Senate File 2234 - Introduced

Passed Senate, Date			
Nays Nays Nays Nays Nays			
A BILL FOR 1 An Act providing for research related to mitigation of odor 2 emitted from livestock operations. 3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA: 4 TISB 6236SS 82 5 da/nh/14 PAG LIN 1 DIVISION V 1 2 ODOR MITIGATION RESEARCH FOR LIVESTOCK OPERATIONS 1 3 Section 1. NEW SECTION. 266.40 DEFINITIONS. 1 4 For purposes of this division, the following definitions 1 5 apply: 1 6 1. "Livestock" means beef cattle, dairy cattle, swine, 1 7 chickens, or turkeys. 1 8 2. "Livestock operation" means any area in which livestock 1 9 are kept in a confined space, including a confinement feeding 1 10 operation or open feedlot. 1 11 3. "Livestock producer" means the titleholder of livestock 1 2 or a livestock operation. 1 3 4. "University" means Iowa state university of science and 1 14 technology. 1 15 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of natural resources to 1 19 establish and administer a research effort to mitigate odor 1 20 emitted from livestock operations involving swine, beef or 1 21 dairy cattle, chickens, or turkeys as provided in this 2 division. NEW SECTION. 266.42 PURPOSES. 2 The purposes of the research effort provided in section 1 25 266.41 are to accelerate the adoption of affordable and 2 deffective odor mitigation technologies and strategies by 2 7 livestock producers, expand the number of affordable and 2 deffective odor mitigation technologies and strategies 2 9 available to livestock producers, and provide 3 0 research=grounded information regarding odor mitigation 3 1 technologies and strategies that are ineffective or 3 2 cost=prohibitive. 3 3 Cost=prohibitive. 4 The purposes of the research projects to address whether 3 4 TECHNOLOGIES AND STRATEGIES == APPLIED ON-SITE RESEARCH 3 5 PROJECTS. 2 1 Iowa state university of science and technology shall 2 conduct applied on=site research projects to address whether 3 3 conduct applied on=site research projects to address whether 3 5 pro		Vote: Ayes Nays	Passed House, Date Vote: Ayes Nays
l An Act providing for research related to mitigation of odor mitted from livestock operations. BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA: 4 TLSB 6236SS 82 5 da/nh/14 PAG LIN DIVISION V 1 2 ODOR MITIGATION RESEARCH FOR LIVESTOCK OPERATIONS 1 3 Section 1. NEW SECTION. 266.40 DEPINITIONS. 1 4 For purposes of this division, the following definitions 1 5 appl. "Livestock means beef cattle, dairy cattle, swine, 1 6 following of the continued			A BILL FOR
a BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA: 4 TISB 6236SS 82 5 da/nh/14 PAG LIN 1 1 ODOR MITIGATION RESEARCH FOR LIVESTOCK OPERATIONS 1 3 Section 1. NEW SECTION. 266.40 DEFINITIONS. 1 4 For purposes of this division, the following definitions 1 5 apply: 1 6 1. "Livestock" means beef cattle, dairy cattle, swine, 1 7 chickens, or turkeys. 1 8 2. "Livestock operation" means any area in which livestock 1 9 are kept in a confined space, including a confinement feeding 1 10 operation or open feedlot. 1 1 3. "Livestock producer" means the titleholder of livestock 1 12 or a livestock operation. 1 3 4. "University" means Iowa state university of science and 1 14 technology. 1 5 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of agriculture and land 1 18 stewardship and the department of agriculture and land 1 19 establish and administer a research effort to mitigate odor 1 20 emitted from livestock operations involving swine, beef or 1 21 dairy cattle, chickens, or turkeys as provided in this 1 22 division. 1 2 Sec. 3. NEW SECTION. 266.42 PURPOSES. 1 2 The purposes of the research effort provided in section 1 2 defective odor mitigation technologies and strategies by 2 division. 2 Sec. 3. NEW SECTION. 266.43 DEVBLOP AND ADVANCE 3 effective odor mitigation technologies and strategies 3 defective odor mitigation technologies and strategies 3 effective odor mitigation technologies and strategies 3 effective odor mitigation technologies and strategies 4 TECHNOLOGIES AND STRATEGIES = APPLIED ON-SITE RESEARCH 3 PROJECTS. 3 Lowa state university of science and technology shall 4 cennologies and strategies that are ineffective or 3 door mitigation technologies of their successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successfully 6 implemented across many livestock operations on a statewide basis and under different circumstances. 2 C. The universi	1	An Agt providing for regearch rel	
