Weaver Consultants Group

Project No. 3086-352-11-03
December 16, 2021

Mr. Steve Odil, P.E.
MC-124
Municipal Solid Waste Permits Section
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Response to Comments – Leachate Phyto Utilization System
BVSWMA Rock Prairie Road Landfill – TCEQ Permit No. MSW-1444C
Brazos County, Texas
Tracking No. 26642845, RN 100830090/CN 600340194

Dear Mr. Odil:

On behalf of Brazos Valley Solid Waste Management Agency, Inc. (BVSWMA), please find enclosed one original and one copy of the replacement pages for the referenced temporary authorization. The attached replacement pages were developed to incorporate comments included in your notice of deficiency e-mail dated October 27, 2021.

This response letter contains each comment identified by the TCEQ (in bold) and a response to each.

1. **The modification report includes data and discussion to demonstrate that the use of Leachate Phyto-Utilization System has not contaminated soils in the Final Cover System, on which the Leachate Phyto-Utilization System is located. Results for organics are below detection levels, and most metals are below their calculated 95% upper tolerance levels (UTL), provided in the modification request. Chromium levels exceed the corresponding UTL but are below the highest result for chromium collected from outside the treatment area. However, six reported mercury concentrations exceeded the corresponding UTL, and any concentration reported for samples from outside the treatment area. Explain why these mercury results do not indicate that the treatment process has contaminated underlying soil.**

Response:

Metals are naturally ocurring in soils at varying concentrations.

According to EPA published information (EPA, Ground Water Issue, Behavior of Metals in Soils, October 1992), ambient metals concentrations in soils can be highly variable and change over time due to numerous factors and interrelated processes

(e.g., soil type and texture, pH, salinity, weathering, redox potential, ion exchange capacity, degree of saturation, etc.). The mobility of metals in soil often increases when in-situ sediments are physically disturbed and reworked for fill and cover applications.

According to EPA published data, the average concentration ranges of chromium and mercury in soils are 1-1000 mg/kg and 0.01-0.3 mg/kg; respectively.

Four sample points (B2, B3, B4, and B7) had reported total chromium and mercury concentrations greater than their respective 95% UTL concentrations. However, none of the these intitial apparent exceedances were verified by the subsequent sampling event results. The insitu control sample C1 also exhibited total chromium concetrations above the computed 95% UTL in addition to being the highest total chromium concentration among all collected soil samples to-date.

While chromium and mercury have been detected in individual soil sampling results with reported concentrations greater than the resctive 95% UTL, none of these intitial/apparent exceedances was reproducable. That is, none of the initial detections was confirmed through subsequent resampling. Because there have been no organic constituent detections and no metal constituents have been verifiably detected above their respective 95% UTL concentration, it does not appear that treatment process has contaminated soils.

2. **It appears that the detection limits were used for calculations of UTLs for organics, silver, and cadmium. Use half the detection limit for these analyses.**

Response:

The UTLs for organics, silver, and cadmium have been revised to reflect half of the detection limit.

3. **The purpose of proposed soil sampling at the time of decommission of the Leachate Phyto-Utilization System is to confirm that the leachate treatment process has not contaminated soil in the underlying Final Cover System. Texas Risk Reduction Program Protective Concentration Levels (PCLs) are not appropriate for this determination. Follow protocols for closure that were provided for testing at the end of the temporary authorization period that base conclusions on background concentrations, not PCLs.**

Response:

The protocols have been updated to be consistent with the protocols in this the temporary authorization (95% UTL).

4. Include costs on Table 12-2, Phyto-Utilization Area Closure Cost, for reporting for the recertification of soil final cover system components.

Response:

Table 12-2 has been updated to include recertification reporting.

During the course of your review, if you need additional information or have any questions, please call.

Sincerely,

Jason A. Edwards
Senior Engineer

Attachments: Attachment A – Replacement Pages (Redline/Strikeout Copy)
Attachment B – Replacement Pages (Clean Copy)
Attachment C – TCEQ-20650 Form

cc: TCEQ Region 9
Bryan Griesbach, BVSWMA
Samantha Best, BVSWMA

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PHYTO-UTILIZATION SYSTEM

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

CONTENTS

fast and healthy growth, quickly creating a fully established field as shown by the photographs on Figure 2.

In order to evaluate whether the phyto-utilization pad became contaminated by operation of the system, the TA and its extension required a soil sampling program to compare background concentrations with results after the TA periods. The TA required monitoring of the eight RCRA metals, Total Petroleum Hydrocarbons (TPH), and BTEX (Benzene, Toluene, Ethylbenzene, and Xylene). The background was to be determined using the 95 % upper tolerance limit (UTL) for each constituent. If the 95 % UTL background concentrations were exceeded at the end of the TA period, the landfill would be required to cease operation and decommission the system.

The first soil sampling event was conducted in September 2019 prior to leachate application for purpose of estimating background concentrations of constituents in cover soil. Soil samples were collected from nine points labeled B1 through B9, the locations of which are shown on Figure 1A. In accordance with the TA, the analytical results from these initial nine samples were used to calculate the 95% upper tolerance limits (UTL) to establish estimated background values for the tested constituents. A summary of the results and the 95% UTL is included on Table 1.

Four additional soil sampling events were conducted between July 2020 and January 2021 within the area of leachate application. Control samples were also collected from in-situ soils at four locations (C1 through C4) located outside of the irrigated area during three of these sampling events. The soils sampling results are summarized in the attached Table 2.

