EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENTS AND EXPLANATION OF CHANGES ON GENERAL PERMIT NUMBER TXG130000

This general permit is proposed under the authority found in Texas Water Code (TWC), §26.040. General Permit Number TXG130000 would authorize surface discharges of wastewater into or adjacent to waters in the state from concentrated aquatic animal production facilities, aquatic animal production facilities, and certain facilities engaged in related activities.

Prior to issuing a general permit, the executive director (ED) of the Texas Commission on Environmental Quality (commission or TCEQ) must comply with TWC, §26.040(d) and 30 TAC §205.3(c). Both provisions require the ED to respond to all timely public comments that raise "relevant and material" or "significant" issues. The ED must make these responses publicly available and must file them with the commission's Chief Clerk at least ten days before the TCEQ considers whether to approve the general permit. Accordingly, the ED now files this response to comments (Response) to address concerns raised by the public with regard to a proposed general permit under the Texas Pollutant Discharge Elimination System (TPDES). In certain instances the general permit was revised in response to comments received.

In addition, the ED has made additional changes to the General Permit. These changes are intended to clarify provisions in the General Permit, to refer to other current regulatory requirements, and to provide consistency within the General Permit and with other state and federal regulations. The ED also corrected section numbering errors and made grammatical and stylistic changes.

The Executive Director's Response to Comments

The Office of Chief Clerk received timely letters from the following entities: Texas Parks & Wildlife Department (TPWD), the Texas Aquaculture Association (TAA), and the Texas Agricultural Research and Extension Center, Corpus Christi, (TAES-CC). Some of these public comments have prompted changes in the proposed general permit while others have not.

Comment Number 1: The TPWD recommended changing the word "salinity" to "total dissolved solids" in Part II. Section B.1.d. relating to limitations on coverage. TPWD commented that salinity is usually measured in parts per thousand (ppt). The criteria cited is 500 milligrams per liter (mg/L), which is a parts per million (ppm) measurement. A 500 mg/L measurement is more consistent with a total dissolved solids measurement than a salinity measurement, which may indicate a drafting error.

The TAA commented that the maximum salinity difference of 500 mg/L is reasonable for freshwater streams but not applicable to coastal areas where discharges to saltwater are common.

Response Number 1: The TCEQ agrees with TPWD's recommendation and has changed the term "salinity" in Part II. Section B.1.d. to "total dissolved solids." For freshwater water bodies, total dissolved solids is an appropriate surrogate for salinity and was the intended constituent to be associated with the 500 mg/L value. However, upon further investigation and in response to the TAA comment, the TCEQ believes that a separate salinity threshold for estuarine and marine water bodies is warranted. The TCEQ proposes that Part II. Section B.1.d. read in its entirety as follows: "Any aquaculture facility discharging wastewater to a freshwater receiving water can do so under this general permit only if the difference between the discharge's total dissolved solids (TDS) and the freshwater receiving water's TDS is less than 500 mg/L. Any aquaculture facility discharging wastewater to an estuarine or marine receiving water can do so under this general permit only if the difference between the

discharge's salinity and the estuarine or marine receiving water's salinity is less than 2 parts per thousand (ppt). If the applicable conditions above are not met, the facility must obtain an individual TPDES permit."

Comment Number 2: TPWD commented that the proposed notice of intent (NOI) should be amended to include information comparable to that required for registrations. The previous mechanism for authorizing aquaculture discharges, 30 TAC Chapter 321, Subchapter O, used an application form that required adequate information to assess whether a given facility was eligible for registration, such as species type(s), production levels, feeding rates for cold water species, and discharge location and volume.

Response Number 2: The NOI specific to this general permit is currently under development and will include the requirements found in 30 TAC §205.4(f) for all general permits, and all information necessary to make a determination regarding eligibility for coverage under this general permit. The information requested in the NOI will include, but is not limited to, species type(s), production levels, feeding rates for cold water species, discharge location, and estimated volume of wastewater in gallons per day as requested by the TPWD.

Comment Number 3: TPWD commented that the language in Part III. Section B.3. of the proposed general permit regarding drugs, medications, and chemicals used in aquaculture operations may be too narrow so that the use of Investigational New Animal Drugs (INADs) and regulation-deferred compounds is prohibited.

TPWD states that if TCEQ does not expressly authorize the use of INADs, it may hamper aquatic animal research and treatment in Texas. TPWD has previously encouraged TCEQ to allow the use of

INADs at certain aquaculture facilities, and TCEQ has authorized this usage on a case-by-case basis. TPWD states that, although it may be unusual to allow such case-by-case approvals in a general permit, it would not be cost-effective for either TCEQ or applicants to require individual wastewater discharge permits for otherwise qualifying facilities that seek to use INADs.