DIVISION V 1 2 ODOR MITIGATION RESEARCH FOR LIVESTOCK OPERATIONS 1 3 Section 1. NEW SECTION. 266.40 DEFINITIONS. 1 4 For purposes of this division, the following definitions apply: 1 1. "Livestock" means beef cattle, dairy cattle, swine, 1 7 chickens, or turkeys. 1 8 2. "Livestock operation" means any area in which livestock 1 9 are kept in a confined space, including a confinement feeding 1 10 operation or open feedlot. 1 11 3. "Livestock producer" means the titleholder of livestock 1 12 or a livestock operation 1 3 4. "University" means Iowa state university of science and 1 4 technology. 1 5 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of agriculture and land 1 18 stewardship and the department of natural resources to 1 19 establish and administer a research effort to mitigate odor 1 2 dairy cattle, chickens, or turkeys as provided in this 2 division. 2 3 Sec. 3. NEW SECTION. 266.42 PURPOSES. 2 4 The purposes of the research effort provided in section 2 5 266.41 are to accelerate the adoption of affordable and 2 6 effective odor mitigation technologies and strategies by 2 1 livestock producers, expand the number of affordable and 2 28 effective odor mitigation technologies and strategies by 2 29 available to livestock producers, and provide 3 oset=prohibitive. 3 Sec. 4. NEW SECTION. 266.43 DEVELOP AND ADVANCE 3 FECHNOLOGIES AND STRATEGIES == APPLIED ON-SITE RESEARCH 3 FROJECTS. 1 Iowa state university of science and technology shall 2 conduct applied on-site research projects to address whether 3 door mitigation technologies or strategies an be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successfully 6 implementation and maintenance to accomplish the purposes 7 provided in section 266.42. 2 1. The installation, maintenance, and use of odor 2 11 strategies that have a firm foundation in basic and applied 2 research but which may further bene	2 3 4	emitted from livestock operati BE IT ENACTED BY THE GENERAL ASSE TLSB 6236SS 82	ons.
DORN MITIGATION RESEARCH FOR LIVESTOCK OPERATIONS Section 1. NEW SECTION. 266.40 DEFINITIONS. Por purposes of this division, the following definitions apply: "Livestock" means beef cattle, dairy cattle, swine, chickens, or turkeys. 2. "Livestock operation" means any area in which livestock are kept in a confined space, including a confinement feeding looperation or open feedlot. 11 3. "Livestock producer" means the titleholder of livestock or a livestock operation. 12 or a livestock operation. 13 4. "University" means Iowa state university of science and technology. 15 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 16 Iowa state university of science and technology shall consult with the department of agriculture and land stewardship and the department of natural resources to emitted from livestock operations involving swine, beef or dairy cattle, chickens, or turkeys as provided in this civision. Sec. 3. NEW SECTION. 266.42 PURPOSES. The purposes of the research effort provided in section 266.41 are to accelerate the adoption of affordable and 266 effective odor mitigation technologies and strategies by 171 livestock producers, expand the number of affordable and 28 effective odor mitigation technologies and strategies and 29 available to livestock producers, and provide 13 research=grounded information regarding odor mitigation 13 technologies and strategies by 27 livestock producers, expand the number of affordable and 28 effective odor mitigation technologies and strategies or 22 cost=prohibitive. 3 Sec. 4. NEW SECTION. 266.43 DEVELOP AND ADVANCE 34 TECHNOLOGIES AND STRATEGIES == APPLIED ON=SITE RESEARCH 24 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successfully 4 implemented across many livestock operations on a statewide basis and under different circumstances. 1 The projects shall be conducted at livestock o	PAG	LIN	
1 9 are kept in a confined space, including a confinement feeding 1 10 operation or open feedlot. 1 11 3. "Livestock producer" means the titleholder of livestock 1 12 or a livestock operation. 1 3 4. "University" means Iowa state university of science and 1 14 technology. 1 15 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of agriculture and land 1 18 stewardship and the department of natural resources to 1 19 establish and administer a research effort to mitigate odor 2 0 emitted from livestock operations involving swine, beef or 1 21 dairy cattle, chickens, or turkeys as provided in this 1 22 division. 1 23 Sec. 3. NEW SECTION. 266.42 PURPOSES. 1 24 The purposes of the research effort provided in section 1 25 266.41 are to accelerate the adoption of affordable and 1 26 effective odor mitigation technologies and strategies by 1 27 livestock producers, expand the number of affordable and 1 28 effective odor mitigation technologies and strategies 1 29 available to livestock producers, and provide 1 30 research-grounded information regarding odor mitigation 1 31 technologies and strategies 1 29 available and strategies that are ineffective or 1 32 cost-prohibitive. 1 34 TECHNOLOGIES AND STRATEGIES == APPLIED ON-SITE RESEARCH 1 35 PROJECTS. 1 Iowa state university of science and technology shall 2 conduct applied on=site research projects to address whether 3 odor mitigation technologies or strategies can be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successful 2 implementation and maintenance to accomplish the purposes 2 provided in section 266.42. 2 1. The projects shall be conducted at livestock operations 2 on a statewide basis and under different circumstances. 3 classification. The technologies and strategies may include but 4 are not limited to the following: 5 a. The installation, maintenance, and use of odor 6 mitigating devices, technique	1 1 1 1 1	ODOR MITIGATION RESEARCE Section 1. NEW SECTION. 2 For purposes of this divisi apply: 1. "Livestock" means beef chickens, or turkeys.	CH FOR LIVESTOCK OPERATIONS 166.40 DEFINITIONS. 1.000, the following definitions 1.000 cattle, dairy cattle, swine,
