----- Original Message -----
From: JJNM@aol.com <JJNM@aol.com>
To: Lund, Perry (ECY)
Sent: Fri May 23 09:59:36 2008
Subject: Acres of Geoducks

Hi Perry - Can you confirm for me that determining how many tideland acres were cultivating geoducks prior to March of last year is being made a priority? My concerns about this follow.

Published in last week's Shelton Mason-County Journal was a letter by Jim Gibbons, President of Seattle Shellfish, stating that there were only 200 acres of tidelands currently being used to farm geoducks. This follows the 525 acres Lorree mentioned to you; 270 acres Diane Cooper mentioned at November's SARC meeting; >10,000 acres noted on the COE NWP48 applications in Box 6, "Name of the Cultivated Species" ; and PCSGA's published number of 150 acres ("Geoduck Farming is Good for Washington State"). I was lead to believe in November that this was being focused on by Ecology, resulting in my note to Mr. Manning about my satisfaction on SARC's role in the process.

As you know from my earlier note and conversation in November with Tom Clingman, my firm belief is that tideland acres available and tideland acres in production should be the most fundamental piece of information determined before guidelines can be developed, let alone issued to counties.

I will typically give people the benefit of the doubt. However, the difficulty in getting an accurate number from the shellfish industry has become incomprehensible to me. It should have been easily determined from the NWP48 permits, a process which PCSGA emails show it was involved in developing at least 12 months prior to its final form, detailed in emails from PCSGA in March of last year to shellfish growers in Puget Sound and its east coast counterpart, ECSGA. That this number is still not resolved is beginning to lead me to believe that they have intentionally overstated the numbers on the NWP applications to allow for unpermitted expansion into the very limited tidelands while DOE and COE work through whatever policy issues there are.

Thanks – Jules

From: bill burrows [mailto:profb@myvbprof.com]
Sent: Tuesday, May 06, 2008 10:40 AM
To: Lund, Perry (ECY)
Cc: Holcombe, Candice (ECY)
Subject: PVC and Phthalates

Hi Perry,

During my public comments at yesterdays (May 5) meeting, I made a comment about concerns of PVC and phthalates. Following my comments, Marilyn Showalter mentioned PVC and Bisphenol A (BPA). You correctly responded to her inquiry informing her that PVC tubing does not contain BPA.

I just wanted to be sure that my concern regarding phthalate not be confused with BPA. I have

attached a report from the University of Washington that addresses health issues regarding phthalates. I would ask that this letter of clarification and the attached document from the UW be made part of the record.

Thank you ... bill burrows

(SEE ATTACHMENT BELOW)

From: JJNM@aol.com [mailto:JJNM@aol.com]
Sent: Saturday, May 03, 2008 10:36 AM
To: Lund, Perry (ECY)
Subject: Geoduck Farm Acres

Hi Perry - I wanted to send this to you first.

I was reading the notes from the April meeting and wanted to clarify a comment about current acres of geoduck farms. Its significance was something mentioned in a note to Mr. Manning in November of last year; a "thank you" to Ms. Randall; a response back from Mr. Clingman; and, a final "thank you" back, copied to Mr. Manning and Ms. Randall (see series of emails below). Having accurate information was also mentioned in a memo dated 11/12/07 I'd sent to Mr. Clingman.

As background, in my email to Mr. Manning I expressed concerns about the total acreage noted on the NWP48 permits not providing accurate information of geoduck farms in production. This was a significant enough issue to me that I drove from Portland to attend the November 26 meeting to hear how the NWP48 program was being implemented.

At that meeting, from my notes, acres of current geoduck production ranged from 150 acres (Laura Hendricks) to 270 acres (Diane Cooper), with the NWP48 permits indicating over 10,000 acres in production. After various comments from the Army Corps, Diane Cooper and Laura Hendricks about this, Loree Randall stated that she was aware this was a problem. She said that she was contacting the various shellfish companies in order to clarify what the location and number of acres currently in production was. When I returned home I sent her a note telling her how gratified I was to hear this, and also responded to Mr. Clingman's note below, copied to Mr. Manning, that I was very gratified to hear that the exact number of geoduck farms was being determined.

As I told Mr. Clingman at the meeting, and mentioned in a memo dated 11/12/07 and sent 11/16/07 via email, at the most fundamental level this information is critical in order to provide meaningful guidelines. (Note: I have attached this memo for you as I do not find it on SARC's web site.)

My reason for this email to you is that in the "Final Comments" section it appears that this issue is not resolved, nor is it reasonable to expect it to be. This is far different from what I was lead to believe was happening based on Mr. Clingman's response and the fact that nobody responded that my understanding of what was happening in my "thank you's" was incorrect. So, I felt it important to ask whether this discrepancy in acreage has been resolved and if Ecology has an accurate picture now of exactly where the current geoduck farms are and their acreage.

