

Withdrawn
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FILED MDR

SENATE FILE 2267
BY COMMITTEE ON NATURAL
RESOURCES AND ENVIRONMENT

(SUCCESSOR TO SSB 3123)
(COMPANION TO LSB 6597HV BY
COMMITTEE ON ENVIRONMENTAL
PROTECTION)

Passed Senate, Date _____ Passed House, Date _____
Vote: Ayes _____ Nays _____ Vote: Ayes _____ Nays _____
Approved _____

A BILL FOR

1 An Act providing for the regulation of air quality, and making
2 penalties applicable.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

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SF-2267
NAT. RES. & ENVIRONMENT

1 Section 1. Section 455B.133, subsection 4, unnumbered
2 paragraph 1, Code 2003, is amended to read as follows:

3 Adopt, amend, or repeal emission limitations or standards
4 relating to the maximum quantities of air contaminants that
5 may be emitted from any air contaminant source. The standards
6 or limitations adopted under this section shall not exceed the
7 standards or limitations promulgated by the administrator of
8 the United States environmental protection agency or the
9 requirements of the federal Clean Air Act as amended through
10 January 1, 1991. ~~This does not prohibit the~~ The commission
11 ~~from adopting~~ shall not adopt a standard for a source or class
12 of sources for which the United States environmental
13 protection agency has not promulgated a standard. This ~~also~~
14 section does not prohibit the commission from adopting an
15 emission standard or limitation for infectious medical waste
16 treatment or disposal facilities which exceeds the standards
17 or limitations promulgated by the administrator of the United
18 States environmental protection agency or the requirements of
19 the federal Clean Air Act as amended through January 1, 1991.
20 The commission shall not adopt an emission standard or
21 limitation for infectious medical waste treatment or disposal
22 facilities prior to January 1, 1995, which exceeds the
23 standards or limitations promulgated by the administrator of
24 the United States environmental protection agency or the
25 requirements of the federal Clean Air Act, as amended through
26 January 1, 1991, for a hospital, or a group of hospitals,
27 licensed under chapter 135B which has been operating an
28 infectious medical waste treatment or disposal facility prior
29 to January 1, 1991. The commission shall not adopt or enforce
30 rules under this section that apply to an animal feeding
31 operation as provided in chapter 459.

32 Sec. 2. NEW SECTION. 455B.133A HEALTH EFFECT ADVISORY
33 PANEL.

34 Concurrent with the field study conducted pursuant to
35 section 459.207, a health effect advisory panel shall be

1 convened as provided in this section.

2 1. a. The director shall request interested organizations
3 to appoint voting members to the panel as follows:

4 (1) The national research council of the national
5 academies, which may appoint up to three members.

6 (2) The agency for toxic substances and disease registry,
7 which may appoint one member.

8 (3) The university of Iowa or the national institutes of
9 health, which may appoint one member.

10 (4) Iowa State university, which may appoint one member.

11 (5) The Iowa department of public health, which may
12 appoint one member.

13 (6) The United States department of agriculture, which may
14 appoint one member.

15 (7) The department of agriculture and land stewardship,
16 which may appoint one member.

17 Each organization that appoints a member to the panel may
18 also appoint an alternate who shall serve as the
19 organization's representative on the panel if the principal
20 appointee is unable to attend.

21 b. The director shall appoint the following persons who
22 shall serve on the panel as ex officio, nonvoting members:

23 (1) A person who owns a confinement feeding operation that
24 includes a structure which stores liquid manure, other than a
25 small animal feeding operation.

26 (2) A person who owns a confinement feeding operation that
27 includes a structure which stores manure exclusively on a dry-
28 matter basis, other than a small animal feeding operation.

29 (3) A person who resides within one mile of a confinement
30 feeding operation, other than a small animal feeding
31 operation.

32 (4) A person who is actively engaged in a manufacturing
33 business, other than the manufacturing of anhydrous ammonia.

34 (5) A person who is actively engaged in a business
35 involved in the manufacturing, storage, or delivery of

1 anhydrous ammonia.

2 (6) A person who represents a municipality in this state
3 and is actively engaged in operating a wastewater treatment
4 facility.

5 (7) A person who is employed by the department.

6 Each ex officio member may appoint an alternate who shall
7 serve in place of the principal member appointed by the
8 director whenever the principal member is unable to attend a
9 meeting.

10 2. a. The voting members of the panel shall elect a
11 chairperson from the panel's membership. Meetings may be
12 called by the chairperson or a majority of the voting members.
13 A majority of the panel's voting members constitutes a quorum.
14 An affirmative vote of a majority of the entire voting
15 membership is necessary for the panel to take a substantive
16 action other than adjourning a meeting.

17 b. The voting members shall serve without per diem, but
18 shall be reimbursed by the department for actual and necessary
19 expenses. The ex officio members shall serve without per diem
20 expenses.

21 3. Upon request by the panel, the department shall provide
22 clerical and technical staffing, materials, and meeting rooms
23 necessary for the panel's operations.

24 4. The panel is a government body for purposes of chapters
25 21 and 22.

26 5. a. The panel may advise the department and shall
27 submit interim reports and a final report to the general
28 assembly regarding health effect levels as defined in section
29 459.207, if any, for odor. The report shall include a
30 determination whether a health effect level for odor is
31 determinable based on a reasonable degree of scientific
32 certainty. If the panel finds that it is determinable, the
33 report shall contain findings and recommendations regarding
34 the health effect levels of odor.

35 b. The panel shall submit an interim report to the general

1 assembly on or before January 15 of each year. The panel's
2 final report shall contain findings and recommendations.

3 c. The commission shall not adopt a rule providing a
4 health effect level for odor until after the panel submits its
5 final report to the general assembly and a statute that
6 provides for the health effect level for odor is enacted.

7 Sec. 3. Section 459.207, Code 2003, is amended by striking
8 the section and inserting in lieu thereof the following:

9 459.207 ANIMAL FEEDING OPERATIONS -- AIRBORNE POLLUTANTS
10 CONTROL.

11 1. As used in this section:

12 a. "Airborne pollutant" means hydrogen sulfide, ammonia,
13 or odor.

14 b. "Health effect level" means a level and duration of
15 exposure to odor that causes a material and verifiable
16 physical disease when humans are exposed to an airborne
17 pollutant for periods consistent with the average exposure
18 periods and levels recorded at a separated location.

19 c. "Minimal risk level" means the concentration dose and
20 duration of exposure to hydrogen sulfide or ammonia as
21 provided in subsection 4 as recorded at a separated location.

22 d. "Separated location" means a location or object from
23 which a separation distance is required under section
24 455B.134, subsection 3, paragraph "f", section 459.202, or
25 section 459.204, other than a public thoroughfare.

26 2. The department shall conduct a comprehensive field
27 study to monitor the level of airborne pollutants from animal
28 feeding operations in this state, including but not limited to
29 each type of confinement feeding operation structure. The
30 field study as to each airborne pollutant shall be conducted
31 and shall continue for a period of not less than three years.
32 The monitoring period shall begin with the start of the
33 collection of data for such airborne pollutant. The field
34 study shall include a statistically significant sample of each
35 type of confinement feeding operation structure located in

1 this state.

2 3. The department shall collect monitoring data only from
3 separated locations as provided in this subsection.

