APPENDIX A
EPA/STATE JOINT PILOT PROJECTS

Washington, Oregon, Idaho and Region 10 have identified areas of common concern where we believe that joint planning and priority setting may enable us to overcome existing barriers and create new solutions to pressing and difficult environmental problems. As part of this work, a multi-agency meeting involving the environmental directors of Idaho, Oregon and Washington as well as the Regional Administrator and Deputy Regional Administrator of EPA Region 10 met in Portland on October 29, 2003. Each agency brought to the meeting its key environmental priorities and concerns. At that meeting, the executives identified four areas of common interest where pilot projects will be developed: diesel, permitting and compliance, agriculture, and information technology. Workgroups were established, and over the course of numerous meetings and phone calls, the workgroups developed the following scoping papers that reflect four key issues that are shared priorities throughout the region.

The attached scoping papers are current draft versions. The workgroups will be refining these over the next few months into more complete strategies, and those revisions will be included in this plan as they are completed. These scoping papers will also serve as a basis for EPA's PPA/PPG discussions with states this spring.

Joint State – EPA Planning

Clean Diesel

Current Conditions: State and local air agencies in Region X, along with many concerned citizens and other private partners, have been very successful in ensuring that air quality in the region is in compliance with the NAAQS. To the extent that control of the classes of criteria pollutants has led to reduced emissions of associated toxics, the risk from air toxics has been reduced. Until recently, however, there has been little evaluation as to whether risk from exposure to ambient air toxics has also been reduced. EPA's 1999 National Air Toxics Assessment indicated levels of concern for excess cancer risk from a number of ambient pollutants. The Assessment showed concentrations for diesel particulate matter were especially high in many locations in the region (Figure 1). Further assessment by state and local agencies in Oregon and Washington indicated that projected cancer risk from diesel was much greater than for any other air toxic or combination of air toxics (Figures 2 and 3).

Trends have not yet been established for diesel particulate concentrations, in part because monitoring specifically for diesel particulate is technically challenging, but also because the baseline for diesel particulate concentrations has only recently been established with the 1999 Assessment, which is based on 1996 emission inventory data. The NATA update, using 1999 data and anticipated for release soon, should allow for additional information on air toxic risks in the region. To the extent that States, locals and tribes are able to update emission inventory data, each subsequent round of the NATA will provide additional information on air toxics risks in the region. Unfortunately, Alaska is looking at cutting investments in emission inventory work, but Idaho, Oregon and Washington should continue to provide updated air toxics emissions inventory data.

Major Problems to be Addressed: Diesel engines form a critical part of the region's economy and significant replacement of these engines is economically unrealistic in the near term. While EPA's 2007 on-road rule will result in major progress, the timeframe for full implementation is projected nationally to be twenty to thirty years. The realization of this benefit could take even longer in Region X as, for instance, the Oregon fleet is about 1.5 years older than the national average. The recent economic downturn, in which capital investment has been depressed, was more acutely experienced in the Pacific Northwest than in other parts of the country and would likely have resulted in the fleet aging even more. The effectiveness of stricter engine certification standards by itself to address the risk posed by diesel particulate will be challenged by a phenomenon also seen in light duty vehicles, where vehicle miles traveled has accelerated at a rate faster than can be accounted for by an increase in the vehicle population. This effect, found with heavy duty diesel vehicles as well, tends to diminish the benefits accrued from advances in pollution controls. This phenomenon underscores the need to deal with in-use diesel vehicles in order to assure protection for public health and the environment.

There are a number of approaches to reducing the emissions impact of heavy duty vehicles, which by and large are diesel powered, including repowering with alternative fuels. However, the "clean diesel" approach is regarded as the most cost effective strategy. It requires the use of a fuel with much lower sulfur contamination than is found in the current highway fuel. This ultra low sulfur diesel provides some emission reduction benefit by itself but more importantly enables the installation of advanced exhaust aftertreatment devices, even on existing vehicles. This combination is effective in reducing the most harmful pollutants found in diesel exhaust by upwards of 95 percent. Biodiesel, a fuel refined from vegetable oils and recycled animal fats, is also an environmentally attractive ultra low sulfur diesel fuel. Typically blended with petroleum diesel because of cost and operational considerations, it can be used to complement other clean diesel approaches.

