



SUBSIDIARY OF MERCK & CO., INC.

ACTIVATED CARBON DIVISION CALGON CORPORATION P.O. BOX 6768 1081 ROUTE 22 BRIDGEWATER, NJ 08807 (201) 526-4646

February 27, 1985

Mr. Jerry Harwood
Code 114
LANT Division Naval Station
Norfolk, VA 23511

Dear Mr. Harwood:

Per our recent telephone conversation, for your planning purposes, you would like to obtain budget cost estimates for emergency potable water treatment systems for the following cases:

Flow: 100 gpm, 300 gpm and 500 gpm

Contaminant: 1600-2000 ppb trichloroethylene

Depending on the treatment objectives and whether the air (after air-stripping) can be discharged to the atmosphere, air-stripping may be the preferred mode of treatment. Calgon can design and provide air-strippers (literature enclosed) and will be pleased to do so, if requested.

However, at this time we will only address the emergency treatment systems (utilizing granular activated carbon) that Calgon can provide.

Calgon can provide two-stage skid mounted Calgon Carbon ServiceSM Adsorption Modules for treating either 100, 300, or 500 gpm. One of these modules will provide you with sufficient contact time to treat 100 or 300 gpm. Should you need to treat 500 gpm we would recommend installation of two of these modules, with each module treating 250 gpm. The following are budget estimates for one of these modules (double the cost for two modules for the 500 gpm application):

- A. Delivery, installation supervision, and start-up of one-train, two stage Calgon Carbon Service Adsorption System including the initial fill of two truckloads (20,000 lbs. per truckload) of virgin Filtrasorb 300 activated carbon; carbon reactivation tests; first month's System usage; dismantling supervision; removal and refurbishing of Calgon's Adsorption System upon completion of the project. . . . \$60-70,000.

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- B. Fee after the first month (includes continuing equip-
usage, major maintenance). \$ 5,000/mo.
- C. Extra Truckloads of virgin Filtrasorb 300 activated
carbon (20,000 lbs. per truckload), including removal
of the exhausted carbon for thermal destruction of
the organics on it. \$21,000.00.

Based on the organic and its concentration given by you,
we do not anticipate any problems in accepting the exhausted
carbon from this project. However, the above budget estimates
assume acceptance of the exhausted carbon by Calgon. Furthermore,
based on the presence of 1600-2000 ppb of trichloroethylene
(alone) we estimate the weight pick-up on the carbon to be 6-7%.

Relative to delivery of these Systems, Calgon attempts
to maintain an adequate inventory to enable us to ship them
within 24-48 hours of receiving the client's authorization.
Our inventory situation, can, however, vary depending on cus-
tomer's needs and the emergency projects in operation at a given
point in time.

We believe this letter has included all the information
you require. We would, of course, be pleased to prepare Propos-
als on specific projects, as the needs arise. Should you have
any questions on this letter, or if I can be of any further
assistance, please do not hesitate to contact me.

Very truly yours,

CALGON CARBON CORPORATION

Vipin Kuckreja

Vipin Kuckreja
Sr. Technical Sales Representative

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Enclosures

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