1 12 or a livestock operation. 1 13 4. "University" means Iowa state university of science and 1 4 technology. 1 15 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of agriculture and land 1 18 stewardship and the department of natural resources to 1 19 establish and administer a research effort to mitigate odor 20 emitted from livestock operations involving swine, beef or 21 dairy cattle, chickens, or turkeys as provided in this 2 division. 2 Sec. 3. NEW SECTION. 266.42 PURPOSES. 1 The purposes of the research effort provided in section 25 266.41 are to accelerate the adoption of affordable and 266.41 are to accelerate the adoption of affordable and 266.41 are to accelerate the adoption of affordable and 26 effective odor mitigation technologies and strategies by 1 27 livestock producers, expand the number of affordable and 28 effective odor mitigation technologies and strategies 29 available to livestock producers, and provide 3 research-grounded information regarding odor mitigation 3 research-grounded information regarding odor mitigation 3 sec. 4. NEW SECTION. 266.43 DEVELOP AND ADVANCE 3 TECHNOLOGIES AND STRATEGIES == APPLIED ON-SITE RESEARCH 135 PROJECTS. 2 I Iowa state university of science and technology shall 2 conduct applied on-site research projects to address whether 3 odor mitigation technologies or strategies can be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successful 5 situations, and to analyze the costs of their successful 2 implementation and maintenance to accomplish the purposes 2 provided in section 266.42. 2 1 The university shall evaluate technologies or a statewide basis and under different circumstances. 2 2 The university shall evaluate technologies or 2 11 strategies that have a firm foundation in basic and applied 2 research but which may further benefit from statewide on-site 3 application. The technologies	1	9 are kept in a confined space, 10 operation or open feedlot.	including a confinement feeding
1 14 technology. 1 15 Sec. 2. NEW SECTION. 266.41 ESTABLISHMENT. 1 16 Iowa state university of science and technology shall 1 17 consult with the department of agriculture and land 1 18 stewardship and the department of natural resources to 1 19 establish and administer a research effort to mitigate odor 1 20 emitted from livestock operations involving swine, beef or 1 21 dairy cattle, chickens, or turkeys as provided in this 1 22 division. 2 Sec. 3. NEW SECTION. 266.42 PURPOSES. 1 The purposes of the research effort provided in section 1 25 266.41 are to accelerate the adoption of affordable and 2 effective odor mitigation technologies and strategies by 1 livestock producers, expand the number of affordable and 2 seffective odor mitigation technologies and strategies 2 available to livestock producers, and provide 1 oresearch-grounded information regarding odor mitigation 1 technologies and strategies that are ineffective or 1 cost-prohibitive. 2 Sec. 4. NEW SECTION. 266.43 DEVELOP AND ADVANCE 2 TECHNOLOGIES AND STRATEGIES == APPLIED ON=SITE RESEARCH 2 TECHNOLOGIES AND STRATEGIES == APPLIED ON=SITE RESEARCH 2 TOWA state university of science and technology shall 2 conduct applied on=site research projects to address whether 3 odor mitigation technologies or strategies can be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successful 6 implementation and maintenance to accomplish the purposes 7 provided in section 266.42. 2 1. The projects shall be conducted at livestock operations 9 on a statewide basis and under different circumstances. 10 2. The university shall evaluate technologies or 11 strategies that have a firm foundation in basic and applied 12 research but which may further benefit from statewide on=site 13 application. The technologies and strategies may include but 14 are not limited to the following: 18 a. The installation, maintenance, and use of odor 19 mitigating devices, techniques, or strategies. 2 D. The university s	1	12 or a livestock operation.	
The purposes of the research effort provided in section 1 25 266.41 are to accelerate the adoption of affordable and 1 26 effective odor mitigation technologies and strategies by 1 27 livestock producers, expand the number of affordable and 1 28 effective odor mitigation technologies and strategies 1 29 available to livestock producers, and provide 30 research-grounded information regarding odor mitigation 1 31 technologies and strategies that are ineffective or 1 32 cost=prohibitive. 1 33 Sec. 4. NEW SECTION. 266.43 DEVELOP AND ADVANCE 1 34 TECHNOLOGIES AND STRATEGIES == APPLIED ON=SITE RESEARCH 1 35 PROJECTS. 2 1 Iowa state university of science and technology shall 2 conduct applied on=site research projects to address whether 3 odor mitigation technologies or strategies can be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successful 6 implementation and maintenance to accomplish the purposes 7 provided in section 266.42. 8 1. The projects shall be conducted at livestock operations 9 on a statewide basis and under different circumstances. 2 10 2. The university shall evaluate technologies or 2 11 strategies that have a firm foundation in basic and applied 12 research but which may further benefit from statewide on=site 13 application. The technologies and strategies may include but 14 are not limited to the following: 15 a. The installation, maintenance, and use of odor 16 mitigating devices, techniques, or strategies. 17 b. The use of modeling to locate new livestock operations. 2 c. The manipulation of livestock diet. 2 Sec. 5. NEW SECTION. 266.44 DEVELOP AND ADVANCE	1 1 1 1 1 1	15 Sec. 2. <u>NEW SECTION</u> . 266. 16 Iowa state university of so 17 consult with the department of 18 stewardship and the department 19 establish and administer a res 20 emitted from livestock operati 21 dairy cattle, chickens, or tur	eience and technology shall agriculture and land of natural resources to search effort to mitigate odor ons involving swine, beef or
