



Beyond Waste Issue Paper

Fee Systems

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Fee Systems

Getting “Beyond Waste”

The Department of Ecology (Ecology) has embarked on a project to update the statewide solid and hazardous waste management plans. The aim of the Beyond Waste Project is to guide Washington in a new direction away from simply managing wastes and toward preventing wastes from being generated in the first place. The vision statement for Ecology’s Beyond Waste Project is, *“We can transition to a society that views waste as an inefficient use of resources and believes that many wastes can be eliminated. Eliminating wastes will contribute to social, economic, and environmental vitality.”*

This is one of eight issue papers prepared by Ecology staff to help in the development of strategic plans to move Washington in a new direction, a direction that will take us beyond waste.

Introduction

Fees may be used as powerful economic tools to influence the decisions and behavior of businesses and individual consumers. Fees may also be used to generate revenues to pay for important government programs and services.

In the environmental arena, carefully designed fee programs may have immediate, direct and measurable effects on behavior. This is in comparison to the slower and uncertain effects of traditional methods of influencing environmental behavior through regulation, permitting, enforcement, assistance, education, or recognition programs.

The Hazardous Waste and Toxics Reduction Program within Ecology currently relies on three separate fees as sources of revenue to support pollution prevention and hazardous waste management programs. These include the Hazardous Waste Education Fee, Hazardous Waste Planning Fee, and Hazardous Substance Tax. These fees are important sources of financial support, but they are weak tools in promoting waste reduction or discouraging waste generation.

In this issue paper a written summary is provided of the steps used to identify and evaluate fees to reduce or eliminate hazardous wastes. Some general conclusions and recommendations on needed changes and how we can achieve the Beyond Waste vision follows.

Vision

Ecology envisions a transition to a society that eliminates wastes and treats them as inefficient uses of resources, which contributes to the environmental, economic, and social vitality of the state. We realize this transition to re-use and reduction of hazardous substances will take many years. However, in the short-term, we should plan to position the state to be more effective in reducing wastes through revised policies and programs, including better service to the public, business, and government.

Technical assistance to business and industry is currently funded by revenues collected from Hazardous Waste Planning and Education Fee programs. These existing fee programs have been used as the “starting point” for discussions. The following questions were considered during analysis:

- a) Do current fee systems promote positive environmental behaviors?
- b) Do current fees appropriately target toxics and waste at their source?
- c) Will these fees help us move toward the Beyond Waste vision?
- d) What changes are needed to attain the Beyond Waste vision?
- e) How do we get there?

Study Approach

In general terms, the following describes the process by which fee system issues were examined in this paper:

- Step 1:** Develop goals and criteria describing the characteristics of existing fees that are effective in creating positive environmental results.
- Step 2:** Develop a rating matrix to use as a tool for analyzing and comparing existing and conceptual fee system models using the developed rating criteria.
- Step 3:** Review other fee/tax incentive programs and identify strategies to assist in meeting identified goals.
- Step 4:** Apply the matrix tool and criteria developed in Steps 1 and 2 to existing and potential fees and assess for strengths and weaknesses.
- Step 5:** Describe some conceptual models for further study.

Goals and Criteria

Two major goals and the criteria for an effective fee program were identified.

Goal #1: Raise Needed Revenue

Criteria:

- **Stable Funding Base**
Does the fee program generate funds consistently and reliably, in order to continue assisting business and industry to reduce wastes and toxics?
- **Adequate Funding to Meet Environmental Needs**
Is funding sufficient to meet changing waste/toxics reduction needs?
- **Ease of Administration**

Are the costs and complexity of implementation reasonable compared to the amount of revenue collected?

- **Fee Distribution is Reasonable and Equitable**

Is the fee amount proportional to the environmental impact of toxics/wastes generated?

- **Service Directed Fees**

Are revenues from fees directed to benefit fee payers?

Goal #2: Reduce the Use and Disposal of Toxics

Criteria:

- **Fee Imposed at Time of Purchase or Usage**

Does the fee provide incentives for eliminating “end of pipe” wastes/toxics?

- **Costs are adequate to Motivate Behavior Change**

Does the fee make positive environmental changes happen?

- **Fee is Visible and Easily Understood**

Is the fee “hidden” in other taxes or costs, or related directly to wastes generated or hazardous substances used?

- **Fee Uses “Polluter Pays” Principle**

Are fees assessed equitably according to amount of waste or toxics generated?

Specific Fee/Tax Programs

Background on Taxes, Fees, and Charges

In discussing Hazardous Waste Fees and Taxes administered by Ecology, it is necessary to clarify terms often used interchangeably: fees, taxes, and charges. All are market based policy instruments and encourage behavior through market signals rather than through explicit directives regarding pollution control levels or methods.

