Merced Sun-Star, Guest Commentary, Saturday, Jan. 22, 2011:

Seyed Sadredin: Keeping the Valley's air clean

In the San Joaquin Valley, our air-quality challenges are more difficult than those in any other region in the nation.

On one hand, we have been given circumstances over which we have no control: the Valley's geography, topography and climate turn our region into a bowl with a lid; pass-through highway traffic brings pollution without any economic benefit; and emissions from the northwest add to our own.

On the other hand, our resources and capacity to absorb the economic costs of combating air pollution are limited due to our high poverty and unemployment rates.

Designing and implementing effective strategies that protect both the Valley's economic well-being and our residents' health demand a great deal of innovation, creativity and hard work.

Thanks to residents and businesses, we have made significant progress, and air quality in San Joaquin Valley today is the best in recorded history. Since 1980, air pollution from businesses has been reduced by more than 80 percent.

Given where we are in our journey toward cleaner air, each of us must have the courage to look in the mirror and do our part as we craft reasonable remedies to protect public health. Enormous challenges remain, and we cannot achieve our clean air goals on the back of businesses alone.

Scientific polls show that air quality is a high priority for Valley residents and that they are willing to do their part to reduce air pollution.

Most residents respond positively to calls to refrain from using wood-burning fireplaces and to reduce driving.

Although I'm gratified by the results of these polls, I also believe that the discontent expressed by individuals in the community deserves our attention and response, as it represents the feelings of many, and dismissing it as isolated incidences of denial and blame is foolish.

Let me share the air district's core values:

1. Protection of public health;

2. Active and effective air pollution control efforts with minimal disruption to the Valley's economic prosperity;

3. Outstanding customer service;

4. Ingenuity and innovation;

5. Accountability to the public;

6. Open and transparent public processes;

7. Recognition of the uniqueness of the San Joaquin Valley;

8. Continuous improvement;

9. Effective and efficient use of public funds;

10. Respect for the opinions and interest of all Valley residents.

We have the lowest permit fees and administrative overhead among California's major air districts. We have absorbed significant new and unfunded mandates from the state and federal governments without increasing staff.

Many of our air quality programs serve as the model for the rest of the state and the nation.

All actions by the governing board are subject to months -- and sometimes years -- of public input, debate and discussion. Our pledge is that every instance of less than exceptional service that is brought to our attention is investigated and corrected.

Two actions by the air district seem to be a source of discontent by some people in the community:

Our "Make One Change" campaign that asks Valley residents to refrain from wood burning on poor air-quality days, and the new DMV fees that were enacted in response to what we believe is an unfair federal mandate.

Check Before You Burn has been our most effective and least costly clean-air strategy. Getting equivalent reductions from our heavily regulated businesses could cost hundreds of millions of dollars, which we all would pay in one form or another.

Valley businesses have spent billions of dollars on cleaning up our air, which brings us to the new DMV fees. Facing an unfair mandate from the federal government, our board concluded that a $12 per year fee is less detrimental to the Valley's economy than a $29 million per year penalty on businesses.

As one Valley resident aptly said at the public hearing, paying $12 is better than a neighbor losing his job.

But we believe that neither Valley residents nor businesses deserve a penalty. If anything, they deserve commendation for their sacrifices and investments in clean air. We will continue our fight in Congress to repeal this unfair penalty.

Seyed Sadredin is executive director of the San Joaquin Valley Air Pollution Control District. For more details, visit www.valleyair.org.

Delta to host free emissions testing

The Record
Stockton Record, Saturday, Jan. 22, 2011

A free emissions testing and repair program will be held from 9 a.m. to 3 p.m. today at San Joaquin Delta College, 5151 Pacific Ave., Stockton.

Sponsored by San Joaquin Valley Air Pollution Control District and Valley Clean Air Now, the program is designed to help reduce emissions in older, out of tune cars. If the vehicle does not pass the emission test, the motorist will receive a $500 voucher for repairs at a local Gold Shield-certified smog shop.

A maximum of 525 vehicles will be tested on a first come, first served basis.

Information: (800) 806-2004 or valley-can.org.

Government roundup: Environmentalists sue over sludge project

Bakersfield Californian, Saturday, Jan. 22, 2011

An environmental group said it sued Kern County and a local composting company Friday over the Board of Supervisors' December approval of a project to burn sewage sludge and green waste to produce electricity.

The Association of Irritated Residents, backed by lawyers at the Center on Race, Poverty & the Environment, filed the action in Kern County Superior Court, charging the county didn't adequately study all of the project's environmental impacts including its cumulative ones when considered with other projects.

It says the county didn't accurately calculate the project's greenhouse gas emissions or identify adequate ways of offsetting pollution.

AIR wants the county to set aside the project's environmental impact report and all approvals and prepare what it considers a more adequate environmental report.

Kern County Deputy County Counsel Charles Collins hadn't seen the lawsuit Friday afternoon but defended the county's processes.

"The EIR was very comprehensive, studied all the impacts, and was compliant with CEQA (California Environmental Quality Act)," he said.

