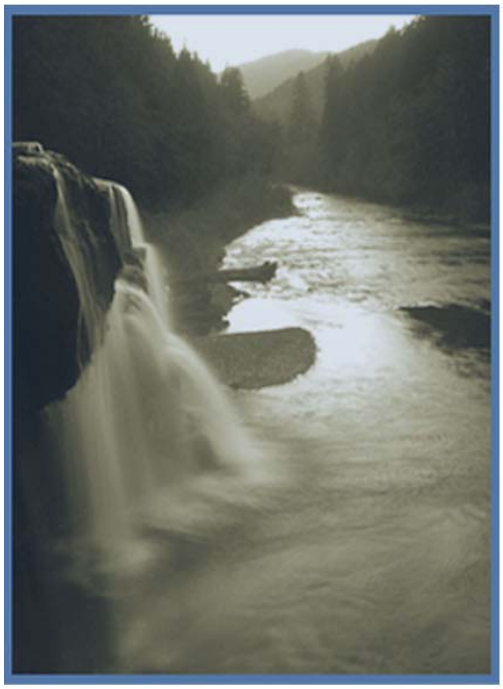

April 2006

CONCEPTUAL BUSINESS PLAN

For an Electronic Product Stewardship Third-Party Organization (TPO)

Developed as a project of the Northwest Product Stewardship Council and led by a Steering Committee of Electronics Manufacturers

Northwest Product Stewardship Council

nw psc

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EXECUTIVE SUMMARY

This Third Party Organization (TPO) Business Plan outlines an organizational structure and a mechanism for delivering waste management services for waste electronic products (e-waste) in the states of Oregon and Washington. Project participants hope that these findings could apply in other multi-state situations as well.

To illustrate how a TPO could provide practical value on a business and policy basis, a Steering Committee of electronics manufacturers developed this Conceptual Business Plan based on a set of key assumptions about TPO responsibilities and the broader, legislated electronics recycling system. This Plan was produced as part of the larger Pacific Northwest TPO Project, which explored issues and concerns expressed by Steering Committee members and other stakeholders about TPO concepts and implementation impacts. Certain characteristics of this Business Plan, such as the scope of products covered and the utilization of the local infrastructure, are outlined for modeling purposes but will ultimately be decided by state legislatures. The assumption that legislation is necessary to implement this Business Plan was confirmed by the legal research conducted during the Project. Model legislation was not prepared as part of this Phase One effort.

The guiding principle of this study is that an Electronic Product Stewardship TPO would be an industry-led, not-for-profit corporation dedicated to effectively delivering a system for recycling discarded electronics. The TPO would work within the framework of state legislation and, intending to serve multiple states, it would facilitate convenient, cost-effective and environmentally-sound collection and recycling of specified electronic products. The TPO would also provide a valuable flow of information between participants in the electronics chain of commerce– consumers, retailers, manufacturers, material suppliers, recyclers and government– regarding information on product characteristics and quantities, design ideas, incentives, and the management of electronic products at end-of-life.

Major Business Plan Assumptions

- The TPO engages electronics manufacturers and retailers to help achieve state program objectives by managing and paying for the delivery of collection, transport and processing services.
- The Business Plan assumes the TPO has access to a source of funding provided via an Advance Recycling Fee that is established by legislation and that is adequate to cover the services for which the TPO is responsible.
- The Business Plan assumes, for the states of Oregon and Washington, that 100 percent of eligible sales are captured into the program and that those funds finance the collection, transport and processing of all returned, covered electronic products. These collection and recycling services would be provided without additional charge and be convenient to consumers and other users of covered electronic products.
    - Note that this approach differs from alternative approaches that would have more than one entity each covering only a portion of the returned products with a

portion of the available funding. These alternative approaches are explored in the Business Plan and in Appendix C to illustrate the impact of less-than-100 percent approaches upon the economic viability of the system. These documents demonstrate that other approaches could inhibit economies of scale and that competing plans, in some cases, may duplicate services and increase administrative costs.

- The product scope assumed in this Business Plan covers desktop and laptop computers, and display devices including monitors and flat panels and televisions.

Major Business Plan Findings

- While there are several legal issues that could limit the function of a regional TPO, any new recycling system will require legislative authorization at the state and/or federal level. Thus, legal restrictions on TPO establishment, operation and financing are limited to a relatively narrow set of constitutional issues discussed in Appendix D (Legal Analyses).
- For the first four years of TPO operations, total costs of the TPO and recycling system covering Oregon and Washington are projected at approximately $29 million. Following system ramp-up during the first 3 years, total system costs projected for year 4 are as follows:

Total Year 4 Costs (in thousands of U.S. dollars)					
Recycling	**Shipping**	**Collection Payments**	**TPO Labor**	**Other Costs**	**Total Year 4 Need**
$5,400	$680	$3,400	$520	$1,500	$11,140

- A base level of service that is “free and convenient” is managed by a regional TPO and could be implemented by charging a fee of fewer than six dollars per new unit sold. Households and small businesses would have free access to convenient drop-off locations, and larger commercial users could utilize TPO-contracted recycling services at no additional cost. The Steering Committee selected financing of these services via an Advance Recycling Fee (ARF) model.

TPO System Costs per New Unit Sold in Washington and Oregon *(estimates, rounded to nearest dollar)*	
TV unit >19"	**$6**
TV unit <19"	**$3**
Desktop PC unit	**$2**
CRT/large LCD monitor	**$4**
LCD monitor unit <22"	**$2**
Laptop unit	**$1**

- Implementation of this Business Plan would begin upon enactment of electronics recycling legislation generally consistent with this Business Plan in one or more states.

The schedule in Section 6 details the timeline for system startup, including assumptions about E-Waste Commission startup (e.g., creation in the second or third month) and the TPO (e.g., formation of TPO Board of Directors in Month 3). Initial TPO start-up costs are approximately $250,000 prior to finalization of a Cooperative Agreement between the TPO and E-Waste Commission in Month 9, and an additional $1.25 million for Months 9-15 prior to the collection of fee proceeds.

Estimated TPO Start-up Costs		
Prior to Finalization of Cooperative Agreement (Month 9)	**Prior to Initiation of Fee Collection (Month 14)**	**TOTAL TPO STARTUP COSTS**
$250,000	$1,250,000	$1,500,000

- Projected collection volumes from household and residential sources over the four-year planning period were estimated as follows:

Projected Collections from Housholds/Small Businesses – lbs./capita/year			
Year 1	Year 2	Year 3	Year 4
1.35	1.76	2.3	2.6

Major Business Plan Recommendations

- **A hybrid recycling system model** offers the best guarantee of meeting individual state policy directions while achieving the economies of scale that are critical to making the program cost-effective. For each implementing state, the hybrid utilizes two organizations – one that is unique to each state to collect the government-mandated fees and to provide program oversight, and a second that is a private TPO operating on a multi-state basis to manage the collection/recycling system.

