"Safer Alternatives to Copper Based Antifouling Paints for Marine Vessels" Project - Alternative Hull Coating Selection Matrix

Unified Port of San Diego		Initial Hull Preparation and Coating Application (For 30' Boat)			Long-Term Cost (For 30' Boat)	Longevity	Cleaning Maintenance		Special Considerations
Boat Use	Coating Category	One Time Stripping Required?	Method	One Time Cost ²	Annualized Cost Over 30 year Period ²	Estimated Years Until Repainting ³	Optimal Inspection Frequency	Resistance to Cleaning Impacts ³	
I,F,P,R	Soft Non- Biocide ¹	Yes	S	\$\$\$	\$-\$\$	5-10	3 to 4 weeks	Good	NB,1
			R	\$\$\$	\$				
I,P,T,R	Hard Non- Biocides ¹	Yes	S or R	\$\$\$	\$\$	7.5-10	3 to 4 weeks / winter 2 weeks / summer	Excellent	NB,2
Cr,P	Zinc Oxide Non- biocide ¹	Depends on specific coating	R	\$-\$\$	\$\$-\$\$\$	1.5-2	3 to 4 weeks	Fair	NB,1,3,4
Cr,P	Organic Biocide	No	R	\$-\$\$	\$\$\$	1-1.5	3 to 4 weeks	Fair	B,1,3,4
F,Cr,P,T	Zinc Biocide	No	R	\$-\$\$	\$\$	1.5-2	3 to 4 weeks	Fair	B,1,3,4
BOAT USE KEY Inactive (I) Frequent-Use Power (F) Racers –Sail (R) Cruisers (Cr) Trailer (T) Pleasure (P)		Yes/No Stripping may be required for initial application, but may not be required for subsequent applications	Spray (S) Roller (R)	\$ = \$900-1,500 \$\$ = \$1,501-2,000 \$\$\$ = \$2,001+ One time cost for soft and hard non-biocides includes stripping costs.			Cleaning may not be required during every inspection. The appropriate cleaning strategy should reduce or prevent the removal (i.e., thinning) of hull paint.		NB= Product does not contain biocide B = Biocide containing product 1=Soft cleaning tools, extra care for cleaning, 2= Periodic cleaning by power tool is acceptable 3= Cleaning likely not necessary for 90-120 days after application 4= May require more coats at waterline

¹The non-biocide paints identified in this table include only those products that do not require registration with California Department of Pesticide Regulation at the time of publishing.

²Prices based on information gathered during 2009-2010 from San Diego Bay boatyards.

³Assumes use of appropriate cleaning strategy