

CITY COUNCIL

AGENDA REQUEST

AGENDA OF: 10/18/16

AGENDA XI-A

REQUEST NO:

CITY ATTORNEY

MEREDITH RIEDE, INITIATED BY: **CITY ATTORNEY**

RESPONSIBLE **DEPARTMENT:**

ENVIRONMENTAL & NEIGHBORHOOD SERVICES

MEREDITH RIEDE

DAWN STEPH,

DAWN STEPH PRESENTED BY:

DIRECTOR:

DIRECTOR OF ENVIRONMENTAL & NEIGHBORHOOD SERVICES

ADDITIONAL APPROVAL:

NA

SUBJECT / PROCEEDING:

APPROVAL OF SETTLEMENT AGREEMENT

EXHIBITS:

	CLEARANCES		APPROVAL
LEGAL:	MEREDITH RIEDE, CITY ATTORNEY	EXECUTIVE DIRECTOR:	
Purchasing:	NA	Assistant City Manager:	MIKE GOODRUM M W G
Budget:	NA	Assistant City Manager:	
		City Manager:	ALLEN BOGARD (Markeyar)

BUDGET

EXPENDITURE REQUIRED: \$ NA

CURRENT BUDGET: \$ NA

ADDITIONAL FUNDING: \$ NA

RECOMMENDED ACTION

Approve Settlement Agreement for illicit discharge into east/west ditch.

EXECUTIVE SUMMARY

EXHIBITS

ENVIRONMENTAL REMEDIATION AGREEMENT

THIS ENVIRONMENTAL REMEDIATION AGREEMENT (this "Remediation Agreement") is effective as of April 1, 2015 (the "Effective Date") by and between THERMO FISHER SCIENTIFIC INC., a Delaware Corporation ("Thermo Fisher"); and THE CITY OF SUGAR LAND, TEXAS, a home-rule city duly incorporated under the laws of the State of Texas (the "City") (singularly a "Party" and collectively the "Parties").

RECITALS:

- A. WHEREAS, Thermo Fisher's indirect subsidiary operates a facility located at 1410 Gillingham Lane, Sugar Land, Texas (the "Facility");
- B. WHEREAS, the Facility discharges storm water to the City's storm water drainage system (the "**Drainage System**");
- C. WHEREAS, Thermo Fisher and the City acknowledge that certain material was released from the Facility (the "Release") into the Drainage System and onto or into certain other properties, including property now owned by Thermo Fisher's indirect subsidiary (collectively the "Affected Properties"), resulting in the presence of contaminants, including those identified on Attachment A (the "Contamination").
- D. WHEREAS, Thermo Fisher desires to (i) investigate and remediate the Contamination on the Affected Properties (the "Work," as more specifically defined in **Attachment B** or as set out in such other work plans reasonably approved by the City) and (ii) perform the Restoration (as defined below), all in accordance with applicable City requirements and federal and state laws and regulations.
- E. WHEREAS, Thermo Fisher needs access to the Drainage System and associated rights-of-way owned by the City (together, the "City Property") to perform the Work and the Restoration (as defined below) on the Drainage System.
- F. WHEREAS, the City wants to cooperate with Thermo Fisher by providing limited and non-exclusive access to the City Property, without waiving any rights, claims or causes of action it may have and which arise out of the Contamination, except as explicitly described in this Remediation Agreement.
- G. WHEREAS, the City desires to be protected from any and all losses, damages, costs, fines, penalties, liabilities, judgments, liens, suits, enforcement actions, claims, causes of action, demands, injuries (including, without limitation, bodily injury and death to persons), or actual damage to the environment or property brought against the City by third parties that may arise from, or be attributable to, the Release, the Contamination, the Work, the Wastes, and/or the Restoration (as defined below) (collectively "Claims") and seeks defense and indemnification from Thermo Fisher from such Claims.
- H. WHEREAS, Thermo Fisher desires to complete the Work and the Restoration (as defined below) and is willing to provide the defense and indemnification sought by the City.

- I. WHEREAS, the City may have claims and causes of action against Thermo Fisher arising out of the Release or the Contamination, including any and all statutory claims and/or claims arising out of any City ordinance.
- J. WHEREAS, Thermo Fisher has agreed to enter into this Remediation Agreement and toll any applicable limitations period or timeliness defenses as set forth below.
- K. WHEREAS, in reliance upon such tolling agreement, the City is deferring the filing of suit on any claims or causes of action the City may have; and
- L. WHEREAS, Thermo Fisher and the City desire to enter into this Remediation Agreement to clarify their respective rights and obligations with respect to the Release, the Contamination, the Work, and the Restoration (as defined below).

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

- 1. <u>Tolling Provision</u>. Any and all statutes of limitation or laches that may be applicable to causes of action against Thermo Fisher, its subsidiary, predecessor, and/or successor companies that have accrued or will accrue to the City and which relate to, or arise out of, the Release, the Contamination, and/or the Work, are tolled for the period commencing on April 1, 2015 and continuing until the later of completion of the Work and the Restoration, or the Termination Date (as defined below), unless otherwise terminated in writing by either Party. No termination pursuant to this Section 1 shall affect either Party's rights and obligations elsewhere in this Remediation Agreement. The Parties agree that laches or any other defense based on delay on the ground that suit was not filed and service of process made during the foregoing tolling period shall not be asserted. Nothing in this Remediation Agreement is intended to revive any cause of action which a statute of limitations or laches, if asserted, would or will bar if suit had been filed in a court of competent jurisdiction prior to April 1, 2015.
- 2. Reservation and Preservation of Rights and Obligations. The City reserves its rights to bring suit or to make claims against Thermo Fisher, its subsidiary, predecessor, and/or successor companies if in its best interest it needs to do so to protect its interests, and nothing in this Remediation Agreement shall be construed (i) to prevent the City from taking such actions or (ii) as any sort of release of claims by the City. If the City initiates a suit against Thermo Fisher, its subsidiary, predecessor, and/or successor companies, concerning or relating to the Release, the Contamination, the Work, or the Restoration (as defined below), the tolling provisions of this Remediation Agreement shall terminate at that time by and between the Parties but such termination shall not affect either Party's rights and obligations elsewhere in this Remediation Agreement. Nothing in this Remediation Agreement is intended to modify any rights or obligations of the Parties in connection with any easement, right-of-way or other prior agreements between the Parties or their predecessors in interest.

