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**SUPERIOR COURT FOR THE STATE OF CALIFORNIA**

**COUNTY OF SACRAMENTO**

RODRIGO ROMO, on behalf of himself and his two minor children,

Plaintiff,

v.

EDMUND G. BROWN, in his official capacity as Governor of the State of California; Division of Oil, Gas & Geothermal Resources, STEVEN BOHLEN, in his official capacity as California Oil and Gas Supervisor,

Defendants.

Case No.

**COMPLAINT FOR INJUNCTIVE AND DECLARATORY RELIEF**

## INTRODUCTION

1. Tens of thousands of Latino schoolchildren across California attend public schools surrounded by oil wells, jeopardizing their health and well-being daily. Plaintiff Rodrigo Romo, on behalf of himself and his two minor children, files this lawsuit to redress the failures of the defendants Governor Edmund G. Brown, the Division of Oil, Gas, Geothermal Resources ("DOGGR"), and Steven Bohlen (collectively "the State") to fulfill our state's legal obligations to protect Romo, his children, and other students of color[1] from the adverse, racially disparate effects of well stimulation[2] as prohibited by California's anti-discrimination law, Government Code section 11135 *et seq*. Romo's children have been exposed to dangerous levels of toxic pollution and suffer psychological stress from well stimulation while attending public schools in Shafter and Wasco, California. The State's interim and final well stimulation regulations recently adopted under California Senate Bill 4 ("SB 4"), fail to protect thousands of students of color, including Latino students, who are exposed to an array of toxins from well stimulation.

2. The majority of children attending schools near well stimulations are already exposed to the worst air pollution in the country, making their developing bodies even more susceptible to the negative health impacts from close proximity to oil and gas development. The California Constitution guarantees these students a fundamental right to an education[3] because of its importance to the success of our state and democracy. Governor Brown, Supervisor Bohlen and DOGGR are failing public school students of color and our state as a whole by adopting regulations that result in and fail to redress the racially disparate impact of well stimulations on students of color, including Latino students.

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[1] For the purposes of the complaint, "person of color" is defined by the American Heritage Dictionary as "a person who has a racial identity other than white." "Students of color" similarly refers to non-white students.

[2] For the purposes of the complaint, "well stimulations" refers to oil and gas development enabled by well stimulation, such as hydraulic fracturing, matrix acidization, and acid fracturing, defined by SB 4 and its corresponding regulations. *See* Sen. Bill No. 4 (2013-2014 Reg. Sess.) § 2 art. 3.

[3] Cal. Const., art. IX, § 1; Cal. Const., art. 9 § 5.

3. Government Code section 11135 *et seq* prohibits the state from funding or engaging in practices that have the purpose or effect of subjecting people to racial discrimination.[4] Governor Brown, Supervisor Bohlen and DOGGR approved inadequate well stimulation regulations that allow dangerous industrial activities to continue to discriminatorily injure students of color, including Latino schoolchildren.

## JURISDICTION AND VENUE

4. This action arises under California Government Code section 11135. Jurisdiction is conferred to this court for a civil action and equitable relief under Government Code section 11139. Jurisdiction is conferred to this court to issue declaratory relief pursuant to Code of Civil Procedure section 1060 and Government Code section 11350.

5. Venue is proper in this Court pursuant to section 393(b) of the Code of Civil Procedure in that part of the claim arose in the County of Sacramento. Defendant Governor Brown appointed Supervisor Bohlen, signed SB 4 into law, delegated emergency authority to DOGGR and exercised his executive authority over their affairs in the County of Sacramento. Defendants Bohlen and DOGGR drafted and adopted both SB 4 interim regulations and final implementing regulations in the County of Sacramento.

6. Venue is proper in this Court pursuant to section 401(1) of the Code of Civil Procedure because defendants are being sued in their official capacity as state officials and the California Attorney General maintains an office in the City and County of Sacramento.

7. Venue is also proper pursuant to section 395 of the Code of Civil Procedure in that defendants Governor Brown and Supervisor Bohlen's offices reside in the County of Sacramento. Defendant DOGGR maintains its headquarters in the County of Sacramento.

## PARTIES

8. Plaintiff Rodrigo Romo is a parent of children who currently attend public schools in California within 1.5 miles of a well stimulation, who were, are, or will be exposed to dangerous levels of toxic air and psychological distress. People of color,

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[4] Cal. Code Regs., tit. 22, § 98101.

including Romo and his two minor children were disparately burdened by conventional oil extraction and well stimulations.

9. Rodrigo Romo, a resident of Shafter, California and parent of two minor children Jane Doe[5] and Joan Doe,[6] suffers from psychological distress and fear for his children's health and safety due to their exposure to well stimulations near their schools.

10. Jane Doe is thirteen years old and attends Richland Junior High in Shafter, California. In the 2013-2014 school year, Richland Junior High had an enrollment of 703 students, 94% of whom were Latino and 96% of whom were students of color.[7] Richland Junior High is within 1.5 miles of the North Shafter Field which contains a total of 92 non-enhanced active wells and a minimum[8] of 45 well stimulations. Richland Junior High itself is within 2 miles of 47 non-enhanced active wells and a minimum of 21 stimulations. Previously, she attended Sequoia Elementary School in Shafter, CA. In the 2013-2014 school year, Sequoia Elementary School had an enrollment of 805 students, 86% of whom were Latino and 89% of whom were students of color.[9] Sequoia Elementary School is within .5 miles of a minimum of 3 well stimulations and 8 non-enhanced oil wells. Sequoia Elementary School is within 1 mile of a minimum of 12 well stimulations and 34 non-enhanced oil wells. Sequoia Elementary School is within 1.5 miles of a minimum of 15 well stimulations and 42 non-enhanced active wells.

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[5] Minor children's names are confidential and withheld at this time to protect their privacy and physical safety. Plaintiff is willing to file their names under seal with the Court if necessary.

[6] *Id.*

[7] California Department of Education, DataQuest Demographic Report Request, *available at* http://data1.cde.ca.gov/dataquest/ (last accessed July 14, 2015).