One of the biggest challenges in addressing diesel particulate risk is the limited regulatory authority over the primary contributors, in-use on-road and non-road diesel powered vehicles. While clean diesel efforts have been promoted by the Puget Sound Clean Air Agency, the Oregon Department of Environmental Quality and other state and local agencies throughout the region for several years already, the focus has been on a voluntary effort, supported by incentives. Several notable successes have been achieved but widespread benefits will require some form of financial assistance, at least for early adopters, to make "clean diesel" a cultural expectation for fleet operators and the public. In the current setting agency efforts to promote

clean diesel effectively represents a large scale marketing campaign for the concept. Therefore agencies will need to look for ways to take advantage of proven marketing techniques in order to be successful. Successful efforts at widespread acceptance and implementation of clean diesel technology will serve as a model for other regions and for other programs in addressing challenging environmental protection needs.

Strategies	Tools & Programs	Measures & Targets
Promote use of ultra low sulfur diesel and biodiesel	Aggregate demand for the fuel through fuel purchase consortiums	Amount of fuel consumed
	** Promotion of fuel use among federal fleets in the region, including military*	Amount of fuel consumed
Promote use of ultra low sulfur diesel and biodiesel outside of population centers	** Support state and local efforts to develop fuel market in rural areas by promoting fuel use by railroads and other significant users*	Amount of fuel consumed, geographic scope of fuel distribution
Promotion of best available retrofit technology	Promotion of retrofit of exhaust aftertreatment on diesel vehicles and stationary engines in federal fleets in the region, including military. Supplemental Environmental Projects could be used for this purpose.	Number of engines retrofitted
	** Develop protocols for clean diesel recognition program and implement marketing program in support as a national pilot*	Support for participants and enhancement of public awareness and support for overall project
	Develop and distribute periodic clean diesel newsletter to fleet operators as an aid in marketing the concept	Reinforcement of messages leading to increased fuel use and retrofitting

Strategies	Tools & Programs	Measures & Targets
Reduce diesel engine idling	Work with states to promote truck stop electrification along the I-5 corridor with an eye to extending efforts to I-90, I-84, I-82 and US97.	• Partnership with Region IX and Environment Canada to extend efforts to these adjoining locales. • Number of sites and parking slips covered
	Promote and support efforts to install idle reduction devices on switch engine locomotives	Number of switch engines fitted
	Support efforts to reinforce anti idling policies at schools	Outreach programs developed and implemented
Extend clean diesel efforts to non-road diesels	Encourage EPA HQ to adopt the non-road engine rule and to regulate locomotives and marine engines	Further development of application of clean diesel technologies to non-road engines
	Assist state and local agencies in extending clean diesel efforts to non-road engines, including stationary engines, as opportunities arise	• Amount of ultra low sulfur and biodiesel fuel consumed • Number of engines retrofitted
	Incorporate strategy for reducing marine vessel emissions in port and near shore	Partnership with Region IX, Environment Canada, Washington, Oregon and California to support strategies developed through EPA/EC Characterization of Georgia Basin/Puget Sound Airshed Project and West Coast Global Warming Initiative
Secure funding for demonstration projects, especially those that extend range of applications and/or geographic scope	**Encourage and support early adopters by reducing fuel premiums, costs of exhaust controls and/or idle reduction infrastructure*	• Amount of fuel consumed • Number of retrofits • Idle reduction measures in place

* Priority Actions, the focus will include other tools and programs as additional resources become available.

Interaction with other Region X Priorities: EPA Region X has adopted Six Priorities that cover the entire range of environmental protection and enhancement responsibilities the agency is charged with. In addition to priorities related to water and land quality protection efforts the Diesel Emission Priority Plan has been adopted as one of the Region's Six Priorities. Many of the efforts outlined here are also to be found within the Priority Plan. See http://yosemite.epa.gov/r10/extaff.nsf/d7b03c22cbc0843588256464006a2ff4/fc3dbd1dd9d2ba8688256c1c0005249b?OpenDocument for a fuller description of the commitments for upcoming work.

The Northwest Collaborative Air Priorities Project (NWCAPP), hosted by Region X, is designed to take advantage of the knowledge and energy of people who impact and care about air quality in the region. The process is intended to be a truly collaborative effort that will break out of the "government-in-charge" model often used in the past to address air quality concerns. In June of 2003, over 150 representatives from government, industry, communities and nongovernmental organizations assembled at the Northwest Air Summit. Their task was to review the data and information on air quality in the Pacific Northwest and Alaska, establish priorities for reducing risk to human health and the environment, and develop projects which will improve air quality.

