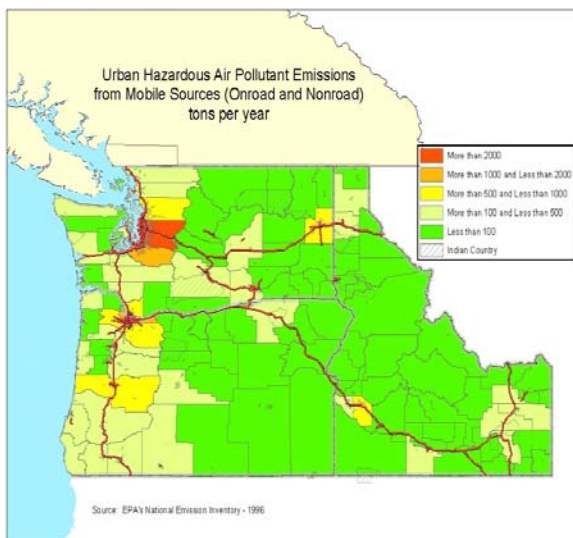


Strategies	Tools & Programs	Measures & Targets
<p>Implement, Attain, and Maintain Air Quality Standards in Areas throughout the Country.</p>	<ul style="list-style-type: none"> <li>- State/local/Tribal implementation plan process. Implementation and enforcement of the current SIP control measures (emission limitations, permitting, conformity, etc.) will comprise the bulk of the Region's strategy for ensuring continued attainment of the NAAQS.</li> <li>- Title V permits</li> <li>- PSD/NSR permits</li> <li>- Development of streamlined permitting programs that improve management of stationary source emissions with less administrative effort on the part of the source and permitting authorities</li> </ul>	<ul style="list-style-type: none"> <li>- Ambient concentrations of ozone, measured against the 8-hour standard.</li> <li>- Ambient concentrations of fine particles, measured against the annual and 24-hour standard.</li> <li>- Ambient concentrations of CO, SO2, Pb, and NO2.</li> <li>- Populations living in areas measuring healthy air quality for any of the NAAQS.</li> <li>- # Title V permits</li> <li>- # NSR permits</li> </ul>
<p>Support for revised ozone and new PM 2.5 NAAQS</p>	<p>Region 10 will need to provide technical assistance to support air quality planning and the development of workable control measures</p>	<ul style="list-style-type: none"> <li>- Complete area designations</li> </ul>
<p><u>Indian Country</u>: Region 10 has proposed Federal Implementation Plans for 39 reservations in ID, OR, and Washington. These Plans will establish a new set of federal air quality rules to Indian reservations that will be directly implemented by EPA or by Tribes under delegation agreements.</p> <p>Region 10 has also developed a tribal air monitoring strategy that will be used to guide the monitoring of air quality in Indian country, including the placement of any new monitors.</p>	<ul style="list-style-type: none"> <li>- After the rules are promulgated, Region 10 will begin outreach and implementation of the rules. EPA will be refocusing some of its resources so it can function as a local air authority for the 39 reservations.</li> <li>- Once the rules are promulgated, Region 10 will be negotiating with a few tribal governments to establish agreements whereby tribes will implement some of the rules on behalf of EPA.</li> <li>- Will require training, technical supports, grants to tribes, assistance to build tribal capacity</li> </ul>	<ul style="list-style-type: none"> <li>- Tribal areas with monitoring programs</li> <li>- Tribal programs with agreements to implement federal air quality rules</li> <li>- Grants awarded</li> </ul>

