



January 4, 2010

Mr. Rick Greenhow
Marine Floats
1208 East D Street
Tacoma, WA 98421-1710

Subject: Washington State Department of Natural Resources over-water structure requirements for light penetration

Dear Mr. Greenhow

In reference to our conversation last week regarding the requirements of the Washington State Department of Natural Resources for over-water structures the following two paragraphs apply for light penetration. These requirements are for all state-owned aquatic lands on both fresh and marine water bodies.

New floats, piers, fingers, docks, and gangways must have unobstructed grating over at least 50 percent of the surface area; grating material must have at least 60 percent open space. Skirting is prohibited. When existing structures undergo maintenance or repair, the replaced portions must meet these requirements. Additional measures to maximize light transmission may include, but are not limited to:

- *Maximize the clearance of the structure above the water and minimize the width of the structure.*
- *Orient structures north and south to allow the arc of the sun to cross the structure perpendicularly.*
- *Use reflective non-toxic paint or materials on the underside of the structure to reflect ambient light.*
- *Use solar tubes and glass blocks to direct light under the structure.*
- *Illuminate the area under the structure during daytime with artificial lighting.*

Existing docks, piers, rafts and floats that are not located at the appropriate buffer distance from existing aquatic vegetation (See Protected Vegetation_2009-11-17.docx) must be moved, or renovated so that they allow at least 30 percent of ambient light to reach the sediment surface within the aquatic vegetation zone; OR at least 90 percent of the ambient light to reach the water surface directly below the structure. Ambient light is measured as the amount of light between the wavelengths of 400 to 700 nanometers, the photosynthetically active range.

I have documented through site visits and literature, provided by Angela Butts (Marine Floats Permit Specialist), that the Marine Floats systems including the EnviroCrete system and the EnviroTuff systems both are able to achieve the environmental requirements for state-owned aquatic lands by the WA State Department of Natural Resources. Further, the EnviroGuard system for covered moorage also meets the requirements of the agency to replace structures with light maximizing ones.

Thank you for working with us through this past year and we look forward to our continued relationship in the coming years.

Sincerely,

A handwritten signature in cursive script that reads "Lalena Amiotte".

Lalena Amiotte
Environmental Planner; Aquatics Division