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Colorado Department
of Public Health
and Environment

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

FINAL AGENCY-WIDE SUPPLEMENTAL ENVIRONMENTAL PROJECTS POLICY

Signed

5/9/08

Martha Rudolph, Director
Environmental Programs

Date

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5/9/08

Paul Tourangeau, Director
Air Pollution Control Division

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Gary Baughman, Director
Hazardous Materials and Waste Management Division

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5/9/08

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Date

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Colorado Department of Public Health and Environment

Agency-wide Supplemental Environmental Projects Policy

Note to reader: This policy is intended to be an integral part of each of the department’s environmental division’s entire Enforcement and Compliance Assurance Policy and procedures. It is not a stand-alone document, and must be read and implemented in conjunction with the larger enforcement program implementation strategies (for example, any agreements the department has reached with the U.S. Environmental Protection Agency).

I. Background

In all settlements, violators are required to achieve and maintain compliance with all applicable regulations. All settlements include appropriate monetary penalties related to the environmental damage and financial gain the violator has received as a result of the violation. In some instances, violators may receive some penalty relief resulting from their commitment to implement Supplemental Environmental Projects (SEPs). SEPs are projects that benefit either the environment or public health that a violator agrees to undertake in settlement of an enforcement action, but that the violator is not otherwise legally required to perform. Whether the department decides to accept a proposed SEP as part of a settlement is purely within its discretion. Even though a project appears to satisfy all of the provisions of this policy, the department may decide for one or more reasons that a SEP is not appropriate, e.g., the cost of reviewing or overseeing the SEP is excessive, the SEP is not enforceable, or the department believes the violator may not have the ability or reliability to complete the proposed SEP. The department cannot accept SEP funds, nor can a SEP project fund efforts that the department is required to do pursuant to act or regulation.

For the purposes of this policy the term “First Party SEP” refers to a SEP in which a violator chooses to complete a project within its own facilities. A “Third Party SEP” refers to a SEP where the violator makes a donation to a third party or, in certain circumstances, performs the SEP to the benefit of a third party.

II. SEP Basic Guidelines

A SEP will not be approved if the violator is otherwise legally required to perform the proposed activity. For example, the SEP must not include actions required by any federal, state, or local law, regulation, administrative or court order or permit. Further, SEPs cannot include actions that the violator may be required to perform as injunctive relief, as part of a settlement or order in another legal action, or by state or local requirements.

SEPs may be used to mitigate some or all of a civil penalty in accordance with the following criteria: (1) While a First Party SEP may not be used to mitigate the economic benefit component of a monetary penalty¹ a donation to a third party can be used to mitigate economic benefit. A SEP performed by a violator to the benefit of a third party may also be approved to mitigate economic benefit at the department’s discretion; (2) the cost of a SEP will generally exceed the amount of penalty mitigation offered in exchange (see **Section V**, Extent to Which a SEP Can Mitigate a Penalty); (3) Because deterrence objectives must be met, SEPs may only mitigate 80% of the gravity portion of a penalty²; (4)

¹ Except as allowed in CDPHE’s Agency-wide Policy on Assessing Administrative Penalties Against Eligible Governmental Entities.

² Unless a violator is a small business (See Section “Extent to Which a SEP Can Mitigate a Penalty”) or except as allowed in

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Violators are precluded from seeking or receiving any tax benefit or favorable tax treatment associated with a SEP, including Third Party SEP donations; and (5) all SEPs must result in improvements to the environment or reduce the total risk burden posed to public health or the environment by the identified violations beyond what is required by law (“beyond compliance”).³ If a SEP benefits a medium different from the medium in which the violation occurred, the medium benefited by the SEP will be consulted before approval of the SEP (e.g., if a water violation occurred, and a hazardous waste SEP is proposed, the Water Quality Control Division will consult with the Hazardous Materials and Waste Management Division prior to approval of the SEP).

Although a media nexus is not required for SEPs, projects with a geographic nexus to the violation are given preference. The SEP should typically benefit the area or community adversely affected by the violation(s). However, the department does recognize that a facility’s operations may also have environmental and public health impacts outside of the immediate geographic area.

SEPs are not intended to reward the violator for undertaking activities that are obviously in its economic self-interest (e.g., update or modernize a plant to become more competitive). If equipment replacement occurs as part of a SEP, the violator must subtract the value of any equipment sold in the calculation of expenditures. Although a SEP at times may benefit a violator, it must also provide significant benefit to public health and/or the environment. For First Party SEP proposal guidelines, please see **Attachment C**.