EPA defines charges, fees, and taxes collectively as “payments required from pollution sources.” EPA uses these terms interchangeably but notes the following differences: “a tax is a purely revenue raising instrument, whereas charges or fees are intended to offset cost to the government.”

The use and effectiveness of market based instruments in the U.S. has been severely limited by authorizing legislation. EPA’s policy on the subject is that, with respect to fees, taxes, and charges, the principle of “polluter pays” applies primarily and often exclusively to the costs of regulating pollution. With rare exception, fees, taxes, and charges are not set at a level to change behavior. (*See Appendix No .1, Discussion of Taxes, Fees, & Charges*)

In 1990, legislation established the Office of Waste Reduction, administered by the Hazardous Waste and Toxics Reduction Program at Ecology. Rules were established for the development of two, separate fee programs called the Education Fee and the Planning Fee programs. The programs collect fees from businesses state-wide.

Although, the adopted rules governing fee assessment are different, both programs are based on generation of wastes and toxics and are used for similar purposes, namely advising, consulting, and assisting business and industry in waste reduction/planning activities. The funds are co-mingled and deposited in the Hazardous Waste Assistance Account (HWAA). (*See Appendix No. 2, Planning & Education Fee Legislation*)

The following is a brief description of the fee programs and a summary of the findings of the study team that prepared this Issue Paper:

Hazardous Waste Education Fee

This annual fee, termed the base fee in the legislation, is a flat fee with provisions for increases, based on current inflation rates. Businesses are assessed this fee based on active, tax ID numbers, gross revenues from business activities, and industrial classifications. The fee is currently assessed at \$46 per business and in 2002 it generated approximately \$750,000.

This fee program has been controversial from its inception, due its impact on a wide range of business types, even those that generate little or no waste. Over 100,000 businesses were selected by Ecology staff in the initial legislation. However, negative public outcry forced staff to re-examine all business classifications and eliminate some of those that generated little or no waste. This reduced the number of business classifications billed from 437 to 301. The original legislation was also amended to strike an existing 300% fee penalty provision for late or non-payment. These amendments, along with adoption of internal administrative procedures mitigated some concerns, but the program continues to experience many structural and administrative problems. (See *Appendix No. 3, Education Fee Statistics & Background Information*)

Summary of Findings

Pros

- Provides a constant, dedicated source of funding
- Funds are used for waste reduction/pollution prevention activities state-wide
- Provides person-to-person contact on waste issues

Cons

- Controversial, not well accepted by the public
- Difficult to administer; multi-agency involvement, lots of paper work
- Inequitable, based on industrial code, not amounts of waste generated
- Fee payer selection criteria is poorly defined
- No incentives to reduce waste streams, fee payers regard the fee as a "tax"
- Waste reduction benefits to fee payers are minimal and hard to track, since funds are co-mingled with those collected from facility planners
- Does not promote positive environmental behavior

Hazardous Waste Planning Fee

The State Hazardous Waste Reduction Act requires many hazardous waste generators and hazardous substance users to prepare Pollution Prevention Plans for the reduction of hazardous wastes and substances. It also requires facilities to pay an annual fee to support implementation of the planning requirements.

The annual planning fee is assessed on all facilities that generate more than 2,640 pounds of recurrent hazardous waste annually or that report toxic releases as part of the federal Toxics Release Inventory requirement. Funds are used in plan review, technical planning assistance, and other activities related to plan development and

implementation. The fee is assessed, using a fee per pound rate for both dangerous and extremely hazardous waste, and toxic releases adjusted for inflation. (*See Appendix No. 4, Planning Fee Statistics & Background Information. For additional background information, see Appendix No. 5, Examples of Other State & International Fee & Rebate Programs*)

Planning Fee Program Accomplishments

The planning law and fee program has been in existence for 13 years (since 1990) and it has provided a constant source of dedicated funding for waste reduction and pollution prevention activities. Recurrent hazardous waste streams have decreased by 49% and Ecology has been successful in promoting a state-wide ethic in hazardous substance/waste reduction in business and industrial circles that is constantly refined as time passes. However, the fee formula as designed may be inadequate for achieving all that has to be done to reduce waste and hazardous substances. A detailed assessment of these issues is presented below. (*See the Beyond Waste Issue Paper on Pollution Prevention for a full discussion.*)

Planning Fee Problems

Legislation restricts the amount of fees collected from individual facilities and for the program as a whole through the use of fee caps or limits. Fee caps create inequities in applying the fee formula to individual facilities and restrict total revenues available for program use in providing technical assistance. Current capping limits include:

- \$13,192 cap on individual facilities
- \$60 cap on fees for facilities generating at least 2,640 pounds of waste, but less than 4,000 pounds (waste only)
- \$1,361,474 cap on total program revenues (with adjustments for inflation)

Cap Inequities

The cap on individual facility fees creates, in some cases, a disparity in actual rates assessed per pound of waste generated as well as total fees paid between capped vs. non-capped facilities. Large, generators with capped fees pay a much lower rate and contribute a smaller overall share of the total annual planning fee each year. Table I shows this disparity in proportion of waste generated and total fees paid for years 1994 and 2002. Tables II-A & II-B show the actual rates billed per 10,000 risk pounds of waste.