Unique Regional Issues - Strategies for Smoke and Air Quality	Tools & Programs	Measures & Targets
Effective regional leadership from EPA	- EPA facilitates joint strategic planning and coordination with Region 10 states and tribes	- Regional smoke and air quality strategy developed and being implemented
More effective SMPs in place	- EPA provides and facilitates program, technical, and financial support for SMP improvements	- Interagency and cooperative agreements developed for more effective SMPs - Better tools in place for cumulative smoke modeling, monitoring, meteorology, and public notification of burn activity
Reduced emissions from prescribed fire	- EPA supports efforts, such as research and pilot projects for alternatives to burning, emission reduction methods, and incentive programs to reduce burning	- Less emissions due to greater adoption of alternatives, more efficient burning methods, and fewer acres burned - Less impacts to air quality
Improved knowledge of health impacts and fire emissions	- EPA supports research and educational efforts related to smoke exposure and health effects and characterization of fire emissions	- Better science available for decision-makers and stakeholders to develop better rules, policies, procedures, and technical tools
Ability to measure status, trends, and progress	- EPA supports efforts to better collect and manage data on fire emissions and SMP effectiveness	- More accurate emissions inventory for prescribed fire - Areas identified where smoke management is not effective and other approaches needed

**Sub-objective 1.1.2: Reduced Risk from Toxic Air Pollutants.** By 2010, working with partners, reduce air toxics emissions and implement area-specific approaches to reduce the risk to public health and the environment from toxic air pollutants.

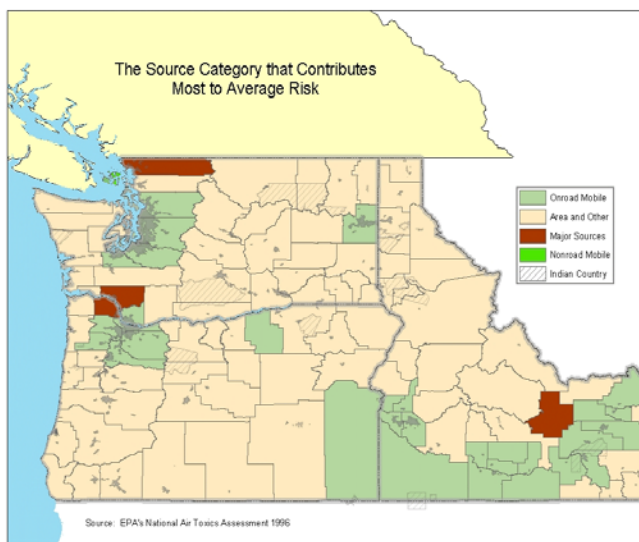


**Current State/Major Problems to be Addressed:**

According to the 1999 National Air Toxics Assessment, which was based on 1996 emissions inventory data, the most severe air toxics contaminants in Region 10 are certain carcinogens, including diesel particulate matter, benzene, formaldehyde and others, and the non-carcinogen acrolein. These air toxics problems tend to be concentrated in urban areas and along transportation corridors, and are generally comparable to national air toxic levels. While large stationary sources do contribute to carcinogenic levels of concern, and may be responsible for creating hot spots with high levels of concern, smaller stationary sources and mobile sources, both on-road and off-road, are larger regional air toxics contributors. However, stationary

diesel engines used for power generation in rural Alaska villages are significant contributors of air toxics in local areas.

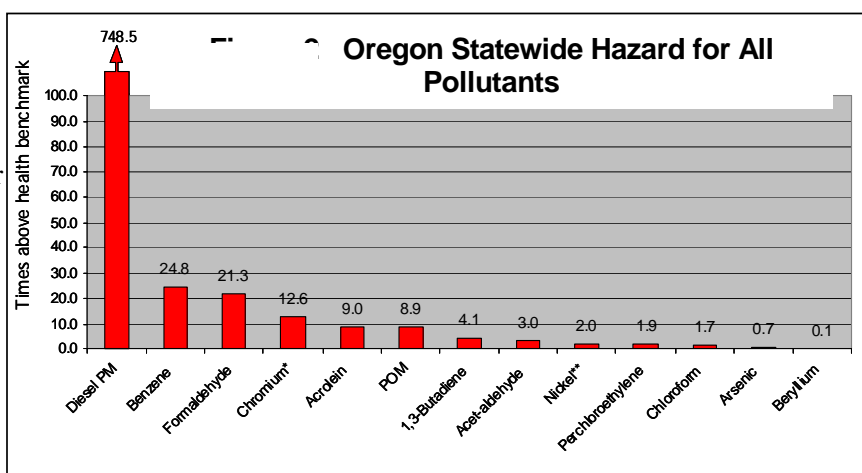
Since this was the first round of the NATA, each subsequent round will provide additional information on air toxics trends in the region (the next round of the NATA should come out in December of 2003). To the extent that States, locals and tribes are able to update the emissions inventory data, each subsequent round of the NATA will provide additional information on air toxics risks in the region. Unfortunately, Alaska is looking at cutting investments in emissions inventory work, but Idaho, Oregon and Washington should continue to provide updated air toxics emissions inventory data.