[8] Well stimulation estimates used in this complaint are from DOGGR data, which we believe undercount the actual number of well stimulations occurring. *See* Center for Biological Diversity letter to Governor Brown, re: Unreported and Dangerous Well Stimulation in California, March 26, 2014, *available at* http://www.biologicaldiversity.org/campaigns/california_fracking/pdfs/14_3_25_Letter_to_Gov_Brown.pdf (last accessed July 14, 2015).

[9] *Id.*

11. Jane Doe suffers from severe asthma and epileptic attacks. Since active well stimulations began within 1,200 feet of Sequoia Elementary School while she was a student there, Jane Doe suffers from psychological distress fearing for her own health and safety due to well stimulations. Jane Doe continues to suffer from psychological distress and fear for her own health and safety due to proximity to well stimulation at Richland Junior High.

12. While Jane Doe attended Sequoia, school officials told the students to stay inside for recess for a week because of bad smells assumed to be associated with the well stimulations neighboring Sequoia Elementary School. She continues to fear spending time outside and exercising outside near Richland Junior High because of its proximity to well stimulations.

13. Joan Doe is seventeen years old and attends Independence High School in Wasco, California. For the 2013-2014 school year Independence High School had an enrollment of 129 students, 96% of whom were Latino and 97% of whom were students of color.[10] Independence High School is within 2 miles of the Rose Field with 62 active wells, at a minimum 44 well stimulations. Joan Doe suffers from severe asthma and fears for her health and safety because of her school's proximity to well stimulations.

14. Defendant Edmund G. Brown is sued in his official capacity as the Governor of the State of California. Governor Brown assumed office on January 3, 2011 and again after re-election on January 5, 2015. Governor Brown signed SB 4 into law, directs and oversees the Division of Oil, Gas, Geothermal Resources, and appoints its officers including Oil and Gas Supervisor Steven Bohlen.

15. Defendant Division of Oil, Gas, Geothermal Resources (DOGGR) is an agency of the State of California. Pursuant to Public Resources Code section 3106, DOGGR is charged with regulating "the drilling, operation, maintenance, and abandonment of oil and gas wells in the state, preventing damage to: (1) life, health, property, and natural resources;

[10] *Id.*

(2) underground and surface waters suitable for irrigation or domestic use; and (3) oil, gas, and geothermal reservoirs."

16. Defendant Steven Bohlen is sued in his official capacity as the State of California Oil and Gas Supervisor. The State Oil and Gas Supervisor supervises the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities related to oil and gas production within an oil and gas field regarding safety and environmental damage. Governor Brown appointed Supervisor Bohlen on January 2, 2014.

## LEGAL BACKGROUND

17. California's anti-discrimination statute, Government Code section 11135, and its implementing regulations prohibit the state and its agencies from intentional and unintentional discrimination. Government Code section 11135, subdivision (a) provides:

> "No person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, genetic information, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state."

18. Regulations further defining discriminatory practices under section 11135 are found in Division 8 of Title 22 of the California Code of Regulations. The regulations define discrimination to include practices that result in disparate impacts. The State is prohibited from practices that "utilize criteria or methods of administration that have the purpose or effect of subjecting a person to discrimination."[11]

19. The State shall not "make or permit selections of sites or locations of facilities that have the purpose or effect of …subjecting [persons] to discrimination under any program or activity."[12]

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[11] Cal. Code Regs., tit. 22, § 98101, subd. (i)(1).
[12] Cal. Code Regs., tit. 22, § 98101, subd. (j)(1).

20. The definitions and prohibitions of the Fair Employment and Housing Act's implementing regulations are incorporated by reference into section 11135[13], including the stringent "business necessity" standard defense to a *prima facie* case of disparate impact discrimination. Where a facially neutral practice has a discriminatory effect, the State must prove that the practice is "necessary to the safe and efficient operation of the business" and that there does not exist a less discriminatory alternative that would accomplish the business purpose equally well.[14]

21. The Legislature amended Government Code section 11135 eight times in the years following its enactment in 1977 to ensure a broad construction of the statute. In 1999, the Legislature inserted an explicit private right of action to correct a state court ruling finding that section 11135 did not allow a private action.[15] The Legislature further mandated that "this article shall not be interpreted in a manner that would frustrate its purpose."[16]

*California's Well Stimulation Regulatory History*

22. The California petroleum industry began in 1865. Since that time over 210,000 wells have been drilled in the search for oil, gas, and geothermal resources. No statewide regulations and no statewide agency governed these operations for the first fifty years.

23. Defendant DOGGR was formed in 1915 to regulate statewide and oil and gas activities. DOGGR began as the Department of Petroleum and Gas, a branch of the State Mining Bureau. In 1929, DOGGR was moved to the Department of Natural Resources and then moved again in 1961 to the Department of Conservation, under the Resources Agency, where it currently resides. In 1992 it was renamed the Division of Oil, Gas, and Geothermal Resources.

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[13] Cal. Code Regs., tit. 22, § 98400.
[14] Cal. Admin. Code, tit. 2, § 7286.7, subd. (b).
[15] *See* Gov. Code § 11139; Stats. 1999, ch. 591(AB 670), § 3; *Arriaga v. Loma Linda Univ.*, 10 Cal. Rptr. 2d 619 (Cal. Dist. Ct. App. 1992).
[16] Gov. Code, § 11139

24. DOGGR receives financial support from yearly assessments levied on oil and gas production and on high temperature geothermal wells pursuant to section 3401 of the Public Resources Code.

25. DOGGR is charged with supervising the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells. DOGGR is responsible for preventing damage to life, health, property, natural resources, and underground and surface waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances.[17]

26. DOGGR is charged with collecting all necessary information on oil and gas wells to determine the presence of water suitable for irrigation or domestic purposes that might be affected. DOGGR prepares maps and other accessories to advise operators as to the best means of protecting water-bearing strata and surface water.[18]

27. On September 20, 2013, Governor Brown signed into law Senate Bill 4 (Pavley, Ch 313, Stats of 2013) in order to provide "transparency and accountability to the public regarding well stimulation treatments, including, but not limited to, hydraulic fracturing, associated emissions to the environment, and the handling, processing, and disposal of well stimulation and related wastes, including from hydraulic fracturing..."[19]

28. SB 4 requires DOGGR to develop and enter a formal rulemaking process for well stimulation.

29. In SB 4, the legislature outlined the scientific and regulatory uncertainty of well stimulation:

> "Insufficient information is available to fully assess the science of the practice of hydraulic fracturing and other well stimulation treatment technologies in California, including environmental, occupational, and public health hazards and risks."[20]

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[17] Pub. Resources Code, § 3106.
[18] Pub. Resources Code, § 3107.
[19] Sen. Bill No. 4 (2013-2014 Reg. Sess.) § 1(c).
[20] Sen. Bill No. 4 (2013-2014 Reg. Sess.) § 1(b).

