

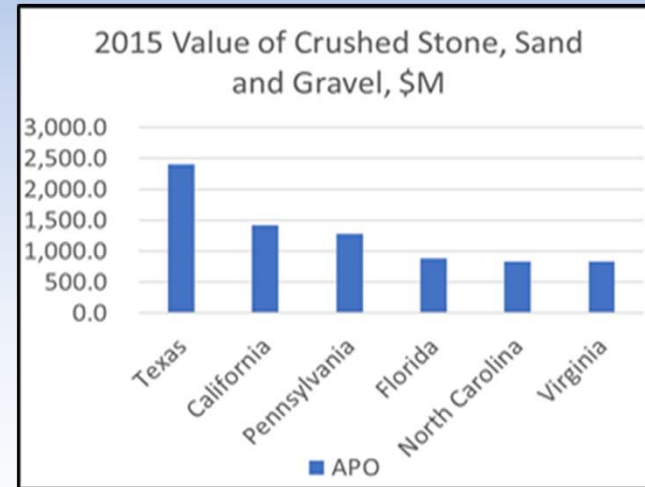
The following presentation was given by Mark Friesenhahn during the November 10, 2020, Sand Mining Rulemaking Petition Stakeholder Meeting. Mr. Friesenhahn is a stakeholder representing Texans for Responsible Aggregate Mining (TRAM) and is not employed by, or otherwise affiliated with, the Texas Commission on Environmental Quality (TCEQ). This document is being made available by the Executive Director purely as a courtesy. The views expressed in this presentation are those of the authors. The TCEQ does not endorse, represent, or necessarily agree with the following information or its accuracy.

APOs in Texas

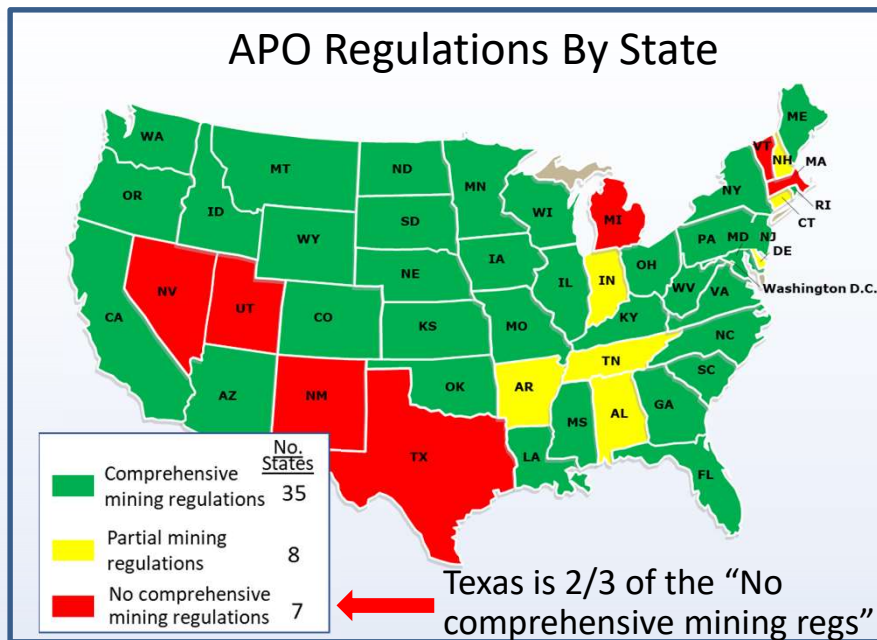


APOs

- Aggregate Production Operations (APOs) are a \$2.5 billion industry in Texas
 - Open-pit surface mines (quarries for aggregate and gravel)
 - Sand mines (dry and wet)
 - Hot mix asphalt plants
 - Concrete batch plants & bulk material handling facilities
 - Associated crushing, processing, material handling, and transport operations
 - TX APOs are 70% larger than the next state (California)
- The industry is growing rapidly to meet demand
- Texas does not have comprehensive APO regulations
- APOs include large, well-funded international, nation-wide and local companies
- The influence of the industry on the state legislature is strong



Source: U.S. Geological Survey (USGS)



	Total States	States w/o Regs	In TX?
Lafarge Holcim	41	6	Y
Martin Marietta	26	4	Y
Lehigh Hanson	24	3	Y
Cemex	20	4	Y
Vulcan	19	2	Y
Rodgers Group, Inc.	12	1	Y
Lhoist	8	1	Y
Anderson Columbia	6	1	Y

APO Issues and Conflicts are Large

How Do We Achieve Equitable Resolution for All Stakeholders?

<u>No.</u>	<u>APO Key Issues</u>
1.	<u>Air particulate emissions</u> – quantify and address the impact APOs have on air quality for adjacent neighbors, near-by properties, and the community at large
2.	<u>Water use and availability</u> – assess and address consumption, availability, and the mounting effects of APO water use on regional water supplies
3.	<u>Surface and ground water contamination and flooding</u> – address water quality impacts to aquifers, rivers, and wetlands as well as silting and flooding issues
4.	<u>Rapid development of APOs without adequate regulatory oversight</u> – permitting requirements are deficient and Environmental Impact Assessments, mine planning and reclamation are not required. Resolution will require regulation akin to the federal Surface Mining and Control Reclamation Act (SMCRA) that applies to mining almost everywhere else in the US
5.	<u>Truck traffic</u> – address effects of rapidly increasing volume of heavy truckloads on public infrastructure, including limited capacity roads, as well as the associated emissions and dust they create. Address safety and the public cost of maintaining roads not designed for this use
6.	<u>Nuisance issues</u> – address additional impacts to neighbors’ quality of life and enjoyment of private property, including blasting (over-pressure and seismic activity), noise, odor, light trespass, and visible blight
7.	<u>Economic impacts</u> – address the negative economic impacts of APOs, including the devaluation of neighboring properties and the misapplication of agricultural and wildlife valuations for APO properties.

TRAM Technical Team

- Objectives
 - Preserve the natural beauty of unspoiled areas of TX including the Coastal Bend and the Hill Country, and ensure clean air & water and adequate water for our children, friends, retirees, tourists and new families
 - Resolve seven APO Key Issues common to many areas of TX to achieve long-term, balanced and equitable impacts on all involved
 - Work with lawmakers, state agencies, and good-faith industry operators to create state standards for BMPs in the APO industry and to adopt those standards into law
 - Seek healthier, safer, and more desirable communities and a more efficient APO industry better aligned with stakeholder concerns in the communities in which that operate
- Initiatives
 - Quantitative assessment and understanding of the Texas APO industry
 - Resolve seven APO Key Issues with education, dialogue and legislation
 - Development of Best Management Practices (BMPs) for Texas APOs to support best practices and legislation
 - Support APO stakeholders with work on rule improvements and legislation
- Technical Team
 - 8 team members
 - Engineers, geologists, hydrogeologists, scientists and U of H professor emeritus
 - Experts in mining & mining operations engineering, hydrogeology, sedimentation and flooding, and biomedical research