LEE COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

BLUE SHEET NO: 20020545

<u>1. REQUESTED MOTION:</u>

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<u>ACTION REQUESTED</u>: Authorize the re-allocation of project funds already included in the Professional Service Agreement (Supplemental Agreement No. 10) with Malcolm Pirnie, Inc. related to the permitting efforts for the expansion of the waste to energy facility.

<u>WHY ACTION IS NECESSARY</u>: To move and allocate funds previously earmarked for contract negotiations and preliminary design review to additional (unanticipated) permitting tasks required by the DEP and other regulatory agencies.

<u>WHAT ACTION ACCOMPLISHES</u>: Revises funding allocation for engineering and permitting services required for the expansion of the waste to energy facility.

| 2. DEPARTMENTAL CATEGO COMMISSION DISTRICT #: | | 3. MEETING DATE: 05-28-2002 |
|---|---|--|
| 4. AGENDA: | 5. <u>REQUIREMENT/PURPOSE</u> : | 6. REQUESTOR OF INFORMATION: |
| CONSENT ADMINISTRATIVE APPEALS PUBLIC WALK ON TIME REQUIRED: | (Specify) STATUTE ORDINANCE <u>X</u> ADMIN. CODE <u>X</u> OTHER <u>Prof. Serv. Agmt</u> | A. COMMISSIONER: B. DEPARTMENT: <u>Lee County-Public Works</u> C. DIVISION/SECTION: <u>Solid Waste Division</u> BY: <u>Lindsey Sampson, Solid Waste Director</u> <i>Garte: 5/13/02</i> <i>Gardary Company</i> |

BACKGROUND: On June 5, 2001 the Board of County Commissoners approved Supp. Agreement No. 10 to the Professional Service Agreement between the County and Malcolm Pirnie, Inc. related to certain permitting, preliminary design, and operating contract responsibilities required for the expansion of the waste to energy facility. Funds for each major work task of this change order were estimated based on the level of work reasonably expected to be required at that time.

In performing the permitting tasks, it is now apparent that the Department of Environmental Protection and other regulatory agencies are requesting various analysis and reports in excess of the normal information gathering previously performed for this type of (permitting) project. The attached memo from Mr. David Cerrato of Malcolm Pirnie, Inc., prevides an explanation for some of the additional work performed and anticipated, in excess of the original planned scope of services.

Although Supp. Agrmt. No. 10 provides authority for administrative re-allocation of funds between the work scope tasks, the Solid Waste Division is requesting the Boards consideration and approval for this re-allocation because of the potential impact that these adjustments may have on future costs related to this project. It is expected that the funds that will be utilized at this time for the additional permitting work will have to be replaced at a future date for costs associated with the WTE operating contract negotiations and preliminary design review.

No additional funds are required at this time.

8. MANAGEMENT RECOMMENDATIONS:

| | | | 9. RECOMM | ENDED APPRO | <u>OVAL</u> | | | |
|---|-------------------------------|---------------------------|--------------------------|---------------------------|---------------------|---|--|---|
| (A) DEPARTMENT DIRECTOR | (B) PURCH. OR CONTRACTS | (C) HUMAN RESOURCES | (D) OTHER | (E) COUNTY ATTORNEY | | (F) BUDGET SERVICES OMM 5/14 | | (G) COUNTY MANAGER |
| Humler Haventier Date: 5.14.02 | 5/14/02 Date: | N.A. Date: | Ni pt. Date: | Bate: | 01 PM 5/14/02 | ом Risk Кинол Ж 5/14/07 Ж 3/14 | сс Р X 5/14/от | Haunder S. Lavender Date: 5.14.02 |
| 10. COMMISSION ACTION: APPROVED DENIED DEFERRED OTHER | | | ECEIVED BY DUNTY ADMI | 0 ⁰⁰ pm | | | ATTY. CO. ATM TS. (4) CO. CO. CO. CO. CO. CO. CO. CO. | |

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MALCOLM PIRNIE, INC. INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS & CONSULTANTS

May 13, 2002

Lindsey J. Sampson Lee County Solid Waste Division 10500 Buckingham Road, Suite 200 Ft. Myers, FL 33905

Re: Lee County Resource Recovery Facility Expansion

Dear Mr. Sampson:

Attachment A to this letter provides an assessment of the additional engineering and scientific analyses that have been, and continue to be, required by the Florida Department of Environmental Protection (the "Department") prior to the Department reviewing the permit application to expand the Lee County Resource Recovery Facility. As a result of the additional work required, Malcolm Pirnie is asking the County to consider reallocating its schedule of payments accordingly.

Attachment B provides a revised Exhibit "SA-B" to Supplemental Agreement No. 10 between Malcolm Pirnie and the County. The revised Exhibit "SA-B" does <u>not</u> constitute an increase in the total compensation projected to be paid to Malcolm Pirnie and its subconsultants at this time. It does, however, transfer funds from three tasks:

- 1.4 Agreement Negotiations,
- 1.5 Conceptual Design Review, and
- 1.6 Additional Services

into tasks 1.1 Preliminary Permitting Process, 1.2 Permit Application, and creates a new task 1.2.1 Additional Permitting. This should provide the necessary funding to keep the permitting process moving forward provided that a reasonable approach to emission limits can be reached with the Department.