30. Further in SB4, the legislature directs DOGGR:

> "...in consultation with the Department of Toxic Substances Control, the State Air Resources Board, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any local air districts and regional water quality control boards in areas where well stimulation treatments, including acid well stimulation treatments and hydraulic fracturing treatments may occur, shall adopt rules and regulations specific to well stimulation treatments. The rules and regulations shall include, but are not limited to, revisions, as needed, to the rules and regulations governing construction of wells and well casings to ensure integrity of wells, well casings, and the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation treatments, and full disclosure of the composition and disposition of well stimulation fluids, including, but not limited to, hydraulic fracturing fluids, acid well stimulation fluids, and flowback fluids."[21]

31. The Legislature mandated that the permanent regulations create a permitting process for well stimulation.

32. The Legislature mandated that SB 4 regulations require the DOGGR Supervisor to "review," "approve," or "deny" these permits and "consider the quantifiable risk of well stimulation treatments," prior to making his determination for individual permits.[22]

33. The Legislature mandated DOGGR "finalize and implement [permanent] regulations governing" SB 4 on or before January 1, 2015.

34. In the interim period of time before January 1, 2015, SB 4, through Public Resources Code section 316, granted industrial operators an interim grace period from SB 4's permitting requirements until final SB 4 regulations went into effect. SB 4 further directed DOGGR to allow advanced well stimulation treatments regulated under SB 4, such as fracking and stimulations with acid, during this interim period with minimal state oversight, review or regulation.[23]

35. On November 15, 2013, DOGGR began its formal well stimulation rulemaking process with the release of its proposed permanent implementing regulations

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[21] Sen. Bill No. 4 (2013-2014 Reg. Sess.) §7.
[22] Sen. Bill No. 4 (2013-2014 Reg. Sess.) § 2.
[23] Sen. Bill No. 4 (2013-2014 Reg. Sess.) § 2; Pub. Res. Code, § 3161(a).

(hereinafter "SB 4 Implementing Regulations"). This release initiated a 60-day public comment period and triggered five public hearings on the regulations across the state.

36. On December 23, 2013, DOGGR exercised its emergency regulatory authority, pursuant to and outlined in SB 4, and released interim regulations for well stimulation for 2014 ("interim regulations"). These regulations outlined a temporary permitting and state oversight process for well stimulations for the period of time before DOGGR issued its SB 4 Implementing Regulations.

37. On January 1, 2014, the interim regulations went into effect. The interim regulations did not include setbacks for active drilling, waste disposal, or waste storage from sensitive land uses like schools, hospitals, residential housing or commercial farms.

38. On June 13, 2014, DOGGR released revisions to the draft SB 4 Implementing Regulations and provided 45 days for the public to review and comment on its revisions.

39. On June 20, 2014, Governor Brown signed and put into immediate effect Senate Bill 861 amending DOGGR's authority allowing it to use emergency rulemaking to establish interim regulations for the implementation of SB 4.

40. On June 27, 2014, DOGGR filed a readoption of the interim regulations, which first went into effect on January 1, 2014, with the Secretary of State. The interim regulations continued to provide DOGGR with regulatory authority over well stimulations specified in SB 4 and required operators to publicly disclose certain information on their stimulations.

41. On October 9, 2014, DOGGR released a second set of revisions to the SB 4 Implementing Regulations and provided 15 days for the public to review and comment on the regulations.

42. On December 30, 2014, the Office of Administrative Law ("OAL") approved and filed the final SB 4 Implementing Regulations on well stimulation treatments with the Office of the Secretary of State.

43. On July 1, 2015, State Oil & Gas Supervisor Steven Bohlen certified the Final Senate Bill 4 Environmental Impact Report in which "DOGGR evaluated the impacts of existing and potential future oil and gas well stimulation treatments" in California.[24]

44. Also on July 1, 2015, the SB 4 Implementing Regulations went into effect and, according to DOGGR, "are designed to protect health, safety, and the environment, and supplement existing strong well construction standards. They address a comprehensive list of issues, including testing, monitoring, public notice, and permitting."[25]

45. On July 9th, 2015, following the final implementation of SB 4 regulations California Council on Science and Technology (CCST) published its independent scientific assessment of well stimulation treatments including hydraulic fracturing in California pursuant to SB 4. The purpose of the report was to "synthesize and assess the available scientific information associated with well stimulation treatments in California."[26] Volume II of the study discusses potential impacts of well stimulation on "water, atmosphere, seismic activity, wildlife and vegetation and human health."[27]

*California's Irresponsible Regulatory Oversight of Well Stimulations*

46. Since Governor Brown took office in 2011, reports indicate DOGGR has prioritized fast tracking permit approvals over assessing public health and environmental risks. This places serious and disproportionate health risks on students of color, including Latino students, attending California public schools.

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[24] Steven R. Bohlen, State Oil and Gas Supervisor's Certification Statement Issued in Connection with Environmental Impact Report on Analysis of Well Stimulation Treatments in California, DOGGR July 1, 2015 *available at* ftp://ftp.consrv.ca.gov/pub/oil/SB4EIR/Documents/SB%204%20EIR%20Supervisor's%20Certification%20Statement.pdf (last accessed July 14, 2015).

[25] SB 4 News and Information, DOGGR (Jan. 13, 2015), *available at* ftp://ftp.consrv.ca.gov/pub/oil/SB4DEIR/docs/05_CDOC_2012.pdf (last accessed July 14, 2015).

[26] Well Stimulation in California, CCST (July 9, 2015), *available at* http://ccst.us/projects/hydraulic_fracturing_public/SB4.php (last accessed July 14, 2015).

[27] *Id.*

47. Based on information and belief, in the Fall of 2011, Supervisor Elena Miller and Department of Conservation Director Derek Chernow raised concerns regarding well permitting and ordered more stringent permitting reviews, delaying injection well project permitting decisions.

