

Organic Residuals Project: Addressing Cross-Media Regulatory Conflicts

Impediments to Achieving Greenhouse Gas Reductions and Watershed Restoration Goals

A Concept Paper (Draft)

Pacific Southwest Organic Residuals Symposium's Planning Committee

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Background

The annual Pacific Southwest Organic Residuals Symposium (PORS) presents options for renewable energy and new uses of organic residuals. It looks at ways to achieve greenhouse gas (GHG) reductions, select and fund new technologies, and coordinate cross-media regulations to achieve environmental benefits while protecting public health. The symposium is intended for those interested in putting organic residuals to their best uses and includes the public, non-profit and private sectors, state and federal regulators, researchers, students, laboratory technicians, and environmental groups.

PORS is sponsored by the U.S. EPA, Department of Resources Recycling and Recovery (formerly the Integrated Waste Management Board), Central Valley Regional Water Quality Control Board, Department of Food and Agriculture, Western United Dairymen, Sustainable Conservation, California Association of Sanitation Agencies, Sacramento Municipal Utilities District, USDA Natural Resources Conservation Service, USDA Rural Development, BioCycle Magazine, and the University of California, Davis.

In the past two PORS (2008 and 2009), stakeholders raised concerns regarding cross media regulatory coordination. The following are some of the specific issues raised and discussed:

- No one agency has primary or special responsibility for oversight and accountability of coordinating cross-media issues among regulatory agencies;
- Alternative energy projects are being stifled by silo thinking and "interpretations" of regulations;
- No consideration or weighing of a project's net environmental benefit and public health;
- No mechanism or policy to effectively address or resolve cross-media issues;
- Obtaining necessary permits can be quite costly, confusing, time consuming, or even impossibly expensive for small operators;

- Reducing or eliminating the lengthy times (often measured in years) needed to bring new and innovative technology on-line. It is also recognized that the time required to obtain even routine permit approval can take considerable time; and
- Need for a transparent process or forum to facilitate institutional integration and reduce fragmented approaches to solving environmental problems.

Introduction

The PORS planning committee intends to undertake the complex issue of cross-media coordination in this year's symposium (September, 2010) and advocate for actions to improve California's regulatory structure. We are aware of, and support, the existing environmental laws and protections for water and air quality and, therefore, public health. We want to be very clear that we are not promoting the relaxation of standards intended to protect public health and the environment. Our goal is to have a rational and transparent regulatory structure which is more efficient, expedient, user-friendly, and improves agency cooperation, collaboration and coordination.

The complex regulatory tangle and rigid institutional barriers which impede implementing projects that reduce GHG emissions and advance innovative renewable energy technology have been raised as serious impediments from the past three PORS by stakeholders (e.g., permitting dairy methane digesters, composting facilities and using methane produced by wastewater treatment plant digesters). While the existing regulations may be seen as effective when each media is addressed separately, the deficiencies become evident when the regulations are viewed holistically as one set of regulations for protecting the overall environment. Moreover, other stakeholder groups have identified the similar problem of cross-media conflict and permit coordination as a significant barrier to watershed restoration, on-farm restoration, disposal of animal carcasses (e.g., dairy cows), reuse of manure and biosolids, and composting.

The PORS planning committee will seek to join efforts with other groups to press this "inconvenient truth" to those who may be able to help disentangle the complicated maze of regulations that often work at cross purposes, are fragmented and counterproductive, and pose an undue burden on those committed to innovation and projects with clear environmental benefits. PORS 2010 will focus on a range of potential ideas, actions and new solutions through improved technology, executive orders, administrative fixes, and/or legislation, to ease or minimize this problem, and help provide accountability and transparency to the process, while retaining the important protections that the current regulations provide.

Concurrent Efforts

We are aware of other concurrent efforts to address problems associated with cross-media coordination. Other pursuits include an analysis and position on the institutional barriers and other contributing factors, and all offer recommended actions for resolution.

