

The Texas Commission on Environmental Quality (commission) proposes new §§311.71 - 311.82.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

Senate Bill (SB) 1354, 79th Legislature, 2005, amended Texas Water Code (TWC), Chapter 26 by adding new Subchapter M, Water Quality Protection Areas; specifically §§26.551 - 26.562. The statute addresses permitting, financial responsibility, inspections, water quality sampling, enforcement, cost recovery, and interagency cooperation with regard to quarry operations. The requirements of the statute are applicable to a pilot program in the John Graves Scenic Riverway. The John Graves Scenic Riverway is defined as the Brazos River Basin, and its contributing watershed, located downstream of the Morris Shepard Dam on the Possum Kingdom Reservoir in Palo Pinto County, Texas, and extending to the county line between Parker and Hood Counties, Texas.

Chapter 311, Subchapter H, implements §§26.551 - 26.554 and 26.562. New Subchapter H establishes the permitting and financial assurance requirements for the John Graves Scenic Riverway pilot program. A corresponding rulemaking is published in this issue of the *Texas Register* that includes the addition of Subchapter W, Financial Assurance for Quarries to Chapter 37, Financial Assurance.

SECTION BY SECTION DISCUSSION

Proposed new §311.71, Definitions, defines the terms used within the subchapter. Definitions for the following terms are consistent with definitions found in SB 1354: aggregates, John Graves Scenic Riverway, operator, overburden, owner, pit, quarry, quarrying, refuse, and water body. The

following definitions were added to, or modified from, those contained in SB 1354: 25-year, 24-hour rainfall event, aquifer, best management practices, natural hazard lands, navigable, reclamation, restoration, responsible party, structural controls, tertiary containment, and water quality protection area. Definitions for 25-year, 24-hour rainfall event, aquifer, best management practices, natural hazard lands, and tertiary containment are generally consistent with other federal and/or state rules found in 40 Code of Federal Regulations and 30 TAC, respectively.

Proposed new §311.71(7) defines navigable, for the purposes of this subchapter, as “Designated by the United States Geological Survey (USGS) as perennial on the most recent topographic map(s) published by the USGS, at a scale of 1:24,000.” Providing this definition eliminates any confusion regarding the term, given the significant variability in scope of other federal and state designations of navigability. This definition establishes the scope of proposed permitting requirements most closely related to perennial water bodies, where impacts to water quality, aquatic life, and navigability are of concern, and allows the commission to focus permitting and enforcement resources in those areas. Additionally, the use of USGS topographic maps as the source for determining navigability provides an easily accessible source and eliminates the interpretation necessary in a strictly narrative description.

Proposed new §311.71(14) and (17) include definitions for reclamation and restoration, respectively. The definitions are broad, but also define the scope of reclamation and restoration consistent with the scope of SB 1354.

Proposed new §311.71(16) defines responsible party as “Any owner, operator, lessor, or lessee who is primarily responsible for the overall function and operation of a quarry in the water quality protection area defined by §311.71(16).” This definition was modified from the definition found in SB 1354 so that it specifically references quarries located in a water quality protection area, as defined within the subchapter.

Proposed new §311.71(21) defines a water quality protection area as “For the purposes of this subchapter, the Brazos River and its contributing watershed occurring in Palo Pinto and Parker Counties below the Morris Shepard Dam.” SB 1354 requires the commission to designate water quality protection areas through commission rules. The proposed definition of water quality protection area focuses permitting and enforcement resources within Palo Pinto and Parker Counties, where impacts from quarrying are of concern.

Proposed new §311.72, Applicability, identifies activities regulated by this subchapter and activities specifically excluded from regulation, consistent with SB 1354. Activities regulated by this subchapter include quarrying within a water quality protection area in the John Graves Scenic Riverway, as identified in subsection (a). Activities specifically excluded from regulation are identified in subsection (b)(1) - (4). Paragraphs (1), (4), and (5) exclude, respectively, the following: the construction or operation of a municipal solid waste facility regardless of whether the facility includes a pit or quarry that is associated with past quarrying; an activity, facility, or operation regulated under Natural Resources Code, Chapter 134, Texas Surface Coal Mining and Reclamation Act; and quarries mining clay and shale for use in manufacturing structural clay products. Paragraphs (2) and (3) exclude,

respectively, the following: a quarry, or associated processing plant, that on or before January 1, 1994, has been in regular operation without cessation of operation for more than 30 consecutive days and under the same ownership; and the construction or modification of associated equipment located on a quarry site or associated processing plant site identified in §311.72(b)(2). Where facilities are specifically excluded by paragraphs (2) and (3), the exclusion is applicable to operations within the current lease hold or property boundaries. Where these facilities acquire additional lease holds and/or property, quarrying in those new areas will be subject to the requirements of this subchapter. As this distinction in applicability is dependant upon regular operation since January 1, 1994, without cessation for more than 30 days and operating within the current lease hold or property boundaries, facilities subject to this exclusion are required to maintain documentation on site to demonstrate the exclusion as provided in subsection (c). The responsible party carries the burden of proof in demonstrating that a quarry meets the exclusions listed in subsection (b).

In addition to the exclusion listed in new §311.72(b)(5), quarries mining clay and shale for use in manufacturing structural clay products are also excluded from regulation through the definition of aggregate and quarry in SB 1354 and this proposed subchapter. This exclusion includes current operations, the expansion of current operations on current property, the expansion of current operations to adjacent properties, or new operations.

Proposed new §311.73, Prohibitions, identifies areas within a water quality protection area in the John Graves Scenic Riverway where quarrying is prohibited, consistent with SB 1354. Proposed new §311.73(a) prohibits the construction or operation of any new quarry, or the expansion of an existing

quarry, located within 200 feet of any water body. The construction or operation of any new quarry, or the expansion of an existing quarry, located between 200 feet and 1,500 feet of any water body is prohibited except where the requirements in §§311.75(2), 311.77, and 311.78(b) are met. For the purposes of this subchapter, a new quarry is any quarry that commenced operations after September 1, 2005. An existing quarry is any quarry that was in operation prior to September 1, 2005. Expansion of an existing quarry refers to any change to an existing quarry that results in additional disturbance, including the construction of additional processing areas.

Throughout this subchapter, prohibitions, application requirements, and performance criteria are established based upon the quarry's location relative to a navigable water body (as defined in §311.71). Where location is established as the distance from a water body, the distance is measured from the gradient boundary. Federal Emergency Management Agency flood hazard maps identify the 100-year floodplain relative to a water body.

