# Guidance for Using State Supplemental Environmental Projects to Implement Wood Stove Changeout Programs

# **Guidance for Using Supplemental Environmental Projects to Implement Wood Stove Changeout Programs**

Prepared by:

Outreach and Information Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

# **Table of Contents**

I. Introduction	4
Why a Wood Stove Changeout Program?	4
What is a Wood Stove Changeout?	
Why a Supplemental Environmental Project (SEP)?	
General SEP Policies and Requirements	
II. What Motivates Violators and Regulators to Pursue Wood Stove Changeout	
SEPs in State Settlements?	
Motivation for Violators	7
Motivation for Regulators	7
Benefits of a Wood Stove Changeout Program	7
III. Regulator's Roadmap to Wood Stove Changeout SEPs	9
IV. Clearing Barriers Along the Way	11
V. Resources for Wood Stove Changeout SEPs and Peer Exchange	13
Appendix A: EPA, State and Local SEP Policies and Guidance	
Appendix B: SEP Libraries - EPA and State	
Appendix C: EPA Contacts	
Appendix D: Settlements Including Wood Stove Changeout SEPs	22
Table 1 – Solutions to Wood Stove Changeout Projects Barriers in State SEPs	12

# Guidance for Using Supplemental Environmental Projects to Implement Wood Stove Changeout Programs

# I. Introduction

This document provides guidance to state government officials on how to utilize supplemental environmental projects to implement a wood stove changeout program. This document does not establish any policies or opinions on federal supplemental environmental projects, but does highlight official policies issued to date by the EPA's Office of Enforcement and Compliance Assurance that may be useful to state officials.

# Why a Wood Stove Changeout Program?

There are currently 7.5 million old wood stoves across the United States that are responsible for emitting a total of 336,000 tons of  $PM_{2.5}$  (also known as fine particle pollution) per year—more than emissions from highway and non-road diesel vehicles combined. Changing out one old wood stove with a newer, cleaner wood-burning stove reduces fine particle emissions by an average of 70 percent—that's equivalent to removing seven old diesel buses off the road. Other heat appliances (pellet stoves, gas, oil or electric appliances) may reduce fine particle emissions more than 70 percent.

Wood smoke emitted from wood stoves contains a mixture of gases and fine particles that can cause burning eyes and a runny nose. Fine particle pollution can aggravate existing diseases, such as coronary artery disease, heart failure, asthma or chronic bronchitis and emphysema. Wood smoke is also known to emit harmful pollutants such as polycyclic aromatic hydrocarbons, benzene, and dioxin.

Changing out old wood stoves protects public health and can help areas meet air quality standards for particle pollution. Changeouts can also address short term fine particle peak exposures to wood smoke, improve visibility in national wilderness areas and parks, and support community-based air toxics programs.

## What is a Wood Stove Changeout?

A wood stove changeout is typically a voluntary program that state, tribal or local governments implement to replace older stoves with cleaner burning heating appliances (wood stoves, pellet stoves, gas, oil or electric appliances). Some areas have replaced old wood stoves with EPA-certified wood stoves. These newer wood stoves emit an average of 70 percent less smoke; are 50 percent more efficient, and use 1/3 less wood than models sold before 1990.

For many communities, the primary goal is to reduce emissions of fine particle pollution. Reducing these harmful emissions can considerably lessen the impact that wood smoke has on public health and the environment. Many states have implemented wood stove changeout programs that exchange old wood stoves (those that do not meet the 40 C.F.R. Part 60 Subpart AAA New Source Performance Standards) with cleaner heating

appliances through incentives—such as cash rebates, tax deductions and Supplemental Environmental Projects (SEPs).

## Why a Supplemental Environmental Project (SEP)?

A Supplemental Environmental Project (SEP) is an environmentally beneficial project that a violator of an environmental law voluntarily agrees to undertake in the settlement of a civil enforcement action. The main goal of a SEP is to improve the environmental health of a community (or communities) that have been put at risk due to a violation of an environmental law.

Utilizing a SEP to implement a wood stove changeout program is an effective way to leverage resources that can make significant impacts on public health and the environment. Several state, tribal and local governments have effectively implemented changeout programs through SEPs. Some violators have provided funds for wood stove exchanges and others have provided actual wood stoves and other heating appliances for changeout programs. To learn more, see <a href="#">Appendix D: Settlements Including Wood Stove Changeout SEPs</a>.

A violator may voluntarily choose to enter into a SEP settlement. The voluntary nature of a SEP does not preclude the enforcing agency from mentioning to the violator, in the beginning stages of a settlement process, that the violator may wish to consider a implementing a SEP project, or from providing examples, if asked (e.g. a wood stove changeout program). The SEP must be a project that a violator will not otherwise be required to perform. Both the violator and the enforcing agency should agree that the particular project is appropriate for the particular settlement. If the parties agree to a SEP, and it becomes part of a finalized settlement agreement, then the terms of the SEP become enforceable and must be carried out by the violator in accordance with the settlement.