  1) A state-specific "E-Waste Commission" will collect and disburse funds and provide oversight to assure that state policy directions established by legislation or regulation are achieved. This "Commission" could be a new agency, an assignment to an existing agency, or another legal arrangement deemed appropriate by the state legislature.

  The legal analysis in Appendix D (Johnson memo) refers to such an organization as a "special purpose state agency" and states: "The Oregon and Washington legislatures have created or authorized the creation of numerous special purpose state and local commissions, boards, authorities and districts to achieve particular governmental objectives." (p.2)

2) A privately-managed, multi-state TPO to contract for and manage recycling services. The TPO would engage the leadership of electronics manufacturers and other key stakeholders that provide valuable experience and perspective.

The TPO could be designed and created by a group of private individuals or an existing entity–referred to as the "Founders" in the Business Plan. It could be established as an independent entity or within another pre-existing organization, and would likely be a not-for-profit organization.

In this hybrid system, the State Commission would likely establish an agreement or contract with the multi-state TPO, thus providing the TPO access to the funds, under defined conditions, in order to manage recycling services. This agreement would assure that individual policy directives of the state are implemented, but it must provide a level of consistency between states in order for the TPO operation to be viable. Funding authority and oversight thus would reside closely within each state, while management of recycling services benefits from regional economies of scale.

The authors of this Business Plan wish to thank the Washington Department of Ecology, U.S. EPA Region X and other members of the Project Support Team who assisted in this exploration of a multi-state electronics recycling system.

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1. MISSION AND ORGANIZATIONAL GOALS

1.1 NW TPO Vision

The Electronic Product Stewardship TPO will be an industry-led, not-for-profit corporation dedicated to effectively delivering a system for recycling discarded electronic equipment that meets or exceeds the expectations of stakeholders.

1.2 NW TPO Mission

The TPO will, working within the framework of State legislation and intending to serve multiple states, facilitate convenient, cost-effective and environmentally-sound collection and recycling of specified electronic products. The TPO will provide a valuable flow of information between participants in the electronics chain of commerce, including consumers, retailers, manufacturers, material suppliers, recyclers and government. Information will include data on product characteristics and quantities, design ideas, incentives, and the management of electronic products at end-of-life.

If the TPO Were Limited to a Single State…

…then the burden of TPO staffing, overhead and other administrative costs would rise significantly. These costs represent 15% of total TPO costs for a 2-state TPO; rise to 20% for a Washington-only TPO, and to 30% for Oregon-only. This does not account for potentially higher unit fees charged by recyclers due to lower volumes.

1.3 NW TPO Goals

The overarching goal of the TPO is to meet legislated requirements for e-waste management. Specific program objectives and performance measures that are adopted in state legislation will be incorporated into this Business Plan when it is adapted to meet state-legislated requirements.

The TPO shall seek to fulfill its vision and meet legislated requirements through the following goals, objectives, indicators and targets.[1]

GOAL 1 To engage representatives of the electronics industry in the management of end-of-life electronic products through active participation in governance of the Electronic Product Stewardship TPO.

Objective 1.1

Establish and maintain an active TPO governance structure that represents both larger and smaller manufacturers.

[1] ***A goal*** specifies issues or problems that the organization must successfully address and provides a general direction for addressing them. These goals are derived from the Vision and Mission statements.
An objective provides a yardstick for measuring progress against a goal. Objectives are intended to be measurable, appropriate, realistic and timely.
An indicator is a selected program element that will be used to assess progress against an objective.
A target is a specific, intended accomplishment for that program element that, cumulatively, will contribute to achievement of the goals and objectives. Upon an action to implement a TPO, specific dates should be assigned to these targets.

Indicator: A fully functioning TPO Board of Directors that includes at least 5 representatives of the top 10 brand owners in terms of market share and at least 5 representatives of other brands.

Target: The TPO Board of Directors has been established and begun meeting.

Target: Board of Directors meetings are held at least quarterly.

Objective 1.2

Establish instruments of TPO governance.

Indicator: Adopted bylaws and other governing documents.

Target: Bylaws have been drafted and approved by the Board of Directors.

GOAL 2 To create and manage, using legislatively authorized funding, a system of vendors providing collection and recycling services that meet performance goals defined by state legislation.

Objective 2.1

Provide collection services for all citizens of the TPO region.

Indicator: Conveniently distributed collection sites or opportunities.

Target: Each county has collection services provided either by ongoing collection sites or periodic events.

Target: One collection site has been established in each county of the state.

Target: At least one collection site that is open for business on a weekly basis has been established in each town with a population over 10,000.

Objective 2.2

Meet or exceed established recovery goals.

Indicator: Pounds per capita collected and processed.

Target: The goals established for each state in the TPO region are met.

GOAL 3 To manage recovered electronic products in a cost-effective manner.

Objective 3.1

Use competitive, low-bid procurement for contract processors.

Indicator: An effective procurement process.

Target: Establish low-cost protocol, based on bids received and experience.

Target: A procurement process has been implemented that secures low bid submittals from contract processors.

Target: Contracts have been negotiated and secured with contract processors that, in comparison with other programs, are judged to be cost-effective.

Objective 3.2

Continuously improve the cost-effectiveness of contract processing.

Indicator: Methodology for ongoing measurement of program cost-effectiveness.

Target: A measurement system has been established that compares on an ongoing basis the cost and effectiveness of TPO contract processors with comparable other programs.

Indicator: An efficiency best-practices system that monitors and shares amongst contract recyclers new and efficient technologies and processes.

Target: Expertise and up-to-date knowledge of processing technologies is continuously accessed by the TPO.

Target: Efficiency best-practices for e-waste management technologies and processes are defined.

Target: Regular communications are established with contract processors regarding efficiency best-practices and opportunities for improvement.

Indicator: Cost efficiency of processor contracts.

Target: Processor costs shall decline by 3 percent per year for the first 5 years.

GOAL 4 To manage recovered electronic products in an environmentally and socially responsible manner.

Objective 4.1

Assure that all electronics collected under the auspices of the TPO are processed according to environmental best practices.

Indicator: Environmental best practice standards for contract processors.

Target: Environmental best practices standards have been defined for contract processors.

Target: Environmental best practices standards are included in all service contracts.

Indicator: Auditing of processors.

Target: All contractors are audited for environmental best practices each year.

Objective 4.2

Assure that processed materials or components shipped overseas are handled according to health, safety, environmental and fair labor standards at least comparable to those in the U.S.

Indicator: Health, safety and environmental standards for downstream processors and markets.

Target: Health, safety and environmental standards have been developed for downstream processors and markets.

Target: Health, safety and environmental standards for downstream processors and markets, including requirements to track product downstream, are included in all service contracts.

Indicator: Reporting by contract processors on health, safety and environmental standards for downstream processors and markets.