4 Monitoring data collected at locations other than as provided
5 in this subsection shall be invalid.

6 a. For purposes of measuring hydrogen sulfide and ammonia,
7 monitoring data is considered to be taken at a separated
8 location if the monitor is located within three hundred feet
9 of the following:

10 (1) A structure that constitutes the separated location.

11 (2) The boundaries of a public use area.

12 However, in no event shall monitoring data be collected at
13 a distance closer than the required minimum separation
14 distance that applies to the manure application or confinement
15 feeding operation structure.

16 b. For purposes of measuring odor, monitoring data is
17 considered to be taken at a separated location if the
18 monitoring data is collected at a location that is not closer
19 than the required minimum separation distance that applies to
20 the manure application or confinement feeding operation
21 structure.

22 4. a. For an airborne pollutant that is hydrogen sulfide,
23 the minimal risk levels are as follows:

24 (1) The acute minimal risk level is a concentration dose
25 exceeding seventy parts per billion for the duration of
26 fourteen consecutive days. The sum of the hourly averages for
27 fourteen consecutive days shall not exceed twenty-three and
28 fifty-two hundredths parts per million-hour.

29 (2) The intermediate minimal risk level is a concentration
30 dose exceeding thirty parts per billion for the duration of
31 three hundred sixty-four consecutive days. The sum of the
32 hourly averages for three hundred sixty-four consecutive days
33 shall not exceed two hundred sixty-two parts per million-hour.

34 b. For an airborne pollutant that is ammonia, the minimal
35 risk levels are as follows:

1 (1) The minimal risk level is a concentration dose
2 exceeding one thousand seven hundred parts per billion for the
3 duration of fourteen consecutive days. The sum of the hourly
4 averages for fourteen consecutive days shall not exceed five
5 hundred seventy-one parts per million-hour.

6 (2) The chronic minimal risk level is a concentration dose
7 exceeding three hundred parts per billion for the duration of
8 three hundred sixty-five or more consecutive days. The sum of
9 the hourly averages for three hundred sixty-five consecutive
10 days shall not exceed two thousand six hundred twenty-eight
11 parts per million-hour.

12 c. A consecutive day for purposes of this subsection shall
13 be determined as provided in this paragraph. Hourly averages
14 must first be computed by averaging all valid five-minute
15 averages recorded by the data acquisition system in that hour.
16 An hourly average is considered valid if at least forty-five
17 minutes of valid five-minute averages are recorded by the date
18 acquisition system. A sampling day consists of twenty-four
19 nonoverlapping hours beginning from midnight on a given day to
20 midnight on the following day. A day of continuous monitoring
21 data is valid if at least eighteen hours of valid hourly
22 averages have been recorded at the monitoring location. To
23 determine the daily average, each of the valid hourly
24 concentrations associated with a sampling day shall be
25 averaged and truncated to one part per billion. The daily
26 average shall be used to compare with the appropriate minimal
27 risk level or health effect level to determine whether the
28 requisite number of consecutive daily averages exceeds the
29 applicable concentration dose.

30 5. After completion of the field study, the commission may
31 adopt rules pursuant to chapter 17A, except section 17A.4,
32 subsection 2, and section 17A.5, subsection 2, paragraph "b",
33 to do any of the following:

34 a. Establish recommended best management practices,
35 mechanisms, processes, or infrastructure designed to reduce

1 airborne pollutants from animal feeding operations in
2 accordance with this section. The recommended best management
3 practices, mechanisms, processes, or infrastructure may be
4 developed for a particular air pollutant and for a specific
5 type of confinement feeding operating structure if the data
6 from the field study demonstrates to a reasonable degree of
7 scientific certainty that a particular airborne pollutant from
8 that type of confinement feeding operation structure is
9 present at the separated location at a level exceeding a
10 minimal risk level for hydrogen sulfide or ammonia, or as
11 applicable a health effect level for odor. The department
12 shall consult with the department of agriculture and land
13 stewardship, Iowa state university college of agriculture, and
14 livestock producers who may be impacted before establishing
15 recommended best management practices, mechanisms, processes,
16 or infrastructure. The department shall provide a procedure
17 for the approval of alternative or experimental best
18 management practices, mechanisms, processes, or infrastructure
19 designed to reduce an airborne pollutant from an animal
20 feeding operation.

21 b. Establish rules for the enforcement of a minimal risk
22 level or health effect level only in accordance with this
23 subsection. The commission may adopt rules providing for the
24 enforcement of a minimal risk level for hydrogen sulfide or
25 ammonia, or as applicable a health effect level for odor for a
26 particular airborne pollutant, for a specific type of
27 confinement feeding operation structure if all of the
28 following apply:

29 (1) The data from the field study demonstrates to a
30 reasonable degree of scientific certainty that the airborne
31 pollutant from that type of confinement feeding operation
32 structure is present at separated locations at levels
33 exceeding the minimal risk level for hydrogen sulfide or
34 ammonia, or as applicable a health effect level for odor.

35 (2) A statute that provides for the health effect level is

1 enacted.

2 The commission shall not adopt rules if the data does not
3 demonstrate to a reasonable degree of scientific certainty
4 that the airborne pollutant from a specific type of
5 confinement feeding operation structure is present at
6 separated locations at levels that exceed the minimal risk
7 level for hydrogen sulfide or ammonia, or as applicable the
8 health effect level for odor.

9 6. If the commission adopts rules under subsection 5, the
10 department may monitor the level of airborne pollutants at a
11 separated location in accordance with subsection 3. However,
12 the department shall not monitor the level of airborne
13 pollutants unless a written complaint is received from the
14 owner or occupant of the separated location. The department
15 shall monitor the level of airborne pollutants by collecting
16 data at the separated location owned or occupied by the person
17 making the complaint. In providing for the enforcement of the
18 minimal risk level for hydrogen sulfide or ammonia, or as
19 applicable the health effect level for odor, the department
20 shall take all measurements at the separated location in
21 accordance with subsection 3.

22 a. In using monitoring equipment to collect data for
23 hydrogen sulfide, equipment shall incorporate a thermal
24 oxidizer and a reference method for the measurement of ambient
25 concentrations of sulfur dioxide that meet all calibrations,
26 standards, and testing requirements established by the United
27 States environmental protection agency. In using monitoring
28 equipment to collect data for ammonia, the equipment shall
29 incorporate a thermal oxidizer and a reference method for the
30 measurement of ambient concentrations of nitrogen dioxide that
31 meet all calibrations, standards, and testing requirements
32 established by the United States environmental protection
33 agency.

34 b. The department shall not enforce a rule adopted
35 pursuant to this section based on data, if any of the

1 following apply to the collection of such data:

2 (1) The data is collected from a site other than a
3 separated location as provided in this section.

4 (2) The data collected exceeds the minimal risk level or
5 health effect level but is within the monitoring equipment's
6 margin of error as established pursuant to rules which shall
7 be adopted by the commission.

8 (3) The monitoring equipment used to collect data for
9 hydrogen sulfide or ammonia does not meet the specifications
10 for such equipment as required by this section or rules
11 adopted by the commission.

12 c. If the department determines that a violation of a
13 minimal risk level or health effect level exists, the
14 department shall conduct an investigation to trace the source
15 of the airborne pollutant after the department has collected
16 data measuring an airborne pollutant from a separated
17 location. The department may enter the premises of a
18 confinement feeding operation in compliance with section
19 455B.103. The department shall comply with standard
20 biosecurity requirements customarily required by the
21 confinement feeding operation that are necessary to control
22 the spread of disease among an animal population.