Each state, tribal and local government has established its own SEP policy. Some governments defer to the federal SEP policy. State, local and tribal policies are not bound by EPA's SEP policy.

# **General SEP Policies and Requirements**

The following section provides general policies and requirements to consider when mentioning a SEP project idea to a violator. SEP policies and practices differ from state to state. Refer to <u>Appendix A: EPA, State and Local SEP Policies and Guidance</u> for complete federal and state SEP policy guides.

# I. Relationship between Violation and Proposed Project (Nexus)

The federal SEP policy requires that a relationship, or connection, exist between the violation and the proposed project. For federal SEPs, a connection exists only if a proposed project meets at least one of the following criteria:

 The project is designed to reduce the likelihood that similar violations will occur in the future; and/or

- The project reduces the adverse impact to public health or the environment to which the violation at issue contributes; and/or
- The project reduces the overall risk to public health or the environment potentially affected by the violation at issue. ¹

## II. SEP Policy Guidelines

The federal SEP policy includes the following guidelines:

- A project cannot be inconsistent with any provision of the underlying statute(s).
- A SEP must advance at least one of the objectives of the environmental statute that is the basis of the enforcement action.
- EPA must not play any role in managing or controlling funds used to perform a SEP.

# III. Minimum Penalties and Penalty Mitigation

The federal SEP policy specifies that a minimum penalty amount be included to maintain the deterrent effect of the settlement. A violator should not obtain an economic advantage over competitors that complied with the law. For these reasons, when a SEP project is part of a settlement agreement, the policy calls for a minimum penalty amount which is the greater of the following:

- twenty-five percent of the gravity component<sup>2</sup>, or
- the economic benefit of noncompliance plus 10 percent of the gravity element.

The federal policy provides for mitigation credit of up to 80 percent of the value of the SEP. Most states limit the amount of a penalty that can be mitigated by a SEP. State policies differ greatly regarding SEP mitigation percentage or multiplier. For example, Texas limits SEPs to mitigating no more than 50 percent of the penalty of for-profit entities. Pennsylvania may not mitigate the penalty more than 75 percent. In Missouri, a SEP must have a value two times greater than the proposed penalty amount and must leave a portion of the proposed penalty to be paid. In Colorado, a strong pollution prevention project may be eligible for 100% mitigation credit.

### IV. Designation of Funds

EPA may not manage or direct funds used to implement a SEP in a federal enforcement settlement. Some states may also face restrictions on the use of SEP funds. For example, North Carolina restricts the use of SEP funds to projects that improve public education. Some states specify that compliance funds go directly toward environmental protection departments. These policies may prohibit wood stove changeout projects or may limit their location.

October 31, 2002, EPA Memorandum from Director Walker B. Smith, "Importance of the Nexus Requirement in the Supplemental Environmental Projects Policy" <a href="http://www.epa.gov/Compliance/resources/policies/civil/seps/sepnexus-mem.pdf">http://www.epa.gov/Compliance/resources/policies/civil/seps/sepnexus-mem.pdf</a>.

<sup>&</sup>lt;sup>2</sup> The gravity component of a penalty is the part of the settlement that addresses the seriousness of the violation, including aspects such as the size of the business, the duration of the violation, the amount of the pollutant, the sensitivity of the environment, and the toxicity of the pollutant.

# V. Profitability

In certain circumstances, EPA may accept a federal SEP that will ultimately be profitable to the violator. EPA has issued guidance on this which may be found at <a href="http://www.epa.gov/compliance/resources/policies/civil/seps/seps-profitableprojects.pdf">http://www.epa.gov/compliance/resources/policies/civil/seps/seps-profitableprojects.pdf</a>. States may allow a SEP that generates a profit for the violator. States may wish to consider using the EPA software PROJECT to calculate the real value of the project when considering project income. To learn more, visit <a href="http://www.epa.gov/Compliance/civil/econmodels/index.html">http://www.epa.gov/Compliance/civil/econmodels/index.html</a>.

# II. What Motivates Violators and Regulators to Pursue Wood Stove Changeout SEPs in State Settlements?

The main reason to pursue a wood stove changeout is to achieve real environmental benefits. In general, SEPs are an efficient way to achieve environmental progress in the wake of an environmental violation. Wood stove changeout projects, where applicable, can achieve not only multi-pollutant reduction benefits, but also additional benefits such as enhancing home fire safety and potentially lowering heating costs for the homeowner.

#### **Motivation for Violators**

There are several reasons why a violator may want to consider a SEP when entering into a settlement. A few of these reasons include:

- 1) corporate responsibility,
- 2) interest in the community,
- 3) corporate image and positive public relations,
- 4) desire to achieve environmental benefits, and
- 5) mitigation of a portion of the penalty.

