The Texas Animal Health Commission (Commission) proposes amendments to §38.1, concerning Definitions, §38.2, concerning General Requirements, §38.3, concerning Infected Bulls and Herds, §38.4, concerning Certified Veterinary Practitioners, and §38.6, concerning Official Trichomoniasis Tests. The amendments are for the purpose of making changes to the Trichomoniasis control program based on recommendations made by the Trichomoniasis Working Group (TWG), which met on May 15, 2012.

Bovine Trichomoniasis (aka Trichomonosis or Trich) is a venereal disease of cattle caused by the protozoa *Tritrichomonas foetus*. The organism lives in the folds of the prepuce and internal sheath in bulls, and colonizes the vagina, cervix, uterus and oviducts of cows. It causes abortion and extended calving seasons. Bulls will remain persistently infected and spread infection from cow to cow during natural service; however, cows generally clear infection after two to three heat cycles. Bulls over four years old are typically the main reservoir of infection in a herd; this is because older bulls often have deeper preputial folds (crypts) creating a more favorable environment for Trich.

Certain herd management practices are risk factors for infection; commingled grazing or fence–line contact with other herds is one documented risk factor. Control of *T. foetus* in an infected herd includes testing bulls and culling those infected. Although use of younger bulls has been recommended as a control strategy because they have a lower prevalence of infection than older bulls, such use will not eliminate the possibility of infection. Artificial insemination is considered the classic method for controlling venereal diseases of cattle. However, this is often impractical in range cattle operations due to lack of facilities, expertise or management practices. Additionally, annual pregnancy testing and culling of non–pregnant cows can help control herd infection. Also, vaccination of females can decrease duration and severity of infection. If exposure to other risk factors cannot be avoided, vaccination is believed to help reduce economic loss.

The TWG discussed requiring the testing of all bulls in a herd when a cow has been diagnosed positive. The TWG did agree that if a laboratory diagnosis has been made on a cow, fetus or bull, that all bulls in that herd should be placed under quarantine and tested for Trich. The TWG did not want to address a female management program at this time, but if a positive test on routine laboratory screening did show a positive Trich cow in a herd, then all bulls in that herd must test negative for Trich as per existing rule before the herd can be released from quarantine.

The TWG also discussed the maximum transport time for samples – is 96 hours still valid with 48-hour incubation? Does TVMDL also incubate samples for 48 hours even if private veterinarians incubate samples for 48 hours before sending them to the lab for testing? For example, if a vet obtains blood samples on a Friday, incubates over the weekend, and then sends to the lab, does TVMDL incubate for an additional 48 hours before running test? After consultation with TVMDL staff, the Commission will extend the maximum shipping time for private vets to 120 hours provided that they indicate on the test chart that the sample has been incubated as per specifications prior to shipping.

The group also recommended allowing laboratory pooled samples for change of ownership and to allowing laboratory pooled samples for both releasing tests from

quarantine, instead of just one of the tests as it is now.

Regarding Trich Feeding Facility issues, the group agreed to two of the proposals. The first was to allow untested bulls permitted originally to the feeding facility to return to a market for sale to slaughter or to allow bulls to return to market for a test. All untested bulls will be permitted in and out of feeding facilities whether headed direct to slaughter or back to a market. Also, allowing untested bulls that entered a feeding facility on a permit to later be tested at the facility and sold by private treaty/or return to market as tested was not approved by the committee.

Section 38.1 is entitled "Definitions" and adds a definition for Official Laboratory Pooled Trichomoniasis test samples.

Section 38.2 is entitled "General Requirements" and provides for another authorized type of movement for untested bulls. Under §38.2(d), an exemption now provides that they may be sold for movement to an approved feedlot and then moved to slaughter or transported back to a livestock market under permit, issued by Commission personnel, to be sold in accordance with this chapter.

Section 38.3 is entitled "Infected Bulls and Herds" and creates a requirement that when Trich is diagnosed in female cattle or fetal tissue, then all breeding bulls associated with the herd will be restricted under a Hold Order for testing in accordance with this subsection. The title of the section is also being changed to "Infected Herds".

Section 38.4 is entitled "Certified Veterinary Practitioners" and provides that certified veterinarians shall submit all Trich samples to the TVMDL in accordance with §38.6 of this chapter.

Section 38.6 is entitled "Official Trichomoniasis Tests" and is being amended to allow arrival of the sample at the laboratory within 120 hours instead of 96 hours if the sample is incubated by the collecting veterinarian for 48 hours after collection. An additional change to this section provides that Trich samples pooled at the laboratory may qualify as official tests at a ratio of up to five individually collected samples pooled for one test.

