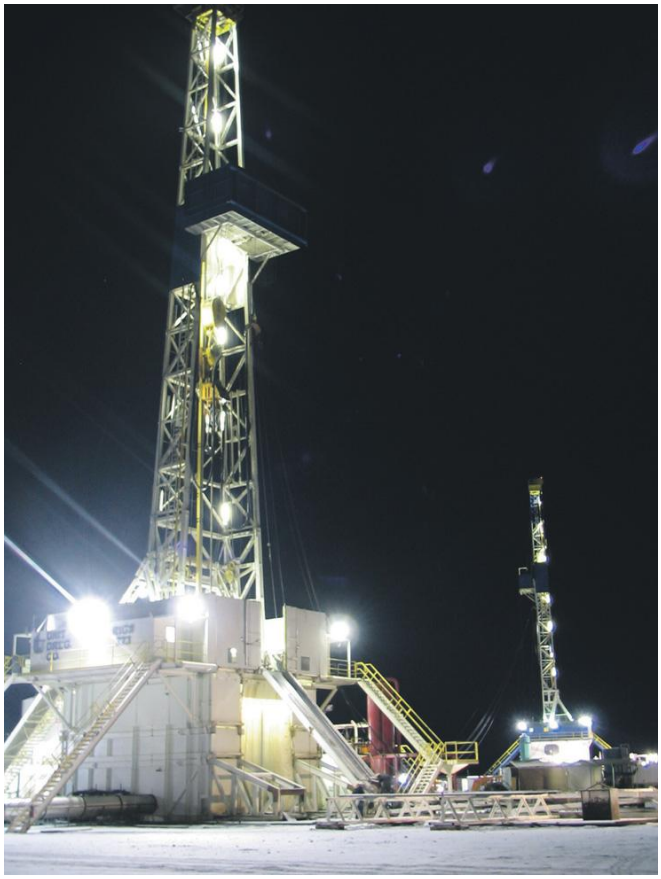
DEQ issues ozone alert for Pinedale



A Questar drilling rig is seen in this January 2006 file photo. Operators are putting in special emission-reduction measures on rigs such as this when ozone warnings are issued. (Jeff Gearino/Star-Tribune file)

By JEFF GEARINO
Southwest Wyoming bureau
Tuesday, February 3, 2009 9:15 PM MST

GREEN RIVER -- Pinedale residents could wake up with unhealthy levels of ozone in the air this morning and should take appropriate precautions, state officials say.

Wyoming Department of Environmental Quality officials predicted weather and other conditions will be ideal for high ozone levels in the Upper Green River Basin.

The DEQ ozone advisory -- the first ozone alert of the winter season -- was announced Tuesday on the agency's Web site.

The ozone advisory is part of the DEQ's new program that aims to warn residents about possible elevated ozone levels before they occur, instead of after.

A year ago, elevated levels of the potentially toxic air pollutant prompted the DEQ to issue its first ozone warning after Boulder registered an eight-hour ozone level of 122 parts per billion.

Federal regulations limit ozone air pollution to no more than 75 parts per billion during an eight-hour period.

The ozone advisory prompted outrage from Pinedale Town Councilman Dave Smith.

"It just pisses me off that these government agencies that are tasked with looking out for the health, welfare and safety won't do it," he said in a phone interview Tuesday afternoon.

"They're flat-ass just not doing their job ... and there comes a point when the health and welfare of everybody is much more important than the state's" oil and gas revenues, he said.

"The ozone alert is just proof that what all the tree-huggers are screaming about is actually happening ... if there wasn't a problem, they wouldn't be giving us advisories saying we think it's going to be (bad), so don't go out on Wednesday," Smith said.

"I should never, ever, ever, never, not once in my lifetime, hear that there's been (an ozone advisory) in Sublette County. ... We should never have air like that here in the least populated county in the least populated state in the country," he said.

"It's been a complete and abysmal failure of our government officials to look after our citizens. ... Why in the hell do we have the dirtiest air in the country?"

Industry officials said Tuesday they understand the concerns of area residents about elevated levels of ozone, but noted the operators in the Jonah and Pinedale Anticline have been successful in reducing emissions in the fields.