23 d. If the department determines that a violation of a
24 minimal risk level or health effect level is caused by an
25 airborne pollutant from a confinement feeding operation
26 structure, the department shall issue a written notice to the
27 owner of the confinement feeding operation. The notice shall
28 require that the owner reduce the emission of the airborne
29 pollutant to meet the minimal risk level or health effect
30 level. The notice shall expire one year from the date of its
31 issuance. The owner shall not be in violation of state law
32 for failing to comply with the notice during its effective
33 period. If the department determines that a violation of a
34 minimal risk level or health effect level is caused by an
35 airborne pollutant from the confinement feeding operation

1 structure after the notice has expired, the department may
2 commence an enforcement action as provided in this chapter.
3 However, the owner shall not be subject to an enforcement
4 action for the period that the department's notice is in
5 effect, and shall not be subject to the imposition of
6 penalties based on a violation during that period.

7 7. The commission's rules providing for a minimal risk
8 level or health effect level shall not exceed a standard or
9 limitation applying to the same minimal risk level or health
10 effect level pursuant to the requirements of the federal Clean
11 Air Act as amended through January 1, 1991, or regulations
12 promulgated by the United States environmental protection
13 agency. This section shall supersede the commission's
14 authority under section 455B.133.

15 EXPLANATION

16 GENERAL. This bill amends provisions in Code chapters 455B
17 and 459, regulating air quality administered by the department
18 of natural resources. Code chapter 455B, division II,
19 provides general air quality regulatory authority to the
20 department, and Code chapter 459 specifically regulates animal
21 feeding operations and especially confinement feeding
22 operations.

23 REGULATION OF AIR CONTAMINANTS. Code section 455B.133
24 authorizes the department to adopt rules that establish
25 standards for air contaminants that may be emitted from any
26 source. The standards cannot exceed those promulgated by the
27 United States environmental protection agency, but the Code
28 section does authorize the department to adopt standards for
29 emissions from other sources. The bill provides that the
30 commission is prohibited from adopting a standard for these
31 other sources. The bill also provides that the department
32 cannot adopt rules that apply to animal feeding operations
33 other than as provided in Code chapter 459. That Code chapter
34 provides authority to the department to regulate animal
35 feeding operations, including the emission of airborne

1 pollutants.

2 HEALTH EFFECT ADVISORY PANEL. The bill creates new Code
3 section 455B.133A, which requires the establishment of a
4 health effect advisory panel. The panel must be composed of a
5 number of persons representing public and private
6 organizations, including regulators, the scientific community,
7 animal agriculture, rural residents, and industry. The
8 purpose of the panel is to advise the department and to issue
9 interim reports and a final report to the general assembly
10 regarding health effect levels of odor. The department of
11 natural resources is prohibited from adopting standards for a
12 health effect level before the panel submits its final report
13 to the general assembly and a health effect level is
14 established by statute.

15 AIR POLLUTANTS EMITTED FROM ANIMAL FEEDING OPERATIONS.

16 Current Code section 459.207 requires the department to
17 conduct a comprehensive field study to monitor the level of
18 airborne pollutants (defined as hydrogen sulfide, ammonia, or
19 odor) emitted from animal feeding operations. The Code
20 section provides that plans and programs established by the
21 department cannot provide for the enforcement of an air
22 quality standard prior to December 1, 2004. The Code section
23 also provides that any air quality standard established by the
24 department must be based on, and enforced at, distances
25 measured from a confinement feeding operation structure to a
26 separated location defined as a residence, school, church,
27 business, or public use area (but not public thoroughfare).
28 In providing for enforcement, the department must take all
29 initial measurements at the separated location. If the
30 department determines that a violation of a standard exists,
31 it may conduct an investigation to trace the source of the
32 airborne pollutant.

33 The bill rewrites Code section 459.207. The provides that
34 departmental standards must be based on a "health effect
35 level" for odor that is at a level and duration of exposure

1 that causes a material and verifiable physical disease
2 consistent with the average exposure periods and levels
3 recorded at a separated location. The standards also provide
4 for a "minimal risk level" that is a duration of exposure to
5 hydrogen sulfide or ammonia as recorded at separated
6 locations.

7 The bill provides that the department must conduct a
8 comprehensive field study to monitor the level of airborne
9 pollutants emitted from animal feeding operations for a period
10 of at least three years. The bill establishes minimum
11 separation distances for monitoring hydrogen sulfide, ammonia,
12 and odor. The bill provides specific concentrations for
13 hydrogen sulfide and ammonia which constitute health effect
14 levels. The bill establishes minimal risk levels for both
15 hydrogen sulfide and ammonia and procedures for sampling and
16 maintaining data.

17 The bill requires the department to establish best
18 management practices, mechanisms, processes, or infrastructure
19 designed to reduce airborne pollutants. The department must
20 also provide a procedure for the approval of alternative or
21 experimental best management practices, mechanisms, processes,
22 or infrastructure. The bill prescribes how the department may
23 monitor the level of airborne pollutants at particular
24 locations.

25 The bill establishes technical standards for equipment used
26 to measure airborne pollutants, including a thermal oxidizer
27 and a reference method for the measurement of ambient
28 concentrations as set out by the United States environmental
29 protection agency. The bill restricts enforcement of a
30 standard if data are not collected as required in the bill.
31 It also provides that if the department determines that a
32 violation of a minimum risk level or health effect level
33 exists, it must provide the owner of the confinement feeding
34 operation with a one-year grace period in order to comply with
35 the department's standards. The department's rules cannot

1 exceed a standard adopted by the United States environmental
2 protection agency.

3 A person who violates a provision of the bill is subject to
4 a civil penalty which is established, assessed, and collected
5 in the same manner as provided in Code section 455B.109. That
6 Code section requires the department to establish a schedule
7 of penalties for violations. A civil penalty may be up to
8 \$10,000 and each day of a violation constitutes a separate
9 offense.

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1 Amend Senate File 2267 as follows:

2 1. By striking everything after the enacting
3 clause and inserting the following:

4 "Section 1. Section 455B.133, subsection 4,
5 unnumbered paragraph 1, Code 2003, is amended to read
6 as follows:

7 Adopt, amend, or repeal emission limitations or
8 standards relating to the maximum quantities of air
9 contaminants that may be emitted from any air
10 contaminant source. The standards or limitations
11 adopted under this section shall not exceed the
12 standards or limitations promulgated by the
13 administrator of the United States environmental
14 protection agency or the requirements of the federal
15 Clean Air Act as amended through January 1, 1991.
16 ~~This does not prohibit the~~ The commission from
17 adopting shall not adopt a standard for a source or
18 class of sources for which the United States
19 environmental protection agency has not promulgated a
20 standard. This also section does not prohibit the
21 commission from adopting an emission standard or
22 limitation for infectious medical waste treatment or
23 disposal facilities which exceeds the standards or
24 limitations promulgated by the administrator of the
25 United States environmental protection agency or the
26 requirements of the federal Clean Air Act as amended
27 through January 1, 1991. The commission shall not
28 adopt an emission standard or limitation for
29 infectious medical waste treatment or disposal
30 facilities prior to January 1, 1995, which exceeds the
31 standards or limitations promulgated by the
32 administrator of the United States environmental
33 protection agency or the requirements of the federal
34 Clean Air Act, as amended through January 1, 1991, for
35 a hospital, or a group of hospitals, licensed under
36 chapter 135B which has been operating an infectious
37 medical waste treatment or disposal facility prior to
38 January 1, 1991. The commission shall not adopt or
39 enforce rules under this section that apply to an
40 animal feeding operation as provided in chapter 459.