In summary, no TPH or BTEX constituents were detected above the Method Detection Limit (MDL) in any of the collected samples to date. Total arsenic, barium, chromium, lead, mercury, and selenium were detected at all sampled locations at low and varying concentrations, including in the control and background samples. Four sample points (B2, B3, B4, and B7) had reported total chromium and/or mercury concentrations greater than their respective UTL concentrations. Total chromium detected in control sample C1 outside of the irrigated area also exceeded the computed UTL in addition to exhibiting the highest total chromium concentration among all collected soil samples. None of the results show increasing or stable trends as a result of operation of the system and instead show significant variability between each sampling event. ~~This variability indicates that the UTL method is not a reliable method to determine contamination by the system.~~

~~Alternatively, t~~This permit modification proposes to implement a two-tiered compliance monitoring protocol that includes comparison of analytical results to ~~a risk-based action level concentration~~ the previously established 95% UTL coupled with verification resampling. ~~An action level equal to 50 percent of the tier 1 Residential soil Protective Concentration Levels (PCLs) is proposed as an upper limit to the total metal concentrations detected in individual soil samples collected as part of routine soil~~

~~compliance monitoring.~~ Additional information about this protocol is described in Appendix 5 of the revised Leachate and Contaminated Water Plan.

Table 1.
Baseline Soil Samples for BVSWMA-RPRLF Phyto-Utilization Project

Boring	Date	Sample ID	Units	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH (nC6 to nC12)	TPH (>nC12 to nC28)	TPH (>nC28 to nC35)
B1	9/6/2019	PS1900	mg/Kg	**2.43**	**88.3**	*< 0.629*	**6.42**	**13.1**	**0.0103**	**2.82**	*< 0.629*	*< 0.0064*	*< 0.0064*	*< 0.0064*	*< 0.0064*	*< 57.0*	*< 57.0*	*< 57.0*
B2	9/6/2019	PS1901	mg/Kg	**5.20**	**236**	*< 0.560*	**6.57**	**17.9**	**0.0195**	**1.83**	*< 0.560*	*< 0.0059*	*< 0.0059*	*< 0.0059*	*< 0.0059*	*< 64.0*	*< 64.0*	*< 64.0*
B3	9/6/2019	PS1902	mg/Kg	**3.27**	**711**	*< 0.545*	**4.24**	**12.2**	**0.0080**	**3.01**	*< 0.545*	*< 0.0052*	*< 0.0052*	*< 0.0052*	*< 0.0052*	*< 64.0*	*< 64.0*	*< 64.0*
B4	9/6/2019	PS1903	mg/Kg	**2.65**	**450**	*< 0.525*	**4.45**	**11.0**	**0.0135**	**2.30**	*< 0.525*	*< 0.0061*	*< 0.0061*	*< 0.0061*	*< 0.0061*	*< 57.0*	*< 57.0*	*< 57.0*
B5	9/6/2019	PS1904	mg/Kg	**12.9**	**1,610**	*< 0.562*	**5.90**	**12.6**	**0.0107**	**5.29**	*< 0.562*	*< 0.0053*	*< 0.0053*	*< 0.0053*	*< 0.0053*	*< 62.0*	*< 62.0*	*< 62.0*
B6	9/6/2019	PS1905	mg/Kg	**3.93**	**545**	*< 0.574*	**4.01**	**11.4**	**0.0118**	**3.04**	*< 0.574*	*< 0.0061*	*< 0.0061*	*< 0.0061*	*< 0.0061*	*< 61.0*	*< 61.0*	*< 61.0*
B7	9/6/2019	PS1906	mg/Kg	**2.95**	**421**	*< 0.536*	**4.51**	**9.73**	**0.0118**	**2.35**	*< 0.536*	*< 0.0054*	*< 0.0054*	*< 0.0054*	*< 0.0054*	*< 56.0*	*< 56.0*	*< 56.0*
B8	9/6/2019	PS1907	mg/Kg	**1.75**	**83.6**	*< 0.515*	**2.88**	**7.09**	**0.0081**	**1.06**	*< 0.515*	*< 0.0054*	*< 0.0054*	*< 0.0054*	*< 0.0054*	*< 55.0*	*< 55.0*	*< 55.0*
B9	9/6/2019	PS1908	mg/Kg	**3.23**	**438**	*< 0.544*	**3.00**	**9.55**	**0.0071**	**2.15**	*< 0.544*	*< 0.0062*	*< 0.0062*	*< 0.0062*	*< 0.0062*	*< 58.0*	*< 58.0*	*< 58.0*

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH (nC6 to nC12)	TPH (>nC12 to nC28)	TPH (>nC28 to nC35)
Mean	4.26	509.2	~~0.554~~ 0.277	4.66	11.6	0.0112	2.65	~~0.554~~ 0.277	~~0.0058~~ 0.003	0.0058 0.003	~~0.0058~~ 0.003	~~0.0058~~ 0.003	~~59.3~~ 29.7	~~59.3~~ 29.7	~~59.3~~ 29.7
k-value	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031	3.031
Std Dev	3.385	461.390	~~0.034~~ 0.016	1.363	2.995	0.004	1.170	~~0.034~~ 0.016	~~0.000~~ 0.0002	0.000 0.0002	~~0.000~~ 0.0002	~~0.000~~ 0.0002	~~3.464~~ 1.633	~~3.464~~ 1.633	~~3.464~~ 1.633
Samples (n)	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Benzene	Toluene	Ethyl-benzene	Total Xylenes	*TPH* (nC6 to nC12)	*TPH* (>nC12 to nC28)	*TPH* (>nC28 to mC35)
Baseline 95% UTL (mg/Kg)	**14.52**	**1,908**	~~**0.656**~~ **0.325**	**8.80**	**20.70**	**0.0226**	**6.19**	~~**0.656**~~ **0.325**	~~**0.0071**~~ **0.0035**	~~**0.0071**~~ **0.0035**	~~**0.0071**~~ **0.0035**	~~**0.0071**~~ **0.0035**	~~**69.8**~~ **34.6**	~~**69.8**~~ **34.6**	~~**69.8**~~ **34.6**

95% upper tolerance limit (UTL)

UTL = x +kS

x = mean

S = standard deviation

k = one-sided tolerance factor (see Table I)

Statistical Background Calculations from TCEQ's

Use of Statistics for Determining Soil/Groundwater Cleanup Levels under the Risk Reduction Rules

Effective Date: April 30, 1998

Mean value for Cadmium, Silver, and Organics assumed to be half the detection limit.