### **Motivation for Regulators**

SEPs can accomplish direct environmental benefits that would not otherwise be achieved. With a SEP, there is an opportunity to achieve some "beyond compliance" environmental benefits, even while maintaining the deterrent for non-compliance. State regulators seeking innovative approaches can give violators the option of investing in environmentally beneficial projects through SEPs. This approach represents an alternative to traditional regulation, while maintaining the integrity of the regulatory process and providing lasting environmental benefit.

### Benefits of a Wood Stove Changeout Program

Wood stove changeout projects generate multiple benefits. Installing new EPA-certified wood stoves or other clean burning heating appliances through a SEP can achieve environmental benefits that would otherwise not occur due to the relatively high cost of new wood stoves (and professional installation). Reducing harmful emissions at a cost-effective rate (less than \$2000 per ton for every wood stove replaced) can help bring areas into attainment with the national fine particle standards. See the following table for a control technology comparison.

**Control Technology Comparison** 

Source and Control Measure Name	Average Annual Cost Effectiveness (\$/ton PM <sub>2.5</sub> reduced in 1999 dollars)
Residential Wood Combustion – NSPS Compliant Wood	2,000
Stoves (EPA-Certified)	
Agricultural burning- Bale Stack/Propane Burning	2,591
Conveyorized Charbroilers – Catalytic Oxidizer	2,966
Construction Activities – Dust Control Plan	3,600
Iron and Steel Production – Sinter Cooler	5,000
Conveyorized Charbroilers – ESP for Commercial	7,000
Cooking	

Source: EPA, Air Quality Criteria for Particulate Matter (October 2004)

## I. Health Benefits Related to Reducing Wood Smoke

The biggest risk to human health in terms of wood smoke, indoors or outdoors, comes from fine particle matter or PM<sub>2.5</sub>. These extremely small particles can be inhaled deeply into the lungs where they can cause or aggravate respiratory conditions such as bronchitis. Fine particle pollution from wood smoke is more dangerous for some segments of the population than for others. For example, people with heart or lung disease, such as congestive heart failure, angina, chronic obstructive pulmonary disease, emphysema or asthma, may experience health effects earlier and at lower smoke levels than healthy people. Children and older adults are more susceptible to smoke. Children are particularly vulnerable for several reasons: their respiratory systems are still developing; they breathe more air (and air pollution) per pound of body weight than adults; and they are more likely to be active outdoors. In addition to the smoke that can be released inside the home, studies show that an estimated 70 percent of smoke from chimneys can actually re-enter the home and other neighborhood dwellings.

**Health Benefits: Wood Stove Changeout Program** 

Health Effect	Incidence (avoided cases)	Dollar benefits (2000 dollars)
Mortality (adult)	5,000	\$27,000,000,000
Non-fatal heart attacks	7,800	\$670,000,000
Chronic Bronchitis	3,300	\$1,200,000,000
Work Loss Days	650,000	\$85,000,000
Asthma Exacerbation	91,000	\$4,000,000
Hospital Admissions, Cardiovascular	2,400	\$53,000,000
Hospital Admissions, Respiratory	2,400	\$35,000,000
Total	NA	\$29 Billion

Source: EPA, "Health Benefits: Wood Stove Changeout Program (National Level, 2008)"

## II. Economic Benefits

To the homeowner, receiving a free or discounted wood stove (or other appliance) is a great cost saver. The homeowner may also see a reduction in wood consumption (as much as 1/3 less) due to the greater efficiency of a new wood stove. To the state, tribal or local government, reducing smoke and fine particle pollution saves time, money and lives. EPA estimates that if all old wood stoves across the U.S. were replaced with EPA-certified wood stoves by 2008, the health benefits would reach \$29 billion.

### III. Safety Benefits

Old, polluting stoves are not as air tight as newer models and can allow smoke to be released inside the home. They also emit more creosote due to inefficient combustion which can build up in the chimney. If the chimney is not cleaned regularly, the creosote can ignite inside the chimney causing a house fire. The National Fire Protection Association (NFPA) estimates that failure to clean the chimney was the leading cause of fires associated with wood stoves, accounting for 33% of reported fires from 1999-2001<sup>3</sup>. In 2001, an estimated 4,000 reported home structure fires involving wood stoves or other solid-fueled fixed heaters resulted in 50 civilian deaths, 80 civilian injuries, and \$45 million in direct property damage.

# III. Regulator's Roadmap to Wood Stove Changeout SEPs

This section provides seven basic steps that regulators can follow when considering a wood stove changeout SEP.

# Step 1: Familiarize yourself with enforcement settlement rules and policies applicable to your area or jurisdiction.

Regulators may refer to Appendix A (EPA, State and Local SEP Policies and Guidance) for policies that are available online. Although many states refer to the term "Supplemental Environmental Project," some states may use other terms such as "Supplemental Project," or "Community Project." Regulators are encouraged to assess:

- any provisions in the state that may prevent or impede developing a wood stove changeout SEP,
- how the state's environmental penalty funds are earmarked or used, and
- prior wood stove changeout projects in your area or jurisdiction.