The department particularly encourages investments in pollution prevention or energy efficiency projects (see **Attachment A**). These types of projects are designed to make production more efficient and reduce the likelihood of noncompliance, and provide significant long-term environmental and health benefits to the public. Although pollution prevention generally pays off for the company in the long term, it may not appear attractive to the company because of the associated technical risk, temporary impacts on production rates during project implementation or a long payback period. A penalty reduction through a SEP can offset such concerns and make the project more attractive. For example, business decisions are often made based on the payback period of the project (in other words, the amount of time required for an investment to generate enough income to cover the initial capital cost of the project). The payback period of pollution prevention projects is often longer than the payback period a company uses to evaluate the economic attractiveness of an investment. A penalty reduction can decrease the up-front cost of the project, thus shortening the effective payback period.

III. Third Party SEPs

The department may approve a donation to a third party for the implementation of a SEP or a SEP performed by the violator to the benefit of a third party to mitigate either the gravity and/or the economic benefit component of a penalty. Third Party SEP projects must meet all the requirements of a SEP as described in this policy with a few exceptions. A local government entity that is a recipient of SEP funds from a donation is able to use those funds for a project that would enable it to come into compliance with environmental regulations, provided that the donation comes from a violator that is not affiliated with that local government entity. It should also be noted that a cash donation will typically receive a 1 to 1 ratio for penalty mitigation. While the SEP Coordinator at the department can assist a violator with tracking a SEP, it is the violator who is ultimately responsible and legally liable for ensuring that a SEP

CDPHE’s Agency-wide Policy on Assessing Administrative Penalties Against Eligible Governmental Entities.

³ The environmental benefit from a SEP is not required to be quantifiable, although quantifiable benefits are strongly preferred.

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is completed satisfactorily. The violator may not transfer this responsibility and liability to a third party. For information on third party and community SEP proposal guidelines, please see **Attachment D**.

IV. Categories of Approvable SEPs

The department considers the following seven (7) categories of projects for potential SEPs. Each project will be closely scrutinized to ensure that all aspects of the project(s) fulfill the legitimate objectives of the department’s SEP policy in all respects.

1) Pollution Prevention Projects According to the Pollution Prevention Act of 1992, pollution prevention is defined as “any practice which reduces the use of any hazardous substance or amount of any pollutant or contaminant prior to recycling, treatment or disposal, and reduces the hazards to public health and the environment associated with the use or release or both of such substances, pollutants, or contaminants.” For the purposes of developing a SEP, a pollution prevention project is any project that substantially reduces or prevents the generation or creation of pollutants through:

- **Source reduction** - eliminating the source of pollution by changing industrial processes or substituting less polluting fuels or less toxic raw materials in existing processes;
- **Alternative/Renewable Energy, Energy Efficiency** – application of measures and technologies to reduce/eliminate dependency upon traditional resources. Examples include, but are not limited to: wind, solar, biomass and geothermal powered generation of electricity, ethanol-based (“E-85”) or bio-diesel fuels for vehicles, and sustainable building engineering;
- **Waste minimization** - conserving those materials that are sources of pollution; this includes application of closed-loop processes or other resource-efficiency measures;
- **In-process recycling** – returning waste materials produced during a manufacturing process directly to production within the same manufacturing process using dedicated, fixed, and physically integrated equipment so that no releases, including fugitive releases, occur;
- **Innovative recycling technologies** - substantially reducing the discharge of generated pollutants through innovative recycling technologies that keep the pollutants out of the environment in perpetuity; and
- **Conservation** - protecting natural resources through conservation or increased efficiency in the use of energy, water or other materials. A specific example of such a project that the department encourages is an up-front capital investment in energy efficiency improvements and reinvestment of the resulting cost savings into a long-term green energy program either on-site or in a community-based program, or a combination of both. Details of this type of energy efficiency project are provided in Attachment A.

In order for a project to meet the definition of pollution prevention, there must be an overall decrease in the amount and/or toxicity of pollution released to the environment, not merely a transfer of pollution among media.

2) Pollution Reduction Projects

A pollution reduction project is defined as a project that goes substantially beyond compliance with permit or regulatory limitations to further reduce the amount of pollution discharged into the environment. Where a pollutant or waste stream already has been generated or released, a pollution reduction approach (recycling, treatment, containment, or disposal techniques) may be appropriate, so

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long as it does not create an increased or adverse cross-media impact on public health or the environment. Examples include: (a) a project that reduces the discharge of pollutants through more effective end-of-pipe or stack removal technologies; (b) improved operation and maintenance; and, (c) recycling of residuals for use as raw materials in production off-site, thereby reducing the need for treatment, disposal, or consumption of energy or natural resources.