41 Sec. 2. NEW SECTION. 455B.133A HEALTH EFFECT
42 ADVISORY PANEL.

43 Concurrent with the field study conducted pursuant
44 to section 459.207, a health effect advisory panel
45 shall be convened as provided in this section.

46 1. a. The director shall request interested
47 organizations to appoint voting members to the panel
48 as follows:

49 (1) The national research council of the national
50 academies, which may appoint up to three members who

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1 reside in this state or in states contiguous to this
2 state.

3 (2) The university of Iowa, which may appoint one
4 member.

5 (3) Iowa State university, which may appoint one
6 member.

7 (4) The Iowa department of public health, which
8 may appoint one member.

9 (5) The United States department of agriculture,
10 which may appoint one member.

11 (6) The department of agriculture and land
12 stewardship, which may appoint one member.

13 Each organization that appoints a member to the
14 panel may also appoint an alternate who shall serve as
15 the organization's representative on the panel if the
16 principal appointee is unable to attend.

17 b. The director shall appoint the following
18 persons who shall serve on the panel as ex officio,
19 nonvoting members:

20 (1) A person who owns a confinement feeding
21 operation that includes a structure which stores
22 liquid manure, other than a small animal feeding
23 operation.

24 (2) A person who owns a confinement feeding
25 operation that includes a structure which stores
26 manure exclusively on a dry-matter basis, other than a
27 small animal feeding operation.

28 (3) A person who resides within one mile of a
29 confinement feeding operation, other than a small
30 animal feeding operation.

31 (4) A person who is actively engaged in a
32 manufacturing business, other than the manufacturing
33 of anhydrous ammonia.

34 (5) A person who is actively engaged in a business
35 involved in the manufacturing, storage, or delivery of
36 anhydrous ammonia.

37 (6) A person who represents a municipality in this
38 state and is actively engaged in operating a
39 wastewater treatment facility.

40 (7) A person who is employed by the department.

41 Each ex officio member may appoint an alternate who
42 shall serve in place of the principal member appointed
43 by the director whenever the principal member is
44 unable to attend a meeting.

45 2. a. The voting members of the panel shall elect
46 a chairperson from the panel's membership. Meetings
47 may be called by the chairperson or a majority of the
48 voting members. A majority of the panel's voting
49 members constitutes a quorum. An affirmative vote of
50 a majority of the entire voting membership is

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1 necessary for the panel to take a substantive action
2 other than adjourning a meeting.

3 b. The voting members shall serve without per
4 diem, but shall be reimbursed by the department for
5 actual and necessary expenses. The ex officio members
6 shall serve without per diem expenses.

7 3. Upon request by the panel, the department shall
8 provide clerical and technical staffing, materials,
9 and meeting rooms necessary for the panel's
10 operations.

11 4. The panel shall consult with the agency for
12 toxic substances and disease registry as to the health
13 effect levels as defined in section 459.207, if any,
14 for odor.

15 5. The panel is a government body for purposes of
16 chapters 21 and 22.

17 6. a. The panel shall submit interim reports and
18 a final report to the general assembly regarding
19 health effect levels as defined in section 459.207, if
20 any, for odor. The report shall include a
21 determination whether a health effect level for odor
22 is determinable based on a reasonable degree of
23 scientific certainty. If the panel finds that it is
24 determinable, the report shall contain findings and
25 recommendations regarding the health effect levels of
26 odor.

27 b. The panel shall submit an interim report to the
28 general assembly on or before January 15 of each year.
29 The panel's final report shall be submitted no later
30 than December 31, 2006. The final report shall
31 contain findings and, if appropriate, recommendations.

32 c. The commission shall not adopt a rule providing
33 a health effect level for odor until after the panel
34 submits its final report to the general assembly and a
35 statute that provides for the health effect level for
36 odor is enacted.

37 Sec. 3. Section 459.207, Code 2003, is amended by
38 striking the section and inserting in lieu thereof the
39 following:

40 459.207 ANIMAL FEEDING OPERATIONS -- AIRBORNE
41 POLLUTANTS CONTROL.

42 1. As used in this section:

43 a. "Airborne pollutant" means hydrogen sulfide,
44 ammonia, or odor.

45 b. "Health effect level" means a level and
46 duration of exposure to odor that causes a material
47 and verifiable physical disease when humans are
48 exposed to an airborne pollutant for periods
49 consistent with the average exposure periods and
50 levels recorded at a separated location.

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1 c. "Minimal risk level" means the concentration
2 dose and duration of exposure to hydrogen sulfide or
3 ammonia as provided in subsection 4 as recorded at a
4 separated location.

5 d. "Separated location" means a location or object
6 from which a separation distance is required under
7 section 455B.134, subsection 3, paragraph "f", section
8 459.202, or section 459.204, other than a public
9 thoroughfare.

10 2. The department shall conduct a comprehensive
11 field study to monitor the level of airborne
12 pollutants from animal feeding operations in this
13 state, including but not limited to each type of
14 confinement feeding operation structure. The field
15 study as to each airborne pollutant shall be conducted
16 and shall continue for a period of not less than three
17 years. The monitoring period for an airborne
18 pollutant shall begin with the start of collection of
19 valid data for such airborne pollutant, including but
20 not limited to the collection of valid data prior to
21 the effective date of this Act. The field study shall
22 include monitoring data from at least five confinement
23 feeding operations for each type or phase of animal
24 production system commonly used in this state and for
25 each type of manure storage or treatment system
26 commonly used at such animal production systems. The
27 confinement feeding operations monitored shall, to
28 every extent practicable, be located in different
29 geographic locations in the state.

30 3. The department shall collect monitoring data
31 only from separated locations as provided in this
32 subsection. Monitoring data collected at locations
33 other than as provided in this subsection shall be
34 invalid.

35 a. For purposes of measuring hydrogen sulfide and
36 ammonia, monitoring data is considered to be taken at
37 a separated location if the monitor is located within
38 three hundred feet of the following:

39 (1) A structure that constitutes the separated
40 location.

41 (2) The boundaries of a public use area.

42 However, in no event shall monitoring data be
43 collected at a distance closer than the required
44 minimum separation distance that applies to the manure
45 application or confinement feeding operation
46 structure.

47 b. For purposes of measuring odor, monitoring data
48 is considered to be taken at a separated location if
49 the monitoring data is collected at a location that is
50 not closer than the required minimum separation

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1 distance that applies to the manure application or
2 confinement feeding operation structure.

3 4. a. For an airborne pollutant that is hydrogen
4 sulfide, the minimal risk levels are as follows:

5 (1) The acute minimal risk level is a
6 concentration dose exceeding seventy parts per billion
7 for the duration of fourteen consecutive days. The
8 sum of the hourly averages for fourteen consecutive
9 days shall not exceed twenty-three and fifty-two
10 hundredths parts per million-hour.