48. Based on information and belief, oil and gas industry representatives lobbied Governor Brown and Kern County representatives to speed up the oil and gas well permitting process at DOGGR.

49. Based on information and belief, Governor Brown asked Mr. Chernow to ease key regulations for oil extraction in California.

50. Based on information and belief, Governor Brown fired Mr. Chernow and Ms. Miller shortly after Mr. Chernow wrote a memo stating that relaxing rules on underground injection would violate environmental laws.

51. In November 2011, Mr. Chernow's appointment was withdrawn and he was terminated as Director of the Department of Conservation. Ms. Miller was subsequently fired.

52. In December 2011, Governor Brown appointed Dr. Mark Nechodom as Director of the Department of Conservation. Governor Brown appointed Tim Kustic as the new DOGGR Supervisor.

53. Based on information and belief, Dr. Nechodom agreed to a streamlined permitting approach, allowing some drilling to occur without a full review. Permit approvals increased markedly in the three months after Governor Brown appointed Dr. Nechodom and Mr. Kustic.

54. Governor Brown has been quoted in various publications praising the increases in permits approved shortly after Governor Brown fired Mr. Chernow and Ms. Miller.

55. On June 3, 2015, Director Nechodom was named as a defendant in a federal lawsuit on behalf of Kern County farmers alleging a conspiracy with Governor Brown,

DOGGR and private oil companies to allow illegal oil waste injections. Dr. Nechodom resigned as the Director of the Department of Conservation on June 4, 2015.[28]

56. In June 2014, the State Water Resources Control Board reviewed whether to require groundwater monitoring around wells with well stimulation as required by SB4. During this review, the Board discovered that DOGGR was approving injection wells in aquifers not exempted by EPA from the Safe Water Drinking Act. By March 3, 2015, the Board ordered DOGGR to shut down a total of 23 injection wells. DOGGR has allowed 1,063 wells near potential sources of drinking water to continue operating.

## FACTUAL ALLEGATIONS

*Well Stimulation in California*

57. Well stimulation techniques in California seek to produce energy from the extraction and refining of crude oil.

58. Hydraulic fracturing for the simulation of oil and gas wells first occurred commercially in Kansas in 1947. Industrial operators in the United States rapidly adopted the process because it increased yields from geological formations previously unreachable through conventional techniques.

59. Technological advances in the stimulation process occurred throughout the second half of the twentieth century. In the late 1990s, industrial operators began using technologies that allowed horizontal drilling and drilling at significantly greater depths.[29] These advances and exploration throughout the early 2000s led to well stimulation's rapid expansion across the country and a dramatic increase in domestic oil and gas production known as the "shale boom."

60. Operators in California stimulate wells by injecting highly pressurized fluids, including large amounts of water, and proppants (chemically treated silica sand) or acid,

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[28] Julie Cart, Head of California Agency Accused of Favoring Oil Industry Quits, L.A. Times, June 5, 2015, *available at* http://www.latimes.com/local/lanow/la-me-head-of-oil-regulating-agency-quits-20150605-story.html (last accessed July 14, 2015).

[29] Philippe A. Charlez, Rock Mechanics: Petroleum Applications 239 (Editions Technip, 2d ed. 1997).

which creates fissures between molecules in a geological formation that frees the oil for extraction. The fluids injected contain acids and over 630 known chemicals, including carcinogens, neurotoxins and those known to negatively impact human health.

61. In California, nearly 60% of wastewater from stimulated wells is disposed of in unlined pits that can leak into groundwater and can evaporate and become air pollutants. Around 36% of the active evaporation-percolation pits are operating without the necessary permits from the Central Valley Regional Board.[30]

62. Congress explicitly promoted the development of domestic well stimulation techniques in the Energy Policy Act of 2005 declaring:

> "United States oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports.[31]"

63. In the Energy Policy Act of 2005, Congress also exempted well stimulations from all major provisions of federal environmental pollution control laws including the Safe Drinking Water Act, Clean Water Act, Comprehensive Environmental Response Compensation Act, National Environmental Policy Act, and the Resource Conservation and Recovery Act.[32]

64. As the Bureau of Land Management concluded in its final rulemaking on well stimulation on federal lands on March 20, 2015, federal and state well stimulation regulations across the country have yet to keep up with the speed and continually evolving technological complexities of operations. Many new technologies and operations in well stimulations are regulated exclusively by laws enacted thirty years ago.[33]

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[30] Jane C.S. Long et al., An Independent Scientific Assessment of Well Stimulation in California Vol. II 164 (2015).

[31] Pub.L.No. 109–58, § 369 (b)(1).

[32] Oil and gas operations are further exempt from the "aggregation" requirement of the Clean Air Act thus rendering the majority of emissions and stages of production from well stimulations without federal regulatory coverage under this Act. Clean Air Act § 112(n)(4)(A).

[33] "The BLM final rule on well stimulation serves as a much-needed complement to existing regulations designed to ensure the environmentally responsible development of oil and gas resources on Federal and Indian lands, which were finalized nearly thirty years ago, in light

65. California's SB 4, like the Energy Policy Act, outlines the State's commitment to promoting, streamlining, and encouraging the expansion of well stimulation techniques:

> "The hydraulic fracturing of oil and gas wells in combination with technological advances in oil and gas well drilling are spurring oil and gas extraction and exploration in California. Other well stimulation treatments, in addition to hydraulic fracturing, are also critical to boosting oil and gas production.[34]"

66. Mirroring the Energy Policy Act, DOGGR's SB 4 Implementing Regulations define hydraulic fracturing in conjunction with other enhanced methods of oil recovery:

> "Well stimulation treatment" means a treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation. (A) Well stimulation is a short term and non-continual process for the purposes of opening and stimulating channels for the flow of hydrocarbons. Examples of well stimulation treatments include hydraulic fracturing, acid fracturing, and acid matrix stimulation."

67. DOGGR specifies:

> "Hydraulic fracturing" means a well stimulation treatment that, in whole or in part, includes the pressurized injection of hydraulic fracturing fluid[35] into an underground geologic formation in order to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well."