3) Environmental Restoration and Protection Projects

The objective of an environmental restoration project is to repair damage done to the environment beyond the need to remediate the damage done by the violation. Cross-media projects are a preferred option for this type of project. Examples of approvable projects include: (a) reductions in discharges of pollutants that are not the subject of the violation or the subject of other regulatory requirements within an affected air basin or watershed; (b) restoration of a wetland; (c) development of a conservation program or protection of habitat critical to the well-being of a species or ecosystem; and (d) purchase and management of a watershed area as an open space buffer zone to protect sensitive species or drinking water supply; and conservation easements.

Environmental restoration projects could include, in appropriate circumstances, projects that involve the remediation of facilities and buildings, provided such activities are not otherwise legally required. This includes the removal/mitigation of contaminated materials, such as contaminated soils, asbestos, and leaded paint, which are a continuing source of releases and/or threats to individuals.

4) Environmental Assessments

Under the category of environmental assessments, two types of environmental assessment projects have been approved by the department to date: (a) pollution prevention assessments; and (b) development and implementation of environmental management systems. These SEPs can only be approved where the violator commits to provide the department with copies of all assessments and reports and commits to implementation of technically feasible and economically reasonable steps identified in the assessments. If the violator chooses not to implement all recommendations in the assessment, it must submit a justification for not implementing certain recommendations. Environmental audits that merely represent compliance-focused, general good business practices are not acceptable SEPs.

Pollution prevention assessments are independent, systematic reviews of processes and operations conducted internally by a violator. The goal of the assessment is to identify opportunities to reduce the use, production, and generation of hazardous and other pollutants.

An environmental management system (EMS) assessment is a systematic, independent and documented verification process, conducted by a third party EMS auditor. The auditor objectively obtains and evaluates evidence to determine whether an entity's EMS conforms to the EMS requirements, which closely reflect the ISO 14001 (2004) criteria. This type of evaluation may identify the need for: (a) a formal corporate environmental compliance policy and enforceable procedures for implementation of that policy; (b) the need for planning processes as they pertain to an EMS, such as hazard identification and risk assessments, environmental programs, etc.; (c) implementation and operation criteria which includes: educational and training programs for employees, communication activities, EMS documentation requirements, operation and maintenance

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programs and in-plant and community emergency plans; (d) checking and corrective action criteria, which includes monitoring and measurement systems, record keeping and reporting systems and internal audit criteria; and (e) management review activities.

Any pollution prevention assessment or environmental management system development conducted as part of a SEP should include a materials accounting component that estimates the amounts of certain [or all] materials entering and exiting the facility (see Attachment B for a full definition of materials accounting).

The calculation of an appropriate mitigation for assessment projects will take place in two phases. In the first phase, the violator will receive penalty mitigation for the cost of undertaking the assessment. Upon completion of the assessment, the violator may receive further mitigation for implementation of activities recommended in the assessment, provided that such activities meet all other requirements for a SEP described elsewhere in this policy and are reviewed and approved by the department. The SEP settlement shall establish a timeframe within which the second phase must be completed, but generally no later than 24 months from the effective date of the agreement. If the violator opts not to complete the second phase, the balance of the unpaid penalty becomes due and payable to the department.

5) Environmental Education and Training

- a) Environmental education projects are intended to improve environmental behavior, raise the public’s awareness of actions it can take to prevent pollution, and promote environmental sustainability. Environmental education projects increase public awareness and knowledge about environmental issues and provide the skills necessary to make informed decisions and take responsible actions. It teaches individuals how to weigh various sides of an issue through critical thinking and it enhances their own decision-making skills. The department will give priority to projects that include an action component. An action component is needed to provide measurable quantifiable outcomes. An example of an acceptable project would be a lesson plan given to schoolchildren on energy efficiency. The action component could be to purchase compact fluorescent light bulbs for the homes of the children. The children would then calculate how much energy and money they are saving through the installation of the energy saving measure, reporting the cumulative results in the SEP completion report. Education projects that focus on fostering environmentally beneficial behavior using social marketing tools⁴ and/or follow National Guidelines for Excellence in Environmental Education (where applicable) are preferred. The violator must contract with an appropriate external expert to develop and implement an environmental education project.
- b) Environmental training projects are defined as the use of publications, broadcasts, or seminars that underscore the importance of complying with environmental laws or disseminate technical information about the means of complying with environmental laws. These projects provide necessary training and technical support to identify, achieve, and maintain compliance with applicable regulatory requirements; avoid violations; and, go beyond compliance by reducing the generation, release or disposal of pollutants beyond legal requirements. Public awareness projects may include: (a) sponsoring industry-wide seminars directly related to correcting

⁴ For more information on social marketing tools and techniques, please see www.toolsofchange.com, www.cbsm.com or contact the SEP Coordinator at 303-692-2976 for additional assistance.

