

HertzWu, Sara

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**From:** ADAMAS CONSTRUCTION And DEVELOPMENT SERVICES PLLC <adamas.mt.406@gmail.com>  
**Sent:** Thursday, October 31, 2019 12:08 PM  
**To:** HertzWu, Sara  
**Subject:** Fwd: EPA Call Tomorrow  
**Attachments:** EPA Call exhibits.pdf

Chris,

According to § 503.9 General definitions.

(a) Apply sewage sludge or sewage sludge applied to the land means land application of sewage sludge.

Our Company did not engage in this activity,

1.) The contract to pump, haul and land apply sludge was between the NCUC and IHS as per the attached contract that has been sent to EPA more than once. (see attached exhibit "A")

2.) IHS specifically reiterated "reiterated that NCUC is responsible for the sludge removal work and that IHS's relationship isn't with ADAMAS PLLC for this project, in the IHS pre-construction meeting minutes also sent to EPA. (See attached exhibit "B") IHS also goes on to point out in the minutes "the land that hasn't been tested in accordance with the EPA 503 requirements and that NCUC is ultimately responsible for following the requirements." As Sara HertzWu pointed out in her last email, ***"There is no provision of the regulation that would transfer any responsibility to maintain the records to another entity."***

3.) Adamas and myself were at all times, SUBCONTRACTORS, contracted to operate as a project manager and technical consultant. We were told at all times that NCUC would be motoring the contract and complying with EPA regulations. We were at all time in a subordinate position and was limited in our communications and abilities, as evidenced by the attached letter from NCUC to our company. (See attached Exhibit "C")

4.) Under our duty as a subcontractor, we sub-contracted with the land owner to apply the sludge to his own land. (See attached exhibit "D")

According to § 503.10 Applicability.

(a) This subpart applies to any person who prepares sewage sludge that is applied to the land, to any person who applies sewage sludge to the land, to sewage sludge applied to the land, and to the land on which sewage sludge is applied.

According to § 503.9 General definitions.

q) Person is an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

(r) Person who prepares sewage sludge is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

The NCUC is the person responsible for the project, that are also the person who generates sewage sludge during the treatment of domestic sewage. We have no partnership with the NCUC, we are not and was not an agent or employee of the NCUC.

Tom Robinson is the person who applies the sewer sludge to his own land. We do not meet this definition either.

According to 503.17 Recordkeeping

(a) Sewage sludge. (1) The person who prepares the sewage sludge in § 503.10(b)(1) or (e) shall develop the following information and shall retain the information for five years:

As NCUC meets this description and not our company we had no obligation under this section.

(ii) The person who applies the bulk sewage sludge shall develop the following information and shall retain the information for five years.

As Tom Robinson was the applier he meets this description and not our company, therefor we had no obligation under this section.

These clearly point out that our company had no record keeping obligations and NCUC was ultimately responsible for complying with all 503 regulations.

The two main allegations from Sara HurtzWu are; " the records were not maintained and you did not respond to the 308 request, thus providing the basis for our complaint."

As demonstrated above and according to her own word NCUC ultimately had the responsibility to comply with all 503 regulation and "There is no provision of the regulation that would transfer any responsibility to maintain the records to another entity." NCUC and Tom Robinson were the persons who prepared and applied the sludge, they have a responsibility to maintain these record not our company.

She wen on to further say in her October 25th email; "You are required to provide an answer to the complaint within 30 days from the receipt of the complaint" and contends we did not provide a response as the second basis for her complaint. please find the attached response sent to EPA on October 3, 2018, where it specifically states "We reserve the right to dispute any obligation to respond" and further states we requested the information from NCUC. (See attached "E")

This clearly shows the allegation that we fail to respond is baseless at best.

Thank you for your assistance with this matter.

