



U.S. Environmental Protection Agency
Pacific Southwest/Region 9



Dear Readers,

Environmental progress has always depended on the efforts of citizens, government, businesses and other institutions to move us forward, whether through bold action or small steps.

As EPA begins our fifth decade of work to protect human health and the environment, we salute the many partners whose focus and determination have joined with ours to bring about real change, one step at a time.

We strive to use our oversight responsibilities to encourage innovation while steadfastly upholding environmental laws – from energy projects in sensitive desert ecosystems, to metal plating shops in residential neighborhoods, to military expansion on Pacific islands.

We invite your input on our work and your help in protecting the environment of this vast, magnificent region.

We have made great strides over the past four decades, and we must continue our collaborative efforts to protect human health and the environment.

A handwritten signature in blue ink, appearing to read 'Jared Blumenfeld'.

Jared Blumenfeld
Regional Administrator
EPA Pacific Southwest Region



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CLEAN AIR

Clearing the Skies in Arizona

For decades, people moved to Arizona for their health, but air pollution grew along with cities and power plants. EPA is working with state, local and tribal partners to make Arizona's air clean and healthful again.

Phoenix dust causes health problems

Coarse particulate pollution (known as PM-10) reached unhealthy levels in Phoenix, the nation's fifth-largest city, 11 times in 2008. These particles, 1/7 the width of a human hair, can worsen asthma and cause heart and respiratory ailments, especially in children and the elderly.

In January 2011, Arizona withdrew its existing PM-10 control plan to work with EPA and local governments to strengthen it even further. Controls on sources of dust in the Phoenix metro area remain in effect.

“Working with Arizona state and regional agencies, we can develop a practical plan that protects public health,” said Colleen McKaughan, EPA's Arizona-based regional associate director. EPA provides Arizona \$30 million annually for air quality.

www.epa.gov/region9/air/phoenixpm

Healthier air at Gila River

In January 2011, EPA approved the 600-square-mile Gila River Indian Community's blueprint for better air quality. The plan includes specific ordinances for industries like aluminum extrusion plants, an explosives manufacturer, sand and gravel operations, and chemical supply companies, as well as regulations on dust, a permit program, enforcement, and air monitoring.

“This plan can serve as a model to tribes nationwide,” said EPA Regional Administrator Jared Blumenfeld, at a signing ceremony with Gila River Governor William Rhodes.

www.epa.gov/region9/air/actions/gila-river.html

Clearing the air at Four Corners

Pollution from coal-burning power plants affects public health and obscures the landscape in the scenic Four Corners region, home to 16 national parks and wilderness areas. In October 2010 EPA proposed to require the most stringent air pollution controls possible on all five units of the Four Corners Power Plant on the Navajo Nation, to reduce nitrogen oxide (NOx) emissions by 80%.

The power plant owners suggested an alternative that would reduce emissions even more – by 87% – and prevent any job or revenue loss to the Navajo Nation. EPA then proposed this alternative in February 2011. Under the alternative, this facility, the nation's largest source of NOx, would cut emissions from 45,000 to 5,800 tons annually.

In addition to reducing visibility, NOx forms ozone (smog) and particles. Children, the elderly, people with asthma, and outdoor workers are at risk from these pollutants.

www.epa.gov/region9/air/navajo

Hawaii Takes on Climate Change

In Hawaii, oil accounts for 95% of all energy use. Switching to clean, renewable local energy sources will help achieve energy security, create jobs, and address climate change.

The State of Hawaii's goals are to achieve 70% clean energy by 2030, with 30% from efficiency



EPA SPOTLIGHT

ASIA YEARY

Asia Yearly is supporting Hawaii's clean energy goals by creating a sustainability internship program. She co-founded the RISE program with Shanah Trevenna of the University of Hawaii's "Sustainable UH." Currently, Asia is working to get more agencies, schools, non-profits, and companies involved by hosting or funding clean energy, transportation, sustainable agriculture, water, waste, recycling, and composting internships.

and 40% from clean renewable sources, while reducing greenhouse gas (GHG) emissions to 1990 levels by 2020.

The Hawaii Clean Energy Initiative, a collaborative effort by government agencies, organizations, and businesses, has three priorities: Transforming the regulatory environment for clean energy development, collaborating with utilities to increase renewable energy generation, and getting renewable energy into utility grids.

EPA's Asia Yearly helped create the Rewarding Internships for Sustainable Employment (RISE) program to support Hawaii's energy, climate change, and green workforce development goals. RISE is administered by Kupu (a nonprofit that runs the Hawaii Youth Conservation Program), the UH Community College system, and the State Energy Office. Funding for interns and projects comes from EPA, the Hawaii Department of Health, the state Department of Education, and Honolulu Clean Cities (a U.S. Department of Energy initiative).

