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Recent Developments in Environmental Law: California's Targeted Emissions Levels

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This paper will attempt to discuss California's Global Warming Solutions Act of 2006, specifically the Cap-And-Trade Program (AB32) it established, and the Act's intended and potential influence on domestic and international efforts toward reducing carbon emissions.

Part I. The history of AB32:

Legislative findings

California's progressive approach to Global Warming and air pollution stems from recognition of the actual threat that greenhouse gas (GHG) emissions pose to our planet. In 2005, Governor Arnold Schwarzenegger signed into law California's Global Warming Solutions Act of 2006, or Assembly Bill 32 (AB32).¹ The Legislative findings were clear: the state government recognized and accepted the threat of global warming, and its potential to cause health risks and environmental harm.

The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, and a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.²

It is important to note that the legislature's findings were not based simply on speculation; scientific research has shown that the increased concentration of GHGs in the atmosphere has the potential to lead to numerous health conditions: rising CO₂ levels have been determined to exacerbate respiratory problems, including asthma;³ NO_x contributes to smog; and ozone has the potential to cause permanent lung damage, as well as asthma and pneumonia.⁴

The environmental threats are similarly real. In 2008, Governor Arnold Schwarzenegger declared a statewide drought, citing an unprecedented decrease in water storage levels, outbreaks of wildfires, abnormally low rainfall in the years of 2007 and 2008, and "critically dry water conditions in the Sacramento and San Joaquin river basins," and a runoff estimate of 41 percent below average in 2008.⁵ In response to the drought, the governor ordered an expedited "drought-related climate research."⁶

AB32, then, was not only an ambitious attack on California's rising concentration of GHG emissions, but a necessity to the state which in 2013 was reported by the American Lung Association as having the top 6 of the nation's 10 most polluted cities.⁷

¹ Supra

² West's Ann.Cal.Health & Safety Code § 38501

³ *Changing Planet, Changing Health How the Climate Crisis Threatens Our Health and What We Can Do About It*, Paul R. Epstein, MD, and Dan Ferber, Los Angeles 2011

⁴ Epstein at 92

⁵ Executive Order S-20-06 by the Governor of the State of California, June 4, 2008

⁶ Supra

⁷ <http://www.lung.org/associations/states/california/assets/pdfs/sota-2013/sota-2013-most-polluted.pdf>

Part II: AB32, The Clean Air Act, and Compelling Change

Legislative Intent and applicability under the Clean Air Act.

AB32 sets an overall goal of lowering California's greenhouse gas (GHG) emissions in three waves: by 2010, emissions were to be reduced to 2000 levels; by 2020, emissions are to be reduced to 1990 levels; and by 2050, emissions are to be reduced to "80 percent below 1990 levels."⁸ The first compliance period is from 2013-2014 and covers the electric industry in California; the second from 2015-2017; the third from 2018-2020. The last 2 terms cover fuel distributors.⁹

The State Air Resources Board (ARB) has been tasked with its implementation, which includes designing

...emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains electric system reliability, maximizes additional environmental and economic co-benefits for California, and complements the state's efforts to improve air quality.¹⁰

The emphasis is on protecting California's industry and economy, practical measures which will benefit not only the citizens of California, but the state itself.

Under the Clean Air Act (CAA); the federal government, through EPA sets the National Ambient Air Quality Standards (NAAQSs) for the six criteria pollutants (carbon monoxide, lead, nitrogen dioxide oxide, sulfur dioxide, and particle pollution).¹¹ Each state must set a State Implementation Plan (SIP) to meet the NAAQSs, which must then be approved by EPA.¹² Section 110 of the CAA expressly gives the states the initial responsibility of "assuring air quality within the entire geographic area comprising such state," but only with respect to submitting and implementing SIPs.¹³ AB32 exists outside of this framework, as EPA has yet to add any of the main GHGs (CO₂, CH₄, N₂O, and fluorinated gases) to the criteria pollutant list.¹⁴

However, Section 111(d) of the CAA, which "requires states to develop plans for existing sources of noncriteria pollutants (i.e. a pollutant for which there is not national ambient air

⁸ Appendix C Executive Orders Relating to the Reduction of Greenhouse Gas Emissions in California, C-4

⁹ *supra*

¹⁰ West's Ann. Cal. Health & Safety Code § 38501

¹¹ *National Ambient Air Quality Standards (NAAQS)*, <http://www.epa.gov/air/criteria.html>

¹² Robert V. Percival et al., *Environmental Regulation: Law Science & Policy* at 503 (6th ed. 2009).

