



June 30, 2005

Honorable Doug Formon  
City Hall  
515 West Washington Ave.  
Jonesboro, AR 72401

RE: Proposal to Provide Environmental Consulting Services related to Landfill Gas Migration into Buildings Located at the Former City Landfill Facility on Strawfloor Road and Assessment of Migration of Landfill Gas to Neighboring Properties  
FTN No. P4000-05-03 Revised

Dear Mayor Formon:

FTN Associates, Ltd. (FTN) appreciates the opportunity to submit the following proposal to provide environmental consulting services related to potential landfill gas migration assessment at the former City Landfill facility on Strawfloor Road located in Jonesboro, AR (the Project).

Our Basic Services will generally consist of determining the impacts to the City of Jonesboro Sanitation Department facilities located on Strawfloor Road from the former Class I Landfill located at the site and to determine if landfill gas from the former landfill is migrating to neighborhood properties, all as set forth in the printed Scope of Work for Basic Services (Exhibit A) and subject to the Standard Terms and Conditions (Exhibit B) which are attached to this letter. We will also furnish such Additional Services as you may request.

You are expected to furnish us with full information as to your requirements including any special or extraordinary considerations for the Project or special services needed and also to make available all pertinent existing data. In addition, we request that you provide information concerning the potential health and/or physical hazards present at the facility to which FTN employees could be exposed. This information (i.e. Material Safety Data Sheets, etc.) is needed to ensure FTN's compliance with the OSHA Hazard Communication Standard.

Our fee for Basic Services will be based on time and materials using the Client Rates in Exhibit C for services rendered by our principals and employees engaged directly on the Project. The total fee for Basic Services will not exceed \$22,700 without prior approval from you. Any Additional Services will be charged on the basis of time and materials (Exhibit C).

Honorable Doug Formon  
June 30, 2005  
Page 2

We will bill you monthly for Services and Reimbursable Expenses with invoices to be paid within 30 days. The above financial arrangements are on the basis of prompt payment of our bills and the orderly and continuous progress of the Project.

We expect to start our services immediately after receipt of your acceptance of this proposal. As noted in the Project Schedule included in Exhibit A, the initial monitoring events will be conducted the week of July 11, 2005. Additional information regarding the project schedule and deliverables is discussed in Exhibit A.

If there are protracted delays for reasons beyond our control, we would expect to negotiate with you an equitable adjustment of our compensation taking into consideration the impact of such delays including but not limited to changes in price indices and pay scales applicable to the period when services are in fact being rendered.

This proposal, which includes Exhibits A, B, and C consisting of 7 pages, represents the entire understanding between you and us in respect of the Project and may only be modified in writing signed by both of us. If it satisfactorily sets forth your understanding of our agreement, we would appreciate your signing the enclosed copy of this letter in the space provided below and returning it to us. This proposal will be open for acceptance until July 15, 2005 unless changed by us in writing.

Thank you very much for the opportunity to present this proposal. Please do not hesitate to call me or Paul Crawford, PE, PG if you have any questions relating to this proposal or additional services offered by FTN.

Respectfully submitted,  
FTN ASSOCIATES, LTD.

Accepted this \_\_\_\_\_ day  
of \_\_\_\_\_, 2005



Mark S. Koch, REM  
Project Manager

MSK/bls

RAWP\_FILES\PROPOSALS\4000\40000503P-R OHM LFG 06-30-05.DOC



## **EXHIBIT A**

### **Scope of Work for Basic Services Assessment of LFG Impacts and Migration City of Jonesboro Sanitation Facility Jonesboro, AR**

Attached to and made a part of the Letter Agreement dated June 28, 2005 between FTN Associates, Ltd. (FTN) and Doug Formon, Mayor (the "Client") in respect to the project described therein. The Project objective, the specific tasks, and project assumptions are summarized below.

