

Coal Plant Shutdowns: The Implications of Recent Health Studies

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As if the owners of coal-fired power plants did not have enough to worry about, two studies published last month concluded that the shutdowns of coal-fired power plants were associated with improvements in the reproductive health of persons living in the vicinity (0-10 km) of the plants. The first [study](#), a review by University of California, Berkeley researchers and published in the *American Journal of Epidemiology*, concludes that the shutdown of eight coal- and oil-fired plants is associated with a 20–25% reduction in premature births; the study indicated a potentially larger improvement in certain communities of color. The second [study](#) (published in *Environmental Health*), which examined fertility rates in females proximate to the same eight plants, found that fertility rates increased after the plants were closed.

The decision to retire a coal plant is complex. Health studies alone will not be the deciding factor, although we are confident they should be added to the mix. Separate and apart from the shutdown-decision calculus, however, it pays to understand studies like these because they have post-shutdown implications.

First, as we previously advised in our [June 2016 alert](#), a plant's relationship with its community will be a significant factor in the approval process as the utility seeks to re-power, re-purpose, or remediate and restore the site. The two above-mentioned studies cast coal plants in a negative light and may leave some in the community feeling hurt, perhaps even betrayed. The utility will have to be sensitive to those concerns and able to respond to the studies.

For example, while acknowledging the negative conclusions reached by the studies' authors, the utility could also note that even those authors recognized that more research needed to be done. As stated in the fertility study, "These results require confirmation in other populations, given known methodological limitations of ecologic study designs." Similarly, the authors do not reach a conclusion about causation; they only point out an association: "We found that power plant retirements were associated with a decrease in the proportion of preterm birth," and, "Our study leveraged a natural experiment of 8 coal and oil power plants retirements and found an association with increased fertility rates nearby."

Second, toxic tort suits involving coal plant emissions are not difficult to find. Allegations of harm to unborn children and fertility issues may be part and parcel of toxic tort lawsuits, as, for

example, tobacco companies well know (see the Surgeon General's warning: "Smoking By Pregnant Women May Result In Fetal Injury, Premature Birth And Low Birth Weight").

Only time will tell if premature births and loss of fertility will form the bases for future claims against coal plant owners and operators. In the meantime, a utility deciding to close its coal plant should consider what records it will require to defend such suits in the future. This consideration should not be on a one-off basis. Instead, it should be a part of the company's document retention policy, thus assuring that the company's decisions are internally consistent and that the full scope of future needs is assessed, as explained in our [January 2017 alert](#).