Target: All contractors track products downstream and report quarterly on the adherence of downstream processors and markets to health, safety and environmental standards.

Indicator: Reporting by contract processors on fair labor standards for workforce.

Target: No anti-competitive job displacement of private sector jobs from alternative workforces unless explicitly allowed.

Objective 4.3

Assure that all contracts are certified to national or international financial performance standards that rely on documentation to facilitate auditing. Recycler standards that exceed regulation should be encouraged.

Indicator: Implementation of broadly accepted financial recordkeeping.

Target: Establish a reliable documentation scheme that can be used to reimburse service providers and be used to authenticate records, billing and material balance.

Indicator: Implementation of broadly accepted recycler performance standards.

Target: Monitor and report regularly to the Board on the status of implementation of certification standards for recyclers.

Target: When national or international certification standards for recyclers have been developed, they are reasonably implemented in all processor contracts.

GOAL 5 Provide a reliable flow of information between participants in the electronics chain of commerce, as appropriate, regarding data on product characteristics and quantities, design ideas, incentives, and the management of electronic products at end-of-life.

Objective 5.1

Maintain active communications with the owners of all brands marketed in the TPO region regarding (a) the end-of-life management system and (b) design characteristics of their branded products as they affect recycling efficiency.

Indicator: A method for a minimum of quarterly communications with all manufacturers that sell in the TPO region regarding the status of the e-waste recycling system.

Target: A quarterly communication system with all manufacturers that sell in the TPO region has been implemented.

Target: Communications with liaison personnel for all manufacturers has been established.

Indicator: Information about elements of product design that affect recycling is provided to manufacturers.

Target: The TPO has implemented a method to obtain from contract recyclers and communicate to manufacturers' information regarding recycling efficiencies or inefficiencies that result from product design.

Objective 5.2

Educate consumers regarding e-waste diversion options and benefits.

Indicator: Implementation of a consumer education program.

Target: A consumer education plan has been developed in cooperation with local and state government.

Target: Targets in the consumer education plan have been successfully met.

Objective 5.3

Constructively engage local governments in assuring that convenient services are provided for their residents and that those residents are informed about recycling opportunities.

Indicator: Cooperative relationships with all local governments in the TPO region.

Target: A working arrangement has been developed with all local governments in the TPO region.

Target: Arrangements have been made for providing information regarding e-waste recycling opportunities through local hotlines, publications and other media throughout the TPO region.

Objective 5.3

Constructively engage states in the development of requirements for e-waste management.

Indicator: The implementation of supportive governmental measures needed for the proper functioning of the TPO.

Target: The TPO has worked closely with appropriate state agencies in the development of measures necessary to implement the e-waste funding legislation.

Target: The state environmental agency has taken action to adopt and implement a ban on e-waste disposal within a year after recycling opportunities have been implemented statewide.

2. ORGANIZATIONAL GOVERNANCE

The following are two different models for the legal and governance structure of a TPO:

1. ***A quasi-governmental TPO***: A legislatively created, quasi-governmental organization in which the governing structure, authorities and responsibilities are defined by state legislation, along with the ability to access funds generated by the fee system.

2. ***An independent TPO***: An independent, privately-formed TPO that is enabled by state legislation to provide recycling services under the oversight of a state agency and to access funds generated by the fee system.

In both models, the government is ultimately responsible for the performance of the program. In the first model the governmental responsibility is direct while in the second model it is through an agency's oversight of the TPO.

The first model would come into existence through the adoption of legislation. The second model could be created by its "Founders" at any time, but would begin providing recycling services when funding is provided through legislation.

2.1 Recommended TPO Governance Model

The recommended governance approach adapts these two models into a hybrid. The quasi-governmental TPO becomes an E-Waste Commission, operating separately in each state, but which is more or less "governmental" depending on the terms of the legislation. The independent TPO, as the manager of recycling services, is then free to operate across more than one state.

Recommended Hybrid Governance Approach

Legislation in each state establishes an "E-Waste Commission" to collect and disperse funds and oversee program performance. The Commission establishes an Agreement with an independent, (likely) multi-state TPO to manage recycling services. Funding authority resides closely with the state, while management of recycling services benefits from regional economies of scale[2].

Members of the E-Waste Commission are appointed by the Governor as specified in the legislation.

Legislation assigns to the Commission responsibility and authority to:

- Establish advance recovery fees for all products covered by the

[2] *Note that, as documented by the spreadsheet model developed for this project, economy of scale in providing processing and recycling services is important to constrain costs of e-scrap management.*

legislation

- Establish payment mechanisms and enforce payment of the ARF
- Authorize retailers or first sellers to retain a portion of the ARF to cover their expenses
- Establish an Agreement with a TPO to provide all collection, recycling and related services
- Limit the use of ARF funds for the purposes specified above plus the cost of operating the Commission

The legislation also defines the criteria for an acceptable TPO. These could include that the TPO be a not-for-profit organization, commit to comply with certain policy objectives (e.g., provide convenient services) and be supported by companies who supply a specified percentage of covered products to the state. The legislation specifically authorizes the Commission to establish an Agreement with a TPO that has served other states.

Note: *An alternative approach is that the function that is provided by the E-Waste Commission be assigned by legislation to an existing state agency empowered to establish an agreement with a multi-state TPO.*

The Hybrid Governance Approach has several benefits:

- It places major operating responsibilities on product manufacturers, who apply their business expertise and motivation to control costs to e-waste management.
- It provides for segregation of funds from other governmental monies, thus avoiding diversion into other programs.
- It allows for multi-state operation in the management of recycling services.

The following section outlines organizational and governance elements of the two organizations – the E-Waste Commission and the multi-state TPO – and provides excerpts from a legal memorandum referred to as the "Johnson memo"[3]. Full text of the memo can be found in Appendix D.

[3] *The legal memorandum was produced by Stephen Johnson of Garvey Schubert and Barer, dated 11/28/05 and titled "Legal Issues Relevant to Structuring an Entity to Manage Collection, Recycling and Disposal of Waste Electronics in Washington and Oregon".*

2.2 E-Waste Commission

Incorporation status

- The organization would be established by legislation and would take the form of a state commission, a public authority or public corporation. Depending on the legislation it could be part of an existing agency, a fully-governmental commission or a quasi-governmental organization with assigned responsibilities and powers.
  - The Johnson memo, found in Appendix D, refers to such an organization as a "special purpose state agency" and states: "The Oregon and Washington legislatures have created or authorized the creation of numerous special purpose state and local commissions, boards, authorities and districts to achieve particular governmental objectives." (p.2)
  - The Johnson memo cites the Washington Apple Commission as a model and states: "The Apple Commission model involves a substantial degree of input and control by the industry sector that funds the agency's activities. No impediment has been identified under the constitution or laws of Washington or Oregon that would prevent the electronics industry from having a similar relationship with an "E-waste Commission" in one or both of these states and, perhaps, an even greater degree of input and/or control." (p.5)