The delegates to the Northwest Air Summit reached consensus on the eight priorities, several of which support and relate directly to the clean diesel effort:

- Reduce emissions from transportation especially diesel and carbon dioxide, and support land use planning and alternate transportation as tools.
- Increase support for education and other means of encouraging the public to take actions to reduce air pollution.
- Reduce health risks from outdoor toxic air pollutants, including identification of hot spots and primary contributing sources of toxic emissions.
- Reduce greenhouse gas emissions causing climate change.
- Reduce health risks from toxic and other air pollution where people live, especially in minority, low income, rural, and other under-represented communities.
- Reduce risks to ecosystems, tribal communities, and their cultural resources from toxic and other air pollution sources

For more information about NW CAPP see:
http://yosemite.epa.gov/r10/homepage.nsf/3061430ee8351cae88256cdb005af493/946930817103ade988256d870080cec6?OpenDocument

PNW PPA-Strategic Plan Alignment & Implementation Pilot Project:
Information Management Initiative

Introduction

High quality and highly accessible information are critical to the success of environmental agencies in fulfilling their respective missions. We must have information systems that are multi-dimensional and support both scientific and administrative needs. Pacific Northwest environmental agencies are investing in information technology and management, including initiatives to access data from multiple sources. In turn, these data can 'feed' applications that add value by enabling people to analyze the information. Pacific Northwest environmental agencies now have an unprecedented opportunity to exploit these developments and achieve functional efficiencies by adopting a collaborative approach to information system integration.

Problem Statement

Some of the more important challenges confronting Pacific Northwest environmental agencies follow:

1) Complexity - The complexity of environmental problem-solving is increasing. Information systems have not kept pace with this trend, hampering our ability to access and leverage the information and tools needed to effectively contend with increasingly complex issues.

2) Trans-Jurisdictional Issues - Agencies are increasingly contending with environmental problems that transcend their own respective jurisdictions. Systems capable of integrating information in these trans-jurisdictional domains are often non-existent, poorly developed, or inaccessible.

3) Resource Leveraging – We have seen relatively recent improvements in both the climate for and realization of interagency collaboration vis-à-vis information system development (e.g., the PNW Water Quality Data Exchange). But some of the IT/IM work undertaken by agencies is duplicative of that being performed by others.

4) Stove-Pipe Programs - Media-specific and other special emphasis programs often yield data, information, and applications that do not share common architectures, standards, and protocols. This problem leads to internal agency inefficiencies and discourages intra- and inter-agency exchanges and integration.

Strategy

The Pacific Northwest environmental agencies propose to enter into a new collaborative arrangement that will systematically address these challenges. This collaboration will embrace several levels of engagement, including:

1) Community-Building - To promote a heightened sense of awareness, collegiality, and community, both information systems managers and technical staff from Pacific Northwest environmental agencies will meet annually to share information on their respective capabilities, challenges, business needs, opportunities, and initiatives. In the future, this initiative will include an outreach activity to invite other resource agencies, tribes, academia, and perhaps the private sector to participate in a Pacific Northwest information consortium.

2. Joint Development Pilot: The current Pacific Northwest Water Quality Data Exchange project has brought together information systems managers and staff from Pacific Northwest environmental agencies in a collaborative effort to build a tool for sharing water quality information. This collaboration involves developing exchange standards and a common tool to make data accessible from multiple locations via the Internet. While the Pacific Northwest Water Quality Data Exchange project is committed to develop a basic access tool, the project is not funded to deliver a high-quality tool. The Pacific Northwest participants will evaluate and consider RAINS and other information access and delivery systems for development into a high-quality access tool for Pacific Northwest water quality data. Our objective is to facilitate and improve information access and delivery for future data sharing efforts. The Pacific Northwest Water Quality Data Exchange project will deliver three-state data sets in 2004. During 2004, the participants will collaborate on a demonstration application(s) to show how exchange data can be accessed and delivered. Following this demonstration, we will develop a strategic plan to grow a selected software tool(s) for data sharing in the region. Part of the strategic plan will be coming to agreement on division of responsibilities and resources, so that no group member ends up with work but without resources.

3) Joint Program Reform - The same group responsible for developing the Pacific Northwest Water Data Exchange Node will jointly select one program (e.g., a Superfund remedial program) for special information management emphasis during CY'04. This emphasis will engage a target environmental program (to be determined) common to Federal and State agencies to combine information in a way that is consistent with intra-agency standards and inter-agency exchange protocols.

