NOVA SOUTHEASTERN UNIVERSITY Oceanographic Center



Dr D. McCorquodale Spectrum Laboratories Fort Lauderdale, Florida 33309

Re: testing of treated and untreated water

Dear Dr. McCorquodale,

I have performed light microscopical analyses of the four samples you provided (2 controls and 2 treatments). Please note that the results below are not quantitative, rather they are subjective assessments based on observations of living versus dead algal cells.

The two control samples were rich in both motile algae (i.e. flagellates) and non-motile algae (e.g. diatoms). The first treated sample (collected immediately after treatment) showed a greater than 50% reduction in motile cells. In other words, this implies that about 50 % of all algae were killed. Diatoms, being non-motile, were difficult to score as living or dead however many showed evidence of some cell damage (i.e. cell lysis). The second treatment (taken after several passes) showed greater algal damage and it is estimated that around 75% of the algae were killed. Again, this assessment was based mainly on the effect on motile algae.

I stress that these results are tentative and are solely based on subjective observations. However, they are encouraging and definite cell damage was evident in the treated samples. In the meantime, I am culturing the four samples in the laboratory to see if the control samples respond (i.e. grow) faster than the treated samples. If growth is more pronounced in the controls, it will help to substantiate the above observations.

Sincerely yours,

ogersor

Andrew Rogerson Ph.D Professor Marine Microbiology and Director of Graduate Programs

8000 North Ocean Drive + Dania Beach, Florida 33004-3078 + (954) 267-3600

Fax (954) 262-4098



Laboratories, Inc.

Water Management Technologies 1510 SW 13th Street Ft. Lauderdale, FL 33312

This letter is a follow-up to the initial report of the results of samples taken from your OXY-Plus SCAVENGER 2000 floating marine platform on Monday afternoon March 26, 2001.

Two untreated samples were taken. Two additional samples were taken, 1) immediately after treatment and 2) after one pass of thirty meters and return through pass.

Microscopic analyses by Dr. Andrew Rogerson of Nova Southeastern University was performed on cultures set up for each of the four samples. These cultures contained nutrients and were incubated under normal environmental conditions for eight days.

Both untreated samples showed a variety of species of algae. These samples were rated as " \*\*\*\* " or 100% growth.

The sample taken immediately after treatment showed between a " \*\* " and " \*\*\* " growth. This indicates between a 25% and 50% reduction.

The sample taken after one pass back and forth showed a "\*" growth. This indicates a 75% reduction.

The growth results substantiate the initial observations that indicate that the OXY--PLUS treatment system on your vessel is quite effective for treatment of contaminated of surface waters.

Regards,

Donald S. McCorquodale, Jr., Ph.D. President Microbiologist - Spectrum Laboratories, Inc. Affiliated Faculty - Occanography - Nova Southeastern University .

> McNab Road, FL Lauderdale, FL 33309 • Phone: (954) 978-6400 • Fax (954) 978-2239 Indian Street, Savannah, Ga. 31401 - Phone: (912) 238-5050 - Fax (912) 234-4815