One of the largest challenges in addressing air toxics in Region 10 is the limited regulatory authority over the primary contributors: mobile sources, smaller stationary sources, and indoor air sources. Another challenge is delegating the NSPS and NESHAP programs to States that are hard hit by the economic downturn, and under political pressure to downsize their programs. Tribal program assumption is just beginning, and could require considerable staff time. In every instance where programs are not delegated (on tribal land, or where the State declines delegation), and in some instances where authority cannot be delegated, EPA will need to directly implement and enforce the federal regulations. However, EPA is generally not staffed to do direct implementation for programs that have traditionally been delegated to States and locals. In order to successfully carry out these direct implementation responsibilities, EPA will need to prioritize the work and be strategic with its limited resources.

**Strategy Highlights:**

EPA's strategy for reducing risk from air toxics will focus on three primary areas: continued implementation and enforcement of the NESHAP for source categories that are important in our Region; the development of risk based programs and risk reduction strategies for high risk areas (including air toxics monitoring and community risk assessments); and a joint approach with federal, State,

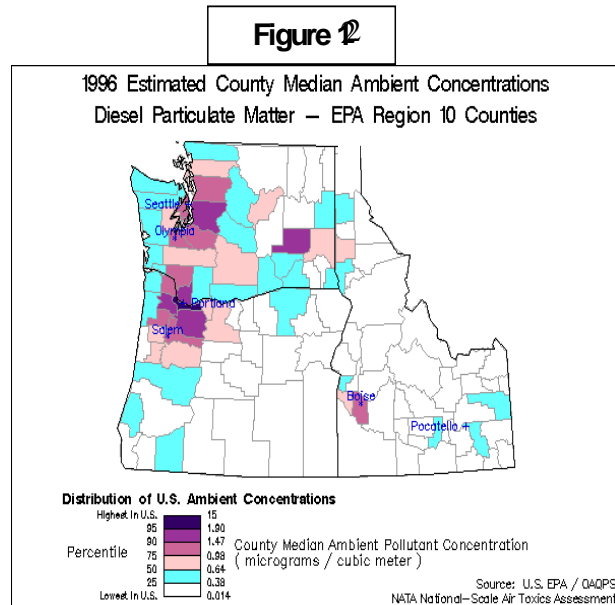


local and tribal authorities for increasing the use of clean diesel fuels, including programs for retrofitting current engines. Region 10 EPA and the four Region 10 States have undertaken a joint effort to align our air quality priorities and as a result we've affirmed clean diesel as a joint priority. The following is the strategic plan submitted by the Region 10 States and incorporated by Region 10.

## Clean Diesel

State and local air agencies in Region 10, 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).



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. While Alaska has focused its air toxics resources on rural diesel health assessments rather than emission inventory work, but Idaho, Oregon and Washington should continue to provide updated air toxics emissions inventory data.

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 and Alaska 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.

**Relation to Regional Priorities:** The early work in characterizing the risk from air toxics in Region 10 (NATA, monitoring in Seattle and Portland, Oregon and Washington studies) has shown that diesel particulates from on-road and non-road engines dominate the cancer health risk. While EPA’s new regulations for sulfur in diesel fuels, and on-road and non-road diesel engines standards will significantly reduce tailpipe emissions, the long fleet turnover times mean that, absent other measures, the high risk will continue for many years. As such, Region 10 has made reducing the impacts from diesel particulates a priority. See the Diesel Emission Priority Plan in Region 10’s Six Priorities for a fuller description of problems and commitments for upcoming work.