3. Work and Restoration.

- (a) Thermo Fisher shall, at its sole cost and expense, take all reasonable actions necessary to complete the Work on the Affected Properties as soon as practicable and without undue delay, and in accordance with **Attachment C** (referred to as the "Clearance Criteria") to this Remediation Agreement. Thermo Fisher shall promptly seek concurrence from the Texas Department of State Health Services ("DSHS") with Thermo Fisher's release of such Affected Properties for unrestricted use (the "Agency Notice") for each significant portion of the Work, and secure the written concurrence from the City that such Work has been completed according to the Clearance Criteria. The City shall accept the Work as set forth below:
 - (i) Interim acceptance of the Work: The City will perform any surveys or assessments of completed segments of the City Property within five (5) business days after Thermo Fisher notifies the City that Thermo Fisher has completed the Work on a subject section of the City Property or on any portion of any of the other Affected Properties where remediation involves excavation, and will promptly notify Thermo Fisher thereafter regarding whether the specified segment meets the Clearance Criteria.
 - (ii) Final acceptance of the Work: Within ten (10) days of Thermo Fisher's receipt of the Agency Notice(s) for each of the Affected Properties, Thermo Fisher shall provide the City with (i) a copy of such notice(s) and (ii) written confirmation that Thermo Fisher has met the Clearance Criteria (the "Notice of Completion"). Within thirty (30) days after Thermo Fisher provides the City with a Notice of Completion, the City will provide written notice to Thermo Fisher, accepting the Notice of Completion or inform Thermo Fisher of the reasons the City is not accepting such Notice of Completion.
- (b) Thermo Fisher shall initiate reasonable actions necessary to restore each of the Affected Properties in accordance with the Clearance Criteria before or upon receipt of concurrence from the City that the Work has been completed in accordance with the Clearance Criteria or upon the Termination Date, whichever occurs first. Thermo Fisher may rely upon interim acceptance of the Work by the City to begin Restoration on the City Property. After initial restoration work, Thermo Fisher shall promptly restore all Affected Properties from any changed conditions caused by the Work to meet the requirements of Attachment C. Such restoration activities shall be at Thermo Fisher's sole cost and expense and shall include, at a minimum, the filling of all excavated areas resulting from the Work, to the extent reasonably requested by the owner of each the Affected Properties. Any excavations on the Affected Properties that are filled as part of the Work shall only be filled with fill dirt that is clean and free of pollutants or contaminants. Thermo Fisher's obligations in this Section 3(b) shall be referred to herein as the "Restoration."
- (c) Except as otherwise provided in this Section 3(c), the Work and the Restoration shall be carried out by (i) CN Associates, Inc. and its subcontractors and/or (ii) such other qualified contractor(s) selected by Thermo Fisher (collectively the "Environmental Contractor"). For any Work or Restoration performed on the City Property, the City must

approve any subcontractors of CN Associates, Inc. and/or such other qualified contractor(s) selected by Thermo Fisher, such approval not to be unreasonably withheld.

- (d) The City shall coordinate with and assist Thermo Fisher on the portions of the Work and Restoration that require input from, and approvals by, the City. The City will timely make its representatives available to perform oversight of the Work and the Restoration, including any confirmatory sampling the City chooses to perform to allow the Work and the Restoration to proceed in a timely manner without Thermo Fisher incurring delay charges from the Environmental Contractor.
- (e) In performing the Work and the Restoration, Thermo Fisher assumes the responsibility for identifying the presence and location of any and all pipelines, piping, conveyancing mechanisms, conduits, cables, tanks, power lines or other installations or equipment whether above-ground or underground. However, in response to a one call notification, the City will mark underground structures on the City Property covered by the one call system and Thermo Fisher may rely upon those marked locations.
- (f) Thermo Fisher shall be the generator of any and all Wastes (as defined below) arising out of the Work or the Restoration, and Thermo Fisher shall be solely responsible for the disposal of all such Wastes in accordance with Applicable Laws. Thermo Fisher further agrees that any and all Wastes (as defined below) resulting from the Work and/or the Restoration shall only be disposed at facilities that are permitted for such Wastes and which are listed on **Attachment D**. For the purposes of this Remediation Agreement, "**Wastes**" means any radiological material removed from any of the Affected Properties and any other materials (x) originating at the Facility or (y) brought onto the Affected Properties by Thermo Fisher during performance of the Work or the Restoration, and that may no longer be used for another purpose and is a chemical, substance, object, waste, or combination thereof, that is or may be hazardous to human health or safety or the environment.
- (g) Thermo Fisher shall take all steps necessary to ensure that the Affected Properties remain free and clear of any and all claims, liens, security interests or other encumbrances in favor of the Environmental Contractor. In the event that the Environmental Contractor asserts a lien or any similar claim against any of the Affected Properties as a result of the Work or the Restoration, Thermo Fisher shall promptly take action to remove and discharge the lien.

4. Access to the City Property.

(a) Subject to the specific conditions of this Remediation Agreement, the City shall provide Thermo Fisher, its consultants, contractors, and any designees with limited and non-exclusive access to the City Property as necessary to perform the Work and the Restoration. The access provided herein is intended and shall be construed only as a temporary license to perform Work and not as a grant of an easement or any other interest in the City Property. The access provided herein shall include the ability to bring all equipment reasonably necessary for Thermo Fisher to complete the Work and the Restoration on the City Property, except that Thermo Fisher shall not unreasonably interfere or disrupt any City activities occurring on the

City Property. The City shall not unreasonably interfere or disrupt any Work or Restoration that Thermo Fisher is performing on the City Property.