68. The Monterey Shale formation contains an estimated 15.4 billion barrels of oil— nearly two thirds of the nation's total shale oil deposits — and is by far the nation's

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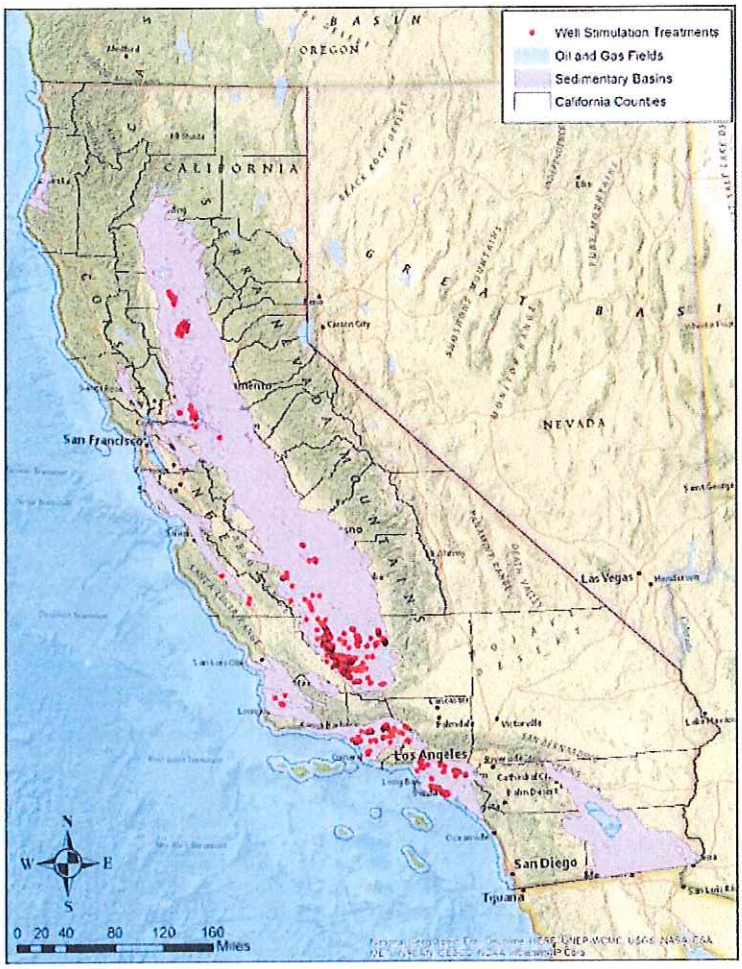
of the increasing use and complexity of well stimulation coupled with advanced horizontal drilling technology. This technology has opened large portions of the country to oil and gas development." *See* Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands: Final Rule, Department of the Interior (Mar. 2015) *available at* http://www.blm.gov/style/medialib/blm/wo/Communications_Directorate/public_affairs/news_release_attachments.Par.6134.File.dat/HF-Final-Agency-Draft.pdf (last accessed July 14, 2015).

[34] Sen. Bill No. 4 (2013-2014 Reg. Sess.) ch. 313 § 1(a).

[35] "Hydraulic fracturing fluid" means one or more base fluids mixed with physical and chemical additives for the purpose of hydraulic fracturing.

largest shale formation.[36] The Monterey shale formation is the primary source rock for the conventional oil reservoirs found in the Santa Maria and San Joaquin Basins in southern California with a total estimated area of 1,752 square miles.[37] The Monterey shale formation is a 50 million year old sedimentary basin stretching in parts from Modesto to San Diego.

69. From the records of state regulatory agencies, a minimum of 4,717 active oil and gas wells in Kern County are known to use well stimulation. In the Los Angeles Basin of the estimated 4,071 wells marked as active, a minimum of 302 wells are known to use well stimulation.




[36] Estimates fluctuate due to market and technological concerns; however the hydrocarbons in the geological formation remain unaltered by varying estimates.

[37] U.S. Energy Information Administration, Review of Emerging Resources: US Shale Gas and US Shale Oil Plays (July 2011).

*Cumulative Impacts: Well Stimulation in Communities Overburdened by Pollution*

70. Well stimulations in the Monterey Shale formation are occurring overwhelmingly in the state's top 20% most polluted communities in California.[38] Emissions from well stimulations add to the significant existing toxic harm in these communities.

71. Preexisting health conditions and exposures to numerous sources of pollution increase individuals' susceptibility to negative health impacts of pollutant exposures.

72. Sequoia Elementary School and Richland Junior High School, located in Shafter, and Independence High School, located in Wasco, are in two of the top 20% most polluted communities in the state. Shafter and Wasco rank in the 98.8 percentile for communities most exposed and burdened by PM2.5 in California. Wasco ranks in the 94 percentile and Shafter ranks in the 73 percentile for communities most exposed and burdened by pesticides in California.[39]

73. The San Joaquin Valley air basin is a nonattainment area for criteria pollutants such as ozone and PM2.5. The Valley is an Extreme nonattainment area for the 1997 and 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS), a serious nonattainment area for the 1997 PM2.5 NAAQS, and a Moderate nonattainment area for the 2006 PM2.5 NAAQS.

74. Los Angeles – South Coast Air Basin is a nonattainment area for ozone, particulate matter and lead.

75. In 2014, the American Lung Association ranked Los Angeles County the nation's most ozone polluted county in the country, Kern County as the fourth most particulate matter and ozone polluted county in the country, and Fresno County as the second most particulate matter polluted and sixth most ozone polluted county in the country.

76. Students attending schools within 1.5 miles of hydraulic fracturing and other well stimulations are more vulnerable to their damaging and potentially lethal impacts.

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[38] California Office of Environmental Hazards, *CalEnviroScreen 2.0*, *available at* http://oehha.ca.gov/ej/ces2.html (last accessed July 14, 2015).

[39] *Id.*

*Negative Health Impacts from Well Stimulations*

77. The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Hydraulic fracturing and well stimulations negatively impacts the full array of mental, physical and social health of students of color attending public schools through both direct exposure to dangerous chemicals and pollutants in addition to pscyhosocial stressors of living and learning in a fracked community.