In addition to any other required permits, proposed new §311.74, Authorization, requires all responsible parties to obtain permit coverage under 30 TAC Chapters 205 or 305. Section 311.74(1) identifies the requirements of this subchapter applicable to all quarries located within a water quality protection area in the John Graves Scenic Riverway. In addition to the requirements in paragraph (1), paragraph (2) requires individual permits for all quarries located within the 100-year floodplain, or within one mile, of a water body. The requirements of paragraph (3) are in addition to those found in paragraphs (1) and (2) for quarries located between 200 feet and 1,500 feet of a water body. These locational distinctions are consistent with SB 1354. Paragraphs (4) and (5) address facilities located

within multiple applicability zones. The requirements for the more restrictive zone are applicable to the entire quarry, except where the executive director waives, modifies, or otherwise adjusts the requirements for that portion of the quarry located outside of the more restrictive applicability zone. The executive director anticipates waiving, modifying, or otherwise adjusting the requirements for that portion of the quarry located outside of the more restrictive applicability zone where a quarry can demonstrate that the portion of the facility located inside the more restrictive applicability zone will still meet all applicable performance requirements.

Proposed new §311.75, Permit Application Requirements, outlines the permit application requirements for all quarries located within a water quality protection area in the John Graves Scenic Riverway. Section 311.75(1) outlines the permit application requirements for all quarries located within a water quality protection area in the John Graves Scenic Riverway including requirements for the submission of financial assurance for restoration. Permit application requirements for quarries located between 200 feet and 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway are identified in paragraph (2). Paragraph (3) allows for the executive director to request any additional information necessary for the quarry to demonstrate compliance with TWC, Chapter 26, Subchapter M or this subchapter.

Proposed new §311.76, Restoration Plan, identifies the requirements for the Restoration Plan required in §311.75(1) for all quarries located within a water quality protection area in the John Graves Scenic Riverway. The Restoration Plan provides a proposed plan of action for how the responsible party will restore a water body to background conditions following an unauthorized discharge. Subsection (a)(1)

and (2) outlines the requirements included in the Restoration Plan enabling the executive director to evaluate the applicant's methodology for determining the physical, chemical, and/or biological background conditions of each of the water bodies that may be at risk as a result of an unauthorized discharge from a quarry. Since background conditions in a water body may change over time, proposed paragraph (3) is designed to ensure that the determination of background conditions will be completed in a timely manner and reevaluated and updated periodically. Paragraph (4) allows the applicant to consider the unique characteristics of the facility, the receiving waters at risk, and the background conditions of these water bodies and requires the applicant to identify the specific goals and objectives of potential restoration actions based on site-specific qualities of the adjacent water bodies and the facility. Paragraph (5) requires the applicant to include an evaluation of a reasonable range of potential restoration alternatives that may be implemented to achieve the goals and objectives identified in the Restoration Plan to return affected water bodies to background conditions. It further requires that the applicant identify a preferred restoration alternative that would be implemented in the event of an unauthorized discharge. To ensure the effectiveness and long-term success of the restoration action, paragraph (6) requires the applicant to describe the process that will be used to monitor the effectiveness of the preferred restoration action and identify the performance criteria that will be used to determine the success of the restoration or the need for interim on- and off-site stabilization. To ensure meaningful input from stakeholders on the restoration action that is ultimately implemented to restore the affected water body, paragraph (7) requires the applicant to identify a process for public involvement in the evaluation of the restoration action(s) selected to restore the receiving water body to background conditions. Paragraph (8) requires a detailed estimate of the maximum probable costs required to complete a restoration action used to support the amount of

financial assurance required by §311.81(a). Certification of the Restoration Plan by a licensed Texas professional engineer is required in subsection (b).

Proposed new §311.77, Technical Demonstration, identifies the requirements for the Technical Demonstration required in §311.75(3) for all quarries located within 200 feet to 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway. Requirements for a time schedule for the proposed quarry from initiation to termination of operations, including restoration, are identified in subsection (a)(1). Subsection (a)(2), (3), and (4) provides a description of the geology, quarrying processes, and other operations that would be found on site. Identification of the type, character, and volume of all wastewater and storm water generated at the quarry is required in paragraph (5). Paragraph (6) requires the submission of a topographic map and lists all items that must be identified on the map. Paragraph (7) defines the minimum requirements for the Surface Water Drainage and Accumulation Plan, required by SB 1354. Paragraph (7)(A) requires a description of the use and monitoring of structural controls and best management practices as identified in the Best Available Technology Evaluation. The minimum items required for identification on a topographic map are listed in subparagraph (B)(i) - (v). Paragraph (8) lists the requirements for the Best Available Technology Evaluation. Paragraph (8)(A) requires that the applicant assess the use of structural controls and best management practices. Certification by a licensed Texas professional engineer is required for the design and construction of all structural controls. Subparagraph (B) requires an evaluation of performance criteria established in §311.79 and §311.80. This evaluation should help ensure that the requirements of §311.79 and §311.80 have been reviewed and will be met by the applicant. Paragraph (9) ensures that the applicant has developed procedures and schedules for the

periodic review of the Technical Demonstration for consistency with quarry operations and site conditions. Subsection (b) requires certification of the Technical Demonstration by a licensed Texas professional engineer.

Proposed new §311.78, Reclamation Plan, identifies the requirements for the Reclamation Plan required in §311.75(3) for all quarries located within 200 feet to 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway. The minimum requirements of the Reclamation Plan are listed in subsection (a)(1)(A) - (C). Subparagraph (A) requires the applicant to provide a description of the proposed use of the disturbed area following reclamation. The proposed use of a reclaimed area will dictate the standards for reclamation, which subparagraph (B) requires the permittee to develop. Standards for reclamation must address removal or final stabilization of all materials, waste, structures, temporary roads/railroads, and equipment; backfilling, regrading, and recontouring; slope stabilization; and the establishment of vegetation, wildlife habitat, drainage patterns, and permanent control structures, as listed in paragraph (2)(i) - (xi). A description of how reclamation will be conducted and a timetable for the completion of reclamation activities is required in the Reclamation Plan in subparagraph (C). Paragraph (2) requires a detailed estimate of the maximum probable costs required to complete reclamation. Subsection (b) requires certification of the Reclamation Plan by a licensed Texas professional engineer.

Proposed new §311.79, Performance Criteria for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway, outlines the performance criteria applicable to all quarries located within a water quality protection area in the John Graves Scenic Riverway. Section 311.79(1)

establishes a 45 milligrams per liter daily average effluent limitation for total suspended solids and a pH range of 6.0 to 9.0 standard units for all discharges to waters in the state. Effluent limitations for total suspended solids are established to reduce sediment loading to receiving water bodies. A daily average concentration of 45 milligrams per liter is achievable when proper best management practices and structural controls are installed and maintained. Effluent limitations for pH are established to preclude impacts to water quality and are achievable primarily through best management practices, although structural controls and/or treatment may be necessary. The applicability of total suspended solids and pH effluent limitations are limited in paragraph (2) to discharges resulting from a rainfall event less than the 25-year, 24-hour rainfall event. The 25-year, 24-hour rainfall event has historically been the design standard for water quality applications. Rainfall events beyond the 25-year, 24-hour rainfall event are typically considered an “act of God.” To ensure that the effluent limitations established in paragraphs (1) and (2) are monitored consistently, monitoring frequencies are specified in paragraph (3) at once per day, when discharging. This monitoring schedule provides regular monitoring of discharges, allowing the commission and quarries to monitor the effectiveness of best management practices and structural controls. Paragraph (4) outlines monitoring and reporting requirements for monitoring conducted under paragraph (3). Because paragraph (2) limits the applicability of effluent limitations under severe rainfall conditions, paragraph (5) requires that the permittee install a permanent rain gauge and keep daily records of rainfall and resulting flow.