# Step 2: Determine whether a wood stove changeout project makes sense in your state and be prepared to raise the idea for consideration during the settlement negotiations.

- "Ready-made" project ideas are likely to help move settlement processes along.
- Negotiating parties are best served if one or both has project ideas in mind for consideration in a settlement. Both parties can keep a running list of ideas as a handy resource and as a reminder to make connections with key stakeholders.

<sup>&</sup>lt;sup>3</sup> November, 2004, <u>Home Heating Fire Patterns And Trends</u>, National Fire Protection Association, Fire Analysis and Research Division, John R. Hall, Jr.

 Consider what viable resources are available in (or near) your state, including: wood stove retailers, your local low income energy assistance and weatherization office (see <a href="http://www.eere.energy.gov/regions/">http://www.eere.energy.gov/regions/</a>) and other key stakeholders.

# Step 3: Educate key stakeholders and partners about the potential wood stove changeout project that may occur in the state enforcement settlement as early as possible.

Only parties to the settlement can participate in settlement negotiations. However, key stakeholders, such as the Attorney General's Office, industry trade associations, state, tribal and local air quality agencies, EPA, and manufacturers can provide valuable information that may help in the consideration of implementing a wood stove changeout project in a state settlement.

It is important to 1) promote "buy-in" and 2) gain useful insight, particularly regarding the technical feasibility, realistic expense, and environmental benefits of potential wood stove changeout projects.

- Informing key players early about wood stove changeout project ideas will allow time to educate each other about the technical feasibility and environmental benefits of a given project.
- EPA can provide health benefits information and a "How-To Guide for Implementing a Wood Stove Changeout Campaign," at <a href="http://www.epa.gov/woodstoves/how-to-guide.html">http://www.epa.gov/woodstoves/how-to-guide.html</a>.
- Other important contacts are provided in Appendix C.

# Step 4: Ensure all parties are aware of the process, potential partnerships, and benefits.

- Inform violators that wood stove changeout projects are an option (among others) in settlements, and that they are completely free to propose or decline the inclusion of a SEP in the settlement.
- Explain the health and environmental benefits.
- Provide potential resources for developing specific project ideas.

# Step 5: Assess the value of the proposed SEP project and decide if it is acceptable, warrants modification, or is unacceptable according to the applicable state enforcement policy.

EPA and its partners can help assess the technical feasibility, realistic expense, and environmental benefits of the proposed wood stove changeout project. Regulators should be extremely familiar with applicable state enforcement policies and consult with their legal counsel if necessary.

# Step 6: Determine if additional time is needed to negotiate a wood stove changeout SEP settlement agreement.

Regulators may wish to allow more time for a wood stove changeout SEP than they do for traditional settlements due to the time it takes to coordinate logistics.

# Step 7: Plan and implement the wood stove changeout program.

Contact other state, tribal, and local agencies, manufacturers, public health departments, utilities, industry associations, state environmental departments, non profits, academic institutions and others to leverage resources and successfully implement the program. EPA maintains a publicly available website at <a href="http://www.epa.gov/woodstoves">http://www.epa.gov/woodstoves</a> where state, tribal and local agencies and other organizations can find information on woodstove changeout programs, partnerships, technical assistance and other useful links to resources available for implementing a successful woodstove changeout program.

# IV. Clearing Barriers Along the Way

Regulators and violators alike may face barriers to including wood stove changeout projects in settlements. The following table describes potential barriers and offers suggestions on overcoming challenges.

 $Table\ 1-Solutions\ to\ Wood\ Stove\ Changeout\ Projects\ Barriers\ in\ State\ SEPs.$ 

Potential Barrier	Potential Solution
Perception of "letting violators off easy" via:	Recognize and convey to stakeholders that:
<ul> <li>reduced penalties and/or</li> </ul>	• violators will pay a penalty.
• potential project profitability.	State SEP policies may contain provisions for
	limiting anticipated project income if appropriate
	• project income may be directed to additional
	environmental projects.
Perception that small negotiated settlements do	Provided that relevant state SEP policies allow
not provide adequate flexibility to support a	flexibility (as most states do), consider:
wood stove changeout project and transaction	• pooling penalty funds from several settlements to
costs.	form larger funds
	• leveraging other funds such as grants
Demonstrating "nexus" or relationship between	Confirm the enforcement policy in your state.
the benefits of a wood stove changeout project	Many state SEP policies have more flexibility than
and a violation by a source.	the federal SEP policy with regards to nexus.
Pursuing goals for SEP benefits to accrue	Environmental benefits of wood stove changeout
directly to the community in which the violation	projects can potentially impact more than one
occurred, while the source is located elsewhere.	community (including the one in which the
	violation occurred).
Limited awareness among stakeholders about	Use the resources provided in this document and
wood stove changeouts, including project	tap into the readily accessible expertise identified
options, realistic costs, and benefits.	herein, including EPA, industry representatives, or
	other relevant contacts.
Stakeholder perception that wood stove	Use the resources provided in this guide to
changeout SEPs are too difficult to develop and	facilitate all phases of development and
they do not have the time or resources to develop	implementation. Several agencies, nonprofit
project ideas, manage the process, and/or	organizations and industry representatives across
monitor the project.	the country are potential partners that can help
	manage the project.
Fear of defendants/respondents misinterpreting	Regulators can clearly inform (and remind)
regulators' presentation of the SEP option as	defendants that they are free to propose or decline
indication that a SEP is mandatory (although	SEPs in a settlement.
SEPs are voluntary).	