1 34 TECHNOLOGIES AND STRATEGIES == APPLIED ON=SITE RESEARCH 1 35 PROJECTS. 2 1 Iowa state university of science and technology shall 2 2 conduct applied on=site research projects to address whether 3 odor mitigation technologies or strategies can be successfully 4 implemented across many livestock operations, locations, and 5 situations, and to analyze the costs of their successful 6 implementation and maintenance to accomplish the purposes 7 provided in section 266.42. 8 1. The projects shall be conducted at livestock operations 9 on a statewide basis and under different circumstances. 10 2. The university shall evaluate technologies or 11 strategies that have a firm foundation in basic and applied 12 research but which may further benefit from statewide on=site 13 application. The technologies and strategies may include but 14 are not limited to the following: 15 a. The installation, maintenance, and use of odor 16 mitigating devices, techniques, or strategies. 17 b. The use of modeling to locate new livestock operations. 18 c. The manipulation of livestock diet. 19 Sec. 5. NEW SECTION. 266.44 DEVELOP AND ADVANCE	1 1 1 1 1 1 1 1	The purposes of the research 25 266.41 are to accelerate the a 26 effective odor mitigation tech 27 livestock producers, expand th 28 effective odor mitigation tech 29 available to livestock produce 30 research=grounded information 31 technologies and strategies th 32 cost=prohibitive.	th effort provided in section adoption of affordable and mologies and strategies by the number of affordable and mologies and strategies and strategies are, and provide regarding odor mitigation at are ineffective or
I lowa state university of science and technology shall conduct applied on=site research projects to address whether door mitigation technologies or strategies can be successfully implemented across many livestock operations, locations, and situations, and to analyze the costs of their successful implementation and maintenance to accomplish the purposes provided in section 266.42. 1. The projects shall be conducted at livestock operations on a statewide basis and under different circumstances. 1. The university shall evaluate technologies or trategies that have a firm foundation in basic and applied research but which may further benefit from statewide on=site application. The technologies and strategies may include but are not limited to the following: a. The installation, maintenance, and use of odor imitigating devices, techniques, or strategies. b. The use of modeling to locate new livestock operations. c. The manipulation of livestock diet. Sec. 5. NEW SECTION. 266.44 DEVELOP AND ADVANCE		34 TECHNOLOGIES AND STRATEGIES ==	APPLIED ON=SITE RESEARCH
2 10 2. The university shall evaluate technologies or 2 11 strategies that have a firm foundation in basic and applied 2 12 research but which may further benefit from statewide on=site 2 13 application. The technologies and strategies may include but 2 14 are not limited to the following: 2 15 a. The installation, maintenance, and use of odor 2 16 mitigating devices, techniques, or strategies. 2 17 b. The use of modeling to locate new livestock operations. 2 18 c. The manipulation of livestock diet. 2 19 Sec. 5. NEW SECTION. 266.44 DEVELOP AND ADVANCE	2 2 2 2 2 2 2 2 2	I Iowa state university of so 2 conduct applied on=site resear 3 odor mitigation technologies o 4 implemented across many livest 5 situations, and to analyze the 6 implementation and maintenance 7 provided in section 266.42. 8 1. The projects shall be of	ch projects to address whether or strategies can be successfully ock operations, locations, and costs of their successful to accomplish the purposes conducted at livestock operations
2 15 a. The installation, maintenance, and use of odor 2 16 mitigating devices, techniques, or strategies. 2 17 b. The use of modeling to locate new livestock operations. 2 18 c. The manipulation of livestock diet. 2 19 Sec. 5. NEW SECTION. 266.44 DEVELOP AND ADVANCE	2 2 2 2	10 2. The university shall ev 11 strategies that have a firm fo 12 research but which may further 13 application. The technologies	valuate technologies or bundation in basic and applied benefit from statewide on=site and strategies may include but
	2 2 2 2 2	15 a. The installation, maint 16 mitigating devices, techniques 17 b. The use of modeling to 18 c. The manipulation of liv 19 Sec. 5. NEW SECTION. 266.	enance, and use of odor , or strategies. locate new livestock operations. restock diet. 44 DEVELOP AND ADVANCE