TPWD also suggests that the use of regulation-deferred compounds at a facility authorized under the general permit should be reviewed on a case-by-case basis. TPWD also commented that the use of low regulatory compounds at levels specified by the United States Food and Drug Administration (FDA) and used as directed in FDA guidance poses no threat to water quality, and TCEQ should clarify that use of low regulatory compounds is authorized.

The TAA submitted a similar request that INADs be treated the same as drugs and chemicals approved by the United States Environmental Protection Agency (EPA) or FDA.

Response Number 3: The recently published 40 Code of Federal Regulations (CFR) Part 451 entitled "Concentrated Aquatic Animal Production Point Source Category" addresses the use of INADs and sets out a regulatory scheme that must be followed in order to obtain approval of their use. 40 CFR §451.3(a) states that "a permittee subject to this Part must notify the permitting authority of the use in a concentrated aquatic animal production facility subject to this Part of any investigational new animal drug (INAD) or an extralabel drug use where such a use may lead to a discharge of the drug to water of the U.S." 40 CFR §451.3(a)(1) states that a "permittee must provide a written report to the permitting authority of an INAD's impending use within 7 days of agreeing or signing up to participate in an INAD study." 40 CFR §451.3(a)(2) states "For INADs and extralabel drug uses, the permittee must provide an oral report to the permitting authority as soon as possible, preferably in advance of use, but no later than 7 days after initiating use of that drug." 40 CFR §451.3(a)(3) states the permittee must

also provide a written report to the permitting authority within 30 days after initiating the use of INADs and extra label drug. 40 CFR §451.3(a) further states that "Reporting is not required for an INAD or extralabel drug use that has been previously approved by FDA for a different species or disease if the INAD or extralabel use is at or below the approved dosage and involves similar conditions of use."

After reviewing the comments of the TWPD and the TAA, the ED has revised the general permit to include the requirements from the newly promulgated 40 CFR Part 451 guidelines for the use of INADs and for the use of low regulatory compounds. Subsequent communication from the TPWD indicates the comment on the use of regulation-deferred compounds is no longer valid. Therefore, no changes will be made to the permit in regard to regulation-deferred compounds.

Part III. Section B.3 now reads in its entirety:

Drugs, Medications and Chemicals.

(a) Drugs, medications and chemicals approved by the United States Environmental Protection Agency (EPA) or the United States Food and Drug Administration (FDA) for aquaculture use may be used in water which will be discharged. Treatment shall be limited to those aquatic species and to those purposes for which approval was granted. Treatment shall be used only as necessary, and only as directed on the product label. The water shall be diluted, held for a specific time, or neutralized prior to discharge as directed on the product label or as necessary to comply with 30 TAC Chapter 307 (relating to Texas Surface Water Quality Standards) or as needed to be below the concentration level used for a long-term static treatment, whichever is the lowest concentration. Records of all drugs, medications, and chemicals utilized for treatment shall be maintained on a monthly basis at the facility and shall be readily available for inspection by authorized representatives of the executive director for at least three years. Records shall include treatment concentrations, discharge volumes and dates, and a product label or Material Safety Data Sheet (MSDS) for each drug, medication, or chemical utilized.

(b) Notification, outlined below, shall be provided to the TCEQ's Stormwater and Pretreatment Team, of the use of any investigational new animal drug (INAD) or any extralabel drug, as defined at 40 CFR 451.3 General Definitions, where such a use may lead to a discharge of the drug. Reporting is not required for an INAD or extralabel drug use that has been previously approved by FDA for a different species or disease if the INAD or extralabel use is at or below the approved dosage and involves similar conditions of use.

(i) The permittee must provide a written report of an INAD's impending use within 7 days of agreeing or signing up to participate in an INAD study. The written report must identify the INAD to be used, method of use, the dosage, and the disease or condition the INAD is intended to treat.

(ii) For INADs and extralabel drug uses, the permittee must provide an oral report as soon as possible, preferably in advance of use, but no later than 7 days after initiating use of that drug. The oral report must identify the drugs used, method of application, and the reason for using that drug.

(iii) For INADs and extralabel drug uses, the permittee must provide a written report within 30 days after initiating use of that drug. The written report must identify the drug used and include: the reason for treatment, date(s) and time(s) of the addition (including duration), method of application; and the amount added.