TABLE I
PLANNING FIRMS BY FEE STATUS
1994 and 2002

YEAR & CATEGORY	NUMBER OF FACILITIES	TOTAL FEE POUNDS (IN TONS)	PROPORTION OF TOTAL FEE POUNDS	TOTAL AMOUNT BILLED
1994				
FACILITIES W/CAPPED FEES	63	10,436,557	99.806%	\$689,409
FACILITIES W/O CAPPED FEES	417	20,193	0.193%	\$510,138
FACILITIES THAT DO NOT PAY	206	53	0.001%	-----
2002				
FACILITIES W/CAPPED FEES	56	379,315	99.98%	\$738,752
FACILITIES W/O CAPPED FEES	496	8,344	0.02%	\$622,723
FACILITIES THAT DO NOT PAY	182	3,858 (TRI)	not added in	

Note: Program revenue cap for 1994 was \$1,199,547 and for 2002 it was \$1,361,475. Figures include adjustments for inflation.

Individual facility cap for 1994 was \$10,943 and for 2002 it was \$13,192.

Facilities That Do Not Pay are those facilities whose fees are not cost effective to collect.

TABLE II-A
ACTUAL RATES BILLED TO PLANNING ENTITIES IN 1994
(per 10,000 risk pounds)

Actual Rates Billed Per 10,000 risk pounds	Number of Facilities	Actual Amount Billed	Total Billings
Capped Firms			
<\$1.00	9	\$10,943	\$98,487
\$1.00-\$10.00	17	\$10,943	\$186,031
>\$10.00-\$50.00	17	\$10,943	\$186,031
>\$50.00-\$100.00	12	\$10,943	\$131,316
>\$100.00-\$130.00	8	\$10,943	\$87,544
Subtotal	63		\$689,409
Non-Capped Firms			
\$130.00	382	From \$56 to \$10,942	\$508,213
Firms Generating <4,000 Risk Pounds	35	\$55.00	\$1,925
\$28.94 (average)			
Totals	480		\$1,199,547

TABLE II-B
ACTUAL RATES BILLED TO PLANNING ENTITIES IN 2002
(per 10,000 risk pounds)

Actual Rates Billed Per 10,000 risk pounds	Number of Facilities	Actual Amount Billed	Total Billings
Capped Firms			
\$1.00-\$5.00	33	\$13,192	\$435,336
>\$5.00-\$10.00	7	\$13,192	\$92,344
>\$10.00-\$50.00	10	\$13,192	\$131,920
>\$50.00-\$100.00	4	\$13,192	\$52,768
>\$100.00-\$360.00	2	\$13,192	\$26,184
Subtotal	56		\$738,752
Non-Capped Firms			
\$360.00	422	From \$61 to \$13,191	\$618,222
Firms Generating <4,000 Risk Pounds	75	\$60	\$4,500
\$13.23 (average)			
Totals	553		\$1,361,474

The tables clearly show the actual rate paid per pound of waste is considerably higher for non-capped facilities and the disparity increases when one examines 2002 data.

Current Exemption

Another fee equity problem concerns the exemption afforded facilities that release toxics. The current \$60 fee cap applies to facilities that generate between 2,640 and 4,000 lbs of wastes and does not consider the amount of toxic releases. This had led to disparities in fee amounts assessed to different facilities. Facilities may use or release thousands of pounds of hazardous substances, but if they generate between 2,640 and 4,000 lbs of waste, their fee cannot exceed the \$60 limit. For example a firm that generates 3,999 lbs of wastes and releases 200,000 lbs of toxics to air, water, or land has their fee capped at \$60. However, a firm generating 4,100 lbs of dangerous waste with no toxic releases will pay more than the \$60 cap. In addition, the threshold for the fee is based initially on wastes generated, not toxics released. Some facilities release toxics, but generate no waste and as a result, they pay no fee. It is also anticipated that, as volumes of extremely hazardous waste are reduced or eliminated, total fees from large facilities will be substantially reduced, since the fee is assessed at 10 times that of dangerous waste.