2 21 PROJECTS.

3

3

3 5

3 8

3 15

3 22

4

4 2.

4

4 5

4

4 8

4

4 12

4 18

6

7

Iowa state university of science and technology shall 2 23 conduct basic or applied research projects to develop or 2 24 advance technologies or strategies to accomplish the purposes 2 25 provided in section 266.42.

- 1. The university shall evaluate technologies or 27 strategies that have not been subject to comprehensive 28 scientific scrutiny but which demonstrate promise to 2 29 accomplish the purposes provided in section 266.42. 30 technologies and strategies may include but are not limited to 31 the following:
- 2 32 a. The adaption and use of modeling to locate livestock 2 33 operations associated with keeping livestock other than swine, 34 and to locate livestock operations utilizing odor mitigation 35 devices, techniques, or strategies.

The installation, maintenance, and use of odor 2 mitigating devices, techniques, or strategies.

- c. The use of topical treatments applied to manure 4 originating with livestock operations keeping chickens and turkeys.
 - Nothing in this section restricts the university from conducting its evaluation at livestock operations, including as provided in section 266.43.
- 3 9 Sec. 6. <u>NEW SECTION</u>. 266.45 EMER 3 10 STRATEGIES == BASIC RESEARCH PROJECTS. EMERGING TECHNOLOGIES AND

Iowa state university of science and technology shall 3 12 conduct basic research projects to investigate emerging 3 13 technologies or strategies that may accomplish the purposes 3 14 provided in section 266.42.