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widespread or prevalent violations within an industry; or (b) organizing a conference on pollution prevention solutions for compliance in a particular sector. The violator must contract with an appropriate external expert to develop and implement an environmental training project. Environmental training projects using social marketing techniques³ are encouraged.

6) Public Health

A public health project provides preventive, screening, diagnostic, therapeutic health care or education related to actual or potential threats to human health. This may include epidemiological data collection and analysis, medical examinations of potentially at-risk or affected persons, collection and analysis of blood/fluid/tissue samples, medical treatment and rehabilitation therapy.

7) Other Types of Projects

Facilities may propose other types of projects as long as those projects meet all additional requirements of a SEP as described in this policy.

Note: SEPs for research will only be allowed if the study investigates innovative practical pollution prevention or reduction solutions. In addition, the entity conducting the SEP must commit to implement the results of the study, as feasible, and make available the technology or solution to other interested facilities.

V. Extent to Which a SEP Can Mitigate a Penalty

There are two steps in determining the extent to which a SEP can mitigate a penalty. The first step is to calculate the minimum portion of the penalty assessment that must be collected in cash. The second step is to determine the amount of credit each dollar spent on the SEP will receive against the penalty.

- 1) Penalties are comprised of a gravity component and, when applicable, an economic benefit component.
 - a) With regard to the gravity component, the minimum cash component of the penalty must equal 20%. There are exceptions for small businesses (defined as having fewer than 50 employees) as well as for eligible governmental entities⁵. These entities may be allowed to mitigate 100% of the gravity component with a SEP with no cash penalty. The department, however, retains complete discretion in allowing SEPs to mitigate penalties.
 - b) With regard to the economic benefit component, 100% of the economic benefit should be collected in cash, unless the department allows a violator to mitigate economic benefit through a Third Party SEP. Eligible Governmental Entities may be allowed to mitigate the entire penalty in accordance with the department’s Agency-wide Policy on Assessing Administrative Penalties Against Eligible Governmental Entities.
2. In general, the department will consider how well SEPs perform against the five factors listed below in allowing penalty mitigation. Only exceptional projects will be allowed the maximum mitigation.
 - a) Benefits to the Public or Environment at Large - All SEPs must meet this objective. For example, the extent to which a project reduces discharges of pollutants to the

⁵ See the department’s Policy on Settling Administrative and/or Civil Penalties Against Eligible Governmental Entities

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environment and/or reduces risk to the general public resulting in a higher positive environmental effect, rate higher in these factors.

- b) Innovations - SEPs that further the development and implementation of innovative processes, technologies, or methods to more effectively reduce the use, generation, release, or disposal of pollutants; conserve natural resources; or, promote compliance do well in this factor.
- c) Environmental Justice - SEPs that mitigate damage or reduce risk to minority or low-income populations that have been disproportionately exposed to pollution, or are at environmental risk, perform well in this factor.
- d) Cross-media Impacts - SEPs that reduce emissions to more than one medium perform well in this factor.
- e) Pollution Prevention - SEPs that develop and implement pollution prevention techniques and practices perform well in this factor.
- f) Community Input - SEPs that perform well on this factor will have been developed taking into consideration input received from the affected community. No credit should be given for this factor if the defendant/respondent did not actively participate in soliciting and incorporating public input into the SEP.

In determining the amount of credit each dollar spent on a SEP should receive, the ratio of penalty mitigation to SEP cost shall typically be no less than 1 to 1.5 (e.g., to receive \$100,000 in penalty mitigation, a violator must spend \$150,000 on a SEP). The 1 to 1.5 ratio of civil penalty mitigation recognizes the potential cost savings, public relations, and other benefits associated with SEP expenditures that may accrue to the violator. SEP costs may be lower than 150% and, at times, as low as 100% of the amount of the penalty mitigation, if the violator chooses a pollution prevention or energy efficiency SEP and/or can prove there is no benefit to the violator associated with the expenditures⁶. Credit for a SEP cannot be given for a project planned or initiated before the enforcement action because it credits a project that would otherwise occur. A cash donation to a department-approved third party for an approved SEP will typically receive a 1 to 1 ratio.

