## Patrick Pressentin

Law Office of PATRICK E. PRESSENTIN 1001 Fourth Avenue Plaza, Suite 4400 Seattle, WA 98154-1065

Patrick E. Pressentin (206) 587-0066 Pressentin@aol.com FAX: (206) 389-1708

November 1, 2017 By email only: http://ws.ecology.commentinput.com/?id=acfUM

Derek Rocket, Permit Writer Washington State DOE Water Quality Program P.O. Box 47775 Olympia, WA 98504-7775 Re: Imidacloprid use on Willapa Bay tideland Dear Sir:

This is a public comment on the use of the toxin imidacloprid in areas of Willapa Bay. I assume the economic consequences of denying the permit, much as I would assume that there were economic consequences to the prohibition of DDT. Nevertheless I oppose all use of this product on Willapa based on the Draft Environmental Report: "There are still knowledge gaps about imidacloprid." Of utmost importance are the unknown cumulative effects of Imidacloprid and its breakdown products throughout the bay in areas whether applied or not. Neurotoxins are not specific and the report indicates that the benthic and invertebrate populations will be affected to an unknown extent, particularly on a cumulative basis which is a required finding. Measurements after a 4 hour window do not provide a scientific basis for approval.

Rhetorically, would you ingest the chemical with such testing? Green Sturgeon, an endangered species, eat these shrimp and bio accumulate toxins. Will they become like the orca as the most contaminated tissue over time with a newer toxin than PCB, affecting birthrate and reducing the natural predation?

My background is local and practical and includes the UW Wetland Certificate course, environmental law practice in the litigation and cleanup of hazardous waste sites in Washington and Alaska, and continuous voluntary work over 30 years in restoration of contaminated sites. I visit Willapa Bay annually, have for over 40 years. I eat oysters (I applaud Taylor Seafoods since they have decided NOT to use this chemical.). I enjoy Oysterville and purchasing oysters there. Who cleans up after this chemistry is used for 10 years? Not the small users, but the taxpayers. Are the breakdown products and cumulative effects of Carbaryl applications still in the watershed and flora and fauna? Is there not cumulative and synergistic effects to the populations affected aside from "immediate adverse, unavoidable impacts to juvenile worms, crustaceans, and shellfish to the areas treated". Pulp mills in Washington and Alaska left legacy sites that cannot be cleaned entirely, decimating benthic, invertebrate, and fish populations by cumulative effects ignored at the permit stage. The cleanups exceed the economic value conveyed in the long run and the environment will not fully recover for decades. And these pollutants were not neurotoxins, but effluent, sulfuric acid, industrial PAHs that will eventually break down naturally.

There are "immediate adverse, unavoidable impacts to juvenile worms, crustaceans, and shellfish to the areas treated". This says nothing of cumulative impact.

I must comment on the proponents website protectwillapabay.org, where they defend the use of imidacloprid as "A Responsible, Ecologically-Conscious Integrated Pest Management Program" and

an ecological necessity for the plan. "An ecosystem imbalance that's not natural that has caused proliferation of the shrimp and turned the bay into a wasteland, where nothing else can live or grow." This is their lawyer talking, an advocate without scientific basis. The "imbalance" is not historical, nor an imbalance. The shrimp are native unlike the Spartina grass. The Pacific oysters are the invaders, the result of Japanese natives introduced here and now the users are insisting on draconic change, much the way Atlantic salmon have edged their way into our environment and now the users place the taxpayers and owners (Public Trust ownership) of our waters at risk. The mud tidelands are not deserts of biology but simply an alternative ecology of the most natural kind. Wetlands were once regarded as wastelands because of lack of knowledge and are now protected because of their economic value; these mud flats are biologically diverse and have their own value and economic assets to the larger ecosystems that are not explored in the Draft EIS. The artificial reduction of these shrimp by the use of a neurotoxin is not reasonable. Unexplored options as alternatives exist (floating or hanging cultures like Penn Cove) but have not been proposed due to economic considerations. Toxins are not the answer if we are to look to a sustainable, healthy food source.

Yours truly, /s/ Patrick E. Pressentin