- (b) After execution of the Remediation Agreement, Thermo Fisher shall notify the City in writing at least seven (7) calendar days prior to commencing on the City Property any Work or Restoration performed pursuant to this Remediation Agreement, with such notice, containing, without limitation: (i) time and date of planned entry onto the City Property; (ii) the identity of any subcontractors of CN Associates, Inc. and any other contractor(s) selected by Thermo Fisher and reasonably approved by the City pursuant to Section 3(c) above and which will enter the City Property (for purposes of clarity, Thermo Fisher is only required to provide the names of the entities and not the names of any individuals) as well as the equipment they will be using; (iii) a description of the work planned during the entry; (iv) expected duration of access; and (v) all health and safety plans for the Work or Restoration. If previously provided to the City in the form of a written work plan, Thermo Fisher may reference the previously submitted work plan and need not reiterate the work plan information in each notice under this section as long as there are no material variations to or from the previously existing work plans.
- (c) The access onto City Property shall terminate on the later of (i) April 1, 2017 or (ii) the date the City has determined that all Work (as determined in accordance with **Attachment C**, referred to as the "Clearance Criteria") and Restoration on the City Property is complete.
- (d) Notwithstanding any other provision in this Section 4, the City retains the sole discretion to unilaterally terminate access to the City Property in the event of Thermo Fisher's material non-compliance with any of the provisions herein, and its failure to cure any such noncompliance within fourteen (14) calendar days following receipt of written notice of its noncompliance from the City.
- 5. <u>Termination of Agreement</u>. This Remediation Agreement expires and terminates on the later of either (i) Thermo Fisher's completion of the Work (in accordance with the Clearance Criteria) and Restoration on all of the Affected Properties or (ii) April 1, 2021 (the "Termination Date"). However, the City retains discretion to unilaterally terminate the Remediation Agreement, as executed or amended at any time, in the event of Thermo Fisher's material noncompliance with this Remediation Agreement, and its failure to cure any such noncompliance from the City. Thermo Fisher retains discretion to unilaterally terminate the Remediation Agreement, as executed or amended at any time, in the event of the City's material noncompliance with this Remediation Agreement, and its failure to cure any such noncompliance within fourteen (14) calendar days following receipt of written notice of its noncompliance from Thermo Fisher or the City's termination of Thermo Fisher's access to the City Property prior to Thermo Fisher's completion of the Work and Restoration.

6. Information Sharing.

(a) Thermo Fisher shall promptly provide to the City all data, survey results, and data reports (other than personal information) (the "Information") in its care, custody, or

control and which relate to the Release, the Contamination, the Work, and/or the Restoration, all regardless of the date generated. Furthermore, Thermo Fisher shall promptly provide to the City any and all written communications with any federal, state or local governmental authority (including, but not limited to, the DSHS), including emails, that are in its care, custody, or control and which relate to the (i) City Property and (ii) Release, the Contamination, the Work, and/or the Restoration, regardless of the date generated. In addition, Thermo Fisher shall, upon the City's request, promptly provide the City access to all raw data, whether or not verified, arising from the Work or the Restoration.

- (b) The City shall be permitted to have representatives present during all Work and Restoration, and Thermo Fisher shall, upon the City's request, allow the City and its representatives to perform tests to identify radioactive material and visual inspections, at, on, or in the Facility. The obligation to provide Information under this Remediation Agreement shall not extend to privileged attorney-client communications or attorney work product information. Thermo Fisher shall have no liability for any injuries or damages arising from the presence of a City representative during Work or Restoration.
- 7. <u>Safety and Standard of Care</u>. Thermo Fisher represents, covenants and warrants that:
- (a) the Work and the Restoration shall be conducted in a safe and workmanlike manner consistent with the generally accepted level of care and skill ordinarily exercised by professional engineers and environmental consultants performing services of a similar nature;
- (b) it shall take reasonable actions and shall implement reasonable protections necessary to ensure that the Work and the Restoration, and all equipment, materials and substances generated or brought onto the Affected Properties, including the City Property but excluding the Facility, pose no unreasonable threat to the safety or health of persons or the environment;
- (c) the Work and the Restoration cause no injuries to persons or damage to any of the (i) Affected Properties, including the City Property but excluding the Facility, or (ii) other City property (real or personal) or of any other person, property, pipelines, or other structures on City property;
- (d) it shall remove decontamination materials or other waste materials from the Work or Restoration as soon as reasonably practicable; such materials will be generated, owned and be the sole responsibility of Thermo Fisher;
- (d) it must call the Texas One Call System at 1-800-669-8344 to locate any underground facilities at least 48 hours prior to commencement of Work and Restoration on the City Property that would result in more than surficial ground disturbance; and
- (e) all persons performing the Work and the Restoration shall be appropriately trained, certified, permitted and/or licensed as may be applicable to the job they perform in accordance with all Applicable Laws (as defined below), including, but not limited to, those related to work around radioactive substances.

8. <u>Compliance with Applicable Laws</u>. Thermo Fisher represents, covenants and warrants that it shall comply with all applicable laws and regulations in undertaking the Work and the Restoration, including any and all federal, state or local laws, statutes, rules, ordinances, codes, permits, directives, standards, certificates and licenses of any governmental authority in effect during the term(s) of this Remediation Agreement ("Applicable Laws").

9. Performance Bond and Insurance.

- (a) Within ten (10) days of both Parties' execution of this Remediation Agreement, Thermo Fisher shall secure and maintain, at its sole cost and expense and using the forms attached hereto as **Attachment E**, a so-called Performance Bond and Payment Bond until such time as the City has approved all Work and Restoration on the City Property. Such Performance and Payment Bond shall be in the amount of \$3,500,000, executed by a Surety authorized to do business in the State of Texas, and meeting the other requirements of Texas Insurance Code Chapter 3503.
- (b) For all Work or Restoration performed on the City Property, Thermo Fisher represents, covenants and warrants that it and the Environmental Contractor shall (i) maintain appropriate liability insurance to cover liabilities that could occur in connection with the Work or the Restoration, reasonably approved by the City, and with limits of at least \$1,000,000 per occurrence and \$2,000,000 general aggregate, (ii) ensure that the insurance includes contractor liability coverage and pollution liability coverage insuring actions undertaken pursuant to this Remediation Agreement, (iii) ensure that the applicable policies will also name the City as an additional insured and waive all subrogation against the City, (iv) provide appropriate documentation of this coverage and additional insured status prior to initiating any Work or Restoration, and (v) ensure that the applicable policies shall not be cancelled, materially changed or have coverage reduced while the Environmental Contractor is performing Work or Restoration without thirty (30) days' prior written notice to the City.
- 10. <u>Meetings and Telephone Conferences with Governmental Authorities</u>. Thermo Fisher shall provide the City with reasonable advance notice of meetings or telephone conferences with any federal, state or local governmental authority (including, but not limited to, the DSHS) relating, in whole or part, to (i) the City Property <u>and</u> (ii) the Release, the Contamination, the Work, and/or the Restoration. Thermo Fisher shall not object to the City having its representatives attend and participate in such meetings or telephone conferences. The foregoing obligation shall not apply to any unscheduled telephone conference initiated by any federal, state or local governmental authority (including, but not limited to, the DSHS).