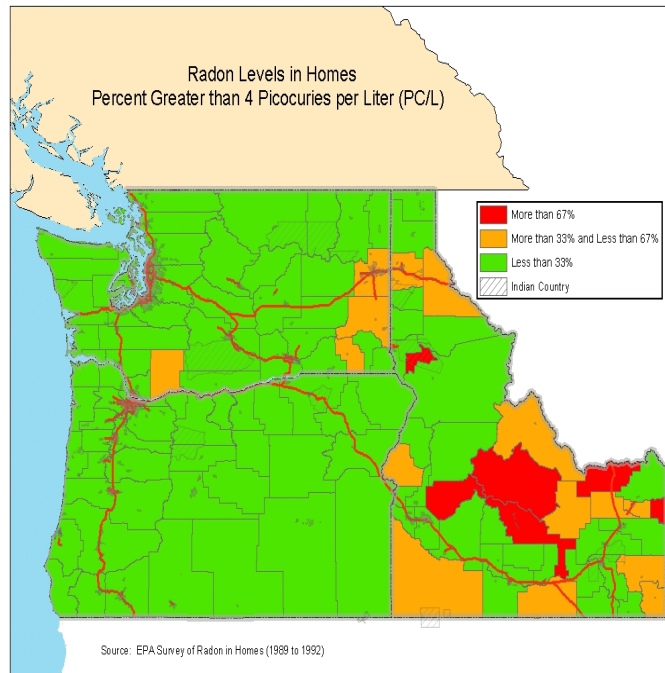
Strategies	Tools & Programs	Measures & Targets
Address a five-year backlog of requests for technical assistance and decisions on the NSPS and NESHAP programs that have a direct impact on industry, State programs, and the public.	<ul style="list-style-type: none"> <li>- Delegations of authority to States and locals</li> <li>- Title V operating permits</li> </ul>	<ul style="list-style-type: none"> <li>- # NSPS and NESHAP delegated</li> <li>- # requests granted or denied</li> </ul>
Work with communities on risk assessment and reduction projects that can address the mobile, stationary, and indoor air sources of contamination in addition to looking at larger sources.	<ul style="list-style-type: none"> <li>- Geographically-based and flexible, allowing counties or municipalities to choose from a tool-box of regulatory and non-regulatory approaches.</li> </ul>	<ul style="list-style-type: none"> <li>- air toxics levels (subsequent NATA assessments)</li> <li>- percent of high risk areas with monitors</li> <li>- lowered risk from air toxics in particular localities.</li> </ul>

Unique Regional Issues - Strategies for Clean Diesel	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
	<i>* Promotion of fuel use among federal fleets in the region, including military</i>	- Amount of fuel consumed
	<i>* Support state and local efforts to develop fuel market in rural areas by promoting fuel use by railroads and other significant users</i>	- Amount of fuel consumed, geographic scope of fuel distribution
Promote use of other alternative fuels, as appropriate	Partner with Clean Cities Coalition	Amount of alternative fuel consumed and number of alternative fuel vehicles
Promotion of diesel retrofit technology	Promote retrofit of exhaust after-treatment on diesel vehicles & stationary engines in fed. fleets, including. military. (Supplemental Env.Projects could be used)	- Number of engines retrofitted
	Promotion of retrofit of exhaust aftertreatment on diesel schoolbuses	- Number of school buses retrofitted
	<i>* Develop protocols for clean diesel recognition program and support marketing efforts such as newsletters</i>	- Support for participants and enhancement of public awareness and support for overall project

