REQUEST FOR EQUITABLE ADJUSTMENT

Change Proposal Re: Jacobsville Neighborhood Soil Contamination Site

Operable Unit 2, Project 5S

Evansville, Vanderburgh County, Indiana

Enviroworks, LLC

May 13, 2020

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CERTIFICATION

I certify that the request is [made](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=180b662c286174212c790cce449b7af7&term_occur=999&term_src=Title:48:Chapter:2:Subchapter:H:Part:252:Subpart:252.2:252.243-7002) in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

# EXECUTIVE SUMMARY

Enviroworks LLC, as a subcontractor of APTIM Environmental & Infrastructure LLC, entered into a contract with the U.S. Army Corps of Engineers to perform remedial action to remove lead-contaminated soil at the Jacobsville Neighborhood Soil Contamination site in Evansville, Indiana, from January-December of 2019. Enviroworks, LLC had a Firm Fixed Price Contract with Aptim, while Aptim had a Cost-Plus Contract with USACE; this created different work strategies for both Enviroworks and Aptim. While Aptim benefited from having a billable crew onsite, Enviroworks benefited from completing the project as quickly as possible. Aptim, in trying to justify its onsite personnel, and to keep them billable, unfairly stacked on requirements and processes to the execution of the work, such as: PPE requirements, the delivery of wet and otherwise unsuitable backfill soil and topsoil, staging area requirements, and APTIM’S requirement that Enviroworks provide an onsite Health & Safety Officer resulted in additional field overhead and direct expenses, i.e. a change to the work within the general scope of work. In addition, unusually severe weather (rain) halted work on 24 days of the project. The work was subsequently completed on December 13, 2019. FAR 52.243-1 governing Changes to Fixed-Price Contracts (48 CFR § 52.243-1) is relevant to the completion of Task 1: “General Conditions for Remediation”; Task 2: “Mobilization”; Task 3: “Demobilization”; Task 4: “Project Planning”; Task 5: “Project Management and Reporting”; Task 6: “Community Involvement and Engagement”; Task 7: “Hosting and Maintenance of CLEANUP Database”; Task 9: “Recordkeeping”, and Task 10: “Remedial Action Completion Report (RACR) and Air Monitoring Report”, as described in the Performance Work Statement (Appendix A). Task 8: “Remedial Action Implementation for 150 Properties” was Cost Plus Fixed Fee as defined by FAR 16.306. The FAR “Changes” clause (48 CFR § 52.243-1) allows for changes made inside the scope of work as to description of services performed, and this was the case with the additional expenses incurred by Enviroworks. In addition, the FAR “Differing Site Conditions” (48 CFR § 52.236-2) is relevant to the backfill and staging area expenses.

The total cost of the additional expenses on this project relating to PPE requirements, an onsite Health & Safety Officer, Backfill and Staging Area expenses is stated by Enviroworks to be $552,613.18 and adjustment is requested in this amount.

REQUEST FOR EQUITABLE ADJUSTMENT

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## Statement of Contract Requirement

The contract between Enviroworks and the APTIM was for soil remediation at 150 residential properties in Evansville, Indiana. Soil contaminated by lead and arsenic was found at multiple sites in Evansville, within a variety of land uses; this project was restricted to the remediation of residential properties and properties to which families and children have frequent access such as parks, schools, playgrounds, and day care facilities. Industries in the location from the 1880s to the 1950s are believed to have been the source of the contamination. Enviroworks was contracted by APTIM to remove and replace contaminated soil at various residential sites and according to the Performance Work Statement (PWS) (see Appendix A) to follow EPA guidance (Superfund) to remediate individual properties by hauling contaminated soil to a landfill, replacing it with clean backfill and topsoil and replacing contaminated sod with new sod.

The PWS states: “The Contractor shall provide all personnel, labor, equipment, tools, transportation, and supplies necessary to perform the work described herein and meet the performance objectives. The Contractor shall provide personnel trained as required by the Occupational Safety and Health Administration (OSHA) and all other applicable federal and state regulations.” Enviroworks complied will all contract requirements and finished the job with reports furnished to USACE and EPA as indicated in the PWS.

## Changes to Contract Requirements

Contract costs were escalated as described below for the following reasons: 1.) additional PPE and the need for an on-site Health & Safety officer were required by Aptim after the contract began, and do not appear in either the PWS provided by APTIM or the bid provided to APTIM by Enviroworks and 2.) Additional costs related to the wet backfill, i.e. the staging area personnel are not considered in the original contract and are not customarily necessary.

