

TCEQ DOCKET NO. 2014-1487-MSW

IN THE MATTER OF THE	§	BEFORE THE TEXAS COMMISSION
APPLICATION OF THE CITY	§	
OF FARMERS BRANCH, TO	§	ON
MODIFY LANDFILL PERMIT	§	
NO. MSW-1312A	§	
	§	
	§	ENVIRONMENTAL QUALITY
	§	

**EXECUTIVE DIRECTOR'S RESPONSE TO THE CITY OF CARROLLTON'S
MOTION TO OVERTURN AND REQUEST FOR STAY**

TO THE HONORABLE MEMBERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

The Executive Director of the Texas Commission on Environmental Quality (TCEQ) files this Response to the City of Carrollton's (Movant) Motion to Overturn and Request for Stay (MTO) the Executive Director's issuance of his final approval of an application by the City of Farmers Branch (Applicant) modifying Municipal Solid Waste (MSW) Permit No.1312A (Permit).

I. BACKGROUND

The Applicant operates an existing Type I MSW Landfill located in the City of Lewisville in Denton County, Texas (Facility). This matter involves the Executive Director's final approval of a modification application (Modification) requesting revision of the Facility's Site Development Plan authorizing installation and operation of a slurry wall, installation of three additional groundwater monitoring wells, adjustment of the Facility's groundwater monitoring system's Point of Compliance and revisions to the Facility's Corrective Action Plan cost estimate as an additional groundwater corrective action remedy.

The Applicant filed the application on December 28, 2012, seeking authorization of an additional corrective action remedy to address groundwater contamination (Application). The slurry wall would function as a hydraulic barrier to the movement of contaminated groundwater while observation wells located upgradient and down

gradient from the slurry wall and Point of Compliance monitor wells will be utilized to monitor the performance and effectiveness of the additional remedy.

On April 23, 2014 the Application was declared technically complete. On May 16, 2014, the Applicant mailed and published Notice of the Application and Preliminary Decision. The Public Comment Period closed on June 9, 2014. The Executive Director mailed a courtesy public comment response letter to the commenter, Movant, on September 10, 2014. The Executive Director issued final approval of the Modification on September 18, 2014. On September 23, 2014, the Office of the Chief Clerk transmitted notice of the Executive Director's final approval of the Modification identifying the deadline by which a motion to overturn must be filed as October 16, 2014. Movant timely filed an MTO on October 16, 2014. The Office of General Counsel issued a letter extending the deadline, by which the MTO will expire by operation of law unless the Commission takes further action, December 12, 2014. The Office of General Counsel's letter provided a briefing schedule identifying November 13, 2014, as the deadline for briefs in response to the MTO to be filed by the Office of Public Interest Counsel, the Applicant and the Executive Director and November 25, 2014, as the deadline for Movant to file replies to the responses.

II. EXECUTIVE DIRECTOR'S RESPONSES TO MOVANT'S ARGUMENTS

The Executive Director reviewed the Modification in accordance with applicable rules following established procedures, and the Movant's Public Comments and MTO arguments. The Executive Director offers that the issued Modification is administratively appropriate, procedurally correct and most importantly, is protective of human health and the environment. *See* Title 30, Texas Administrative Code (30 TAC) §§ 305.70(d) and (l).

The Executive Director disagrees with the Movant's assertion that his final action issuing the Modification should be overturned and that a "stay" of his action is either available or appropriate. The Executive Director asserts that implementation of the issued Modification, authorizing installation and operation of a slurry wall as an additional corrective action remedy to address groundwater contamination at the

Facility, will provide the greatest protection of human health and the environment while the Facility's major amendment is pending and should not be delayed.

1. The Modification Application was appropriately administered as a modification with notice.

The MSW rules provide a modification procedure for authorization of activities at landfill facilities that may be characterized as "minor changes to an MSW facility that do not substantially alter the permit or registration conditions and do not reduce the capability of the facility to protect human health and the environment." (30 TAC §305.70(d)). It is often the case that permit modifications are needed and utilized to authorize changes that protect human health and the environment.

The Applicant implements a groundwater Corrective Action Plan at the Facility authorized and required by MSW Permit No. 1312A. The Executive Director determined that installation and operation of a slurry wall as an additional corrective action remedy would not substantially alter the permit conditions or reduce the capability of the facility to protect human health and the environment.

