

Six Ponds News

April, 2011

(www.sixponds.org)

An Occasional Publication of the Six Ponds Improvement Association, Plymouth Mass.

Nuclear Concerns in the Six Ponds Area

Because of the concerns about the problems at Japan's Fukushima nuclear power plant, and its similarity to Pilgrim Station in Plymouth, a representative of the Six Ponds Association attended Plymouth Nuclear Matters Committee meeting on Monday, March 21. It was informative, but perhaps not overly reassuring.

Jack Anderson, Entergy's Government Relations Director for Pilgrim, addressed several issues. He confirmed that Pilgrim was basically the same as the 1, 2, 3 and 4 reactors in Fukushima (GE, Mark One Containment) and had been built at the same time. While he admitted that there were some differences, he wasn't sure what they all were. The obvious ones were that Fukushima is located in an area subject to high risk of a tsunami, and Pilgrim isn't; and the fact that the switch gears and fuel oil tank were located outside the building in Fukushima (subject to salt water intrusion) and are located inside a sealed air hold building at Pilgrim. There was much discussion about the low risk of a similar earthquake/tsunami occurring in New England, therefore, according to Mr. Alexander, the likelihood of that kind of accident is low.

Questions were asked about power outages and the ability of Pilgrim to withstand storm surges from hurricanes. Mr. Anderson seemed confident that Pilgrim had been designed to withstand a 20 foot hurricane storm surge (to mean water level) on top of design basis ocean waves and that its backup power sources were safe. Containment systems had relief pressure vents that would prevent hydrogen accumulation and explosions. He claimed the plant was designed for fire and flood consideration and was seismically rated. There is a yet another diesel-powered generator available of a sufficient size to operate the necessary equipment if there was a loss of all off-site power.

Committee members asked about the storage of spent fuel rods. According to one Six Pond member, who recently toured the Pilgrim site, "the spent rod pool is located on the second story above the ground so that the spent rods can more easily be moved from the reactor to the pool. Water must be pumped up to the second story. The containment building is not designed as robustly as the reactor building even though the risk to that building today is very much similar to the risks of the reactor building. The reason: original design contemplated removal of spent rods to off-site storage - it did not contemplate that so many rods would have to be left crammed into that space." (It should be noted that the pool contains all the spent fuel rods since the plant start-up in 1972.)

Mr. Alexander pointed out that the additional security upgrades after 9/11 for the spent fuel management system included the installation of lines that could add water without accessing the building. While Entergy would very much like spent rods to be taken to an interim central depository by the government it is not likely to happen anytime soon, if ever.

The Committee members appeared to take their role seriously and asked the important questions. However they seemed unaware that Pilgrim had been rated as one of the reactors in the US seriously at risk of an incident.

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Law Enforcement and New OHV Law

On May 7, at 2-4 in the Otto Fehlow Room of the Plymouth Library a symposium will be held called "Protection of Open Space" and will deal with enforcement of the new OHV (Off Highway Vehicle) law. There to speak on the subject will be various state and local law enforcement organizations.

The new law was passed by the Legislature and signed by Gov. Deval Patrick last August.

Under this law, no person under 14 may operate an all-terrain vehicle or recreational utility vehicle.

No person age 14 to 16 may operate an all-terrain or recreational utility vehicle with an engine capacity greater than 90 cubic centimeters or operate any such vehicle without direct supervision by an adult. The supervising adult must be at least 18 years old and must be sufficiently close to the operator at all times to maintain both visual contact and verbal communication.

As of Feb. 1, operators under the age of 18 are required to take an approved safety course.

No one under the age of 16 1/2 may operate a recreational vehicle across a public way unless directly supervised by an adult.

Parents of operators under the age of 16 will be required to attend one mandatory safety course session. You can only sign up for one of these classes with proof that you have successfully completed the General Safety Training. Organizations offering state approved OHV Safety classes include Fresh Air Educators, 877-508-4288, www.freshaireducators.com.

The safety course schedule is by town, location, time and class date.

Register for any of the following by calling the Boat and RV Safety Bureau at 508-759-0002.



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Nuclear... (continued)

Mary Lampert, of Pilgrim Watch (a grassroots organization in Duxbury, concerned about the safety of Pilgrim Station), reported on her petition to the federal safety board about the degrading of underwater cables supplying power to Pilgrim.

Town Meeting in Duxbury voted to request denial of re-licensing without 1) third party assumption of post disaster liabilities, 2) inspection and replacement of any degraded control rods, 3) inspection / replacement of the underground cables not designed for wet conditions, and because of present Tritium leaks, 4) upgraded inspections and monitoring of plant to current best practices monitoring standards.

The Committee's role is only to advise the Board of Selectman. They did discuss the concern about, and the difference between, the "known unknowns" and the "unknown unknowns". The next nuclear accident will most likely not be the same as the last one; it will be the thing we are not anticipating, and are not likely to have prepared for. The Committee seems to be both informed and concerned, but the public, and those of us in the Six Ponds area should let them know of our concerns.