11 (2) The intermediate minimal risk level is a
12 concentration dose exceeding thirty parts per billion
13 for the duration of three hundred sixty-four
14 consecutive days. The sum of the hourly averages for
15 three hundred sixty-four consecutive days shall not
16 exceed two hundred sixty-two parts per million-hour.

17 b. For an airborne pollutant that is ammonia, the
18 minimal risk levels are as follows:

19 (1) The minimal risk level is a concentration dose
20 exceeding one thousand seven hundred parts per billion
21 for the duration of fourteen consecutive days. The
22 sum of the hourly averages for fourteen consecutive
23 days shall not exceed five hundred seventy-one parts
24 per million-hour.

25 (2) The chronic minimal risk level is a
26 concentration dose exceeding three hundred parts per
27 billion for the duration of three hundred sixty-five
28 or more consecutive days. The sum of the hourly
29 averages for three hundred sixty-five consecutive days
30 shall not exceed two thousand six hundred twenty-eight
31 parts per million-hour.

32 c. A consecutive day for purposes of this
33 subsection shall be determined as provided in this
34 paragraph. Hourly averages must first be computed by
35 averaging all valid five-minute averages recorded by
36 the data acquisition system in that hour. An hourly
37 average is considered valid if at least forty-five
38 minutes of valid five-minute averages are recorded by
39 the data acquisition system. A sampling day consists
40 of twenty-four nonoverlapping hours beginning from
41 midnight on a given day to midnight on the following
42 day. A day of continuous monitoring data is valid if
43 at least eighteen hours of valid hourly averages have
44 been recorded at the monitoring location. To
45 determine the daily average, each of the valid hourly
46 concentrations associated with a sampling day shall be
47 averaged and truncated to one part per billion. The
48 daily average shall be used to compare with the
49 appropriate minimal risk level or health effect level
50 to determine whether the requisite number of

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1 consecutive daily averages exceeds the applicable
2 concentration dose.

3 5. After completion of the field study, the
4 commission may adopt rules pursuant to chapter 17A,
5 except section 17A.4, subsection 2, and section 17A.5,
6 subsection 2, paragraph "b", to do any of the
7 following:

8 a. Establish recommended best management
9 practices, mechanisms, processes, or infrastructure
10 designed to reduce airborne pollutants from animal
11 feeding operations in accordance with this section.
12 The recommended best management practices, mechanisms,
13 processes, or infrastructure may be developed for a
14 particular air pollutant and for a specific type of
15 confinement feeding operating structure if the data
16 from the field study demonstrates to a reasonable
17 degree of scientific certainty that a particular
18 airborne pollutant from that type of confinement
19 feeding operation structure is present at the
20 separated location at a level exceeding a minimal risk
21 level for hydrogen sulfide or ammonia, or as
22 applicable a health effect level for odor. The
23 department shall consult with the department of
24 agriculture and land stewardship, Iowa state
25 university college of agriculture, and livestock
26 producers who may be impacted before establishing
27 recommended best management practices, mechanisms,
28 processes, or infrastructure. The department shall
29 provide a procedure for the approval of alternative or
30 experimental best management practices, mechanisms,
31 processes, or infrastructure designed to reduce an
32 airborne pollutant from an animal feeding operation.

33 b. Establish rules for the enforcement of a
34 minimal risk level or health effect level only in
35 accordance with this subsection. The commission may
36 adopt rules providing for the enforcement of a minimal
37 risk level for hydrogen sulfide or ammonia, or as
38 applicable a health effect level for odor for a
39 particular airborne pollutant, for a specific type of
40 confinement feeding operation structure if all of the
41 following apply:

42 (1) The data from the field study demonstrates to
43 a reasonable degree of scientific certainty that the
44 airborne pollutant from that type of confinement
45 feeding operation structure is present at separated
46 locations at levels exceeding the minimal risk level
47 for hydrogen sulfide or ammonia, or as applicable a
48 health effect level for odor.

49 (2) A statute that provides for the health effect
50 level is enacted.

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1 The commission shall not adopt rules if the data
2 does not demonstrate to a reasonable degree of
3 scientific certainty that the airborne pollutant from
4 a specific type of confinement feeding operation
5 structure is present at separated locations at levels
6 that exceed the minimal risk level for hydrogen
7 sulfide or ammonia, or as applicable the health effect
8 level for odor.

9 6. If the commission adopts rules under subsection
10 5, the department may monitor the level of airborne
11 pollutants at a separated location in accordance with
12 subsection 3. However, the department shall not
13 monitor the level of airborne pollutants unless a
14 written complaint is received from the owner or
15 occupant of the separated location. The department
16 shall monitor the level of airborne pollutants by
17 collecting data at the separated location owned or
18 occupied by the person making the complaint. In
19 providing for the enforcement of the minimal risk
20 level for hydrogen sulfide or ammonia, or as
21 applicable the health effect level for odor, the
22 department shall take all measurements at the
23 separated location in accordance with subsection 3.

24 a. In using monitoring equipment to collect data
25 for hydrogen sulfide, equipment shall incorporate a
26 thermal oxidizer and a reference method for the
27 measurement of ambient concentrations of sulfur
28 dioxide that meet all calibrations, standards, and
29 testing requirements established by the United States
30 environmental protection agency. In using monitoring
31 equipment to collect data for ammonia, the equipment
32 shall incorporate a thermal oxidizer and a reference
33 method for the measurement of ambient concentrations
34 of nitrogen dioxide that meet all calibrations,
35 standards, and testing requirements established by the
36 United States environmental protection agency.

37 b. The department shall not enforce a rule adopted
38 pursuant to this section based on data, if any of the
39 following apply to the collection of such data:

40 (1) The data is collected from a site other than a
41 separated location as provided in this section.

42 (2) The data collected exceeds the minimal risk
43 level or health effect level but is within the
44 monitoring equipment's margin of error as established
45 pursuant to rules which shall be adopted by the
46 commission.

47 (3) The monitoring equipment used to collect data
48 for hydrogen sulfide or ammonia does not meet the
49 specifications for such equipment as required by this
50 section or rules adopted by the commission.

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1 c. If the department determines that a violation
2 of a minimal risk level or health effect level exists,
3 the department shall conduct an investigation to trace
4 the source of the airborne pollutant after the
5 department has collected data measuring an airborne
6 pollutant from a separated location. The department
7 may enter the premises of a confinement feeding
8 operation in compliance with section 455B.103. The
9 department shall comply with standard biosecurity
10 requirements customarily required by the confinement
11 feeding operation that are necessary to control the
12 spread of disease among an animal population.

13 d. If the department determines that a violation
14 of a minimal risk level or health effect level is
15 caused by an airborne pollutant from a confinement
16 feeding operation structure, the department shall
17 issue a written notice to the owner of the confinement
18 feeding operation. The notice shall require that the
19 owner reduce the emission of the airborne pollutant to
20 meet the minimal risk level or health effect level.
21 The notice shall expire one year from the date of its
22 issuance. The owner shall not be in violation of
23 state law for failing to comply with the notice during
24 its effective period. If the department determines
25 that a violation of a minimal risk level or health
26 effect level is caused by an airborne pollutant from
27 the confinement feeding operation structure after the
28 notice has expired, the department may commence an
29 enforcement action as provided in this chapter.
30 However, the owner shall not be subject to an
31 enforcement action for the period that the
32 department's notice is in effect, and shall not be
33 subject to the imposition of penalties based on a
34 violation during that period.

