

DAMES & MOORE A PROFESSIONAL LIMITED PARTNERSHIP

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FAX NO. (504) 769-0454

January 8, 1991

Vista Chemical Company
Lake Charles Chemical Plant
P.O. Box 727
Westlake, LA 70669

ATTN: Diane Johnson

Re: Proposal
Indoor Air Quality Evaluation
Lake Charles Chemical Plant
D&M Proposal No. 91-154-102B

Dear Ms. Johnson:

Thank you for the time you devoted to me during my visit to your facility in December 1990. Dames & Moore appreciates the opportunity to present this proposal for evaluating indoor air quality of the Laboratory Building at Vista's Lake Charles Chemical Plant. We believe that indoor air quality problems such as those currently being experienced in the Laboratory are best solved by an integrated approach that combines evaluation of the ventilation system, measurement of air concentrations of selected contaminants, and review and evaluation of employees' concerns and complaints. Failure to consider all of these factors could result in misleading conclusions concerning the need for corrective action.

SCOPE OF WORK

Dames & Moore proposes to evaluate the Laboratory's internal environment by completing the following tasks:

TASK 1: EVALUATION OF EMPLOYEE QUESTIONNAIRES

The purpose of this portion of the investigation will be to evaluate worker responses to a questionnaire designed to detect patterns which might tend to implicate or rule out potential environmental problems. Questionnaires will be provided to each laboratory occupant and results tabulated without attribution. Results of this questionnaire will be utilized to more accurately focus the follow-up efforts, thereby potentially minimizing costs associated with evaluation of atmospheric contaminants.

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TASK 2: EVALUATION OF HEATING, VENTILATION, and AIR CONDITIONING (HVAC) SYSTEM

Work to be completed under this task includes a detailed evaluation of the engineering drawings of the ventilation system to determine design configuration. This task assumes that Vista Chemical can provide the required engineering drawings of the ventilation system. Following review of the engineering plans, an on-site evaluation will be made. This evaluation will include verification of the current status of the ventilation system to include ventilation system flow measurements, an evaluation of the location of makeup air intakes and the amount of outside makeup air entering the ventilation system, evaluation of the proper functioning of filters, drip pans, and fans, and an evaluation of the cleanliness of the ventilation system.

TASK 3: EVALUATION OF LABORATORY AIR QUALITY

Under this task, air samples will be collected from selected rooms within the Laboratory and evaluated for chemicals with high utilization and/or high irritant or toxic properties. Additionally, samples will be analyzed for routine indicators of indoor air quality (carbon dioxide, carbon monoxide, particulates). This task will be accomplished on two separate days and sample collection will occur during periods of maximum potential for elevated concentrations. We estimate that approximately 20 to 30 samples of chemicals utilized within the Laboratory will be required and the analytical costs are estimated based on this number.

TASK 4: PREPARATION OF REPORT

This task will result in a final report that details the findings of Tasks 1-3. The report will present results of samples collected, a summary of the HVAC system evaluation, and a compilation of the results of employee questionnaires. Based on the findings of the study, conclusions will be formulated and recommendations provided to ameliorate problems identified by the survey data.

STAFFING AND SCHEDULE

Dames & Moore proposes to conduct this evaluation with a mix of project and senior level personnel. The industrial hygiene sampling and evaluation of questionnaires will be performed by a project level industrial hygienist. The evaluation of the ventilation system will be conducted by a senior level mechanical engineer. Overall project supervision will be under the direction of a senior level Certified Industrial Hygienist. Dames & Moore is prepared to begin work within two weeks of authorization to proceed. Return of the signed proposal is sufficient for authorization

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to proceed. The field work is expected to take one week to complete, with sample analysis taking approximately 21 days from sample receipt. The final report can be delivered within two weeks of receipt of sample results. We estimate the final report would be complete and delivered within eight weeks of receipt of the authorization to proceed.

FEEs

Dames & Moore proposes to perform the above scope of work on a time and materials basis in accordance with the attached General Conditions and standard Schedule of Charges. We estimate that the above scope of work can be accomplished at a fee of \$10,750, inclusive of analytical costs. An analysis of this estimate is attached.

Dames & Moore is pleased to have the opportunity to provide this proposal for this interesting and important project. If you concur with this proposal, please sign and return one copy of your authorization to proceed. If you have questions, please do not hesitate to contact me.

Very Truly Yours,

DAMES & MOORE
A Professional Limited Partnership


Shelton R. Birch, CIH
Manager, Industrial Hygiene
Health Services Group

SRB:css

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I hereby authorize Dames & Moore to begin work on the above described scope of work under the stated terms and conditions and prices.

	Title	Date
for Vista Chemical Company		

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ESTIMATE OF CHARGES

**VISTA CHEMICAL COMPANY
LAKE CHARLES CHEMICAL PLANT
LABORATORY BUILDING**

<u>SERVICE</u>	<u>ESTIMATED CHARGES</u>
Site Work (review plans, evaluate ventilation system, conduct sampling, prepare questionnaire)	\$ 4,000
Office (data analysis, report preparation, typing, etc.)	\$ 3,500
Equipment, supplies, travel, etc.	\$ 1,250
Analytical costs	<u>\$ 2,000</u> ?
Total	\$10,750



SCHEDULE OF CHARGES UNITED STATES

The compensation to Dames & Moore for our professional services is based upon and measured by the following elements, which are computed as set forth below.