- 1. The university shall evaluate technologies or 3 16 strategies that demonstrate promise for future development but 3 17 which may require a long=term research commitment.
- 3 18 2. Nothing in this section restricts the university from 3 19 conducting its evaluation at livestock operations, including 3 20 as provided in section 266.43.

Sec. 7. <u>NEW SECTION</u>. 266.46 INFORMATION REPORTING.

In accordance with section 266.42, Iowa state university of 3 23 science and technology is the custodian of all information 3 24 including but not limited to reports and records obtained, 3 25 submitted, and maintained in connection with the research 26 projects conducted on the site of a livestock operation as 27 provided in this division. The information shall be kept 3 28 confidential by the university and its agents and employees, 3 29 except as provided in section 266.47. For purposes of this 3 30 division, such information is not subject to chapter 22 and 3 31 shall not be made public upon subpoena, search warrant, 3 32 discovery proceedings, or by any other means. A person shall 33 not be compelled to disclose the name or address of a 34 livestock producer except upon written waiver by the livestock 3 35 producer participating in the research project.

Sec. 8. <u>NEW SECTION</u>. 266.47 RESEARCH RESULTS == INTERIM AND FINAL REPORTS.

Iowa state university of science and technology shall 4 prepare and submit reports as follows:

1. a. The university shall submit an interim report to the general assembly each year on or before January 15, through January 15, 2012. The interim report shall do all of the following:

(1) Describe the university's progress in achieving the 4 10 purposes of section 266.42, and detail its efforts in carrying 4 11 out the research projects described in this division.

(2) Evaluate applied and basic research projects being 4 13 conducted or completed and provide estimates for their 4 14 completion.

Make any recommendation for improving, continuing, or 4 16 expanding research and for disseminating the results of the 4 17 research to livestock producers.

18 b. The university shall submit a final report to the 19 general assembly on or before January 30, 2013. The final 4 20 report shall include a summary of efforts, the university's 4 21 findings and conclusions, and recommendations necessary to 4 22 carry out the purposes of section 266.42.

2. Nothing in this section prevents the university from 4 24 compiling information obtained, submitted, and maintained in 25 connection with the research projects conducted on the site of 26 a livestock operation as provided in this division, and 4 27 publishing that information as part of the report so long as 28 the information cannot be used to identify a livestock 29 producer or livestock operation without the consent of the 4 30 livestock producer as provided in section 266.46.

Sec. 9. <u>NEW SECTION</u>. 266.48 REPEAL.

This division is repealed on June 30, 2018. EXPLANATION

This bill provides for the establishment and administration 35 of a research effort regarding the mitigation of odor emitted 1 from livestock operations involving swine, beef or dairy 2 cattle, chickens, or turkeys. The research effort is to be 3 conducted by Iowa state university in consultation with the 4 department of agriculture and land stewardship and the 5 department of natural resources.

The purpose of the bill is to accelerate the adoption of 6 affordable and effective odor mitigation technologies and 8 strategies by livestock producers.

The bill includes three specific project classifications: 10 (1) on=site applied research to address whether technologies 11 and strategies can be successfully implemented across many 5 12 livestock operations, locations, and situations; (2) basic or 5 13 applied research to evaluate technologies or strategies that 5 14 have not been subject to comprehensive scientific scrutiny but 5 15 which demonstrate promise; and (3) basic research to 5 16 investigate emerging technologies and strategies.

5 17 The bill provides that information obtained in connection 5 18 with the research projects conducted on the site of a 19 livestock operation is confidential, unless confidentiality is 20 waived by the livestock producer.

The bill requires that Iowa state university submit annual 2.1 22 interim reports which describe the university's progress in 23 carrying out the research projects and make recommendations 24 for improving, continuing, or expanding research and for 25 disseminating the results of the research to livestock 5 26 producers. The university must submit a final report to the 5 27 general assembly by January 30, 2013. 5 28 LSB 6236SS 82

5 29 da/nh/14.1

4 32 4 33

5

5

5 9

5