(c) Notification of the use of compounds that have undergone review by the FDA and have been determined to be drugs of low regulatory priority, shall be provided using the requirements outlined for INADs and extralabel drugs in Part III. Section B.3.(b).

Comment Number 4: TPWD commented that the citations to the TAC in Part III. Section B.4. are incorrect. The TPWD states that "the citations should be corrected as follows: ". . .disease, as defined in 31 TAC §57.111 or §69.77 (should be **§69.75**) shall. . ." ". . .and shall comply with all the requirements of 31 TAC §57.11 (should be **§57.114**) or §69.77 as well as . . ."

Response Number 4: The citations have been changed as requested. Part III. Section B.4. now reads as follows: "Any discharger authorized under this general permit engaged in the propagation and/or rearing of shrimp which exhibit one or more manifestations of disease, as defined in 31 TAC § 57.111 or § 69.75 shall immediately report the observations to the TCEQ's regional office and Wastewater Permitting Section (MC-148), and to the Texas Parks and Wildlife Department (TPWD), and shall comply with all the requirements of 31 TAC § 57.114 or § 69.77 as well as other actions deemed appropriate by the TPWD. The TPWD shall be notified immediately of the diagnosis. Any actions which are deemed as necessary by the discharger to prevent transmission of the disease to aquatic life endemic to water in the state shall be implemented as soon as possible. The executive director may additionally require cessation of the discharge of effluent from infected portions of the facility as necessary to protect aquatic life in the receiving stream from potential adverse effects."

Comment Number 5: TPWD made the following comments on the need for corrections of the following typographical errors: "Part I.1 and 2. Concentrated aquatic animal production facilities – Correct typographical error as follows: 'multiple ponds that are individually owned, managed or leased ponds. . ." (delete "ponds"); "Part II. Section C.1. - Correct typographical error as follows: ' . . .utilize this notices (change "notices" to "notice") as necessary. . .'"; "Part II. Section C.6. - Correct typographical error as follows: '…under this general permit prior (delete "prior" here), or authorization under a separate individual or general permit, prior. . .'"; "Part III Section B.8. - Correct typographical error as follows: 'All discharges from (delete "from") shall comply. . .'"; "Notice of

Authorization by General Permit - Correct typographical error as follows: 'A facility that only temporarily holds and do (change "do" to "does") not feed aquatic species.'"

Response Number 5: The errors cited by TPWD have been corrected as requested.

Comment Number 6: TAES-CC cites the high quality of water discharged from their experimental systems, which it alleges is better than that required for coverage under the proposed general permit. TAES-CC requests reconsideration of some of the general permit conditions that must be met in order to operate under the proposed general permit. For instance, the TAES-CC comments that in order to meet the proposed permit levels, the facility must pump the discharge to other ponds for further treatment, rather than release the effluent. However, at the TAES-CC facility, they run the risk of losing valuable data if the culture water is pumped instead of released at the termination of a research study. While TAES-CC indicates that it is planning for the future construction of new ponds to capture the effluent water, the facility would not qualify for coverage under the terms of the current draft general permit in the interim. TAES-CC also stresses that its total volume released is comparatively small and it continually makes efforts to improve effluent water quality.

The TAES-CC requested that a special provision be made to exempt it from meeting the total suspended solids and five-day carbonaceous biochemical oxygen demand ($CBOD_5$) load limits currently required for coverage under the proposed general permit. To meet the standards, TAES-CC states that it must pump in new water from the adjacent lagoon. Currently, the research facility discharges less then 30 days a year.

Response Number 6: The ED recognizes that the general permit may not be suitable for all aquaculture discharges. Standard effluent limitations (including $CBOD_5$) in the general permit are

based on the size of the anticipated discharge and are applied to all similarly-sized facilities seeking coverage under the general permit. The standard effluent limitations are expected to maintain a 5.0 mg/L dissolved oxygen criterion under worst case default modeling conditions. If effluent limitations under the general permit are too stringent or a facility otherwise does not qualify for coverage under the general permit, a facility may apply for an individual permit. On the opposite end of the spectrum, if site-specific data (hydraulic characterization, historical headwater, and temperature values, etc.) calls for special permit provisions *less* stringent than those in the general permit, it may be beneficial for an applicant to seek an individual wastewater permit. For these reasons, the ED did not change the general permit as requested by the TAES-CC.

Comment Number 7: The TAES-CC requested that the maximum number of discharge days required by the general permit be increased from 30 to 60 days a year so that effluent may be diluted and the permit limits proposed in the general permit can be met.

