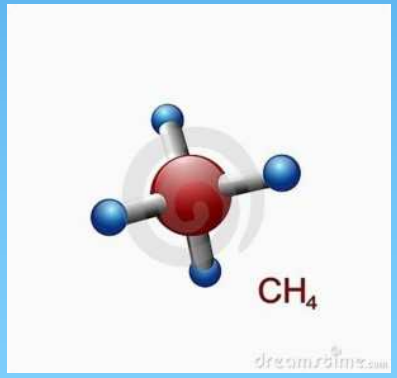
HEALTH PROTECTIVE STANDARDS FOR THE INJECTION OF BIOMETHANE INTO THE COMMON CARRIER PIPELINE



Presented by: Patrick Holland

What is Biomethane?

* Waste decomposes anaerobically
* Biogas = raw (unprocessed) mixture of methane and carbon dioxide
* Biomethane is biogas that is upgraded to pipeline quality (natural gas)

Sources of biomethane?

* Landfills
* Dairies
* Sewage treatment plants (POTWs)
  - Point Loma Wastewater Treatment Plant

Benefits of Biomethane

* Supporting energy diversity as a renewable energy source
* Reducing greenhouse gas emissions
* Promoting sustainable waste management practices
* Creating new jobs in California

AB 1900

* Requires California Public Utilities Commission (CPUC) develop standards for biogas
* Office of Environmental Health Hazard Assessment (OEHHA) and Air Resources Board (ARB) prepared a report with recommendations to CPUC on the public health aspects of injecting biomethane into common carrier pipelines

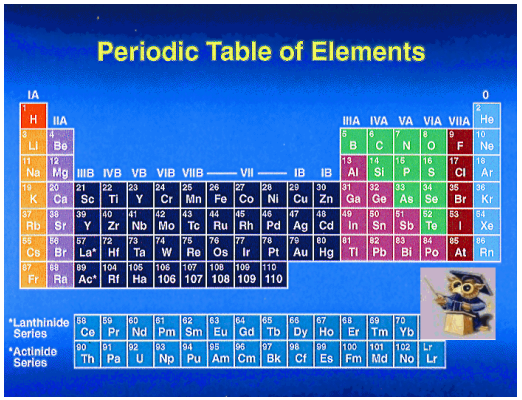
AB 1900 TF Position

LOS ANGELES COUNTY
SOLID WASTE MANAGEMENT COMMITTEE/
INTEGRATED WASTE MANAGEMENT TASK FORCE

* TF sent an "Oppose Unless Amended" letter to Senate Environmental Quality Committee on June 28, 2012
  * AB 1900 reinforced scientifically inaccurate provisions in State law, specifically Public Resource Code 25741, that discourage the utilization of State resources and inhibit the development of renewable energy generating conversion technologies

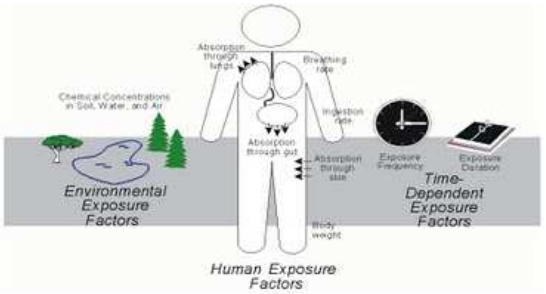
OEHHA Tasks and Findings

* To compile a list of constituents of concern found in biogas that could:
    a) pose a health risk
    b) at levels that significantly exceed concentrations of those constituents in natural gas
* Determine health protective levels for these constituents



ARB Tasks and Findings

* To develop realistic exposure scenarios
* Identify the associated health risk to utility workers and gas end users
* Determine the concentrations of these constituents in biogas necessary to protect public health
* Identify monitoring, testing, reporting, and recordkeeping requirements



Questions?

http://www.arb.ca.gov/energy/biogas/biogas.htm