VI. Legal Guidelines for Negotiating SEPs

- SEPs are not required to have a media nexus to the violation.
- Projects with a geographic nexus are given preference.
- A project cannot be inconsistent with any underlying statute and generally must advance at least one of the declared objectives of state or federal requirements.
- Since the primary purpose of this policy is to obtain environmental or public health benefits that may not have occurred "but for" the settlement, First Party projects started before the department identifies a violation are not eligible as SEPs. Projects developed or implemented before the identification of a violation may mitigate the penalty in other ways. Depending on the specifics, if

⁶ Except as allowed in CDPHE's Agency-wide Policy on Assessing Administrative Penalties Against Eligible Governmental Entities.

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a company had initiated environmentally beneficial projects before the enforcement commenced, the initial penalty calculation could be lower or the violation deemed less severe due to the absence of recalcitrance, no history of other violations, good faith efforts or other factors enumerated in the statutes.

- The department may neither play a role in managing or controlling funds to be set aside or escrowed for performance of a SEP, nor retain authority to manage or administer the SEP. Further, the department will not approve SEPs that require the violator to fulfill a function that is otherwise required by statute. The department may provide oversight to ensure that a project is implemented pursuant to the provisions of the settlement and will retain legal recourse if the SEP is not adequately performed.

VII. Drafting Enforceable SEPs

Generally, the SEP must be set forth in sufficient detail in a signed settlement agreement. The settlement agreement must accurately and completely describe the SEP, including the specific actions to be performed. If the SEP is to be in the form of a donation to a department-approved third party, the project(s) can be identified at a later date so long as the department has the final approval of the project(s). In addition, the agreement should provide for a reliable and objective means to verify that the violator has completed the project in a timely manner. To the extent feasible, the violator should be required to estimate, at the outset, the benefits associated with the SEP and to subsequently track and measure those benefits. The violator is ultimately responsible and legally liable for ensuring that a SEP is completed satisfactorily. The violator may not transfer this responsibility and liability to a third party. The settlement agreement should require a violator to clearly state that the project was undertaken as part of an enforcement action whenever the violator publicizes the SEP and/or the results of the SEP.

VIII. Measurement

When feasible, the initial SEP proposal should include an estimate of all environmental benefits, a description of the methodology used to estimate those benefits, and baseline data regarding the relevant environmental impact in order to measure progress.

The violator may be required to submit status reports as appropriate. A “SEP Completion Report” must be submitted to the department no later than 2 months after project completion. If more time is needed for outcome measurements or project evaluation, a deadline extension should be requested in writing to the department. At a minimum, the SEP Completion Report should include:

- 1) A detailed description of the project as implemented;
- 2) A description of any operating problems encountered and the solutions thereto;
- 3) Itemized costs, documented by copies of purchase orders and receipts or canceled checks;
- 4) Certification and demonstration that the SEP has been fully implemented pursuant to the provisions of the Consent Order; and
- 5) A description of the environmental and public health benefits resulting from implementation of the SEP along with **quantification** of the outcomes and benefits.

The calculation of the cost and benefits of the SEP must include actual costs and economic benefits to the violator. For example, the violator must clearly document any benefits received by the sale of equipment being replaced by the SEP or benefits received from land donations.

Please see **Appendix E** for SEP Completion Report Guidelines.

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IX. Failure to Complete a SEP and Penalties

If a SEP is not completed to the satisfaction of the department within the time periods specified, or the violator fails to implement the terms of the SEP for the entire life of the agreement, the remaining penalty mitigation attributed to the SEP and/or a stipulated penalty shall be paid to the department as an administrative penalty. The department may impose a stipulated penalty, in addition to the remaining penalty mitigation attributed to the SEP, for the violator’s failure to comply with the specific requirements of the SEP (e.g., failure to meet deadlines in the agreement or adequate completion of the SEP). The determination of whether a SEP has been satisfactorily completed is in the sole discretion of the department. Although it is the violator who is ultimately responsible for ensuring that a SEP is completed satisfactorily, third party SEP recipients should recognize that any failure on their part to complete a SEP or submit a SEP completion report would result in a loss of eligibility for receiving future SEP funding.