Unique Regional Issues - Strategies for Clean Diesel	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.	<ul style="list-style-type: none"> <li>- Partnership with Region IX and Environment Canada to extend efforts to these adjoining locales.</li> <li>- # of sites and parking slips covered</li> </ul>
	Promote efforts to install idle reduction devices on switch engine locomotives	<ul style="list-style-type: none"> <li>- Number of switch engines fitted</li> </ul>
	Support efforts to reinforce anti idling policies at schools	<ul style="list-style-type: none"> <li>- Outreach programs developed and implemented</li> </ul>
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	<ul style="list-style-type: none"> <li>- Further development of application of clean diesel technologies to non-road engines</li> </ul>
	Assist state and local agencies in extending clean diesel efforts to non-road engines, including stationary engines, as opportunities arise	<ul style="list-style-type: none"> <li>- Amount of ultra low sulfur and biodiesel fuel consumed</li> <li>- Number of engines retrofitted</li> </ul>
	Incorporate strategy for reducing marine vessel emissions in port and near shore	<ul style="list-style-type: none"> <li>- Partnership with Region 9, Env. Canada, WA, OR and CA to support strategies developed through EPA/EC Characterization of Georgia Basin/Puget Sound Airshed Project and West Coast Global Warming Initiative</li> </ul>
Provide technical and financial support to risk assessments	- Rural AK health risk assessment (diesel power plants)	<ul style="list-style-type: none"> <li>- # risk assessments</li> </ul>
Secure funding for demonstration projects, especially those that extend range of applications and/or geographic scope	<i>*Encourage and support early adopters. Projects may include reducing fuel premiums, costs of exhaust controls and/or idle reduction infrastructure</i>	<ul style="list-style-type: none"> <li>- Amount of fuel consumed</li> <li>- Number of retrofits</li> <li>- Idle reduction measures in place</li> </ul>

**Objective 1.2: Indoor Air.** By 2008, 4 million additional Americans than the 16 million in 2005 will be experiencing healthier indoor air in homes, schools, and office buildings.

**Current State/Major Problems to be Addressed:** Asthma is epidemic in the U.S. and continues to increase. 5000 Americans die from asthma each year; an estimated 250 in Region 10. While the cause of the increase is still unknown, it is known that many common indoor air pollutants can trigger asthma attacks. While additional study is needed, health effects due to mold appear to be increasing as well. The number of people smoking in the U.S. continues to decrease, but 9-12 million American children still are exposed to environmental tobacco smoke in the home. Tribes, especially in Alaska, continue to identify indoor air as a top health problem. Portions of Region 10, notably far Eastern Washington and most of Idaho, have among the highest radon levels in the country.



Interest in EPA Indoor Air Quality (IAQ) programs, particularly Tools for Schools, is growing rapidly. Increasing the grant funding available to meet this need could immediately increase the effectiveness of the program. Making the IAQ programs a priority at both the State health and environmental agencies, such that some of their federal and State funds are directed toward establishing IAQ programs would also be extremely helpful. Improving the state of the science on IAQ issues, especially mold, would help make for an even more credible program. EPA's limited staff resources makes it difficult to provide technical assistance to, and to manage grants for, rural tribes, especially in Alaska. Finally, reviving our radon program is vital to making clearer progress toward radon targets.

**Strategy Highlights:**

The Region's indoor air program will focus much of its effort on improving air quality on outreach to schools, through both direct technical assistance and grants to states and tribes. We will also continue to do outreach to communities, organizations, and individuals through educational presentations and materials.

Strategies	Tools & Programs	Strategic Targets
Direct implementation	- Within our existing staffing constraints, Region 10 conducts school walkthroughs, gives educational presentations, and communicates with hundreds, if not thousands, of members of the public each year	- # walkthroughs - # educational presentations



Strategies	Tools & Programs	Measures & Targets
Grants	<ul style="list-style-type: none"> <li>- Tools for Schools</li> <li>-Region 10 has at least one grant in each State and one tribal training grant.</li> <li>- Region 10 has SIRG grants for radon programs in each State</li> </ul>	<ul style="list-style-type: none"> <li>- Percent of elementary &amp; secondary schools adopting indoor air quality management plans like IAQ Tools for Schools</li> <li>- # in-home asthma assessments</li> <li>- # office and commercial building IAQ training</li> <li>- # “Smoke Free Home” pledges</li> </ul>
Partnerships with other agencies, especially tobacco prevention and asthma prevention organizations		<ul style="list-style-type: none"> <li>- asthma rates</li> <li>- Environmental Tobacco Smoke (ETS) exposure rates</li> </ul>