RISE provides job training, workshops, speakers, outreach events and field trips to engage and motivate interns. Current projects include renewable energy permit streamlining, GHG reporting and energy assessments.

www.hawaiicleanenergyinitiative.org

San Joaquin Plants Cut Emissions

Two biomass plants are found to be violating rules in California's Central Valley, home to some of the state's worst air quality.

EPA and the San Joaquin Valley Air Pollution Control District took enforcement actions in February 2011 against two biomass-burning power plants in Chowchilla and El Nido (south of Merced), Calif. – resulting in emissions reductions of up to 545 tons per year and fines totaling \$835,000 for violations of Clean Air Act and District rules.

An investigation by EPA and the District had found that the two facilities were violating their air emission permits.

As a result of these actions, the plants have installed controls that reduce nitrogen oxide (NOx) emissions – a precursor to smog – by up to 180 tons per year and carbon monoxide up to 365 tons per year. Fine particulates are also being reduced.

“These enforcement actions are a victory for human health,” said Jared Blumenfeld, EPA's Pacific Southwest Regional Administrator.

Biomass power plants use green waste from farms that would otherwise be subject to open burning, and construction debris that might have gone to a landfill, to generate power.

Fines paid by Ampersand Chowchilla Biomass and Merced Power, located within 12 miles of each other in the San Joaquin Valley, were \$343,000 and \$492,000, respectively.

The ports of Los Angeles, Long Beach, and Oakland are major sources of air pollution from ships, trains, trucks, and harbor equipment moving a never-ending stream of shipping containers to and from the ports.







CLEAN WATER

Honolulu to Upgrade Sewage Treatment

In Honolulu, sewage spills resulting from failure of old, deteriorating infrastructure have at times fouled canals and closed beaches. Quick fixes are insufficient to prevent these spills, which threaten the health of near-shore waters.

In August 2010, EPA, the State of Hawaii, three environmental groups and the City and County of Honolulu reached a legal settlement requiring Honolulu to upgrade wastewater collection and treatment systems to prevent sewage spills and to discharge cleaner water from the city's two major sewage treatment plants.

The settlement includes a schedule for upgrading the city's wastewater collection system by June 2020, and upgrading the Honouliuli treatment plant to secondary treatment by 2024, and the Sand Island plant by 2035.

Initial work includes rehabilitation and replacement of aging sewer pipes, repairs to pump stations, backup strategies to minimize risks of force main spills, ongoing cleaning and maintenance to prevent blockages, and improved efforts to keep fats, oils and grease from entering sewers from restaurants.

The agreement will significantly reduce both the public health risk from pathogens in raw sewage and the amount of harmful pollutants in near-shore waters, benefiting Oahu residents as well as visitors to its beaches. The multi-year schedule lets the city spread the costs over time.

Honolulu also paid a fine of \$1.6 million to resolve violations of state and federal water pollution laws, such as the March 2006 force main break that spilled about 50 million gallons of raw sewage into the Ala Wai Canal, which resulted in the closure of nearby Waikiki Beach.

Protecting Coastal Waters

Long after land-based pollution of California's coastal waters had been strictly limited, ships offshore must meet a higher standard.

In September 2010, in response to a request from the State of California, EPA moved to stop large cruise ships and other commercial vessels from discharging sewage within three miles of the California coast and inland waterways, creating the nation's largest coastal No Discharge Zone.

The action will triple the area of protected coastal waters from 1,755 square miles to 5,222, protecting California's coastline from pathogens and other sewage contaminants discharged by ships.

In addition to the coastline, the rule applies to San Francisco and San Pablo Bays, the Sacramento-San Joaquin Delta, San Pedro Bay, San Diego Bay, Santa Cruz Harbor, and Humboldt Bay on the North Coast. It will prohibit discharge of about 22.5 million gallons of treated vessel sewage currently allowed in state waters annually – enough to fill a line of tanker trucks over 29 miles long.

The rule complements a recent ban on sewage discharges from ships in California's four National Marine Sanctuaries (Gulf of the Farallones, Cordell Bank, Monterey Bay, and Channel Islands), as well as existing, small No Discharge Zones that apply to all vessels.

Hundreds of large cargo and cruise ships travel through California waters each year. The state has three of the nation's busiest cargo ports – Los Angeles, Long Beach, and Oakland – and three of the busiest cruise ship ports – Los Angeles, Long Beach, and San Diego. Other ports subject to the regulation include San Francisco, Stockton, West Sacramento, Port Hueneme, and Humboldt Bay.

Banning sewage discharges from large ships will help protect the health of swimmers, surfers,



EPA SPOTLIGHT

SUE KEYDEL & GAIL LOUIS

Sue Keydel (left) and Gail Louis (below) work with EPA colleagues, Oregon's Department of Environmental Quality, California's North Coast Regional Water Quality Control Board, and five California tribes in the Klamath River watershed to set pollutant limits and develop watershed restoration strategies. They are part of a multi-agency team helping to enforce the Clean Water Act, place warnings about toxic algae blooms, and develop a water quality monitoring program.



and beachgoers, as well as California's unique marine ecosystems and wildlife, fishing, shellfish, and tourism. Economic impacts to the shipping industry will be minimal.