Proposed new §311.80, Additional Performance Criteria for Quarries Located Between 200 Feet and 1,500 Feet of a Water Body Located Within a Water Quality Protection Area in the John Graves Scenic Riverway, outlines additional performance criteria applicable to all quarries located between 200 feet

and 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway. Section 311.80(1)(A) - (F) addresses design and construction requirements for final control structures including: certification of the design and construction, availability of design and construction plans and specifications, slope restrictions, water management capabilities, stabilization, inspection, and buffers. These requirements are established to ensure proper design and construction, operation, and maintenance of structural controls. Paragraph (2) provides for the proper operation of treatment, detention, and water storage tanks and ponds by requiring a minimum of two feet of freeboard. Paragraph (3) requires a depth marker so that compliance with paragraph (2) can be verified. Impacts to historical resources are addressed in paragraph (4) by requiring compliance with 36 Code of Federal Regulations Part 800 and 9 Texas Natural Resources Code, Chapter 191. Paragraph (5) addresses impacts to federal endangered/threatened, aquatic/aquatic-dependant species/proposed species or their critical habitat. As a measure of protection for water supply wells, paragraph (6) establishes siting restrictions for all waste management units. Paragraph (7) establishes requirements for secondary and tertiary containment of chemicals and fuels to reduce the potential for leaks and spills to contaminate surface and/or groundwater. Tertiary containment is required where quarry operations overlay aquifer and/or aquifer recharge areas and sufficient confining layers do not exist to preclude contamination. Secondary containment is required in all instances. Where natural hazards, frequent flooding, or areas of unstable geology exist, paragraph (8) prohibits the location of a quarry operation.

Proposed new §311.81, Financial Responsibility for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway, establishes requirements for financial assurance for restoration and reclamation as required by this subchapter.

Proposed new §311.81(a) requires that the owner or operator of a quarry located in the John Graves Scenic Riverway establish and maintain financial assurance, in an amount determined by the cost estimate within the approved Restoration Plan in §311.76(8), for restoration of a water body that is affected by an unauthorized discharge. The financial assurance is intended to cover the costs of site stabilization and restoration performed by an independent contractor and include design and engineering fees, costs of repairing failed or impaired structural controls, costs of soil stabilization and erosion control measures necessary to prevent additional releases, and where practicable, removal of excess silt, sediment, rocks, and debris from the affected water body.

Proposed new §311.81(b) requires that the owner or operator of a quarry located in the John Graves Scenic Riverway establish and maintain financial assurance, in an amount determined by the cost estimate within the Reclamation Plan in §311.78(2), for reclamation of the quarry. The financial assurance is intended to cover the costs of reclamation performed by an independent contractor. Costs of reclamation include design and engineering fees; removal or final stabilization of all materials, waste, structures, temporary roads/railroads, and equipment; backfilling, regrading, and recontouring; slope stabilization; and the establishment of vegetation, wildlife habitat, drainage patterns, and permanent control structures.

Proposed new §311.82, Expiration, specifies September 1, 2025, as the expiration date for Chapter 311, Subchapter H, consistent with SB 1354.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Walter Perry, Analyst, Strategic Planning and Assessment Section, determined that, for the first five-year period the proposed new rules are in effect, no significant fiscal implications are anticipated for the agency or other units of state or local government. However, fiscal implications, which may be significant, are anticipated for up to 16 quarry facilities currently operating in the John Graves Scenic Riverway.

The proposed rules implement SB 1354, which amended TWC, Chapter 26. The bill addresses permitting, financial responsibility, inspections, water quality sampling, enforcement, cost recovery, and interagency cooperation with regard to quarry operations in the John Graves Scenic Riverway.

The John Graves Scenic Riverway is defined as the Brazos River Basin and its contributing watershed, located downstream of the Morris Shepard Dam on the Possum Kingdom Reservoir in Palo Pinto County, Texas, and extending to the county line between Parker and Hood Counties, Texas.

The proposed rules would establish the permitting and financial assurance requirements for the John Graves Scenic Riverway 20-year pilot program. At this time, there are 16 permitted quarries operating within the John Graves Scenic Riverway. Quarries operating at a distance less than 200 feet would not be able to obtain a permit under the proposed rules. The remainder of these quarries would be required to obtain either an individual permit or coverage under a newly developed general permit

based on their proximity to a water body within a water quality protection area in the John Graves Scenic Riverway. Those quarries operating between 200 feet and up to one mile of a water body would be required to obtain an individual permit. Quarries operating within a distance greater than one mile of a water body would obtain coverage under the newly developed general permit. The affected quarries are required to have a storm water pollution prevention plan under their current general permit. The proposed rules would increase permitting requirements, especially for those facilities located between 200 feet and 1,500 feet of a water body, though facilities located greater than 1,500 feet of a water body will also experience increased permitting requirements. Implementation of the new requirements is expected to increase operating costs for some quarry operators in the John Graves Scenic Riverway. None of the potentially affected quarries are owned or operated by units of local government.

The proposed rules would have no significant fiscal impact for the commission, although there may be an increase in the number of individual water quality permits issued by the agency. All quarries operating less than one mile from a perennial body of water would be required to obtain an individual permit and therefore have to pay a higher permit application fee. The maximum anticipated application fee for an individual permit is \$1,250 and the fee for the general permit is \$100. Fee revenue would increase dependent upon how many quarries would be required to switch to the individual permit. The additional fee revenue would be deposited in the Water Resource Management Account (Fund 153). Assuming all 16 facilities apply for individual permits, there would be an estimated one time revenue gain of \$20,000.

A slight increase in the number of individual permits reviewed by the Water Quality Division is expected, along with higher levels of inspection activity. It is expected that the commission, in conjunction with the Texas Parks and Wildlife Department and the Brazos River Authority, would conduct inspections of the John Graves Scenic Riverway twice per year from the air and twice per year by boat. The costs may be shared among the interested agencies. The inspections are required twice per year until September 1, 2025, as specified by SB 1354. The additional workload is expected to be absorbed using current agency resources as no funds were appropriated to implement the requirements. SB 1354 also established the Reclamation and Restoration Fund Account within the General Revenue Fund. Penalties and other money received by the commission as a result of enforcement actions taken under the provisions of the proposed rulemaking would be deposited into the account. Money in the account could be appropriated only to the commission for the reclamation and restoration of the beds, bottoms, and banks of water bodies affected by unlawful discharges. Subsequent to the passage of SB 1354, the passage of SB 1605 by the 79th Legislature, 2005, invalidated the creation of the dedicated Reclamation and Restoration Account. If the recovery of penalty revenue or the procurement of cost recovery or financial assurance funds should occur, the commission will evaluate other mechanisms available to the agency for the deposit, accounting, and disbursement of these funds. It is projected that the rulemaking would result in no additional costs to units of local governments.