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Attachment A: Specific elements of an energy efficiency/green energy SEP

- (1) Determine last year's energy use and cost.
- (2) If known energy efficiency improvements are planned or have been identified prior to the SEP, the company can implement these ideas. If energy efficiency improvements are not planned, an energy audit should be conducted. An outside third party should be considered for this work. The Division can assist a company in locating a third party assessor, if needed.
- (3) List all possible energy efficiency projects, capital costs and estimated savings.
- (4) Decide on top-priority projects and implement them. The company can mitigate the civil penalties assessed against the cost of capital improvements and other up-front costs of projects.
- (5) Energy usage should be tracked on a monthly basis to determine energy efficiency savings.
- (6) The savings should be deposited into an interest-bearing account that will be used to:
 - a) Invest in an on-site green energy program (see sample calculations below). For example, the company would purchase x number of blocks of wind energy (1 block = 100 kilowatt-hours @ \$2.50/block of wind energy from Xcel's *Windsorce* Program) for a ten-year period; or,
 - b) Fund and market a community-based green energy program. The fund would be setup as a cost share opportunity for utility customers in the community to purchase *Windsorce* at a reduced premium rate of \$.01/kWh and the fund would pay the remaining \$.015 premium for a minimum of x number of years; or,
 - c) Invest $\frac{1}{2}$ the savings from energy efficiency improvements in a community fund to implement a *Windsorce* buy-down program and the other $\frac{1}{2}$ of the savings in a fund for the purchase of x number of blocks of *Windsorce* to be used on-site.

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Sample Calculations and Worksheet for Determining *Windsource* Purchase

Step I - Determining Electricity Use:

If actual electricity use data are not available, use can be estimated by multiplying the square footage of your facilities by 20 kWh/yr./sq. ft. For example, if the rented or occupied square footage for your agency is 129,592-sq. ft. then your estimated annual electricity use is:

$$\underline{129,592} \text{ sq. ft.} \times 20 \text{ kWh/yr./sq. ft.} = \underline{2,591,840} \text{ kWh/yr.}$$

Your estimate: _____ sq. ft. x 20 kWh/yr./sq. ft. = _____ kWh/yr.

Step II - Determining Electricity Cost:

If actual electricity cost data are not available, electricity cost can be approximated by multiplying the electricity use by \$0.05/kWh. For example, if the actual or estimated electricity use for your facility is 2,591,840 kWh/yr., then your estimated annual electricity cost is:

$$\underline{2,591,840} \text{ kWh/yr.} \times \$0.05/\text{kWh} = \underline{\$129,592}/\text{yr.}$$

Your estimate: _____ kWh/yr. X \$0.05/kWh = \$ _____/yr.

Step III – Determining *Windsource* Goal & Purchase:

Determining the *Windsource* purchase goal will depend on the settlement agreement. The end *Windsource* goal will be the percentage of the electricity that will be purchased from *Windsource* times the annual electricity use. For example: if 25% of the facilities electricity will be purchased through *Windsource*, then:

$$25\% \times \underline{2,591,840} \text{ kWh/yr.} = \underline{647,960} \text{ kWh/yr.}$$

Your Goal: _____ % x _____ kWh/yr = _____ kWh/yr.

$$\underline{647,960} \text{ kWh/yr.} \div 1,200 \text{ Wh/yr./block} = \underline{540} \text{ blocks (rounded up)}$$

Your Block Purchase: _____ kWh/yr. ÷ 1,200 kWh/yr./block = _____ blocks

Step IV – Determining Environmental Benefits

The Xcel Energy of Colorado estimates that for every annual block of *Windsource* purchased, the benefit to the earth’s climate is the same as planting one-half acre of trees, not driving an auto for 2,400 miles or not burning 1,800 pounds of coal. For example:

$$\underline{540} \text{ blocks} \times \frac{1}{2} \text{ acre of trees/block} = \underline{270} \text{ acres of trees planted each year}$$

$$\underline{540} \text{ blocks} \times 2,400 \text{ vehicle miles traveled/block} = \underline{1,296,000} \text{ vehicle miles not traveled each year}$$

$$\underline{540} \text{ blocks} \times 1,800 \text{ lbs. of coal burned/block} = \underline{972,000} \text{ lbs. of coal not burned each year}$$

Your Impact:

$$\underline{\hspace{2cm}} \text{ blocks} \times \frac{1}{2} \text{ acres of trees/block} = \underline{\hspace{2cm}} \text{ acres of trees planted each year}$$

$$\underline{\hspace{2cm}} \text{ blocks} \times 2,400 \text{ vehicle miles/block} = \underline{\hspace{2cm}} \text{ miles not driven each year}$$

$$\underline{\hspace{2cm}} \text{ blocks} \times 1,800\# \text{ of coal burned/block} = \underline{\hspace{2cm}} \# \text{ of coal not burned each year}$$

Step V – Determining Incremental Cost

The cost of all the *Windsource* energy you purchase will be based on your actual metered electricity usage billed at the base electric rate plus a Monthly Wind Energy Service Adjustment. The cost of the *Windsource* Adjustment differs according to your base electric rate and currently varies from \$0.87 - \$0.91 per 100kWh block per month or \$10.44 - \$10.92 per 100 kWh per year. For more information, please contact Xcel Energy at 1-800-481-4700.