It is important to recognize that the transfer of funds is significant and results in the reallocation of almost \$700,000 from tasks that will likely still be required once the permit is obtained. Therefore, Malcolm Pirnie will be required to submit an additional Supplemental Agreement increasing the total cost of the project once the permitting process is complete. At that time, however, the County and Malcolm Pirnie will be better able to estimate the level of effort that will be required to finalize an agreement with Covanta Energy of Lee Inc. and implement the expansion of the Facility.

Very truly yours, MADCOLM PIRNIE, INC.

David S. Cerrato, REM V Fork Vice-President

Enclosures



ATTACHMENT A

To: Lindsey J. Sampson, P.E.

May 9, 2002

From: David S. Cerrato, Vice-President Malcolm Pirnie, Inc.

Re: Additional Work Required to Continue Efforts Associated with the Permitting of Facility

The following provides a detailed description of the additional unanticipated work efforts that have been and will continue to be required for the Expansion Project permitting.

Item 1: SCR Systems Work Efforts

Expansion of the Project Team's scope of work occurred regarding the SCR/SNCR cost comparison. It was apparent from meetings with the FDEP that they were particularly concerned about NOx control and air toxics if the project proceeded. The Project Team and the County realized that accepting SCR for this project would likely simplify However, after the County and the Project Team evaluated permitting with the FDEP. the costs and benefits to the rate payers the Project Team recommended SNCR. The County concurred. This triggered extensive data gathering and analyses to substantiate the SNCR approach. For example, the Project Team had to substantially increase their efforts in an attempt to thoroughly identify specifications and costs for SCR systems to address agency comments regarding SCR versus SNCR. It was anticipated that this information gathering work effort would be supported by Covanta and their Martin GmBH contacts in Europe. However, Covanta was unable to provide any vendor quote or European data. The SCR vendors exhibited little cooperation. Additionally, little European and Japanese data was available and considerable efforts were expended in attempting to contact vendors, Asian, U.S., and European agencies, and individual facilities. After the data and information was complete, two additional FDEP meetings, that included the Director of the Division of Air Resources Management, were held on this issue. The FDEP provided significant feedback in these meetings, indicating that additional SCR vendor quotes and SCR/SNCR comparison and analysis should be provided to them for comparison to their in-house information. This then required the Project Team to expand their research and data gathering efforts to respond to the Department's comments. The amount of time and effort spent on this was considerable. It does appear however, that the Department may accept the County's approach. The estimated savings to the rate payer will be significant (over \$6,000,000.00 in capital costs and over \$1,000,000.00 a year in annual operating expenses) if the Department remains consistent in accepting the County's approach throughout the permitting process.

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Item 2: Developing emission factors and BACT determinations based on the operational history of the existing units

The Department's position that the NSPS emission standards for the new processing unit would be insufficient if the facility is expanded added a significant amount of effort to the Project Team's scope of work. Based on meetings with the FDEP, emission standards based on previous stack test data from the existing two units would be the method expected for setting new emission standards. The County and the Project Team agreed to evaluate this approach and did so. Based upon this evaluation the Project Team recommended using continuous emissions monitoring data in lieu of annual stack test data. To review this approach, a formal meeting, again including the Director for the Bureau of Air Resource Management and his staff, was scheduled. A position paper defending the NSPS standards was developed, reviewed, revised and submitted. The Project Team continued to discuss this issue with the Department in an attempt to provide the necessary operating flexibility to maintain efficient facility operations. The standard approach utilized in prior applications for other sources had been to use a value 10-25% over the highest stack test level. The Department suggested potentially using three to four times the average stack test level. Both of those approaches would involve establishing emission limits considerably below any vendor guarantees and inhibit the operator from operating the facility as efficiently as possible and adding significant cost to operations.

Considerable additional effort was expended on these activities, including internal discussions with the vendor and the County over appropriate levels and approaches. The Project Team and the County agreed to establish statistical analyses of emissions to determine appropriate emission levels. This analysis was then used in several additional meetings with the FDEP to determine if the proposed emission reductions would be sufficient and not have an adverse impact on facility operations. At this meeting the Project Team, FDEP, and the County agreed to consider revised emissions standards based upon consistent results from the stack test data, continuous emissions monitors, and statistical analysis. Additionally, the parties agreed to consider "action levels", which essentially would be emission goals with plans of action if they were exceeded, but would not constitute a violation. These action levels will represent significant reductions in emissions. The Project Team is in the process now of finalizing a proposal to the FDEP that will establish new emissions standards for the new unit that will include this new concept ("action levels") in permitting. As a result, both the manner in which these emissions standards and action levels are being developed and the manner in which they will be implemented and enforced will forge new ground in resource recovery and hence, continues to require additional expenditure to finalize.