Governing Board composition and selection

- The Commission could include participation by electronics manufacturers, retailers, local governments, recyclers and other stakeholders, depending on how specific the developed legislation is.
- The legislation that establishes the Commission would specify a process for selecting the representatives.
  - The Johnson memo states: "As currently constituted, the Washington Apple Commission consists of the Director of the Washington Department of Agriculture or his designee and thirteen apple growers and dealers … appointed by the Director. … The statutory provisions giving the Director of the Department of Agriculture the authority to appoint the members of the Commission and to review and approve the Commission's activities are new. In 2003 and 2004, the Washington legislature amended the statutes governing the Apple Commission to reinforce and strengthen the Department of Agriculture's control over the Commission. For the first time, these amendments required the Director of the Department of Agriculture to appoint the members of the Commission and subjected most of the Commission's activities to review and approval by the Director." (p.5)
  - The Johnson memo states that these legislative changes were due to a U.S. District Court decision that restricted the powers of the Commission to levy fees from the industry "to fund speech". This would not apply to the core activities of an E-waste Commission, though the Commission activities would need to be appropriately limited regarding "speech". Though not stated in the Johnson

memo, presumably then, previous law provides the precedent that the Commission members could be appointed by industry as they were under the law before amendment.

- The State Governor would have authority to remove any Commission member.

Organizational roles and responsibilities

- The Commission is accountable to the state through financial and performance audits using independent auditors. Additionally, an ongoing oversight role of Commission operations may be provided by an existing state agency or agency official.
  - The Johnson memo states: "While a substantial degree of input and control by the electronics industry seems possible, some oversight by elected state officials and their appointees will be necessary." (p.6)
- Within the limits established by the legislature (e.g. a "cap" or "ceiling" on fees), the Commission will have the authority to collect, set and modify fees.
  - The Johnson memo states: "if it is desirable for the agency to control the level of the assessment, Washington and Oregon courts have long recognized that the authority to impose a fee to defray the cost of a governmental service may also be justified as compensation for the burden imposed by the payer's activities. This rationale would seem to support the assessment of a fee on manufacturers and distributors of e-products to defray e-waste management costs made necessary by the environmental burdens imposed by such products. A special-purpose state agency could probably be authorized to assess a fee against manufacturers, distributors or consumers to fund e-waste management costs incurred by the agency, so long as adequate guidelines and/or procedural protections are provided to guide the agency's actions." (p.4)
- Enforcement of fee collection could be done by the Commission.
- The Commission would be delegated at least the following powers and authorities:
  - To enter into contracts for goods and services
  - To hire staff and consultants
  - To borrow funds
  - To apply for and receive public and private grants.

Principles and procedures for anti-trust, confidentiality, conflict of interest, remuneration, etc.

- Would follow existing state government requirements.

Multi-State Authorities and Operations

- Such an organization would likely be established under one state's legislation that would not be applicable to other states.

2.3 The Independent, Multi-State TPO

Incorporation status

- The TPO would be designed and created by a group of private individuals or an entity – the Founders.
- It could be an organization within another pre-existing organization.
- It would likely be a not-for-profit organization.

Governing Board composition and selection

- The Founders would likely comprise the core of the initial Governing Board.
- The Governing Board would preferably be controlled by electronics manufacturers.
- Other stakeholder directors would be included, including retailers, governmental representatives, etc.
- The founders would decide on a selection process for additional members.

Organizational roles and responsibilities

- The TPO Board is the ultimate governing body.
- The Board governs with the objective to establish and fulfill the requirements of the Commission via an Agreement.
- The TPO would be required to develop and execute a Business Plan, to be approved by the Commission that is capable of meeting the goals adopted in the legislation.
- The Commission or the TPO Board could terminate the relationship.
- The Board holds responsibility for financial support of the TPO within terms of the agreement established between the TPO and the E-waste Commission.
- The Johnson memo states: “If a government agency assesses and collects fees and funds the activities of this entity by means of contracts or grants, the… payment to the NGO of the funds generated by the fee would be governed by a contract between the agency and the NGO.” (p. 9)

Principles and procedures for anti-trust, confidentiality, conflict of interest, remuneration, etc.

- Would follow existing state government requirements.

Multi-State Authorities and Operations

- Operations could easily be multi-state, but the state requirements that provide funding would need to be compatible in essential regards. The multi-state TPO

could adapt to some differences in TPO requirements as long as they are not in conflict.

- The Johnson memo states: “A private NGO could operate in Oregon, Washington and other states, so long as the state statutes authorizing the program, the rules adopted by state regulators and the contractual requirements in each state are consistent.” (p. 11)

3. THE TPO BUSINESS MODEL AND PLANNING SCENARIO

This Section establishes the basis for an assumed e-waste management scenario developed to write this Business Plan. This assumed scenario will be referred to as the "Planning Scenario" and will serve two purposes:

- Describe the key functions of a TPO in the Pacific Northwest that drive the associated costs and required revenue.
- Provide a Business Plan that is adaptable to different contexts that may be created through enabling legislation.

3.1 Key Variables in Modeling the Business

This Section describes the key services that will be delivered, the assumed methods of service delivery, and other major drivers that are taken into account to estimate TPO fixed and variable costs.

The biggest driver of TPO costs overall is the volume of returned electronic products from households and small businesses to be recycled. In developing this Business Plan, the authors recognize that the volumes of product to be managed will vary substantially depending on the several key program characteristics that may be established differently by participating states, including:

- Scope of covered products
- Geographic area and population to be serviced
- The required services to be provided

In addition, a few other important variables in projecting return volumes were identified, analyzed and ultimately incorporated into the Planning Scenario assumed for purposes of this Business Plan. Most notable is the rate of public participation represented by low, medium and high estimates developed from available data on public participation in existing electronics recycling programs (the medium estimate is ultimately used in the Planning Scenario).

These variables have been analyzed and aggregated into the Planning Scenario and are described below.

3.1.1 Types of Products to be Managed

The product scope assumed in this Business Plan is:

- Desktop and laptop computers
- Display devices including monitors and flat panels
- Televisions

Alternative Product Scope A

If the scope of products covered only CRT devices, overall TPO costs would be 12-18% less during the first 3 years. TPO costs would probably decline significantly in future years due to a proportionate decline of CRT returns relative to flat panels.

3.1.2 Geographic Area and Population Served

The Planning Scenario utilized in this Business Plan assumes that the programs of Washington and Oregon will be generally compatible for regional implementation via a unified TPO in order to achieve greatest efficiency and greatest economy of scale. The Planning Scenario also assumes the need to allow different inputs from the states of Oregon and Washington in anticipation of some variation in program characteristics from one state to the other.

Alternative Product Scope B

If the scope of products expanded to include the listed product set plus large computer peripherals such as printers, scanners and multi-function devices, overall TPO costs would be 3-7% more during the first 4 years.