Individual Facility Fees

Facility fees have risen, since implementation of the program, because of changes in the total generation of waste state-wide and inflationary factors. This increase has had a disproportionate impact on non-capped facilities. Data shows the capped facility fee has risen from \$11,433 in 1996 to \$13,706 in 2002, an increase of approximately 20

percent. The fee rate increase for non-capped facilities is much higher. Using the calculated state-wide rate per pound for each year from 1996 to 2002 and a hypothetical waste generation rate of 10,000 pounds per non-capped facility, Ecology has estimated the potential increase in fees. That estimate shows the potential for non-capped facility fees increasing from \$170 in 1996 to \$590 in 2002, a 247% increase. (See *Appendix No. 4, P2 Planner Fee Trends; Capped vs. Uncapped Facilities, 1996-2002*)

This inequity becomes more apparent, when fee growth is forecasted by facility type for the next seven years; up to 2010. It is anticipated the fee for non-capped facilities will grow about 575% and only 50% for those that are capped. It was also found that actual fee amounts paid by non-capped facilities will be greater than capped facilities in the next 17-20 years. (Ecology's Northwest Regional Office, *Hazardous Waste & Toxics Reduction Program staff research. See Appendix No. 4, tables and charts titled Percent Change in Planning Fees & Maximum Fee vs. Fee Paid by 100,000 lb/yr Generator*)

Potential Revenue Shortfalls

The \$1.37 million cap on total revenues (includes an inflationary factor) restricts total revenues for funding the Hazardous Waste & Toxics Reduction Program. Since the funds can only be used to provide planning and technical assistance, future revenue shortfalls will occur as demands for staff assistance increases and pollution prevention strategies become more complex. Currently, costs exceed revenues and the fund balance is in decline. There are also difficulties in tracking the expenditures from the two fee programs. Revenues from both fee programs are deposited in a single account, the Hazardous Waste Assistance Account and are not tracked separately, creating difficulties in tracking the use of funds for the maximum benefit of all fee payers, both planners and non-planners.

Summary of Findings (Existing Planning Fee System)

Pros

- Provides a constant level of dedicated funding for technical assistance and outreach to business and industry for implementing pollution prevention activities
- Promotes an environmental ethic for large industries to achieve waste reduction goals
- A proven success in reducing a significant amount of waste state-wide

Cons

- Legislatively mandated fee caps on individual facilities create inequities in planning fee assessments
- The current fee formula excludes the impact of hazardous substances used and does not adequately assess impacts
- The current revenue cap restricts expenditures to support technical assistance and outreach.

- Revenues provide technical assistance to facility planners and other program activities. The fee system does not address “upstream” waste/hazardous substance reduction and dictates an “end of pipe” solution

Hazardous Substance Tax

The Model Toxics Control Act (MTCA), approved by voters in 1988 as Initiative Measure Number 97, established a tax on hazardous substances. It is of key importance with respect to the management of hazardous materials for two distinct reasons: it generates a major portion of the funding for the state Hazardous Waste Program and it provides a possible means to reduce hazardous substances in products before they can enter the environment. Research has shown that the major portion of hazardous substances released in the environment come from products. This major pathway is woefully neglected by existing fee programs and only partially addressed in the current Hazardous Substance Tax Program.

The MTCA statute, (Chapter 82.21RCW), imposes a tax of 0.7% on “the first possession of all hazardous substances “in the state. The tax is applied to the wholesale value of hazardous substances. Under provisions of the law, hazardous substances are those defined in federal statute, petroleum products, federally registered pesticides, and “other substances determined by the director of ecology by rule to present a threat to human health or the environment, if released to the environment.

MTCA established both the state and local toxic control accounts, with 47% of the revenue going to the state and 53% to local accounts. Proceeds from the Hazardous Substance Tax play a major role in funding three Ecology programs: the Hazardous Waste and Toxics Reduction (HWTR) Program; the Solid Waste and Financial Assistance Program (SW&FAP); and the state Toxics Cleanup Program. (*See Appendix No. 6, Summary of the State Hazardous Substance Tax*)

Currently, over 8,000 different hazardous substances are subject to the Hazardous Substance Tax, with approximately 85% of the tax collected coming from petroleum products. The majority of the funds (\$8.0m in FY 2001) are used to fund site cleanup work by Ecology’s Toxics Cleanup Program rather than pollution prevention and toxics reduction activities. Additional funds from the State Toxics Account go to the Nuclear Waste and Spills Programs. Other agencies that receive State Toxics Control Account funding are the Departments of Health and Agriculture.