Other concurrent efforts include the following:

1. California Roundtable for Agriculture and the Environment: CRAE submitted a letter to the secretary of CalEPA (May 2008) in support of an effort led by the Sustainable Conservation to orchestrate a partnership with government agencies, environmental and private industry partners to make more efficient the permitting process for greenhouse gas mitigation technologies related to agriculture (attached). In addition, CRAE's July 2010 draft White Paper "Building Regulatory Support for Environmental Enhancement on California Farms" focuses on on-farm environmental restoration and watershed enhancement projects. Release date of final paper is imminent.
2. California Agricultural Vision 2030 (California Department of Food and Agriculture and the American Farmland Trust): The California State Board of Food and Agriculture released a set of draft recommendations for public comment focusing on strategic policy options needed to support a sustainable food production and delivery system in California (July 2010). These draft recommendations are a result of a continuing process to bring together a diverse set of agricultural stakeholders to create consensus on the diverse set of issues impacting California's food system. One of the seven high priority policy actions includes "Smarter regulation of agriculture to improve environmental quality" to address the regulatory complexities facing the agricultural community. An advisory committee has been established charged with turning recommendations into action. The CRAE has been asked to "evaluate the pros and cons of a variety of institutional arrangements (e.g., an ombudsman) or suggest alternatives for improving the administration of environmental and other regulations affecting agriculture. The primary purpose is to help farmers and regulatory agencies avoid duplication of effort, reconcile conflicting mandates and requirements, reduce paperwork and cut compliance costs where feasible, all without compromising environmental quality standards and compliance." Public comments on the Ag Vision recommendation will be accepted until August 20, 2010. The complete list of Ag Vision recommendations and history of the process are available at: www.cdffa.ca.gov/agvision.
3. UCLA and UC Berkeley's law schools: "ROOM TO GROW – How California Agriculture Can Help Reduce Greenhouse Gas Emissions." Published March 2010, this policy paper is the third in a series of reports on how climate change will create opportunities for

specific sectors of the business community and how policy makers can facilitate those opportunities. The report identifies barriers and solutions for reducing GHG emissions and was prepared by a group of agricultural leaders, academics, policy makers, non-governmental organizations and water experts. It also offers recommendations for policy makers and industry leaders to overcome these barriers.

(http://www.law.berkeley.edu/files/Room_to_Grow_March_2010.pdf)

4. The California Biomass Collaborative: This partnership of government, industry, environmental groups, and education institutions is examining these issues. The Collaborative is administered by UC Davis and sponsored by the California Energy Commission and other agency and industry partners. The Collaborative works to enhance the sustainable management and development of biomass in California for the production of renewable energy, biofuels, and products. The Collaborative holds annual conferences where regulatory barriers to biomass facilities have been discussed in some detail. This issue has been the topic at many meetings. One of the actions taken was to perform a survey of stakeholders in California assessing permitting barriers and other obstacles to biomass facilities.
5. Past Legislation: The Cannella Environmental Farming Act of 1995 (Article 8.5, California Food and Agricultural Code Sections 560-568) may have promise, however, its focus is primarily on science and not public policy nor on process issues such as cross media coordination among regulatory agencies. It places emphasis on the following:

“Section 561 the Legislature finds and declares the following:

(d): Best scientific evidence should include the net environmental impact provided by agriculture.

(e): Additional research is necessary to adequately inventory the impact that agriculture has on the environment. Recognition should be afforded to agricultural activities that produce a net benefit for the environment, which is consistent with the growing trend of providing incentives for the private sector to undertake economic activities that benefit the environment.”

The Act called for CDFA to establish and oversee an “environmental farming program” to “provide incentives to farmers whose practices promote the well-being of ecosystems, air quality, and wildlife and their habitat.”

The Act also mandated CDFA to “convene a five-member Scientific Advisory Panel on Environmental Farming to advise and assist federal, state and local government agencies on issues relating to air, water, and wildlife habitat . . . to assist government

agencies to incorporate benefits . . . into environmental regulatory programs.” [Section 568(a)(4)]