PUBLIC BENEFITS AND COSTS

Mr. Perry also determined that for each year of the first five years the proposed new rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be improved

water quality due to a decrease in the amount of suspended solids entering water bodies within a water quality protection area in the John Graves Scenic Riverway.

Fiscal implications are anticipated for businesses and individuals operating rock quarries in the John Graves Scenic Riverway. The proposed rules would establish the permitting and financial assurance requirements for the John Graves Scenic Riverway 20-year pilot program. At this time, there are approximately 16 permitted quarries operating within the John Graves Scenic Riverway that would be required to obtain either an individual permit or coverage under a general permit based on the proximity to a water body within a water quality protection area in the John Graves Scenic Riverway. The proposed requirements for quarries located greater than one mile from a water body include the development of a restoration plan, maintenance of financial assurance for restoration, and compliance with performance criteria. Quarries located within one mile of a water body will be required to obtain an individual permit, develop a restoration plan, maintain financial assurance for restoration, and comply with performance criteria. Quarries located between 200 feet and 1,500 feet of a water body are required to submit a Technical Demonstration, submit a Reclamation Plan, maintain financial assurance for reclamation, comply with additional performance criteria, obtain an individual permit, develop a Restoration Plan, maintain financial assurance for restoration, and comply with performance criteria.

Quarries required to obtain coverage under the individual permit would pay a permit application fee of \$1,250 instead of \$100 and may have to hire a professional engineer, professional geoscientist, or other qualified individual to design the Restoration Plan and where applicable, the Reclamation Plan,

Technical Demonstration, and surface water drainage and water accumulation plan, as well as perform a review of best available technology to minimize adverse impacts. These professional costs may be in the range of \$200 per hour, depending upon the size of the site. Professional fees are estimated to be between \$3,200 and \$32,200, assuming work would take anywhere from 2 to 20 days to complete.

Construction of the performance controls would be a new cost to quarry operators as well. To control runoff from the quarries, berming must be constructed down-gradient and most likely detention structures built to meet effluent limitations. Small sites could be bermed and detention basins built at an estimated cost of \$1,400. Larger sites could take longer, especially with consideration of topography and vegetative cover. For those sites requiring a detention structure, it is projected that costs would be between \$24,750 and \$74,250 to excavate a one million-gallon detention basin. This would capture the rainfall from a 25-year, 24-hour rainfall event from 7.55 acres (an event of 7.2 inches).

Financial assurance is estimated to cost 3% to 5% per year of the amount estimated to restore and reclaim the site. It is estimated that on average, cost estimates providing the basis for the amount of financial assurance would cost a minimum of \$100,000 for restoration and \$200,000 for reclamation. Therefore, at a minimum, the financial assurance is estimated to cost between \$3,000 and \$15,000 per year in premiums, unless operations can qualify to meet the financial assurance provisions through a corporate financial test. Facilities located greater than 1,500 feet from a water body would be required to meet the financial assurance requirements for restoration activities. Those facilities located between 200 feet and 1,500 feet of a water body would be required to meet the proposed financial assurance

requirements for both reclamation and restoration activities. Reclamation is required once the quarry terminates operations. Actual costs would vary by site and would be dependent upon the condition of the site at the time that operations cease. In addition, there may be other costs associated with the individual permit such as contested case hearing costs. If there is a contested case hearing, costs to the applicant could be anywhere from \$5,000 to \$100,000 for attorney fees and would depend upon the length of the hearing and other circumstances. Total costs for the new requirements are estimated to be between \$43,000 and \$223,000 to obtain an individual permit and between \$6,300 and \$37,300 for a general permit.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

Adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rulemaking. A small business is defined as having fewer than 100 employees or less than \$1 million in annual gross receipts. A micro-business is defined as having no more than 20 employees. It is not known how many of the estimated 16 facilities are small or micro-businesses, but for those that are, there could be costs associated with the proposed permitting and financial assurance requirements.

Small or micro-businesses would be subject to the same requirements for compliance as larger businesses. Estimated costs would range from \$43,000 to \$223,000 to obtain an individual permit and between \$6,300 and \$37,300 for a general permit. Costs for a small business requiring coverage under an individual permit would range from \$430 to \$2,230 per employee and between \$63 and \$373 per employee for coverage under the general permit. For a micro-business, costs for coverage under the

individual permit could range from \$2,150 to \$11,150 per employee and between \$315 and \$1,865 per employee for coverage under the general permit.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because, although the proposed rulemaking meets the definition of a “major environmental rule” as defined in §2001.0225, it does not meet any of the four applicability requirements listed in §2001.0225(a). Texas Government Code, §2001.0225(a), only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

In this case, the proposed rules do not meet any of these four applicability requirements. First, regardless of whether the rules exceed a standard set by federal law, the proposed rules are specifically required to implement state law in SB 1354. Second, the proposed rules do not exceed a requirement of state law, in that they are being proposed to implement specific requirements of SB 1354. Third, the proposed rules do not exceed an express requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program. Fourth, the commission does not propose these rules solely under the general powers of the agency, but rather under the authority of SB 1354, which directs the commission to implement rules under TWC, Chapter 26.

The commission invites public comment regarding this draft regulatory impact analysis determination.

TAKINGS IMPACT ASSESSMENT

The commission evaluated these proposed rules and prepared an assessment of whether the proposed rules constitute a takings under Texas Government Code, Chapter 2007.

The specific purpose of the proposed rules is to implement SB 1354. The proposed rules protect a unique portion of the Brazos River watershed between Possum Kingdom Reservoir in Palo Pinto County and Parker County, Texas, to be known as the John Graves Scenic Riverway, from ongoing mining and quarrying activities in the proximity of the beds, bottoms, and banks of the river that significantly impair the quality of the water flowing in the river.

These proposed rules implement the requirements for quarries in the John Graves Scenic Riverway that were established in SB 1354. Under SB 1354, the commission may not authorize a quarry within 200 feet of a navigable water body within the John Graves Scenic Riverway. The bill prohibits the commission from authorizing the construction or operation of a new quarry or the expansion of an existing quarry between 200 and 1,500 feet of a navigable waterbody within the John Graves Scenic Riverway, unless certain performance criteria established by rulemaking are satisfied. SB 1354 further establishes that a quarry located or proposed to be located within one mile of a navigable waterbody in the John Graves Scenic Riverway must get an individual permit. Those quarries located or proposed to be located at a distance more than one mile must be covered under a general permit. This proposed rulemaking and related restrictions implement the express requirements of SB 1354.

Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking of private real property, because although the proposed rules do affect private real property, they do not constitute a “taking” as defined by the Private Real Property Rights Preservation Act. According to the Act, “taking” means a governmental action that affects private real property, in whole or in part or temporarily or permanently, in a manner that requires the governmental entity to compensate the private real property owner as provided by the Fifth and Fourteenth Amendments to the United States Constitution or Texas Constitution, Article I, §17 or §19; or a governmental action that: 1) affects an owner's private real property that is the subject of the governmental action, in whole or in part or temporarily or permanently, in a manner that restricts or limits the owner's right to the property that would otherwise exist in the absence of the governmental action; and 2) is the producing cause of a reduction of at least 25% in the market value of the affected private real property,

determined by comparing the market value of the property as if the governmental action is not in effect and the market value of the property is determined as if the governmental action is in effect.

The Fifth Amendment to the United States Constitution states in relevant part: "Nor shall private property be taken for public use, without just compensation." The takings clause applies to the states by virtue of the Fourteenth Amendment. Similarly, Texas Constitution, Article I, §17 provides: "No person's property shall be taken, damaged or destroyed without adequate compensation being made, unless by the consent of such person; and, when taken, except for the use of the State, such compensation shall be first made, or secured by a deposit of money . . ."

Texas courts have held that takings can be classified as either physical or regulatory. Physical takings occur when the government authorizes an unwarranted physical occupation of an individual's property. The proposed rules do not authorize the physical occupation of any private real property; therefore, they will not result in a physical takings of private real property. A regulatory takings occurs when a regulation does not substantially advance legitimate state interests, or when a regulation either denies a landowner all economically viable use of property, or unreasonably interferes with a landowner's right to use and enjoy that property.

The proposed rules substantially advance a legitimate state interest by implementing SB 1354, relating to the protection of water quality in watersheds threatened by quarry activities; establishing a pilot program in certain portion of the Brazos River watershed; and providing penalties. The commission is tasked with maintaining the quality of water in the state consistent with the public health and

enjoyment, and the propagation and protection of terrestrial and aquatic life. SB 1354 is being implemented to protect the John Graves Scenic Riverway from ongoing mining and quarrying activities in the proximity of the beds, bottoms, and banks of the river that significantly impair the quality of the water flowing in the river.

Determining whether all economically viable use of a property would be denied entails an analysis of whether value remains in property subject to these rules if the proposed rules were adopted. The proposed rules do not prohibit quarrying altogether. While the proposed rules would prohibit quarrying within 200 feet of a navigable water body within the John Graves Scenic Riverway, quarrying would be permitted between 200 feet and 1,500 feet of a water body, provided that certain performance criteria are met. Facilities located more than one mile from a water body may obtain a general permit under TWC, §26.040. In addition, the proposed rules do not restrict other potential uses of property located in the John Graves Scenic Riverway. Therefore, the proposed rules would not deny any landowner all economically viable uses of a property.

Determining whether the proposed rules would unreasonably interfere with a landowner's right to use and enjoy property would require consideration of two factors: 1) the economic impact of the regulation; and 2) the extent to which the proposed rules interfere with distinct investment-backed expectations. This determination is typically made by courts on a fact-intensive, case-by-case basis.

As previously stated, the proposed rules do not prohibit quarrying altogether; instead, the rules restrict quarrying activities that will protect the quality of the water flowing in the John Graves Scenic

Riverway. The commission does not anticipate that the proposed rules will unreasonably interfere with a landowner's investment-backed expectations, nor will the proposed rules be the producing cause of a 25% reduction in the market value of affected private real property.

The commission invites public comment on this preliminary takings impact assessment.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the rules are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Coastal Management Program, nor will it affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the proposed rules are not subject to the Texas Coastal Management Program.

ANNOUNCEMENT OF HEARING

A public hearing on this proposal will be held in Mineral Wells on April 6, 2006, at 6:30 p.m. at the Mineral Wells City Hall Annex, Council Chambers, 115 Southwest First Street. The hearing will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. There will be no open discussion during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearing and will answer questions before and after the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact the Office of Public Assistance at (512) 239-4000. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Joyce Spencer, MC 205, Texas Register Team, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas, 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Project Number 2005-051-037-PR.

Comments must be received no later than 5:00 p.m., April 24, 2006. Copies of the proposed rules can be obtained from the commission's Web site at

http://www.tceq.state.tx.us/nav/rules/propose_adopt.html. For further information, please contact Kimberly Wilson, Water Quality Division, (512) 239-4644.

SUBCHAPTER H: REGULATION OF QUARRIES IN THE

JOHN GRAVES SCENIC RIVERWAY

§§311.71 - 311.82

STATUTORY AUTHORITY

The new rules are proposed under TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; §5.102, which establishes the commission's general authority necessary to carry out its jurisdiction; §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; §26.011, which provides the commission with authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. Rulemaking authority is expressly granted to the commission to adopt rules under TWC, Chapter 26 as amended by SB 1354, §2.

The proposed new rules implement SB 1354, which creates TWC, Chapter 26, new Subchapter M. SB 1354, §2, expressly requires the commission to adopt rules adequate to protect the water resources in a water quality protection area for inclusion in any authorization, including an individual or general permit.

§311.71. Definitions.

The following words and terms, when used in the subchapter, have the following meanings.

(1) **25-year, 24-hour rainfall event**--The maximum rainfall event with a probable recurrence interval of once in 25 years, with a duration of 24 hours, as defined by the National Weather Service and Technical Paper Number 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments; or equivalent regional or state rainfall information.

(2) **Aggregates**--Any commonly recognized construction material originating from a quarry or pit by the disturbance of the surface, including dirt, soil, rock asphalt, granite, gravel, gypsum, marble, sand, stone, caliche, limestone, dolomite, rock, riprap, or other nonmineral substance. The term does not include clay or shale mined for use in manufacturing structural clay products.

(3) **Aquifer**--A saturated permeable geologic unit that can transmit, store, and yield to a well, the quality and quantities of groundwater sufficient to provide for a beneficial use. An aquifer can be composed of unconsolidated sands and gravels; permeable sedimentary rocks, such as sandstones and limestones; and/or heavily fractured volcanic and crystalline rocks. Groundwater within an aquifer can be confined, unconfined, or perched.

(4) **Best management practices**--Any prohibition, management practice, maintenance procedure, or schedule of activity designed to prevent or reduce the pollution of water in the state.

Best management practices include treatment, specified operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

(5) **John Graves Scenic Riverway**--That portion of the Brazos River Basin and its contributing watershed, located downstream of the Morris Shepard Dam on the Possum Kingdom Reservoir in Palo Pinto County, Texas, and extending to the county line between Parker and Hood Counties, Texas.

