New York’s ban on high-volume hydraulic fracturing is based on a study that comes to the virtual opposite conclusion of a 2011 report by the state’s environmental authorities, which said fracking posed no significant new risks to groundwater supplies or public health.

The two diametrically opposed reports might give opponents of Gov. Andrew Cuomo’s fracking ban the legal ammunition to get it overturned, although low natural gas prices and the tendency of courts to grant broad deference to the decisions of administrative agencies make such an attack a long shot.

“Changing your mind is OK to a court, but there does have to be a rationale,” said Steven Russo, chair of Greenberg Traurig’s New York environmental practice and former chief legal counsel of the New York State Dept. of Environmental Conservation. “A court might ask, ‘What changed? Was there a new study?’”

The answer is basically no. The report by the New York Department of Health that Gov. Cuomo relied upon when announcing the ban cites a number of potential risks from fracking, most of which are common to any large-scale industrial process. Insert the words “casino construction” in place of “high-volume hydraulic fracturing” in large parts of the report and it would ring just as true, since the risks have to do with noise, vehicle emissions, and the terrifying prospect of sudden increases in income in small, relatively impoverished towns in New York’s shale belt.
Those same risks are mentioned in the draft environmental impact statement issued by the Dept. of Environmental Conservation in 2011. Only in that report, they are dismissed as common to any form of oil and gas drilling and easily controlled with existing regulations and a few special provisions such as placing 2,000-foot buffer zones around drinking water supplies.

The report was a draft effort to update a general environmental survey dating back to 1992, under which oil and gas companies obtain permits to drill. The executive summary contains many passages that would warm the heart of any oil and gas executive (or farmer looking to capture a new stream of income from his land).

Horizontal drilling, for example, causes much less surface disruption than conventional vertical drilling because six or eight wells can be punched in from a single pad, allowing drillers to tap 640 acres while disturbing less than 10 acres for pad site and roads. Conventional wells on 40-acre spacing would disturb 10 times the acreage, the state agency concludes.

How about the dreaded flaming faucet?

“Well construction associated with high-volume hydraulic fracturing presents no new significant adverse impacts with regard to potential gas migration,” the study concludes, citing the experience of 15 states with no confirmed reports of groundwater contamination other than from failures of the well casing, which can happen with any well. It is “highly unlikely that groundwater contamination would occur by fluids escaping from the wellbore for hydraulic fracturing,” the study says.

Then, in a bit of common sense that seems to have eluded many who believe natural gas can find a new path to the surface when a well is fracked, the study says:

That shales must be hydraulically fractured to produce fluids is evidence that these types of rock formations do not readily transmit fluids. The high salinity of native water in the Marcellus and other Devonian shales is evidence that fluid has been trapped in the pore spaces for hundreds of millions of years,
implying that there is no mechanism for discharge of fluids to other formations.

Yeah, but all that pressure, cracking the rock, can’t that make cracks reaching to groundwater layers?

The induced fractures create a pathway to the intended wellbore, but do not create a discharge mechanism or pathway beyond the fractured zone where none existed before. The pressure differential that pushes fracturing fluid into the formation is diminished once the rock has fractured, and is reversed toward the wellbore during the flowback and production phases. Accordingly, there is no likelihood of significant adverse impacts from the underground migration of fracturing fluids.

The study also rejects claims that fracking causes earthquakes, and concludes that the environmental risks associated with drilling fluids on the surface can be addressed with existing regulations.

How about all that water? Turns out the peak demand from fracking is estimated at 9 billion gallons a year in New York, a lot of water, but a little less impressive when compared with New York’s total freshwater consumption of 10.3 billion gallons a day.

Fracking would bring change to New York’s rural areas, the report acknowledges. Traffic might increase — as with a casino — and temporary housing might become scarce in drilling boomtowns. The demand for government services would go up, along with tax revenue. The report estimates total economic impact of as much as $2.5 billion a year, including $800 million in wages.

All of which might make a good argument that the Governor’s ban is based more on satisfying the environmental wing of his party than on sound science. But any challenger would have to show the government acted irrationally, Russo said, an almost impossible bar to get over.
“The odds are pretty great a court would step away and say, ‘There was a process here and we’re not going to second-guess policy determinations,” he said.

Some drillers might have an incentive to challenge the ban on scientific grounds simply to prevent New York’s conclusions from being adopted elsewhere, said Jason Hutt, a partner with Bracewell & Guiliani in Washington.

“The industry will feel compelled to rebut the scientific conclusions, because the scientific conclusions will have impact outside the state,” Hutt told me.

With gas prices low and plenty of drilling sites available in other states, however, oil and gas companies might just leave New York to importing the stuff from elsewhere. Gov. Cuomo’s safety concerns don’t seem to extend to Pennsylvania, after all.

The good news is if the state wants to rescind the ban, all it has to do is cite the Environmental Commission’s 2011 report.