

**Agreement for Professional Services For
Conducting a Risk and Resilience Assessment and Updating the City of Bay City's Emergency
Response Plan to Comply with the American Water Infrastructure Act of 2018 Requirements
Between the City of Bay City and LSPS Solutions, LLC**

This Agreement for Professional Services ("Agreement") is made between LSPS Solutions, LLC, 203 Windwood Lane, Victoria, TX ("Professional"), and the City of Bay City ("Owner") a Texas municipal corporation, 1901 Fifth Street, Bay City, TX 77414, who, in consideration of the mutual covenants of this Agreement, hereby agree as follows:

I. Scope of Services

- 1.1 Scope of Work.** In accordance with the attached **Proposal for Conducting a Risk and Resilience Assessment and City of Bay City's Public Utility's Emergency Response Plan to Comply with the American Water Infrastructure Act of 2018 Requirements (Exhibit A)**, dated June 26, 2019, Professional shall provide all personnel and equipment necessary to complete the Risk and Resilience Assessment and update the Emergency Response Plan for the City of Bay City.

II. Payment

- 2.1 Payments to Professional.** City agrees to pay Professional in accordance with the attached **Exhibit A**, a flat fee of **\$56,435.00**. Professional shall submit an invoice to City during the last week of each month for the portion of the work completed during that month. The City agrees to make payment on the invoice within 30 days of receipt of the invoice.

III. Term/Termination

- 3.1 Term and Termination.** This Agreement shall commence no later than ten (10) days after execution and shall terminate upon completion of the project and delivery of the deliverables specified in the attached **Exhibit A**. City may terminate this agreement upon written notice to Professional with the understanding that all services being performed under this agreement shall cease upon the date specified in such notice. In the event of early termination, Professional shall invoice City for all services completed and shall be compensated in an amount corresponding to the percentage of the compensation corresponding to the percentage of the work satisfactorily completed on the effective date of termination, to the extent such work provides value to City.

IV. Miscellaneous

- 4.1 Ownership of Documents.** All documents prepared and assembled by Professional pursuant to this agreement shall become property of City and shall be delivered to City without restriction of future use. Professional may make copies of any and all documents for its files.
- 4.2 Controlling Law.** This agreement is performable and is to be governed by the law applicable in Matagorda County, Texas. Venue for any action arising under this Agreement shall be in Matagorda County, Texas.

4.3 Successors & Assigns. Neither City nor Professional shall assign, sublet or transfer any rights under or interest in (including, but without limitations, monies that may become due or monies that are due) this Agreement without the written consent of the other. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Professional from employing independent consultants, associates and other employees to assist it in the performance of services hereunder.

4.4 No Third-Party Beneficiaries. Nothing herein shall be construed to give any rights or benefits to anyone other than City and Professional.

4.5 Independent Contractor. In performing services under this agreement, the relationship between City and Professional is that of independent contractor, and City and Professional by the execution of this agreement do not change the independent contractor status of Professional. No term or provision of this agreement or act of Professional in the performance of this agreement shall be construed as making Professional the agent, servant, or employee of City.

4.6 Entire Agreement. This agreement, together with any referenced attachments, constitutes the entire agreement between the parties, and supersedes all prior written or oral understandings. This agreement and said attachments may only be amended, supplemented, modified or canceled by a duly executed written instrument.

EXECUTED, this the 26 day of Feb., 2020.

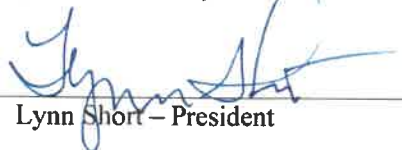
City of Bay City, Texas



Robert K. Nelson, Mayor

(seal)

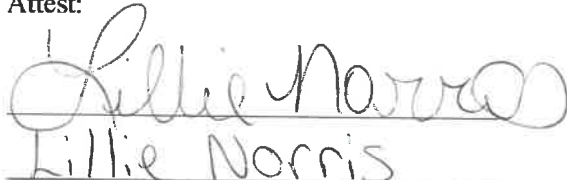
LSPS Solutions, LLC



Lynn Short – President

(seal)

Attest:



Printed Name

Attest:



Thomas Short – Vice President

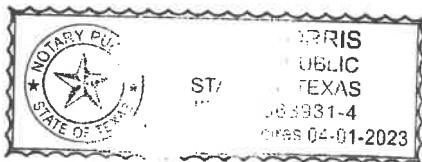


Exhibit A



Solutions, LLC

LSPS Solutions, LLC

203 Windwood Lane

Victoria, Texas 77904

361 / 212-8243

Lynn Short, President

June 26, 2019

Mr. Barry Calhoun
Director of Public Works
City of Bay City
1217 Avenue J
Bay City Texas 77414

Re: Proposal for Conducting a Risk and Resilience Assessment and City of Bay City's Public Utility's Emergency Response Plan to Comply with the American Water Infrastructure Act of 2018 Requirements

Barry,

President Donald J. Trump signed the American Water Infrastructure Act of 2018 into law on October 23, 2018. Section 2013 of this new legislation requires Community water systems to conduct Risk and Resilience assessments and to amend their Emergency Response Plans to address the findings of that Risk and Resilience Assessment. This section of the new law replaces the provisions in SDWA regarding anti-terrorism activities and instead creates requirements for assessing risks from malevolent acts, (including terrorism), and resilience to natural hazards.

This section requires certification to EPA that the assessment was complete and due dates are phased in by water system size as follows:

- $\geq 100,000$ persons by March 31, 2020;
- 50,000 to $< 100,000$ by December 31, 2020; and
- 3,300 to $< 50,000$ by June 30, 2021.

Six months after the assessment certification, another certification is due to EPA that the Emergency Response Plan has been updated to incorporate findings of the assessment.

Assessments are required to be reviewed every 5 years to determine whether the assessment must be revised. Again, a certification that this review was conducted, and the assessment revised, if applicable, is required to be submitted to EPA.

In order to help municipalities and utilities meet the requirements of this new law, LSPS Solutions, LLC staff have reviewed the three AWWA standards developed as guidance documents for the preparation of the Risk and Resilience Assessments and have familiarized ourselves with the ASME-ITI RAMCAP Plus Methodology for conducting the assessments. We have also re-familiarized ourselves with the EPA's Vulnerability Assessment Tool (VSAT) 6.0 software.

Additionally, as we discussed, LSPS Solutions is currently performing a Risk and Resilience Assessment for the Brazosport Water Authority in Lake Jackson, Texas and we have received verbal commitments to prepare them for the City of Victoria, City of Cuero and City of Gonzales. Following our review and familiarization with these standardized processes and software applications, and with the experience we are gaining from the Brazosport Water Authority project, we are confident that we can be a valuable resource for your system and that we will be able to adequately perform the Risk and Resilience Assessment and Emergency Response Plan amendment required by the American Water Infrastructure Act of 2018.

To that end, we are pleased to offer you the following proposal:

Proposal

Risk and Resilience Assessment

Using the ASME-ITI RAMCAP Plus Methodology for conducting the R&R Assessment, LSPS staff proposes to conduct the assessment in an eight-step process. These steps include:

1. ***Asset Characterization*** – *To determine what assets are in place and which are critical.*
 - a. In this step, LSPS employees will inspect your facilities and photo document your system's assets.
 - b. Following the initial inspection, LSPS staff will create a list of your assets and prioritize them based on their criticality and susceptibility to attack or disruption.
2. ***Threat Characterization*** – *To determine which threats and hazards should be considered.*
 - a. In this step, LSPS staff will determine a list of possible threats for each of the prioritized assets.
 - b. Once the list of possible threats is created, LSPS staff will use the EPA's VSAT 6.0 software application to assess the probability of each of the threats identified for the list of prioritized assets.
 - c. LSPS staff will then schedule and conduct a review meeting with you and your staff to ensure that all parties to the process agree with the list of prioritized assets and asset/threat pairs developed in the first two steps of the process before moving on the subsequent steps.
3. ***Consequence Analysis*** – *To determine what happens to the assets if a threat or hazard occurs, (i.e. how much money will be lost, how many lives lost or injuries result).*