Restoring California's Rivers

California's rivers range from the wild and scenic Klamath in the rural north to the urban Los Angeles in the south. Both suffer from pollution.

In December 2010, EPA approved California's Klamath River water quality plan, the culmination of 13 years of efforts by EPA and the state to limit pollution in 17 North Coast rivers. The Klamath River plan will reduce phosphorus (57%), nitrogen (32%), and biochemical oxygen demand (16%).

The Klamath, which once supported the nation's third largest salmon runs, still has California's highest diversity of migratory fishes – salmon, cutthroat trout, steelhead trout and sturgeon. In 2002, there was a massive die-off of 33,000 adult salmon.

The Karuk, Yurok, Hoopa Valley, Quartz Valley, Resighini Rancheria, Modoc and Klamath tribes have relied on the river for subsistence for thousands of years.

The Klamath River has been degraded by dams, agricultural diversions, nutrients, and toxic algae blooms.

Pollution limits for other California Klamath Basin waters – the Trinity, Scott, Shasta, and Lost Rivers – are also being implemented.

www.epa.gov/region9/water/watershed/klamath.html

An urban river

In July 2010, EPA Administrator Lisa Jackson announced a decision to protect the Los Angeles River as a "Traditional Navigable Water."

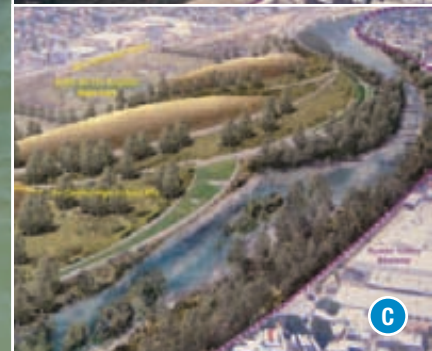
"We want the L.A. River to demonstrate how urban waterways can serve as assets in building stronger neighborhoods, attracting new businesses and creating new jobs," said Jackson.

EPA's designation will help federal, state and local agencies protect natural streams, wetlands, and other waters in the L.A. Basin, as well as reduce polluted stormwater runoff.

Much of the river is accessible through highways, streets, parks and a 49-mile bicycle trail. People use it for boating, fishing, education, bird watching, art festivals, and other community events.

www.epa.gov/region9/newsletter/sept2010/la-river.html

A EPA Regional Administrator Jared Blumenfeld signs the proposed No Discharge Zone rule to protect California's coastal waters. **B** Among the beneficiaries: Sea mammals like this sea lion swimming near the pier shown in photo A. **C** A restoration proposal (bottom) for the Los Angeles River would create a riverside park from a vacant rail yard (top). **D** Near the Klamath River, a member of the Yurok Tribe cooks salmon steaks over a fire in the traditional way. **E** A quiet spot on the Salmon River, a tributary to the Klamath, near California's northern border.







CLEAN LAND

Spurring Development and Green Jobs

Former military bases often require extensive cleanup before they can be put to productive reuse. EPA is working with the military and regional agencies to advance cleanup, clearing the way for more sustainable development.

Redevelopment at the McClellan Air Force Base Superfund site took a major step forward in 2010 with the transfer of more than 80 parcels, totaling 560 acres, to Sacramento County, Calif.

The county transferred the parcels to a developer, McClellan Business Park, which is now responsible for cleanup. Among its tenants are businesses supporting hundreds of green jobs. The Sacramento Region now ranks #1 in California clean-tech job growth.

The Department of Defense is funding cleanup of contaminated groundwater and soil at the former McClellan Air Force Base. EPA, the California Department of Toxic Substances Control and the Central Valley Regional Water Quality Control Board are overseeing cleanup by McClellan Business Park to ensure protection of public health and the environment.

In April 2011, EPA will propose the cleanup plan for 51 parcels transferred last year. Plans have already been approved and are being implemented by McClellan Business Park for some of the other transferred sites.

Among the green tech companies on the recently transferred McClellan Business Park property:

- **ZETA Communities**, makers of ultra energy-efficient modular homes, added 200 jobs. ZETA's state-of-the-

Story continues, p. 14

EPA Brownfields grants and loans help clean up old industrial sites and clear the way for redevelopment.

Thousands of ENERGY STAR buildings nationwide save energy and money, and reduce air pollution.

Environmental justice is an EPA priority for communities suffering disproportionate public health impacts.

Tailpipe emissions standards for cars and trucks have dramatically reduced air pollution over the past 40 years.

Stormwater regulations prevent polluted urban street runoff from fouling waterways and beaches.



Air quality standards protect public health from smog, dust, smoke, and other particulate pollution.

EPA's Superfund Program cleans up abandoned mines and industrial sites that threaten nearby communities.

Water quality standards keep waterways safe for fishing, swimming, and recreation.