11. Thermo Fisher Indemnification and Release.

(a) Thermo Fisher shall, and hereby agrees to, indemnify, defend and hold harmless the City, from and against any and all Claims. In the event a Claim is made against the City, the City shall provide Thermo Fisher with written notice promptly after becoming aware of such Claim. Thermo Fisher may elect to defend any Claim through counsel of its choice.

- (b) To support its obligations in this Section 11, Thermo Fisher shall, within ten (10) business days from the date both Parties have executed this Remediation Agreement, secure an irrevocable letter of credit, with the City as the sole beneficiary, in the amount of \$10 million, using a form and financial institution reasonably acceptable to the City. Thermo Fisher's obligation to maintain such irrevocable letter of credit shall terminate four (4) years after all Work and Restoration is complete, even if that date is later than the Termination Date, except that if there is a Claim that has not been fully resolved by that termination date, such letter of credit shall be maintained until such Claim has been fully resolved, either by settlement or final and non-appealable judgment. Thermo Fisher may substitute for the letter of credit another form of financial assurance that is acceptable to the City.
- (c) If Thermo Fisher elects to defend a Claim through counsel of its choice, then within (10) business days after receiving notice of such Claim Thermo Fisher shall notify the City of its intent to do so and the City shall promptly surrender defense of such Claim to Thermo Fisher. Pending such notice and assumption of defense, the City shall not settle the Claim or take any steps to defend that could prejudice Thermo Fisher's assumption of the defense. If Thermo Fisher elects to defend a Claim, Thermo Fisher shall retain sole authority to defend the Claim. However, Thermo Fisher shall not settle any Claim (or make any admission or concession in connection therewith) without the prior written consent of the City (which shall not be unreasonably withheld). The City shall cooperate reasonably with Thermo Fisher in connection with the performance by Thermo Fisher of its obligations in this Section.
- (d) For each Claim for which Thermo Fisher has elected to defend, Thermo Fisher shall have the continuing obligation to keep the City reasonably updated about the status of its defense of such Claim(s) and any related settlement discussions.
- (e) Except as provided in Section 3(e), Thermo Fisher expressly acknowledges and agrees that the City has made no representations to Thermo Fisher in connection with any condition, contamination or substances that may exist on, near, about, or under, any of the Affected Properties. Thermo Fisher expressly RELEASES the City, and its respective officers, directors, agents and employees, from and accepts all risks, known or unknown, of entering the Affected Properties, performing any work thereon, and that may be found to exist from any condition, contamination or substances on, near, about or under such Affected Properties.

12. Payment of Costs.

- (a) Within seven (7) business days of Thermo Fisher's receipt of a fully executed version of this Remediation Agreement, Thermo Fisher shall pay the City the amount of \$229,450.00, representing the City's internal and external (e.g., legal and technical) costs arising out of, or relating to, the Release, the Contamination, the Work, and the Restoration, prior to the date this Remediation Agreement was signed by both Parties.
- (b) Thermo Fisher further agrees to reimburse the City for all reasonable costs that the City incurs after the date this Remediation Agreement was signed by both Parties and

prior to the Termination Date, and which arise out of, or relate to, the Release, the Contamination, the Work, and/or the Restoration, more particularly described as follows:

- (i) the City's costs of the following City personnel using the corresponding rates shown below: City Engineer (charged at \$66.51 per hour), City Attorney (charged at \$77.73 per hour), the Director of Environmental & Neighborhood Services (charged at \$56.71 per hour), Public Works Director (charged at \$65.70 per hour), City Manager (charged at \$112.50 per hour), First Assistant City Manager (charged at \$85.68 per hour), Assistant City Managers (2) (each charged at \$78.10 per hour), and the Communications Director (charged at \$48.94 per hour).
- (ii) fees and expenses of the City's outside legal counsel, including Crain, Caton & James, P.C.;
- (iii) fees and expenses of the City's technical advisors, including Environmental Science and Engineering (ESE) Partners, L.L.C.; and
- (iv) fees and expenses of the City's outside public relations consultants, including Ward Communications.
- \$500,000.00, unless circumstances later dictate that a larger amount is necessary. Should the City later decide that a larger reimbursement obligation is necessary, the Parties agree to negotiate in good faith such additional reimbursement obligation. Notwithstanding the foregoing, the limitation on the reimbursement obligations in this Section 12(c) do not limit in any way any authority or right the City has outside of this Agreement to obtain additional reimbursement should the City incur costs in excess of the limit on Thermo Fisher's obligation in this Agreement.
- (d) The City may present claims for reimbursement of costs contemplated under Section 12(b) above to Thermo Fisher. Following receipt of such claims for reimbursement of costs, Thermo Fisher shall have the right to review and request additional information regarding the work underlying the claim prior to the payment of any such reimbursement claim. Upon receipt of satisfactory information on the work underlying any reimbursement claim, Thermo Fisher agrees that it will make prompt payment to the City, but in no case shall any such payment be delayed longer than thirty (30) days following Thermo Fisher's receipt of sufficient information to confirm the claim for reimbursement.
- 13. <u>Notices</u>. Thermo Fisher represents, covenants and warrants that it shall fully comply with all notice provisions herein. Except as otherwise specifically provided herein, all notices required or made under this Remediation Agreement shall be in writing and shall be made as follows:

To the City:

Meredith Riede, Esq. City of Sugar Land P.O. Box 110

Sugar Land, Texas 77478 Phone: (281) 275-2715 Fax: (281) 275-2335 mriede@sugarlandtx.gov

and

Kelly D. Brown, Esq. Crain, Caton & James, P.C. 1401 McKinney, Suite 1700 Houston, Texas 77010

Phone: (713) 752-8628 Fax: (713) 658-1921 kbrown@craincaton.com

To Thermo Fisher:

Robert Fetter

Thermo Fisher Scientific

168 Third Avenue Waltham, Ma. 02451 Phone: (781) 622-1176

robert.fetter@thermofisher.com

and

George Wilkinson, Esq.