In 2001, the Hazardous Substance Tax generated \$34,624,799 or 84% of the \$41,109,581 received by the State Toxics Control Account. In the current biennium, this account contributes 55.6% of the total HWTR Program budget of \$18.9 million. This account and the Local Toxics Control Account, also funded by the Hazardous Substance Tax, provide \$6.9 million or 30% of the current biennial operating budget of \$22.8 million of the SW&FA Program. Together, these two Ecology programs receive 42% of their biennial funding from the Hazardous Substance Tax.

As a result of the high volume and high value of petroleum imports to the state, the very low Hazardous Substance Tax of 0.7% generates sufficient revenue to fund a significant portion of three Ecology programs and it makes significant contributions to the budgets of other state agencies. As a result of their dependence on the Hazardous Substance Tax for major portions of their funding, all three Ecology programs are vulnerable to the considerable volatility in the world petroleum markets. However, the 0.7% rate of taxation as applied to hazardous substances provides little incentive to reduce the use of those hazardous substances.

Summary of Findings (Existing Hazardous Substance Tax)

Pros

- The Hazardous Substance Tax provides a major source of non-dedicated funding for the Hazardous Waste & Toxics Reduction Program, the Solid Waste & Financial Assistance Program, and the Toxics Cleanup Program
- Revenues are derived from taxes on hazardous substance use, not waste
- The tax supports collection of revenue early in the production process

Cons

- Revenues from the Hazardous Substance Tax can fluctuate because of volatility in the petroleum market
- The low tax rate is not an incentive to changing behavior such as reducing hazardous substance use

Where Are We Headed?

The following summarizes current trends if we “stay the course” for both the existing fee programs that fund the Hazardous Waste Assistance Account and the Hazardous Substance Tax that funds the Local and State Toxics Control Accounts.

If planning and education fees do not change:

- They will continue to provide a constant, dedicated level of funding
- They will continue to provide funding to assist industries to develop strategies for reducing wastes and toxics
- The levels of hazardous wastes and toxic substances will continue to grow as the economy expands
- Technical assistance for pollution prevention will not keep pace with the increased generation of wastes and/or hazardous substances use
- Fee assessment inequities will grow
- The lack of economic incentives will not be sufficient to significantly reduce hazardous wastes or the use of toxic substances

If the Hazardous Substance Tax does not change:

- It will continue to provide a major source of non-dedicated funding for three Ecology programs
- It will provide little or no incentive to reduce the use of hazardous substances

- It will continue to generate fluctuating revenues because the major portion of the revenues are derived from petroleum based products
- The reliance on a petroleum-based tax will continue to minimize the incentive to reduce use of other hazardous substances covered by the tax
- Hazardous substances imported into the state in products, the major source of hazardous substances in the state, will not be taxed

Evaluation of Existing and Potential Fee/Tax Systems

A matrix tool was designed to score existing and potential fee and tax programs against the developed criteria. The scoring, although subjective, compares how well existing and conceptual fee/tax systems match up to the goals and future vision of the Beyond Waste project. The following discussion summarizes an assessment of the matrices for the existing fee programs and the Hazardous Substance Tax system. Then, some conceptual fee program models are discussed that can move the HWTR Program toward the Beyond Waste vision. (See *Appendix No. 7, Fee Model Evaluation Matrix & Criteria*)

Discussion

Hazardous Waste Education Fee

An evaluation shows this fee provides a stable funding base, but does not score highly on any of the other criteria and cannot be considered a viable program for promoting positive environmental behaviors or achieving the Beyond Waste vision. The fee has been controversial, difficult to administer, non-targeted, inequitable, and should not be considered in future fee systems.

Hazardous Waste Planning Fee

This program rates higher because of three significant factors: the fees have been successfully targeted for planning assistance; the program is easier to administer (the number of facilities assessed is relatively small); and the fee purpose is easily understood. The Planning Fee program has also provided positive benefits and has resulted in technical assistance that has reduced waste state-wide. However, fee caps have created inequities in individual fee payments and these caps also impact total revenues available for program development. In addition, the program does not adequately support the highest waste management priority; "hazardous substance reduction," and it utilizes an "end of pipe" approach that does not adequately recognize the toxicity inherent in substances or products.

Hazardous Substance Tax

By imposing fees early in the production process (first possession of hazardous substances) this system rates the highest in the potential to prevent the dispersal of toxics. However, the tax rate is low and the resulting cost increase for the purchaser is not enough to motivate behavior change. Program revenues can fluctuate widely because of the rise and fall in cost of petroleum products. Most importantly, the tax

does not apply to finished products containing hazardous substances. This is most likely the largest source of hazardous substances in the environment.

In summary, none of the current fee or tax programs score highly as a model fee system for the future.