The PPE required by APTIM had been determined in advance (May 16, 2019; see letter in Appendix B) to be unnecessary by a Certified Industrial Hygienist (see Appendix B). The additional expense for PPE and time for donning them was caused by the insistence of the APTIM project manager, and APTIM health and safety officer in spite of our previous documented assurance from an independent industrial hygienist that such coverings were not necessary for this job. APTIM’s Health & Safety officer performed Personnel Exposure Assessments (PEA) and all of them fell below the EPA’s threshold for exposure to lead. Nevertheless, APTIM chose not to relax the requirement to wear Tyvek suits, gloves and booties. Based on the laboratory data from the PEA and the confirmation of the independent hygienist, Enviroworks insisted that the additional PPE was not necessary. However, APTIM mandated that Enviroworks employees working on excavation activities wear the additional PPE, despite data that supported the discontinuation of PPE use. Additional cost was incurred by Enviroworks for purchasing the PPE and the time it took employees to don and remove the PPE. PPE was removed during morning and afternoon breaks, at lunch, and each time they left the containment area for things such as bathroom and other unforeseen breaks. This was a minimum of eight donning and removals of PPE per employee; which significantly impacted production. The cost of the PPE is reflected in Appendix C.

As a subcontractor to APTIM, Enviroworks performed project activities under APTIM’s Health & Safety Plan. The addition of a full-time on-site Health & Safety officer was not initially required, was unexpected by Enviroworks, was later mandated by APTIM per direction by USACE, and was not included in the original proposal or Performance Work Statement, nor specified in the contract. Enviroworks is requesting reimbursement for the cost to fill the position (see Appendix D for expenses).

The additional time and personnel required to work with the saturated backfill were caused by the insistence of the APTIM project manager that the work proceed, even when the soil delivered appeared not to have been screened properly, and was at times delivered in an unsuitable state (see email and soil images in Appendix E). With regard to the unsuitable backfill, APTIM directed Enviroworks to perform work using backfill (sub-soil) that was not suitable to use. Boulder-size rocks and clumps of weeds needed to be screened out. Topsoil also was delivered wet and unscreened. Enviroworks determined that backfill costs (see Appendix F), based on extra time needed to complete work, were 30% higher than original costs.

The additional expense of the staging area personnel (see Appendix G) also was not anticipated by Enviroworks and was made necessary by the unsuitable condition of the backfill and topsoil delivered. Enviroworks has included the cost of one operator for 96 days; all equipment costs associated with the task have been allocated to project costs.

Applicable FAR Clauses.

With regard to the costs of PPE requirements that exceeded EPA requirements, the unplanned addition of an on-site Health & Safety officer, Enviroworks considers these actions to constitute changes to the original contract that were unanticipated. The FAR “Changes” clause, 48 CFR § 52.243-1 (a) (1) states:

If the requirement is for services, other than architect-engineer or other professional services, and no supplies are to be furnished, substitute the following paragraph (a) for paragraph (a) of the basic clause: (a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following: (1) Description of services to be performed.

With regard to the cost of time spent in dealing with wet backfill, and the additional staging area cost associated with the wet backfill, Enviroworks considers these to be site conditions that differed significantly from what was indicated in the Performance Work Statement. The FAR “Differing Site Conditions” (48 CFR § 52.236-2) states:

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in [work](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=4e844c537457149a27a94427b43e7320&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) of the character [provided](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=80fb588108eda34822560ae27fdc9a0d&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the [work](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=4e844c537457149a27a94427b43e7320&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) under this contract, whether or not [changed](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=11f198441c6d337a8f51a9776f671643&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) as a result of the conditions, an equitable adjustment shall be [made](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=0cdc8731f17aae57ac31e77f1ab0e2d4&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if [made](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=0cdc8731f17aae57ac31e77f1ab0e2d4&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) after [final payment](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=6d135e7ecb5a1832f31e69bb4fbe0354&term_occur=999&term_src=Title:48:Chapter:1:Subchapter:H:Part:52:Subpart:52.2:52.236-2) under this contract.