1001 Fannin Street, Suite 2500

Houston, Texas 77002 Phone: (713) 758-4834 Fax: (713) 615-5142 gwilkinson@velaw.com

Either Party may change the above designations by written notice to the other party.

14. General Provisions.

- (a) The Recitals and Attachments are incorporated herein and deemed a part of this Remediation Agreement.
- (b) This Remediation Agreement and its validity, construction and all rights under it shall be governed by the laws of the State of Texas, with exclusive venue in Fort Bend County, Texas.
- (c) This Remediation Agreement supersedes any prior agreements, including the Interim Environmental Remediation Agreement (effective on or about July 22, 2016), and contains the entire agreement of the Parties on the matters covered. No other agreement, statement or promise made by any party or agent of any party that is not in writing and signed by

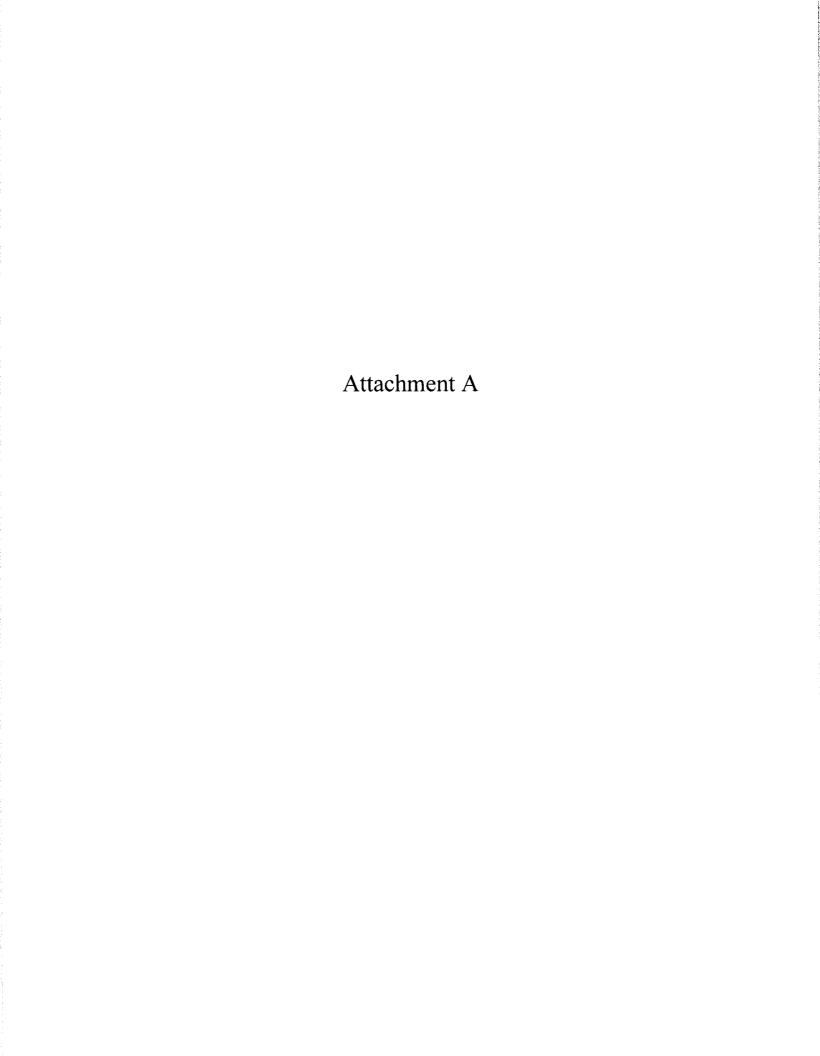
all the Parties to this Remediation Agreement shall be binding. Any amendments to this Remediation Agreement shall be in writing and signed by all Parties hereto.

- (d) This Remediation Agreement cannot be assigned by either the City or Thermo Fisher without the express written consent of the other Party. This Remediation Agreement shall inure to the benefit of and shall be binding upon the City and Thermo Fisher and their successors and assigns.
- (e) The provisions of this Remediation Agreement were negotiated by all the Parties hereto, and this Remediation Agreement shall be deemed to have been drafted by all the Parties hereto.
- (f) This Remediation Agreement may be executed in counterparts, each of which shall be deemed to be an original, but such counterparts when taken together shall constitute but one agreement.
- (g) The Parties represent, covenant and warrant that the following signatories to this Remediation Agreement are authorized to bind the Parties to the terms hereof.
- (h) Failure to insist upon strict compliance with any provision hereof shall not be deemed a waiver of such provision or of any other provision hereof. The waiver by any party of any breach of any of the provisions of this Remediation Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of the same, or of any other provision of this Remediation Agreement.
- (i) The invalidity or unenforceability of any provision hereof shall not affect the validity or enforceability of any other provision. In the event any provision of this Agreement is held invalid or unenforceable, the Parties agree to interpret and apply the remainder of this Agreement in a manner so as to maintain its original intent in all material aspects.
- (j) The existence of this Remediation Agreement, any and all obligations hereunder, shall not be construed as an admission of any issue of fact or law or as an admission or adjudication of any liability and shall not be admissible in any other suit or proceeding.
- (k) Notwithstanding anything to the contrary, the Parties' rights and obligations in Sections 2, 6, 9, 11, 13, and 14 of this Remediation Agreement shall survive the expiration or termination of the Remediation Agreement.
- (l) Notwithstanding Section 14(a) of this Remediation Agreement, to the extent of any conflict between a provision in this Remediation Agreement and a provision in any Attachment hereto, the provision in the Remediation Agreement shall control. To the extent of any conflict between a provision in an Attachment to this Remediation Agreement and any work plan submitted by Thermo Fisher pursuant to this Remediation Agreement and approved by the City, the provision in the Attachment shall control.

