technology, and
23 The University of Texas at El Paso's Center for Inland Desalination
24 Systems. Participation in the center's activities shall be open to
25 any faculty or staff member of each host university who is an active
26 researcher in the field of water desalination, engineering,
27 hydrology, biology, water supply development, or energy

1 efficiency, or in another relevant field as determined by the
2 boards.

3 Sec. 111.133. PURPOSE. The center is created to:

4 (1) promote interdisciplinary research, education,
5 and training for the development of state-of-the-art products,
6 materials, systems, and technologies designed for the desalination
7 of seawater from the Gulf of Mexico and brackish water within
8 surface and groundwater resources throughout the state; and

9 (2) develop cost-effective, energy-efficient, and
10 environmentally sound water desalination, brine disposal, and
11 water conveyance technologies that can enhance the potential for
12 desalinated water to contribute toward the state's long-term water
13 portfolio.

14 Sec. 111.134. POWERS AND DUTIES. The center shall:

15 (1) collaborate with appropriate international,
16 federal, state, and local agencies and private business or
17 nonprofit entities as necessary to develop innovative desalination
18 technologies;

19 (2) research and develop innovative seawater and
20 brackish water desalination technologies, including pretreatment
21 technologies and improvements, that are energy efficient and cost
22 effective, minimize environmental impacts, and offer long-term
23 water supply solutions for the state;

24 (3) research and develop brine disposal and reuse
25 methods and technologies;

26 (4) research and develop water conveyance systems and
27 technologies that may be used to transport desalinated water to

1 target use populations;

2 (5) develop test facilities for evaluating the
3 performance of new products, materials, or techniques;

4 (6) develop specifications and standards for products
5 used for desalinating water, conveying water, and disposing of
6 brine;

7 (7) provide public information, education, and
8 outreach regarding desalination technologies and appropriate uses
9 and conservation methods for desalinated water; and

10 (8) provide data, recommendations, and any other
11 information necessary relating to desalination for local,
12 regional, or statewide water planning programs and processes.

13 Sec. 111.135. COLLABORATION WITH OTHER ENTITIES. The
14 University of Houston, The University of Texas at Brownsville, and
15 The University of Texas at El Paso shall encourage public and
16 private entities to participate in or support the operation of the
17 center and may enter into an agreement with any public or private
18 entity for that purpose. An agreement may allow the center to
19 provide information, services, or other assistance to an entity in
20 exchange for the entity's participation or support.

21 Sec. 111.136. GIFTS AND GRANTS. The boards may solicit,
22 accept, and administer gifts and grants from any public or private
23 source for the purposes of the center.

24 Sec. 111.137. PERSONNEL. The boards may employ personnel
25 for the center as necessary.

26 Sec. 111.138. EXPIRATION. This subchapter expires
27 September 1, 2023.

1 SECTION 4. This Act takes effect immediately if it receives
2 a vote of two-thirds of all the members elected to each house, as
3 provided by Section 39, Article III, Texas Constitution. If this
4 Act does not receive the vote necessary for immediate effect, this
5 Act takes effect on the 91st day after the last day of the
6 legislative session.