35 7. The commission's rules providing for a minimal
36 risk level or health effect level shall not exceed a
37 standard or limitation applying to the same minimal
38 risk level or health effect level pursuant to the
39 requirements of the federal Clean Air Act as amended
40 through January 1, 1991, or regulations promulgated by
41 the United States environmental protection agency.
42 This section shall supersede the commission's
43 authority under section 455B.133."

By DAVID JOHNSON

S-5149 FILED MARCH 25, 2004

**Fiscal Services Division
Legislative Services Agency
Fiscal Note**

SF 2267 - Health Effects Regulation (LSB 6597 SV)
Analyst: Debra Kozel (Phone: (515) 281-6767) (deb.kozel@legis.state.ia.us)
Fiscal Note Version - New

Description

Senate File 2267 makes changes to air quality regulations related to animal feeding operations. Some of the changes include:

- Specifies that the Department of Natural Resources cannot adopt rules regulating air contaminants that exceed the standards of the federal Environmental Protection Agency (EPA).
- Specifies that a Department standard cannot be enforced if the data is not collected as outlined in the Bill.
- Creates a Health Effects Advisory Panel that will advise the Department of Natural Resources and the General Assembly about the health effects related to odor emitted from animal feeding operations. The Panel will submit a final report with recommendations to the General Assembly. The Department of Natural Resources, based on the Panel's recommendations, will establish standards.
- Specifies the Environmental Protection Commission cannot adopt a rule related to the health effect level for odor until the Advisory Panel submits the final report and a health effects level for odor is enacted.
- Specifies that Department standards must be based on a health effect level for odor.
- Specifies the Department of Natural Resources must conduct a comprehensive field study of airborne pollutants for a period of at least three years.
- Specifies that a violator will receive a written notice from the Department of Natural Resources and must reduce emissions during a one-year grace period.

Assumptions

1. The cost of one hydrogen sulfide and ammonia monitor is \$60,000 and ten additional sites will be needed. Total monitoring equipment costs are estimated at \$600,000.
2. Additional equipment needed for monitoring sites is \$20,000 per site for a total cost of \$200,000.
3. Operating costs for 20 air-monitoring sites is estimated at \$500,000 per year.
4. The estimated cost for the Health Effects Advisory Panel is \$10,000 per year.

Fiscal Impact

The estimated fiscal impact of SF 2267 is an increase in expenditures of \$860,000 for FY 2005 and \$460,000 for FY 2006 to the Department of Natural Resources. The increased expenditures would be funded from the Environment First Fund.

Source

Department of Natural Resources

Dennis C Prouty

March 16, 2004

The fiscal note and correctional impact statement for this bill was prepared pursuant to Joint Rule 17 and pursuant to Section 2.56, Code of Iowa. Data used in developing this fiscal note and correctional impact statement are available from the Fiscal Services Division, Legislative Services Agency to members of the Legislature upon request.

Johnson
Houser
Seng

Succeeded By ⁷ SSB# 3123
SF/HF 2267 Natural Resources

SENATE FILE _____
BY (PROPOSED COMMITTEE ON
NATURAL RESOURCES AND
ENVIRONMENT BILL BY
CHAIRPERSON HOUSER)

Passed Senate, Date _____ Passed House, Date _____
Vote: Ayes _____ Nays _____ Vote: Ayes _____ Nays _____
Approved _____

A BILL FOR

1 An Act providing for the regulation of air quality, and making
2 penalties applicable.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

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1 Section 1. Section 455B.133, subsection 4, unnumbered
2 paragraph 1, Code 2003, is amended to read as follows:

3 Adopt, amend, or repeal emission limitations or standards
4 relating to the maximum quantities of air contaminants that
5 may be emitted from any air contaminant source. The standards
6 or limitations adopted under this section shall not exceed the
7 standards or limitations promulgated by the administrator of
8 the United States environmental protection agency or the
9 requirements of the federal Clean Air Act as amended through
10 January 1, 1991. ~~This does not prohibit the~~ The commission
11 ~~from adopting~~ shall not adopt a standard for a source or class
12 of sources for which the United States environmental
13 protection agency has not promulgated a standard. This ~~also~~
14 section does not prohibit the commission from adopting an
15 emission standard or limitation for infectious medical waste
16 treatment or disposal facilities which exceeds the standards
17 or limitations promulgated by the administrator of the United
18 States environmental protection agency or the requirements of
19 the federal Clean Air Act as amended through January 1, 1991.
20 The commission shall not adopt an emission standard or
21 limitation for infectious medical waste treatment or disposal
22 facilities prior to January 1, 1995, which exceeds the
23 standards or limitations promulgated by the administrator of
24 the United States environmental protection agency or the
25 requirements of the federal Clean Air Act, as amended through
26 January 1, 1991, for a hospital, or a group of hospitals,
27 licensed under chapter 135B which has been operating an
28 infectious medical waste treatment or disposal facility prior
29 to January 1, 1991. The commission shall not adopt or enforce
30 rules under this section that apply to an animal feeding
31 operation as provided in chapter 459.

32 Sec. 2. NEW SECTION. 455B.133A HEALTH EFFECT ADVISORY
33 PANEL.

34 Concurrent with the field study conducted pursuant to
35 section 459.207, a health effect advisory panel shall be

1 convened as provided in this section.

2 1. a. The director shall request interested organizations
3 to appoint voting members to the panel as follows:

4 (1) The national research council of the national
5 academies, which may appoint up to three members.

6 (2) The agency for toxic substances and disease registry,
7 which may appoint one member.

8 (3) The university of Iowa or the national institutes of
9 health, which may appoint one member.

10 (4) Iowa State university, which may appoint one member.

11 (5) The Iowa department of public health, which may
12 appoint one member.

13 (6) The United States department of agriculture, which may
14 appoint one member.

15 (7) The department of agriculture and land stewardship,
16 which may appoint one member.

17 Each organization that appoints a member to the panel may
18 also appoint an alternate who shall serve as the
19 organization's representative on the panel if the principal
20 appointee is unable to attend.

21 b. The director shall appoint the following persons who
22 shall serve on the panel as ex officio, nonvoting members:

23 (1) A person who owns a confinement feeding operation that
24 includes a structure which stores liquid manure, other than a
25 small animal feeding operation.

26 (2) A person who owns a confinement feeding operation that
27 includes a structure which stores manure exclusively on a dry-
28 matter basis, other than a small animal feeding operation.

29 (3) A person who resides within one mile of a confinement
30 feeding operation, other than a small animal feeding
31 operation.

32 (4) A person who is actively engaged in a manufacturing
33 business, other than the manufacturing of anhydrous ammonia.

34 (5) A person who is actively engaged in a business
35 involved in the manufacturing, storage, or delivery of

1 anhydrous ammonia.

2 (6) A person who represents a municipality in this state
3 and is actively engaged in operating a wastewater treatment
4 facility.

5 (7) A person who is employed by the department.

6 Each ex officio member may appoint an alternate who shall
7 serve in place of the principal member appointed by the
8 director whenever the principal member is unable to attend a
9 meeting.

10 2. a. The voting members of the panel shall elect a
11 chairperson from the panel's membership. Meetings may be
12 called by the chairperson or a majority of the voting members.
13 A majority of the panel's voting members constitutes a quorum.
14 An affirmative vote of a majority of the entire voting
15 membership is necessary for the panel to take a substantive
16 action other than adjourning a meeting.