Pesticide rules are enforced to protect consumers, field workers, fish and wildlife.

EPA works with tribal communities to enforce federal and tribal environmental regulations.

art, 91,000-square-foot facility serves the entire Western region.

- **N Solar Inc.**, part of South Korea-based Millinet Solar, is setting up its U.S. manufacturing plant, creating 150 jobs.
- **Advanced Data Center's** new LEED-certified building will use 67% less energy than the industry average.

Underground Tanks in Indian Country

EPA works with tribes in the Pacific Southwest to assess and clean up abandoned underground fuel storage tank (UST) sites.

Since 2005, EPA has assessed more than 300 tribal UST sites in the region and removed more than 150 tanks – plus 15,000 cubic yards of contaminated soil.

In 2010, these efforts were boosted by \$3.1 million from the 2009 American Recovery and



EPA SPOTLIGHT

CARL WARREN

Carl Warren has headed up the Underground Storage Tank (UST) Tribal Cleanup Program since 2004, playing a key role in closing over 200 abandoned UST sites on tribal

lands. Carl engages the community by meeting with tribal leaders and environmental representatives for all sites where cleanups are occurring.

Reinvestment Act. EPA cleaned the land while creating jobs, contracting the work to Bristol Environmental Remediation Services, LLC, a 100% Native American-owned firm and funding about 20,000 man-hours of work. Subcontractors including Native-owned companies on the Hopi Reservation, Navajo Nation, and Hoopa Valley Indian Reservation are also involved.

Input and assistance from tribes has been crucial. EPA's tribal UST program, led by Carl Warren, has consulted with more than 50 tribes

in the Pacific Southwest to identify and select sites for assessment and cleanup. EPA also oversees cleanups done by responsible parties.

The Agency collaborates with tribes to build capacity by providing training in UST compliance, inspections, and oversight. Several tribes in the region now have their own UST staff.

Results include:

- Funding for the Navajo Nation to perform preliminary investigation activities at about 50 sites.
- Installing a soil vapor extraction system and removing more than 50,000 pounds of hydrocarbons at the Arizona Traders site on the Gila River Indian Community.
- Removing a tank and 260 cubic yards of contaminated soil just 850 feet from Hotevilla Spring, a Hopi water source.
- Installing a remediation system and removing 3,700 cubic yards of contaminated soil at the White Eagle site in Shiprock, NM.



A



B



Cleanup is underway or completed at several sites on the Navajo Nation, Yurok Reservation, and Hoopa Valley. EPA will continue to work with tribes to clean up about 110 remaining sites in the Pacific Southwest.

REVITALIZING ROUTE 66

Leaking underground storage tanks are a hazard in many places – including Winslow, Arizona. Recovery Act funding through EPA helped clean them up, creating jobs and spurring revitalization.



Watch the video:
www.epa.gov/region9/brownfields/66

Cleaning Up the Anaconda Mine

In an arid landscape southeast of Reno, Nevada, EPA is overseeing cleanup of a five-square-mile mining site.

Millions of tons of mineral-rich ore were processed at the Anaconda Mine, leaving tailings heaps and leach ponds contaminated with elevated levels of copper and uranium. These compounds can contaminate ground water and windblown dust. Since 2005, EPA has overseen more than \$10 million worth of cleanup work at the site.

The mine began operation around 1918 and was acquired in 1953 by Anaconda Minerals. From 1977 to 1982 the mine was owned by ARCO, and later sold to Arimetco Inc., which recovered copper from ore heaps in the 1990s before going bankrupt in 1999. Mining raised levels of copper and uranium at the ground surface. Low pH fluids in the heap leach ponds can harm water birds and other wildlife.

Since 2004, EPA has conducted five actions to reduce imminent health and environmental threats while studies of permanent solutions are underway. These cleanup actions included capping more than 70 acres of mine tailings to

prevent erosion and windblown dust, removing transformers containing PCBs, building a large evaporation pond to contain heap leach fluids, and closing and repairing other heap leach ponds.

In 2010, EPA oversaw further cleanup work by ARCO under a legal agreement with EPA, including:

- Covering former evaporation ponds to prevent windblown dust and contaminated water
- Removing radioactive materials to a safe level for site workers
- Abating threats from abandoned electrical systems
- Removing asbestos-laden pipes
- Operating the heap leach fluid collection system to prevent catastrophic acid discharges.

www.epa.gov/region9/anaconda



A A new business location on the former McClellan Air Force Base near Sacramento. **B** An EPA-funded underground fuel tank cleanup underway on the Navajo Nation. **C** A former copper mining pit that has filled with groundwater at the Anaconda Mine site in Nevada. **D** EPA's Tom Dunkelman oversees cleanup work at the Anaconda Mine site.





COMMUNITIES & ECOSYSTEMS

Creating a Healthier San Joaquin Valley

California's 250-mile-long San Joaquin Valley, home to more than four million people and still growing, is severely threatened by air and water pollution.

