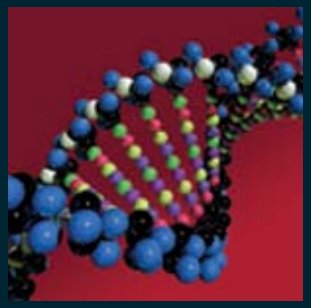
Solutions to Regulatory and Resource Issues Regarding Renewable Energy and GHG Projects


Joseph Hower, PE, DEE

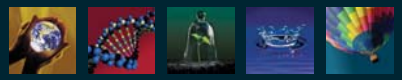
Managing Principal

ENVIRON International Corporation

jhower@environcorp.com

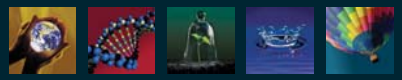
213.943.6319

ENVIRON



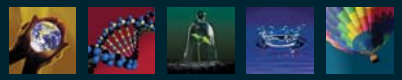
Overview of Solutions

- Sophisticated emission control technologies.
- Work with government agencies to change federal, state and local regulations to better recognize the unique benefits of organics residuals projects.
- Work with regulators to take advantage of existing resource and recovery provisions of the Health and Safety Code.
- Work with other stakeholders such as NGOs to gather support for the projects



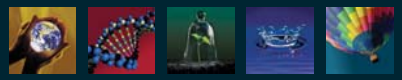
Emission Controls and Regulatory Issues

- Regulatory Drivers:
  - Best Available Control Technology (BACT)
  - Availability and cost of offsets
  - More stringent source specific regulations
  - GHG regulations
- Sophisticated emission controls:
  - PM_{10} control
  - NOx control
  - Fuel gas cleanup technologies



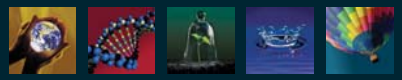
Change Regulations: State Legislature

- GHG regulations:
  - Regulations that take into account life cycle analysis
  - Regulations that have provisions for renewable energy or GHG that currently have barriers because of existing or regulation requirements
  - Complexity in the design of offset rules for GHGs
    a) It is a regional and global issue rather than a local issue.
    b) Lack of experience with measuring, managing and accounting for GHG emissions and emission reductions.
- SB827 for the current SCAQMD “permit moratorium”
  - On the Governor’s desk



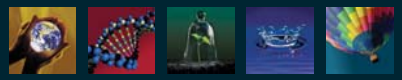
Regulatory Role in Reducing GHGs

- Importance of regional efforts:
  - Solutions and contributions need to come from all levels.
  - Regional efforts:
    a) Can balance other programs
    b) Can facilitate progress and recognize co-benefits
    c) On-the-ground knowledge of local conditions



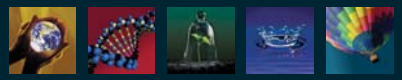
Additional Options for Offsets Under the Health and Safety Code

- District shall issue permits for the construction of a project which burns municipal waste, landfill gas, or digester gas if several conditions are met including BACT and offsets to mitigate the impact of the project.
- Utility displacement credits for cogeneration and qualifying facilities.
  - Can only be issued by CARB
  - Credits “ran out” in 1980’s
- Also offsets for resource recovery projects, need growth allowance



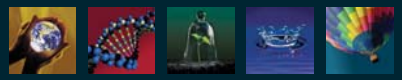
Renewable Energy Projects

- Example projects in Southern California:
  - Biosolids waste-to- energy facility
  - Rentech – Municipal solid waste gasification facility
  - Green Conversion Systems
  - Dairy Manure Digester Permitting
  - Various municipal digester and landfill gas projects
  - Dairy Emission Reduction Credit appeal



Early Stakeholder Involvement

- Technical compliance with regulations is not enough
- Most projects have discretionary approvals
  - Triggers CEQA
  - Will force public notice at some point
- It is better to be out front
- Have an effective communications plan and team
- NGOs, local governments, local agencies.



Conclusions

- Advancement in control technology is important to regulatory compliance.
- Regulations need to account for GHG reduction in addition to traditional criteria pollutants.
- Regulations can interfere with pollution reduction measures such as organics use.
- Explore resource and recovery options for obtaining offsets.
- Implement outreach early and often