¹³ Percival at 579, citing *Train v. Natural Resources Defense Council*

¹⁴ <http://www.epa.gov/climatechange/ghgemissions/gases.html>

quality standard) whenever EPA promulgates a standard for a new source.”¹⁵ EPA has recently begun to set standards for GHG emissions from motor vehicles, but in 2009, California was waived from any such CAA regulations, and has been allowed to set and regulate its own GHG emission standards for motor vehicles.¹⁶

Should a federal plan for overall GHG emission standards be set, the state would then likely be able to seek another waiver under section 209 of the CAA.

Monitoring GHG Emissions and Implementing Change

California’s state legislature designated the State Air Resources Board as “the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases.”¹⁷ The state board has the authority to “adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this program.”¹⁸

Under the cap-and-trade program, California’s state government first establishes an emissions cap for GHGs.¹⁹ The facilities covered by AB32’s regulation are “then allocated, or must purchase, allowances,” which they may then sell, provided they reduce their emissions.²⁰

The facilities covered include public utility natural gas suppliers, facilities which generate or import electricity, and petroleum gas suppliers.²¹ A facility may offset its emissions by purchasing an ARB offset credit, which “is equal to 1 metric ton of carbon dioxide equivalent (MTCO_{2e}) and can only be quantified using an ARB approved Compliance Offset Protocol.”²² The allows the state to gain revenue from permits purchased by power companies to offset their carbon production²³

Spreading Cap and Trade

¹⁵ <http://www.epa.gov/region07/air/rules/111d.htm>

¹⁶ <http://www.epa.gov/otaq/climate/ca-waiver.htm>

¹⁷ Appendix B, §3810, b-7

¹⁸ Supra

¹⁹ 30 UCLA J. Envtl. L. & Policy 51 pg. 16 Alice Kaswan

²⁰ Supra

²¹ Article 5: *California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms*, Section 95812

²² <http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>

²³ <http://science.time.com/2013/01/29/obama-talks-climate-change-california-is-acting-on-it/>

AB32 has the potential to set the stage for an international model.²⁴ California is member of the Western Climate Initiative (WCI), in which it has partnered with several Canadian provinces: British Columbia, Manitoba, Ontario, and Quebec,²⁵

California is not alone in its implementation of a cap-and-trade program; others include The Regional Greenhouse Initiative (RGGI), The European Union Emission Trading System, New Zealand Emissions Trading Scheme, and the Australian Carbon Pollution Reduction Scheme.²⁶ Unlike RGGI, or any of the international plans, however, AB32 covers power, natural gas, and gasoline imports, giving it a much further reach. Also covers out-of-state companies, giving it a great and significant scope.²⁷

Conclusion

California was under no obligation by the CAA to enact AB32, but still took the steps to respond to the very real threats posed to the planet by global warming.²⁸ AB32 is both a model for GHG reduction, and a litmus test for whether a comprehensive emission reduction plan can work. Its success or failure, then, is inextricably linked to the future of environmental regulation in the United States.

²⁴ http://www.edf.org/climate/AB32?s_src=ggad_ab32&gclid=CNDdvc2OyLYCFcuj4Aod6EIAgg

²⁵ <http://www.westernclimateinitiative.org/wci-partners>

²⁶ 40 Env'tl. .L. Rep. News & Analysis 10696, Aaron Ezoy

²⁷ 2013 WL 1750691 pg. 3 JP Benson, Cludia O'Brien, Bob Wyman

²⁸ 44 Urb. Law. 429 pg. 9 Christopher Burt