--

**Nathan Pierce - Owner/General Manager**

ADAMAS Construction & Development Services PLLC

PH: 1-406-697-3022

EMAIL: [ADAMAS.MT.406@GMAIL.COM](mailto:ADAMAS.MT.406@GMAIL.COM)

[www.biomicrobicsmontana.com](http://www.biomicrobicsmontana.com)

CONTRACTOR REGISTRATION# 228703

*~ Building the Future with the Enviroment in Mind ~*

~ GENERAL CONTRACTOR - COMMERCIAL - INDUSTRIAL - RESIDENTIAL - MUNICIPAL ~

--

**Nathan Pierce - Owner/General Manager**

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CONTRACTOR REGISTRATION# 228703

*~ Building the Future with the Enviroment in Mind ~*

~ GENERAL CONTRACTOR - COMMERCIAL - INDUSTRIAL - RESIDENTIAL - MUNICIPAL ~

10:00 Meeting

## 00500 - AGREEMENT BETWEEN NCUC AND SFC

This Agreement, dated May 11, 2016, between The NCUC, and SFC, in consideration of the mutual covenants set forth, agree as follows:

### ARTICLE 1: WORK

1.1 NCUC shall complete all work as specified or indicated in the fixed price Documents. The work is generally described as removal and land application of bio-solids from the Lama Deer wastewater treatment facility to identified agricultural lands. An agreement must be in place before application may begin. It is the responsibility of NCUC to negotiate the application of the bio-solids with the land owner, and to apply the bio-solids in a method that is approved by Northern Cheyenne Environmental Protection Department (NCEPD), Tribal laws and regulations, and EPA requirements.

### ARTICLE 2: THE PROJECT

2.1 The project for which the work under the fixed price documents may be whole or only a part is generally described as follows: IHS Project B116N39 - Lama Deer Lagoon Renovation. Cell 2 sludge removal.

### ARTICLE 3: ENGINEER

3.1 The project has been designed by: Billings Area Indian Health Service ("SFC Engineer") who is to act as SFC's representative, assume all duties and responsibilities and have the rights and authority assigned to SFC Engineer in the fixed price documents in connection with completion of the work in accordance with the fixed price documents.

### ARTICLE 4: FIXED PRICE TIME

4.1 Time of the essence. All the time limits for milestones, if any, substantial completion, and readiness for final payment as stated in the fixed price documents are of the essence of the fixed price agreement.

4.2 Days to achieve substantial completion: The work will be substantially complete within 14 consecutive calendar after the date when the fixed price time commences to run as provided in Article 24 of the General Conditions.

4.3 SFC and NCUC recognize that time is of the essence for this agreement and work is to be completed as described in 4.02.

### ARTICLE 5: FIXED PRICE

5.1 SFC shall pay NCUC for completion of the work in accordance with the fixed price documents an amount equal to the sum of the established unit price for each separately identified item of unit price work times the quantity of that item that is constructed and accepted. Unit prices are those listed in the fixed price proposal form. Estimated quantities used for fixed price proposal purposes are not guaranteed. Payment will be for actual quantities as determined by the SFC Engineer in accordance with Article 35 of the General Conditions.

### ARTICLE 6: PAYMENT PROCEDURES

6.1 Payment procedures shall be in accordance with the General Conditions.

### ARTICLE 7: NCUC'S REPRESENTATION

7.1 NCUC has fulfilled all representations as listed in Section 0300, Article 3, I A through J inclusive.

### ARTICLE 8: FIXED PRICE DOCUMENTS:

#### 8.1 Contents

A. The Fixed price documents consists of all pages of the following:

1. This Agreement.
2. Fixed Price Proposal.
3. General Conditions.
4. Supplementary Conditions.
5. Labor Provisions.
6. General Provisions listed in the Table of Contents.
7. Technical Provisions listed in the table of contents.
9. Drawings consisting of one sheet.
10. Addenda (numbers \_\_\_\_\_ to \_\_\_\_\_).