6. Fort Baker Leadership Summit/Spring 2009: Re-imagining California *A Sustainable Future for the Golden State*: Forty California leaders from business, academia, philanthropy, government, and nonprofit organizations gathered at Fort Baker (Sausalito, CA) to focus on the obstacles and complexity in adopting a comprehensive action plan to guide California toward sustainability. “The experience demonstrated that to attain sustainability California needs policies and an infrastructure that reflect the interrelationship of economy, environment, education, and equity, rather than continue to address these issues in fragmented “silos” and move beyond business as usual. The group explored how to overcome fragmented policymaking and planning. The “group found that some of the obstacles stem from a lack of integrated thinking about interrelated issues. Fragmentation, complexity, and a lack of a common vision and guiding principles are among the root causes of our state’s stagnation. Water, waste, pollution, climate change, energy, and economic growth, though interrelated, lack integrated planning and management.” WELL Network¹ produced the Fort Baker Leadership Summits in 2009.
7. Biosolids Cross Media Roundtable, May 2008: A roundtable forum was convened with CalEPA, to discuss and work toward solutions to cross media issues. The California Association of Sanitation Agencies and other Clean Water Summit partners (Bay Area Clean Water Agencies, Central Valley Clean Water Association, Southern California Alliance of Publicly Owned Treatment Works, and Clean Water Environment Association) organized the forum which was attended by a broad cross section of state and federal officials. These 27 organizations included the State Integrated Waste Management Board, State Water Resources Control Board, CA Air Resources Board, Cal Trans, Central Valley Regional Water Quality Control Board, San Joaquin Valley Air District, South Coast Air Quality Management District, and USEPA, Region 9. The participants “acknowledged that a silo approach is still the norm, which is in part necessitated by the constraints of both federal and state law. A need to view issues holistically was also duly recognized and steps are being taken to implement such a move . . . One issue cited was the difficulty in identifying all potential impacts and

¹ WELL Network is a nonprofit, non-partisan, women-led organization formed in 2003 to bring attention to shortsighted and poorly coordinated policies that have enabled pollution, toxic chemicals, and global warming to put health of families at risk. Members include women who are business leaders, professionals, philanthropists, and decision makers within their communities. WELL Network produced the Fort Baker Leadership Summits and is resource to policy makers and others committed to charting a sustainable future for California.
www.wellnetwork.org

affected parties as rules are being crafted.” The Summit Partners worked with Cal EPA to develop a checklist and questionnaire to be used and shared by regulatory agencies as they develop rules.

8. Opportunities, Barrier and Strategies to Increasing Local Meat Processing in California (University of California, Cooperative Extension, January 2010): This two page issue paper identifies the multiple barriers confronting livestock producers interested in local systems of meat production and processing rather than large scale processing facilities. Among the points raised, there are two which identify barriers at the state level:

- Due to the shrinking number of rendering facilities in California, offal is now a liability for small-scale processing facilities whereas it was once considered an asset and could be sold.
- Composting offal could be a cost-effective and safe practice, but is illegal in California.

The paper offers potential solutions to federal, state and county level barriers. The paper is included in Appendix A.

Success Story

Marin Coastal Watersheds Permit Coordination Program

In 2004, the Marin Resource Conservation District (RCD) established the first Permit Coordination Program to increase landowners’ willingness to cooperate in voluntary conservation projects by providing streamlined and expedited permitting and programmatic compliance with the California Environmental Quality Act (CEQA). The PCP consists of 16 restoration practices to control soil erosion, restore riparian habitat, protect and improve water quality, provide education and outreach, to conserve rangeland, cropland, and forest. The PCP supports the agricultural economy and heritage in western Marin County. Through the PCP, regulatory agencies issue permits to the RCD that cover projects on private lands. Private landowners’ contract with the RCD and agree to work under its supervision to complete projects. Without this program, private landowners would need to navigate a complicated and lengthy process with individual permitting authorities to obtain the necessary permits required to implement a restoration project.

During the past five years, the RCD has met the PCP goal and strengthened its relationships with ranchers, the USDA Natural Resources Conservation Service, Point Reyes National Seashore, California Department of Parks & Recreation, and state and federal regulators. The RCD, its partners, and the landowners have recognized that because agriculture is the area’s

predominant land use, on-farm conservation activities can lead to significant ecological improvements.

The Marin Coastal Watersheds Permit Coordination Program's Five-Year Report and Feasibility Study for Program Reauthorization (draft dated February 2009) are included in the appendix. The program is presently in the process of being renewed.

Case Studies to be Presented at the 2010 Pacific Southwest Organic Residuals Symposium

Albert Straus Dairy

The interconnection issue is one of the biggest barriers to wider adoption of dairy digesters. Interconnection is linking the generator to electrical lines (i.e., "hook up"). The process is lengthy and convoluted and requires streamlining to help dairy producers as it takes on average, about a year to get interconnected from the time the application is submitted. There should be ways to anticipate and respond to problems before they arise to reduce the time needed for ultimate approval.