Population: The volume of product from households and small businesses to be managed by the TPO is projected in Section 3.2 by a formula of pounds-per-capita-per-year multiplied by the population. The population projections for 2005 based on the 2000 U.S. census are:

- Washington: 6,204,632
- Oregon: 3,596,083

Product from residential and commercial sectors:

This Business Plan assumes all residents, businesses and institutions will be serviced by the TPO-funded system; that is, products will be received from them and the costs of recycling will be covered.

The Planning Scenario assumes that products that come from large businesses and institutions will be collected outside of collection channels created under TPO oversight for households and small businesses. Large business and institutional users will have access to bulk pick-up and recycling services under contract with the TPO at no additional cost to those institutions. The Planning Scenario assumes that the combination of economies of scale provided by the TPO recycling contracts and the inherent reuse value in covered products disposed by these larger users will result in no additional costs to the TPO for recovering these products.

If Sales to Large Businesses Were Covered by a Different Financing Mechanism….

…then some fraction of waste product sold to these large business and institutional users would be transferred to households and reused via employee sales programs, resale by commercial brokers and charitable donation to households. Thus, some fraction would be recycled without having paid the fees at sale. Since all sales are covered, there is no attempt to "filter out" products returned by households previously used by large businesses and institutions.

The Planning Scenario acknowledges that some unknown fraction of products sold to these large business and institutional users will be transferred to households and reused via employee sales programs, resale by commercial brokers and charitable donation to households. This reused product will ultimately be available for recycling as residential e-waste, and, as such, is considered within the product scope assumed by the Planning Scenario. There is not an attempt to "filter out" product returned by households previously used by large businesses and institutions.

Urban versus rural population distribution: The costs of transportation from collection sites to a consolidation[4]/processing center is one of several substantial cost factors and one that will vary considerably for different communities, in proportion to population density and transportation distances. The Planning Scenario takes this into account by simply using an average transportation cost across all counties in Washington and Oregon.

3.1.3 Services to be provided

Core services: The following services are the drivers of TPO costs:

- Collection from last user
- Transportation
- Processing
- Public education and promotion
- TPO labor and overhead

Collection: Collection includes a base level of free and convenient service as described below:

Collection may be provided by a number of different types of service providers, including local recyclers and waste management companies, municipal facilities, retailers, not-for-profit organizations and charities. This Plan assumes that there is no payment to the public for returned product–the return is free, but there is no buy-back. The convenience of the collection system, and how well it is promoted to the public, are the primary, TPO-controlled factors that will determine the amount of product received from a given population.

One main issue facing the TPO is how to plan for collection from households and small businesses. There are two primary approaches to planning and measuring a collection system:

- One is based on a measure of convenience–e.g. a collection site per X number of residents.
- The second is based on achieving a level of collection performance–e.g. pounds of product collected per capita per year.

The Planning Scenario utilized in this Business Plan assumes a hybrid of these two approaches. First, the TPO projects yearly recovery rates from households and small businesses in lbs/capita/year. The numbers are projected for each of the first four years, ramping up over that period using existing comprehensive electronics collection programs as a guide. Second, the TPO will establish metrics to assure that remote areas or areas of low population will be appropriately serviced. For rural-dominated counties, the Planning

[4] *The term "consolidation" causes confusion because it is used in some systems – e.g. Maine and WEEE – to mean the point at which financial responsibility shifts from government to industry. Here it means simply the function of receiving product from many collection sites and preparing a stream of products in bulk form for downstream processing. It is simply the doorway for bulk scale product into the contracted e-waste management system.*

Scenario assumes at least one collection site that is open for business on a weekly basis has been established in each town over 10,000 in population.

The TPO will have flexibility in the methods it uses to achieve those rates through working with local communities, charities and businesses to maximize the efficiency of the collection system.

Collection costs: Costs of collection for households and small businesses – and other sources where product is not already in bulk form – are highly sensitive to the type and density of collection sites. A study conducted by the National Electronic Product Stewardship Initiative (NEPSI) participants, called the Seattle Assessment, examined a range of different densities of collection sites for Snohomish County, WA. The costs ranged from approximately 9 cents/lb to 18 cents/lb. In comparison, the combined reimbursement rate for collection and transportation has been set by the Waste Management Board in California at 20 cents/lb. The Planning Scenario of this Business Plan assumes 15 cents/lb–slightly more than the mid-range of the Seattle Assessment study.

If Collection Costs for Rural Communities Were 2X Urban/Suburban Costs…

…then the overall TPO costs per new unit sold in WA/OR would increase by only 3.3% in Year 4 of TPO operations. Approximately 7% of the Oregon population lives in rural counties as defined in this plan, and 13% of Washington.

This collection cost includes transportation to the centralized processing center. Snohomish County includes a mix of urban and remote rural populations. However, the county is located relatively close to the processing site in Seattle. When transportation costs are calculated for a state as a whole, an additional cost of 3 cents/lb for transportation of products from distant areas is assumed.

Estimation of collection costs: Collection costs are estimated at 15 cents/lb, including transportation to the bulk consolidation center. An additional amount of 3 cents/lb is assumed for bulk product transport from consolidation point to processing center.

Adjusting the density of collection sites via collection costs: In the contracting model described in section 3.3, the payments for collection can be adjusted, providing a greater incentive for local organizations to establish such sites. Increasing the collection payment should increase the density of collection sites, thereby increasing public convenience and collection rates.

Reuse: The reuse of e-scrap has many advantages. It provides a higher retained resource value than recycling, supports local businesses and not-for-profits, addresses the digital divide issue, and reduces the cost of recycling by diverting reusable products, if only for a limited period of time. The best approach to reuse was discussed extensively in the NEPSI process, where it was decided that reuse should not, and need not, be subsidized or paid for by system financing. However, local reuse of appropriate items can be accommodated in the collection infrastructure. For example, economies of scale provided by the TPO recycling contracts and the inherent reuse value in covered products disposed by these

larger users will result in no additional costs to the TPO for making available recovery, reuse and recycling services to these users.

Sorting for reuse happens best at the point of collection where product can be sorted (or triaged) by local reuse organizations prior to the point when management for material recovery begins. In fact, this process may reduce system costs by diverting 5-15 percent of the post-household material that would otherwise be recycled. This is an assumed option in the Business Plan Planning Scenario for household/small business product collection and consolidation entities.

Transportation: There are two distinct portions of the transportation model:

- Local transportation, sometimes called "milk runs", from collection sites to a consolidation/processing center. Product will generally be whole and loosely packed. Many, if not most, permanent sites may also be recycling facilities in order to keep these costs at a minimum.
- Long-distance transportation (i.e. bulk shipping) from the consolidation/processing center to downstream processors or markets. This may include partially disassembled products and materials that are efficiently packed.