# V. Resources for Wood Stove Changeout SEPs and Peer Exchange

The appendices to this document provide additional information for regulators interested in pursuing a wood stove changeout SEP. As referenced in previous sections, these appendices include:

- Appendix A EPA, State and Local SEP Policies and Guidance
- Appendix B SEP Libraries EPA and State
- Appendix C EPA Contacts
- Appendix D Settlements Including Wood Stove Changeout SEPs

Appendix A: EPA, State and Local SEP Policies and Guidance

Agency	Policy	Alternative organizational or contact information
U.S. EPA	Supplemental Environmental Projects (SEPs) Policy and Guidance http://cfpub.epa.gov/compliance/resources/policies/civil/seps/ http://www.epa.gov/compliance/civil/index.html	
Alabama	Not available	Office of General Counsel http://www.adem.state.al.us/Agency Overview/GenCounselOV.htm
Alaska	Not available	http://www.law.state.ak.us/departm ent/civil/civil.html#enviro Craig Tillery, Chief Assistant Attorney General, Section Supervisor, 907-269-5100
Arizona	Compliance & Enforcement Handbook Arizona Department of Environmental Quality, Office of Special Counsel, Version - 7/1/02 http://azdeq.gov/function/forms/download/handbook/fullha ndbookw.pdf, (pp. 8-3 through 8-9) (pp. 51-57) referring page: http://www.azdeq.gov/function/forms/docs.html#hand	
Arkansas	Supplemental Environmental Project (SEP) Policy and Proposal Guidelines http://www.adeq.state.ar.us/legal/sep.htm (Updated as of August 28, 2004)	
California	CAL/EPA Recommended Guidance on Supplemental Environmental Projects, October 2003 http://www.calepa.ca.gov/Enforcement/Policy/SEPGuide.p df	
California local	Bay Area Air Quality Management District Supplemental Environmental Projects Policy http://www.baaqmd.gov/pln/plans/ozone/2003_meetings/se pp.pdf	
Colorado	Colorado Department of Public Health and Environment Agency-wide Supplemental Environmental Projects Policy, January 2003 <a href="http://www.cdphe.state.co.us/ap/down/settlemanual.pdf">http://www.cdphe.state.co.us/ap/down/settlemanual.pdf</a>	

Agency	Policy	Alternative organizational or contact information
Connecticut	Policy on Supplemental Environmental Projects, March 25, 1993, revised February 15, 1996 http://www.dep.state.ct.us/enf/policies/sep.pdf referring page: http://www.dep.state.ct.us/enf/enfpol.htm	
District of Columbia	Not available	Environmental Health Administration, Air Quality Division, <a href="http://doh.dc.gov/doh/site/default.asp">http://doh.dc.gov/doh/site/default.asp</a>
Delaware	Policy on Penalty Assessments Associated with Administrative Enforcement Actions <a href="http://www.dnrec.state.de.us/dnrec2000/admin/enforcement/penaltyassessment/penaltyassessment/penaltyassessmentpolicy.htm">http://www.dnrec.state.de.us/dnrec2000/admin/enforcement/penaltyassessmentpolicy.htm</a>	
Florida	Directive 923, Settlement Guidelines for Civil and Administrative Penalties, January 24, 2002 <a href="http://www.dep.state.fl.us/admin/depdirs/pdf/923.pdf">http://www.dep.state.fl.us/admin/depdirs/pdf/923.pdf</a> <a href="http://www.dep.state.fl.us/admin/depdirs/directives.htm">http://www.dep.state.fl.us/admin/depdirs/directives.htm</a>	
Georgia	Not available	Enforcement Orders <a href="http://www.dnr.state.ga.us/dnr/environ/enforder-files/orders.htm">http://www.dnr.state.ga.us/dnr/environ/enforder-files/orders.htm</a> Contact Information for the Air  Protection Branch <a href="http://www.dnr.state.ga.us/dnr/environ/aboutepd_files/branches_files/apb.htm">http://www.dnr.state.ga.us/dnr/environ/aboutepd_files/branches_files/apb.htm</a>
Hawaii	Not available	The Environmental Notice (February 23, 2003) <a href="http://www.state.hi.us/health/oeqc/notice/notice/23feb2003.pdf">http://www.state.hi.us/health/oeqc/notice/notice/23feb2003.pdf</a> lists a count of SEP projects and cites the Environmental Planning Office as a point of contact for the table or call 808-586-4337.  Current issues are available at <a href="http://www.state.hi.us/health/oeqc/notice/">http://www.state.hi.us/health/oeqc/notice/</a>
Idaho	DEQ Guidance Document #GD98-1: Supplemental Environmental Projects <a href="http://www.deq.state.id.us/about/policies/gd98_1.cfm">http://www.deq.state.id.us/about/policies/gd98_1.cfm</a>	
Illinois	Not available	Performance Partnership Agreement <a href="http://www.epa.state.il.us/ppa/">http://www.epa.state.il.us/ppa/</a> See <a href="p.117">p.117</a> of the 2001 agreement for <a href="reference">reference</a> to expanding role of <a href="Supplemental Environmental Projects">Supplemental Environmental Projects</a> .