This is the state's top agricultural region, with more than 250 crops, including much of the nation's fruits, vegetables, and nuts. Dairy products are California's most valuable agricultural commodities; about 75% of the state's dairy cows are here. Total production is more than \$24 billion annually.

The valley owes its agricultural success to a remarkable water system. The federal Central Valley Project delivers fresh water from the Delta and San Joaquin River to farms. The State Water Project brings Delta water to farms and cities. Most of the water is used for agriculture. Valley communities rely mostly on ground water to drink. Surface waters support wetlands critical for wintering waterfowl.

The human and environmental toll

The valley's unique topography and wind patterns trap air pollution. The California Air Resources Board estimates that 2,400 deaths each year are associated with fine particulate air pollution here. The valley has some of the state's highest rates of childhood asthma. Transportation, specifically diesel trucks, is the largest air pollution source.

Dairies and feedlots generate large quantities of manure, and agriculture uses toxic pesticides. Farms, wetlands, and communities contend with poor water quality. The San Joaquin River boasted one of California's largest salmon runs before nearly 95% of its water was diverted for

irrigation. The salmon are gone, and the river and its wetlands, once teeming with wildlife, are a small remnant compared with a century ago.

The valley has high rates of poverty and unemployment. One bright spot: a recent study found that renewable energy and High Speed Rail development could create more than 100,000 jobs.

Solutions underway in 2011

EPA and state and local partner agencies are finding solutions for the valley's severe environmental and health challenges. The Agency's work of issuing permits for facilities that affect air and water quality, oversight of state regulators, reviewing Environmental Impact Statements, and environmental cleanup is guided by principles of environmental justice, partnership, transparency, and vigorous environmental law enforcement.

One goal is to reduce the valley's fine particulate air pollution through regulatory action and accelerating adoption of clean air technologies and cleaner transportation. EPA is working with California and the San Joaquin Valley Air District to reduce this pollution 34% from 2009 levels, to attain the federal clean air standard by 2014. New regulations on air emissions will affect industrial boilers, refineries, paints, and consumer products.

To help restore fish and wildlife, EPA is working with state and federal partners to update regulations to reduce toxic selenium in the Delta, and initiate regional water quality monitoring. Fifty miles of the San Joaquin riverbed, bone dry half the year since 1940 due to water diversions, is now being restored by new, legally mandated water releases from Friant Dam.

EPA and its state and federal partners are reducing environmental impacts of animal waste and agriculture by supporting adoption of clean technologies such as dairy waste digesters and



EPA SPOTLIGHT

NOEMI EMERIC-FORD

Noemi Emeric-Ford is Brownfields Coordinator in EPA's Southern California Field Office. She has created collaborative partnerships to revitalize

communities across the Pacific Southwest, overseeing assistance to states, tribes, municipalities and nonprofits, such as the Reno Sparks Indian Colony project, funded by the first brownfields loan to a tribal community in the West. Before coming to the region, Noemi was in EPA's Chicago office, where she organized the nation's first Superfund Job Training Initiative for communities near cleanup sites.

conservation tillage, which minimizes pollution from dust and diesel while saving energy and money.

EPA is an active partner in ongoing state and community efforts to spur sustainable economic development in the valley's Fresno, Kings, and Kern Counties. This includes working with federal housing and transportation agencies and the California High Speed Rail Authority to plan development along future rail routes and stations, as well as helping the South Kern community and The California Endowment to reduce public health risks.

Growing Sustainable Communities

EPA collaborates with state and local governments to clean up abandoned industrial sites – brownfields – and return them to productive use.

EPA's top priorities for brownfields assistance are under-served and economically disadvantaged neighborhoods with environmental justice issues, where jobs and cleanups are most needed.

In National City (San Diego County), Calif., EPA is working with the Department of Housing

and Urban Development and the Department of Transportation, through the Interagency Partnership for Sustainable Communities, to help the city meet sustainability goals, and generate affordable housing and transportation.

In 2010, EPA awarded a \$1 million Brownfields revolving loan to National City, and a \$300,000 Community Action for a Renewed Environment (CARE) grant to the Environmental Health Coalition (EHC) for work there and in Barrio Logan, a San Diego neighborhood. This funding is helping clear the way for National City's planned Westside Affordable Housing Transit Oriented Development.

"National City's old industrial base presents a myriad of challenges," says Mayor Ron Morrison. The city will use the loan to clean up sites contaminated with oil and toxics. Earlier EPA funding helped the city develop green building standards and assess contamination on vacant properties.

The CARE grant enables EHC to address air pollution in Barrio Logan and National City from the nearby port and industries. The nonprofit builds grassroots campaigns to improve public health by dealing with pollution, discriminatory land use, and unsustainable energy policies.