## Work Performed Exceeding Contract Requirements

Personal Protective Equipment. Requirements for Personal Protective Equipment (PPE) were exceeded on the project at an unnecessarily high cost due to APTIM’s instance on wearing full PPE (Tyvek, gloves and booties). Enviroworks was a sub-contractor to APTIM and was therefore bound by APTIM’s health and safety requirements provided to continue working on the project. The soil contaminants included lead and arsenic, and OSHA mandates the employer provide a safe working environment. APTIM’s H&S officer on the job site performed OSHA “Gold Standard” Personnel Exposure Assessments, all of which fell below the EPA’s threshold. APTIM nevertheless at that time did not relax their initial requirement for Tyvek suits, gloves and booties, while Enviroworks, backed by the laboratory data taken by a third-party Certified Industrial Hygienist (CIH), insisted that employees could cease using the additional PPE. APTIM, disregarding the supporting data, did not relent, which unjustifiably added costs for Enviroworks. The costs for the PPE are captured in the cost for the PPE equipment and in the time taken to don on and off. PPE is donned on and off at the beginning of the day, after lunch, after breaks (mid-morning, and mid-afternoon) and any time equipment was being moved from one residential location to another and decontaminated at the end of the project (see images in Appendix H). According to the independent, third-party Certified Industrial Hygiene consultant Stacy Savage, MS, CIH of Savage Consultants LLC, the less comprehensive type of PPE Enviroworks originally had expected to use on the project was correct given the nature of the project (see Appendix B, referenced above, for correspondence from the CIH regarding the PPE).

Health & Safety Officer Requirement.As a subcontractor to APTIM, Enviroworks performs project activities under APTIM’s Health & Safety Plan. APTIM mandated that Enviroworks provide an on-site Health & Safety officer, an expense that was not included in our proposal, nor was it required in the contract. Enviroworks requests that APTIM reimburses Enviroworks the cost to fill the position.

Backfill. USACE and APTIM directed Enviroworks to perform work using backfill material (sub-soil) and topsoil that was unsuitable for the purpose. Furthermore, sub-soil and topsoil was delivered wet and at times appeared to be unscreened. (Backfill and topsoil was kept covered at night and during the day when rain threatened; see images in Appendix E.) As the Performance Work Statement (PWS) indicates (from Appendix G of the PWS: p. 8): “Backfill material shall be free from rocks larger than 3 inches, roots, peat and other organic matter, ashes, cinders, trash, debris, and other deleterious materials. Backfill containing more than 10 percent gravel, stones, or shale particles is unacceptable.” This requirement was not met and the backfill was in fact unacceptable by the preceding definition. This unsuitable material was used throughout the project, adding costs based on extra time taken to deal with the unsuitable material resulting in 30% higher projected costs.

Staging Area.It also was necessary for Enviroworks to keep an operator in the job’s staging area at all times to work the backfill, which at times was delivered wet, making it much heavier and difficult to handle, and it required to be spread out for drying, turned, spread out for drying, and subsequently stock piled. Having a full-time staging area operator position was not considered in the proposal nor indicated in the contract. Additionally, the fact that the sub-soil and topsoil would be delivered wet and unscreened was not anticipated by Enviroworks. We have included only the cost of this operator for 96 days; all equipment costs associated with Task 8 “Remedial Action Implementation” as considered for this REA have been allocated to project costs.

Rain delay. The project also endured a rain delay. Work on the project was halted on 24 days. Note: the 24 days is not 24 individual ten hour working days, it is a summation of total hours that work was stopped due to rain, which is the equivalent of 24 days.

different days due to unusually heavy rain for the geographic location and time of year. Because the critical path to completion in a project that requires removal and replacement of soil and the sod that covers it requires constant access to areas exposed entirely to the elements, the extraordinarily heavy rain and subsequent area flooding brought work to a standstill on certain days. The rainy days also are implicated in the condition of the backfill. It is not our intention to seek compensation for the actual rain delay as governed by FAR 52.249-8 ( c ), but rather for the demonstrable delay and expense occasioned by the delivery of saturated backfill, which was extremely difficult to work and required extra time and personnel as described in the Computation of Costs below. All costing evidence is available in its entirety.

## Computation of Costs of Work Exceeding Contract Requirement

The cost for the PPE requirement, including labor for time to don on and off the PPE, per diem, equipment (2,016 hours), and materials, is $175,866.63. The cost of the on-site Health & Safety officer at 72 10-hour workdays plus fringe, overhead, G&A and Enviroworks fee/profit is $41,831.51. The cost of additional Staging Area personnel (G1 Equipment operator) at 96 10-hour workdays plus fringe, overhead, G&A and Enviroworks fee/profit is $88,783.46. The additional cost of Backfill crew to cope with wet backfill based on percentage of backfill at total 246 labor hours plus fringe, overhead, G&A and profit fee ($178,425.20), 4,536 equipment hours, per diem and materials is $246,131.58. The total cost under consideration is therefore $552,613.18 (see Appendix I).