11. Exhibits to this agreement:

- a. NCUC's Fixed Price Proposal.
- b. Documentation submitted by NCUC prior to proposal agreement, and approval by SFC and NCUC.

12. The following, which may be executed and delivered on or after Effective Date Agreement, are not attached:

- a. Written Amendments.
- b. Work Change Directives.
- c. Change Orders
- d. Field Orders

B. The documents listed in paragraph 8.1.A. are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Agreement Documents other than those listed above in this Article 8.

D. The Agreement Documents may be amended to provide for additions, deletions, and revisions in the work or to modify the terms and conditions thereof by a change in proposal and work. The requirements of agreement documents may be supplemented, and minor variations and deviations in the work may be authorized by a Field Order, Engineer's approval of a Shop Drawing, and/or Engineer's written interpretation or clarification only after SFC Director's approval.

### ARTICLE 9: MISCELLANEOUS:

9.1 Terms: Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated.

06301 - FIXED PRICE PROPOSAL FORM

Item	Description	Quantity	Units	Unit Price	Item Price
1.	Mobilization	1	ls	51,000.00	51,000.00
2.	Sludge Removal	1,000,000	gal	\$0.091	91,000.00
3.	Sludge Transport	1,000,000	gal	\$0.048	68,000.00
4.	Sludge Application	1,000,000	gal	\$0.029	29,000.00
Total Fixed Price Proposal:					239,000.00

LDV  
President, Northern Cheyenne Tribe

05.11.2018  
Date

Sherril Bennett  
Director, NCUC

5/11/18  
Date

James White  
Director, SFC

5/11/18  
Date

Note: Quantities are estimated. Payment will be based on actual quantities installed. Payment beyond Estimated quantities are not guaranteed. Approval is required before NCUC will Exceed 1,000,000 gallons of sludge removal, transport, or application. All fixed price proposals will be automatically rounded up to the nearest \$100 dollars.

in the General Conditions.

IN WITNESS WHEREOF, SFC and NCUC have signed 2 copies of Agreement. One counterparts have been delivered to SFC, and one to NCUC. All portions of the fixed price documents have been signed or identified by SFC and NCUC.

This Agreement will be effective on 5/11/18 (which is the effective date of the Agreement).

NCUC: Sheri Bennett

SFC: James White

By: Sheri Bennett  
Signature of Authorized Representative

By: James White  
Signature of Authorized Representative

Address for giving notices:

Northern Cheyenne Indian  
P.O. Box 747, Jamez, MT 59023  
Phone: (406) 477-6118  
Fax: (406) 477-6779  
E-mail: ncuc@angweb.net

Address for giving notices:

Indian Health Service  
2900 4th Ave, Billings MT 59101  
Phone: 406-247-7096  
Fax: \_\_\_\_\_  
E-mail: Jim.White@ihs.gov

Name: Sheri Bennett  
Title: General Manager  
Address: P.O. Box 747

Name: Jim White  
Title: SFC Director  
Address: 2900 4th Ave

Billings, MT 59101  
Phone: 406-477-6118 Fax: (406) 477-6779  
E-mail: ncuc@angweb.net

Billings, MT 59101  
Phone: 406-247-7096 Fax: \_\_\_\_\_  
E-mail: Jim.White@ihs.gov

END OF SECTION



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service  
Indian Health Service

**Date:** May 18, 2018  
**From:** James Courtney, EIT  
**Subject:** Pre-Construction Meeting Minutes  
**Project:** BI 16-N39: Lame Deer Lagoon Sludge Removal  
**To:** Record

Billings Area  
Indian Health Service  
2900 4th Avenue North  
P.O. Box 36600  
Billings, MT 59107

A Pre-Construction meeting for the above referenced project was held on Thursday May 17<sup>th</sup>, 2018 from 1300 to 1500 hours at the Billings Area IHS SFC conference room in Billings, MT. The meeting also addressed the pre-construction of the Northern Cheyenne Scattered Housing work. Quentin Allen led the portion of the meeting covering the pre-construction for the Scattered Housing work.