*1. Air Pollution from Well Stimulation*

78. Significant and damaging air pollution from well stimulation occurs throughout the entire life of a well. Emissions dangerous to human health occur at the preproduction, production, transmission and storage, use and after well abandonment phases. Preproduction emissions, meaning well pad preparation, drilling, well stimulation, and completion, include methane, benzene, toluene, ethylbenzene and xylene ("BTEX"), volatile organic compounds ("VOCs"), nitrogen oxides, fine particulate matter, hydrogen sulfide and silica dust. At the production phase, methane and VOCs, many of which are toxic air contaminants, continue to be released from a wellhead, condensate tanks, compressor stations, and open wastewater impoundments.

79. VOCs are ozone precursors because ground-level ozone, commonly referred to as smog, forms when VOCs react with nitrogen oxides in the presence of heat and sunlight.

80. VOCs play a part in the formation of PM2.5 pollution when it chemically reacts with nitrogen oxides and ammonia in the lower atmosphere. PM2.5 is a term of art, which defines a spectrum of fine particulate matter with an aerodynamic diameter of 2.5 microns or less. For comparison, the diameter of a human hair is 50 to 100 microns. The extremely small size of PM2.5 allows it to penetrate deep into lung tissue or pass through the lungs and into the blood stream.

81. Exposures to air toxics are associated with mild and severe respiratory disorders, exacerbate existing respiratory disorders like asthma, cause neurological problems, gastrointestinal cardiovascular damage, cancer, birth defects, damage to immune system, harm to skin and eyes, and premature death. Additional symptoms include nausea, headaches, nosebleeds and difficulty breathing. Children, the elderly, and those that are already suffering from chronic health problems are especially vulnerable to negative health impacts from air toxics and are known to experience irreversibly damaging impacts at lower levels of exposure than the general population.

82. Exposure to the criteria pollutants ozone and PM2.5, causes serious health problems by damaging lung tissue, reducing lung capacity and sensitizing the lungs to other irritants. Exposure leads to and exacerbates asthma, reduces lung capacity, and can cause premature death. Children, adults who are active outdoors, the elderly, and people with respiratory disease are most at risk. Exposure increases respiratory and cardiovascular hospital admissions, and school and work absenteeism.

83. Proximity to oil and gas production increases a population's exposure to air pollutant emissions, as well as dust, chemicals, noise, and light.[40] Increased proximity to air toxic releases increases the experience of negative health effects including birth defects, cancer risks, respiratory and neurological damage. Exposure to degraded air quality – in particular, exposure to benzene – for residents living distances of less than or equal to a half-mile from natural gas wells in Colorado caused an increased cancer risks and premature death over residents living further from the well sites.[41] Levels of benzene near California's

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[40] Jane C.S. Long et al., *supra* note 30, at 388.

[41] Lisa McKenzie et al., Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources, 424 SCIENCE OF THE TOTAL ENVIRONMENT 79, 79-87 (2012), *available at* http://dx.doi.org/101016/jscitotenv.2012.02.018; Lisa McKenzie et al., Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, 122 ENVIRONMENTAL HEALTH PERSPECTIVES 412, 412-17 (2014), *available at* http://dx.doi.org/10.1289/ehp.1306722.

oil fields have also been identified as a major contributor to risk.[42] In addition, there is an increased risk of neural tube defects at a distance of 2 miles and an increased risk of congenital heart defects in newborns within a 10-mile radius of natural gas wells in Colorado.[43]

84. Students of color, including Latino students, disproportionately attend schools within these unsafe ranges putting them at increased risks of these serious health impacts. Jane and Joan Doe both suffer from asthma and Jane Doe suffers from epileptic attacks.

*2. Psychological Stress*

85. Several environmental threats cause damaging psychosocial and psychological stress that lead to serious psychological and physical injuries. Oil spills, oil drilling, proximity to heavy industry, superfund cleanup sites, and well stimulation of the Marcellus Shale in Pennsylvania are documented to have resulted in statistically significant psychological, psychosocial and physical stress.[44]

86. A "concern for health," having concerns and complaints ignored by regulatory agencies, feeling that corruption was occurring, and a sense of injustice are common stressors for those living near hydraulic fracturing operations. These stressful experiences reinforce feelings and the stress from concerns for one's health. These particular concerns are further expressed as a result of sensory stimuli from the daily activities of drilling perceived through

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[42] California At Risk: An Analysis of Health Threats From Oil and Gas Pollution in Two Communities, Earthworks (January 2015), *available at* http://www.earthworksaction.org/files/publications/CaliforniansAtRiskFINAL.pdf (last accessed July 14, 2015).

[43] Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, *see supra* note 41.

[44] Bernard D. Goldstein, et al., The Gulf Oil Spill, 364 NEW ENGLAND JOURNAL OF MEDICINE 1334, 1334-48 (2011); Nancy Fielder, et al., Health Effects of A Mixture of Indoor Air Volatile Organics: Their Ozone Oxidation Products and Stress, 113 ENVIRONMENTAL HEALTH PERSPECTIVES 1542, 1542-48 (2005); Kyle Ferrar et al., Assessment and Longitudinal Analysis of Health Impacts and Stressors Perceived to Result From Unconventional Shale Gas Development in the Marcellus Shale Region, 19 INTERNATIONAL JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH 104, 104-12 (2013).

senses of hearing, sight and smell. These stimuli include increased noises, vibrations, light pollution, the close physical proximity of physical well pads and machinery on the frack sites, waste water ponds, and increased truck traffic. This psychological stress also negatively physically impacts sufferers' bodies by weakening their immune systems, increasing the absorption of toxics, difficulties in respiration, perspiration and consumption.

87. Students of color, including Latino students, disproportionately attend schools in close proximity to well stimulation putting them at increased risks of these serious psychological impacts. Jane and Joan Doe both suffer from psychological distress and fear for their health and safety because of their schools' proximities to well stimulations.

*SB 4 Implementing Regulations Fail to Protect California Public Schools and Other Sensitive Land Uses*

88. All students in California have a fundamental and protected right to an equal education, "California has assumed specific responsibility for a statewide public education system on equal terms to all.[45]"

89. Currently and historically, California state law does not limit how close industry may place well stimulation next to sensitive land uses like schools, hospitals, or residential housing. California state law, SB 4, the interim regulations and final corresponding SB 4 Implementing Regulations did not and do not limit where industrial operators may use well stimulation and merely require notification that well stimulations will occur.