(6) **Natural hazard lands**--Geographic areas in which natural conditions exist that pose or, as a result of quarry operations, may pose a threat to the health, safety, or welfare of people, property, or the environment, including areas subject to landslides, cave-ins, large or encroaching sand dunes, severe wind or soil erosion, frequent flooding, avalanches, and areas of unstable geology.

(7) **Navigable**--Designated by the United States Geological Survey (USGS) as perennial on the most recent topographic map(s) published by the USGS, at a scale of 1:24,000.

(8) **Operator**--Any person engaged in or responsible for the physical operation and control of a quarry.

(9) **Overburden**--All materials displaced in an aggregates extraction operation that are not, or reasonably would not be expected to be, removed from the affected area.

(10) **Owner**--Any person having title, wholly or partly, to the land on which a quarry exists or has existed.

(11) **Pit**--An open excavation from which aggregates have been, or are being, extracted with a depth of five feet or more below the adjacent and natural ground level.

(12) **Quarry**--The site from which aggregates for commercial sale are being, or have been, removed or extracted from the earth to form a pit, including the entire excavation, stripped areas, haulage ramps, and the immediately adjacent land on which the plant processing the raw materials is located. The term does not include any land owned or leased by the responsible party not being currently used in the production of aggregates for commercial sale or an excavation to mine clay or shale for use in manufacturing structural clay products.

(13) **Quarrying**--The current and ongoing surface excavation and development without shafts, drafts, or tunnels, with or without slopes, for the extraction of aggregates for commercial sale from natural deposits occurring in the earth.

(14) **Reclamation**--The land treatment processes designed to minimize degradation of water quality, damage to fish or wildlife habitat, erosion, and other adverse effects from quarries.

Reclamation includes backfilling, soil stabilization and compacting, grading, erosion control measures, appropriate revegetation, or other measures, as appropriate.

(15) **Refuse**--All waste material directly connected with the production, cleaning, or preparation of aggregates that have been produced by quarrying.

(16) **Responsible party**--Any owner, operator, lessor, or lessee who is primarily responsible for overall function and operation of a quarry located in the water quality protection area as defined in this section.

(17) **Restoration**--Those actions necessary to change the physical, chemical, and/or biological qualities of a receiving water body in order to return the water body to its background condition. Restoration includes on- and off-site stabilization to reduce or eliminate an unauthorized discharge, or substantial threat of an unauthorized discharge.

(18) **Structural controls**--Physical, constructed features that prevent or reduce the discharge of pollutants. Structural controls include, but are not limited to, sedimentation/detention ponds; velocity dissipation devices such as rock berms, vegetated berms, and buffers; and silt fencing.

(19) **Tertiary containment**--A containment method by which an additional wall or barrier is installed outside of the secondary storage vessel or other secondary barrier in a manner

designed to prevent a release from migrating beyond the tertiary wall or barrier before the release can be detected.

(20) **Water body**--Any navigable watercourse, river, stream, or lake within the water quality protection area.

(21) **Water quality protection area**--The Brazos River and its contributing watershed within Palo Pinto and Parker Counties, Texas, downstream from the Morris Shepard Dam, and extending to the county line between Parker and Hood Counties, Texas.

§311.72. Applicability.

(a) This subchapter applies to quarrying within the water quality protection area designated by this subchapter, in the John Graves Scenic Riverway.

(b) This subchapter does not apply to:

(1) the construction or operation of a municipal solid waste facility regardless of whether the facility includes a pit or quarry that is associated with past quarrying;

(2) a quarry, or associated processing plant, that since on or before January 1, 1994, has been in regular operation without cessation of operation for more than 30 consecutive days and under the same ownership;

(3) the construction or modification of associated equipment located on a quarry site or associated processing plant site described in paragraph (2) of this subsection;

(4) an activity, facility, or operation regulated under Natural Resources Code, Texas Surface Coal Mining and Reclamation Act, Chapter 134; or

(5) quarries mining clay and shale for use in manufacturing structural clay products.

(c) Operations or facilities to which this subchapter does not apply under subsection (b)(2) and (3) of this section, must maintain adequate documentation on site sufficient to demonstrate their exclusions.

(1) Documentation demonstrating ownership includes, but is not limited to: deeds, property tax receipts, leases, or insurance records.

(2) Documentation demonstrating continuous operation without cessation of operation for more than 30 consecutive days beginning on or before January 1, 1994, includes, but is not limited

to: production records, sales receipts, payroll records, sales tax records, income tax records, or financial statements/reports.

§311.73. Prohibitions.

(a) The construction or operation of any new quarry, or the expansion of any existing quarry, within 200 feet of any water body located within a water quality protection area in the John Graves Scenic Riverway is prohibited.

(b) Unless authorized under this subchapter, the construction or operation of any new quarry, or the expansion of an existing quarry, located between 200 feet and 1,500 feet of any water body located within a water quality protection area in the John Graves Scenic Riverway is prohibited.

§311.74. Authorization.

(a) Any responsible party shall obtain a permit subject to the requirements of Chapters 205 and 305 of this title (relating to General Permits for Waste Discharges and Consolidated Permits).

(b) The following additional requirements imposed through this subchapter for discharges from quarries located within a water quality protection area in the John Graves Scenic Riverway are based on the location of the quarry.

(1) In addition to the requirements of Chapters 205 and 305 of this title, a quarry located within a water quality protection area in the John Graves Scenic Riverway must meet the following requirements:

(A) §311.75(1) of this title (relating to Permit Application Requirements);

(B) §311.79 of this title (relating to Performance Criteria for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway); and

(C) §311.81(a) of this title (relating to Financial Responsibility for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway).

(2) In addition to the requirements of Chapters 205 and 305 of this title and paragraph (1) of this section, any quarry located within the 100-year floodplain or within one mile of a water body within a water quality protection area in the John Graves Scenic Riverway must obtain an individual permit.

(3) In addition to the requirements of Chapters 205 and 305 of this title and paragraph (1) and (2) of this section, all quarries located within 200 feet to 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway, and subject to the prohibition under §311.73(b) of this title (relating to Prohibitions), must meet the following requirements:

(A) §311.75(2) of this title;

(B) §311.80 of this title (relating to Additional Performance Criteria for Quarries Located Between 200 Feet and 1,500 Feet of a Water Body Located Within a Water Quality Protection Area in the John Graves Scenic Riverway); and

(C) §311.81(b) of this title.

(4) For any quarry subject to the provisions of paragraph (2) of this section, a part of which is also located outside of the 100-year floodplain of, or beyond one mile from, a water body, the requirements of paragraph (2) of this section are applicable to the entire quarry. The executive director may waive, modify, or otherwise adjust these requirements for that portion of the quarry located outside of the 100-year floodplain of, or beyond one mile from, a water body.