As an example, the Albert Straus Dairy contacted a private consultant, Industrial Power Technology (IPT) for assistance with its application for interconnection with PG&E for his new engine running on biogas from his renewable energy digester system. The dairy already had an interconnection agreement with the utility and had been running the old engine for several years, however, they bought a new engine to replace the old one. The application was submitted for PG&E's initial review in mid-April 2009. PG&E notified them that a supplemental review was required due to the nature of the installation (from induction type motor to a synchronous type). Straus/IPT received the supplemental report at the beginning of July. It took the next six months to get a cost and agreement with PG&E to install the ground bank. Site visits and final inspection of the project were conducted before PG&E could sign off and took well over a year after the application was submitted and only after some extraordinary intervention. The delays and added equipment cost to the dairy were well over \$100,000.

It is recommended that for a project of this nature, that after the interconnection application is submitted to PG&E and before its review, that a face-to-face meeting between the owner (Straus), the engineer, and PG&E transpire to put identify issues that put the project outside of a simple connection project. More importantly, a timeline is needed for PG&E at each step with a final deadline to actually consummate the interconnection.

Synagro

Life Cycle Assessment/Energy Balance on Biosolids End-Uses: Regulations do not take into account life cycle of biosolids and may result in forcing a switch to options with a greater overall

environmental impact.

❖ **Examples:** Composting is viewed as a beneficial use of biosolids, a diversion mechanism for material to landfill, and a potential reduction mechanism for greenhouse gas (GHG) emissions. However, there are increasing regulations on VOC air emissions from composting facilities which are leading to facility closure and loss of investment. As regulations are developed, regulatory agencies should consider overall impacts and benefits of composting facilities.

Southern California Air Quality Management District Rule 1133 (emission reductions from co-composting) has resulted in the closure of a composting facility in Corona because of requirements for an enclosed facility. Biosolids that would have gone to a local facility, are now being trucked to a static aerated pile compost operation in Kern County, 100+ miles away, or to a compost operation in Arizona, over 200 miles away. SCAQMD and the California Resources Board should consider the net emissions and other environmental impacts of diversion of this material.

San Joaquin Valley Air Pollution Control District Rule 4565 (regulating emissions from composting/biosolids facilities) will also result in the closure of compost facilities, or retrofitting as static aerated pile operations, which require more energy to operate. Material currently being brought to those facilities will need to be diverted to new locations and be handled using alternative technologies. SJVAPCD adopted this rule as part of their mandate to clean up the air in the San Joaquin Valley, operating in its legislatively-imposed silo. Regulatory systems should be developed or modified so that SJVAPCD collaborates with CARB to avoid pollution shifting from stationary source to mobile source pollution.

❖ **Example:** Use of compost/biosolids on fire ravaged lands – The Santa Ana Regional Water Quality Control Board became very proactive following the Freeway Complex Fires and has facilitated the use of biosolids compost to reclaim fire ravaged land. This includes a much more pragmatic approach to control of salts and an alternative interpretation was adopted. This is an example of a Regional Water Board embracing net environmental benefits and eliminating cross media barriers.

“Challenges to Disposal of Livestock and Poultry Mortalities and Animal By-Products in California” (August 2010)

The California Emergency Animal Disposal Workgroup is developing this paper to address the regulatory cross-media barriers to disposal of animal carcasses (e.g., surface and groundwater regulations, air pollution rules, composting prohibitions). It describes the State’s animal carcass disposal system and where problems exist, especially when unexpected events result in surges of carcasses requiring disposal (e.g., elevated heat and humidity resulting in a spike in animal mortalities in the Central Valley, summer of 2006). The workgroup is co-chaired by the

California Department of Food and Agriculture and CalEPA. Members include representatives from the livestock industry, industry allied to livestock production, local regulatory agencies, state and federal regulatory agencies, and academic organizations. A weblink will be provided when the final paper is released.

Appendix A

1. “Environmental Cross-Media Regulatory Conflicts: Potential Solutions” was prepared by members of the PORS planning committee. This paper provides further analysis and examples which illustrate cross-media conflict. It also presents technological, administrative, and legislative solutions, and advocates for better coordination among agencies to reduce or minimize conflict.

2. The Marin Coastal Watersheds Permit Coordination Program’s Five-Year Report and Feasibility Study for Program Reauthorization (draft dated February 2009) (<http://www.marinrcd.org/>).