FISCAL NOTE

Mr. Sami Chadli, Director for Administration and Finance, Texas Animal Health Commission, has determined for the first five-year period the rules are in effect, there will be no significant additional fiscal implications for state or local government as a result of enforcing or administering the rules. An Economic Impact Statement (EIS) is required if the proposed rules have an adverse economic effect on small businesses. The agency has evaluated the requirements and determined that there is not an adverse economic impact on cattle breeders or raisers. The purpose of the rules is to determine whether or not an infected animal exists in a herd. If an undisclosed Trich bull in discovered in a herd, then they will be spreading the disease and infecting other animals in the herd. Also, if these undisclosed animals are infected and sold they will spread the disease to other herds and animals. The purpose of the rules is to control and prevent the spread of the disease which

protects the Texas cattle industry. For these reasons, the Commission has determined that there is not an adverse impact on these cattle raisers and breeders and there is no need to do an EIS. Implementation of this rule poses no significant fiscal impact on small or micro-businesses.

PUBLIC BENEFIT NOTE

Mr. Chadli has also determined that for each year of the first five years the rules are in effect, the public benefit to individuals is limited to ensuring that the health status of these animals is known which protects the livestock industry in this state.

LOCAL EMPLOYMENT IMPACT STATEMENT

In accordance with Texas Government Code §2001.022, this agency has determined that the proposed amendments will not impact local economies and, therefore, did not file a request for a local employment impact statement with the Texas Workforce Commission.

TAKINGS ASSESSMENT

The agency has determined that the proposed governmental action will not affect private real property. The proposed amendments are an activity related to the handling of animals, including requirements for testing, movement, inspection, identification, reporting of disease, and treatment, in accordance with 4 TAC §59.7, and are, therefore, compliant with the Private Real Property Preservation Act in Government Code, Chapter 2007.

REQUEST FOR COMMENT

Comments regarding the proposal may be submitted to Carol Pivonka, Texas Animal Health Commission, 2105 Kramer Lane, Austin, Texas 78758, by fax at (512) 719-0721 or by e-mail at "comments@tahc.state.tx.us".

STATUTORY AUTHORITY

The amendments are proposed under the following statutory authority as found in Chapter 161 of the Texas Agriculture Code. The Commission is vested by statute, §161.041(a), with the requirement to protect all livestock, domestic animals, and domestic fowl from disease. The Commission is authorized, by §161.041(b), to act to eradicate or control any disease or agent of transmission for any disease that affects livestock. If the Commission determines that a disease listed in §161.041 of this code or an agent of transmission of one of those diseases exists in a place in this state among livestock, or that livestock are exposed to one of those diseases or an agent of transmission of one of those diseases, the commission shall establish a quarantine on the affected animals or on the affected place. That authority is found in §161.061.

As a control measure, the Commission, by rule may regulate the movement of animals. The commission may restrict the intrastate movement of animals even though the

movement of the animals is unrestricted in interstate or international commerce. The Commission may require testing, vaccination, or another epidemiologically sound procedure before or after animals are moved. That authority is found in §161.054. An agent of the Commission is entitled to stop and inspect a shipment of animals or animal products being transported in this state in order to determine if the shipment originated from a quarantined area or herd; or determine if the shipment presents a danger to the public health or livestock industry through insect infestation or through a communicable or noncommunicable disease. That authority is found in §161.048.

Section 161.005 provides that the Commission may authorize the executive director or another employee to sign written instruments on behalf of the Commission. A written instrument, including a quarantine or written notice signed under that authority, has the same force and effect as if signed by the entire Commission.

§Section 161.061 provides that if the Commission determines that a disease listed in §161.041 of this code or an agency of transmission of one of those diseases exists in a place in this state or among livestock, exotic livestock, domestic animals, domestic fowl, or exotic fowl, or that a place in this state where livestock, exotic livestock, domestic animals, domestic fowl, or exotic fowl are exposed to one of those diseases or an agency of transmission of one of those diseases, the Commission shall establish a quarantine on the affected animals or on the affected place.

No other statutes, articles, or codes are affected by the amendments.