Item 3: Additional assistance provided for the Ecological and Health Risk Assessments

In order to complete the ecological and human health risk assessments and develop particle size distributions and deposition velocities for both wet and dry deposition, additional modeling and receptor information, additional information on parameters used



to calculate concentrations in selected water bodies, water quality sampling, and a detailed visual survey of potential receptors within a five mile radius of the Facility was required. After providing substantial backup on deposition algorithms and mercury speciation, the Project Team also determined and defended the speciation data for mercury, the particle size distribution, and collected, summarized and corrected the Dioxin distribution for the various Dioxin and Furan congeners. The Project Team also developed the dioxin and furan distribution for use in the risk assessments. This required the Project Team to obtain and correct data on the distributions from the prior seven years' stack test, and work with Covanta to establish an appropriate distribution for use in the risk assessments. The preliminary modeling is currently under peer review.

Item 4: Additional work associated with the air quality impact assessment

The fourth major area affecting the Project Team's scope involved the air quality impact assessment. The National Park Service requested that the use of CALPUFF modeling for the Everglades, even though the project is approximately 90 kilometers from the nearest border. As this model has very limited regulatory history and involves substantial costs to execute, the County directed the Project Team to meet with the National Park Service regarding this decision. The Project Team arranged and met with the National Park Service in Denver to suggest that the normal modeling approach would be adequate, especially due to the minimal impacts from the facility. Based on the results of the meeting the Project Team was directed to perform the CALPUFF analyses at additional expense. The Project Team was also required to develop and determine an approach to be utilized for air toxics impact assessments as well as a series of minor source analyses for particulate sources and other specialized analyses including start-up/shutdown/malfunction and minor PSD source growth. Other additional issues affecting the level of effort and scope of work for this item include the effort required to obtain additional information on ecological impacts of mercury, including researching other pre/post ecological mercury sampling programs at resource recovery facilities in Maryland and New Jersey.

Item 5: Additional unanticipated Ecological and Health Risk Assessment work.

CPF Associates' original budget estimate was \$25,000 to conduct the Health and Ecological Risk Assessments. After the meeting with USF&WS service and much discussion with the Project Team, and recent experiences (i.e. Spokane and North Andover resource recovery facilities) review, it was recommended that their scope be expanded to include a literature review, chemical screening, environmental fate and transport modeling, and ecological risk assessment, in addition to the human health risk assessment. This has required additional human and environmental health risk modeling based on the preliminary results obtained so far.

Attachment B

SUPPLEMENTAL AGREEMENT NO. <u>10</u> (Continued)

EXHIBIT "SA-B"

Date: May 13, 2002

COMPENSATION AND METHOD OF PAYMENT

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for General Engineering Services for the project known as Final Permitting/Approval Assistance, Construction Monitoring and Acceptance Testing and As-Built Review for the Solid Waste Energy Recovery Facility Project

SECTION 1.00 CHANGE(S) IN COMPENSATION

The compensation the CONSULTANT, shall be entitled to receive for providing and performing the supplemented, or changed services, tasks, or work as set forth and enumerated in the Scope of as follows:

NOTE: A Lump Sum (L.S.), Not-to-Exceed (N.T.E.), or Estimated (Est.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "SA-A". In accordance with Professional Services Agreement Article 5.03(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

| Task # | Task Title | Amount of Compensation | | Indicate Basis of Compensation Est., LS or NTE | lf Applicable Indicate (W.I.P.P) |
|---------------------------|--|------------------------|--------------------------|--|---|
| | | Original | Revised | | |
| 1.1 | Preliminary Permitting Process | \$104,504 | \$177,684 | Est. | W.I.P.P. |
| 1.2 | Permit Applications | \$172,240 | \$172,240 | Est. | W.I.P.P. |
| 1.2.1 | Additional Permitting | | \$127,336 | | |
| 1.3 | Permit Processing and Public Hearings | \$88,860 | \$ 88,860 | Est. | W.I.P.P. |
| 1.4 | Agreement Negotiations | \$264,262 | \$ 33,434 | Est. | W.I.P.P. |
| 1.5 | Conceptual Design Review | \$268,588 | \$ 8,793 | Est. | W.I.P.P. |
| 1.6 | Additional Services | \$200,516 | \$313,322 ⁽¹⁾ | Est. | W.I.P.P. |
| | Engineering Services Expenses | \$56,000 | \$56,000 | Est. | W.I.P.P. |
| | Subconsultants | \$325,000 | \$502,301 | Est. | W.I.P.P. |
| Total (Unless page) | list is continued on next | \$1,479,970 | \$1,479,970 | N.T.E. | |

Note: Est. = Estimate, funds may be moved between tasks upon approval of Solid Waste Director.

(1) - Funds to be allocated to subconsultants based on approved task orders.

REREV:04/21/93