The following were in attendance:

James Courtney, IHS, Project Engineer  
Jim White, IHS SFC Director  
Quentin Allen, IHS Engineer  
Jason Schneider, IHS Engineer  
George Cummins, IHS Construction Inspector  
Sheri Bement, Northern Cheyenne Utilities Commission (NCUC) General Manager  
Dion Killback, NCUC Attorney  
Nathan Pierce, Subcontractor to NCUC / ADAMAS PLLC  
Michelle Pierce, Affiliate of ADAMAS PLLC

In addition to the attached Pre-Construction Meeting Agenda, the following items were discussed:

- I stated that because the project is funded by the EPA, the IHS is restricted for how the funds may be spent.
- I reiterated that NCUC is responsible for the sludge removal work and that IHS's relationship isn't with ADAMAS PLLC for this project.
- Nathan Pierce asked about what the process would be if additional sludge would be required to be removed. I responded that the agreement requires a notification from NCUC when 90% of the sludge is removed and that the possibility of additional sludge being removed could be addressed at that time.
- I stated that soil testing should be considered if the sludge will be applied to land that hasn't been tested in accordance with the EPA 503 requirements and that NCUC is ultimately responsible for following the requirements.
- I stated that Sheri, Nathan, and I visited the site on 5/16/18 and that the sludge removal plan appeared to be appropriate.
- At the conclusion of addressing the items in the agenda, there were no questions.

If there are any questions or additional comments, please contact me at (406) 247-7094.

Attachments: Pre-Construction Meeting Agenda

James Courtney, EIT

CC: Jim White, PE, Billings Area IHS, SFC Director  
Project File: BI 16-N39

# Lame Deer Lagoon Sludge Removal

IHS Project: BI 16-N39

## PRE-CONSTRUCTION MEETING AGENDA

May 17, 2018

### INTRODUCTIONS:

### CONTACTS:

#### Project Engineer / Manager:

James Courtney, EIT  
Billings Area Indian Health Service  
2900 4<sup>th</sup> Ave. N.  
Billings, MT 59101  
James.Courtney@IHS.gov  
(406) 247-7094

#### IHS SFC Director:

Jim White  
Billings Area Indian Health Service  
2900 4<sup>th</sup> Ave. North  
Billings, MT 59101  
Jim.White@IHS.gov  
(406) 247-7096

#### IHS Engineer:

Quentin Allen, PE  
Billings Area Indian Health Service  
2900 4<sup>th</sup> Ave. N.  
Billings, MT 59101  
Quentin.Allen@IHS.gov  
(406) 247-7092

#### Northern Cheyenne TERO Office:

(406) 477-6287

#### Construction Inspector:

George Cummins  
Lame Deer Service Unit  
Indian Health Service  
George.Cummins@IHS.gov  
(406) 477-4420

#### NCUC General Manager:

Sheri Bement  
Northern Cheyenne Utilities Commission  
Bement.Sheri@gmail.com  
(406) 208-8647

#### Subcontractor:

Nathan Pierce  
ADAMAS PLLC  
16550 Cottontail Trail  
Shepherd, MT, 59079  
adamas.mt.406@gmail.com  
(406) 697-3022

### PROJECT OVERVIEW:

- Project funded by EPA
- The Fixed Price Agreement is between the Northern Cheyenne Tribe and the Indian Health Service.
- Project Duration: 60 Days
- Date of Substantial Completion: 14 consecutive calendar days after notice to proceed

#### PROJECT SCOPE

- Removal, transport, and application of 1,000,000 gal of sludge from Cell #2 of the Lame Deer lagoon



**REVIEW OF PROJECT CONTRACT DOCUMENTS:**

- NCUC and any of NCUC's Subcontractors doing work on this project are required to obtain applicable registration with the Northern Cheyenne Tribal Employment Rights Office ("TERO").
- Storage areas. Must be obtained and paid for by NCUC. Areas shall be authorized or approved by SFC.
- Safety: NCUC will be required to assign a "competent person" to ensure that construction is performed in accordance with ALL OSHA safety requirements. Contractor shall have an accident prevention and safety program.
- Work Days and Hours: Construction work will not be permitted on Saturdays, Sundays, nor on Federal, State, or Tribal holidays, unless approved in writing by Engineer. Notice shall be written at least three days in advance.