### Segregation of costs.

The additional costs have been identified by Enviroworks, segregated from the general cost of the project and detailed in the attached spreadsheets.

### Internal controls.

The cost of the additional work was fully documented in real time when the additional work was incurred by Enviroworks, and pertinent documents and images are included in the Appendices. The Project Work Statement is included in Appendix A of this document.

# APPENDICES

1. Performance Work Statement
2. CIH Correspondence Regarding PPE
3. PPE Expenses Spreadsheet
4. Health & Safety Officer Expenses Spreadsheet
5. Email and Images re: Topsoil and Backfill
6. Backfill Expenses Spreadsheet
7. Staging Area Expenses Spreadsheet
8. PPE/Decontamination Images
9. REA Total Expenses Summary Spreadsheet

APPENDIX A: Performance Work Statement

[PWS\_Jacobsville\_NWO MEGA MATOC\_ 18Jun2019.pdf](file:///C:\Users\Jacks\Desktop\Enviroworks\PWS_Jacobsville_NWO%20MEGA%20MATOC_%2018Jun2019.pdf)

APPENDIX B: CIH Correspondence Regarding PPE

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

APPENDIX C: PPE Expenses Spreadsheet

A screenshot of a cell phone

Description automatically generated

APPENDIX D: Health & Safety Officer Expenses Spreadsheet

A screenshot of a cell phone

Description automatically generated

APPENDIX E: Email and Images of Topsoil and Backfill

A screenshot of a social media post

Description automatically generated

A close up of a rock

Description automatically generated

Image 1 included with 7/19/2019 email

A close up of an animal

Description automatically generated

Image 2 included with 7/19/2019 email

A close up of a rock

Description automatically generated

Image 3 included with 7/19/2019 email

A rocky area

Description automatically generated

Image 4 included with 7/19/2019 email

A pile of dirt

Description automatically generated

Image 5 included with 7/19/2019 email

A car parked on the side of a dirt field

Description automatically generated

Backfill pile covered with tarp against rain

A group of people on a dirt road

Description automatically generated

Subsoil covered with tarp to protect from rain

A close up of a rock

Description automatically generated

Subsoil with measured clumps

A picture containing outdoor, grass, machine, field

Description automatically generated

Subsoil being delivered

A pile of dirt

Description automatically generated

Subsoil stockpile

A close up of a rock

Description automatically generated

Subsoil with clumps; 8.8 moisture reading

A close up of a rock

Description automatically generated

Subsoil with measured clumps 2

A picture containing outdoor, little, small, dirt

Description automatically generated

Topsoil delivered to a property address

A close up of a rock

Description automatically generated

Topsoil delivered to a property address 2

A close up of a rock

Description automatically generated

Topsoil with measured clumps, showing debris

A close up of a fish

Description automatically generated

Topsoil with measured clumps

A close up of a dirt field

Description automatically generated

Topsoil stockpile 1

A close up of a rock

Description automatically generated

Topsoil stockpile 2

A close up of a rock

Description automatically generated

Topsoil with 8.9 moisture reading

A close up of a rock

Description automatically generated

Topsoil with 9.9 moisture reading

A dirt hill

Description automatically generated

Topsoil with clumps 1

A close up of a rock

Description automatically generated

Topsoil with clumps 2

A picture containing outdoor, rocky, field, horse

Description automatically generated

Topsoil with debris 1

A dirt road

Description automatically generated

Topsoil with debris 2

A close up of a dirt field

Description automatically generated

Topsoil with debris 3

A pile of dirt in a rocky area

Description automatically generated

Topsoil with debris 4

A close up of a hill

Description automatically generated

Topsoil with debris 5

A close up of a hill

Description automatically generated

Topsoil with debris 6

A close up of a rock

Description automatically generated

Topsoil with debris 7

APPENDIX F: Backfill Expenses Spreadsheet

A screenshot of a cell phone

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APPENDIX G: Staging Area Expenses Spreadsheet

A screenshot of a cell phone

Description automatically generated

APPENDIX H: PPE/Decontamination Images

A car parked in the dirt

Description automatically generated

A picture containing truck, building, indoor, food

Description automatically generated

A picture containing snow, building, person, digger

Description automatically generated

A picture containing building, truck, sitting, old

Description automatically generated

A person standing in front of a building

Description automatically generated

A picture containing building, truck, sitting, snow

Description automatically generated



Appendix I: REA Summary Expenses Spreadsheet

A picture containing screenshot

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