Estimation of transportation costs: This Business Plan uses the NEPSI Seattle Assessment to estimate local transportation costs. Local collection costs are included in the average collection costs as described above. Long distance transportation/bulk shipping is included as a separate transportation cost and is estimated at 3 cents/lb.

Processing: Processing is an inclusive term that can encompass several different discrete activities that vary from one recycler to another, including:

- Receipt from collection sites, including from large institutional product users
- Consolidation and sorting
- Minimal dismantling for removal of materials requiring special handling
- Manual dismantling for separation of recyclable materials
- Packing and shipping
- Shredding and mechanical separation
- Final processing of materials into industrial feedstock

There are multiple companies in Washington and Oregon providing these services currently. These and/or other TPO-contracted facilities also can perform essential data capture, management and reporting activities.

To estimate processing costs, numerous sources of data were reviewed, including:

- Processing cost estimates provided by several recyclers operating throughout the United States
- Actual price quotes obtained by various participants in the Pacific Northwest TPO project
- NEPSI surveys
- Prices quoted in the monthly E-Scrap News publication
- California IWMB reimbursements for processing set at 28 cents/lb. Note that this number is thought by many stakeholders as high, and therefore provides a good upper bound of a reasonable cost range.

Estimation of processing costs: Processing services are commonly procured as a package, including transportation to market. Available data on processing costs from the California program, E-Scrap News estimates and other sources will be used to estimate a cost per pound for different categories of product. Using data from these sources, this Business Plan estimates the average processing cost at 24 cents/lb. In order to reduce this cost over time, the TPO will utilize competitive procurement processes and establish personnel policies that reward cost reductions in major contracting costs, such as processing and shipping.

***Public education and promotion**:* This will be a shared responsibility of the TPO and local communities. In general, the TPO will develop system-wide educational materials and provide statewide promotions. Local government will inform citizens regarding locations of collection sites.

Estimation of education costs: This Business Plan projects the TPO share of public education and outreach at $300,000 per year.

Both industry (represented by the TPO) and government have specific expertise in public outreach, education and advertising that will complement each other.

The TPO could provide advertising/outreach to the general public about the importance of reuse and recycling of electronics products and explain how consumers can take advantage of easy opportunities to reuse and recycle. This could be done as a typical business marketing campaign similar to, or in conjunction with, marketing that is done to sell new products.

Government has experience with providing information to the public and business community about specific reuse and recycling opportunities available to them. Residents and businesses alike are conditioned to use government services and staff to learn about how to recycle the waste that they generate. Government could provide and promote hotlines (1-800 number), websites, bill enclosures and other opportunities to inform the

public where they can go to reuse and recycle their electronics. This information would be coordinated with outreach services provided by the TPO and would target urban and rural residents and businesses statewide.

TPO Labor: In order to operate the TPO, specialized professional staff will be required as detailed in Section 4 below.

3.2 Projection of Collection Volumes

The single most important variable affecting overall TPO costs is the amount of post-household/small business product managed per population served. There are two distinct approaches to estimating pounds-per-capita collection volumes:

- A projected generation spreadsheet model based on historic sales data, estimated product lifetimes, average product weights, and the likelihood of alternative disposition pathways. This information would be used to estimate the amount of waste product theoretically available for collection/recycling in a given year.
- An examination of existing collection program data. However, there are only a few programs that are representative, meaning that they serve a wide and definable population and have been operating over time.

The first approach requires estimates of average product weight and life span that introduce significant uncertainty into projections, producing an estimate that substantially exceeds what actual programs are collecting. However, the existing programs, even after several years, are often still increasing in volumes. The second approach requires a "judgment call" as to whether existing programs are comparable to the future program being planned. The second approach also needs to be adjusted to account for fluctuations in future collection volumes consistent with historic changes in average product weight, average life span and historic unit sales.

NEPSI studied this question under the topic of setting performance goals for the program. The information gathered is very valuable, and the NEPSI data was summarized in a report[5] that can be referenced to estimate collection volumes. Recent program experience has shown a steady increase in the volumes collected by the existing programs.

In 2002, the NEPSI analysis concluded that the most valid basis for estimating product that will be collected would use data from existing programs. The NEPSI document arrived at a figure of 1.75 pounds-per-capita-per-year based on the data that was available at that time.

A figure of 2.6 pounds-per-capita is assumed as the Planning Scenario estimate in this Business Plan based on an evaluation of new data from Hennepin County, Minnesota, which included product from primarily residential sources and the product set specified above. Although the demographics of Hennepin County do not exactly match the demographics of the Pacific Northwest region, this program's rate does provide an

[5] *"Performance Measures Guide" produced in December 2004 for Snohomish County by Wayne Rifer.*

aggressive collection target useful for purposes of this Business Plan, and is in fact described as the “gold standard” by one manufacturer representative.

The Planning Scenario also assumes that collection volumes will ramp-up from smaller to larger volumes over several years. To make this calculation, the first year rate is set at the annualized rate achieved by the California program in its first 7 months of operation (1.35 lbs/capita/year). Consistent with the assumed scope of products, these California numbers have been adjusted to also include desktop computers. The ramp-up rate from year one utilizes the historic rate increases from the Hennepin County program since curbside collection was initiated in Minneapolis in 1997. This achieves the current Hennepin county rate over 3½ years. This is faster than Hennepin achieved that rate, justified by the greater current backlog of obsolete product.

After review and analysis of existing comprehensive collection programs, the Planning Scenario utilized in this Business Plan assumes collection at the following lbs/capita rates for the first 4 years of TPO operation:

Projected Collections from Housholds/Small Businesses *(lbs/capita/year)*			
Year 1	Year 2	Year 3	Year 4
1.35	1.76	2.3	2.6

3.3 Proposed Approach for Service Contracting

Another important planning assumption is the approach taken to securing collection, transportation and recycling services. This approach drives the administrative structure of the TPO, and the structure for how these services are monetarily-defined in the financial model.

The selected Planning Scenario assumes that all direct services will be competitively contracted by the TPO via an RFP/RFQ process open to existing/developing business in the area and regional/national vendors. The primary considerations in service contracting are to achieve overall cost efficiency, ability to enforce quality and the management of risk to the TPO.

While there are several possible structures for contracting, the approach assumed in this Planning Scenario is most similar to the one specifically designed to minimize overhead costs by the Infrastructure Group of NEPSI.

Under this approach, the largest share of overhead burden will come from contract management–procurement of vendors, contract negotiations, payables management, vendor auditing, data management and reporting.