17 b. The voting members shall serve without per diem, but
18 shall be reimbursed by the department for actual and necessary
19 expenses. The ex officio members shall serve without per diem
20 expenses.

21 3. Upon request by the panel, the department shall provide
22 clerical and technical staffing, materials, and meeting rooms
23 necessary for the panel's operations.

24 4. The panel is a government body for purposes of chapters
25 21 and 22.

26 5. a. The panel may advise the department and shall
27 submit interim reports and a final report to the general
28 assembly regarding health effect levels as defined in section
29 459.207, if any, for odor. The report shall include a
30 determination whether a health effect level for odor is
31 determinable based on a reasonable degree of scientific
32 certainty. If the panel finds that it is determinable, the
33 report shall contain findings and recommendations regarding
34 the health effect levels of odor.

35 b. The panel shall submit an interim report to the general

1 assembly on or before January 15 of each year. The panel's
2 final report shall contain findings and recommendations.

3 c. The commission shall not adopt a rule providing a
4 health effect level for odor until after the panel submits its
5 final report to the general assembly and a statute that
6 provides for the health effect level for odor is enacted.

7 Sec. 3. Section 459.207, Code 2003, is amended by striking
8 the section and inserting in lieu thereof the following:

9 459.207 ANIMAL FEEDING OPERATIONS -- AIRBORNE POLLUTANTS
10 CONTROL.

11 1. As used in this section:

12 a. "Airborne pollutant" means hydrogen sulfide, ammonia,
13 or odor.

14 b. "Health effect level" means a level and duration of
15 exposure that causes a material and verifiable physical
16 disease when humans are exposed to an airborne pollutant for
17 periods consistent with the average exposure periods and
18 levels recorded at a separated location. For hydrogen sulfide
19 and ammonia, the health effect levels are the doses and
20 durations as defined in subsection 4.

21 c. "Separated location" means a location or object from
22 which a separation distance is required under section
23 455B.134, subsection 3, paragraph "f", section 459.202, or
24 section 459.204, other than a public thoroughfare.

25 2. The department shall conduct a comprehensive field
26 study to monitor the level of airborne pollutants from animal
27 feeding operations in this state, including but not limited to
28 each type of confinement feeding operation structure. The
29 field study as to each airborne pollutant shall be conducted
30 and shall continue for a period of not less than three years.
31 The monitoring period shall begin with the start of the
32 collection of data for such airborne pollutant. The field
33 study shall include a statistically significant sample of each
34 type of confinement feeding operation structure located in
35 this state.

1 3. The department shall collect monitoring data only from
2 separated locations as provided in this subsection.

3 Monitoring data collected at locations other than as provided
4 in this subsection shall be invalid.

5 a. For purposes of measuring hydrogen sulfide and ammonia,
6 monitoring data is considered to be taken at a separated
7 location if the monitor is located within three hundred feet
8 of the following:

9 (1) A structure that constitutes the separated location.

10 (2) The boundaries of a public use area.

11 However, in no event shall monitoring data be collected at
12 a distance closer than the required minimum separation
13 distance that applies to the manure application or confinement
14 feeding operation structure.

15 b. For purposes of measuring odor, monitoring data is
16 considered to be taken at a separated location if the
17 monitoring data is collected at a location that is not closer
18 than the required minimum separation distance that applies to
19 the manure application or confinement feeding operation
20 structure.

21 4. a. For an airborne pollutant that is hydrogen sulfide,
22 the health effect levels are as follows:

23 (1) The acute health effect level is a concentration dose
24 exceeding seventy parts per billion for the duration of
25 fourteen consecutive days.

26 (2) The chronic health effect level is a concentration
27 dose exceeding thirty parts per billion for the duration of
28 three hundred sixty-four consecutive days.

29 b. For an airborne pollutant that is ammonia, the health
30 effect levels are as follows:

31 (1) The acute health effect level is a concentration dose
32 exceeding one thousand seven hundred parts per billion for the
33 duration of fourteen consecutive days.

34 (2) The chronic health effect level is a concentration
35 dose exceeding three hundred parts per billion for the

1 duration of three hundred sixty-five or more consecutive days.
 2 c. A consecutive day for purposes of this subsection shall
 3 be determined as provided in this paragraph. Hourly averages
 4 must first be computed by averaging all valid five-minute
 5 averages recorded by the data acquisition system in that hour.
 6 An hourly average is considered valid if at least forty-five
 7 minutes of valid five-minute averages are recorded by the date
 8 acquisition system. A sampling day consists of twenty-four
 9 nonoverlapping hours beginning from midnight on a given day to
 10 midnight on the following day. A day of continuous monitoring
 11 data is valid if at least eighteen hours of valid hourly
 12 averages have been recorded at the monitoring location. To
 13 determine the daily average, each of the valid hourly
 14 concentrations associated with a sampling day shall be
 15 averaged and truncated to one part per billion. The daily
 16 average shall be used to compare with the appropriate health
 17 effect level to determine whether the requisite number of
 18 consecutive daily averages exceeds the applicable
 19 concentration dose.

20 5. After completion of the field study, the commission may
 21 adopt rules pursuant to chapter 17A, except section 17A.4,
 22 subsection 2, and section 17A.5, subsection 2, paragraph "b",
 23 to do any of the following:

24 a. Establish recommended best management practices,
 25 mechanisms, processes, or infrastructure designed to reduce
 26 airborne pollutants from animal feeding operations in
 27 accordance with this section. The recommended best management
 28 practices, mechanisms, processes, or infrastructure may be
 29 developed for a particular air pollutant and for a specific
 30 type of confinement feeding operating structure if the data
 31 from the field study demonstrates to a reasonable degree of
 32 scientific certainty that a particular airborne pollutant from
 33 that type of confinement feeding operation structure is
 34 present at the separated location at a level exceeding a
 35 health effect level. The department shall consult with the

1 department of agriculture and land stewardship, Iowa state
2 university college of agriculture, and livestock producers who
3 may be impacted before establishing recommended best
4 management practices, mechanisms, processes, or
5 infrastructure. The department shall provide a procedure for
6 the approval of alternative or experimental airborne control
7 strategies to reduce the airborne pollutant from the
8 confinement feeding operation.

9 b. Establish rules for the enforcement of a health effect
10 level only in accordance with this subsection. The commission
11 may adopt rules providing for the enforcement of a health
12 effect level for a particular airborne pollutant for a
13 specific type of confinement feeding operation structure if
14 all of the following apply:

15 (1) The data from the field study demonstrates to a
16 reasonable degree of scientific certainty that the airborne
17 pollutant from that type of confinement feeding operation
18 structure is present at separated locations at levels
19 exceeding the health effect level.

20 (2) A statute that provides for the health effect level is
21 enacted.

22 The commission shall not adopt rules if the data does not
23 demonstrate to a reasonable degree of scientific certainty
24 that the airborne pollutant from a specific type of
25 confinement feeding operation structure is present at
26 separated locations at levels that exceed the health effect
27 level.

28 6. If the commission adopts rules under subsection 5, the
29 department may monitor the level of airborne pollutants at a
30 separated location in accordance with subsection 3. However,
31 the department shall not monitor the level of airborne
32 pollutants unless a written complaint is received from the
33 owner or occupant of the separated location. The department
34 shall monitor the level of airborne pollutants by collecting
35 data at the separated location owned or occupied by the person

1 making the complaint. In providing for the enforcement of the
2 health effect level, the department shall take all
3 measurements at the separated location in accordance with
4 subsection 3.