Table 1.
Historical Soil Samples for BVSWMA-RPRLF Phyto-Utilization Project

Boring	Date	Sample ID	Units	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH (nC6 to nC12)	TPH (>nC12 to nC28)	TPH (>nC28 to nC35)
B1	9/6/2019	PS1900	mg/Kg	2.43	88.3	< 0.629	6.42	13.1	0.0103	2.82	< 0.629	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 57.0	< 57.0	< 57.0
	7/9/2020	PS2000	mg/Kg	3.19	87.7	J 0.072	7.32	14.90	0.0119	1.01	J 0.069	< 0.0007	< 0.0009	< 0.0010	< 0.0015	< 11.0	< 15.0	< 15.0
	8/6/2020	PS2009	mg/Kg	3.30	375.0	J 0.149	4.42	10.60	0.0159	0.81	J 0.466	< 0.0007	< 0.0009	< 0.0010	< 0.0014	< 9.1	< 12.0	< 12.0
	10/14/2020	PS2022	mg/Kg	3.26	318.0	J 0.143	4.27	11.30	0.0168	J 0.55	J 0.041	< 0.0006	< 0.0007	< 0.0009	< 0.0012	< 9.5	< 12.0	< 12.0
B2	9/6/2019	PS1901	mg/Kg	5.20	236	< 0.560	6.57	17.9	0.0195	1.83	< 0.560	< 0.0059	< 0.0059	< 0.0059	< 0.0059	< 64.0	< 64.0	< 64.0
	7/9/2020	PS2001	mg/Kg	5.18	115	J 0.069	5.62	12.00	0.0253	J 0.56	J 0.027	< 0.0007	< 0.0008	< 0.0010	< 0.0014	< 10.0	< 13.0	< 13.0
	8/6/2020	PS2010	mg/Kg	5.18	52	< 0.013	2.64	7.07	0.0176	J 0.51	J 0.018	< 0.0005	< 0.0006	< 0.0006	< 0.0009	< 8.1	< 11.0	< 11.0
	10/14/2020	PS2023	mg/Kg	8.16	159	J 0.055	6.21	13.40	0.0422	J 0.55	J 0.026	< 0.0005	< 0.0007	< 0.0008	< 0.0011	< 8.1	< 11.0	< 11.0
B3	9/6/2019	PS1902	mg/Kg	3.27	711	< 0.545	4.24	12.2	0.0080	3.01	< 0.545	< 0.0052	< 0.0052	< 0.0052	< 0.0052	< 64.0	< 64.0	< 64.0
	7/9/2020	PS2002	mg/Kg	5.00	85.6	< 0.041	12.10	17.40	0.0199	1.47	J 0.047	< 0.0009	< 0.0010	< 0.0012	< 0.0017	< 13.0	< 17.0	< 17.0
	8/6/2020	PS2011	mg/Kg	4.32	27.0	< 0.036	7.30	12.10	0.0218	1.78	J 0.050	< 0.0006	< 0.0008	< 0.0009	< 0.0013	< 10.0	< 14.0	< 14.0
	10/14/2020	PS2024	mg/Kg	2.88	431.0	J 0.067	5.10	12.70	0.0120	0.78	J 0.035	< 0.0007	< 0.0008	< 0.0009	< 0.0013	< 10.0	< 14.0	< 14.0
B4	9/6/2019	PS1903	mg/Kg	2.65	450	< 0.525	4.45	11.0	0.0135	2.30	< 0.525	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 57.0	< 57.0	< 57.0
	7/9/2020	PS2003	mg/Kg	5.06	1,130	0.116	7.60	13.0	0.0105	0.24	J 0.024	< 0.0008	< 0.0010	< 0.0012	< 0.0017	< 12.0	< 16.0	< 16.0
	8/6/2020	PS2012	mg/Kg	2.89	553	J 0.039	5.51	8.0	0.0249	0.81	J 0.032	< 0.0006	< 0.0008	< 0.0009	< 0.0012	< 10.0	< 13.0	< 13.0
	10/14/2020	PS2025	mg/Kg	2.35	508	J 0.049	8.54	11.9	0.0221	1.28	J 0.074	< 0.0006	< 0.0007	< 0.0008	< 0.0011	< 8.8	< 12.0	< 12.0
B5	9/6/2019	PS1904	mg/Kg	12.9	1,610	< 0.562	5.90	12.6	0.0107	5.29	< 0.562	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 62.0	< 62.0	< 62.0
	7/9/2020	PS2007	mg/Kg	3.00	63.6	J 0.056	3.89	7.5	0.0092	J 0.23	J 0.021	< 0.0006	< 0.0007	< 0.0008	< 0.0012	< 8.4	< 11.0	< 11.0
	8/6/2020	PS2016	mg/Kg	2.87	44.9	< 0.032	2.85	6.4	0.0084	J 0.49	J 0.023	< 0.0006	< 0.0007	< 0.0008	< 0.0011	< 8.3	< 11.0	< 11.0
	10/14/2020	PS2026	mg/Kg	2.84	43.9	J 0.049	3.54	7.0	0.0105	J 0.35	J 0.028	< 0.0005	J 0.0041	< 0.0007	< 0.0010	< 7.6	< 10.0	< 10.0
B6	9/6/2019	PS1905	mg/Kg	3.93	545	< 0.574	4.01	11.4	0.0118	3.04	< 0.574	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 61.0	< 61.0	< 61.0
	7/9/2020	PS2008	mg/Kg	3.41	50	< 0.038	5.96	12.4	0.0124	0.90	J 0.040	< 0.0007	< 0.0013	< 0.0009	< 0.0008	< 9.8	< 13.0	< 13.0