Liberty already uses sewage sludge to make compost at its open-air facility. The project adds a power plant adjacent to it, about 10 miles northwest of Lost Hills.

Company officials have said the initiative is a result of new San Joaquin Valley Air Pollution Control District regulations limiting the size of outdoor composting facilities to reduce the release of volatile organic compounds.

Liberty officials have said the conversion will reduce VOC emissions at the facility by 98 percent and that the sludge would be kept in sealed silos and transferred through pipes into combustion chambers.

In giving their approval, county supervisors said the project improved the current operation at Liberty.

Merced Sun-Star and Modesto Bee Editorial, Monday, Jan. 24, 2011:

Our View: Harvesting the sun in the Valley

UC Merced is leading the way in green solar technology to power the world.

Anyone who has lived in the San Joaquin Valley knows that if there's one thing we have plenty of, it's sunshine.

The many months of sunshine contribute mightily to our agricultural bounty and is a reason that many people choose to live here.

Now we're on the verge of seeing the sun in a new light -- as the way to produce much of the energy we need to power our households, businesses and factories.

For all the talk about solar power in the past few years, it's still a very small part of the power Californians use. In 2009, solar accounted for less than 1 percent of the power generated in the state, according to the California Energy Commission.

The largest solar installation in our region is at UC Merced. Its nine-acre array of panels produces about 20 percent of the electricity for the campus.

Since 2007, when the Modesto Irrigation District initiated its solar program, only 97 households and 15 businesses have completed solar installations. All of them are creating power for their own use.

But the district has approved a contract with SunPower Corp., which plans a 160-acre solar farm on McHenry Avenue north of Patterson Road. MID will purchase the power, up to 25 megawatts, generated at the privately owned facility, which is expected to be up and running by mid-2012.

And, just this month, SunPower signed a contract with Southern California Edison to build a major solar facility on 1,000 acres near Santa Nella. It would generate 110 megawatts, enough to meet the demand from about 71,000 homes, and is expected to be complete by 2014.

Solar facilities are likely to be spread around California, but the San Joaquin Valley has a significant edge in one regard -- some of the most advanced research of solar power is taking place right here at UC Merced.

Last week, The Modesto Bee's editorial board met with three solar experts -- Roland Winston, a founding member of the UC Merced faculty and an acclaimed inventor and educator in the field of solar energy; Ron Durbin, director of development for the UC Advanced Solar Technologies Institute and part of UC Merced's School of Engineering; and Paul McMillan, principal in the utility and power plants unit of SunPower Corp.

It's no surprise that they see great potential for solar -- or that their enthusiasm is contagious. At the meeting -- the full video of which is available at videos.mercedsunstar.com -- they also answered some of the most common questions about solar.

Here are some highlights:

What are the advantages of solar power? First, its abundance -- it's everywhere and especially here in the Valley. Second, it doesn't have the same negative byproducts as other sources -- coal, natural gas and nuclear.

The biggest drawback is expense. But technology improvements are being discovered quickly to make solar less expensive. Efficiency and affordability are the focuses of the UC Advanced Solar Technologies Institute, which includes faculty from Berkeley and Santa Barbara and is based at Merced.

The research team has designed and developed a low-cost, high temperature, nontracking solar thermal collector, which could be used for solar heating, cooling, desalinization and food processing. A 25-kilowatt demonstration project, the first of its kind in the world, is under construction at UC Merced.

Solar photovoltaic has been getting the most attention, but much of the world is far ahead of the United States with solar thermal -- using solar to heat water. Much of the world's domestic hot water now comes from solar thermal systems, which also can be used to cool.

Where should solar systems go? One thought is almost anywhere, because it takes only a few square meters of cell to generate usable amounts of power. Researchers are looking into putting solar on windows, for instance.

UC Merced's nine-acre solar array was placed on good farmland, but the topsoil was removed and used elsewhere. Desert land can seem like a good idea, but there are transmission costs and the challenges of rare animal and plant species. Foothills might seem ideal for solar panels but only if the slopes are in the right direction. The topography can make installations more difficult.

California State University, Fresno, has solar panels atop its covered parking lots, giving double benefits: A cooler, shaded place for parking, and a rooftop designed to capture sunlight.

Why can't there be solar panels on every home? Such installations have to be reviewed case by case to see if they make financial sense. Factors include the angle and direction of the roof, interference from trees or other obstructions, how long the family expects to live in the house, the cost of power currently used, and utility company rules. The bottom line for homeowners is how long it takes for the solar installation to pay for itself.

Will the Valley's infamous air pollution interfere with solar production? It shouldn't. The panels are designed to need washing a couple of times a year, and sunlight gets through even when there's dust. More important, says UC Merced's Winston, the air pollution problem is an incentive to get more power from solar -- a clean source -- and to reduce the burning of natural gas and other fuels.

Is solar just a passing fad or is it really going to materialize as a major source of U.S. power? In the 1970s, solar also was much touted, but by the 1980s, those seemed like broken promises. "The pieces are coming together for the real thing now," says McMillan. The UC Merced experts agree.