"We clearly were hoping that all of the combined emission reductions were going to add up in a way ... that we're going to avoid having an ozone alert in Sublette County this year," said Randy Teeuwen, community relations advisor for EnCana Oil and Gas, Inc., one of the largest operators in the Jonah field. "The reality is that it's a unique set of circumstances combining sun and wind and snowpack that really triggers that ozone alert.

"We understand that our activities contribute to that, but we have made very significant strides in reducing our emissions in Jonah and we're continuing to work on that.

"The challenge is with all of the activity and equipment that we have out there, it's not something that can just be done overnight. But we have reduced our emissions so far by approximately 40 percent and we're working on further reductions."

Pins and needles

The DEQ advisory predicted that the conditions and factors that result in the formation of ozone, a noxious gas and respiratory irritant, could occur sometime today in the Pinedale.

Those conditions include strong temperature inversions, low winds, snow cover and bright sunlight. A temperature inversion occurs when a warm air mass sits atop a cold air mass, compressing it toward the earth. The inversion can trap the air in the valley.

The Air Quality Division of the DEQ is advising people who might be sensitive to ozone -- including children, the elderly and those with existing respiratory conditions -- to avoid any extended, strenuous outdoor activity while the advisory is in effect.

Elevated levels of ozone can cause respiratory problems in people and animals, and can trigger headaches and burning eyes.

"Here we go again. ... The local citizens who live in Pinedale are once again on pins and needles with a potential significant public health threat looming over them," said Bruce Pendery, air quality program director for the Wyoming Outdoor Council, in a phone interview. "So that's of great concern to everyone.

"I think we all think that this problem needs to be resolved and needs to be fixed, so that we're not having these kinds of alerts and warnings. It's very disturbing to be in the same situation again."

DEQ spokesman Keith Guille said area residents can check the agency's Web site's main page. It is featuring daily updates to see if an advisory has been issued for the following day. Air Quality Division

Director Dave Finley could not be reached for comment Tuesday.

Too many engines

The Upper Green River Basin has registered at least slightly elevated levels of ozone in three out of the last four winters.

Researchers now recognize that the ongoing natural gas development in the region has a lot to do with that trend. There are an estimated 5,000 oil and gas wells in the basin, which includes the lucrative Jonah and Pinedale Anticline fields in southwest Wyoming.

Ground-level ozone is created by chemical reactions between oxides of nitrogen and volatile organic compounds in the presence of sunlight.

Scientists believe emissions from industrial facilities and electrical utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of nitrogen oxides and volatile organic compounds in the atmosphere.

Ozone gas is created when sunlight hits the oxides of nitrogen and volatile organic compounds that are present in the air.

"The bottom line is ... there is too many engines burning fossil fuel and too much organic compounds going up in the air in the winter and they just need to slow it down a little bit," Smith said. "They just need to slow down a little bit and let Mother Nature catch up."

The DEQ has monitored elevated ozone levels during the wintertime in Sublette County since 2005, and last winter the agency issued five ozone warnings for the region.

The 2008 warnings were the first issued by the state agency in the county. The ozone warnings prompted the ire and concerns of area residents at the time.

Teeuwen said companies such as EnCana have developed short-term emission reduction contingency plans in cooperation with the state to help reduce ozone-forming emissions.

The short-term measures include deferring non-essential well pad and road construction activities, postponing liquid hauling, and minimizing vehicle idling among other efforts.

He said the companies are already using improved technology on drilling rigs to reduce pollutants that help create ozone, including converting drilling rigs from diesel power to natural gas power.

"We're taking this very seriously, obviously, and it's a very big initiative for us," Teeuwen said.

Pendery said the newest alert indicates there's still a lot more work to do.

"Nobody can be relaxing or backing off. ... We need to move forward with greater regulation of the air pollution in this area," he said.

The Air Quality Division operates three monitoring stations at sites in Daniel, Pinedale and Boulder. Another monitoring station, the Jonah, has been shut down, but is expected to be reinstalled later this year.

Realtime data, including current ozone levels being measured at the monitoring stations, can be found at www.wyvisnet.com.

DEQ officials noted the agency is currently conducting an intensive study of wintertime ozone formation in the Upper Green River Basin.

Contact southwest Wyoming bureau reporter Jeff Gearino at 307-875-5359 or gearino@tribcsp.com