90. However, this notification requirement only extends to certain parties nearby, such as landowners and tenants, and does not include schools. Both the interim regulations and SB 4 Implementing Regulations do not require industrial operators or state officials to give notice to students, parents, teachers, or school officials at schools near well stimulation sites. SB 4 Implementing Regulations do not even require state officials to

[45] *Butt v. State of California*, 4 Cal. 4th 668, 680 (1992).

consider a proposed well's physical proximity to sensitive land uses like schools in their permit review process.

91. Additionally, community residents, students, and school officials are not provided an opportunity to participate in the process of siting, approving, or denying wells in their area. The majority of states around the country do require setbacks for well stimulation. Well stimulation occurs in 32 states, and only 11 of them, including California, do not require setbacks or protections for sensitive land uses. California is one of the largest oil producing states in the country with half of all new wells using well stimulation. The other largest oil producing states, Texas and North Dakota, both require setbacks for well stimulation. Similarly, other heavy oil producing states in the Gulf Coast like Louisiana and Alabama also impose setbacks.

92. On July 9, 2015, the California Council on Science and Technology published "Well Stimulation in California" as required by SB 4 and recommended setbacks from residences, schools and other sensitive receptors as a method of mitigating known health risks from air toxics and water pollutants.[46]

[46] Jane C.S. Long et al., An Independent Scientific Assessment of Well Stimulation in California Vol. II 433 (2015).

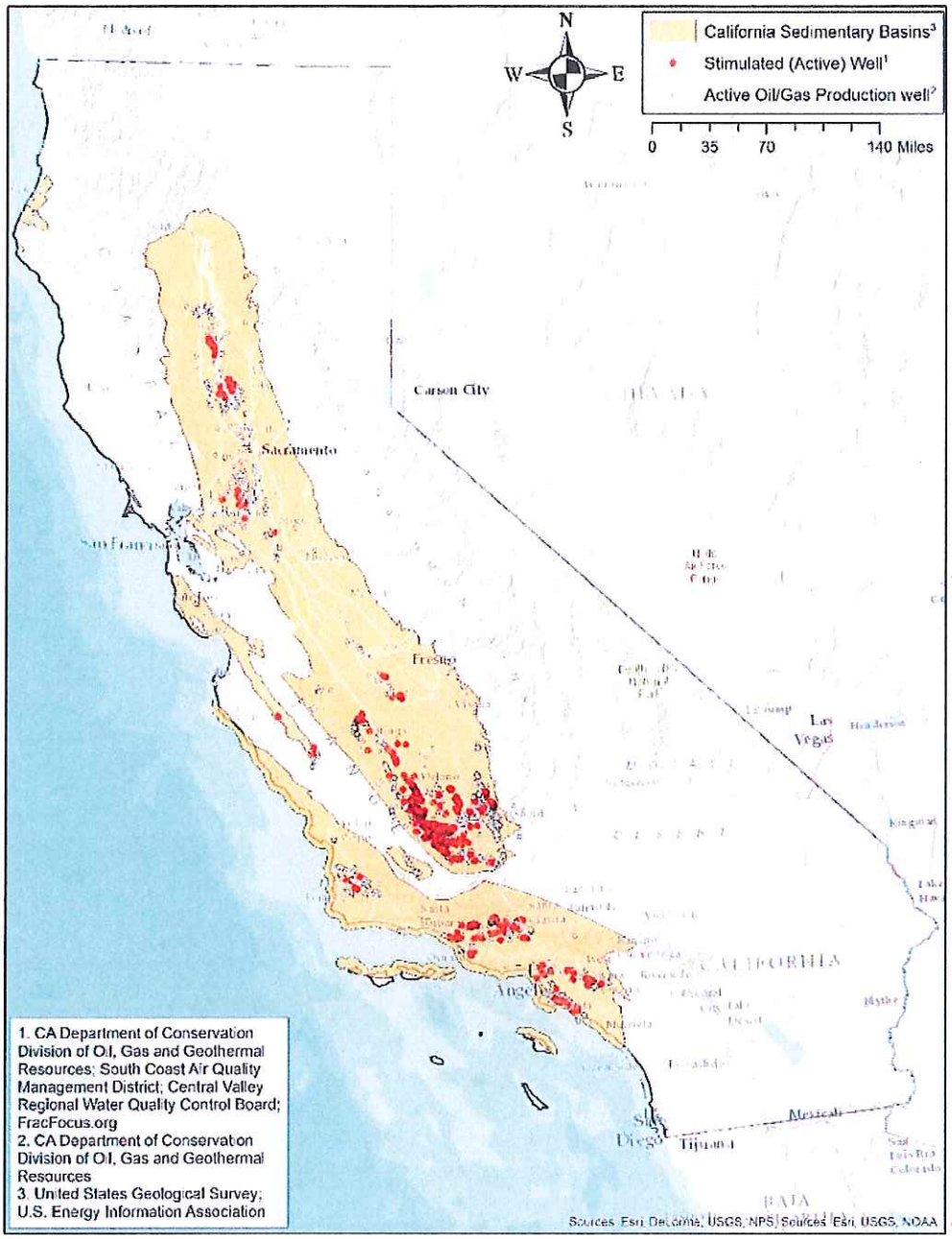


Figure 2. Sedimentary basin with oil and gas production wells. This analysis of school demographics limits the sample population to the areas of California overlaying the sedimentary basin source rock, where active wells are currently producing hydrocarbon resources. The GIS layer was created by combining U.S. Geological Service data and EIA data. The sedimentary basin and oil and gas production wells with stimulations identified are shown in the map above.

*Well Stimulation Near California Schools and within School Districts Disproportionately Harms Students of Color, Including Latino Students.*

93. The Final Environmental Impact Report ("EIR") required under SB 4 identifies cities and counties within the Monterey formation and cities and counties that contain active oil and gas fields. Overwhelmingly, the counties and cities where active oil and gas fields are found have minority and low-income populations higher than the state average.[47] The EIR fails to identify any measures to mitigate these disproportionate impacts beyond tracking their continued occurrence.[48]

94. In California, according to 2010 census data, 5.4 million people live within one mile of the approximately 82,000 oil and gas wells in California listed as new and/or active by DOGGR. More than a third of these people (1.8 million) also live in areas most overburdened by pollution as identified by California EPA's CalEnviroScreen 2.0. Ninety two percent (92%), of those Californians within both a mile of an oil and gas well and in communities most overburdened by pollution are people of color.[49]

95. Enrollment data for the 2013-2014 school year show that three hundred fifty-two thousand seven hundred and twenty-four (358,724) California students attend a school within one mile of an oil and gas well and 121,903 students attend a school within a half mile of these wells.

