

City of Hattiesburg, MS

*200 Forrest St.
P.O. Box 1898
Hattiesburg, MS 39401*



Meeting Agenda - Final

Friday, January 11, 2013

3:00 PM

Council Chambers

City Council - Special Called Meeting

*City Council
Special Called Meeting*

[2013-0004](#)

Declare the need for additional professional services to complete sludge removal from the south lagoon as an emergency, as defined and authorized by MS Code Sections 31-7-1 (f) and 31-7-13 (k); approve proposal from Merrell Bros. Inc. to assist with completion of the sludge removal; authorize issuance of manual check for mobilization in accordance with said proposal.

Attachments:

[Merrell Bros - Revised proposal using WM landfill](#)

[Work Plan](#)

[Project details and summary](#)

[Executed Proposal, Merrell Bros.](#)



City of Hattiesburg, MS

200 Forrest St.
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Master

File Number: 2013-0004

File ID: 2013-0004

Type: Regular Agenda Item

Status: Approved

Version: 1

Reference:

In Control: City Council

File Created: 01/11/2013

Brief Title: Professional service proposal with Merrell Bros. Inc.
for sludge removal in the south lagoon.

Final Action: 01/11/2013

Minute Book Number: MB2013-1/13-15

Title:

Declare the need for additional professional services to complete sludge removal from the south lagoon as an emergency, as defined and authorized by MS Code Sections 31-7-1 (f) and 31-7-13 (k); approve proposal from Merrell Bros. Inc. to assist with completion of the sludge removal; authorize issuance of manual check for mobilization in accordance with said proposal.

Notes:

Sponsors:

Enactment Date:

Attachments: Merrell Bros - Revised proposal using WM landfill, Work Plan, Project details and summary, Executed Proposal, Merrell Bros.

Enactment Number:

Contact:

Meeting Date: 01/11/2013

Drafter:

Effective Date:

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	City Council - Special Called Meeting	01/11/2013	Approve and Authorize				Pass

Action Text: A MOTION was made by Council member Carroll and seconded by Council member Delgado to Declare the need for additional professional services to complete sludge removal from the south lagoon as an emergency, as defined and authorized by MS Code Sections 31-7-1 (f) and 31-7-13 (k); approve proposal from Merrell Bros. Inc. to assist with completion of the sludge removal; authorize issuance of manual check for mobilization in accordance with said proposal.

Attorney Lawrence stated that he is satisfied that this matter meets the definition of an emergency as defined in [MS Code Section] 31-7-1 (f) because of the impact it will have upon the City, as well [the definition] of an emergency purchase under [MS Code Section] 31-7-13. He said that this purchase fits with the exceptions to 31-7-13 as it falls under maintenance and/or repair and is a professional services contract. He asked that the Council consider a number of factors: that there is an emergency nature due to deadlines the City must meet under its agreed order with the Mississippi Department of Environmental Quality; that the estimated amount of sludge to be removed has been exceeded and that L & A Contracting has lived up to its obligation, having removed an even greater amount of sludge than was estimated during the time period of the bid; that the administration has been in contact with representatives of L & A, and that they agree the City should seek additional assistance in order to meet its deadlines in this matter; and that the amount of sludge that has been removed far exceeds the amount described in the request for proposals and far exceeds the amount that even Plaas, the lowest but [ultimately] not the best bidder, said could be removed.

Council member Carroll asked if [this company] needs to help in order for the City to remove the sludge by spring. Mr. Kuyrkendall stated that the deadline is the end of February or early March; he said [Merrell Brothers] will use a different technology, a centrifuge that can de-water yeast sludge more quickly [than other technologies]. He said Merrell Brothers can start Monday [January 14, 2013].

Council member Delgado said she is satisfied that the City is [taking the action it needs to take], but said the circumstances are exceptional due to representations made a long time ago from USA Yeast; she stated that the City is [incurring] tremendous costs and there should be some additional remedy the City should be able to pursue, as this is further evidence of the company's over-reaching. Attorney Lawrence said he will look into the matter to see if additional recourse is available.