#### **PROJECT OBJECTIVE**

The objective of the Project is to determine the impacts to the City of Jonesboro Sanitation Department facilities located on Strawfloor Road from the former Class I Landfill located at the site and to determine if LFG from the former landfill is migrating to neighboring properties.

Specific tasks are described below:

#### **Task 1 – Assessment of LFG Migration in Structures at the Site**

FTN will conduct ambient air monitoring in all enclosed structures located at the facility. Monitoring will be conducted by a trained technician utilizing a LandGEM 500 portable analyzer. The ambient air will be analyzed for percent methane, percent carbon dioxide, percent lower explosive limit (LEL) for methane, and percent oxygen content. In addition, data on the date, time and specific location of the monitoring will be collected. Since atmospheric pressure and local weather can impact LFG migration, the atmospheric pressure and weather conditions encountered during monitoring will also be recorded.

Monitoring will be conducted during the initial site visit and during two follow-up monitoring events. The follow-up events will be conducted approximately 10 days from the previous monitoring event. Data from all monitoring events will be tabulated to determine if trends in the presence of LFG can be determined.

The proposed budget for Task 1 activities is \$1,600.

#### **Task 2 – Assessment of LFG Migration to Adjacent Properties**

FTN will install 15 semi-permanent monitoring probes along the property boundary of the landfill facility and on the adjacent properties to the east if permission is granted by the landowners. The probes will be installed to a depth of approximately 15 feet below ground surface (bgs) using a direct push technology (DPT) drill rig. The DPT will advance a two-inch diameter steel tube to a total depth of 15 feet bgs or until probe refusal. A slotted one-inch diameter polyvinyl chloride pipe will be placed in the boring and the annulus space will be backfilled with sand to within one foot of the



ground surface. The final one-foot of annulus space will be sealed using hydrated bentonite chips. A locking cover will be installed on each probe to deter tampering or unauthorized access to the probes.

Upon completion of the installation of the monitoring probes, each probe will be numbered, their approximate location marked with a portable GPS receiver, and allowed to stabilize for a minimum of one hour. After stabilization, each probe will be monitored utilizing a LandGEM 500 portable analyzer. The air in each probe will be analyzed for percent methane, percent carbon dioxide, percent lower explosive limit (LEL) for methane, and percent oxygen content. In addition, data on the date, time and specific location of the monitoring will be collected. Since atmospheric pressure and local weather can impact LFG migration, the atmospheric pressure and weather conditions encountered during monitoring will also be recorded.

Monitoring will be conducted during the initial site visit and during two follow-up monitoring events. The follow-up events will be conducted approximately 10 days from the previous monitoring event. Data from all monitoring events will be tabulated to determine if trends in the presence of LFG can be determined.

During the probe installation process, a number of borings will be made on the city property and the adjacent property to the east to determine if waste was placed in these areas. The approximate location of the borings will be recorded from a portable GPS receiver and the presence or absence of waste will be noted.

The proposed budget for Task 2 activities is \$15,400.

### **Task 3 – Sedimentation Pond and Leachate Sampling**

At the request of the City of Jonesboro, FTN will collect a sample of water from the existing sedimentation pond and the leachate from the Class 1 landfill. These samples will be containerized, properly labeled, and transported to an analytical laboratory under strict chain-of-custody. The samples will be analyzed for the typical parameters required for Class 1 Landfills as detailed by ADEQ Regulation 22 Appendix 1, which includes the 15 Priority Pollutant Metals and volatile organic compounds (VOCs). The metals analysis will be performed using EPA Method 6010 and the VOCs using EPA Method 8260C.

The proposed budget for Task 3 activities is \$700.

### **Task 4 – Report Preparation**

Upon completion of the fieldwork, a report will be drafted providing documentation of the monitoring performed in Tasks 1 and 2. This report will include a site layout diagram with monitoring locations. Recommendations for further action, if any, will be provided in a cover letter

to the draft report. A draft report will be provided to the Client for review, and comments will be incorporated in the final report. FTN will submit two copies of the draft and final reports to the Client. All documents and communications associated with this project will be marked with "Environmental Audit Report, Privileged Document" to comply with coverage under ACA 8-1-301.