	8/6/2020	PS2017	mg/Kg	4.50	507	J 0.054	2.94	12.5	0.0045	0.85	< 0.019	< 0.0006	< 0.0007	< 0.0008	< 0.0011	< 9.0	< 12.0	< 12.0
	10/14/2020	PS2027	mg/Kg	2.67	401	J 0.049	3.74	12.7	0.0087	J 0.49	J 0.025	< 0.0005	< 0.0006	< 0.0008	< 0.0011	< 8.8	< 12.0	< 12.0
B7	9/6/2019	PS1906	mg/Kg	2.95	421	< 0.536	4.51	9.73	0.0118	2.35	< 0.536	< 0.0054	< 0.0054	< 0.0054	< 0.0054	< 56.0	< 56.0	< 56.0
	7/9/2020	PS2006	mg/Kg	4.00	723	J 0.076	8.95	14.40	0.0467	0.82	J 0.056	< 0.0007	< 0.0008	< 0.0009	< 0.0013	< 9.6	< 13.0	< 13.0
	8/6/2020	PS2015	mg/Kg	2.49	130	J 0.051	4.15	8.01	0.0131	0.70	J 0.030	< 0.0005	< 0.0006	< 0.0007	< 0.0010	< 7.8	< 10.0	< 10.0
	10/14/2020	PS2028	mg/Kg	3.41	217	J 0.064	8.97	13.30	0.0214	0.97	J 0.077	< 0.0006	< 0.0007	< 0.0008	< 0.0012	< 9.0	< 12.0	< 12.0
B8	9/6/2019	PS1907	mg/Kg	1.75	83.6	< 0.515	2.88	7.09	0.0081	1.06	< 0.515	< 0.0054	< 0.0054	< 0.0054	< 0.0054	< 55.0	< 55.0	< 55.0
	7/9/2020	PS2004	mg/Kg	3.29	249	J 0.164	6.16	13.4	0.0104	J 0.39	J 0.031	< 0.0007	< 0.0009	< 0.0010	< 0.0015	< 11.0	< 14.0	< 14.0
	8/6/2020	PS2013	mg/Kg	4.11	376	J 0.092	3.42	14.3	0.0064	1.18	J 0.020	< 0.0005	< 0.0006	< 0.0007	< 0.0009	< 9.1	< 12.0	< 12.0
	10/14/2020	PS2029	mg/Kg	2.29	99	J 0.095	3.30	16.1	0.0081	J 0.50	< 0.019	< 0.0006	< 0.0007	< 0.0009	< 0.0012	< 9.4	< 12.0	< 12.0
B9	9/6/2019	PS1908	mg/Kg	3.23	438	< 0.544	3.00	9.55	0.0071	2.15	< 0.544	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 58.0	< 58.0	< 58.0
	7/9/2020	PS2005	mg/Kg	4.22	330	J 0.193	3.88	12.50	0.0089	J 0.50	< 0.020	< 0.0007	< 0.0008	< 0.0010	< 0.0014	< 10.0	< 13.0	< 13.0
	8/6/2020	PS2014	mg/Kg	4.33	301	J 0.086	2.84	11.40	0.0089	1.13	J 0.021	< 0.0005	< 0.0006	< 0.0007	< 0.0010	< 7.5	< 9.9	< 9.9
	10/14/2020	PS2030	mg/Kg	3.40	601	J 0.042	4.03	13.50	0.0109	0.66	J 0.020	< 0.0006	< 0.0007	< 0.0008	< 0.0011	< 8.6	< 11.0	< 11.0
C1	8/12/2020	PS2018	mg/Kg	3.08	310	J 0.113	3.96	8.42	0.0173	0.78	J 0.053	< 0.0006	< 0.0007	< 0.0008	< 0.0012	< 8.8	< 12.0	< 12.0
	10/14/2020	PS2031	mg/Kg	6.44	71	J 0.053	12.70	17.00	0.0189	1.56	J 0.046	< 0.0007	< 0.0008	< 0.0009	< 0.0013	< 11.0	< 14.0	< 14.0
C2	8/12/2020	PS2019	mg/Kg	4.82	663	J 0.173	4.74	14.20	0.0193	1.71	J 0.045	< 0.0007	< 0.0008	< 0.0009	< 0.0013	< 9.3	< 12.0	< 12.0
	10/14/2020	PS2032	mg/Kg	2.46	633	J 0.059	5.64	11.30	0.0149	0.81	J 0.044	< 0.0005	< 0.0006	< 0.0007	< 0.0010	< 7.7	< 10.0	< 10.0
C3	8/12/2020	PS2020	mg/Kg	2.28	133	J 0.070	5.11	6.45	0.0154	0.69	J 0.046	< 0.0005	< 0.0006	< 0.0007	< 0.0010	< 8.3	< 11.0	< 11.0
	10/14/2020	PS2033	mg/Kg	2.22	85	J 0.051	4.90	8.92	0.0115	J 0.45	J 0.020	< 0.0005	< 0.0006	< 0.0007	< 0.0010	< 8.0	< 11.0	< 11.0
C4	8/12/2020	PS2021	mg/Kg	2.90	535	J 0.076	2.97	17.5	0.0084	1.79	J 0.023	< 0.0006	< 0.0007	< 0.0008	< 0.0012	< 8.8	< 12.0	< 12.0
	10/14/2020	PS2034	mg/Kg	1.90	57	< 0.035	3.36	9.0	0.0109	1.05	J 0.020	< 0.0006	< 0.0007	< 0.0009	< 0.0012	< 9.5	< 13.0	< 13.0
		Baseline 95% UTL (mg/Kg)		14.52	1,908	~~0.656~~ 0.325	8.80	20.70	0.0226	6.19	~~0.656~~ 0.325	~~0.0071~~ 0.0035	~~0.0071~~ 0.0035	~~0.0071~~ 0.0035	~~0.0071~~ 0.0035	~~69.8~~ 34.6	~~69.8~~ 34.6	~~69.8~~ 34.6