- a. In this step, LSPS staff will determine a list of possible consequences for each of the probable threats identified in the previous step.
 - b. LSPS staff will then use the EPA's VSAT 6.0 and the AWWA's Cybersecurity Guide and Use Case software applications to assign quantitative values to the probable consequences for each of the probable threats. These consequences will be documented as fatalities, injuries, loss of revenue and estimated cost to the region.
- 4. ***Vulnerability Analysis*** – *To determine what vulnerabilities exist that would allow a threat or hazard to cause the pre-determined consequence.*
 - a. In this step, LSPS Solutions employees will use information from the previous steps and the VSAT software application to create a list of vulnerabilities that exist that might contribute to a threat or hazard occurring.
 - b. Upon completion of this step, LSPS staff will then schedule and conduct a review meeting with you and your staff to ensure that all parties to the process agree before moving on.
- 5. ***Threat Analysis*** – *To determine what the likelihood of a terrorist attack or natural or dependency/proximity hazard occurring that might result in any of the consequences identified in the previous step.*
 - a. In this step, LSPS Solutions employees will use information from the previous steps and the VSAT software application to determine how likely it is that one of the threats identified earlier in the process might actually occur and result in any of the pre-determined consequences.
- 6. ***Risk/Resilience Assessment*** – *To determine the Risk/Resilience scores resulting from the previous steps in the analysis.*
 - a. Using the equations presented in the RAMCAP methodology, LSPS staff will score the system's risk and resilience values.
 - b. Upon completion of this step, LSPS staff will then schedule and conduct a review meeting with you and your staff to ensure that all parties to the process agree before moving on.
- 7. ***Risk/Resilience Management*** – *To determine which options exist to reduce the risks identified in previous steps and thereby improve the resilience of the utility and to conduct a cost/benefit analysis for each of these options.*
 - a. In this step, LSPS Solutions employees will use information from the previous steps and the VSAT software application to create a list of possible options that might be pursued in order to mitigate the effects of the previously identified probable threats.
 - b. LSPS staff will then conduct a cost/benefit analysis for each of the options to determine if they are worthy of further consideration.
 - c. Upon completion of this step, LSPS staff will then schedule and conduct a review meeting with you and your staff to ensure that all parties to the process agree before moving on.

8. Final Report and Certification

- a. In this final step of the R&R Assessment, LSPS Solutions staff will generate a draft final report that documents the previously conducted steps in the process and the results and findings from each of these previous steps.
- b. LSPS Solutions staff will then submit the draft final report to you and your staff for review.
- c. After allowing sufficient time for review, LSPS staff will schedule and conduct a final meeting with you and your staff to review and finalize the report.
- d. Following that final review meeting, LSPS staff will edit the report to adopt any revisions identified during the final review meeting and will then finalize and print the report.
- e. LSPS Solutions staff will then write the certification letter and deliver the completed report and certification letter to you so that you can make the required submittal to the EPA in advance of the specified deadline.

Emergency Response Plan

Within six months of completing the Risk and Resilience Assessment and submitting the required certification letter to the EPA, the utility is required to submit a second certification letter to the EPA certifying that they have amended their emergency response plans to reflect the results of their previously performed Risk and Resilience Assessment.

To assist you with this requirement LSPS Solutions proposes to:

- Review your current Emergency Response Plan.
- Edit the Emergency Response Plan to incorporate the results of the Risk and Resilience Assessment results.
- Submit a draft revised Emergency Response Plan for review.
- After allowing sufficient time for review, LSPS staff will schedule and conduct a final meeting with you and your staff to review and finalize the Emergency Response Plan.
- Following that final review meeting, LSPS staff will edit the Emergency Response Plan to adopt any revisions identified during the final review meeting and will then finalize and print the plan.
- LSPS Solutions staff will then write the certification letter and deliver the completed Emergency Response Plan and certification letter to you so that you can make the required submittal to the EPA in advance of the specified deadline.

Deliverables

Upon completion of each of the major components of the project, (Risk and Resilience Assessment and Emergency Response Plan), LSPS Solutions will deliver the following:

1. Three (3) hard copy printed reports or plans in three ring binders.
2. One (1) electronic copy of the report or plan in both Microsoft Word and .pdf format.
3. One (1) printed hard copy of the certification letter for signature and submittal to the EPA.
4. One (1) electronic copy of the certification letter in both Microsoft Word and .pdf format.

Timeline

LSPS Solutions, LLC proposes to complete the scope of work for the Risk and Resilience Assessment over a period of eight consecutive months. Because of the deadlines for certification imposed by the law, it is imperative that a fully executed contract be in place at least eight months prior to the first certification date.

