

February 12, 2015

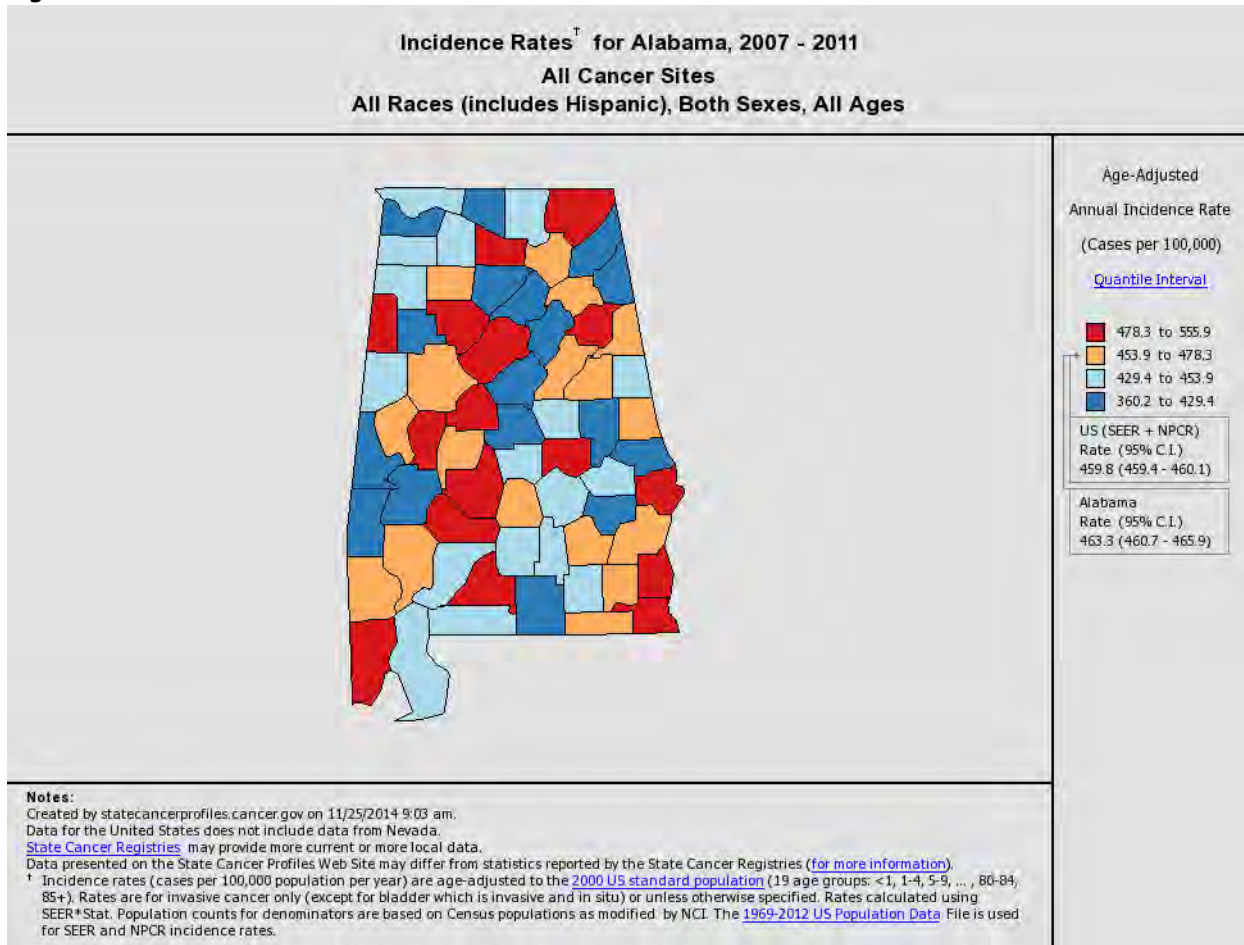
To: TVA Board of Directors

From: Garry Morgan, U.S. Army Medical Department, Retired  
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<http://www.matrr.org> email: [best@matrr.org](mailto:best@matrr.org)