Unique Regional Issues / Problems	Tools & Programs	Measures & Targets
Parts of Eastern WA & most of ID have some of highest radon measurements in country	- National and regional funding for radon work	<ul style="list-style-type: none"> <li>- Limiting radon exposure</li> <li>- # of homes built with radon resistant construction techniques</li> </ul>

**Objective 1.3: Protect the Ozone Layer.** By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.

Note: The only Regional involvement in implementing this Objective is through enforcement of EPA’s national regulations. This work is covered in Goal 5.

**Objective 1.4: Radiation.** Through 2008, EPA and its partners and stakeholders will minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

**Sub-Objective 1.4.1: Enhance Radiation Protection.** Through 2008, minimize radioactive releases of EPA-regulated radioactive waste and minimize impacts from radiation exposure.

**Sub-Objective 1.4.2: Maintain Emergency Response Readiness.** By 2008, ensure Agency readiness to inform the public about and protect them from airborne releases of radiation. By 2008, 80 percent of EPA’s 300-person Radiation Emergency Response Team will meet scenario-based response criteria, up from 50 percent in 2005. By 2008, EPA’s National Radiation Monitoring System will cover 70 percent of the U.S. population. (2005 baseline: 37 percent of the U.S. population)

**Current State/Major Problems to be Addressed:** The radiation portion of human and environmental health protection consists of six activities: emergency response, contaminated site cleanup, health and safety, NESHAP regulations, monitoring, and health physics support. Radiological emergency response obligations for the agency are many and rapidly evolving. Region 10 has some of the most complex and expensive radiological cleanups in the nation at our two major DOE sites, Hanford and INEEL. Hanford was responsible for large atmospheric releases in the past, and is in the process of spending 80 billion dollars on clean up efforts. The occupational protection of our own workforce is complex and time

consuming. The NESHAP program limits radiological air emissions from the DOE sites and the nuclear navy in the area. The most recent emissions are small, but a very high degree of assurance is demanded by the public. There are six volunteer monitoring stations in the Region to monitor ambient radiation conditions. The Region continuously receives requests from States, locals, and individuals for radiation advice and support.

Meeting our emergency response obligations will require a significant effort and EPA has realigned its staff and resources accordingly. Given our limited travel, training, and equipment budgets, properly preparing States and locals, attending available training, and participating in exercises will take priority. EPA radiation staff will spend more time with EPA emergency response units and with the national radiation labs. The cleanup decisions that the Region participates in affect the spending of billions of dollars. These decisions are complex and time consuming. The current radiological emissions of the DOE sites are low, but the sites are extremely complex and verifying compliance is a significant effort. Developing State programs to the standard that would permit delegation requires a investment in training. Assuring compliance requires consistent application of regulations, verification, and review.

**Strategy Highlights:**

A primary focus of the radiation work for the Region will continue to be working with the DOE facilities on both cleanup actions and NESHAP compliance. However, we expect there to be increasing involvement in the development of emergency response capacity at the state and local levels for dealing with radiological releases.

Strategies	Tools & Programs	Measures & Targets
Enhance radiation protection.	<ul style="list-style-type: none"> <li>- Contaminated site decisions would be influenced by technical work supporting Superfund programs.</li> <li>- NESHAP compliance requires permission to construct, similar to a permit. It requires enforcement, compliance assistance, and direct program delivery.</li> <li>- With increased State capacity, delegation could be an option.</li> </ul>	<ul style="list-style-type: none"> <li>- Superfund tracks cleanup progress now, and the influence on their progress could be identified.</li> <li>- The compliance status of NESHAP sources is readily monitored.</li> </ul>
Maintain emergency response readiness	<ul style="list-style-type: none"> <li>- The emergency response improvement starts with building State and local capacity. That is developing and delivering training. We need to travel to more exercises and attend technical training and meetings, especially concerning radiological dispersal devices.</li> </ul>	<ul style="list-style-type: none"> <li>- We do not know of a standard metric for emergency response capability. Numbers of trainings delivered or exercises participated in could be a secondary measure.</li> </ul>