Notes:

< Value = less than Sample Detection Limit (SDL)

J = Analyte detected below method detection limit (MDL)

Baseline Soil sampling Event 9/6/2019

ATTACHMENT 1

REPLACEMENT PAGES
(REDLINE/STRIKEOUT)

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PART III
ATTACHMENT 12
FINAL CLOSURE PLAN

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

October 2001
Revised September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

TABLE 12-2
ROCK PRAIRIE ROAD LANDFILL - PHYTO-UTILIZATION AREA CLOSURE COST

Area Requiring Final Cover	1.5 ac	Infiltration Layer Thickness	1.5	ft (Composite Final Cover)	
		Erosion Layer Thickness	1.0	ft	

Description	Quantity	Unit[1]	Unit[2] Cost	Total Cost	Comments
1.0 ENGINEERING					
1.1 Development of Plans	1.0	LS	$ 5,000	$ 5,000	Includes third party preparation of final cover design and construction plans including specifications (includes grading, drainage, and revegetation).
1.2 Closure Inspection and Testing	1.0	LS	$ 7,500	$ 7,500	Includes third party inspection during closure construction, thickness and permeability verifications, survey, and preparation of closure report.
1.3 TCEQ Reporting for Recertification of Final Cover Soils	**1.0**	**LS**	**$ 8,000**	**$ 8,000**	**Includes submittal of closure report and coordination with TCEQ.**
ENGINEERING TOTAL				~~$ 12,500~~ $ 20,500	
2.0 CONSTRUCTION					
2.1 Testing of Phyto Utilization System Area Soil	1	LS	8,500	$ 8,500	Includes sampling, shipping, laboratory analysis and technical review of results of samples collected at six locations of 100-foot by 100-foot grid across the phyto utilization system area. Four samples collected at each sample location (2 in phyto utilization pad, and 2 in underlying erosion layer and infiltration layer).
2.2 Removal of Contaminated Soil (If Required)	13,310	CY	$ 15.00	$ 199,650	Includes excavation and hauling of soil to Twin Oaks Landfill for disposal.
2.3 Final Cover System					
2.3.1 Infiltration Layer	3,025	CY	$ 5.00	$ 15,125	Includes excavation, hauling, and construction of a 1.5-foot thick clay material infiltration layer over the phyto utilization system area.
2.3.2 Erosion Layer	2,017	CY	$ 2.50	$ 5,042	Includes excavation, hauling, and construction of a 1-foot thick earthen material erosion layer over entire closure area.
2.4 Revegetation	1.5	AC	$ 2,000	$ 3,000	Includes vegetation of completed cover and general fill via seeding and application of fertilizer over the area requiring final cover.
2.5 Removal of Onsite Storage Tanks	1	LS	$ 2,000	$ 2,000	Includes the cost for removal and disposal of the two leachate storage tanks associated with the phyto utilization system.
CONSTRUCTION TOTAL				$ 233,317	
ENGINEERING & CONSTRUCTION SUBTOTAL				~~$245,817~~ $ 253,817	
3.0 CONTINGENCY		10%		~~$ 24,582~~ $ 25,382	
4.0 CONTRACT PERFORMANCE BOND		1.5%		~~$ 3,687~~ $ 3,807	
5.0 LEGAL FEES		LS		$ 5,000	
6.0 TCEQ ADMINISTRATION OF CONTRACTS		LS		$ 5,000	
TOTAL CLOSURE COST				~~$284,086~~ $ 293,006	

[1]LS = Lump Sum, AC = acres, CY = cubic yards.

[2]Unit Costs are in 2021 dollars. Unit costs are based on current market conditions, typical engineering costs, and industry standards related to construction and reflect input from BVSWMA, Inc. and Weaver Consultants Group, LLC.

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PART III
ATTACHMENT 15
LEACHATE AND CONTAMINATED WATER PLAN

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

Revised September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PART III
ATTACHMENT 15
APPENDIX 5
PHYTO-UTILIZATION SYSTEM INFORMATION

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

2.3 Phyto-Utilization System Maintenance

Maintenance will be conducted throughout the use of the phyto-utilization system. The control system will include a notification system that will notify personnel of any alarms or automatic shutdown of the distribution system. In addition, regular inspections and maintenance of the control and distribution system will occur. Equipment repairs, replanting, and mowing will occur as necessary based on actual site conditions.

2.4 Phyto-Utilization System Monitoring

~~The behavior of metals in soils is affected by a multitude of highly complex geochemical processes influenced by soil composition, structure, saturation, temperature, degree of heterogeneity, etc. The continuous interaction of these processes can make it difficult to establish an accurate background concentration limit without collecting and testing an abundance of statistically independant background samples intermittently over an extended period of time. This is due to the variability of natural gechemical processes including stratification and seasonality among others.~~

~~For these reasons, a~~ A two-tiered compliance monitoring protocol is proposed that includes comparison of analytical results to ~~a risk-based action level concentration~~ the 95% UTL coupled with verification resampling. ~~An action level equal to 50 percent of the Tier 1 Residential Soil PCLs is proposed as an upper limit to the total metals concentrations detected in individual soil samples collected as part of routine pad soil compliance monitoring. This action-level fascilitates the use of established human health exposure risk-based standards for soil data comparison. Using 50 percent of the PCL concentration establishes a conservative risk-based threshold for evaluating total metals concentrations in the pad soils.~~ In the event that a ~~metal~~ concentration exceeds ~~50 percent the PCL~~ the 95% UTL, the facility will conduct resampling within 90 days to either verify or disconfirm the initial apparent exceedance. This verification resampling strategy is similar to the 1 of 2 testing startegy used in many aqueous sampling statistical protocols and is designed with the purpose of reducing false positives in analytical testing results. If an exceedance is verified by the resampling results, the facility will notify TCEQ in writing and provide a proposed course of action in response to the exceedance. ~~It is noted that because the threshold for an exceedance equates to 50 percent the PCL concentration, identification of an exceedance does not necessarily have any direct regulatory implications. However, the facility may cease leachate application while consulting with TCEQ to establish a proposed course of action.~~