The proposed budget for Task 4 activities is \$3200.

#### **Task 5 – Project Coordination**

FTN will coordinate project schedules and activities with the Client and FTN subconsultants and will communicate preliminary Project findings to the Client. Preparation of project progress reports, invoices, and correspondence and routine telephone calls will be completed under this task.

The proposed budget for Task 5 activities is \$1,800.

#### **PROJECT SCHEDULE**

The following schedule is proposed for the Project:

1. Installation of the monitoring probes and the initial monitoring of the structures will be accomplished during the week of July 11, 2005.
2. Two subsequent monitoring events will be conducted approximately 10 days and 20 days respectively from the initial monitoring event.
3. A written report of findings will be prepared and submitted to the Client within ten working days of the final monitoring event.

#### **ASSUMPTIONS**

1. The Client will provide access to all structures (i.e., unlocking doors, gates, etc.) and the site during the scheduled monitoring events.
2. The client will obtain written permission for access to the adjacent property from the various landowners.
3. The client will locate and mark all underground utilities and structures in the areas where drilling will be conducted.
4. The area where the monitoring probes will be installed will be accessible to a pick-up truck mounted DPT rig.

**EXHIBIT B**

**Standard Terms and Conditions  
For FTN Contracts**

1. Standard of Care The services provided by FTN shall be performed in accordance with generally accepted professional practice at the time when and the place where the services are rendered.
2. Independent Contractor FTN is an independent contractor and not an employee or agent of CLIENT. CLIENT is not responsible for any of its activities. Any taxes, licenses, permits, required filing of forms or any other conditions imposed upon or required to render FTN Services shall be satisfied by FTN at FTN's expense.
3. Insurance FTN shall procure and maintain insurance for protection from claims under workers' compensation acts. FTN shall procure and maintain liability insurance against claims based on FTN's negligence for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages based on FTN's negligence because of injury to or destruction of property including loss of use resulting therefrom.
4. Indemnification
  - a. FTN does hereby indemnify and save harmless CLIENT from and against any and all liability and claims of liability of any and every kind and nature, including without limitation bodily injury, death and property damage, arising out of any negligent act by FTN, and FTN, at FTN's sole expense, shall handle all such claims, defend all lawsuits filed against CLIENT therein, and reimburse CLIENT in cash for all reasonable expense incurred by CLIENT on account thereof, provided, that if CLIENT elects to retain independent counsel, FTN shall reimburse CLIENT for all costs reasonably incurred by CLIENT to defend itself through attorneys of CLIENT's choice. There is hereby excepted from the foregoing any and all liability and claims of liability solely attributable to acts of CLIENT's direct payroll employees, and there is hereby further excepted from the foregoing any and all liability and claims of liability for environmental pollution which are not the result of negligence on the part of FTN in FTN's performance of this contract.
  - b. CLIENT does hereby indemnify and save harmless FTN from and against any and all liability and claims of liability of any and every kind and nature including without limitation bodily injury, death, property damage and claims for environmental pollution which are not the result of negligence on the part of FTN in FTN's performance of this contract, and CLIENT, at CLIENT's sole expense, shall handle all such claims, defend all lawsuits filed against FTN on account thereof, pay all judgments rendered against FTN therein, and reimburse FTN in cash for all reasonable expense incurred by FTN on account thereof, provided, that if FTN elects to retain independent counsel, CLIENT

shall reimburse FTN for all costs reasonably incurred by FTN to defend itself through attorneys of FTN's choice.