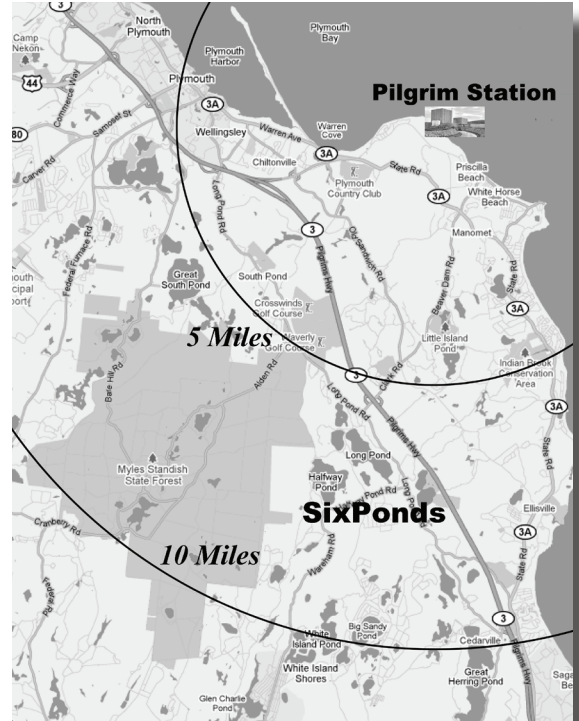
Apparently the town Attorney, Sheila Hollis, also made a recent public statement (pre-tsunami), quoted in the Old Colony of the Town's concern about Pilgrim, and whether safety issues were being sufficiently addressed.

There are a number of major concerns:

- Has Plymouth unwittingly and unwillingly become a de facto permanent nuclear waste depository?
- What would they do in the event of a significant solar "electromagnetic pulse" event?
- Is the design standard to withstand a 20-foot storm surge sufficient?
- Has the NRC really done a sufficient risk assessment for residents living in such close range to an aging nuclear facility?
- Will the safety regulations and requirements change after the events in Japan?
- When can spent rods be transferred to dry cask storage?

We all need to be aware of these issues and to keep on top of developments surrounding the re-licensing of Pilgrim Station. These websites may be of interest:

- The Nuclear Regulatory Commission's Pilgrim Station License Renewal: <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/pilgrim.html>
- The Pilgrim Station site: <http://www.pilgrimpower.com/>
- Pilgrim Watch: <http://www.pilgrimwatch.org>



OHV... (continued)

In addition, the new law requires all operators of recreation vehicles operated on public and private property to register their vehicles with MEP. Previously, operators who rode exclusively on private property were not required to register their vehicles.

The new law also includes increased penalties for illegal operation of off-highway vehicles.

MEP also reminds operators of these safety tips.

- Never operate a recreational vehicle under the influence of alcohol or drugs. Doing so can result in fines, drivers' license restrictions, suspensions and vehicle impoundment.
- Operate at reasonable speeds.
- Wear a safety helmet.
- Operators are prohibited from operating within 150 feet of an occupied residence without permission of the owner.
- It is prohibited to operate a recreational vehicle on an ocean beach or sand dune in a manner to destroy, damage or break down the beach or dune.
- It is prohibited to operate in a manner to harass or chase wildlife or domestic animals.

Report any recreational vehicle accidents to the MEP at 800-632-8075.

EOEEA press release

<http://www.mass.gov/?pageID=eoeeapressrelease&L=1&L0=Home&sid=Eoeeca&b=pressrelease&f=110316-PR-New-OHV-Rules&csid=Eoeeca>

New laws:

<http://www.malegislature.gov/Laws/SessionLaws/Acts/2010/Chapter202>

Lawn Care = Pond Care

The health of our ponds depends on those of us who live near these bodies of water and that does not mean just on the water's edge.

Although pond aging, or eutrophication, is a natural process, human influences speed up the process. This is called cultural eutrophication, and there is a lot that each of us can do to mitigate it.

Main culprits that contribute to cultural eutrophication are excess nutrients in the forms of phosphates, nitrates and bicarbonates, erosion that brings silt and additional nutrient load, shifts in pH due to acid rain, and removal of vegetation from the shore and buffer zone. In addition to making sure our septic systems are in good working order, not using soaps or detergents (including car washing) near the pond, filtering stormwater runoff from roadways, and maintaining vegetation and soil cover along pond edges, how we maintain our lawn and gardens can make a critical difference.

The average lawn in America is greatly over-chemicalized. The nutrients contained in fertilizers are designed to be water soluble for quick uptake by turf grasses, but fertilizer leaching contributes to growth of pond weeds and algae in surface waters. This reduces clarity of the water, resulting in higher water temperatures and reduced dissolved oxygen content, ultimately threatening survival of fish and other pond dwellers. Pesticides and herbicides used on lawns are equally mobile, they do make their way to ponds and they are highly toxic to aquatic life – some are toxic for years after their initial application.

“But I don't live right on a pond.” Truth is every one of us lives in the watershed of some body of water. The following recommendations are good for all lawns.