Draft Scope
Innovation in Permitting and Compliance Assistance
December 23, 2003

Introduction

EPA and the Region 10 States of Idaho, Oregon and Washington are committed to exploring new and creative ways of achieving improved environmental results. EPA and the states are committed to using a variety of tools in their compliance and permitting programs ranging from traditional to new approaches designed to improve environmental benefit. However, much work is ahead of us in the exploration and testing of new ideas that will move us beyond traditional regulatory approaches.

The following principles are agreed to by EPA Region 10 and the states of Idaho, Oregon and Washington:

- EPA and the states will explore and support alternative approaches for increasing compliance and improving environmental results.
- EPA and the states, individually or collectively, will explore tailored enforcement approaches to the inherent differences between municipal sources and industrial sources of pollution.
- EPA will support the states in developing permit flexibility and streamlining for improved environmental results and timely issuance of permits.
- EPA will work with the states to develop increased flexibility in resource allocation between traditional and non-traditional enforcement approaches.
- The work developed through this effort need to be accommodated through trade offs with other existing work and commitments.

Proposed Projects

Sector or Pollutant-Based Approach to Improve Results

- EPA will work with the states to support and/or expand sector and/or pollutant-based approaches for improving environmental performance and compliance at priority sectors. The goal is to improve environmental results at either targeted industry sectors or by pollutant (for instance, mercury). The states and EPA will explore if this approach could be done on a broader scale, either geographically or for the region. The priority focus is on compliance and environmental results instead of enforcement numbers.

Permit Streamlining to Improve Clarity and Timeliness

EPA will work with the states to improve the clarity and timeliness of the permit processes and permit decisions. Roles and responsibilities between EPA and the state agency will be clarified for permit applicants.

- Idaho: Streamline and clarify air permits (Tier 1, Tier 2 and Operating)
- Oregon: Develop additional wastewater permit categories to provide more efficient permitting vehicles for certain types of sources
- Washington: Streamline permit processes and decision-making for improved environmental results.

Alternatives to Improve Environmental Results

EPA and the states will explore alternative approaches to improve environmental results through economic and non-regulatory incentives to communities and regulated entities. In addition, EPA and the states will work at creating at least one state-selected priority area in which traditional compliance (the numbers of inspection) will be approached and measured differently (through actual compliance rates or actual environmental outcome data).

Each state and EPA has piloted alternative approaches to achieve greater environmental benefit. EPA and the states will work together to assess and document successes for the purpose of expanding successful programs.

- Idaho: Agreements on compliance for industry on a multimedia basis
- Oregon: Alternative approaches for increasing compliance for small businesses and municipalities.
- Washington: Alternative approaches such as Memorandum of Understanding between government and industry and the Industrial Footprint project. Both of these efforts use a collaborative approach to improve environmental outcomes.
- EPA: As are the states, EPA is also continuing pilot work to assess alternatives to the traditional inspection/enforcement response, such as compliance assistance in the area of construction related stormwater requirements.

Tailor Enforcement Approaches to Inherent Differences Between Small Municipal and Industrial Sources

Municipalities often find themselves in non-compliance due to limited resources and staff. Municipalities are inherently different than

industrial sources in that they are not profit-making ventures and they don't have the option of closing down and moving elsewhere. Assessing large civil penalties against small municipalities can be counter-productive, when those resources are sorely needed to complete facility upgrades, hire staff, etc. EPA and the states will 1) highlight work that has already been done, and 2) capitalize on that work to develop an overarching enforcement approach to treating small municipalities differently. Options to evaluate will include:

- Reduced penalties and use of mutual agreements and orders.
- Compliance teams dedicated to providing technical assistance and on-going technical support.

Priority Setting for Core Work

EPA will dedicate a portion of its resources to support the states in priority work areas. Support could involve either conducting the priority work as partners with the states, work-share, or working on lower priority work that the states are not able to address.

- Idaho: Priority planning for permit development and inspection.
- Oregon: Support efforts to shift the wastewater permitting program to a comprehensive watershed approach, including prioritization of permits based upon highest priority problems in a watershed
- Washington: Mutually develop permit priorities.

Integration of Enforcement with Program Planning and Evaluation Cycles

Region 10 EPA will work with the Region 10 states to become a national model for integration of the enforcement and planning cycles. Region 10 will advocate for one joint set of national priorities (not a separate OECA set) that is to be clearly addressed through the PPA cycle.