The City of Farmers Branch has also applied for a major amendment of MSW Permit No. 1312A under MSW permit application No. 1312B. The major amendment application requests authorization of a landfill expansion. The major amendment application is presently under technical review and is being processed in accordance with 30 TAC §305.62(a). The Movant asserts that because the Applicant proposed the slurry wall as a component of the waste containment system in the pending major amendment application that authorization of the slurry wall by way of a modification with notice is tantamount to an end run around the public participation requirements for the major amendment application and therefore, the Modification should have been processed as a major amendment.

The Executive Director asserts that the issued Modification authorizes installation and operation of a slurry wall *as an additional groundwater corrective action remedy*. Whereas, authorization of the use of a slurry wall *as a component of a waste containment system* remains subject to the procedural and public participation requirements for a major amendment.

Therefore, the Executive Director contends that the Modification was properly administered as a modification with notice.

2. The Executive Director appropriately determined that the combined existing groundwater monitor wells and groundwater monitoring wells

authorized by the issued Modification comply with the requirements of 30 TAC § 330.409.

MSW Permit No. 1312A presently authorizes installation and operation of twelve groundwater monitor wells, installed from 2003 to 2010, for the purpose of evaluating groundwater conditions cross gradient and down gradient from the impacted monitor wells MW-10, MW-11, and MW-12 in accordance with 30 TAC §330.409(g). Existing MSW Permit No. 1312A requires groundwater chemistry data, defining the groundwater quality, detecting groundwater contamination, and measuring the extent of contamination in the uppermost aquifer from the landfill unit, to be collected and reported from these groundwater monitor wells. Such data delineates the areal extent of groundwater contamination and informs the Executive Director's understanding of the hydrogeological conditions at the site. The Applicant has submitted and the Executive Director has acknowledged monitor well installation reports required by existing MSW Permit No. 1312A. The Executive Director has determined that subsurface information developed to date adequately delineates the areal extent of groundwater contamination in the area of MW-10, MW-11, and MW-12 for the purpose of developing corrective action remedies. Therefore, the Executive Director asserts that no further subsurface investigation activities are required prior to installation and operation of the slurry wall as an additional corrective action remedy

3. The Executive Director appropriately evaluated the effectiveness of the potential corrective measures delineated in 30 TAC §§ [sic] 330.411.

In evaluating remedial alternatives, including the effectiveness of potential corrective measures in accordance with 30 TAC §330.411(c), the Executive Director reviews each individual application on its merits. A correction action remedy is required to: (1) be protective of human health and the environment; (2) attain the groundwater protection standard as specified in accordance with 30 TAC §§ 330.409(h), (i), or (j); (3) control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of 40 Code of Federal Regulations Part 258, Appendix II constituents into the environment that may pose a threat to human health or the environment; and (4) comply with standards for management of wastes as specified in 30 TAC § 330.415(d). The assessment required by 30 TAC §330.411(c) must include, at

a minimum, an analysis of the effectiveness of potential corrective measures in meeting the requirements and objectives of the remedy described under 30 TAC § 330.413.

In addressing 30 TAC § 330.413(c)(1), the Application describes the installation and the purpose of installing the slurry wall as an additional remedy to the Corrective Action Plan. (Application, Attachment 11, Corrective Action Plan, Section 12.2). This section of the Application describes the installation of three groundwater monitor wells that will augment ten existing monitor wells, which will be used to evaluate the slurry wall's effectiveness in limiting further migration of contaminated groundwater southward toward the river that adjoins the southern boundary of the facility. Additionally, the Executive Director relied on documented references regarding proposed remediation techniques such as the Environmental Protection Agency's (EPA) documentation of the use of a slurry wall as an effective hydraulic barrier at waste facilities requiring corrective action (EPA, "Evaluation of Subsurface Engineered Barriers at Waste Sites", EPA 542-R-98-005). This EPA document presents case-history data and provides performance data addressing the elements under 30 TAC §330.411(c)(1). Additionally, state law supports the use of a slurry wall as a corrective action measure, Texas Water Code §26.351(3)([c]orrective action may include: (3) "measures to halt a release in progress or to prevent future or threatened releases of regulated substances").