Thanks Perry. This is important to me as I feel it is, as mentioned, the most fundamental piece of information to have.

Jules

Plastics: Possible Impacts on Children's Health

Phthalates and **Bisphenol A (BPA),** can act as "endocrine disruptors" in animals. Similar hormonal like activity in human systems is possible.

Health effects attributed to endocrine disrupting compounds include a range of reproductive problems (reduced fertility, male and female reproductive tract abnormalities, and skewed male/female sex ratios, loss of fetus, menstrual problems changes in hormone concentrations; early puberty; brain and behavior problems; thyroid hormone and gland changes; impaired immune functions; and various cancers)

These chemicals can leach from plastic containers into foods and beverages causing exposure from dietary ingestion. In addition, children may be exposed through inhalation from these chemicals in dust and through the skin from dermal transfer.

Detectable concentrations of these chemicals have been found in blood, urine, breast milk, and amniotic fluid in the general population. There are only a few human studies focusing on in utero or childhood exposures, so most of our knowledge of potential health effects stems from published animal studies.

UNIVERSITY OF WASHINGTON

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1-877-KID-CHEM

Phthalates

Phthalates are man-made chemicals used as a "plasticizer" in a variety of industrial and commonly used products. These chemicals are anti-androgenic and can adversely impact androgen sensitive tissues during specific windows of development.

Animal Studies (all are high dose exposures in utero)

- significant **testicular toxicity** in utero and in early development (testicular dysgenesis syndrome)
- increased incidence of **male reproductive tract abnormalities** in offspring of prenatally exposed rats including hypospadias, cryptorchidism, and testicular tumors
- **decreased birth weight** after prenatal exposure
- kidney and liver malignant tumors (not thought to be relevant to human exposures)

Human Studies

- prenatal phthalate exposure has been associated with a **decreased anogenital distance** (marker of androgenization), **reduced penile size**, and **incomplete testicular descent**
- phthalate exposure through breast milk has been associated with **increased LH**, **decreased free testosterone** and **increased serum human binding globulin** in 3 month old male infants
- early childhood exposure to phthalates has been associated with increased **rhinitis, eczema, asthma, wheezing**
- several studies relate phthalate exposure with abnormal sperm morphology/sperm DNA damage in adult males

Bisphenol A

Bisphenol A is a man made chemical used in hard, polycarbonate plastics. BPA acts as a pro-estrogenic substance in the body. It has chemical properties similar to estradiol and can impact biological systems in very low doses.

Animal Studies

- **neurotoxic**, stimulates estrogen receptors in brain, prenatal exposures lead to changes in behavior including **hyperactivity, increased aggression, impaired learning**
- prenatal exposure is associated with **early puberty** and **increased mammary tumors** in offspring, increased risk of **prostate hypertrophy**
- prenatal exposure associated with **increased adipocytes and increased body weight** in offspring
- adult exposure associated with modulation of helper T1 and T2 cells which in turn **adversely affects antibody production**

Human Studies

- extensive evidence that **humans are exposed at concentrations similar or higher than doses used in several animal studies that document adverse health effects**
- no epidemiologic studies published examining human health effects.

Sources of Phthalate and Bisphenol A Exposures

There isn't a disclosure requirement or comprehensive list to aid consumers in identifying plastic containers with Phthalate or Bisphenol A. However, Recycling Codes can be a clue to phthalate or BPA containing products

Phthalates

Vinyl (Polyvinyl Chloride – PVC) – PVC tubing, clear food and non-food packaging, medical tubing, wire and cable insulation, film and sheet, construction products such as pipes, fittings, siding, floor tiles, carpet backing, plastic toys and other flexible plastics.

Phthalates can also be found in several cosmetics and personal care products such as lotion, aftershave, and perfumes/cologne.

Bisphenol A

#7 is considered the "other category" This can include hard, polycarbonate plastics such as those used in water bottles for hiking/camping, or baby bottles and sippy cups.

Bisphenol A is also used in can linings and products with thin plastic film coatings such as yogurt containers.

Tips on How to Avoid Exposure

Phthalates	Bisphenol A
• look for recycling code and avoid use of #3 when possible • do not microwave food/beverages in plastic • do not microwave or heat plastic cling wraps • use alternatives to plastic packaging when possible • buy phthalate-free toys or those approved by the European Union (the EU has placed a ban on using certain types of phthalates in children's toys) (any handy website to refer to?)	• look for recycling code and avoid use of #7 (may or may not contain Bisphenol A) when possible • if using hard polycarbonate plastics (nalgene/baby bottles/sippy cups), take precautions. Do not use for warm/hot liquids, discard old scratched bottles • use safe alternatives such as glass or poly ethylene plastic • choose canned foods from makers who don't use BPA (i.e. Eden foods) • try to buy soups/milk/milk products in cardboard cartons

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