The TAA made the same comment. TAA proposed that a shrimp research facility in the coastal zone be allowed to qualify for a general permit even if it discharges more than 30 days a year so long as its maximum daily flow was low. TAA gave the flow rate of 0.5 million gallons per day (MGD) as an example of an acceptable flow rate under their proposal.

Response Number 7: As requested by TAES, the ED has revised the general permit to increase the maximum number of discharge days from 30 to 60 days a year. The general permit's regulatory predecessor, 30 TAC Chapter 321, Subchapter O, requires shrimp research facilities within the coastal zone to discharge less than 30 days per year. The general permit, which supercedes 30 TAC Chapter 321, Subchapter O, includes more restrictive conditions permit conditions while maintaining the

maximum flow rate of less than five million gallons per day for shrimp research facilities. Therefore, Part II. Section A.3.(c)(i) has been changed to the following: "discharges less than 60 days per year";

Comment Number 8: TAA comments that it does not see the justification for requiring an individual permit for retail bait dealers solely because the facility is required to obtain an exotic species permit from TPWD.

Response Number 8: After discussion with the TPWD, the provision which excludes retail bait dealers which are required to obtain an exotic species permit from the TPWD, from obtaining coverage under this general permit has been removed. In order to receive authorization from the TPWD to possess an exotic species, the facility must include controls to prevent escape and/or release. Due to this requirement of the TPWD this exclusion was not required. Part II. Section A.1.(a) now reads: "Retail bait dealers"; Part II. Section B.1.(f) which reads, "Retail bait dealers which are required by the Texas Parks and Wildlife Department (TPWD) to obtain an exotic species permit," was also removed from the general permit.

Comment Number 9: TAA states that it appreciates the work that the TCEQ has done regarding the $CBOD_5$ limits included in the general permit but still believes that the development of BOD reaction coefficients for aquaculture waste would allow the $CBOD_5$ limitations to be modified in such a way that more facilities would be allowed under the general permit. The TAA has seen data that suggests $CBOD_5$ from aquaculture effluent exerts only half as much load on the receiving waters as the same amount of $CBOD_5$ from a domestic wastewater treatment plant. TAA acknowledges that additional data is necessary to demonstrate this supposition.

Response Number 9: Model assumptions used in deriving the general permit effluent limitations are based on EPA approved values. TCEQ's conservative default modeling assumptions are expected to maintain a 5.0 mg/L minimum dissolved oxygen concentration in the receiving waters during worst case conditions of low headwater flow and high temperature. Revising model assumptions, such as the BOD reaction coefficients, used in deriving the limitations could result in less protection for waters in the state. While TCEQ agrees that a reduced BOD reaction rate for aquaculture wastewater, as opposed to domestic wastewater, is theoretically likely, a substantial data set quantifying this correlation does not yet exist. The TCEQ will consider this modification in the future as additional data becomes available, and no changes were made to the general permit.

Other Changes to the General Permit

The ED has made additional recommendations for changes to the general permit. These additional changes are intended to provide clarity in regulatory requirements and to provide internal consistency and consistency with other general permits and regulations. The ED has also made grammatical and stylistic changes not noted here.

Change Number 1. The definitions of "Existing facilities" and "New facilities" were removed from the draft permit. These definitions were carried over from 30 TAC Chapter 321, Subchapter O regarding aquaculture registrations. However, these terms are not used in the general permit, thereby necessitating the deletions.

Change Number 2. The definitions for "Operator" and "Owner" have been changed to provide consistency between the general permit and the definitions found in 30 TAC §305.2(24) and (26). These definitions now read as follows:

Operator - The person responsible for the overall operation of a facility.

Owner - The person who owns a facility or part of a facility.

Change Number 3. Part II. Section A.2.(a)(i) and (ii) were modified to provide internal consistency regarding the definition of aquatic animal production facility and the standards for Tier II coverage. This section was also changed to provide consistency with 40 CFR 122, Appendix C. Specifically, the word "or" was deleted in subsection (i) and the word "or" was changed to "and" in subsection (ii) to be consistent with the definition of an "Aquatic animal production facility" as defined by this general permit. Therefore, the referenced subsections are changed accordingly:

(i) discharges less than 30 days per year;

(ii) produces less than 20,000 pounds harvest-weight of aquatic species per year; and

Change Number 4. Part II. Section C.3. was revised to clarify when coverage begins after the submission of an NOI. The following language is added to the end of Part II. Section C.3.: "Authorization under the terms and conditions of this general permit begins when the applicant is issued a written approval of the NOI. Following review of the NOI, the Executive Director shall either confirm coverage by providing a notification and an authorization number to the applicant or notify the applicant that coverage under this general permit is denied."