In addressing 30 TAC § 330.411(c)(2), the Application discusses when installation of the slurry wall remedy would commence. (MSW Permit No. 1312A, Corrective Action Plan, Sec 12.2.3, page 27).

In addressing 30 TAC § 330.411(c)(3), the Application discusses costs of the remedy, in the closure cost estimate. (Application, Part III, Site Development Plan, Attachment 8 "Closure and Postclosure Care, and Corrective Action Cost Estimates").

In addressing 30 TAC § 330.411(c)(4), the Application addresses the public health aspects of limiting further migration of contaminated groundwater by installation and operation of a new groundwater correction action remedy and does not identify additional institutional

requirements that may substantially affect the remedy.

Finally, the Executive Director, in considering the slurry wall as an additional remedy, considered that the effectiveness of the remedies is subject to reconsideration every year. (30 TAC §330.415(e)).

Therefore, the Executive Director appropriately considered the effectiveness of the slurry wall as an additional groundwater corrective action remedy. The Executive Director continues the discussion of compliance with 30 TAC §330.411 among other rules below.

4. The Executive Director Appropriately issued the Modification in accordance with the requirements for Selection of Remedy under 30 TAC §[sic] 330.413.

The Applicant submitted an Assessment of Corrective Action Measures, dated April 1, 2009. The Executive Director reviewed the Assessment of Corrective Action Measures, determined that it complied with 30 TAC §§330.411 and 330.413 and approved the submittal on July 21, 2010. Land fill gas (LFG) extraction and monitored natural attention were the initial groundwater corrective action remedies selected. The issued Modification modifies the Assessment of Corrective Action Measures to add installation and operation of a slurry wall to the other ongoing remedies.

Certain parts of a permit modification application are required to bear the seal and signature of a licensed professional engineer or licensed geoscientist in accordance with 30 TAC §330.57(f). The Executive Director reviewed the Application and determined that the slurry wall design, installation procedures, and post-construction groundwater monitoring, were appropriately signed and sealed by professional engineer and/or geoscientist and meet the technical requirements of 30 TAC §§330.57(f) and 330.413(b)(1).

5. The Executive Director appropriately issued the Modification in accordance with the requirements for Implementation of Corrective Action Program under 30 TAC §§ [sic] 330.415.

The Executive Director disagrees with the Movant's characterization that years have gone by without addressing groundwater contamination at the facility. In fact, the Applicant has implemented corrective action measures as documented in annual corrective action reports submitted from 2010 through 2013. The Executive Director has determined that the submitted groundwater monitoring and corrective action progress reports have met the technical requirements of 30 TAC §330.415. The Executive Director evaluated the Application in accordance with the on-going corrective action and groundwater monitoring data for the facility and determined that modification of the corrective action measures to include installation of a slurry wall meets the requirements of 30 TAC §330.415(b).

Additionally, the Application describes supervision of construction activities, materials to be used, and test verification methods. (Application, Attachment 1.7, Appendix B, "Slurry Wall Construction Quality Assurance Activities"). The Application states that the proposed Construction Quality Assurance Plan establishes the methodology for the observation and testing of the slurry wall to document that the project is constructed as designed to function as a hydraulic barrier to the movement of contaminated groundwater.

The Executive Director evaluated the geologic and hydrologic conditions at the site, the engineering design, and the construction quality assurance and control plan, all appropriately sealed by a licensed professional engineer, and determined that a slurry wall is an acceptable additional corrective action remedy to better protect human health and the environment in accordance with 30 TAC §330.415(b).

6. The Executive Director appropriately evaluated the efficacy of the proposed slurry wall in achieving source containment.

In issuing the Modification, the Executive Director is mindful that the effectiveness of all groundwater corrective action remedies is subject to yearly reconsideration in accordance with 30 TAC §330.415(e).

The Application states the slurry wall is designed as a hydraulic barrier. (Attachment 1-7). One of the inherent characteristics of a slurry wall is isolation of waste from groundwater as stated in the EPA's report, "Evaluation of Subsurface

Engineered Barriers at Waste Sites” (EPA 542-R-98-005). This report further states that, under well designed and constructed conditions, such vertical barriers perform as designed. The Executive Director considers the slurry wall additional groundwater corrective action remedy option appropriate because it would be protective of human health and the environment.

The Movant asserts that data indicates that the Eagle Ford Formation is not a competent confining unit.