38.1. Definitions.

The following words and terms, when used in this chapter, shall have the defined meanings, unless the context clearly indicates otherwise:

- (1) Accredited Veterinarian--A licensed veterinarian who is approved to perform specified functions required by cooperative state-federal disease control and eradication programs pursuant to Title 9 of the Code of Federal Regulations, Parts 160 and 161.
- (2) Affected Herd--Any herd in which any cattle have been classified as *Tritrichomonas foetus* positive on an official test and which has not completed the requirements for elimination of the disease from the herd.
- (3) Cattle--All dairy and beef animals (genus Bos) and bison (genus Bison).
- (4) Certified Veterinarians--Veterinarians certified with, and approved by the Commission to collect Trichomoniasis samples for official Trichomoniasis testing and to perform any other official function under the Trichomoniasis program.
- (5) Commission--The Texas Animal Health Commission.
- (6) Executive Director--The Executive Director of the Texas Animal Health Commission or his designee.

- (7) Exempt Cattle (from testing requirements)--Cattle that have been physically rendered incapable of intromission at a facility recognized by the TAHC.
- (8) Exposed Cattle--Cattle that are part of an affected herd or cattle that have been in contact with Trichomoniasis infected cattle.
- (9) Herd--
- (A) All cattle under common ownership or supervision or cattle owned by a spouse that are on one premise; or
- (B) All cattle under common ownership or supervision or cattle owned by a spouse on two or more premises that are geographically separated, but on which the cattle have been interchanged or where there has been contact among the cattle on the different premises. Contact between cattle on the different premises will be assumed unless the owner establishes otherwise and the results of the epidemiological investigation are consistent with the lack of contact between premises; or
- (C) All cattle on common premises, such as community pastures or grazing association units, but owned by different persons. Other cattle owned by the persons involved which are located on other premises are considered to be part of this herd unless the epidemiological investigation establishes that cattle from the affected herd have not had the opportunity for direct or indirect contact with cattle from that specific premises. Approved feedlots and approved pastures are not considered to be herds.
- (10) Herd Test--An official test of all non-virgin bulls in a herd.
- (11) Hold Order--A document restricting movement of a herd, unit, or individual animal pending the determination of disease status.
- (12) Infected Cattle--Any cattle determined by an official test or diagnostic procedure to be infected with Trichomoniasis or diagnosed by a veterinarian as infected.
- (13) Infected Herd--The non-virgin bulls in any herd in which any cattle have been determined by an official test or diagnostic procedure to be infected with Trichomoniasis or diagnosed by a veterinarian as being infected.
- (14) Movement Permit (VS 1-27)--Authorization A premovement authorization for movement of infected or exposed cattle from the farm or ranch of origin through marketing channels to slaughter or for movement of untested animals to a location where the animals will be held under hold order until testing has been accomplished.
- (15) (16) Movement Restrictions--A "Hold Order," "Quarantine," or other written document issued or ordered by the Commission to restrict the movement of livestock or exotic livestock.
- (16) (17) Negative--Cattle that have been tested with official test procedures and found to be free from infection with Trichomoniasis.
- (17) (18) Official Identification/Officially Identified--The identification of livestock by

means of an official identification device, official eartag, registration tattoo, or registration brand, or any other method approved by the Commission and/or Administrator of APHIS that provides unique identification for each animal. Official identification included USDA alpha-numeric metal eartags (silver bangs tags), 840 RFID tags, 840 bangle tags, official breed registry tattoos, official breed registry individual animal brands, and official Trich tags issued by the animal health official of the state of origin of imported bulls.

- (18) (19) Official Trichomoniasis test--A test for bovine Trichomoniasis, approved by the Commission, applied and reported by TVMDL or any other laboratory classified as an official laboratory by the Commission. The test document is valid for sixty (60) days and may be transferred within that timeframe with an original signature of the consignor.
- (19) Official Laboratory Pooled Trichomoniasis test samples--Up to five samples individually collected by a Veterinarian and packaged and submitted to an official laboratory which can then pool the samples.
- (20) Positive--Cattle that have been tested with official test procedures and found to be infected with Trichomoniasis.
- (21) Quarantine--A written Commission document or a verbal order followed by a written order restricting movement of animals because of the existence of or exposure to Trichomoniasis. The Commission may establish a quarantine on the affected animals or on the affected place. The quarantine of an affected place may extend to any affected area, including a county, district, pasture, lot, ranch, farm, field, range, thoroughfare, building, stable, or stockyard pen. The Commission may establish a quarantine to prohibit or regulate the movement of any article or animal that the commission designates to be a carrier of Trichomoniasis and/or an animal into an affected area, including a county district, pasture, lot, ranch, farm, field, range, thoroughfare, building, stable, or stockyard pen.
- (22) Test-Eligible Cattle--All sexually intact non-virgin male cattle and all sexually intact male cattle which have erupting or erupted permanent incisor teeth (or older), which are being [imported into the state of Texas or is being] sold, leased, gifted or exchanged in the state of Texas for breeding purposes.
- (23) Trichomoniasis--A venereal disease of cattle caused by the organism *Tritrichomonas foetus*.
- (24) TVMDL--The official laboratory for testing is the Texas Veterinary Medical Diagnostic Laboratory.
- (25) Virgin Bull--Sexually intact male cattle which have not serviced a cow and which are not more than 24 months of age as determined by the presence of the two permanent central incisors in wear or birth date on breed registry papers certified by the breeder; or not more than 30 months of age and certified by both the breeder based on birth date and confirmed by his veterinarian that the bull facility is sufficient to prevent contact with

