

February 19, 2008
To Port Angeles City Council
From: Eloise Kailin, M.D., Secretary, PPF

In early January I presented each of you with a Notice that an expert witness from the National Sanitation Foundation (NSF) has disclosed under oath that the fluorosilicic acid (FSA) certification applications submitted to NSF do not include toxicity information on FSA and its contaminants as is required by the State of Washington (and most other states as well) for compliance with NSF/ANSI Standard 60.

At your last meeting I presented each of you with a copy of a letter written by Gary O. Pittman describing the great number of potential contaminants, how FSA is produced, and why each lot is unique. Tonight I repeat the highlights from that letter and submit a copy of one of the Materials Safety Data Sheets sent to the City.

Gary worked for the phosphate industry for about 21 years. He worked in positions ranging from the analytical laboratory to pilot experimental projects His last position was supervising one-third of the Occidental Chemical Corporation's Swift Creek Chemical Complex. He and many of his co-workers became sick with usual and unusual cancers and damage to lungs, liver, muscles, heart and brain.

The production of fluorosilicic acid and its salts-which I will call FSA here starts with washing down the air pollution scrubbers at phosphate fertilizer plants. Wash water comes from evaporation or settling ponds because there are strict rules against using fresh water in Florida. Those ponds are used as re-cycling centers for general toxic wastes. Sulphuric acid is produced at these facilities and spent vanadium pentoxide catalyst, production sludge and waste water from this process go into the ponds as well as radioactive scale from reaction vessels and filters, phosphoric acid sludges, and radioactive fluosilicates chipped from scrubbing pads and chambers.

In creating the FSA other chemicals are added such as oil based defoamers (possibly containing dioxins), polymers, petroleum products, naphthalene, chlorides, sulfides, Synspar and various reagents. During the phosphoric acid concentration processes these added chemicals and inherent toxic contaminants common in phosphate rock are boiled off the acid in a partial vacuum at temperatures as high as 500 degrees F. The vapors are washed and captured in the pollution scrubbers along with the fluorine and fluorosilicate gases. The reaction vessels are made from Hastelloy G-30 which cost a million dollars each and last only about 3 years. due to corrosion. They contribute nickel and beryllium to the mix as metal complexed fluorosilicates. Many new toxic products are created under these conditions. Each batch will be a unique mixture.

On the good side the Florida Department of Environmental Protection tells me clean well water is used in making up the final product.

With all of these contaminants now perhaps you can begin to see the need for the requirement to meet NSF/ANSI 60 General Requirement Section 3.2.1. This calls for disclosure of all toxic materials for at least one batch of FSA per manufacturer per year. Note that we do not know that the batch actually tested is the one from which Port Angeles is supplied, And there are a number of individual phosphate plants in Florida making the stuff, each with slightly different methods.

But none of these suppliers have met the requirement for full disclosure of the many, many toxic materials present, even on a one lot per year basis.

I now offer you a copy of the MSDS sheet which failed to accompany the first shipment of FSA to Port Angeles. Note the FAX label sent from Jacksonville, Fl dated 6/13/06 which is a month after the City started fluoridation. Note that it claims the product is certified to NSF /ANSI 60 and contrast this to the testimony supplied to you last month saying that Section 3.2.1 has not been complied with. Note the very small amount of information given on contents of the solution delivered. Heavy metals as lead is recorded at 3.17 parts per million. A later MSDS sheet dated November 12, 2007 sent with a different delivery of FSA recorded lead at 9.9 parts per million

Please demand to see the documentation on compliance with NSF/ANSI standard 60. You will have no other way of knowing the nature of the material you have purchased and prescribed for public consumption. The National Sanitation Foundation is a private organization, writing its own regulations and overseeing its own industry. Its test results are not available to the public by Public Disclosure Request.