IN WITNESS WHEREOF the Parties have executed this Remediation Agreement <u>effective as of April 1, 2015</u>.

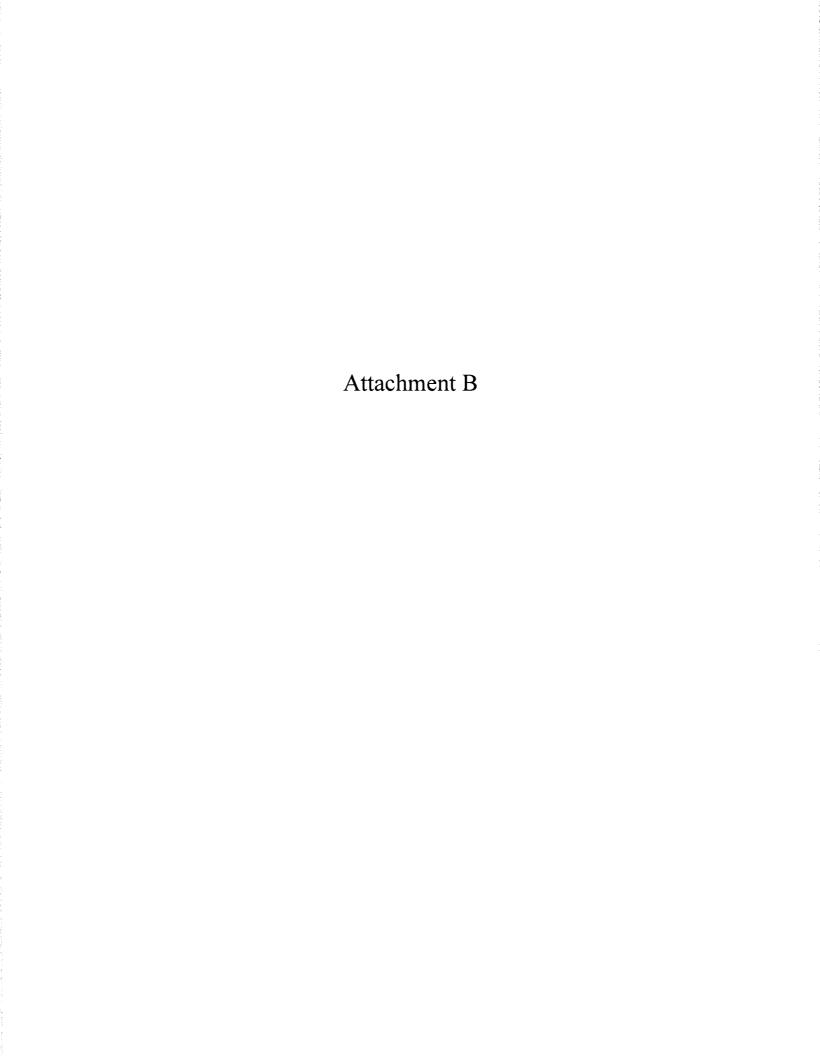
THE CITY:

THE CITT.
THE CITY OF SUGAR LAND, TEXAS, a homerule city duly incorporated under the laws of the State of Texas
By: Blassey
Title: City Manager
Date: 10/18/2016
APPROVED AS TO FORM: MURIDIA Rude
wist Assistant City Secretary
<u>'HERMO FISHER:</u>
THERMO FISHER SCIENTIFIC INC., a Delaware Corporation
By:
Title: VICE POESIOUNT
5 11 11 11



Remediation Agreement - Attachment A

Cesium (Cs-137) and Americium (Am-241)



Remediation Agreement - Attachment B Work Scope

The Work shall consist of the following activities, and those set forth in such work plans reasonably approved by the City:

- 1. City of Sugar Land Storm Water ditches
 - a. Design and authorizations
 - i. Survey the elevations of the excavation areas in the East-West and North-South Ditches.
 - ii. Determine final contours after restoration. The contours will match the elevations at the upstream and downstream ends of the excavation.
 - iii. Obtain permits and authorizations required of Thermo Fisher or the Environmental Contractors for the Work. The parties anticipate that such permits and authorizations shall include, at a minimum, the following kinds of permits and authorizations:
 - (1) Land Disturbance Permit from the City;
 - (2) Approval by City of Stormwater Pollution Prevention Plan that incorporates practices and erosion control requirements required pursuant to Section 9 of the City's Design Standards;
 - (3) Coverage under TCEQ's Stormwater Construction General Permit;
 - (4) Building permit;
 - (5) Wastewater discharge permit;
 - (6) Right-of-way permit from the City; and
 - (7) Authorization from applicable authorities, including the City, for water discharges.
 - b. Storm Drain investigation and remediation
 - i. Survey the storm drains from the inlet on the Thermo Fisher property to the outlet in the East-West Ditch ("Storm Drains") for the presence of Contamination.

- ii. Survey the South Storm Drain System on the Thermo Fisher property between the last storm water inlet on the parking lot and the second manhole on the City Storm Drain for the presence of Contamination.
- iii. Remediate removable Contamination from the Storm Drains. The Environmental Contractor will use high pressure water for cleaning the Storm Drains. Manage water from the Storm Drain cleaning as allowed by permits, authorizations, or regulation. To the extent Contamination is not removed after at least two (2) pressure washings, Thermo Fisher and the City will negotiate in good faith an approach that reasonably protects the City's interests.

c. East-West Ditch

- i. The East-West Ditch ("E-W Ditch") is approximately 60 feet wide from bank to bank and approximately 1,000 feet long.
- ii. Dewater the E-W Ditch and discharge the water as allowed by permits, authorizations, or regulation.
- During the remedial work, pump as needed ditch water from upstream of the dewatered area to downstream of the excavated area to keep the remediation area dewatered to the extent feasible during the remedial process.
- iv. Remove and replace or remediate and return rip rap at the east end (90 ft. x 6 ft. x 1 ft. estimated at 10 tons), west end (70 ft. x 6 ft. x 1 ft. estimated at 8 tons) and the mid-point (estimated 2 tons).
- v. Excavate material along the length of the E-W Ditch, for an estimated 6 feet along each side (12 ft. total width) of the center line of the ditch, to an approximate depth of up to 1 foot (subject to variation to the extent that current contours vary due to sedimentation and erosion).
- vi. If Contamination is present after the initial removal, repeat manual spot or area excavation until the Clearance Criteria are achieved.
- vii. Remove, by manual excavation, any particles located in the E-W Ditch and its right-of-way that are not within the excavation area.
- viii. Dispose of excavated materials off-site.
- d. Pipe connecting the East-West Ditch to the North-South Ditch (the "Connecting Pipe")