In order to avoid the expensive management of contracts for a highly-distributed network of collection sites entailing hundreds of contracts, the Planning Scenario assumes the following for product collected from households and small businesses:

- The TPO will contract with a limited number of consolidation points in each state. Contractors will be secured through a bidding process.
- The TPO will contract for "event services".
- The contractors will be paid on the basis of their bids for pounds of product managed. This could include a pass-through payment for collection services–the Collection Incentive Payment (CIP)–as well as payment for the net costs of downstream transportation and processing. Under this scenario, the TPO would set a CIP based on typical collection costs per pound. Collectors would be able to offer additional services that exceed the assumed level of service in the CIP (i.e., "value added services") that might include special curbside pickup or other enhanced services. Collectors offering these services would receive the same CIP as other collectors offering a minimum required level of service.
- Contract consolidators will compete for arrangements with local collection entities of any type. They may also directly provide collection.
- Contractor consolidators, via their service contract terms, are also responsible for assuring conformance with environmentally sound management standards, data reporting requirements, etc.
- The TPO will establish documentation requirements that are auditable and reliable, including items such as incoming weight tickets balanced by outgoing sales of commodities and waste.
- Returned product from large institutional users collected outside of household/small business collection channels will have access to bulk pick-up and recycling services under TPO contracts with recyclers. The Planning Scenario assumes that the combination of economies of scale provided by the TPO recycling contracts and the inherent reuse value in covered products disposed by these larger users will result in no additional costs to the TPO for recovering products from these users.

In this approach, the specific collection providers are not directly the responsibility of the TPO. Rather, they are the responsibility of the consolidators/processors. The TPO *is* responsible for assuring that a convenient collection network is provided, and the TPO will collaborate with local and state governments to assure that the desired level of convenience is achieved in each community. The TPO can increase (or decrease) the convenience level by adjusting the CIP–the higher the CIP, the more incentive there is for entities to offer collection. In addition, a premium on the CIP may be paid for rural collections.

Thus, the entire network for collection and recycling will be driven by competition managed by the TPO procurement process.

Increasing Cost-efficiency: In order to achieve the objective of increasing the cost-efficiency of processor contracts and of the system as a whole, the TPO shall implement mechanisms to drive prices downward over time. This could include the following mechanisms, using cents/pound as a standardized measurement:

1. Contracts shall be structured to enhance competition among service providers and to encourage development and implementation of innovative business models for collection, shipping and processing.
2. Efficiency "best practices" will be researched by the TPO and shared on a regular basis with the contractor processors.
3. The TPO will monitor processing costs elsewhere in the country and will give incentives to contract processors to meet, or beat, those prices.
4. TPO employees will receive annual bonuses that are tied to successful initiatives to decrease processor contractor costs. These initiatives may include:
    - Notably successful implementation of measures 1-3;
    - Enhancement of the market value of processed materials through identification or development of additional high-value markets;
    - Identification of practices to recover and market high-value components by contract processors;
    - Identification of practices to reduce disposed residues;
    - Reduction or streamlining of TPO paperwork requirements that reduce processor overhead costs while maintaining essential flow of data and information;
    - Identification of organizations, practices and markets that will increase the reuse of whole products and components prior to transportation to the contract processor.

Environmentally Sound Management: Service contracts from the TPO will include standards for Environmentally Sound Management (ESM). Although there is no well-established and widely recognized ESM standard, the Planning Scenario in this Business Plan utilizes the draft EPA Plug-in to eCycling Guidelines[6] now proceeding through a public consensus process as an American National Standard (ANSI).

If multiple TPOs Were Allowed…

…then there would need to be a regulatory system established for fairly allocating responsibility and monitoring compliance across multiple organizations. A TPO Viability Analysis developed with this Business Plan also suggests that multiple TPOs could increase administrative costs and reduce procurement economies of scale.

4. RESOURCES PLAN

4.1 Financial Needs

4.1.1 Operating Finances

Given guidance on the projected product scope for this plan from the Steering Committee, as shown in the detailed Pacific NW TPO spreadsheet model, following a ramp-up period the TPO financial needs are driven by costs of recycling, collection and transportation. Taken together, these three cost elements represent approximately 85 percent of the operating financial needs of

[6] *"U.S. EPA Plug-In to eCycling Guidelines for Materials Management", EPA530-K-04-004, (www.epa.gov/osw). This is sometimes referred to as recycler certification or e-waste facility evaluation. Other efforts to develop such standards are being conducted by IAER (www.iaer.org), the OECD and ISRI (not yet available).*

the TPO. The summary chart below specifies the top four financial needs projected for year 3 of TPO operations.

Table 1 – Projected Year 4 Costs *(rounded)*

Recycling	Shipping	Collection Payments	TPO Labor	Other Costs	Total Year 4 Need
$5,400,000	$680,000	$3,400,000	$520,000	$1,500,000	$11,140,000

The total financial need over the first 4 years of the Pacific Northwest TPO operations is approximately $29 million.

Costs Per Unit: When viewed on a cost-per-new-unit-sold basis, total TPO costs range from approximately $1 to $6 per unit. Table 2 provides costs-per-unit estimates for the system once fully ramped up in Year 4.

TPO System Costs per New Unit Sold in Washington and Oregon *(estimates, rounded to nearest dollar)*	
TV unit >19"	**$6**
TV unit <19"	**$3**
Desktop PC unit	**$2**
CRT/large LCD monitor	**$4**
LCD monitor unit <22"	**$2**
Laptop unit	**$1**

These estimates were derived using assumptions and data described throughout this Business Plan (e.g., volume of electronics collected, processing costs, etc.). Additional key data and assumptions relevant to unit cost estimates include:

- New unit sales in Washington and Oregon are roughly comparable to national sales data
- Product subcategories for televisions (>19”, <19”) and monitors (CRT/LCD >22”, LCD <22”) were developed based on the availability of data on sales, return and average weight. Data sources include product manufacturers, the Consumer Electronics Association (CEA), existing collection pilots and programs (particularly from Hennepin County and Florida), and published and unpublished data from the U.S. EPA and the National Center for Electronics Recycling (NCER)
- Per unit costs were allocated to a product class according to average returned product weight. The following average weights were assumed for each product returned:

Unit Type	Estimated Average Weight
TV >19”	72
TV <19”	41
Desktop PC	22
CRT/large LCD monitor	45
LCD monitor <22”	19
Laptop	7

- Per-unit cost allocations would be adjusted over time to account for changes in average product weight and that product’s share of the total volume of returned electronics.

4.1.2 Financial Risk Management

The two largest costs to be borne by the TPO are for recycling and collection. These two costs are both variable, and are driven by the volume of recyclable products returned by consumers. This volume is difficult to predict in advance. This Plan therefore incorporates two basic strategies for managing this financial risk, both of which affect the resources required to run the TPO.

First, this Business Plan assumes that an E-Waste Commission (see section 2.2) will be authorized by enabling legislation to adjust fees higher or lower within an amount (i.e. a cap or an initial amount) established by legislation, and those funds would be passed along to the TPO. Should the volume of collected product and associated costs exceed budgeted expectations, the E-Waste Commission would have the authority to increase the fees up to the cap amount to fund TPO operations.