1.0 PERSONNEL CHARGES

1.1 Charges for employees are computed by multiplying the total direct salary cost of our personnel (expressed as an hourly rate) by a factor of 2.5. The total direct salary cost shall be a sum equal to the direct payroll cost (computed by dividing the annual payroll cost by 1,940 hours) plus 40 percent of same to cover payroll taxes, insurance incident to employment, sick leave and other employee benefits. The time of a partner or retained consultant devoted to the project is charged at an assigned billing rate.

1.2 The 40 percent employee benefit factor is used for work performed by personnel assigned to offices in the United States. For work performed by personnel in our offices in other countries, it will vary depending on the employee benefits paid in the particular location.

1.3 When outside the United States, employees' and partners' total direct salary cost will be increased by the premium customarily paid by other organizations for work at that location.

1.4 Time spent in either local or inter-city travel, when travel is in the interest of the work, will be charged for in accordance with the foregoing schedule; when traveling by public carrier, a maximum charge of eight hours per day will be made.

2.0 EQUIPMENT CHARGES

2.1 Computer control of project costs will be billed at a rate of \$1.25 per each \$50 of job charges or fraction thereof.

2.2 Other Dames & Moore equipment, if used, will be billed at the rates noted in the Appendix.

3.0 OTHER SERVICES AND SUPPLIES

3.1 Charges for services, equipment and facilities not furnished directly by Dames & Moore, and any unusual items of expense not customarily incurred in our normal operations, are computed as follows:

3.1.1 Cost plus 10 percent includes shipping charges, subsistence, transportation, printing and reproduction, long distance communication, miscellaneous supplies and rentals.

3.1.2 Cost plus 15 percent includes surveying services, land drilling equipment, construction equipment, testing laboratories, contract labor.

3.1.3 Cost plus 25 percent includes aircraft, watercraft, helicopter and marine drilling equipment and operation.

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GENERAL CONDITIONS—FORM D

1.0 BILLING

- 1.1 Invoices will be issued every four weeks, payable upon receipt, unless otherwise agreed.
- 1.2 Interest of 1 1/4% per month (but not exceeding the maximum rate allowable by law) will be payable on any amounts not paid within 30 days, payment therefor to be applied first to accrued interest and then to the principal unpaid amount. Any attorney's fees or other costs incurred in collecting any delinquent amount shall be paid by the Client.
- 1.3 In the event that the Client requests termination of the work prior to completion of a report, Dames & Moore reserves the right to complete such analyses and records as are necessary to place its files in order and, where considered by it necessary to protect its professional reputation, to complete a report on the work performed to date. A termination charge to cover the cost thereof in an amount not to exceed 10% of all charges incurred up to the date of the stoppage of the work may, at the discretion of Dames & Moore, be made.

2.0 WARRANTY AND LIABILITY

- 2.1 Dames & Moore warrants that its services are performed, within the limits prescribed by its Clients, with the usual thoroughness and competence of the consulting profession, in accordance with the standard for professional services at the time those services are rendered. No other warranty or representation, either expressed or implied, is included or intended in its proposals, contracts, or reports.
- 2.2 Dames & Moore's liability shall be limited to injury or loss caused by the negligence of Dames & Moore, its subcontractors, and/or agents hereunder. Dames & Moore has neither created nor contributed to the creation or existence of any hazardous, radioactive, toxic, irritant, pollutant, or otherwise dangerous substance or condition at the site, and its compensation hereunder is in no way commensurate with the potential risk of injury or loss that may be caused by exposures to such substances or conditions.
- 2.3 Dames & Moore's liability for injury or loss arising from (1) professional errors or omissions and/or (2) radiation, nuclear reaction, or radioactive substances or conditions; and/or (3) any other toxic, irritant, pollutant, or waste gases, liquids, or solid materials shall not exceed \$5,000 or our fee, whichever is greater.
- 2.4 Dames & Moore's liability for injury or loss arising from comprehensive general and automobile exposures shall not exceed \$100,000.
- 2.5 Increased liability limits may be negotiated upon client's written request, prior to commencement of services, and agreement to pay an additional fee.
- 2.6 The Client agrees to defend, indemnify, and hold Dames & Moore harmless from any claim, liability, or defense cost in excess of the limits determined above for injury or loss sustained by any party from exposures allegedly caused by Dames & Moore's performance of services hereunder.
- 2.7 In the event the Client makes a claim against Dames & Moore, at law or otherwise, for any alleged error, omission or other act arising out of the performance of its professional services, and to the extent the Client fails to prove such claim, then the Client shall pay all costs, including attorney's fees, incurred by Dames & Moore in defending itself against the claim.

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