- **Chemical Nutrition.** Reduce or eliminate fertilizers. Most lawns can be weaned from chemical dependency over a year or two, particularly if you use a mulching mower or mow frequently and leave the grass clippings on the lawn to naturally decompose and feed the turf. If you feel you *must* fertilize, use an organic, slow-release, low-phosphate fertilizer that you apply once a year when the grass starts to green up in the spring. This is about the same time as the Forsythia are blooming. Fertilizers applied in the Fall or too early in the Spring are a major source of nutrient leaching, because the grass will only use fertilizer when it is actively growing.
- **Toxic Killers.** Eliminate all pesticides and herbicides. We have literally been sold a bill of goods by the petrochemical and pesticide industries. They've convinced America that our lawns are chock full of undesirable

weeds and dreadful critters. Not so. Most lawn weeds can be hand-pulled without much effort, and most lawn insects – yes, even grubs – can live in harmony and balance if the lawn is basically healthy. Save your property, your family, your pets and our wildlife from exposure to these neuro-toxins, endocrine disruptors and carcinogens, and you'll help save your pond from their deadly down-stream effects, too.

- **Water.** If you must water the lawn, water infrequently but deeply. Watering once per week early in the day is much healthier for the lawn than “10 minutes every day” which encourages shallow rooting.
- **Mow high.** Re-set your mower to 3.5” or higher. If you have a lawn service, request they do the same. A longer grass blade translates to a deeper root, it shades the surface of the soil, discouraging weeds, and keeps soil cooler, reducing water use.
- **Blade.** Make sure your mower blade is sharp. A sharp blade makes a clean cut, allowing the grass to recover faster.
- **Leave it.** Leave the grass clippings on your lawn. Grass clippings quickly break down and give your lawn a natural nitrogen burst. Contrary to popular belief, clippings do they contribute to – thatch.
- **Sweet or Sour.** Test the pH of your soil. Between acid rain and living in a pine barrens, you can bet your soil pH is naturally low or ‘sour.’ Raise pH by adding granulated lime to help the plants metabolize nutrients.
- **Proximity.** Keep lawns away from the waters edge. Preferably keep any lawn area at least 100’ from the water, but if this is not possible, eliminate all lawn fertilizers and treatments to keep nutrients and poisons out of the pond.
- **Aerate.** Once every year or so in the Fall, core aerate your soil. This allows water and air to penetrate the surface, and contributes to a healthy lawn ecosystem. Fall aeration is far superior to Spring aeration, because any weed seeds that come to the surface won't have much opportunity to germinate.
- **Say FESCUE.** When seeding or overseeding, always choose a shade mix, even if you have sunny conditions. Shade mixtures have a greater percentage of turf-type tall fescues, grasses that do beautifully under a wide range of conditions, require minimal nutrition, and are very resilient against pests.

Our lawns don't have to contribute to the eutrophication of our ponds. Work to keep lawns away from pond edges, eliminate fertilizers, herbicides and pesticides, mow and water optimally, and both your lawn and our ponds can thrive!

Contributors to this issue:

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Six Ponds Executive Committee 2010-2011

Joe DeSilva (President)	Walter Morrison
Leighton Price (Vice President)	Roger Monks
Betsy Hall (Secretary)	Craig Richards
Doug Post (Treasurer)	Larry Rosenblum
Sam Chapin	Charlotte Russell
Sherm Geller	Judy Savage
Barry Meltzer	

Roadside Clean-up Saturday, April 30

Years ago the Six Ponds Association began a program of roadside cleanup days. That initiative has since caught on all over town and is led by an umbrella group called the Network of Open Space Friends. The town supplies the plastic bags and picks them up after the cleanup has been completed in each neighborhood.

The date for the Six Ponds cleanup this year is Saturday, April 30, with a rain date of Sunday, May 1. We will meet at 10 am at the corner of Clark Road and Long Pond Road. Bags will be supplied – bring your own gloves and any other tools you might want.

It can't come any too soon because the long and tedious winter has left trash strewn all along our roads and open spaces.

Many Six Ponds volunteers stepped up last year to keep our neighborhood looking good, and they have said that it is curiously satisfying work. We encourage new volunteers. Just an hour or two of work on one day at a favorite place makes a big difference.

Questions call: Charlotte Russell at 508 224 2007



Disposal of unused medicines

If you've decided to clean your unused medication from your medicine cabinet please do not flush them down the drain. In the Six Ponds area they go into the aquifer and only to be taken up in your or someone else's well or in our ponds.

What to do with them: some pharmacies or hospitals will take them back and dispose of them, some organizations collect and donate them to third world countries. Here in Plymouth where most trash goes to an incinerator that is the best

fall back choice. There may be some pharmaceutical residual in the incinerator smoke but most is probably broken down. If none of the more preferred means of disposal are available to you, incineration is still better than flushing. When placing the medicine in the trash it's best to remove the drugs from their container so they can't be identified and taken from your waste basket by kids or taken from the trash disposal system.

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