Council President Bradley asked is any determination has been made as to how much material remains to be dredged. Mr. Kuyrkendall said approximately 60 percent of the sludge has been removed; he said it is difficult to know for sure, as density tests yield different values in different cells. He said it is hard to nail down the dry weight, which is the unit used for payment.

Council Vice President Ware asked for a total on sludge removed; Mr. Kuyrkendall stated that close to 1,400 dry tons have been removed. Subsequent discussion related to budgeting for the additional sludge removal.

Council Vice President Ware stated that [the City], through no fault of its own but by manufacture and design, is being pressed in an emergency situation to get rid of [the sludge]; he commented also that USA Yeast just extended the date it will stop depositing [untreated materials] to the lagoons. He asked when USA Yeast will begin [pre-treatment]; Mr. Kuyrkendall stated that USA Yeast's pre-treatment will begin in July 2014. Mr. Kuyrkendall said it took ten years and a long period of no aeration after Hurricane Katrina [for the sludge to accumulate] and that it is not filling back in as it is removed. Council Vice President Ware noted that the City's aeration is more efficient now; Mr. Kuyrkendall said that pre-treatment is still needed and will make a big difference when it begins.

Council member Delgado asked how is it that [the City's] science and investigation prior to [USA Yeast] coming could justify the conclusion that they did not need to pre-treat. She stated that there is a responsible party that needs to make [the City] whole.

Additional discussion related to the repairing, refurbishing and re-installing of 23 surface aerators. Council President Bradley stated that L & A plans to repair, refurbish and re-install aerators. Mr. Kuyrkendall said the contract calls for the aerators to be removed [during sludge removal] and re-installed. Council President Bradley stated that [L & A representatives] were bothered that motors and other parts were missing from the surface aerators that were on the banks, as the plan had been to use those parts to refurbish the aerators before they were re-installed. Mr. Kuyrkendall stated that another company is rehabbing aerators now.

Attorney Lawrence stated that L & A will still be on site removing sludge, meaning two companies will work to help the City meet its deadline. Mr. Kuyrkendall said there will be a double effort, with L & A using the belt press technology.

Council Vice President Ware asked Chief Misenhelter if the investigation on missing aerators is ongoing. Chief Misenhelter stated that the HPD investigation has ended and that the chief detective gave the information that was collected to the attorney general's office.

Following discussion, the Motion received the affirmative vote of the Council as follows:

Yeas: 5 - Bradley, Delgado, Carroll, Ware and Naylor

Nays: 0

Yea: 5 Bradley
Delgado
Carroll
Ware
Naylor

TEL-No Vote: 0

Text of Legislative File 2013-0004

Title

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Summary

Professional service proposal with Merrell Bros. Inc. for sludge removal in the south lagoon.

Budget Information

Expenditure Type

Purchasing Item

Publication Information

OFFICE: (800) 663-8830
FAX#: (574) 699-7478
WEB: www.merrellbros.com

MERRELL BROS.

A Biosolids Management Corporation

- Liquid / Dry Land Application
- State / Federal Reporting
- Dredging

- Land Permitting
- Consulting Services
- Dewatering

- Digester and Lagoon Cleaning
- Off-Site Biosolids Storage
- Grease & Septage Disposal

WORK PLAN

The following work plan would immediately be implemented for the Hattiesburg Lagoon Dredging and Dewatering project.

All effected staff members on our team have been put on notice regarding this project and informed that time is of the essence. If we are awarded this project, we would immediately call a staff meeting at our corporate office with staff members from our Florida and Texas division in attendance via conference call.

After details of the project were explained, we would outline the Mobilization plan that would need to take place. All managers would be instructed as to which pieces of equipment would be needed. All equipment is currently ready to mobilize however each manager would be instructed to inspect and prepare all pieces for departure. Our permitting department would then order the appropriate transport permits.

Our current mobilization plan would begin next Monday the 14th. The Centrifuge and Generator along with a support trailer would depart from our Florida division immediately. The dredge and piping would be mobilized from our Texas division. All remaining pieces of equipment such as pickup trucks, additional piping, and mix tank would either come from our Indiana office or from a project in Las Vegas that has just finished up.