**Objective 1.5: Reduce Greenhouse Gas Intensity.** Through EPA’s voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President’s 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration’s business-as-usual projection for greenhouse gas intensity improvement.<sup>1</sup>)

**Current State/Major Problems to be Addressed:**

Compared to other parts of the country, Region 10 has less greenhouse gas emissions, due primarily to its long reliance upon hydro power instead of fossil-fuel fired power plants. However, the coastal, mountain, and arctic ecosystems in Region 10 are especially susceptible to climate changes. Even minor changes in arctic temperatures have significant impacts on arctic ecosystems (e.g., changes in permafrost). The Region can no longer rely on hydro-power to meet its increasing energy needs and needs to develop new sources of energy. A number of fossil-fuel fired power plants (primarily natural gas-fired turbines) are being constructed and other alternative energy supplies (e.g., wind) are being investigated. State and local agencies are developing programs to minimize increases in greenhouse gases as these new energy sources are permitted.

**Strategy Highlights:**

Region 10 will continue to promote Energy Star labeling, including benchmarking, for federal, general office, and college buildings. We will also nominate local buildings and partners for national Energy Star awards, and engage in other Energy Star program areas as appropriate.

In addition, Region 10 will continue to provide technical and financial support to state and local programs, such as the new West Coast Global Warming Initiative.

Strategies	Tools & Programs	Measures &Targets
Reduce greenhouse gas intensity.	<ul style="list-style-type: none"> <li>- Regional Solar Schools effort.</li> <li>- Innovative Chelan PUD green power program.</li> <li>- Distributed energy for agriculture.</li> <li>- Region 10's green power purchases and power production.</li> <li>- Regional alternate-fueled vehicle and/or hybrid vehicle use.</li> <li>- Integrate Energy Star into the Region's developing environmental management system.</li> <li>- Ensure greenhouse gas emissions are considered in NEPA environmental impact statements.</li> <li>- Challenge Federal Network for Sustainability members to use energy efficiency savings to purchase green tags.</li> </ul>	<ul style="list-style-type: none"> <li>- # schools outfitted with solar panels</li> <li>- kw/h of green power purchased by Region10</li> <li>- # alternate-fueled vehicles and/or hybrid vehicles in EPA's fleet</li> <li>- total miles driven in EPA's alternate-fueled vehicles and/or hybrid vehicles</li> <li>- # NEPA EIS's that address greenhouse gas emissions</li> </ul>

**Objective 1.6: Enhance Science and Research.** Through 2010, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

**Sub-Objective 1.6.1: Science to Support Air Programs.** Through 2010, use the best available scientific information, models, methods and analyses to support air-program-related guidance and policy decisions.

Strategies	Tools & Programs	Measures & Targets
<p>Collaborate with externals through the Northwest International Air Quality Environmental Science and Technology Center (NW-AIRQUEST) to provide a sound scientific basis for air quality management decision-making in the Pacific Western North America Region. Facilitate the development of regionally consistent technical approaches to emission inventories, air quality modeling, air monitoring; foster coordination of efforts and leveraging of projects, and stay current with state-of-the-science developments.</p>	<ol style="list-style-type: none"> <li>1) Provide sound scientific advice and direction to regional decision-makers.</li> <li>2) Develop, operate, and improve urban and regional numerical air quality forecast systems to form an archival database of simulated atmospheric data. Coordinate emission inventory and air quality observational databases for model application.</li> <li>3) Develop, evaluate and apply tools for specific measurement and modeling studies related to air quality.</li> <li>4) Educate, transfer technology, and communicate to enhance understanding of current air quality issues, improve capabilities among stakeholders for using advanced modeling systems, and promote widespread communication of methods and results.</li> <li>5) Collaborate with other scientific groups and organizations involved in the science disciplines associated with risk assessment.</li> </ol>	<p>Improved air quality management and decision-making based on collaboration among affected stakeholders and sound science.</p>
<p>Collaborate with externals in the development and utilization of a web-based information system to help manage prescribed forestry and agricultural burning, wildfires, and other sources of burning that pose a significant threat to human health and the environment in the Pacific Northwest and Alaska. Enhance operational and strategic decision-making and the ability of communities to develop a coherent perspective on impacts from these sources.</p>	<p>Complete development and commence implementation of web-based information system to help manage environmental threats from burning. The system, <i>BlueSky RAINS</i>, will provide regulatory agencies, burn managers, and the public with information on planned burns, meteorological conditions, pollutant trajectories, and potential air quality impacts, along with links to other relevant information.</p>	<p>Improve effectiveness of regional smoke management and associated decision making. Improve air quality by reducing the amount of fine particulate matter from diesel and smoke emissions.</p>