~~Volatile organic compounds (VOCs) are not commonly naturally ocurring in surface soils. TPH and BTEX constituents have not been detected at or above the method detection limit (MDL) in any of the collected soil samples to-date. Therefore, the MDL is proposed as a highly conservative action level for TPH and BTEX. This strategy is similar to the double quantification rule (DQR) used in many aqueous sampling statistical protocols.~~

~~In the event that TPH or BTEX constituents are detected at or above the MDL, the facility will firstly conduct resampling within 90 days to verify or disconfirm the initial apparent exceedance. If an exceedance is confirmed by the resampling results, the facility will notify TCEQ in writing and provide a proposed course of action in response to the exceedance in the same manner as described for a metals exceedance.~~

Soil sampling will be conducted on a semiannual frequency. The following summarized the soil sampling and evaluation procedures:

- A 100-foot by 100-foot sampling grid will be established across the phyto-utilization area.
- Soil samples will be obtained within each grid area and collected from a depth of 3-feet below surface grade which equates to 1 foot above the bottom of the phyto-utilization soil pad fill.
- Soil samples will be analyzed for the eight RCRA total metals, Total Petroleum Hydrocarbons (TPH), and BTEX constituents (benzene, toluene, ethylbenzene, and xylenes) by a NELAC-certified environmental testing laboratory accreditted in the state of Texas.
- The testing results will be filed in the facility's Site Operating Record within 90 days of sampling.
- Any ~~TPH or BTEX~~ constituent that is detected at or above the ~~MDL~~ 95% UTL will be considered an exceedance.
- ~~The total metal analytical results will be compared to the action levels listed in Table 1 which equate to 50% the Tier 1 residential soil PCLs.~~
- If an action level is exceeded by an individual soil sample's analytical concentration, verification resampling will be conducted. The facility will resample the location within 90 days of the soil sampling date for the analytical concentration exhibiting the unverified exceedance.
- If the resampling results do not verify the initial apparent action level exceedance, the facility will document the results in the SOR and no further action will be required.
- If the initial exceedance is verified by the resampling results, the facility will notify TCEQ in writing within 14 days of the exceedance verification. The notification submittal will include a copy of the laboratory analytical testing reports and a recommendation for a proposed course of action.

Table 1
Action Levels for Total Metals

Constituent	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Tier 1 Residential Soil PCL	24	8,100	52	33,000	500	3.6	310	97
Action Level (50% the PCL)	**12**	**4,050**	**26**	**16,500**	**250**	**1.8**	**155**	**48.5**

3 DECOMMISSIONING OF PHYTO-UTILIZATION SYSTEM

Prior to excavating and/or disposing of phyto-utilization soils and plantings, laboratory testing will be performed of the soils to determine their suitability for use as clean soil fill or for off-site disposal into a permitted landfill. Soil sampling and testing procedures will be conducted in the same manner as the semiannual compliance monitoring discussed in Section 2.4.

Any required removal of the final cover system will be repaired consistent with the permitted Final Cover Quality Control Plan. Soils (and vegetative cover) found to be below action level concentrations will be either left in place or regraded (if necessary) to ensure positive drainage is maintained. Refer to Attachment 12 for the phyto-utilization system closure cost.

ATTACHMENT 2

REPLACEMENT PAGES
(CLEAN)

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PART III
ATTACHMENT 12
FINAL CLOSURE PLAN

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

October 2001
Revised September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

TABLE 12-2
ROCK PRAIRIE ROAD LANDFILL - PHYTO-UTILIZATION AREA CLOSURE COST

Area Requiring Final Cover	1.5 ac	Infiltration Layer Thickness	1.5	ft (Composite Final Cover)
		Erosion Layer Thickness	1.0	ft

Description	Quantity	Unit[1]	Unit[2] Cost	Total Cost	Comments
1.0 ENGINEERING					
1.1 Development of Plans	1.0	LS	$ 5,000	**$ 5,000**	Includes third party preparation of final cover design and construction plans including specifications (includes grading, drainage, and revegetation).
1.2 Closure Inspection and Testing	1.0	LS	$ 7,500	**$ 7,500**	Includes third party inspection during closure construction, thickness and permeability verifications, survey, and preparation of closure report.
1.3 TCEQ Reporting for Recertification of Final Cover Soils	1.0	LS	$ 8,000	**$ 8,000**	Includes submittal of closure report and coordination with TCEQ.
ENGINEERING TOTAL				**$ 20,500**	
2.0 CONSTRUCTION					
2.1 Testing of Phyto Utilization System Area Soil	1	LS	8,500	**$ 8,500**	Includes sampling, shipping, laboratory analysis and technical review of results of samples collected at six locations of 100-foot by 100-foot grid across the phyto utilization system area. Four samples collected at each sample location (2 in phyto utilization pad, and 2 in underlying erosion layer and infiltration layer).
2.2 Removal of Contaminated Soil (If Required)	13,310	CY	$ 15.00	**$ 199,650**	Includes excavation and hauling of soil to Twin Oaks Landfill for disposal.
2.3 Final Cover System					
2.3.1 Infiltration Layer	3,025	CY	$ 5.00	**$ 15,125**	Includes excavation, hauling, and construction of a 1.5-foot thick clay material infiltration layer over the phyto utilization system area.
2.3.2 Erosion Layer	2,017	CY	$ 2.50	**$ 5,042**	Includes excavation, hauling, and construction of a 1-foot thick earthen material erosion layer over entire closure area.
2.4 Revegetation	1.5	AC	$ 2,000	**$ 3,000**	Includes vegetation of completed cover and general fill via seeding and application of fertilizer over the area requiring final cover.
2.5 Removal of Onsite Storage Tanks	1	LS	$ 2,000	**$ 2,000**	Includes the cost for removal and disposal of the two leachate storage tanks associated with the phyto utilization system.
CONSTRUCTION TOTAL				**$ 233,317**	
ENGINEERING & CONSTRUCTION SUBTOTAL				**$ 253,817**	
3.0 CONTINGENCY		10%		**$ 25,382**	
4.0 CONTRACT PERFORMANCE BOND		1.5%		**$ 3,807**	
5.0 LEGAL FEES		LS		**$ 5,000**	
6.0 TCEQ ADMINISTRATION OF CONTRACTS		LS		**$ 5,000**	
TOTAL CLOSURE COST				**$ 293,006**	