female cattle. The certification by the breeder is valid for sixty (60) days and may be transferred within that timeframe with an original signature of the consignor.

38.2. General Requirements.

- (a) Test Requirements: All Texas origin bulls sold, leased, gifted, exchanged or otherwise change possession for breeding purposes in the State of Texas shall meet the following testing or certification requirements prior to sale or change of ownership in the state:
- (1) Be certified as virgin, by the breeder or his representative, on and accompanied by a breeder's certificate of virgin status; or
- (2) If from a herd of unknown status (a herd that has not had a whole herd test), be tested negative on three consecutive culture tests conducted not less than seven (7) days apart or one RT-PCR test conducted within 60 days of sale or movement, be held separate from all female cattle since the test sample was collected, and be accompanied by a Trich test record showing the negative test results.
- (b) Identification of Bulls: All bulls certified as virgin bulls shall be identified by an official identification device or method on the breeder's certification of virgin status. All bulls tested for Trichomoniasis shall be identified by an official identification device or method at the time the initial test sample is collected. Official identification includes: Official Alpha-numerical USDA metal ear tags (bangs tags), Official 840 RFID tags, Official 840 flap or bangle tags, and Official individual animal breed registry tattoo or breed registry individual animal brands. That identification shall be recorded on the test documents prior to submittal.
- (c) Confirmatory Test: The owner of any bull which tests positive for Trichomoniasis may request in writing, within five (5) days of the positive test, that the Commission allow a confirmatory test be performed on the positive bull. If the confirmatory test is positive the bull will be classified as infected with Trichomoniasis. If the confirmatory test is negative the bull shall be retested in not less than seven days to determine its disease status. If the confirmatory test reveals that the bull is only infected with fecal trichomonads, the test may be considered negative.
- (d) Untested Bulls: Bulls presented for sale without a breeder's certification of virgin status or a Trich test record showing negative test results may:
- (1) Be sold for movement only directly to slaughter; or
- (2) Sold for movement to <u>an approved</u> a feedlot and then <u>moved</u> to slaughter <u>or</u> <u>transported back to a livestock market under permit, issued by Commission personnel, to be sold in accordance with this chapter; or</u>
- (3) Be sold and moved under a Hold Order to such place as specified by the Commission for testing to change status from a slaughter bull to a breeding bull. Such bulls shall be officially individually identified with a permanent form of identification prior to movement, move to the designated location on a movement VS-1-27 permit, be held in isolation from female cattle at the designated location for not less than 21 days where the bull shall undergo three culture tests or for not less than 7 days where the bull shall undergo one RT-PCR test. If the results of any test are positive the bull shall be classified as infected and be permitted for movement only directly to slaughter or to a market for

sale directly to slaughter.

38.3. Infected Bulls and Herds.

- (a) Bulls that have been determined to be infected by culture or by RT-PCR test and/or by confirmatory RT-PCR test shall be placed under hold order along with all other non-virgin bulls in the bull herd. Infected bulls must be isolated from all female cattle from the time of diagnosis until final disposition or as directed by the Commission. Breeding bulls which have been disclosed as reactors may be retested provided: the owners, or their agents initiate a request to the TAHC Regional Director where the bull is located; that retests are conducted within 30 days after the date of the original test; test samples for retests are submitted to the Texas Veterinary Medical Diagnostic Laboratory (TVMDL) for testing; and the positive bull is held under quarantine along with all other exposed bulls on the premise. If they are retested, they must have two negative tests by PCR to be released within 30 days of the initial test.
- (b) Positive bulls may be moved directly to slaughter or to a livestock market for sale directly to slaughter. In order to move, the bulls shall be individually identified by official identification device on a VS 1-27 movement permit <u>authorized by the Commission</u> from the ranch to the market and from the market to the slaughter facility, or from the ranch directly to the slaughter facility. Movement to slaughter shall occur within 30 days from disclosure of positive test results (or confirmatory test results) or as directed by the Commission.
- (c) All bulls that are part of a herd in which one or more bulls have been found to be infected shall be placed under hold order in isolation away from female cattle until they have undergone at least two additional culture tests with negative results (not less than a total of three negative culture tests or two negative RT-PCR tests) within 60 days of the initial test unless handled in accordance with subsection (d) of this section. All bulls remaining in the herd from which an infected bull(s) has been identified would have to be tested two more times by culture or one more time by RT-PCR test. Any bull positive on the second or third test would be classified as positive. All bulls negative to all three culture tests or both RT-PCR tests would be classified as negative and could be released for breeding.
- (d) A quarantined herd with breeding bulls that tested negative on the initial test may be maintained with the herd if they develop a Trichomoniasis herd control plan, with the herd owner and their private veterinarian, that will address herd management practices to address this disease and have all breeding bulls tested annually. This will only be authorized for a maximum of three (3) years, then all exposed bulls shall be tested in accordance with this section.
- (e) When diagnosed in female cattle or fetal tissue, then all breeding bulls associated with the herd will be restricted under a Hold Order for testing in accordance with this section.