- i. The Connecting Pipe is 48-inches in diameter and approximately 200 feet long.
- ii. Survey the Connecting Pipe for the presence of Contamination.
- iii. Clean removable Contamination from the Connecting Pipe to the extent feasible using high pressure water or other methods. Manage water from the Connecting Pipe cleaning as allowed by permits, authorizations, or regulation. To the extent Contamination is not removed after at least two (2) pressure washings, Thermo Fisher and the City will negotiate in good faith an approach that reasonably protects the City's interests.

e. North-South Ditch

- i. The North-South Ditch ("N-S Ditch") is approximately 30 feet wide at its base.
- ii. Dewater the portions of the N-S Ditch identified in Exhibit 1 as "Dewater Zones") in segments. Discharge the water as allowed by permits, authorizations, or regulation.
- iii. During the remedial work, pump as needed ditch water from upstream of the dewatered area to downstream of the excavated area to keep the remediation area dewatered to the extent feasible during the remedial process.
- iv. Excavate materials at the bottom of the N-S Ditch for 600 feet downstream ("1st Reach") of the confluence of the N-S Ditch with the E-W Ditch (the "Outfall") and 200 feet up stream ("2nd Reach") of the outfall to 30 feet in width and up to one foot in depth (subject to variation to the extent that current contours vary due to sedimentation and erosion).
- v. Survey the slopes banks of the N-S ditch from the Outfall to Jess Pirtle Drive and spot remediate any particles located.
- vi. Dispose of excavated materials off-site.

f. Clearance Survey

i. Cleaning or remediating as used in the Remediation Agreement or its Attachments will be done to achieve the Closure Criteria in Attachment C.

g. Restoration

- i. Replace soil removed for spot remediation with clean fill as needed to maintain a level ground surface.
- ii. Replace soil in the E-W Ditch and N-S Ditch as needed to achieve the final design contours. For the E-W ditch, the final contour will match the original design contour. For the N-S ditch the final contour will provide an even slope from the existing contours at the upstream and downstream ends of the excavated areas.
- iii. Grade, install sediment controls, and reseed disturbed areas.
- 2. Thermo Fisher Property at 1410 Gillingham Lane

Decommission the Facility under the requirements of 25 T.A.C. 289.252 under the direction and oversight of the Department of State Health Services but subject to the City's rights under the Remediation Agreement.



Remediation Agreement - Attachment C

Closure Criteria

This Attachment C to the Remediation Agreement sets the Closure Criteria for the specified work areas.

- 1. <u>Drain pipes</u> Survey the Storm Drains and Connecting Pipe using a 2"x2" NaI(Tl) detector (Ludlum Model 44-20) coupled with a rate meter (Ludlum Model 2350-1). The Clearance Criteria is met if the activity detected is equal to or less than 10 pCi/g. If a Storm Drain segment or the Connecting Pipe shows activity greater than the Clearance Criteria, then Thermo Fisher will pressure wash the subject segment of pipe and then perform an additional Clearance Survey. If the activity in the subject pipe segment remains greater than 10 pCi/g after at least two pressure washings, the Parties will negotiate in good faith an approach that reasonably protects the City's interests.
- 2. <u>Ditches</u> Clearance Criteria for the Ditches shall consist of the following activities to confirm that all radioactive particles are removed:
 - a. Survey all of the excavated portions of the Ditches using 3x3 sodium iodide detectors to confirm that there are no remaining particles in the area of the excavations.
 - b. Survey all of the slopes and banks of the Ditches using 3x3 sodium iodide detectors to confirm that there are no remaining particles.
 - c. Collect samples for laboratory analysis from the excavated areas. Two representative samples will be collected from each 10 foot by 10 foot grids, representing a total of twenty percent (20%) of the excavated area. For purposes of illustration, the Parties anticipate that the Environmental Contractors will collect the following number of samples:

Table 1: Removal Areas & Confirmation Sampling Frequency

	Length (feet)	Width (feet)	Area (ft²)	20% Sampling (ft²)	10X10 Sample Cell (ft²)	Number of Samples
E-W Ditch	1,000	12	12,000	2,400	100	24

N-S Ditch (2 nd Reach)	100	30	3,000	600	100	6
N-S Ditch (1 st Reach)	600	30	18,000	3,600	100	36

- Perform laboratory analysis of each sample. The Closure criteria is two step for d. closure samples taken from the first 200 feet of the E-W ditch Thermo Fisher will obtain third party laboratory analysis for each of the isotopes listed on Thermo Fisher's license except for Kr-85, H-3, and Tl-204. Isotopes other than Cs-237 and Am-241 meet the closure criteria if the isotope is below a Total Effective Dose Equivalent of 25 mrem as defined by 25 TAC 289.202 (ddd)(2) using the values for 25 mrem/yr set out in table B-2 of NuReg 1757. If any isotope exceeds the clearance value then subsequent samples will be analyzed for that isotope. If any isotope other than Cs-137 and Am-241 is below the Closure criteria for samples in the first 200 feet of the E-W ditch, then the analysis of subsequent samples does not need to include that isotope. Each of the soil samples satisfies the Closure Criteria for Cs-137 and Am-241 if the activity of the sample is equal to or less than 10 pico-Curies per gram (pCi/g) Cesium-137 and 2.1 pCi/g Americium-241, corresponding to a Total Effective Dose Equivalent of 25 mrem/yr using conservative default assumptions.
- 3. Other properties: Confirm that all radioactive particles are located and removed to the following standards:
 - a. Survey 100 percent of the designated areas using: (1) Gas flow proportional floor monitor (Ludlum Model 239) coupled with a rate meter (Ludlum Model 2360), (2) 2"x2" NaI(Tl) detector (Ludlum Model 44-10) coupled with a rate meter (Ludlum Model 2350-1); (3) 3"x3" NaI(Tl) detector (Ludlum Model 44-20) coupled with a rate meter (Ludlum Model 2350-1); (4) Large-area low-energy NaI(Tl) detector (Thermo Fisher G5 Fiddler or a Bicron 5XM) coupled with a rate meter (Ludlum 2221 or Ludlum Model 2350-1); or (5) small area friskers (Ludlum 26-1 for beta/gamma, Ludlum Model 3 with 43-92 for alpha) and remove any particles located.
 - b. Survey concrete areas using the gas flow proportional floor monitor must meet a dual clearance criteria: (1) removal of any and all particles located thereon; and (2) be less Acceptable Surface Contamination Levels set forth in Table C-1 attached hereto.
 - c. Collect soil samples and obtain laboratory analysis. The Closure Criteria is met if the activity of the sample is equal to or less than 10 pCi/g Cesium and 2.1 pCi/g Americium corresponding to a Total Effective Dose Equivalent of 25 mrem/yr using conservative default assumptions.