5 a. In using monitoring equipment to collect data for
6 hydrogen sulfide, equipment shall incorporate a thermal
7 oxidizer and a reference method for the measurement of ambient
8 concentrations of sulfur dioxide that meet all calibrations,
9 standards, and testing requirements established by the United
10 States environmental protection agency. In using monitoring
11 equipment to collect data for ammonia, the equipment shall
12 incorporate a thermal oxidizer and a reference method for the
13 measurement of ambient concentrations of nitrogen dioxide that
14 meet all calibrations, standards, and testing requirements
15 established by the United States environmental protection
16 agency.

17 b. The department shall not enforce a rule adopted
18 pursuant to this section based on data, if any of the
19 following apply to the collection of such data:

20 (1) The data is collected from a site other than a
21 separated location as provided in this section.

22 (2) The data collected exceeds the health effect level but
23 is within the monitoring equipment's margin of error as
24 established pursuant to rules which shall be adopted by the
25 commission.

26 (3) The monitoring equipment used to collect data for
27 hydrogen sulfide or ammonia does not meet the specifications
28 for such equipment as required by this section or rules
29 adopted by the commission.

30 c. If the department determines that a violation of a
31 health effect level exists, the department shall conduct an
32 investigation to trace the source of the airborne pollutant
33 after the department has collected data measuring an airborne
34 pollutant from a separated location. The department may enter
35 the premises of a confinement feeding operation in compliance

1 with section 455B.103. The department shall comply with
2 standard biosecurity requirements customarily required by the
3 confinement feeding operation that are necessary to control
4 the spread of disease among an animal population.

5 d. If the department determines that a violation of a
6 health effect level is caused by an airborne pollutant from a
7 confinement feeding operation structure, the department shall
8 issue a written notice to the owner of the confinement feeding
9 operation. The notice shall require that the owner reduce the
10 emission of the airborne pollutant to meet the health effect
11 level. The notice shall expire one year from the date of its
12 issuance. The owner shall not be in violation of state law
13 for failing to comply with the notice during its effective
14 period. If the department determines that a violation of a
15 health effect level is caused by an airborne pollutant from
16 the confinement feeding operation structure after the notice
17 has expired, the department may commence an enforcement action
18 as provided in this chapter. However, the owner shall not be
19 subject to an enforcement action for the period that the
20 department's notice is in effect, and shall not be subject to
21 the imposition of penalties based on a violation during that
22 period.

23 7. The commission's rules providing for a health effect
24 level shall not exceed a standard or limitation applying to
25 the same health effect level pursuant to the requirements of
26 the federal Clean Air Act as amended through January 1, 1991,
27 or regulations promulgated by the United States environmental
28 protection agency. This section shall supersede the
29 commission's authority under section 455B.133.

30

EXPLANATION

31 GENERAL. This bill amends provisions in Code chapters 455B
32 and 459, regulating air quality administered by the department
33 of natural resources. Code chapter 455B, division II,
34 provides general air quality regulatory authority to the
35 department, and Code chapter 459 specifically regulates animal

1 feeding operations and especially confinement feeding
2 operations.

3 REGULATION OF AIR CONTAMINANTS. Code section 455B.133
4 authorizes the department to adopt rules that establish
5 standards for air contaminants that may be emitted from any
6 source. The standards cannot exceed those promulgated by the
7 United States environmental protection agency, but the Code
8 section does authorize the department to adopt standards for
9 emissions from other sources. The bill provides that the
10 commission is prohibited from adopting a standard for these
11 other sources. The bill also provides that the department
12 cannot adopt rules that apply to animal feeding operations
13 other than as provided in Code chapter 459. That Code chapter
14 provides authority to the department to regulate animal
15 feeding operations, including the emission of airborne
16 pollutants.

17 HEALTH EFFECT ADVISORY PANEL. The bill creates new Code
18 section 455B.133A, which requires the establishment of a
19 health effect advisory panel. The panel must be composed of a
20 number of persons representing public and private
21 organizations, including regulators, the scientific community,
22 animal agriculture, rural residents, and industry. The
23 purpose of the panel is to advise the department and to issue
24 interim reports and a final report to the general assembly
25 regarding health effect levels of airborne pollutants. The
26 department of natural resources is prohibited from adopting
27 standards for a health effect level before the panel submits
28 its final report to the general assembly and a health effect
29 level is established by statute.

30 AIR POLLUTANTS EMITTED FROM ANIMAL FEEDING OPERATIONS.
31 Current Code section 459.207 requires the department to
32 conduct a comprehensive field study to monitor the level of
33 airborne pollutants (defined as hydrogen sulfide, ammonia, or
34 odor) emitted from animal feeding operations. The Code
35 section provides that plans and programs established by the

1 department cannot provide for the enforcement of an air
2 quality standard prior to December 1, 2004. The Code section
3 also provides that any air quality standard established by the
4 department must be based on, and enforced at, distances
5 measured from a confinement feeding operation structure to a
6 separated location defined as a residence, school, church,
7 business, or public use area (but not public thoroughfare).
8 In providing for enforcement, the department must take all
9 initial measurements at the separated location. If the
10 department determines that a violation of a standard exists,
11 it may conduct an investigation to trace the source of the
12 airborne pollutant.

13 The bill rewrites Code section 459.207. The bill provides
14 that departmental standards must be based on a "health effect
15 level" that is at a level and duration of exposure that causes
16 a material and verifiable physical disease consistent with the
17 average exposure periods and levels recorded at a separated
18 location.

19 The bill provides that the department must conduct a
20 comprehensive field study to monitor the level of airborne
21 pollutants emitted from animal feeding operations for a period
22 of at least three years. The bill establishes minimum
23 separation distances for monitoring hydrogen sulfide and
24 ammonia, and odor (if such measurements may be scientifically
25 taken). The bill provides specific concentrations for
26 hydrogen sulfide and ammonia which constitute health effect
27 levels.

28 The bill requires the department to establish best
29 management practices, mechanisms, processes, or infrastructure
30 designed to reduce airborne pollutants. The department must
31 also provide a procedure for the approval of alternative or
32 experimental airborne control strategies. The bill prescribes
33 how the department may monitor the level of airborne
34 pollutants at particular locations.

35 The bill establishes technical standards for equipment used

1 to measure airborne pollutants, including a thermal oxidizer
 2 and a reference method for the measurement of ambient
 3 concentrations as set out by the United States environmental
 4 protection agency. The bill restricts enforcement of a
 5 standard if data are not collected as required in the bill.
 6 It also provides that if the department determines that a
 7 violation of a health effect level exists, it must provide the
 8 owner of the confinement feeding operation with a one-year
 9 grace period in order to comply with the department's
 10 standards. The department's rules cannot exceed a standard
 11 adopted by the United States environmental protection agency.

12 A person who violates a provision of the bill is subject to
 13 a civil penalty which is established, assessed, and collected
 14 in the same manner as provided in Code section 455B.109. That
 15 Code section requires the department to establish a schedule
 16 of penalties for violations. A civil penalty may be up to
 17 \$10,000 and each day of a violation constitutes a separate
 18 offense.

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