**TECHNICAL PROVISIONS:**

- The Construction General Permit (CGP) and the Storm Water Pollution Prevention Plan (SWPPP) is incidental to the project and is to be provided as a submittal to the engineer.  
REFERENCE: <http://water.epa.gov/polwaste/npdes/index.cfm>
- Cleanup of the site and final grading is incidental to the contract.

**PLANS:**

- Existing Utilities: contractor is responsible for locating all existing utilities prior to any excavation.
- Cleanup of the site and final grading is incidental to the contract.

**CONTRACTOR QUESTIONS:****SITE VISIT:**

41877 Hwy 212  
P.O. Box 747  
Lame Deer, MT 59043



Phone: 406.477.6318.6118  
Fax: 406.477.6779  
Email:ncuc@rangeweb.net

June 27, 2018

Mr. Nathan Pierce  
ADAMAS Construction Services  
16550 Cottontail Trail  
Shepherd, MT 59071

RE: Lame Deer Lagoon Project

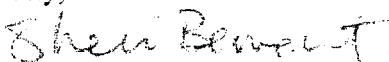
Dear Nathan:

This letter is formal notification that as the Northern Cheyenne Utilities Commission (NCUC) contract with Indian Health Service and our subsequent sub-contract with ADAMAS Construction Services, I am officially notifying of the following:

- 1) I am the NCUC representative that you need to direct all work-related questions or requests to. Further, you are not to go directly to Indian Health Service unless it relates to the day to day work that James Courtney, Project Engineer, can respond to. Any extensions of time, change orders, inquiries or requests for payment must go through me.
- 2) The project will be monitored on a daily basis by me and in my absence by the NCUC Foreman, Raymond Pine. He has the authority to act on my behalf on any matters on a daily basis if I am unavailable.
- 3) Please submit your invoice to me by Friday, June 29, 2018, at 5:00 p.m. for all expenses paid by your company to date with the exception of the mobilization costs. Please provide a copy of all invoices paid, payroll and copies of checks which you are seeking reimbursement for. Every expenditure will require a receipt.
- 4) Please provide proof of NC TERO work permits for each of ADAMAS Employees performing work on this project. If not submitted, NCUC will consider breach of contract.

The drawdown will be submitted on Monday, July 2, 2018. NCUC Board of Commissioners gave a deadline to submit all. If you have any questions, please don't hesitate to contact me. Thank you

Sincerely,

  
Sheri Bement  
General Manager

# Subcontractor Agreement

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THIS AGREEMENT, made this 8th day of August A.D. 2018 by and between **ADAMAS CONSTRUCTION AND DEVELOPMENT SERVICES PLLC** hereinafter called the Contractor, and **Tom Robinson** hereinafter called the Subcontractor.

For the consideration hereinafter named, the said Subcontractor covenants and agrees with said Contractor, as follows:

**FIRST.** The Subcontractor agrees to furnish all material and perform all work necessary to complete the: Receive and apply bio-solid sludge from the frac tanks located at the Lame Deer Lagoons in Lame Deer Montana at an agronomic rate and haul it to the barley field with Pivot line owned or leased by Tom Robinson, in compliance with US 40 EPA 503 regulations. Subcontractor further agrees to prep the field and till the sludge incorporating it into the soil within 6 hour. Must apply to 50 acres at a max application rate of 22,000 gallons per acres.

**SECOND.** The Subcontractor agrees to promptly begin said work as soon as notified by said Contractors. Estimated begin date is 8/8/18. Subcontractor will furnish Contractor with logs for each day of application.