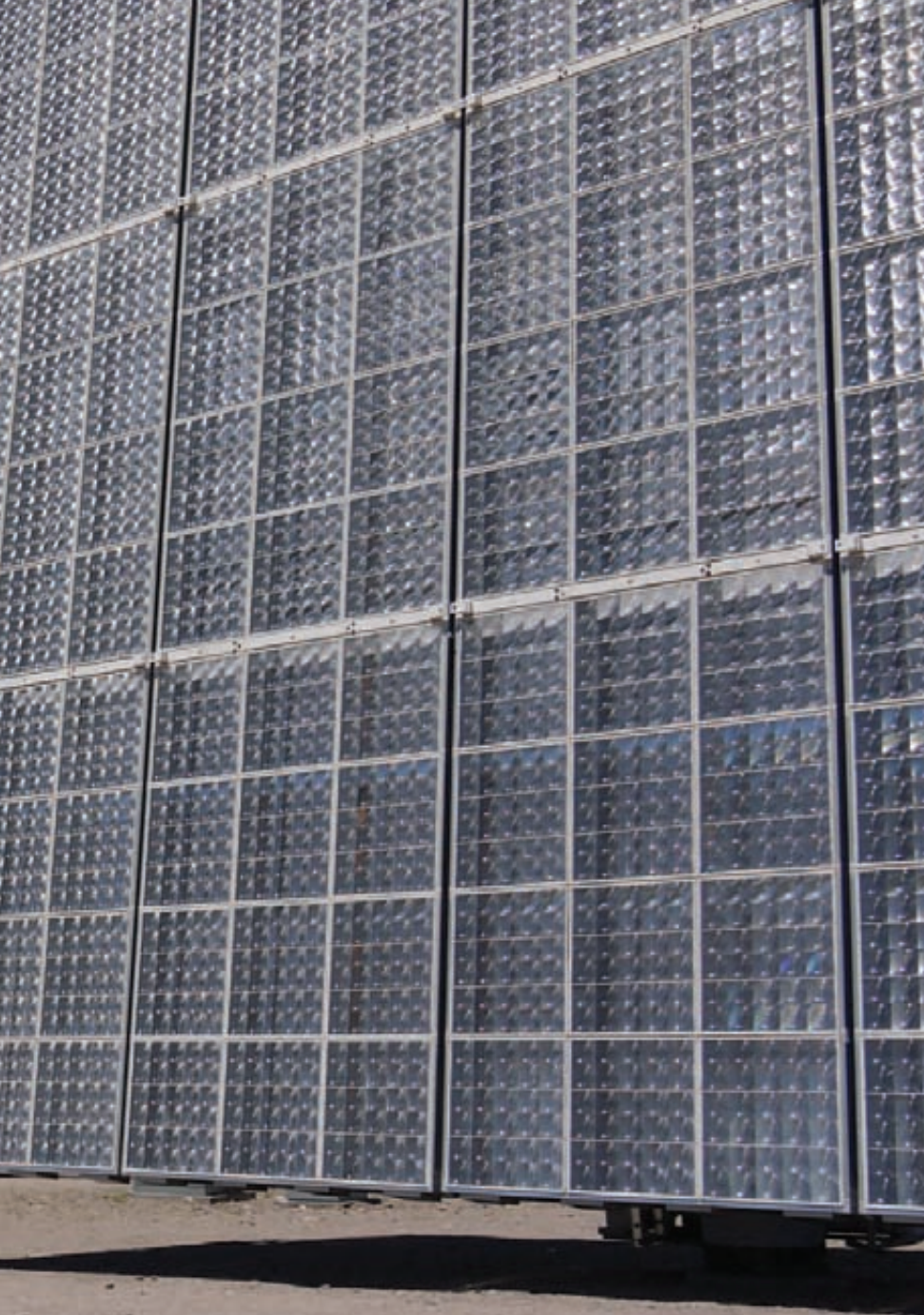
"Unjust land use plans have allowed pollution to burden the health of our communities," says Diane Takvorian, EHC's Executive Director. "Now we can create community plans that lead to cleaner, healthier neighborhoods."

VIDEO: www.epa.gov/region9/brownfields/natlcity.html

- A** A Tohono O'odham officer patrols tribal lands near the U.S.-Mexico border. **B** The San Joaquin Valley's bowl-shaped topography tends to trap air pollutants to create smog. **C** EPA Brownfields grants and loans help speed cleanup and redevelopment of former industrial sites. **D** EPA Administrator Lisa Jackson (center) and Congresswoman Barbara Lee (left) tour Oakland, Calif. **E** EPA's Idalia Perez visits a fertilizer plant in a San Joaquin Valley town.







COMPLIANCE & STEWARDSHIP

Renewable Energy Projects Get a Close Look

New solar power installations are generating more clean power in the Pacific Southwest every year. Before construction starts, each must be scrutinized to minimize environmental impacts.

In 2010, EPA's Pacific Southwest Environmental Review Office Energy Team staff reviewed 50 detailed plans for 39 energy projects, sending comments back to the authorizing agencies on how best to minimize impacts. Several of these reviews under the National Environmental Policy Act (NEPA) included site visits and meetings with the federal and state agencies involved.