Agency	Policy	Alternative organizational or contact information
Indiana	Supplemental Environmental Project Policy, April 5, 1999 <a href="http://www.in.gov/idem/enforcement">http://www.in.gov/idem/enforcement</a> /oe/policy/nrp/supplemental.html	
Iowa	Not available	David Wornson, 515-242-5817 Michael Murphy, 515-281-8973
Kansas	Kansas Department of Health and Environment Bureau of Waste Management Policy 00-03 related to Supplemental Environmental Projects, July 20, 2000 <a href="http://www.kdhe.state.ks.us/waste/policies/BWM">http://www.kdhe.state.ks.us/waste/policies/BWM</a> 00-03 SEP.pdf	
Kentucky	Not available	Pat Johnston, Enforcement mailto:pat.johnston@mail.state.ky.us
Louisiana	Not available	List of settlements: <a href="http://www.deq.state.la.us/enforcement/b">http://www.deq.state.la.us/enforcement/b</a> <a href="mailto:ep/bep.asp">ep/bep.asp</a> Enforcement Administrator, Peggy Hatch, 225-765-0634
Maine	Supplemental Environmental Projects Policy <a href="http://mainegov-images.informe.org/dep/pubs/sep_pol.pdf">http://mainegov-images.informe.org/dep/pubs/sep_pol.pdf</a>	Jim Dusch, 207-287-8662
Maryland	No state SEP policy	Frank Courtright, 410-537-3220, mailto:fcourtright@mde.state.md.us
Massachusetts	Interim Policy on Supplemental Environmental Projects: Policy ENF-97.005 <a href="http://www.mass.gov/dep/enf/enf97005.pdf">http://www.mass.gov/dep/enf/enf97005.pdf</a> linked on page: <a href="http://www.mass.gov/dep/enf/enfpol.htm">http://www.mass.gov/dep/enf/enfpol.htm</a>	
Michigan	Department of Environmental Quality Policy and Procedures, Supplemental Environmental Projects (SEPs) for Penalty Mitigation, November 10, 1997 <a href="http://www.deq.state.mi.us/documents/deq-wmd-opmemo-sep.pdf">http://www.deq.state.mi.us/documents/deq-wmd-opmemo-sep.pdf</a>	
Minnesota	Not available	Scott Parr, 651-296-7636
Mississippi	Not available	
Missouri	Not available	
Montana	Montana Law requires that all air penalties go into an alternative energy revolving loan fund: <a href="http://data.opi.state.mt.us/bills/mca/75/2/75-2-401.htm">http://data.opi.state.mt.us/bills/mca/75/2/75-2-401.htm</a>	
North Carolina	Not available	
North Dakota	Not available	