38.4. Certified Veterinary Practitioners.

- (a) Only veterinarians certified through the Commission may perform Trichomoniasis program procedures, including but not limited to, collection of samples for official tests for Trichomoniasis within the state of Texas, submission of samples to official laboratories, identification of tested bulls and virgin bulls, management of Trichomoniasis infected bull herds, movement of infected bulls, and reporting of test results. In order to collect and submit Trichomoniasis samples a veterinary practitioner shall be certified to perform Trichomoniasis program procedures. In order to be certified, a veterinarian shall also be licensed to practice veterinary medicine in the state of Texas and be accredited through USDA.
- (b) All veterinarians desiring to perform Trichomoniasis program functions shall participate in a certification program on Trichomoniasis program requirements and procedures before performing any Tichomoniasis program functions, including but not limited to review of the disease, proper sample collection techniques, sample preservation and laboratory submission, identification of animals, management of infected herds and shipment of infected or exposed animals to slaughter. The official certification program shall be conducted by or under the auspices of the Commission. Certified veterinarians shall be recertified every three years.
- (c) Certified veterinarians shall utilize approved procedures for collection of samples, identification of animals and submission of samples to laboratories.
- (d) Certified veterinarians shall only utilize the official laboratories for culture of Trichomoniasis samples.
- (e) Certified veterinarians shall submit all Trichomoniasis samples including all official identification on official Trichomoniasis test and report forms to the TVMDL in accordance with §38.6 of this chapter within the following time lines: Samples submitted for culture tests shall be submitted to arrive at the laboratory within forty eight hours of collection of the samples. Samples submitted for RT-PCR tests shall be submitted to arrive at the laboratory within 48 hours of collection or be incubated by the collecting veterinarian for 48 hours, then be submitted to arrive at the laboratory within 96 hours of collection.

38.6. Official Trichomoniasis Tests.

Approved Tests. Approved tests for <u>Trichomoniasis</u> trichomoniasis testing within the State of Texas shall include the culture or Real Time Polymerase Chain Reaction (RT-PCR) testing of samples collected into an InPouch by certified veterinarians following approved collection, handling and shipping protocols, then tested in approved laboratories.

(1) Official Culture Tests. An official test is one in which the sample is received in the official laboratory, in good condition, within forty eight (48) hours of collection and such sample is tested according to the "Official Protocol for Culture of Trichomoniasis."

Samples in transit for more than forty-eight (48) hours will not be accepted for official culture testing. During transportation, the organisms should be protected from exposure to daylight and extremes of temperature, which should remain above 15 degrees Celsius (59 degrees Fahrenheit) and below 37 degrees Celsius (98.6 degrees Fahrenheit).

- (2) Official Polymerase Chain Reaction Tests. Polymerase Chain Reaction is accepted as an official test or an official confirmatory test when completed by a qualified laboratory, approved by the Executive Director, and the sample is received in good condition by the laboratory within forty-eight (48) hours after collection, or is incubated by the collecting veterinarian for 48 hours after collection, then submitted to arrive at the laboratory within 120 96 hours of collection. Trichomoniasis samples pooled at the laboratory may qualify as the official tests at a ratio of up to five individually collected samples pooled for one test for one of the two tests required to release the quarantine if approved by the TAHC Regional Office where the animals are located. Veterinary practitioners may not submit pooled samples for an official either releasing test.
- (3) Other Official Tests. Other tests for Trichomoniasis may be approved by the Commission, as official tests, after the tests have been proven effective by research, have been evaluated sufficiently to determine efficacy, and a protocol for use of the test has been established.