Fee System Models

Introduction

Ecology focused on analyzing existing fee/tax systems to answer the following questions:

- a) Do current fee systems promote positive environmental behaviors?
- b) Do current fees appropriately target toxics and waste at their source?
- c) Will these fees help us move toward the Beyond Waste vision?
- d) What changes are needed to attain the Beyond Waste vision?
- e) How do we get there?

The analysis provided the following answers to these questions:

- Current fees and taxes do not promote significant, positive environmental behavior, since they are not equally assessed and not large enough to stimulate change.
- Current fees are not effective in reducing use of hazardous substances since they assess “end of pipe” waste/toxics generation and do not address hazardous substances in products.
- The Hazardous Substance Tax does address hazardous substances in products, but the effects are minimal because the tax rate is low.
- Progress toward the Beyond Waste vision can be accomplished by working with existing fee/tax program structures, especially the Hazardous Substance Tax. However, the proposed changes will require additional study, a political climate conducive to change, and actual changes in legislation.

Using background information and analysis of the existing hazardous substance fee program in Washington State, other state fee and tax programs, and the impacts caused by adopting the “no change” alternative, this issue paper proposes two models of alternative fee systems that share the following characteristics:

- They address the limitations identified in the existing fee/tax system.
- They create incentives that will move toward the vision of the Beyond Waste Project.
- They are variations on existing fees or taxes.
- They provide revenue to meet program needs.

Model 1: Improving the Current System

Characteristics:

- Eliminates the Hazardous Waste Education Fee and uses an increased Hazardous Waste Planning Fee program to replace Education Fee revenues.
- Removes current individual fee caps to better align fees with quantities of hazardous waste generated and toxic substances used.
- Removes the current cap on total program revenues to be replaced with one that adjusts for both inflation and population growth.
- Broadens the fee base to include a generator fee to support hazardous waste permitting and compliance activities.
- Closes the loophole that exempts facilities generating between 2,640 and 4,000 pounds of waste from paying an equitable fee for toxics released as emissions.
- Re-assesses the existing fee/waste generation structure and recommends strategies to promote fee assessment equity among planning facilities.

Model 1 is useful in the short-term by providing a stable funding source to allow Ecology to continue to offer technical assistance to facilities so they can comply with the hazardous waste regulations. It also provides revenue for use in assisting facilities in waste/toxics reduction strategies. Model 1 provides continuity for waste/toxics reduction program plans and it maintains the current Hazardous Substance Tax. However, this model does not motivate significant behavior change and it still relies on “end of pipe” fee collection.

Benefits:

- Ease -- Model 1 eases the administrative problems of fee assessment by eliminating the Hazardous Waste Education Fee and significantly reducing the number of fee payers.
- Fairness -- This model replaces the current caps on facility fees with a fee that directly relates to the amount of waste generated and it eliminates the existing toxic release exemption.

Weakness:

- Effectiveness -- The revised Hazardous Waste Planning Fee would not be enough to impact business or consumer behavior.

Model 2: Increase the Hazardous Substance Tax on Non-Petroleum Hazardous Substances

Model 2 proposes a shift in the organization of Ecology away from the management of hazardous wastes and toward the use of economic incentives to reduce the use of hazardous materials or substances. This recommendation recognizes that a major portion of the hazardous and toxic substances that enter the environment do so as

products, not as wastes. In order to discourage the generation of hazardous wastes and, most importantly, to discourage the incorporation of hazardous substances into products, Model 2 will:

- Replace the existing Hazardous Waste Education Fee Program and the Hazardous Waste Planning Fee Program with an increased Hazardous Substance Tax on non-petroleum hazardous substances. This *tax shift* would at least maintain the current funding provided by these fee programs to the Hazardous Waste Assistance Account.
- Offer the opportunity to create a strong incentive for reduced use of non-petroleum hazardous substances through a dramatic increase in their price. The Hazardous Substance Tax rate could be raised high enough to make unsustainable products (those containing hazardous substances) more expensive than sustainable ones. This *tax increase* option is explored in more detail below.

Model 2 advocates a dramatic shift in our approach to waste/source reduction by shifting funding from hazardous waste generated in production to the more significant source of hazardous materials in the environment, the use of hazardous substances.