LSPS Solutions, LLC proposes to complete the scope of work for the Emergency Response Plan over the six-month period between the first and second certification letter deadlines.

Fee

LSPS Solutions, LLC agrees to perform the above referenced services for a lump sum amount of \$56,435.00.

Process Step	Fee
Step 1 - Asset Characterization	\$ 3,129.00
Step 2 - Threat Characterization	\$ 5,972.00
Step 3 - Consequence Analysis	\$ 3,726.00
Step 4 - Vulnerability Analysis	\$ 5,972.00
Step 5 - Threat Analysis	\$ 3,726.00
Step 6 - Risk/Resilience Analysis	\$ 5,972.00
Step 7 - Risk/Resilience Management	\$ 5,972.00
Step 8 - Final Report & Certification	\$ 8,519.00
Emergency Response Plan	\$ 13,447.00
Grand Total	\$ 56,435.00

Although the work could conceivably be completed in its entirety in FY 2021, to do so, work would have to commence no later than October 1, 2020. To avoid any possibility of getting off to a late start and risking missing the EPA's first certification date, we suggest starting the work earlier in FY 2020 which would allow for the completion of the Risk and Resilience Assessment well in advance of the certification deadline. In order to do that, we propose:

- to include Steps 1-5 of the Risk and Resilience Assessment in the **FY 2020 budget cycle** in the amount of **\$22,525.00** and executing a contract in time to **begin this work by June 2020**.
- To include Steps 6-8 of the Risk and Resilience Assessment and the Emergency Response Plan in the **FY 2021 budget cycle** in the amount of **\$33,910.00** and **executing a contract for this work in October 2020**.

Terms

LSPS Solutions, LLC will invoice the City of Bay City during the last week of each month for the portion of the work completed during that month. The City of Bay City agrees to make payment on the invoice within 30 days of receipt of the invoice.

Upon your review of this proposal, should you have questions or concerns regarding this matter, please contact me at 361 / 212-8243. I look forward to working with you and your staff on this very important project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lynn Short", with a stylized flourish at the end.

Lynn Short, President



EXHIBIT B

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/31/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Frost Insurance - Victoria P O Box 2625 Victoria TX 77902		CONTACT NAME: PHONE (A/C, No, Ext): 361-580-9010 FAX (A/C, No): 361-580-9065 E-MAIL ADDRESS:		
INSURED LSPS Solutions LLC 203 Windwood Victoria TX 77904 LSPSSOL-01		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A : National Fire Insurance Co.		
		INSURER B : Hiscox Insurance Company Inc		10200
		INSURER C :		
		INSURER D :		
		INSURER E :		
		INSURER F :		

COVERAGES

CERTIFICATE NUMBER: 1057565665

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence): MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG \$ \$ \$ \$ \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) \$ \$ \$ \$
	UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE AGGREGATE \$ \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A			6021445732	3/10/2019	3/10/2020	X PER STATUTE E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liability			MPL1902950 19	4/1/2019	4/1/2020	\$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

City of Bay City
1901 Fifth Street
Bay City, Texas 77414

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

**Exhibit B****CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

05/31/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Frost Insurance Agency Inc PO Box 2625 Victoria TX 77902-292		CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL: ADDRESS:	
INSURED LSPS SOLUTIONS LLC 203 WINDWOOD Victoria TX 77904		INSURER(S) AFFORDING COVERAGE INSURER A: Capitol Specialty Insurance Corporation NAIC # 10328 INSURER B: Kinsale Insurance Company 38920 INSURER C: Hallmark County Mutual Insurance Co. 29408 INSURER D: INSURER E: INSURER F:	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		0100085747-0	04/22/2019	04/22/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ Excluded PERSONAL & ADV INJURY \$ Excluded GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ Excluded
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		A42518918	04/22/2019	04/22/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED <input type="checkbox"/> RETENTION \$ <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE					EACH OCCURRENCE \$ AGGREGATE \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N N/A				PER STATUTE E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Pollution Liability		EV20191184-01	04/22/2019	04/22/2020	\$1,000,000 Each Incident \$2,000,000 Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

City of Bay City 1901 Fifth Street Bay City, Texas 77414 TX 78501	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Michael H. Buz</i>