Agency	Policy	Alternative organizational or contact information
Nebraska	Not available	SEPs are mentioned on the following page: <a href="http://www.deq.state.ne.us/AirDivis.nsf/p">http://www.deq.state.ne.us/AirDivis.nsf/p</a> <a href="mailto:ages/AirCaE">ages/AirCaE</a>
New Hampshire	Not available	SEPs are mentioned in the following document: <a href="http://www.des.state.nh.us/legal/carp/CA">http://www.des.state.nh.us/legal/carp/CA</a> RP-App-6-5.pdf Linked from: <a href="http://www.des.state.nh.us/legal/carp/">http://www.des.state.nh.us/legal/carp/</a>
New Jersey	Not available	
New Mexico	Civil Penalty Policy, p.23: <a href="http://www.nmenv.state.nm.us/aqb/enforce_compliance/Civil%20Penalty%20Policy%2010-20-05%20Version.pdf">http://www.nmenv.state.nm.us/aqb/enforce_compliance/Civil%20Penalty%20Policy%2010-20-05%20Version.pdf</a> linked on page: <a href="http://www.nmenv.state.nm.us/aqb/enforce_compliance/compliance.html">http://www.nmenv.state.nm.us/aqb/enforce_compliance/compliance.html</a>	
New York	Environmental Benefit Project Policy: http://www.dec.state.ny.us/website/ogc/egm/ebp.html	
Nevada	Not available	Compliance-Michael Yamada, Supervisor, Staff Engineer IV, 775-687- 9342, myamada@ndep.nv.gov
Ohio	Brochure for companies: <a href="http://www.epa.state.oh.us/opp/p2regint/p2sepinf.pdf">http://www.epa.state.oh.us/opp/p2regint/p2sepinf.pdf</a> See also: <a href="http://www.epa.state.oh.us/opp/p2regint/p2sep1.html">http://www.epa.state.oh.us/opp/p2regint/p2sep1.html</a> and: <a href="http://www.epa.state.oh.us/opp/p2regint/enforce2.html">http://www.epa.state.oh.us/opp/p2regint/enforce2.html</a>	
Oklahoma	Not available	
Oregon	Oregon Department of Environmental Quality, Internal Management Directive - Civil Penalty Mitigation for Supplemental Environmental Projects: <a href="http://www.deq.state.or.us/programs/enforcement/enforcementSEPDir.pdf">http://www.deq.state.or.us/programs/enforcement/enforcementprocess.htm</a> <a href="http://www.deq.state.or.us/programs/enforcement/enforcementprocess.htm">http://www.deq.state.or.us/programs/enforcement/enforcementprocess.htm</a>	
Pennsylvania	Policy for the Acceptance of Community Environmental Projects in Conjunction with Assessment of Civil Penalty: <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005">http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005</a> <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005">http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005</a> <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005">http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005</a> <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr2001.pdf">http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005</a> <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr2001.pdf">http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr200149e005</a> <a href="http://www.dep.state.pa.us/eps/docs/cab200149b1126000/fldr2001.pdf">http://www.dep.state.pa.us/eps/docs/cab20026o8182701e/012-4180-001.pdf</a>	
Rhode Island	Policy on Supplemental Environmental Projects, SOP Number: BEP-AWC, Effective Date: 7/15/04 http://www.dem.ri.gov/programs/benviron/compinsp/pdf/seppolcy.pdf	
South Carolina	Currently not pursuing SEPs.	Jerry Chalmers, 803-898-4113 Enforcement Policy: <a href="http://www.scdhec.net/eqc/admin/pubs/admproc.pdf">http://www.scdhec.net/eqc/admin/pubs/admproc.pdf</a>

Agency	Policy	Alternative organizational or contact information
South Dakota	Not available	
Tennessee	Not available	
Texas	SEP Main Page http://www.tceq.state.tx.us/legal/sep/index.html	Project List: <a href="http://www.tceq.state.tx.us/legal/sep/index.html">http://www.tceq.state.tx.us/legal/sep/index.html</a>
Utah	Not available	Steve McCann, 801-536-4185 Administration Environmental Scientist
Vermont	Not available	Christian B. Jones, Compliance Section Chief or call the APCD at 802-241-3840.
Virginia	Commonwealth of Virginia, Department of Environmental Quality, Enforcement Manual, December 1, 1999, p 5-1 (p 89 of 167) <a href="http://www.deq.state.va.us/pdf/enforcement/enforcementmanual.pdf">http://www.deq.state.va.us/pdf/enforcement/enforcementmanual.pdf</a>	Amy Owens, 804-698-4512
Washington	Not available	
West Virginia	Not available	Office of Legal Services: Perry McDaniel, Chief 1356 Hansford Street Charleston, West Virginia 25301 Phone: 304-558-9160 Fax: 304-558-4255
Wisconsin	Not available	Steve Sisbach - Director of Environmental Enforcement, 608-266- 7317  Neil Baudhuin - Air Region Supervisor, 715-365-8958  Rick Wulk - GreenBay AirRegion Supervisor, 920-492-5881  Thomas Dawson DOJ - Environmental Enforcement Unit Leader, 608-266-8987
Wyoming	Not available	

# Appendix B: SEP Libraries - EPA and State

Information on SEPs in concluded federal settlements is available on Enforcement and Compliance History Online (ECHO).

http://www.epa.gov/echo/

EPA's Project Ideas for Potential Supplemental Environmental Projects. <a href="http://www.epa.gov/compliance/resources/policies/civil/seps/potentialproject-seps0607.pdf">http://www.epa.gov/compliance/resources/policies/civil/seps/potentialproject-seps0607.pdf</a>

EPA Region 1 maintains a SEP proposal library and is actively seeking SEP ideas. http://www.epa.gov/NE/enforcement/sep/index.html

EPA Region 3 SEP Index.

http://www.epa.gov/region03/enforcement/sepindex.htm

EPA Region 5 compiles annual SEP reports.

http://www.epa.gov/reg5oorc/reports.htm

EPA Region 6 has a SEP library and is actively seeking SEP project ideas. http://www.epa.gov/Arkansas/6en/6en-sep.htm