The application for MSW Permit No. 1312A characterizes the thickness and hydrogeologic properties of the Eagle Ford Formation as an aquitard. (MSW Permit No. 1312A, Attachment 4 “Geology Report” and Attachment 5 “Groundwater Characterization Report”). The Executive Director previously determined that the information provided in the Geology Report met the technical requirements of 30 TAC §330.63(e). Additionally, the Executive Director approved the Applicant’s 1993 Soil Liner Evaluation Report which, presents geotechnical and permeability data of the Eagle Ford Formation in the southwest portion of the facility. This report concludes that the Eagle Ford Formation has permeabilities that meet or exceed TCEQ’s Municipal Solid Waste liner requirements.

In response to concerns raised by the Movant during technical review of the Application, the Applicant revised the Application to provide additional and deeper borings to demonstrate the thickness of the shale. (Application, Attachment 1-7, Appendix B, “Slurry Wall Construction Quality Assurance Plan”). The Executive Director evaluated the Application and determined that the characterization of the Eagle Ford Formation meets the rule requirements.

The Movant asserts that data indicates that the Eagle Ford Formation is not a competent confining unit and that due to the presence of gravel and the horizontal permeability of the Eagle Ford, the slurry wall will not provide an effective barrier to horizontal GW and/or DNAPL flow.

Characterization of the thickness, the hydrogeological, and geotechnical properties of the Eagle Ford Formation are presented in the Application. (Application, Attachment 4 “Geology Report” and Attachment 5 “Groundwater Characterization Report”). The report concludes, upon the analysis of the data, that the Eagle Ford Formation “constitutes a high quality aquitard material.” (*Id* at Section 3.8, page 4-22).

The Application Corrective Action Plan, which is sealed by a registered geoscientist, states that the Eagle Ford Formation is suitable to form a bottom seal with the slurry wall.

The Movant's assertion that the slurry wall will not provide an effective barrier to horizontal GW and/or DNAPL flow regards the presence of coarse-grained material in the alluvium above the Eagle Ford Formation. Such a condition could possibly affect the permeability characteristics of the slurry wall or its proper construction into the shale foundation. The Application provides methodology for observation and testing of the slurry wall materials and its construction. (Application, "The Slurry Wall Construction Quality Assurance Plan", Attachment 1-7, Appendix B). The results of the testing of the properties of the slurry wall and its installation are required to be over-seen and reviewed by an engineer to verify that the Slurry Wall Construction Quality Assurance Plan has been adhered to.

The Applicant submitted an Assessment of Corrective Action Measures, dated April 1, 2009, which states that the occurrence of landfill gas outside the landfill will continue to diminish in response to the installed LFG collection system. The latest expansion of the LFG collection system was acknowledged by the Executive Director on July 23, 2013. The 2013 Annual Corrective Action Program Report, acknowledged by the Executive Director on May 1, 2014, stated that there were no detectable concentrations of methane in landfill gas test probes located at the southern end of the landfill. The Executive Director has determined that the addition of a slurry wall as an additional groundwater corrective action remedy is appropriate and would be protective of human health and the environment.

7. The Facility is required to properly characterize and manage all Facility-Generated Wastes.

The Movant asserts that that the issued modification Application fails to adequately account for the management of waste generated during construction of the slurry wall.

The Applicant is required to properly manage and document the management of any solid waste generated during construction of the slurry wall (Facility-Generated

Wastes) in a manner that complies with state law and TCEQ rules and that is protective of human health and the environment in accordance with 30 TAC §330.205.

III. PRAYER

For the reasons laid out above, the Executive Director respectfully requests that the Commission allow the Movant's MTO to be overruled by operation of law.

Respectfully submitted,

TEXAS COMMISSION ON
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Richard Hyde
Executive Director

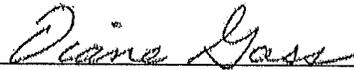
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REPRESENTING THE
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OF THE TEXAS COMMISSION
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CERTIFICATE OF SERVICE

I hereby certify that on November 13, 2014, the original and seven true and correct copies of the Executive Director's Response to the City of Carrollton's Motion to Overturn and Request for Stay was filed with the Chief Clerk of the TCEQ and a copy was served to all persons listed on the attached mailing list via hand delivery, facsimile transmission, Inter-Agency Mail or by deposit in the U.S. Mail.



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