**THIRD.** The Subcontractor shall take out and pay for Workmen's Compensation and Public Liability Insurance, also Property Damage and all other necessary insurance, as required by the Owner, Contractor or by the State in which the work is performed.

**FOURTH.** The Subcontractor shall pay all Sales Taxes, Old Age Benefit and Unemployment Compensation Taxes upon the material and labor furnished under this contract, as required by the United States Government and the State in which the labor is performed.

**FIFTH.** No extra work or changes under this contract will be recognized or paid for, unless agreed to in writing before the work is done or the changes made.

**SIXTH.** This contract shall not be assigned by the Subcontractor.

IN CONSIDERATION WHEREOF, the said Contractor agrees that he will pay to the said Subcontractor, the sum of Fifteen Thousand Dollars (\$15,000.00) for application of the sludge removed from the Lame Deer Lagoon and hauled to Tom Robinsons field and applied at an even rate, said amount to be paid as follows: Contractor shall pay to the said Subcontractor within 7 business days after the Subcontractor shall have completed his work to the full satisfaction of the said contract or Owner and has submitted final invoice to contractor.

The Contractor and Subcontractor for themselves, their successors, executors, administrators and assigns, hereby agree to the full performance of the covenants of this agreement.

IN WITNESS WHEREOF, they have executed this agreement the day and date written above.

Witnesses:

\_\_\_\_\_  
\_\_\_\_\_

Tom Robinson Construction Inc  
Subcontractor

Tom Robinson  
By

Robinson Construction & Development LLC  
Contractor

[Signature]  
By

Stephen R. Brown	Kathryn S. Mahe
Gary B. Chumrau	Alan F. McCormick
Randall J. Colbert	Charles E. McNeil
Justin K. Cole	Emma L. Mediak
Jason M. Collins	Kristen Z. Meredith
Jared S. Dahle	Mark S. Munro
Kathleen L. DeSoto	Robert L. Nowels
Scott W. Farago	J. Andrew Person
Leah T. Handelman	Robert J. Phillips
Elizabeth L. Hausbeck	Anita Harper Poe
Katelyn J. Hepburn	Brian J. Smith
Isaac M. Kantor	Jeffrey B. Smith
Tessa A. Keller	Peter J. Stokstad
Bradley J. Luck	William T. Wagner
Robert C. Lukes	Lee Michael Wilson

October 3, 2018

**Certified Mail Return Receipt Requested**

Jeffery Robichaud, Director  
Water, Wetlands and Pesticides Division  
11201 Renner Boulevard  
Lenexa, KS 66219

Re: Request for Information Pursuant to Section 308 of the Clean Water Act  
(33 U.S.C. § 1318)

Dear Mr. Robichaud:

We represent Mr. Nathan Pierce and Adamas Construction and Development, PLLC, and are in receipt of your letter, dated September 25, 2018, asking Mr. Pierce to respond to an enclosed request for information within 30 days.

We have not yet had the opportunity to review whether Mr. Pierce is obligated to provide a response under the Clean Water Act ("CWA"). We reserve the right to dispute any obligation to respond. However, in an effort to be cooperative, we provide this response.

The Northern Cheyenne Utility Commission (NCUC) was the prime contractor and permit holder on the project referenced in the request for information. Adamas has asked the NCUC to provide the requested technical information. The correspondence with the NCUC is enclosed. Adamas intends to provide a response to you shortly after it receives a response from the NCUC.

As our response requires the input and assistance of the NCUC, we hereby request an additional 60 days to respond to your request for information. Please let us know if such an extension is granted at your earliest convenience.

