

Spett.le Regione Autonoma della Sardegna  
ASSESSORATO DELLA DIFESA DELL'AMBIENTE  
Servizio della Sostenibilità Ambientale Valutazione Impatti e Sistemi  
Informativi Ambientali  
Settore delle Valutazioni Ambientali, Valutazione di Impatto Ambientale  
e Valutazione di Incidenza  
Via Roma, 80 - 09123 Cagliari

e per conoscenza: ARPAS Sardegna, Comune di Arborea, Provincia di  
Oristano

Dear representatives of the region of Sardinia:

I am writing to you to recommend that you deny authorization to the drilling permit Eleonora 01 dir in Arborea, as filed to your office by Sargas, a spinoff of the Italian oil company Saras.

These permits would allow Sargas to drill the Oristano area for what most likely will be heavy sour gas, right off the coast, in a touristic, agricultural, and naturalistic area very close to natural reserves, ranches and farms. These operations could be the beginning of the transformation of beautiful Sardinia and its coastline into a gigantic oil and gas field.

Gas exploration requires massive seismic testing first – via vibrating heavy equipment and trucks, and later drilling up to three, four, or five kilometers under ground. These operations, in my opinion, would be detrimental to the natural beauty of Sardinia and may be dangerous for residents, due to possible drinking water contamination, air pollution, well blowouts and spills which are common consequences of on-shore drilling.

In particular, water contamination issues are severe. Due to fissures in well casings or voluntary dumping, chemicals from drilling muds may enter the water supply and turn what was once a resource into unusable waste. Chemicals may also permeate the air, entering into people's homes and lungs. Toxins will be inhaled by all – the healthy,

but also the young, the vulnerable, the elderly, twenty-four hours a day, seven days a week. Disorders include neurological damage, brain damage, respiratory problems, eye irritation, kidney inflammation, liver problems, cancer, leukemia.

There is a myth that natural gas may be better than coal or crude oil. In terms of emissions, however, natural gas is actually on par with coal. The oil and gas industry has put a lot of effort in presenting natural gas as the cleanest hydrocarbon alternative. In fact, if one considers heavy sour gas, such as the one present in Sardinia, we know that it is not true: both natural gas and crude oil require toxic drilling muds, they both require additional refining, they both emit toxic fumes. Heavy sour gas and oil are both extremely polluting and far more toxic than renewable energy. Natural gas is a dirty fossil fuel just like oil is.

Drilling disenfranchises people, taking them away from their homes, killing tourism, agriculture, small businesses. It should not be tolerated that Sargas can drill so close to people's homes, to the beach, to crops and wineries.

Indeed, if successful, exploratory drilling will be followed by drilling of more permanent wells. Most likely, industrial facilities will have to be built, turning a touristic area into an oil processing location. The people who live along the Oristano coast stand to gain very little in return, since the oil will be sold on the open market and since Italian royalties are among the lowest in the world – about 10% of all profits, which will mostly end up in Roman coffers.

We have all seen the devastation caused by the massive BP oil spill in Louisiana one year ago and prior to that of the lesser known, but still devastating explosion in Australia, where the Montara oil rig released millions of gallons of oil uncontrollably for more than two months.

Having visited Louisiana a number of times over the course of my academic career as a mathematician, and for many years having closely followed the environmental challenges faced in the United States, I am keenly aware of the dangers of on and off shore drilling and the need for energy production from renewable resources.

Sincerely,

A handwritten signature in black ink that reads "Chad M. Hayden-Topaz". The signature is written in a cursive style with a long, sweeping underline.

March 16<sup>th</sup> 2012

Chad Topaz  
Associate Professor of Mathematics  
Macalester College  
St. Paul, MN  
USA