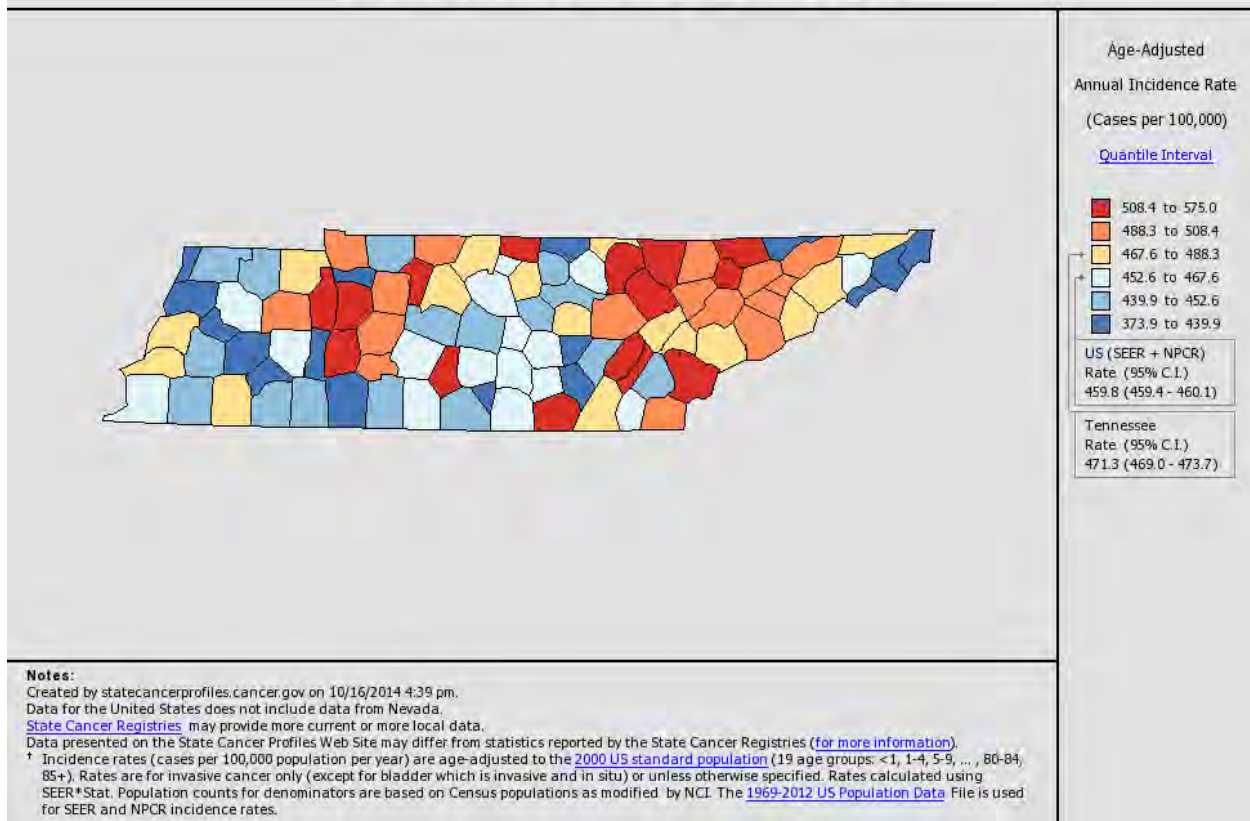
Subject: Pollution and Health in the Tennessee River Valley

The Tennessee River is literally the “lifeblood” of our valley. Many of the valley’s citizens drink its’ water. The cancer incidence maps provided demonstrate geographical patterns in counties where the cancer incidence is high. Water ways and predominant geographic features play a role in the distribution of manufactured pollutants. In each case the counties with the highest elevations of cancer incidence rates are located along the Tennessee River or other water bodies.