Illinois SEP idea bank.

http://www.epa.state.il.us/enforcement/sep/

**Appendix C: EPA Contacts** 

Organization	Appendix C: EPA	
Organization	EPA Contact	Type of
		Assistance
ED LOEGLIO	N. I. D. I	ED A GED
EPA OECA HQ	Melissa Raack	EPA SEP
	Washington, DC	Coordinator
	202-564-7039	
	raack.melissa@epa.gov	
	Beth Cavalier	EPA SEP
	Washington, DC	Coordinator
	202-564-3271	
	cavalier.beth@epa.gov	
EPA-OAQPS	Larry Brockman	Program Contact for "Great American
	RTP, NC	Wood Stove Changeout
	919-541-5398	Campaign"
	Brockman.larry@epa.gov	1 8
EPA Region 1	Amelia Katzen	EPA SEP
	Boston, MA	Coordinator
	617-918-1869	
	katzen.amelia@epa.gov	
EPA Region 2	Rudolph Perez	EPA SEP
	New York, NY	Coordinator
	212-637-3220	
	perez.rudolph@epa.gov	
EPA Region 3	Christopher Day	EPA SEP
	215-814-2481	Coordinator
	Philadelphia, PA	
	day.christopher@epa.gov	
EPA Region 4	Bill Bush	EPA SEP
	Atlanta, GA	Coordinator
	404-562-9538	
	bush.william@epa.gov	
EPA Region 5	Kathleen Schnieders	EPA SEP
	Chicago, IL	Coordinator
	312-353-8912	
	schnieders.kathleen@epa.gov	
EPA Region 6	Efren Ordonez	EPA SEP
	Dallas, TX	Coordinator
	214-665-2181	
	ordonez.efren@epa.gov	
EPA Region 7	Becky Dolph	EPA SEP
	Kansas City, KS	Coordinator
	913-551-7281	
	dolph.becky@epa.gov	

Organization	EPA Contact	Type of Assistance
EPA Region 8	Jim Stearns Denver, CO	EPA SEP Coordinator
	303-312-6912 stearns.james@epa.gov	
EPA Region 9	Allan Zabel San Francisco, CA	EPA SEP Coordinator
	415-972-3902 zabel.allan@epa.gov	
EPA Region 10	Juliane Matthews	EPA SEP
	Seattle, WA	Coordinator
	206-553-1169	
	matthews.juliane@epa.gov	

# **Appendix D: Settlements Including Wood Stove Changeout SEPs**

This appendix provides more detail on publicly available case settlements that include projects incorporating wood stove changeout projects as SEPs.

# **Examples of Wood Stove Changeout Supplemental Environmental Projects**

# Public Service Company (PSC), Hayden Power Station, CO

## Synopsis of SEP Project(s):

In negotiations with EPA and the Sierra Club over violations of the Clean Air Act, PSC agreed to implement a wood stove SEP. The SEP converted 400 wood stoves to gas or propane heaters. For low income families the full cost of conversion was covered; for others there were subsidies. The Sierra Club helped manage the effort and the county was able to resolve its particulate matter (PM) nonattainment designation and has since been re-designated as attaining the PM national ambient air quality standard.

#### Plaintiff: USA

# **ConocoPhillips Company (Conoco)**

# Synopsis of SEP Project(s):

As part of a consent decree for Clean Air Act violations, Conoco agreed to spend \$125,000 to assist the Whatcom County (WA) Opportunity Council in replacing a minimum of 40 old fireplaces/wood stoves with new, cleaner burning heating devices in low income households.

# Plaintiffs: USA, LA, IL, NJ, PA, NWCAA

# PG&E Gas Transmission, Northwest Corp. (PG&E)

### Synopsis of SEP Project(s):

PG&E agreed to spend \$55,000 to assist the Bonner County Community Action Agency (BCCAA) with the development of a wood stove Upgrade Program in Bonner County, Idaho. BCCAA and others provided financial incentives to residents of Bonner County for the replacement of old, uncertified wood stoves.

#### Plaintiff: USA

# Degussa Engineered Carbons LP, Belpre, Ohio

# Synopsis of SEP Project(s):

Degussa Engineered Carbons LP agreed to spend \$245,000 to replace old wood stoves with new, clean-burning EPA certified wood stoves, or natural gas stoves in low income households.

#### Plaintiff: USA

# **Molycorp Mining, Questa, NM**

# Synopsis of SEP Project(s):

In an agreement with the New Mexico Environmental Department, Molycorp Mining distributed 110 stoves to Questa, NM residents. Questa officials distributed the stoves to qualified low income, elderly and disabled villagers to improve air quality.

Plaintiff: NMED

United States	Office of Air Quality Planning and Standards	Pub No. EPA-456/X-07-001
<b>Environmental Protection</b>	Outreach and Information Division	April, 2007
Agency	Research Triangle Park, NC	-