Very truly yours,

GARLINGTON, LOHN & ROBINSON, PLLP

RE:  
October 3, 2018  
Page 2

J. Andrew Person  
Direct Line: (406) 523-2509  
Email: [japerson@garlington.com](mailto:japerson@garlington.com)

JAP:pjc  
c: Colleen Rathbone, Stephanie DeJong

**From:** ADAMAS CONSTRUCTION And DEVELOPMENT SERVICES PLLC  
**To:** HertzWu, Sara  
**Subject:** Fwd: Modified Agreement NCT - ADAMAS  
**Date:** Thursday, October 31, 2019 12:09:52 PM  
**Attachments:** Lame Deer - Sludge Removal Letter from IHS about Issues and Concerns.pdf

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Sara,

Please find the attached.

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**Nathan Pierce - Owner/General Manager**

ADAMAS Construction & Development Services PLLC

PH: 1-406-697-3022

EMAIL: ADAMAS.MT.406@GMAIL.COM

www.biomicrobicsmontana.com

CONTRACTOR REGISTRATION# 228703

*~ Building the Future with the Enviroment in Mind ~*

~ GENERAL CONTRACTOR - COMMERCIAL - INDUSTRIAL - RESIDENTIAL -  
MUNICIPAL ~



Ms. Sheri Bement  
General Manager  
Northern Cheyenne Utilities Commission  
P.O. Box 747  
Lame Deer, Montana 59043  
August 13<sup>th</sup>, 2018

Billings Area  
Indian Health Service  
2900 4th Avenue North  
P.O. Box 36600  
Billings, MT 59107

Ongoing Issues and Concerns Regarding the Sludge Removal Operation in Lame Deer (BI16-N39)

This letter's purpose is to discuss issues and concerns regarding the sludge removal operation at the Lame Deer Lagoon.

The Lame Deer wastewater lagoon sludge removal work is a phase of a project to renovate the lagoon. The renovation's purpose is to increase the effectiveness of the wastewater treatment. Sludge removal is necessary before the installation of the biodomes. Significant delays with the sludge removal work may result in the biodome installation having to occur in the spring due to winter weather. Discharge compliance issues may occur for a longer duration of time due to a delay.

No logs have been received for the removal of sludge, sludge transport, and sludge application. An updated schedule has not been provided and this has reduced IHS's ability to effectively inspect the work. The most recent schedule specifies that land application would be complete 7/28/18 whereas the application actually began 8/9/18. An estimate for the extent of sludge dewatering was established by testing the total solids content. The average total solids content in the tanks was roughly equal to the original sludge samples taken from the lagoon last year. This indicated that the sludge in the tanks was not dewatered. As a result, the estimated quantity for sludge removed was established as being equal to the sludge in the tanks.

The subcontractor, ADAMAS, claimed the sludge was concentrated to multiple times the original concentration. Some issues with the subcontractor's estimate are as follows:

- Unequal units were being compared as equivalent. Last year, the lagoon's sludge concentration was measured and reported as total solids. The total solids content was approximately 6% (weight of solids / weight of sample). The subcontractor is equating total solids to a centrifuged sample's settled volume divided by the sample volume. The error in this assessment was evidenced by the lab results submitted by IHS being significantly less than the results assumed by the subcontractor.
- The agreement specifications explicitly state that the solids testing shall be reported by total solids content as percentage by weight. *"Solids: Test for total solids and moisture content as a percentage by weight."* The results from the samples IHS took last year were also reported as total solids by percentage weight.
- Sludge quantity estimates by IHS were explicitly stated as being related to volume by dry metric tons. *"Estimated sludge quantity is 840,700 gallons, or 199 dmt based on initial sampling"*. The subcontractor is indicating that a ratio of volumes should be used but has not provided an adequate relationship to total solids content.



- The subcontractor's reported sample results were also not produced from a certified lab. This creates the increased potential for procedural, interpretation, and bias errors with the subcontractor's reported results.
- No logs were provided to add credibility to the subcontractor's estimate.

Below are some of the deficiencies and corresponding portions of the agreement that established the requirements.