Under Model 2:

- The tax rate on petroleum hazardous substances in the current Hazardous Substance Tax is retained.
- The tax rate on non-petroleum hazardous substances is significantly increased.
- Revenue generated by a higher Hazardous Substance Tax rate on non-petroleum hazardous substances can be sized to meet various purposes. Depending on the goals chosen, these purposes include:
 1. Simply replacing the Hazardous Waste Assistance Account funding (a tax shift).
 2. Achieving a revenue target such as producing \$10m of new revenue (or some other number) set to equal the cost of certain programs within Ecology or programs or services outside of Ecology (a tax increase).
 3. Achieving systemic behavior change, where non-petroleum hazardous materials simply cost more. An economic analysis would determine the amount of the price increase needed to accomplish a behavior change such as a reduced demand for products containing hazardous substances.

Possible Goals of a Hazardous Substance Tax Increase

Revenue generated by a tax increase could be used in various ways:

- Replace other Ecology revenue sources for ongoing programs such as those funded by the State Toxics Control Account or the General Fund.
- Add additional revenue to fund new or expanded Ecology programs such as the Strategy to Reduce Persistent Bioaccumulative Toxins (PBT).
- Provide additional revenue to one or more programs that are external to Ecology that have a strong link to hazardous substances (basic health coverage, K-12 education, pre-natal care, PBT Strategy implementation, alternative energy programs, a green business fund).

The Role of Time

It is important to note that this proposal could create a large tax increase. For instance, raising \$100m annually means increasing the Hazardous Substance Tax from 0.7% to about 10%; to serve as a price disincentive the tax may need to exceed 50%, which would generate more than enough money to fund Ecology's entire operating and capital budgets. A large tax increase is politically not feasible and it is economically disruptive unless it is phased in over time. For instance, a 50% tax rate could be phased in at 2% a year over 25 years. This gives companies time to anticipate and adjust to the price increases.

Benefits:

- Equitability -- Model 2 taxes all hazardous materials whether they are products, wastes or emissions.
- Fewer Hazards -- Can reduce hazardous substance usage through price disincentives.
- Ease -- Eliminates two fees for businesses and related administration problems for Ecology.
- Supports Environmental Programs -- Can generate revenue for related social, business, environmental or health programs. The revenue will decline over time, however, if the tax is successful.

Weaknesses:

- Business Disadvantage -- May give out-of-state businesses a competitive edge over Washington businesses. What about waste that enters the state as products (e.g., CRTs)?
- Administration -- Builds on a tax that the Department of Revenue dislikes.

Caveats for Model 2

Approximately 85% of the revenue from the Hazardous Substance Tax comes from the tax on petroleum products. However, the tax is applied to a total of over 8,000 substances and this creates significant administrative problems for the Department of Revenue. Consideration needs to be given to targeting the proposed revised Hazardous Substance Tax to a selected portion of non-petroleum hazardous substances.

Ecology recommends a technical analysis of the proposals in Model 2. First, an analysis should consider the price elasticity of the non-petroleum hazardous substances that would be taxed at a much higher rate. Such information would indicate whether the proposed tax increase would lead to a reduction in the use of these hazardous substances and, if so, the effect of such a decline on tax revenues. It should also consider the effect of such a tax on the competitive position of Washington businesses.

Second, an analysis should be done on the feasibility and consequences of shifting the Hazardous Substance Tax from hazardous substances imported as raw materials to a

tax on finished products sold in the state that contain hazardous substances. Such a shift would significantly increase the incentive to eliminate or reduce hazardous substances imported into the state and, eventually, discharged into the state's environment. On the other hand, such a change would create potential problems for business in Washington.

Changes Needed to Achieve the Beyond Waste Vision

Model 1 - Short-term (5-10 years)

The changes proposed in Model 1 focus on obtaining some degree of equity in fee application and needed efficiencies in administrative requirements. It recognizes the need to continue exerting pressure to "make the polluter pay," but at the same time Model 1 provides assistance for promoting pollution prevention and regulatory compliance.

It is important to note that the current fee system has been in place since 1990, with little or no change. The funds from the Hazardous Waste Education Fee and the Hazardous Waste Planning Fee have been an important source of revenue to allow Ecology to assist facilities in reducing wastes and toxics and providing on-site consultation. Wastes and toxics have been reduced. However, because of legislated fee caps on large waste generators, fees for smaller planning facilities have increased at a greater rate than fees for larger facilities even though waste generation has been reduced overall. This sends a mixed message to facilities (see the Beyond Waste Issue Paper on Pollution Prevention Planning).

Implementation of the changes in Model 1 will require a well thought-out strategy and support from all sectors of government, the citizens of Washington, and the business community.