Under NEPA, when a federal agency makes a decision with significant environmental impacts – such as approving a right-of-way to build an energy project – the agency must first publish a Draft Environmental Impact Statement. EPA reviews it, and returns it with suggestions on how to avoid or mitigate the impacts. These comments become part of the public record.

The 39 proposed energy projects EPA reviewed in the Pacific Southwest last year included 20 solar, 7 wind, 2 geothermal, 2 hydroelectric, 1 carbon sequestration, 1 coal, 3 transmission lines, and 3 other renewable energy projects.

EPA's comments helped bring about improvements such as:

- Switching the 250-megawatt (MW) Genesis Solar project from wet to dry cooling, reducing water use nearly 90%.
- Reconfiguring the 709-MW Imperial Valley Solar project to reduce impacts on wetlands (including ephemeral streams) from 177 to 38 acres.



A

- More mitigation for impacts to the threatened desert tortoise at the 45-MW Lucerne Valley Solar project.
- Considering reduced acreage alternatives for the 400-MW Ivanpah Solar project.
- Planning two transmission lines together in the Southwest Intertie Project (SWIP-South) corridor, rather than in separate corridors.

www.epa.gov/region9/nepa

Focusing on Neighborhood Metal Platers

Metal plating shops are often located in low-income neighborhoods where people already face disproportionate environmental risks.

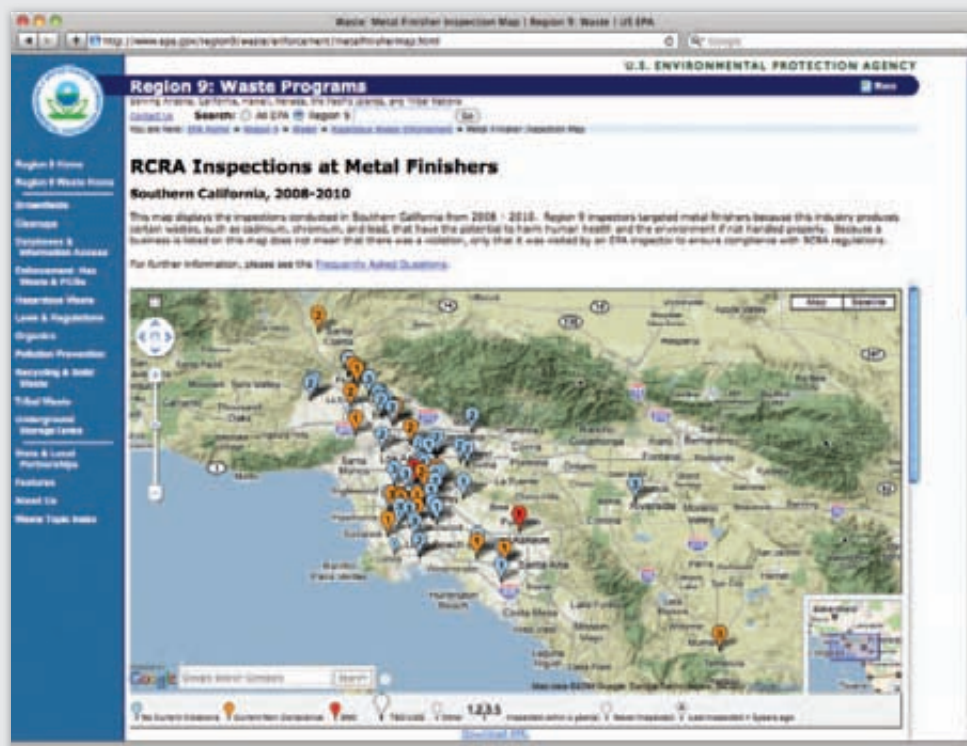
Over the last two years, EPA mapped the locations of metal plating shops in Los Angeles County and inspected 62 of them to ensure compliance with federal hazardous waste laws. Inspections continue in these and other areas.

Plating shops are usually small, low-tech industries that generate hazardous wastes like acids and sludges containing toxic heavy metals like chromium, cadmium, and lead; spent plating solutions containing metals or cyanides; flammable liquids; and corrosive liquids.

EPA took enforcement action against nine metal finishers in Los Angeles, Rosemead, Sun Valley, Compton, Van Nuys, South El Monte and Santa Clara. All returned to compliance and paid fines ranging from \$2,000 to \$48,500. One is sending employees to hazardous waste management training.

A Fort Soledad in the U.S. territory of Guam. B Results of inspections at metal finishers is available at www.epa.gov/region9/waste/enforcement/metalfinishermap.html

B



Two of the shops are in Compton, one of several densely populated communities next to the I-710 freeway, where the effects of pollution are disproportionately higher than elsewhere in Los Angeles County. Approximately 1 million people, of whom 70% are minority and low-income households, are affected by pollution from industries here and goods movement along the I-710.