Depending on travel time, the equipment should start showing up by either Tuesday afternoon or Wednesday. Concurrently, we will dispatch someone from our Alabama division to Hattiesburg to begin securing for lodging for our employees.

Since we have already performed extensive testing on the sludge in our own lab and at our Polymer supplier's lab, we would immediately order the correct polymer for the project and have it shipped to Hattiesburg immediately.

Our Head Centrifuge operations manager and assistant operator will fly leave from Indiana Monday headed to Hattiesburg. Once all personnel and equipment is on site, we will immediately begin setting up. We plan on setting up the dewatering equipment (i.e. Centrifuge, mix tank) on the east side of lagoon 2 and the southwest side of lagoon 4A on the turnaround area that is elevated

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higher than the lagoons are. No setup or equipment would be placed in the flood zone.

Piping will be ran along the east side of lagoon 3D. The dredge will be set in lagoon 3D. At the same time that the mobilization occurs, we will have office staff finalizing contracts with the City and working on permitting the disposal of the waste at the Waste Management landfill in McNeil, MS. We already have a nationwide account with Waste Management, so the approval process will hopefully go quicker. Once the dewatering operations are getting close to start up, we will dispatch 4 semi trucks and transport trailers to the job site to be used to transport the material to the landfill. Since the landfill is not open during the night, we will fill the trailers during the night and then begin immediately hauling them to the landfill first thing in the morning. Our plan is to have enough trailers to continually be able to run the Centrifuge 24 hours per day.

This process will occur 6 days per week. No operations will occur on Sunday.

Once dewatering operations have finished in the desired areas in lagoon 3D, we will then move to lagoon 3C. After lagoon 3C is completed, we will then move to lagoon 3B. Once the project is complete we will request a site inspection from the City. If additional dredging is requested in any certain area, we will move to the lagoon and clean up any missed spots. We also will be able to dredge out any additional sludge from any lagoon if the city so desires.

Once the City has informed us that the work is complete we will begin demobilization plans and start removing equipment form the jobsite.

Documentation tracking during the project will be available to the city through our website. On our site, we will have a password supplied to the city that will allow them access to the daily ledger. This ledger will give the city access to see how the project is progressing This will give the city daily updates of tonnage removed, photos of the project and any other documentation of the project.

Once the demobilization process is complete, a final site walk will be performed to make sure that the site was left in as good or better shape than when we arrived. A final report will then be prepared and submitted to the city with all of the landfill disposal records and daily ledgers from the project. We will also keep records of the project at our corporate office for a minimum of 7 years in case the city ever loses any records and needs any documentation.

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City of Hattiesburg
P.O. Box 1898
Hattiesburg, MS 39403

1/11/12

Re: Proposal for dredging and dewatering services
at the Hattiesburg W.W.T.P.

Attn: Bert Kuyrkendall

Dear Bert:

Please find attached our proposal for performing dredging and dewatering services at the City of Hattiesburg W.W.T.P.

We collected several sludge samples and then tested them at our lab as well as our polymer supplier's lab. The purpose of these tests were to perform secondary testing to compare with the testing that we had originally ran on this sludge a year ago when we bid on this project. Of particular concern was the yeast sludge and the ability to properly find the correct polymer that would work with this hard to dewater sludge. Additionally, yeast sludge typically has a much higher dosage rate requirement for polymer and can be very tricky in getting the right polymer, with the right molecular construction to it. I am sure that you have probably already experienced this difficulty, if you have tried to dewater any of this material.

Based on our dual testing results we now have the correct options of polymer to consider and feel that we should be able to dewater this material. As I mentioned, the dosage rates and cost of the particular polymer needed greatly increase the cost to dewater this material. To put it into easier terms this material is extremely difficult to dewater and requires an enormous amount of polymer to properly hold the correct flocculation point. It will take between 7 – 10 times as much polymer to dewater this material. It also requires some very specific mixing

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requirements that can be tricky to achieve without shearing the polymer.

