

The permission to drill?
OR
The Constitutional right to health and safety?



Does the project have unstudied environmental effects which will cause significant adverse impacts on human beings, either directly or indirectly?



THIS MUST BE PROVED USING “SUBSTANTIAL EVIDENCE.”



- **This is the legal standard:**
- **FACT**
- **A REASONABLE ASSUMPTION PREDICATED
UPON FACT**
- **OR EXPERT OPINION SUPPORTED BY FACT**

OUR SUBSTANTIAL EVIDENCE WILL SUPPORT A 'FAIR ARGUMENT'

“The fair argument standard means enough relevant information and **reasonable inferences from this information, that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.**”

The Operator's Burden

- The circumstances in which an addendum *is* appropriate are limited to **“minor technical changes or corrections.”**

WHAT IS THE PROJECT?

- -the addition of 4 new previously unapproved, and not considered under CEQA, oil and gas wells,
- -an increase of trucking limits by at least 16 one-way trips per day,
- -the potential for increased flaring
- -increased size of storage tanks for oil and produced water storage onsite,
- -and expanded processing for the Cabrillo Oil Field.

THE HEALTH RISK ASSESSMENT

- The Staff recommendation to approve this project rests on the HRA.
- After all, if it showed significant health risk, you would reject the project or order an EIR. But it doesn't so let's look at it.



THE HEALTH RISK ASSESSMENT DIDN'T CONSIDER ALL PROJECT-RELATED EMISSIONS



NAUMANN



ROSENMUND



DOUD



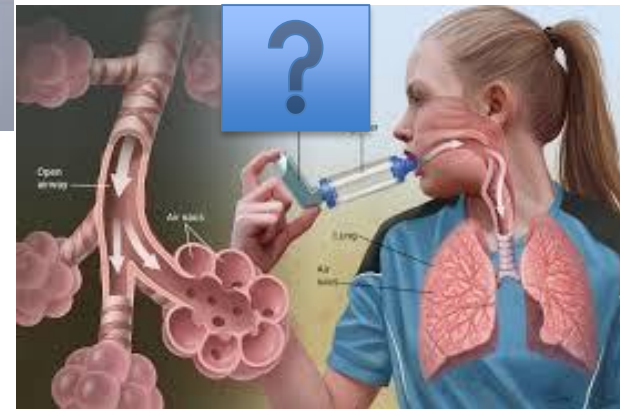
PLUS: FRACKING CHEMICALS AND EXCESSIVE FLARING