Government agencies have formed an Enforcement Collaborative to ensure that industries in the I-710 corridor comply with environmental laws. Participants include EPA, Cal/EPA, the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control Board, the California Air Resources Board, and local governments.

www.epa.gov/region9/ej/enforcement.html

Recognizing sustainable business practices

EPA honored Fresno's Valley Chrome Plating, Inc. (VCP) for eliminating highly toxic lead and chromium from its industrial processes. VCP made these changes as a participant in EPA's National Partnership for Environmental Priorities.

An innovator in "going green," VCP produces chrome-plated semi-truck bumpers and stainless truck accessories. By 2008, it was already a zero-discharge facility committed to recycling all materials.

By 2010, VCP reduced its use of lead by 3,000 pounds and hexavalent chromium by 6,000 pounds. With a staff of 75, this family-run company is a great example of a business that's protecting the environment while strengthening its bottom line.

Minimizing Impacts of Military Buildup in Guam

The U.S. Department of Defense is planning a significant military expansion on the 30-mile-long U.S. island territory of Guam.

Guam's current population of 178,000 is expected to jump at least 25% in the next several years, and infrastructure needs – drinking water, wastewater treatment, power generation, solid waste disposal and recycling, housing, roads, and the port – will need to absorb this rapid population growth.

As the Department of Defense (DoD) has planned for the realignment of Naval, Marine, and Army forces to Guam, EPA has commented extensively on the project's environmental impacts and is working with Guam's Government, DoD, and other federal partners to minimize impacts.

DoD committed to take a unique mitigation approach for construction impacts and the associated population influx. DoD will coordinate with the Government of Guam and federal agencies to identify steps that can be taken to avoid significant impacts to the environment, infrastructure, and social services. A key element of this approach was EPA's coordinated work with DoD to identify \$1.3 billion in drinking water and wastewater infrastructure needs and DoD's commitment to seek that funding.

Meanwhile, EPA partnered on Guam to introduce ultra-low-sulfur diesel, standard in the U.S. since 2007 but virtually unavailable on Guam. Beginning in September 2010, Guam phased out the exclusive use of high-sulfur diesel, reducing sulfur dioxide emissions by 99% – a significant health benefit. EPA also provided technical assistance to Guam in developing a Bottle Bill, which would require beverage container recycling and divert a significant waste stream.



EPA SPOTLIGHT

MICHAEL MANN

Michael Mann first went to Guam as an EPA employee for six months in 2000. He returned in 2002 on "loan" to Guam EPA. Two months later, Super typhoon Pongsona

hit, breaking all the windows in his home – while he was there. Over the next four years, he was involved in many local environmental issues, from marine debris to sustainable development. Today he's back in San Francisco, working with several EPA colleagues on minimizing impacts from Guam's impending U.S. military buildup.

In addition, EPA is:

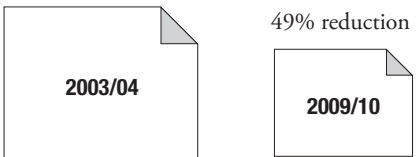
- continuing efforts to ensure that Guam complies with existing wastewater treatment and discharge limits at its largest treatment plants, and provides safe drinking water.
- providing technical review of plans for opening the new Layon landfill and closing the old Ordot dump.
- working with DoD and Guam EPA to advance a framework for zero waste management and to measure and increase the island's recycling rates.
- collaborating with DoD and Guam on safe reuse and recycling of construction and demolition debris, greenwaste, and other materials, and the development of compliant solid waste facilities.
- working with DoD and other agencies on avoidance and mitigation efforts for a proposed aircraft carrier berth that would impact some 70 acres of coral reefs.
- working with DoD, Guam, and contractors to ensure compliance with stormwater rules that help protect Guam's marine environment and surface waters from polluted runoff.



Shrinking Our Footprint

We at EPA's regional office for the Pacific Southwest have set a ZERO WASTE goal and are striving to REDUCE our footprint.

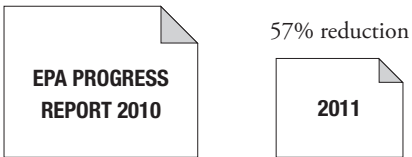
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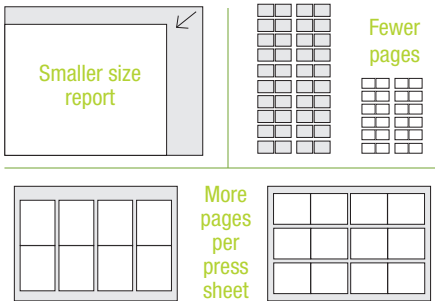
Our Waste Diversion in 2010 = 83%



This Publication's Paper Use



How We Cut Paper Use by 57%



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2,182 gallons
of water



1.3 million
BTUs of energy



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greenhouse gases



Look inside this back cover to learn more about our shrinking footprint.