***CURRENT CANCER INCIDENCE RATES FOR Alabama & Tennessee- Red represents the counties with the highest cancer rates above state and national rates.***



**Incidence Rates<sup>†</sup> for Tennessee, 2007 - 2011**  
**All Cancer Sites**  
**All Races (includes Hispanic), Both Sexes, All Ages**



### Dangerous carcinogenic chemical and radiological substances found in the Tennessee River Valley

Dioxin-Chlordane, PCB, Mercury, tritium, Iodine 131, Uranium 235, cesium 137, strontium 90, cobalt 60, technetium 99, Radon, arsenic, beryllium, hexavalent chromium, lead, lithium, DDT, copper, barium, cadmium, thallium, Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds. (2), (3)

These substances have been present in the TVA area for many years and continue to accumulate in the biosphere and pollute the river valley today. Chemical poisons and radionuclide contamination have contributed to high cancer rates in the valley.

Leukemia, brain cancer, breast cancer, thyroid cancer, lung cancer, Non-Hodgkin Lymphoma and other cancers are present in the valley at elevated incidence rates. Cancer clusters may be found in valley counties such as Jackson, Lauderdale and Morgan in Alabama; Rhea, Marion and Meigs in Tennessee. (1) Rhea County Tennessee has the highest cancer incidence rate in Tennessee.

The TVA is not responsible for regulating effluent discharges, the EPA and the state environmental departments have that responsibility. Monitoring health falls on organizations such as the CDC and the state health departments.

The TVA does have a great responsibility to the citizens of the TVA area. TVA's mission is more than the generation of electrical power. Environmental stewardship is part of TVA's mission. As such the corporations of which the TVA provides economic incentives should not be polluters of our air, land or water. All of us are paying for the pollution of the past 70 years, some have paid with their lives.

The TVA is moving to clean-up its coal fired operations, this is a positive step.

The citizens can no longer afford the health risks of coal ash contamination. Coal ash generated in the TVA area contains heavy metals which bio-accumulate in fish and other organisms in the river. Many areas of the river have Fish Advisories posted as a result of dangerous contaminant levels. Coal ash contaminates the air, water and land. (5)

Radionuclide contaminants are present in the environment, there are no safe levels of ionizing radiation contamination originating from nuclear fuels facilities, nuclear weapons facilities or a nuclear reactor. All nuclear facilities in the valley have leaked or routinely release radionuclide contaminants into the environment which increases the cancer risk to citizens. (2) (4) (6)

Radiation monitoring has revealed high atmospheric radon counts from rainwater sample wipes, radiation counts 55 times background levels (land average background level of 35 cpm, counts per minute). Sediment levels in the river exhibit a minimum of 2 times background up to 6 times background levels (water background level average of 22cpm). High land readings reached 125cpm along the I75 south bound rest area near Athens, Tn. Our multi-channel analyzer revealed Uranium235 to be the predominant offending radionuclide.

Nuclear Power is not clean, it leaves a hundred thousand year legacy of highly radioactive nuclear trash from the fission process which must remain secure for the entire period of its' radioactive life.

Members of The Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team, and Mothers Against Tennessee River Radiation ask of the TVA to not provide economic incentives to industries who will pollute our environment.

We ask of the TVA to continue support of Energy Efficiency and Sustainable Renewable electrical power generation resources. Supporting energy efficiency supports the citizens and businesses of the Tennessee River Valley.

Thank you,  
Garry Morgan [gmorg50@hotmail.com](mailto:gmorg50@hotmail.com)

References: (1)

<http://statecancerprofiles.cancer.gov/map/map.withimage.php?47&001&061&00&2&01&0&1&4&0#results>

(2) <http://health.state.tn.us/ceds/oakridge/ORHASP.pdf>

(3) [http://www.tn.gov/environment/water/docs/wpc/2012\\_305b.pdf](http://www.tn.gov/environment/water/docs/wpc/2012_305b.pdf)

(4) [http://www.epa.gov/radiation/understand/health\\_effects.html#riskofcancer](http://www.epa.gov/radiation/understand/health_effects.html#riskofcancer)

(5) <http://www.psr.org/assets/pdfs/coal-ash-toxics-damaging-to-human-health.pdf>

(6) <http://radioactivepoison.blogspot.com/>