Implementation Strategies:

- Establish a stakeholder process to review the existing hazardous substance fee programs and make recommendations, much like the process created when the law was enacted in 1990
- Undertake careful analysis of program needs and revise the existing program to achieve interim milestones
- Adopt legislative amendments and make the appropriate changes to the guidelines for implementation of the Hazardous Waste Planning Fee

Model 2 – Long Term (10-20 years)

A change of the magnitude suggested in Model 2 will require an extensive effort by Ecology's planning staff to accomplish the following:

- Undertake a detailed analysis of the price elasticity of non-petroleum hazardous substances

- Explore the feasibility and benefits of targeting a selected number of non-petroleum hazardous substances for taxation at a higher rate
- Explore the feasibility and consequences of applying the Hazardous Substance Tax to products imported for purchase in the state
- Write and pass legislation to:
 1. Change the Hazardous Substance Tax on non-petroleum hazardous substances.
 2. Designate non-petroleum hazardous substances subject to the increased tax, based on the above analysis.
 3. Designate that revenues collected from the revised Hazardous Substance Tax fund the State Toxics Control Account.
 4. Shift funds currently collected by the Hazardous Substance Tax on petroleum from the State Toxics Control Account to other state programs.

How Can We Get There?

Milestones: It is difficult to predict when short-term change could occur, since both short and long-term strategies will require revisions to existing Washington State codes and rules, governing both the fee and toxics programs. The proponents of change will need to be aware of the political climate, initiate support for sponsoring program changes, and be sensitive to economic forces that offer opportunities to reduce toxics. A change of this magnitude will also require other Ecology programs that rely on Hazardous Substance Tax funding to understand the impacts, both positive and negative. The schedule for change will be dictated by identification and implementation of existing priorities identified in the HWTR Program Plan, especially those that impact the direction of the existing Pollution Prevention Planning Program.

Legal: Some existing laws related to hazardous waste fees would need to be repealed and new regulations written to expand the scope of existing fee programs, compliance, and permitting activities for the short-term. Chapter RCW 70.105D, Model Toxics Control Act, would require amendments to increase the tax rate to meet long-term toxics reduction goals and provisions to ensure tax increases would be dedicated to HWTR Program priority issues.

Legislative changes to the existing law could meet with stiff opposition, especially if individual facility fee caps are removed. The existing fee caps and the fee formula, enacted in law is the product of intensive deliberations by both industry and citizen advocates. A cursory review of Chapter 70.95E RCW indicates the language would need to be amended to adjust caps on individual fees and the program as a whole.

Organizational: No new programs would have to be developed; programs are already in place to assist in promoting recommended changes. The HWTR Program and subsequent fee regulation provides technical assistance to businesses state-wide. The Model Toxics Control Act currently collects tax revenues from hazardous substances. Although not a “minor” undertaking, changes can occur within established frameworks.

Partners: Much of the support for these changes should come from advocates for a cleaner environment. These include educators, public health advocates, environmental organizations, and those businesses that practice sustainable activities. Some other businesses would also support the change, especially those smaller ones that are currently assessed the Hazardous Waste Education Fee, since that program would be eliminated. Hopefully, the current state government policy on sustainability will allow other state agencies to promote the recommended changes. Consumers will have to provide a strong voice for change.

Educational: The legislature and potential opposition forces will need to understand how this controversial measure simultaneously promotes what Ecology values (revenue for education and higher levels of awareness) and discourages what is not value (toxics). It also must convey how the proposal promotes equity and minimizes administrative costs by tying costs associated with pollution directly to their source; namely, hazardous materials.

Manufacturing: The program will promote process redesign by increasing the Hazardous Substance Tax which will drive desired changes even without any education or specialized knowledge. Businesses will be motivated to innovate. Technical assistance will amplify the changes.

Measuring Success: It is anticipated that there would be a significant drop in the volume of hazardous materials used in manufacturing processes and wastes/toxics generated. The resulting decline in tax revenues, tracked by the Department of Revenue, would be available to monitor program progress.

Opponents: Businesses that use or rely on large amounts of toxic substances may oppose this action. The proposed Hazardous Substance Tax will encourage them to purchase only the toxic materials they absolutely need and recover what they can. Many will argue for their “right to pollute,” however, social values do not support this. Some may argue that this will cost jobs, but in reality it will align social values and economic prices. Businesses with undesirable wastes will become less competitive; green businesses, more competitive.

Selling It: To sell these changes it will be important to obtain legislative sponsorship as well as public support from health advocates and businesses actively involved in sustainability. Phasing in the tax increase will assist businesses to absorb additional

costs, and re-tool existing production processes to be “more green.” Environmentalists should be ready allies. This includes the Washington Toxics Coalition, among others. The key messages are summarized as follows:

- This proposal is not anti-business; it is pro-health
- It aligns prices with social values; toxins create costs in our health care, education, and corrections systems
- Fee administration costs would be eliminated if the long-term recommendations are implemented
- A cleaner environment will benefit all citizens of the state.