$$\underline{540} \text{ blocks} \times \$10.92/\text{yr./block} = \underline{\$16,200}/\text{year}$$

Your estimate: _____ blocks x \$10.92/yr./block = \$ _____/year

\$ _____/yr. x 10 years = \$ _____ total incremental cost

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Attachment B: Definition of Materials Accounting

Materials accounting is an estimate of the inputs and outputs of hazardous or polluting substances over a given time period, i.e., a calendar year. If all inputs and outputs are properly accounted for, inputs should equal outputs. Estimating the inputs and outputs of all substances allows facility managers to clearly see how materials are used and to identify areas for pollution prevention.

Inputs include substances:

- stored at the facility at the beginning of the calendar year;
- brought on site as raw materials;
- manufactured as products, co-products, or non-product output; and/or
- recycled and used on site as raw materials (this includes all materials recycled on site but not in-process).

Outputs include substances:

- stored at the facility at the end of the calendar year;
- consumed at the facility (e.g. molecularly altered so they no longer exist);
- shipped off-site as product; and
- generated as non-product output (this includes all substances that are generated by a production product that are neither consumed nor shipped as product, prior to recycling, treatment and out-of-process recycling).

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Attachment C: First Party SEP Proposal Guidelines

This proposal guideline is to be used by a respondent in an enforcement action who requests to mitigate the administrative civil penalty of a department enforcement action by a SEP. In order for the enforcement staff to begin its evaluation of a proposed SEP, the following information is expected:

- **Enforcement Action** - Indicate the name of the entity and the location of the site associated with the enforcement action. Include the city and county.
- **Project Name** - SEP title
- **Project Manager** - Provide the name, mailing address and telephone number for the project manager, organization conducting the project (if different from the violator), and the person who will be responsible for submitting status reports (if different from the project manager).
- **CDPHE Contact Person** - Provide the name, division, and telephone number of any department staff person who has assisted with the development of this project.
- **Geographical Area to Benefit From Project** - Identify cities, counties, and watersheds that would benefit from the project.
- **Type of Project:**
 - Pollution Prevention
 - Pollution Reduction
 - Environmental Restoration and Protection
 - Environmental Assessments
 - Environmental Education and Training
 - Public Health
 - Other: Please Specify
- **Project Description** - Describe the project including implementation tasks such as technology, operation, or process changes. Describe any efficiency, production or other benefits to the respondent.
- **Expected Environmental and/or Public Health Benefits** - Describe the expected environmental or public health benefits of this project and quantify the environmental benefits to the extent practical.
 - For pollution prevention or reduction projects - Quantify the amount of each pollutant that is expected to be reduced beyond the level required for environmental compliance. Specify the media (air, water, land) to be benefited.
 - For all other types of projects - Quantify the number of sites cleaned, types of contamination contained/removed, acres restored or affected, etc.
- **Project Budget** - Provide projected project costs. Costs must be clearly and solely attributable to the proposed SEP and cannot include any costs internal to the violator, such as: administrative overhead or staff salaries. Please also include calculations of any economic benefit to the respondent.
- **Project Schedule** - Provide a proposed schedule that addresses project implementation, the submittal of status reports to the department and the anticipated completion date. Project implementation must not commence until after the department has approved the SEP in an executed enforcement action.
- **Reporting** - Project reports must provide sufficient information for the department to monitor the project implementation status, to verify and document the proper expenditure of SEP funds, and to evaluate the effectiveness and benefits of the SEP. A SEP completion report must be submitted within 2 months of project completion (please refer to **Section VIII Measurement** as well as **Appendix E** for more information on SEP completion report requirements).

If you have any questions please contact your Enforcement Case Person.

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Attachment D: Third Party and Community SEP Proposal Guidelines

This guidance is intended for use by local governments and organizations seeking the department’s consideration for potential SEP funding in their community in the event that a department enforcement action settlement negotiations may include a SEP located in their area. The entity proposing the SEP must be able to provide detailed documentation to support all statements made in a proposal. The project request will be retained for three years for future consideration during department enforcement action settlements. There are no guarantees the project will be selected. In order for the department to begin its evaluation of a proposed SEP, the information specified below is required.