5. Electronic Deliverables Any use or reuse of original or altered computer files by CLIENT or others without written verification by FTN for purposes other than for the specific purpose intended will be at CLIENT's risk and full legal responsibility. Furthermore, CLIENT will, to the fullest extent permitted by law, indemnify and hold FTN harmless from any and all claims, suits, liability, demands, or costs arising out of or resulting therefrom. Any verification of such adaptation by CLIENT will entitle FTN to additional compensation at the then current rate.

The submitted data files are intended to work only as described. The files are compatible only with the software and operating platform described. FTN makes no warranty as to the compatibility of these files for versions of the software other than for those stated. FTN is not responsible for uses of the data outside of or beyond the scope of the Agreement.

Because data stored on electronic media can deteriorate undetected or can be modified without FTN's knowledge, CLIENT agrees that FTN will not be held liable for the completeness or correctness of the electronic media, with respect to its originally intended use as defined in the agreement, after an acceptance period of 30 days after delivery of the electronic files. FTN stands by the accuracy of sealed drawings that accompany submittals.

The electronic files are submitted to CLIENT for a 30-day Acceptance Period. During this period, CLIENT may review and examine these files; any errors, relative to the intended use of the files, detected during this time will be corrected by FTN as part of the basic agreement. Any changes requested after the Acceptance Period will be considered additional services to be performed on a time and materials basis, at the then current rates plus terms and conditions.

6. Termination This agreement may be terminated at any time, for any cause by either party upon thirty days written notice to the other party. In such event, CLIENT shall forthwith pay FTN in full for all work previously authorized and performed prior to effective date of termination. If no notice of termination is given, relationships and obligations created by this Agreement shall be terminated upon completion of all applicable requirements of this Agreement.
7. Assignment This Agreement shall not be assigned by FTN to any other party unless prior written approval is obtained from CLIENT. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
8. Limit of Liability It is understood that any and all professional liabilities incurred by FTN throughout the course of rendering professional services on this Project shall be limited to a maximum of the net fee received by FTN, not including reimbursable expenses and subconsultants, for all services rendered on the Project.
9. Confidentiality of Information No information concerning this Project shall be released by FTN.

10. Precedence These Standard Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition notice to proceed, or like document regarding FTN's services.
11. Severability If any of these Standard Terms and Conditions shall be finally determined to be invalid or unenforceable in whole or part, the remaining provisions hereof shall remain in full force and effect, and be binding upon the parties hereto. The parties agree to reform this Agreement to replace any such invalid or unenforceable provision with a valid and enforceable provision that comes as close as possible to the intention of the stricken provision.
12. Survival These Standard Terms and Conditions shall survive the completion of the services under this Agreement and the termination of this Agreement for any cause.
13. Controlling Law This Agreement is to be governed by and construed in accordance with the laws of the State of Arkansas.



## EXHIBIT C

### 2005 Fee Schedule<sup>1</sup> FTN Associates, Ltd.

<u>Labor Category</u>	<u>Hourly Rate</u>
Professional 7	\$ 140.00
Professional 6	125.00
Professional 5	112.00
Professional 4	102.00
Professional 3	92.00
Professional 2	82.00
Professional 1	72.00
Technician 4	74.00
Technician 3	61.00
Technician 2	54.00
Technician 1	40.00
Word Processing	48.00

#### Direct Expenses

All direct project expenses will be invoiced at cost plus 10 percent. Direct project expenses include such items as travel, meals, lodging, shipping, supplies, consultants, subcontractors, etc. Vehicle mileage will be charged at standard IRS rates.

A charge of 2 percent is applied to the total labor amount to cover communication charges and computer expenses associated with computer applications, data storage and backup.

Should back-up data be requested for reimbursable expenses, it will be provided for an administrative fee.

#### Payment Terms

Unless other arrangements are made in writing invoicing will be monthly for services completed. Payment is due in full within 30 days of invoice. A service charge of 1½ percent per month will be charged on all balances over 30 days.

---

<sup>1</sup>Effective January 1, 2005 - December 31, 2005