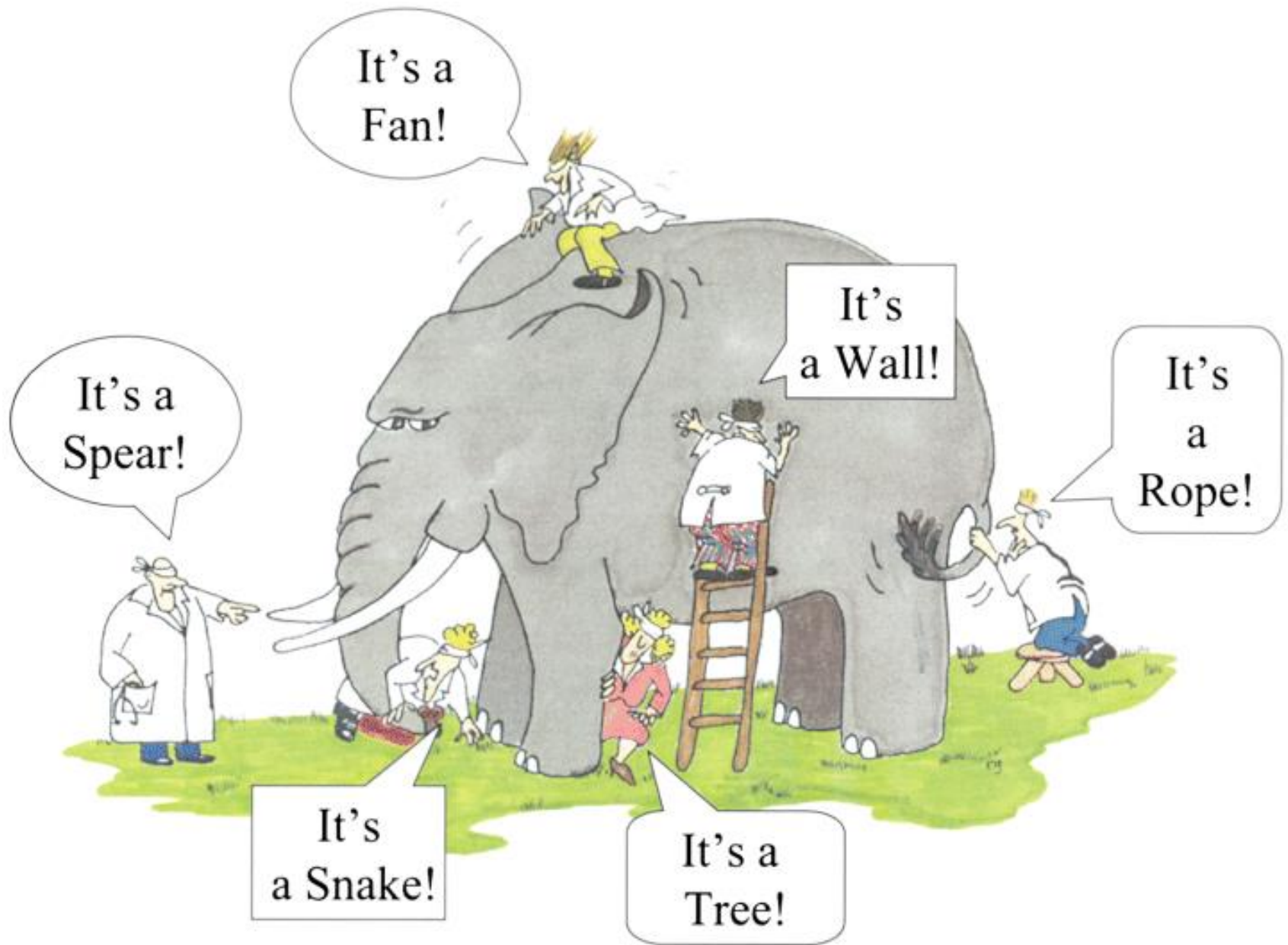
SUSCEPTIBILITY MODIFIERS:
OTHER SOURCES OF POLLUTION RESET THE
LEVELS OF SUSCEPTIBILITY OF THE NEARBY
RESIDENTS.
THIS IS CUMULATIVE IMPACT



THE HEALTH RISK ASSESSMENT IS OF LIMITED USEFULNESS



ALL IMPACTS MUST BE CONSIDERED FOR A CONCLUSION THAT MAKES SENSE





Environmental Risk

WHAT DO WE KNOW, BEYOND THE HEALTH RISK ASSESSMENT, THAT CAN HELP SUPPORT A FAIR ARGUMENT THAT THERE IS A SIGNIFICANT ENVIRONMENTAL RISK?



“More than 200 airborne chemical contaminants have been detected near drilling and fracking sites. **Of these, 61 are classified as hazardous air pollutants, including carcinogens; 26 are endocrine-disrupting compounds that have been linked to reproductive, developmental, and neurological damage.**”

Fracking and Low Birth-weight Babies Go Together

- Infants born within 1 kilometer of a fracked well were 25% more likely to have low birth-weight (less than 5.5 lbs).





“Drilling and fracking operations **emit fine particles and vapors** that combine to create ground-level ozone (smog).

Exposure to these pollutants is known to cause **premature death, exacerbate asthma, and contribute to poor birth outcomes and increased rates of hospitalization and emergency room visits.”**



- Flaring also releases carbon monoxide, soot, and toxic heavy metals. In 2016, **the EPA acknowledged that it had dramatically underestimated health-damaging air pollutants from flaring operations.**
- *Exposure to emissions from natural gas flares and diesel exhaust from the [estimated lifetime] 4,000-6,000 truck trips per well pad also pose respiratory health risks for those living near drilling operations.*



- **Preterm birth was associated with the highest categories of drilling activity and natural gas production**, with the strongest association observed for women in the first trimester.
- Severity of preterm birth was also associated with increased drilling activity and gas production near maternal residence.

Cal EnviroScreen 3.0



Does the project have unstudied environmental effects which will cause significant adverse impacts on human beings, either directly or indirectly?



SUBSTANTIAL EVIDENCE TO SUPPORT A FAIR ARGUMENT

- The additional pollution from this permit modification should be considered significant.
- The high pollution burden of this community, and high level of diesel exposure combined with the high asthma and low birth weight rates combine for the *reasonable inference* that there is substantial evidence to support a fair argument that the addition of the emissions from this project may be significant.

