

Chandler, Jackie (ECY)

From: Benson, Ted (ECY)
Sent: Wednesday, April 16, 2008 11:33 AM
To: Wenger, Barry (ECY); Lund, Perry (ECY); ECY DL TCP ALL; ECY DL EAP ALL; ECY DL SEA ALL
Subject: RE: PVC in the Marine Environment

I would also suggest that you look at the [Marine Plastic Pollution Research and Control Act](#), which is intended to reduce plastics in the marine environment. I also recently read that small pieces of plastic can be even worse than larger pieces. In other words, leaching isn't the only problem.

Ted H. Benson

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"Amiculae, deliciae, num is sum qui mentiar tibi?"

From: Wenger, Barry (ECY)
Sent: Wednesday, April 16, 2008 11:07 AM
To: Lund, Perry (ECY); ECY DL TCP ALL; ECY DL EAP ALL; ECY DL SEA ALL
Subject: RE: PVC in the Marine Environment

Tom H is right - this is a VERY contentious issue since plastic piping, including PVC, is very widely used by many different industries including utilities, boating facilities, the boat hulls and accessories themselves, and of course aquaculture. The leaching of chemicals is a serious issue that has not been adequately addressed in my opinion. Creosote leaching from pilings and treated wood debris hadn't even been seriously addressed until I investigated it and started the first cleanup pilot effort about 6 years or so ago. Now it's been conclusively proven to be a major problem. At that time we were looking at plastic piling as a possible substitute but couldn't find any conclusive information on the leaching question so we were not able to recommend plastic piling then. That appears to be the state of knowledge now also. As far as the pipe breaking into small enough pieces to be a hazard to marine life, I don't think it's an issue. Years of experience being around PVC in the marine environment and exposed to the elements over long periods of time has convinced me that it becomes brittle and can break easily but not into small pieces usually. Anyone paying for it would want to reuse it until it couldn't be driven into the sediment, then they would discard it. It is critical that it is properly disposed of or it could become an issue in the intertidal area over time so permit conditions should include compliance procedures and automatic penalties for not doing so. my 2 cents worth.

From: Lund, Perry (ECY)
Sent: Wednesday, April 16, 2008 10:07 AM
To: ECY DL TCP ALL; ECY DL EAP ALL; ECY DL SEA ALL
Subject: PVC in the Marine Environment

Good Morning, and sorry for the blanket post, but I need some help.

I am staffing a committee that is working towards Shoreline Management guidelines for geoduck aquaculture, the question of PVC has come up and we are hoping to have some discussion at our next meeting (5 May). PVC pipe is typically used for the first year after planting small geoduck (2mm) in the tidelands to protect them from predators, after that the geoduck are large enough and have burrowed deep enough to be relatively safe. Six-inch pipe is cut to about two-foot lengths and driven into the mud in the upper intertidal zone (-2 to +2 MSL).

How does PVC react in this environment? We have heard statements about it breaking down into dangerous component molecules, but we have not been presented any information on this. There is also the question of PVC breaking down physically into small pieces that may be ingested by aquatic animals.

Is there someone who can help by providing me with some information on these questions? Thanks much.

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