- **Project Recipient** - Provide the name, mailing address and telephone number for the project manager, organization desiring the project be performed, and the person who will be responsible for submitting status reports (if different from the project manager). The proposal should be accompanied by a letter or resolution from the appropriate board, governing body, or executive staff expressing the organization's commitment to the project if approved.
- **Name of Project** - Title which identifies the SEP
- **CDPHE Contact Person** - Provide the name, division, and telephone number of any department staff contacted regarding this project.
- **Geographical Area to Benefit from Project** - Identify communities, cities, counties, watersheds, etc. benefiting from this environmental project.
- **Type of project:**
 - Pollution Prevention
 - Pollution Reduction
 - Environmental Restoration and Protection
 - Environmental Assessments
 - Environmental Education and Training
 - Public Health
 - Other: Please Specify
- **Project Description** - Describe project including: need for the project; availability of other similar services or projects in the area; and project implementation tasks such as technology, operation, or process changes.
- **Expected Environmental/Public Health Benefits** - Explain expected environmental and/or public health benefits of this project and quantify the environmental benefits to the extent practical.
 - For pollution prevention or reduction projects - Identify the type of each pollutant expected to be reduced.
 - Specify the media (air, water, land) to be benefited.
 - For all other projects - Identify the sites cleaned, types of contamination contained/removed, acres restored or benefited, number of participants, programs offered, etc.
- **Project Cost** - Provide estimated project costs with specific line item expenditures. Costs must be clearly and solely attributable to the proposed SEP. The department may approve a limited amount of SEP funds to be used for administrative or overhead costs.
- **Project Schedule** - Provide a proposed schedule addressing project implementation and submittal of status reports to the department.

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- **Availability of Other Funding** - Describe the availability of funding for this project from sources other than SEP contributors. Include sources of funding secured and applied for directly related to this SEP. Matching funds are not required.
- **Reporting** - Project reports must provide sufficient information for the department to monitor the project implementation status, to verify and document the proper expenditure of SEP funds, and to evaluate the effectiveness and benefits of the SEP. A **SEP completion report must be submitted** to the department within 2 months after completion (please refer to section **VIII. Measurement** as well as **Appendix E** for more information on SEP completion report requirements).
- **Additional Information** – The department reserves the right to require additional information prior to approval of the proposed SEP.

Note: Although it is the violator who is ultimately responsible for ensuring that a SEP is completed satisfactorily, third party SEP recipients should recognize that any failure on their part to complete a SEP or submit a SEP completion report would result in a loss of eligibility for receiving future SEP funding.

If you have any questions please contact your Enforcement Case Person or the SEP Coordinator @ 303-692-2976 or rachel.wilson-roussel@state.co.us .

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Attachment E: SEP Completion Report Guidelines

- **Enforcement Action Information** – Include the enforcement case number and the name and contact information of the enforcement action respondent.
- **Project Manager** - Provide the name, mailing address and telephone number for the project manager and organization performing the project (if different than above).
- **Name of Project** - Title that identifies the SEP.
- **CDPHE Contact Person** - Provide the name and division of any department staff contacted regarding this project.
- **Geographical Area that Benefited from Project** - Identify communities, cities, counties, watersheds, etc. benefiting from this environmental project.
- **Type of project:** Select from the categories below:
 - Pollution Prevention
 - Pollution Reduction
 - Environmental Restoration and
 - Environmental Assessments
 - Environmental Education and Training
 - Public Health
 - Other Projects
- **Project Summary:** Briefly describe project and include any significant results. This summary should be no more than 150 words.
- **Project Description** - Describe project as implemented in more detail. Include any operating problems encountered and the solutions thereto.
- **Environmental/Public Health Benefits** - Explain environmental and/or public health benefits gained from this project and **quantify** the environmental benefits to the extent possible. (Please include assumptions made for calculations)
 - For pollution prevention or reduction projects - Identify each pollutant reduced and quantities. Include calculations and assumptions used.
 - Specify the media (air, water, land) that was benefited.
 - For other projects - Identify the sites cleaned, types of contamination contained/removed, acres restored or benefited, number of participants, programs offered, gallons of water conserved, etc.
 - Identify dollars and environmental benefits leveraged due to SEP funding
- **Project Budget** – Include actual itemized costs. Documentation of the expenses **MUST** be included as an appendix to the completion report. Documentation includes: copies of purchase orders and receipts, invoices marked paid or with a zero balance or canceled checks.
- **Certification Statement**– The respondent must certify that the SEP has been fully implemented pursuant to the provisions in the Consent Order.

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- **Other Relevant Information** – Include any other relevant information you feel is necessary to demonstrate the success of the project. Examples include: press releases, media reports and articles, letters of appreciation, etc.

If you have any questions please contact your Enforcement Case Person or the SEP Coordinator @ 303-692-2976 or rachel.wilson-roussel@state.co.us.