96. At least sixty one thousand six hundred twelve (61,612) California students attend a school within one mile of a well drilled using well stimulation methods and at least12,362 students attend a school within a half mile of these wells.

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[47] SB 4 Final EIR, Department of Conservation (June 2015) *available at* ftp://ftp.consrv.ca.gov/pub/oil/SB4EIR/EIR/10.10%20Environmental%20Justice.pdf. (last accessed July 14, 2015).

[48] *Id.*

[49] Drilling in California: Who's at Risk?, NRDC (Oct. 2014), *available at* http://www.nrdc.org/health/files/california-fracking-risks-report.pdf (last accessed July 14, 2015).

97. Four hundred eighty-five (485) actively producing and/or newly permitted oil and gas wells are located within 1 mile of a school and 177 of these wells are within a half mile of a school.

98. Seventy-Eight (78) wells confirmed to use well stimulation techniques are within a one mile radius of a school.

99. California school districts with increased Latino and students of color enrollment are more likely to contain a greater number of oil and gas wells, as well as, contain wells that have been stimulated.

100. Statistical trends show that as the number of Latino and students of color students in a school or school district increases, so does the number of oil and gas wells found in the district and near the schools. The counts of students of color and Latino students enrolled in districts and individual schools, and the number of wells in the district and within 0.5 mile and 1 mile from individual schools are positively correlated.

101. Students of color represent 83.8 percent of students attending a school within 1 mile of confirmed well stimulation and 62.5 percent of students at those schools are Latino. Students of color represent 79.6 percent of students attending a school within 1 mile of an active oil and gas production well and 60.3 percent of students at those schools are Latino.

102. Students of color represent 89.9 percent of students attending a school within 0.5 mile of confirmed well stimulation and 61.6 percent of students at those schools are Latino. Students of color represent 77.8 percent of students attending a school within 0.5 mile of an oil and gas well and 59.4 percent of students at those schools are Latino.

103. The top 11 school districts with the highest well counts are located in the San Joaquin Valley. Ten of those school districts are located in Kern County, the other is located in Fresno County.

104. Taft Union High School District in Kern County has 33,155 oil and gas wells within its boundaries, the highest of all California school districts.

105. Kern Union High School District in Kern County has 19,800 oil and gas wells within its boundaries, the second highest of all California school districts.

106. Fourteen (14) schools in the state are located within a half mile of at least one well using well stimulation. Thirteen (13) are located in the Greater LA Basin/Southern California.

107. Sequoia Elementary School in Shafter, Kern County is the only school in California located within a half a mile of three separate stimulated wells. One stimulated well, API 403043765, is less than 1200 feet from the school. Over 800 students attend Sequoia Elementary with 89.5% students of color and 86% Latino students.

*California Schools Active Well and Well Stimulation Disparity Analysis*

108. In order to document the disparate impact of SB 4 implementing regulations on Latino students and students of color, plaintiffs conducted a disparity analysis of California schools limited to those located in regions that are known to produce hydrocarbons. To develop a conservative sample area, 4 datasets were "merged" into a single dataset with a unique boundary. The four datasets included the U.S. Energy Information Association's Sedimentary Basin boundary published January 8, 2015[1]; the USGS National Assessment of Oil and Gas Project (Sacramento Basin Province and San Joaquin Basin Province); and the CA DOC DOGGR Sedimentary Basins with oil, gas or geothermal production (limited to the regions with active oil and gas production wells). The analysis documented the following conclusions:

109. A Latino student is 18.4% more likely to attend a school within 1.5 miles of a stimulated well than a non-Latino student.

110. A student of color is 19.1% more likely to attend a school within 1.5 miles of a stimulated well than a white student.

111. A Latino student is 20.2% more likely to attend a school within 1.5 miles of an active well[50] than a non-Latino student.

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[50] For the purposes of this complaint, an "active well" means an actively producing oil or gas well.

112. A student of color is 24.7% more likely to attend a school within 1.5 miles of an active well than a white student.

**FIRST CAUSE OF ACTION**

**(Cal. Gov. Code §11135 – Disparate Impact Discrimination)**

113. Plaintiff realleges and incorporates all previous paragraphs as if fully set forth herein.

114. A prima facie violation of Cal. Gov. Code §11135 occurs when a program or activity, funded by the state, results in a disparate impact on a protected group.

115. Defendants' approval of SB 4 regulations without setbacks or geographical limitations on well stimulation has the effect of continuing historic discrimination against students of color, including Latino schoolchildren, on the basis of race, national origin, and ethnic group identification. Students of color attending schools within 1.5 miles of a well stimulation, including Romo's children, suffer increased exposures to toxic air pollution and psychological harm while already suffering from existing disparate environmental burdens as compared to the comparison population. Defendants are officials of the State of California and a state agency. Accordingly, Governor Brown, DOGGR, and Bohlen have violated and continue to violate Government Code section 11135 and the regulations promulgated thereunder.

116. As a direct and proximate result of defendants' unlawful conduct, plaintiff Romo and his minor children have suffered irreparable harm and this harm will continue absent injunctive relief.

**PRAYER FOR RELIEF**

WHEREFORE, plaintiff respectfully requests the Court:

A. to declare that defendants DOGGR, Governor Brown and Supervisor Bohlen have violated California Government Code section 11135 through approval of the SB 4 Implementing Regulations, which allow the use of well stimulation in a manner that disproportionately impacts students of color, including Latino students, in California;

B. to invalidate the SB 4 Implementing Regulations;

C. to enjoin defendants DOGGR and Bohlen from approving any permit applications until defendants approve regulations in accordance with California Government Code section 11135 and all relevant applicable laws.

D. to award plaintiff his reasonable attorneys' fees, costs and expenses, including expert witness fees, pursuant to California Code of Civil Procedure section 1021.5.

E. to grant other and further relief as the Court deems just and proper.

Dated: July 14, 2015

Respectfully Submitted,

CENTER ON RACE, POVERTY & THE ENVIRONMENT

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