No logs have been submitted. The agreement requirement for providing logs is specified in the following:

*33155 – Biosolids Removal and Land Application*

*Part 1 – General*

*1.2 Submittals*

*D. Daily logs of sludge removed, transported, and land applied.*

The agreement requires the submission of updated schedules. The current schedule has not been updated despite multiple requests. An updated schedule is necessary for coordinating inspection.

*01330 – Submittals*

*Part 2 – Products*

*C. NCUC's Construction Schedule: Submit Construction Schedule for distribution prior to preconstruction conference. Submit updated Construction Schedule as necessary.*

Samples are required to be taken prior to removing bio solids. The purpose of the samples is to adhere to EPA regulations for land application. Over a year has passed since the sampling was completed by IHS. The subcontractor has not submitted any lab results to date. The agreement requirement for taking and analyzing samples is specified in the following:

*3.2 Sampling and Testing*

*A. Prior to removing bio solids, NCUC shall obtain samples of bio solids and have the samples tested per applicable EPA regulations.*

*B. Testing to be provided:*

...

The agreement states that SFC may review whether a material is equivalent. The sludge in the tanks was analyzed and compared to the sludge that was sampled last year and no evidence of dewatering was observed. The total solids concentrations were approximately equal. Counting the sludge in the tanks as being equal to a greater volume was assessed to be unacceptable.

*00200 – Instructions to NCUC*

*Article 8 – Substitute and "Or-Equal" Items:*

*"SFC, and NCUC will review submissions for substitute of 'or equal' materials for acceptability"*

The subcontractor raised concerns about the trash content in the lagoons and the presence of vegetation. The agreement states that NCUC is responsible for assessing the lagoon conditions before

submitting the proposal. To IHS's knowledge, the subcontractor was aware of the extent of the vegetation and the likelihood of the lagoon containing trash.

*00300 – Fixed Price Proposal*

*3.01 In submitting this proposal, NCUC Agrees, that:*

*"F. NCUC does not consider that any further examinations, investigations, explorations, tests, studies or data are necessary for the determination of this agreement for performance of the work at the prices(s) proposed and accepted and within the times and in accordance with any other terms and conditions of the fixed price documents."*

The quantities for payment in the agreement were based on gallons.

*01220 – Unit Prices*

*3.2 List of Unit Prices*

*3.2.2 Sludge removal: Sludge removal includes dredging or otherwise removing sludge from bottom of lagoon cell and loading it into vessel for transport to land application site. This item shall be paid per gallon of sludge removed.*

Modifications to quantities for payment should be established by a change order. Based on the lack of evidence of dewatering, acceptance of a change order for dewatering seems unlikely at the present time.

*5.1 NCUC will complete the work in accordance with the fixed price documents for the price calculated in the attached fixed price proposal form.*

*"B. NCUC acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of fixed prices, and final payment for all unit price fixed price proposal items will be based on actual quantities provided, determined as provided in the fixed price documents."*

The subcontractor claimed that a change order was appropriate for a delay due to coordinating an application date with the land owner. The agreement states that NCUC is responsible for the agreement with the landowner accepting the solids. Because NCUC is responsible for the landowner agreement and the agreement should have a time element, IHS does not seem responsible for a delay. Jim White requested a copy of the signed agreement between NCUC and the landowner receiving the sludge 4/13/18 and the agreement has still not been received.

*00500 – Agreement Between NCUC and SFC*

*Article 1: Work*

*1.1 NCUC shall complete all work as specified or indicated in the fixed price Documents. The work is generally described as removal and land application of bio-solids from the Lame Deer wastewater treatment facility to identified agricultural lands. An agreement must be in place before application may begin. It is the responsibility of NCUC to negotiate the application of the bio-solids with the land owner, and to apply the bio-solids in a method that is approved by Northern Cheyenne Environmental Protection Department (NCEPD), Tribal laws and regulations, and EPA requirements.*

Sincerely,



James Courtney, EIT

Cc: project file BI16-N39

James White, PE