[1]LS = Lump Sum, AC = acres, CY = cubic yards.

[2]Unit Costs are in 2021 dollars. Unit costs are based on current market conditions, typical engineering costs, and industry standards related to construction and reflect input from BVSWMA, Inc. and Weaver Consultants Group, LLC.

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

PART III
ATTACHMENT 15
LEACHATE AND CONTAMINATED WATER PLAN

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

Revised September 2021

Revised December 2021

Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

ROCK PRAIRIE ROAD LANDFILL
BRAZOS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1444C

PERMIT MODIFICATION

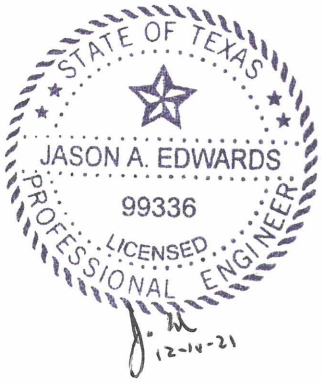
PART III
ATTACHMENT 15
APPENDIX 5
PHYTO-UTILIZATION SYSTEM INFORMATION

Prepared for

Brazos Valley Solid Waste Management Agency, Inc.

September 2021

Revised December 2021



Prepared by

Weaver Consultants Group, LLC
TBPE Registration No F-3727
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 3086-352-11-03

2.3 Phyto-Utilization System Maintenance

Maintenance will be conducted throughout the use of the phyto-utilization system. The control system will include a notification system that will notify personnel of any alarms or automatic shutdown of the distribution system. In addition, regular inspections and maintenance of the control and distribution system will occur. Equipment repairs, replanting, and mowing will occur as necessary based on actual site conditions.

2.4 Phyto-Utilization System Monitoring

A two-tiered compliance monitoring protocol is proposed that includes comparison of analytical results to the 95% UTL coupled with verification resampling. In the event that a concentration exceeds the 95% UTL, the facility will conduct resampling within 90 days to either verify or disconfirm the initial apparent exceedance. This verification resampling strategy is similar to the 1 of 2 testing startegy used in many aqueous sampling statistical protocols and is designed with the purpose of reducing false positives in analytical testing results. If an exceedance is verified by the resampling results, the facility will notify TCEQ in writing and provide a proposed course of action in response to the exceedance.

Soil sampling will be conducted on a semiannual frequency. The following summarized the soil sampling and evaluation procedures:

- A 100-foot by 100-foot sampling grid will be established across the phyto-utilization area.
- Soil samples will be obtained within each grid area and collected from a depth of 3-feet below surface grade which equates to 1 foot above the bottom of the phyto-utilization soil pad fill.
- Soil samples will be analyzed for the eight RCRA total metals, Total Petroleum Hydrocarbons (TPH), and BTEX constituents (benzene, toluene, ethylbenzene, and xylenes) by a NELAC-certified environmental testing laboratory accreditted in the state of Texas.
- The testing results will be filed in the facility's Site Operating Record within 90 days of sampling.
- Any constituent that is detected at or above the 95% UTL will be considered an exceedance.
- If an action level is exceeded by an individual soil sample's analytical concentration, verification resampling will be conducted. The facility will resample the location within 90 days of the soil sampling date for the analytical concentration exhibiting the unverified exceedance.
- If the resampling results do not verify the initial apparent action level exceedance, the facility will document the results in the SOR and no further action will be required.
- If the initial exceedance is verified by the resampling results, the facility will notify TCEQ in writing within 14 days of the exceedance verification. The notification submittal will include a copy of the laboratory analytical testing reports and a recommendation for a proposed course of action.

3 DECOMMISSIONING OF PHYTO-UTILIZATION SYSTEM

Prior to excavating and/or disposing of phyto-utilization soils and plantings, laboratory testing will be performed of the soils to determine their suitability for use as clean soil fill or for off-site disposal into a permitted landfill. Soil sampling and testing procedures will be conducted in the same manner as the semiannual compliance monitoring discussed in Section 2.4.

Any required removal of the final cover system will be repaired consistent with the permitted Final Cover Quality Control Plan. Soils (and vegetative cover) found to be below action level concentrations will be either left in place or regraded (if necessary) to ensure positive drainage is maintained. Refer to Attachment 12 for the phyto-utilization system closure cost.

APPENDIX C

TCEQ – 20650 FORM

Facility Name: Rock Prairie Road Landfill
Permittee/Registrant Name: Brazos Valley Solid Waste Management Agency, Inc.
MSW Authorization #: 1444C
Initial Submittal Date: 09/01/2021
Revision Date: 12/09/2021

Texas Commission on Environmental Quality

Permit/Registration Modification and Temporary Authorization Application Form for an MSW Facility

1. Reason for Submittal

☐ Initial Submittal ☒ Notice of Deficiency (NOD) Response

2. Authorization Type

☒ Permit ☐ Registration

3. Application Type

☐ Modification with Public Notice ☒ Modification without Public Notice
☐ Temporary Authorization (TA) ☐ Modification for Name Change/Transfer

4. Application Fees

☐ Pay by Check ☒ Online Payment

If paid online, enter ePay Trace Number: 582EA000450426

5. Application URL

Is the application submitted for a permit/registration modification with public notice?