Change Number 5. Part II. Section C.4. was revised to clarify that a change in a permittee's charter number as registered with the Texas Secretary of State (SOS) is considered a change in ownership for regulatory purposes under this general permit. If a permittee's charter number changes, there shall be

no lapse in coverage if a Notice of Termination (NOT) and NOI are submitted as required by this permit. This change is made to address the differences between the databases managed by the commission and the SOS. The following language is added to the end of Part II. Section C.4.: "Coverage under this general permit is not transferable. If the owner or operator of the regulated entity changes, the present owner must submit a Notice of Termination (NOT) and the new owner must submit a NOI. The NOT and NOI must be submitted concurrently no fewer than 10 days before the transfer occurs. Any change in a permittee's Charter Number, as registered with the Texas Secretary of State, is considered a change in ownership of the company and would require the new operator to apply for permit coverage as stated above. If the NOT and NOI are submitted as required under this provision, there will be no lapse in authorization for this facility."

Change Number 6. Part II. Section D. Termination of Coverage, was revised to provide clarity to the permittee of conditions that trigger the need for the permittee to file an NOT. This language is also included in all other general permits issued by the commission. This section now reads in its entirety: "A permittee shall terminate coverage under this general permit through the submittal of a Notice of Termination (NOT), on a form approved by the executive director, when the owner or operator of the facility changes, the discharge becomes authorized under an individual permit, the use of the property changes and is no longer subject to regulation under this general permit, or the discharge becomes unnecessary, is delayed, or is completed. Authorization to discharge terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ."

Change Number 7. Part II. Section F.1. was revised to add clarity to the general permit by citing 30 TAC §205.5(d). Section 205.5(d) sets out the current requirements under which a general permit may be amended, revoked, or cancelled. This language is also included in other general permits issued by the commission. Part II. Section F.1. now reads in its entirety: "This general permit is effective from

the date of issuance for a term of five years, unless otherwise amended, revoked, or cancelled by the commission prior to that date. Authorizations for discharge under the provisions of this general permit may be issued until the expiration date of the permit. This general permit may be amended, revoked, or cancelled by the commission after notice and comment as provided by 30 TAC §§ 205.3 and 205.5."

Change Number 8. Part II. Section F.4. was revised to include the citation which requires a permittee to obtain coverage under an individual permit if the general permit is not renewed at least 90 days before expiration. This refers to the regulatory requirements found in 30 TAC §205.5(d). The section now reads, in its entirety: "According to 30 TAC § 205.5(d) (relating to Permit Duration, Amendment, and Renewal), if the commission has made a determination that the general permit will not be renewed at least 90 days before the expiration date, permittees authorized under this general permit shall submit an application for an individual permit before the expiration date. If the application for an individual permit is submitted before the general permit expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit."

Change Number 9. Part III. Section D.2.(i)(i) and (ii) were revised to provide clarification on the size of evaporation ponds used for disposal of wastewater through evaporation. This numbering of this section was corrected. Part III. Section D.2.(i)(i) and (ii) now read in their entirety:

(i) Level II facilities authorized under Part II. Section A.2.(c) which dispose of wastewater by evaporation ponds shall meet the following criteria:

(i) Evaporation ponds shall be sized to prohibit overflow. Evaporation ponds shall be sized using:

(1) The year with the lowest net evaporation (for a minimum period of record of 25 years) or other appropriate data (i.e. worst precipitation and worst pan/lake evaporation). The calculation should include the volume of effluent routed to the evaporation pond on a monthly basis for an entire year.

(2) The average net evaporation (for the entire period of record) or other appropriate data (i.e. average precipitation and average pan/lake evaporation). When two consecutive average years are reviewed, there should be no accumulation of water in the evaporation system. The calculation should include the volume of effluent routed to the evaporation pond on a monthly basis for an entire year.

(ii) Evaporation pond shall be operated to maintain a minimum freeboard of two feet.

(iii) There shall be no discharge of wastewater to surface water in the state.

Change Number 10. Part V.9. was revised to clarify that 30 TAC §205.4 governs the suspension and revocation of an authorization under the general permit. The section now reads in its entirety: "Authorization under this general permit may be suspended or revoked for the reasons stated in 30 TAC § 205.4 (relating to Authorizations and Notices of Intent). The filing of a notification by the discharger of planned changes or anticipated noncompliance, does not stay any permit condition."