4. <u>City Property Restoration</u>

- a. Restore contours and grades as described in the Work.
- b. Restore vegetation to disturbed areas.
- c. Repair erosion or other damage to restored areas occurring within 1 year after completion of the Restoration. If any areas are repaired during the 1 year period, then the 1 year period shall restart for the area that is repaired.

TABLE C-1
Acceptable Surface Contamination Levels

Radionuclide ¹	Average ^{2,3,6}	Maximum ^{2,4,5,}
U-natural, U-235, U-238, and associated decay products except Ra-226, Th-230, Ac-227, and Pa-231	5,000 dpm alpha/ 100 cm ²	15,000 dpm alpha/ 100 cm ²
Transuranics, Ra-223, Ra-224, Ra-226, Ra-228 Th-natural, Th-228, Th-230, Th-232, U-232, Pa-231, Ac-227, Sr-90, I-125, I-126, I-129, I-131, and I-133	1,000 dpm/ 100 cm ²	3,000 dpm/ 100 cm ²
Beta-gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above	5,000 dpm beta- gamma/ 100 cm ²	15,000 dpm beta-gamma/ 100 cm ²

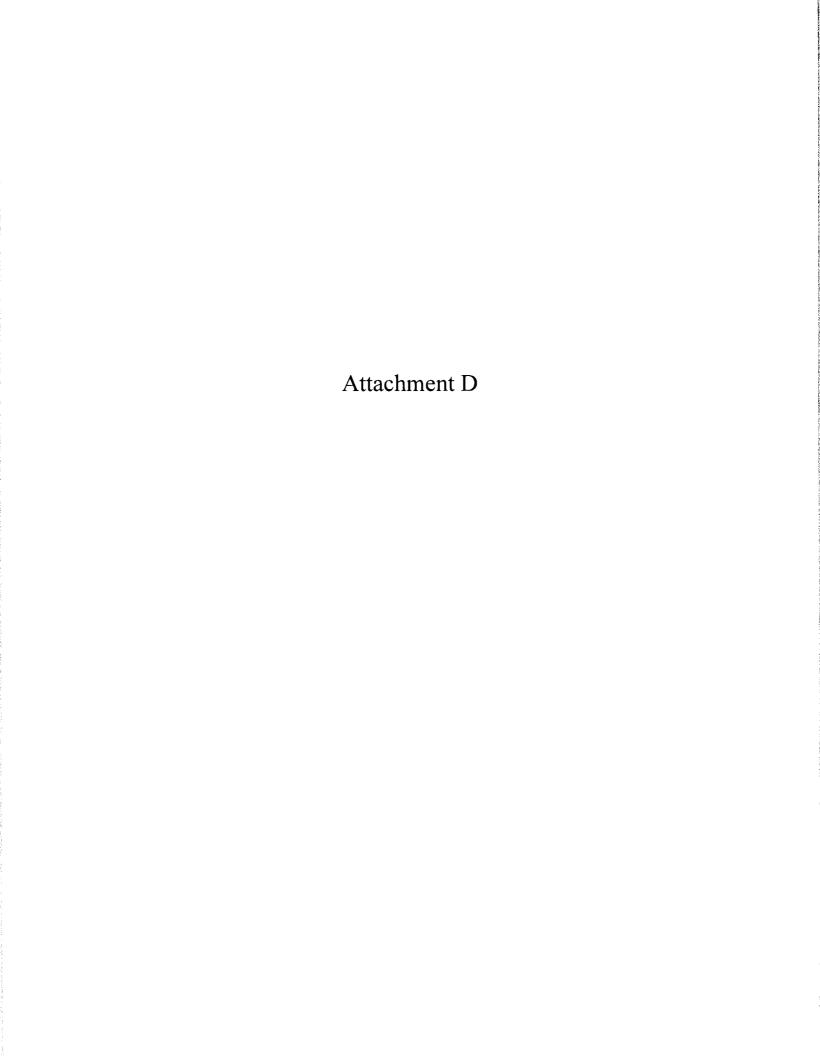
¹ Where surface contamination by both alpha- and beta-gamma-emitting radionuclides exists, the limits established for alpha- and beta-gamma-emitting radionuclides should be applied independently.

² As used in this appendix, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

³Average contamination level shall not be measured over more than 1 square meter. For objects of less surface area, the average shall be derived for each object.

⁴The maximum contamination level applies to an area of not more than 100 square centimeters (cm²).

⁵The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters shall not exceed 0.2 millirad/hour at 1 cm and 1.0 millirad/hour at 1 cm, respectively, measured through not more than 7 milligrams/cm² of total absorber.



Remediation Agreement – Attachment D Disposal Facilities for Wastes

Wastes resulting from the Work under the Remediation Agreement shall be disposed of at one of the following facilities in accordance with all Applicable Laws:

- 1. Waste Control Specialists, Inc. Facility located at 9998 State Highway 176 West, Andrews, Andrews County, Texas 79714.
- 2. Waste Management, Inc. Coastal Plains Recycling and Disposal Facility located at 21000 East Hwy 6 Alvin, TX 77511.