(5) For any quarry subject to the provisions of paragraph (3) of this section, a part of which is also located more than 1,500 feet from a water body, the requirements of paragraph (3) of this section will be applicable to the entire quarry. The executive director may waive, modify, or otherwise adjust these requirements for that portion of the quarry located more than 1,500 feet from a water body.

§311.75. Permit Application Requirements.

Any responsible party who is required to obtain a permit, or who requests an amendment, modification, or renewal of a permit, shall complete, sign, and submit an application to the executive director, according to the provisions in Chapters 205 and 305 of this title (relating to General Permits for Waste Discharges and Consolidated Permits). Quarries located in the John Graves Scenic Riverway must submit additional information based on the location of the quarry.

(1) A quarry located within a water quality protection area in the John Graves Scenic Riverway must submit the following:

(A) a Restoration Plan as outlined in §311.76 of this title (relating to Restoration Plan); and

(B) evidence of sufficiently funded bonding or proof of financial resources to mitigate, remediate, and correct any potential future effects on a water body by an unauthorized discharge to a water body in an amount no less than that specified in §311.81(a) of this title (relating to Financial Responsibility for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway).

(2) In addition to the permit application requirements specified in paragraph (1) of this section, all applications for quarries located within 200 feet to 1,500 feet of any water body within a water quality protection area in the John Graves Scenic Riverway must include:

(A) a Technical Demonstration as outlined in §311.77 of this title (relating to Technical Demonstration); and

(B) a Reclamation Plan as outlined in §311.78 of this title (relating to Reclamation Plan).

(3) In addition to the permit application requirements in paragraphs (1) and (2) of this section, the executive director may require any additional information deemed appropriate and necessary to demonstrate compliance with the provisions of Texas Water Code, Chapter 26, Subchapter M or this subchapter.

§311.76. Restoration Plan.

(a) The Restoration Plan must include a proposed plan of action for how the responsible party will restore the receiving waters to background conditions in the event of an unauthorized discharge that affects those receiving waters. The Restoration Plan, at a minimum, must:

(1) identify receiving waters at risk of an unauthorized discharge from the quarry;

(2) describe the process to be used in documenting the existing physical, chemical, and/or biological background conditions of each of the adjacent receiving waters;

(3) provide a schedule for completing the determination of background conditions of each of the receiving waters and for updating background conditions in the future, as appropriate;

(4) identify the goals and objectives of potential restoration actions;

(5) provide a reasonable range of restoration alternatives and the preferred restoration alternative that may be implemented to return the affected waters to background conditions in the event of an unauthorized discharge;

(6) describe the process for monitoring the effectiveness of the preferred restoration action, including performance criteria, that will be used to determine the success of the restoration or need for interim site stabilization;

(7) identify a process for public involvement in the selection of the restoration alternative to be implemented to restore the receiving waters to background conditions; and

(8) provide a detailed estimate of the maximum probable costs required to complete a restoration action, given the size, location, and description of the quarry and the nature of the receiving waters. The maximum probable cost must be based on the costs to a third party conducting the action without a financial interest or ownership in the quarry.

(b) Certification of the Restoration Plan must be provided by a licensed Texas professional engineer.

§311.77. Technical Demonstration.

(a) The Technical Demonstration must include, at a minimum:

(1) a time schedule for the proposed quarry from initiation to termination of operations, including reclamation;

(2) a detailed description of the type of quarrying to be conducted, including the processes/methods employed (e.g., pit mining where blasting is employed);

(3) a geological description of the quarry area, including a detailed description of the material deposit: type, geographical extent, depth, and volume; and a description of the general area geology;

(4) identification and a detailed description of any other operations on site, including raw-material processing and/or secondary products (e.g., cement) processing;

(5) identification and a detailed description of type, character, and volume of wastewater and storm water generated on site;

(6) a topographic map, at a scale appropriate to represent the quarry operation and all of the following within the boundaries of the quarry:

(A) waterbodies;

(B) existing and proposed roads including quarry access roads;

(C) existing and proposed railroads;

(D) the 100-year floodplain boundaries, if applicable;

(E) structures (e.g., office buildings);

(F) the location of all known wells including, but not limited to, water wells, oil wells, and unplugged and abandoned wells;

(G) active, post, and reclaimed quarrying areas;

(H) buffer areas;

(I) raw material, intermediate material, final product, waste product, byproduct, and/or ancillary material storage and processing areas;

(J) chemical and fuel storage areas;

(K) vehicle/equipment maintenance, cleaning, and fueling areas;

(L) vehicle/equipment loading and unloading areas;

(M) baghouses and other air treatment units exposed to precipitation; and

(N) waste disposal areas;

(7) a Surface Water Drainage and Water Accumulation Plan. The Surface Water Drainage and Water Accumulation Plan must be designed to prevent damage to fish, wildlife, and fish/wildlife habitat from erosion, siltation, and runoff from quarry operations. The Surface Water Drainage and Water Accumulation Plan must, at a minimum:

(A) describe the use and monitoring of structural controls and best management practices as identified in paragraph (8) of this subsection designed to control erosion, siltation, and runoff; and

(B) provide a topographic map, at a scale appropriate to represent the quarry operation and all of the following within the boundaries of the quarry:

(i) the location of each process wastewater and/or storm water outfall;

(ii) an outline of the drainage area that contributes storm water to each outfall;

(iii) treatment, detention, and water storage tanks and ponds;

(iv) structural controls for managing storm water and/or process wastewater; and

(v) physical features of the site that would influence storm water runoff or contribute a dry weather flow; and

(8) a Best Available Technology Evaluation. The Best Available Technology Evaluation assists staff in reviewing and determining the best available technology designed to control erosion, siltation, and runoff from the quarry to minimize disturbance and adverse effects to fish, wildlife, and related environmental resources. Where practical, the Best Available Technology Evaluation must assist staff in reviewing and determining best available technology designed to enhance fish, wildlife, and related environmental resources.

(A) The Best Available Technology Evaluation must assess the use of structural controls and best management practices.

(B) The Best Available Technology Evaluation must evaluate performance criteria outlined in §311.79 and §311.80 of this title (relating to Performance Criteria for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway and Additional Performance Criteria for Quarries Located Between 200 Feet and 1,500 Feet of a Water Body Located Within a Water Quality Protection Area in the John Graves Scenic Riverway).

(C) Structural control design and construction must be certified by a licensed Texas professional engineer. Design and construction plans/specifications must be maintained on site and made available at the request of the executive director; and

(9) a procedure and schedule for reviewing the Technical Demonstration for consistency with quarry operations and site conditions and effectiveness in controlling erosion, siltation, and runoff.

(b) Certification of the Technical Demonstration must be provided by a licensed Texas professional engineer.

§311.78. Reclamation Plan.