After completing all of the testing and cost required, I went back and compared it to our original bid price. What we did when we prepared our original pricing to the City was that we took the cost to dewater the Yeast sludge and then took the cost of what it takes to dewater the other sludge that you have already dewatered and averaged the two prices together to arrive at one final price. As you are also probably aware, the sludge that you dewatered was much easier to dewater due to the nature of municipal and septage sludge. This is very easy and has a much lower cost to dewater. Consequently, since the sludge that you are requesting pricing on is yeast sludge only, our price is higher than what we originally bid to the City.

The other item that increases the cost is that through our testing in order to properly dewater this sludge with any type of speed, a belt press is not the best dewatering option. Although a belt press can work, it will be extremely slow and will require a considerable amount of modification in order to properly mix the sludge prior to dewatering. A belt press will also experience severe sticking problems at time where the sludge will not drop off of the belt very well which will create dirtier filtrate water. The best method to dewater this sludge with is a Centrifuge machine. The Characteristics of a Centrifuge are consistent with what needs to happen in order to properly dewater this sludge in a timely manner. A Centrifuge is obviously much more expensive to operate, which also increases the cost of dewatering this material.

The other item that is different from our original bid is our Mobilization and demobilization charge.

We perform this type of work all over the U.S. so when we bid on a project our Mobilization and Demobilization cost varies depending on where our equipment is currently located at. When we bid on this project, our equipment was very close, so our line item for this cost was lower. Today, the equipment needed to perform this work is located

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much farther away and will require a much higher cost to relocate it to the job site.

In closing, I wanted to explain the items to you above so that you would have a better understanding as to why the pricing was different than when we originally bid on the project. The simple fact is that the remaining sludge is the most difficult and costly to dewater and will not produce as dry of a cake as the other sludge.

The pricing that I have included in our bid is a complete price where we would take care of everything including dredging, hauling and disposal.

We have a very new large mobile Centrifuge available as well as a dredge that we could mobilize to the jobsite fairly quickly if you decided to utilize our services. (See attached pictures)

In an effort to speed up the project we would intend on working 24 hours per day 6 days per week.

Please feel free to call me at our corporate office with any questions at 800-663-8830 or check out our website at www.merrellbros.com

Sincerely



Terry Merrell
Merrell Bros. Inc.

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No. 1
1/11/2013

Proposal for: City of Hattiesburg, MS

Proposal Submitted To:

City of Hattiesburg, MS
P.O. Box 1898
Hattiesburg, MS 39403

Work to be Performed At:

City of Hattiesburg W.W.T.P
Hattiesburg, MS

We hereby propose to Dredge, Dewater, transport and dispose of sludge from the Hattiesburg, MS. w.w.t.p.

This proposal also includes the removal and replacement of aerators that need to be removed and relocated in order to dredge the ponds properly.

ALL MATERIAL IS GUARANTEED TO BE AS SPECIFIED, AND THE ABOVE WORK TO BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS SUBMITTED FOR THE ABOVE WORK AND COMPLETED IN A SUBSTANTIAL WORKMANLIKE MANNER FOR THE SUM OF:

Mobilization / Demobilization = \$ 43,000.00

Charge per Dry Ton = \$ 793.20

Remove existing Aerators \$ 150.00 each

Reinstall existing Aerators \$ 185.00 each

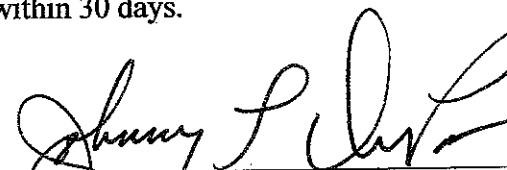
Credit for using Waste Management landfill = \$ 5.41 per wet Ton

**Credit will be calculated by taking landfill scale weight tickets from
Waste Management landfill times \$ 5.41 per wet ton.*

WITH PAYMENTS TO BE MADE AS FOLLOWS: **NET 30 DAYS AFTER COMPLETION.** Overdue payments will incur a finance charge of 1.5% per month (18% per year). If your account becomes past due, we will take all steps necessary to collect, including but not limited to the filing, recording, and foreclosure of a mechanic's lien. You agree to pay all costs of collection, including but not limited to collection agency and attorney fees.

**** We may withdraw this proposal if not accepted within 30 days.**


Merrell Bros. Inc. Date 1/11/13


City of Hattiesburg, MS Date 1/14/13

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