

Late in March, I went to watch the walleye run in the Maumee River near Perrysburg where anglers stood in waders to catch the prized fish. Many of the anglers put the females dripping with eggs back in the river. Few anglers know about the dangers in the water downstream.

650 million gallons of cooling water from the Maumee River at the mouth of Maumee Bay is channeled past a 150 acre dredge island into a 12' deep, 200' wide, 3700' long intake channel into the power plant intake. 650 million gallons is equivalent to filling 32,500 average size swimming pools. The channel pulls 30-100% of the water in the Maumee River into the power plant daily. This is where millions of fish meet their demise.

46 million fish caught against the screens – 52 million if you do traditional math and 2.1 billion larval fish that go through the screens – that is an average of 126,000 fish a day caught and 5.7 million fish per day almost all of which are killed.

Few fish make it to the outfall which is separated from the intake by a half mile by one mile dredge disposal area. The discharge water is heated 5-10 °Fahrenheit than the intake. The water is discharged into 2-3' of water with minimal oxygen levels. The heated water then creates a thermal plume that extends all the way down the Oregon shoreline to Maumee Bay State Park where the water never froze all winter in 2009-2010, but the Maumee River and Lake Erie waters did freeze.

Has Bayshore done anything to reduce the massive fish kills? No

Ohio EPA's consultant Tetra Tech: " Bayshore power plants collection and return system...does not contain any components that target impingement, nor does the system conform to widely accepted design standards for a fish collection and return system...no collection buckets, no continuous rotations. Fish are removed from the screens with a 50 psi high pressure spray si) and returned in concrete conduit with ... several sharp turns before a significant drop to the discharge sluiceway. The intake location is less than ideal." In short Bayshore/First Energy does little to nothing to reduce the fish kills.

What none of us knew was that since the Clean Water Act was passed in the 1970's, Bayshore/First Energy got a renewable license to kill the fish every five years. The base permit was put in a confidential file and it took me six months in the late 1990's to get a copy of the fish kill permit that was magically renewed by Ohio EPA every five years.

Before tonight's hearing tonight, Bayshore rushed to install a pilot louver to reduce the fish caught against the screen with no bypass which is needed for louvers. Ohio EPA's consultant Tetra Tech said that while louvers are logistically possible but will not deliver satisfactory pWith Ohio EPA's own consultant saying no to louvers, why did Ohio EPA put louvers in the permit? Also, louvers are species specific – there are over 100 species of fish killed at Bayshore. Louvers are just a cheap way to buy time until Ohio EPA makes the company do something else.

Bayshore can afford to pay.... Bayshore/First Energy charges some of the highest electrical rates in the country. Bayshore/First Energy has a dirty noisy plant that is so bad that they pay for a street sweeper all day to keep the dust down on Bayshore Rd. First energy has just purchased

the Alleghany power companies stock for \$8.5 billion. It is estimated that the Bayshore plant grosses \$287 million per year. Bayshore/First Energy can afford a cooling tower and pay for the fish they kill.

All that impact fish except intakes pay for licenses to fish and businesses and others pay if there are accidental spills.

In addition to the fish kills, there is a general problem with all NPDES permits issued in Maumee Bay and Western Lake Erie. The modeling for the allowable pollutants is set for all of Lake Erie whose average depth is 62'. Pollutants discharging into an average Maumee Bay depth of 5' and Western Lake Erie depth of 24' have a greater impact on water quality than pollutants discharged into 62' of water or on the far eastern Lake Erie basin 200' of water.

Therefore the following are requested:

1. Figure 1 for the location of the Bayshore is to be updated to the current configuration of Facility Three.
2. Ohio EPA require Bayshore/First Energy to count, weigh and report the fish they kill on a daily basis
3. There was a recommendation from OEPA and ODNR that Bayshore close 3 of the 4 units during spawning season. Bayshore said no. Please make the closure during spawning season a permit condition
4. ODNR charge natural resource damages to Bayshore for the fish they kill with funds benefiting the Maumee River, Bay and Western Lake Erie, until such time as they install and operate the best available technology to reduce the fish kills.
5. Louvers that have no track record to reduce fish kills in fresh water coal fired power plants be determined by Ohio EPA to be unacceptable as recommended by Ohio EPA's own consultant.
6. Because of the massive fishery in the Maumee River/Bay and Western Lake Erie, Ohio EPA set the standard for fish reductions at 90% for impingement and 80% for entrainment which are the upper limits suggested by USEPA rather than the 80%/60% minimal levels proposed by Ohio EPA.
7. The timetable for installation of the best available technology be moved up to July 1, 2012 instead of 2014.
8. Bayshore/First Energy be required to install the best available technology, mechanical draft cooling towers as recommended as logistically feasible with satisfactory performance with no disqualifying limitations that is cost effective and reduces impingement by 95-98% and entrainment by 95-98% by Ohio EPA's consultant, Tetra Tech. This alternative also nearly eliminates the thermal plumes with the reduction in water use to an estimated less than 50

million gallons a day. If cooling towers were required at Davis Besse and Enrico Fermi, the same should be required at Bayshore.

9. The limited use of screens in some of the intakes be investigated and corrected to 24 hour use(the report shows one screen used 15 minutes in a 24 hour period and another 30 minutes in a 12 hour period.
10. Ohio EPA initiates new modeling for NPDES permits in Maumee Bay and the Western Basin of Lake Erie which has recently been classified by USEPA as all nearshore and exception warm water habitat and then reevaluate what the water quality based effluent limits should be. The modeling used to determine the limits
11. Ohio EPA determine what is happening to the dead fish at Bayshore. There are reports that Bayshore grinds the dead fish and then puts the remains in the flyash. IS this true? Do ground up fish in the fly ash have any permit issues for the fly ash or its reuse? Ohio EPA needs to require Bayshore to give a full accounting of what happens to the dead fish.
12. Ohio EPA require Bayshore to analyze and quantify all of its flyash for arsenic, mercury and other pollutants in the cdf and in the landfill.
13. The wastewater from the flyash sluice be characterized and reported.
14. The mercury discharge limits meet Great Lakes Water Quality standards
15. There are no studies that show the impacts of the thermal discharges to the ecosystem along the Oregon shoreline. As previously stated, the water along the shoreline never freezes. There is reason for Ohio EPA to restrict the size of the thermal plume to 1000 feet from the point of discharge to allow, if for nothing else, recreational uses of the Oregon shoreline in the winter. Bayshore/First Energy should not be allowed to keep the water from freezing for over two miles denying people the right to ice fish, ice skate, or ice boat on Maumee Bay.
16. That the outfall temperature be limited to no more than 90°.

It is obvious there are many issues facing the Great Lakes and one of the nation's largest fish killing power plants. This is a fresh water fishery and the numbers of 126,000 caught and 5.7 million are a loss to the fishery and the economy.. Fishing is big business. Fish have value. It is time for Ohio EPA and Ohio DNR to have the Bayshore/First Energy power plant reduce the fish kills by installing cooling towers. First Energy Generation has the ability to pay for the cooling towers with the cost factored into rates determined at auction, not into distribution. Toledo, Port Clinton, Sandusky and the State of Ohio would all benefit from a more robust fishery.

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