(a) The Reclamation Plan establishes procedures and standards for reclamation of the quarry.

(1) The Reclamation Plan must, at a minimum:

(A) provide a description of the proposed use of the disturbed area following reclamation;

(B) develop site-specific standards for reclamation appropriate to the end use proposed in subparagraph (A) of this paragraph that addresses the following:

(i) removal or final stabilization of all raw material, intermediate material, final product, waste product, byproduct, and/or ancillary material;

(ii) removal of waste or closure of all waste disposal areas;

(iii) removal of structures, where appropriate;

(iv) removal and reclamation of all temporary roads and/or railroads;

(v) backfilling, regrading, and recontouring;

(vi) slope stability for remaining highwalls and detention ponds;

(vii) revegetation of the reclaimed area giving consideration to species diversity and the use of native species;

(viii) establishment of wildlife habitat, giving consideration to creation/expansion of habitat for endangered and threatened species, where applicable;

(ix) establishment of drainage patterns;

(x) establishment of permanent control structures (e.g., retention ponds), where necessary, to address erosion, siltation, and runoff from post quarrying and reclaimed areas; and

(xi) removal of all equipment;

(C) provide a description of how reclamation will be conducted (e.g., phased reclamation) and a timetable for the completion of reclamation activities.

(2) The Reclamation Plan must include a detailed estimate of the maximum probable cost required to complete and implement the plan. The maximum probable cost must be based on the cost to a third party conducting the reclamation without a financial interest or ownership in the quarry operation.

(b) Certification of the Reclamation Plan must be provided by a licensed Texas professional engineer.

§311.79. Performance Criteria for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway.

The following performance criteria are applicable to quarries located within a water quality protection area in the John Graves Scenic Riverway.

(1) Discharges from quarries shall meet the following effluent limitations.

Figure: 30 TAC §311.79(1)

<u>Parameter</u>	<u>Daily Average Limitation</u>
<u>Total Suspended Solids</u>	<u>45 milligrams per liter</u>
<u>pH</u>	<u>Between 6.0 and 9.0 standard units</u>

(2) Discharges from quarries resulting from a rainfall event greater than the 25-year, 24-hour rainfall event are not subject to effluent limitations in paragraph (1) of this section.

(3) Discharges from quarries shall be monitored as follows.

Figure: 30 TAC §311.79(3)

<u>Parameter</u>	<u>Monitoring Frequency</u>
<u>Total Suspended Solids</u>	<u>1/day, when discharging</u>
<u>pH</u>	<u>1/day, when discharging</u>

(4) Results of analysis for monitoring conducted as specified in §311.75(3) of this title (relating to Permit Application Requirements) shall be submitted monthly on approved self-report forms. Monitoring and reporting records, including strip charts and records of calibration and maintenance, shall be retained on site, or shall be readily available for review by a commission representative for a period of three years from the date of the record or sample, measurement, or report.

(5) The permittee shall install a permanent rain gauge at the plant site and keep daily records of rainfall and the resulting flow. Monitoring records shall be retained on site, or shall be readily available for review by a commission representative for a period of three years from the date of the record.

§311.80. Additional Performance Criteria for Quarries Located Between 200 Feet and 1,500 Feet of a Water Body Located Within a Water Quality Protection Area in the John Graves Scenic Riverway.

Authorizations to discharge from quarries located between 200 feet and 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway require the permittee

to satisfy the following performance criteria. An evaluation of these performance criteria must be incorporated into the Technical Demonstration, as required in §311.77 of this title (relating to Technical Demonstration).

(1) The down-gradient perimeter of the quarry must include a final control structure to manage the discharge of wastewater and/or storm water. The final control structure must be designed and constructed as follows.

(A) Certification of the final control structure design and construction must be provided by a licensed Texas professional engineer. Design and construction plans and specifications must be maintained on site and made available at the request of the executive director.

(B) The final control structure side slopes must not exceed a gradient of 1:3 (33%).

(C) The final control structure must be designed to impound, at minimum, the volume of water resulting from a 25-year, 24-hour rainfall event for the final control structure drainage area.

(D) The final control structures must be properly stabilized (via use of vegetation, riprap, and/or other acceptable technique) to prevent the final control structure from being a source of pollution and/or to prevent structural failure.

(E) The final control structure must be inspected once every 14 calendar days and within 24 hours of any rainfall event totaling 0.5 inches or greater. Where an inspection identifies failure and/or problems with the final control structure, corrections must be made within seven calendar days of the inspection. Records of these inspections and any site stabilizations must be maintained on site for a period of three years and made available to the executive director, upon request.

(F) A minimum 200-foot vegetative buffer must be maintained between the final control structure and any water body.

(2) All treatment, detention, and water storage tanks and ponds must be operated to maintain a minimum freeboard of two feet.

(3) A permanent depth marker shall be installed and maintained on all treatment, detention, and water storage tanks and ponds. The depth marker shall identify the volume required for the design rainfall event, as specified in paragraph (1)(C) of this section, and freeboard.

(4) The quarry operation must demonstrate compliance with all the requirements of 36 Code of Federal Regulations Part 800 (Protection of Historic Properties) and 9 Texas Natural Resources Code, Chapter 191 (Antiquities Code).

(5) The quarry operation must not have a detrimental effect on any federal endangered/threatened, aquatic/aquatic-dependent species/proposed species; or their critical habitat.

(6) Waste management units must be located a minimum horizontal distance from water wells, in accordance with 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers), or where those regulations do not apply, the minimum distance to a water well must be 500 feet.

(7) Secondary containment of chemical and fuel storage is required. Where quarry operations overlay aquifer and/or aquifer recharge areas and sufficient confining layers do not exist to preclude contamination of groundwater, tertiary containment is required for all chemical and fuel storage.

(8) Quarry operations must not be located on natural hazard land, areas subject to frequent flooding, or in areas of unstable geology.

§311.81. Financial Responsibility for Quarries Located Within a Water Quality Protection Area in the John Graves Scenic Riverway.

(a) An owner or operator of a quarry located within a water quality protection area in the John Graves Scenic Riverway shall establish and maintain financial assurance for restoration in accordance with Chapter 37, Subchapter W of this title (relating to Financial Assurance for Quarries). The amount

of financial assurance must be no less than the amount determined by the executive director as sufficient to meet the requirements of the Restoration Plan in §311.76(8) of this title (relating to Restoration Plan).

(b) An owner or operator of a quarry located between 200 feet and 1,500 feet of a water body within a water quality protection area in the John Graves Scenic Riverway shall establish and maintain financial assurance for reclamation in accordance with Chapter 37, Subchapter W of this title. The amount of financial assurance must be no less than the amount determined by the executive director as sufficient to meet the requirements of the Reclamation Plan in §311.78(2) of this title (relating to Reclamation Plan).

§311.82. Expiration.

This subchapter expires September 1, 2025.