## Phyllis Farrell

Greetings, I am a citizen concerned about both global warming and the impact of current farming practices. I grew up in Iowa where the Farm Bureau was a conservation group (no longer!). My father practiced what is now known as regenerative farming, crop rotation, use of cover crops and grass waterways, 3 foot fence buffers, manure as fertilizer and animals turned out to fields after harvest. I am appalled at the use of CAFOs. Besides being incredibly inhumane, they are the source of air, soil and water pollution.

Regarding the proposal to reissue Concentrated Animal Feeding Operation (CAFO) National Pollutant Discharge Elimination System and State Waste Discharge General Permits, I have several comments:

- \*DOE has failed to consider the impacts of climate change in authorizing CAFO discharge into our waterways.
- \* In the draft, there is no requirement for all WA CAFOs to obtain permits. This means that over 200 WA CAFOs are discharging to ground and surface water, and no one is measuring the discharge or regulating it.
- \* Washington is looking closely at requirements for riparian buffers and DOE has developed draft guidelines that will protect salmon from pollution and save salmon habitat. These guidelines should be an enforceable part of the CAFO permit, and they are not.
- \* There are 53 CAFO dairies in Western Washington flood plains. Last fall, DOE spent several hundred thousand dollars helping Whatcom County farmers pump manure out of lagoons to prevent overtopping during extreme flooding. With Climate Change, these extreme weather events will increase, including flooding that sends pollutants directly into the rivers and into Puget Sound.
- \*DOE has an obligation to define "All Known, Available and Reasonable Technology" (AKART) for CAFOs, and we don't see that definition in the permit.
- \*Manure lagoons contribute to global warming. Storing manure in lagoons produces methane, a GHG far more potent than CO2. Washington State sends over a million metric tons of GHG CO2 equivalent into the atmosphere every year from manure lagoons. When cows are kept on pasture, this does not happen. I sympathize with farmers who followed the best available advice when they built lagoons years ago.R They were told, and they believed, that lagoons would protect the environment. Now, we know that the side effects are huge, and I wish to see farmers assisted in transitioning away from this practice.

Respectfully,

Phyllis Farrell