<b>Strategies</b>	<b>Tools &amp; Programs</b>	<b>Measures &amp; Targets</b>
<p>Determine potential pathways for fibrous amphiboles from the processing of vermiculite ore that have been linked to respiratory diseases such as asbestosis and mesothelioma.</p>	<p>Conduct study to determine if fibrous amphibole minerals, including both regulated asbestos fibers and other non-regulated mineral fibers, could become airborne when soil is disturbed. Confirm existence of soil to air pathway allowing fibrous amphibole minerals to move from soil to air.</p>	<p>Aid in risk management decision making. The assessment of asbestos exposures from source to humans has been applied at hazardous waste sites (e.g., North Ridge Estates and Spokane Vermiculite), schools, and other buildings.</p>
<p>Collaborate in the creation of a high resolution operational weather prediction system) that produces high-resolution atmospheric forecasts used to drive a collection of environmental modeling systems.</p>	<p>Produce operational atmospheric, hydrologic, and air quality forecasts over the Pacific Northwest utilizing the Pennsylvania State University /National Center for Atmospheric Research mesoscale model (MM5). Using the results, generate smoke, ventilation and fire control guidance driven by MM5 output.</p>	<p>Improve accuracy and timeliness of weather forecasts, thereby aiding in the implementation of actions to reduce risk from exposure to toxic and other air pollution.</p>
<p>Provide expertise to states, locals, and tribes to perform focused assessments to identify air toxics posing the greatest risks in their communities. These focused assessments may vary in complexity and scope from review of existing data to developing rigorous analyses to better characterizes the sources and extent of air pollution sources in communities.</p>	<p>The Region will conduct NATA outreach, risk assessment and risk communication training, state-wide and regional air toxics calls and meetings.</p>	
<p>Conduct training on how risk assessments are to be performed within the framework of residual risk assessments as required under the new MACT standards.</p>	<p>Kick off training for residual risk assessments beginning in 2004 - first as EPA-only course, then offer courses around the Region for interested partners. This training can also function as a networking opportunity to build relationships with our state, local and tribal partners. These assessments will be focused on specific facilities and include modeling and risk assessment components.</p>	<p>Build capacity in timely manner so when the MACT takes effect, the Region is ready to meet the workload internally, and help our stakeholders prepare for the MACT/residual risk work.</p>

## **Notes**

1. The NW CAPP Priorities as decided by the delegates of the Air Summit (June 5, 2003)

### **Preamble**

We recognize that air quality issues are critical to our quality of life now and for future generations. Air quality issues are inter-connected with economic development, ecosystems, and environmental justice. Decisions must be supported by sound science. Economic prosperity and vitality are also important to achieve balance. We acknowledge, maintain, celebrate, and build upon our past successes in air quality and will focus on the following priorities for the next 5 to 10 years.

### **Priorities**

- Reduce emissions from transportation especially diesel and carbon dioxide, and support land use planning and alternate transportation as tools.
- Reduce emissions from combustion, including:
  - energy production, and
  - residential, forestry, and agricultural burning, and support alternative energy sources
- Reduce risks from air pollution indoors, including:
  - homes,
  - offices,
  - schools, and
  - other buildings
- 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.