☐ Yes ☒ No

If the answer is "Yes", enter the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted in the space provided: http://

6. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☒ No

If "Yes", cross-reference the confidential documents throughout the application and submit as a separate attachment in a binder clearly marked "CONFIDENTIAL."

7. General Facility Information

Facility Name: **Rock Prairie Road Landfill**

MSW Authorization No.: **1444C**

Regulated Entity Reference No.: **100830090**

Physical or Street Address (if available): **7600 Rock Prairie Road**

City: **College Station** County: **Brazos** State: **Texas** Zip Code: **77842**

(Area code) Telephone Number:

Latitude: **30.58** Longitude: **-96.25**

8. Facility Type(s)

☒ Type I	☐ Type IV	☐ Type V
☐ Type I AE	☐ Type IV AE	☐ Type VI

9. Description of the Revisions to the Facility

Provide a brief description of all revisions to the permit/registration conditions and supporting documents referred by the permit/registration, and a reference to the specific provisions under which the modification/temporary authorization application is being made. Also, provide an explanation of why the modification/temporary authorization is requested:

The purpose of this permit modification request is to allow for the use of a Leachate Phyto-Utilization System using vetiver grass at the Rock Prairie Road Landfill.

This section is intentionally left blank; please continue to the next page.

10. Facility Contact Information

Site Operator (Permittee/Registrant) Name: Brazos Valley Solid Waste Management Agency, Inc.

Customer Reference No. (if issued)*: CN**600340194**

Mailing Address: **P.O. Box 9960**

City: **College Station** County: **Brazos** State: **Texas** Zip Code: **77842-7960**

(Area Code) Telephone Number: **(979) 764-3878**

Email Address: **sbest@BVSWMA.com**

TX Secretary of State (SOS) Filing Number:

*If the Site Operator (Permittee/Registrant) does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Site Operator (Permittee/Registrant) as the Customer.

Operator Name[1]: Same as Site Operator (Permittee/Registrant)

Customer Reference No. (if issued)*:

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address:

Charter Number:

[1]If the Operator is the same as Site Operator/Permittee type "Same as "Site Operator (Permittee/Registrant)".
*If the Operator does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Operator as the customer.

Consultant Name (if applicable): Weaver Consultants Group, LLC

Texas Board of Professional Engineers Firm Registration Number: **F-3727**

Mailing Address: **6420 Southwest Boulevard, Suite 206**

City: **Fort Worth** County: **Tarrant** State: **Texas** Zip Code: **76109**

(Area Code) Telephone Number: **817-735-9770**

E-Mail Address: **jedwards@wcgrp.com**

Agent in Service Name (required only for out-of-state):

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address:

11. Ownership Status of the Facility

Is this a modification that changes the legal description, the property owner, or the Site Operator (Permittee/Registrant)?

☐ Yes ☒ No

If the answer is "No", skip this section.

Does the Site Operator (Permittee/Registrant) own all the facility units and all the facility property?

☐ Yes ☐ No

If "No", provide the information requested below for any additional ownership.

Owner Name:

Street or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address (optional):

Charter Number:

Signature Page

I, Bryan Griesbach, Executive Director,
(Site Operator (Permittee/Registrant)'s Authorized Signatory) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 12-16-21

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____
(Print or Type Operator Name) (Print or Type Representative Name)

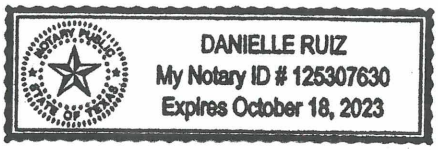
as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

_____
Printed or Typed Name of Operator or Principal Executive Officer

_____
Signature

SUBSCRIBED AND SWORN to before me by the said Bryan Griesbach
On this 16th day of Dec., 2021
My commission expires on the 18th day of Oct., 2023

_____
Notary Public in and for
Brazos County, Texas
(Note: Application Must Bear Signature & Seal of Notary Public)



Permit/Registration Modification with Public Notice

(See Instructions for P.E. seal requirements.)

Required Attachments	**Attachment No.**
Land Ownership Map	
Land Ownership List	
Marked (Redline/Strikeout) Pages	
Unmarked Revised Pages	

Additional Attachments as Applicable- Select all those apply and add as necessary

- ☐ Signatory Authority
- ☐ Fee Payment Receipt
- ☐ Confidential Documents

Permit/Registration Modification without Public Notice or TA

(See Instructions for P.E. seal requirements.)

Required Attachments (for Modifications only)	**Attachment No.**
Marked (Redline/Strikeout) Pages	
Unmarked Revised Pages	

Additional Attachments as Applicable- Select all those apply and add as necessary

- ☐ Signatory Authority
- ☐ Fee Payment Receipt
- ☐ Confidential Documents

Permit/Registration Name Change/Transfer Modification

(See Instructions for P.E. seal requirements.)

Required Attachments	**Attachment No.**
TCEQ Core Data Form(s)	
Property Legal Description	
Property Metes and Bounds Description	
Metes and Bounds Drawings	
On-Site Easements Drawing	
Land Ownership List	
Land Ownership Map	
Property Owner Affidavit	
Verification of Legal Status	
Evidence of Competency	

Additional Attachments as Applicable- Select all those apply and add as necessary

- ☐ Signatory Authority
- ☐ Fee Payment Receipt
- ☐ Confidential Documents
- ☐ Final Plat Record of Property, if platted
- ☐ Assumed Name Certificate