Second, during the first year of operations, the TPO will sequence plans for revenue collection from the E-Waste Commission and contractor payments (i.e., cash flow) to minimize the need to borrow and to ensure that adequate funds are available to pay contractors when invoices are received. Thus, the TPO will plan to end year 1 operations with a positive cash flow and a small cash reserve. This reserve grows slightly through the second year, declines through year 3 and is spent in year 4. Adjustments in collected funds and/or TPO expenses over the years will be required to maintain a small reserve for TPO operations. The spreadsheet model developed for this business plan assumes that available cash reserves will never exceed 15 percent of annual TPO income.

Under the second strategy, should the revenue needs exceed the maximum available funds under the cap, the TPO should be authorized to negotiate with the E-Waste Commission to either increase the revenue or curtail the services provided.

4.2 Personnel Needs

The following TPO staff positions are projected to be needed:

- Executive Director. Required to run the TPO and be hired by and responsible to the TPO Board of Directors for all TPO administration.

- Contract Manager. Required to plan and execute deals with selected contractors.
- Accounts Payables Manager. Required to plan, manage outsourcing contracts, and troubleshoot any outsourced financial functions.
- Communications Director. Required to coordinate complex and visible regional communications efforts.
- Office Manager. Required to administer the TPO office.
- Administrative Support staff. Required to support various TPO office functions.

4.3 Contract services

Section 3.3 describes the method of contracting that the TPO will utilize. In terms of stakeholder credibility, a good process for vendor selection and management, as well as the systems in place for those vendors to manage their downstream collectors and markets, will be critical.

The TPO will develop the following administrative implements for service contracting within the budget included in this Business Plan:

- A model to project the optimal number of consolidators in a geographic region.
- A collection financial model to establish the CIP and any CIP enhancements for rural communities.
- Vendor qualification requirements.
- A two-stage vendor procurement document, including a pre-qualification stage and low-bid selection (RFQ/B).
- A method for verifying that documentation requirements are complete.
- A prospective vendor due-diligence process before contracting.
- An Environmentally Sound Management standard.
- A boilerplate vendor contract.

In addition, ongoing management of vendors will be critical after the contracting efforts, and processes will need to be in place to make sure they are meeting their requirements. These processes will include:

- Vendor reporting requirements
- A periodic vendor auditing process

5. ADMINISTRATION

5.1 Budget authority and accountability

The Pacific Northwest Third Party Organization derives its authority to operate using collected Advance Recovery Fees and is accountable to the E-Waste Commission of one or more states with which it enters into a Cooperative Agreement, or other appropriate legal arrangement, to provide recycling system services, including but not limited to the states of Washington and Oregon. An annual budget will be developed by the TPO Executive Director and presented to the TPO Board of Directors for approval.
Following approval of the annual TPO budget, the Executive Director will prepare a summary of the TPO plans and budget for the coming year to be submitted to the responsible representative(s) of the state agencies, including the relevant state E-Waste Commission(s) consistent with the specific requirements in that state's Cooperative Agreement with the TPO, and state law.

5.2 Financial management and administrative policies and procedures

Concurrently with the approval process for the annual TPO budget, the Executive Director will prepare and present to the TPO Board of Directors a report on the state of TPO finances and any proposed changes in TPO administrative policies and procedures recommended or adopted during the current fiscal year.

5.3 Personnel policies and procedures

The Executive Director will prepare and submit proposed personnel policies and procedures to the Board of Directors for approval. As a private, not-for-profit entity, the TPO will establish personnel policies and procedures consistent with other private, not-for-profit entities whose mission it is to provide a critical service for the common good.

5.4 Management information system

In the interest of providing high quality services at the lowest cost, the Pacific Northwest TPO will maximize the efficient use of information technology for oversight by the TPO Board of Directors, partner state agencies, sponsoring industry participants, other interested stakeholders and the general public.

Concurrently with the submission of the annual TPO budget to the Board of Directors, the Executive Director will prepare a report on the state of the TPO management information system and recommend any improvements in TPO MIS plans, strategy and/or execution.

With the approval of the Board of Directors, the Executive Director may outsource one or more functions associated with the TPO MIS when it is deemed cost effective to do so. The MIS will also be a primary support tool for collecting the results of audits of service providers.

5.5 Financial and performance audits

The Board of Directors shall constitute an Audit Committee to oversee TPO financial and performance audits. Such audits shall be done periodically as requested by the Board of

Directors, and auditors will be selected directly by the Board Audit Committee independent of TPO management. The TPO Executive Director will work with the selected auditor(s) and make available any and all financial and other records as requested. All outside audit reports will be made available to the TPO Executive Director for review and comment at least 7 days prior to submission to the Board Audit Committee. All auditor reports shall be directed to the Board Audit Committee.

5.6 Insurance and legal representation

Consistent with the budget and other contracting policies approved by the Board of Directors, the Executive Director will be authorized to enter the TPO into contracts with insurance providers and legal services as needed.

6. OPERATIONS

6.1 TPO Start-up plan

Implementation of this Business Plan will begin upon enactment of electronics recycling legislation generally consistent with this Business Plan in one or more states. The start-up process will unfold as follows:

- Meeting among state officials and the Steering Committee to review specific legislated requirements and next steps.
- Revision of the Business Plan under direction of the Steering Committee to update the schedule and assure compliance with newly legislated requirements.
- Steering Committee hires a TPO Executive Director.
- Formation of TPO organizational structure consistent with legislated requirements.
    - Selection of manufacturer and other stakeholder representatives as required by legislation, or as needed if not directed in legislation.
- TPO operations begin per schedule in 6.2.

6.2 Schedule

6.2.1 Major tasks and milestones: next 12-18 months

- Enactment of recycling legislation in one or more states: Day 1
- E-Waste Commission appointed/established: Months 2-3
- Formation of TPO organizational structure (i.e. Board of Directors): Month 3
- Hiring of TPO Executive Director: Months 4 and 5
- TPO Initial Board of Directors meeting, office manager hired, initiation of limited business operations: Month 5
- TPO Business Plan revisions completed to comply with legislated requirements: Month 6

- Identify IT needs: Month 6
- Preparation/submission of TPO proposal to E-Waste Commission: Month 7
- Contracts Manager hired: Month 8
- Finalization of Cooperative Agreement between TPO and E-Waste Commission: Month 9
- Coordination with local communities to identify needs and opportunities for local services: Months 9-10
- Professional support contracts negotiated and secured (legal, financial audit, outreach/education, insurance, IT, telecom): Months 9-10
- RFP/RFQ for recycling/shipping/consolidation service providers issue: Month 10
- Hiring of a TPO Communications Director and Accounts Receivables Manager: Month 12
- First annual TPO Board of Directors meeting: Month 13
- Contract(s) for recycling/shipping/consolidation service provider(s) awarded: Month 14
- TPO fee collection begins by E-Waste Commission: Month 14

6.2.2 Resource requirements

- Prior to completion of Cooperative Agreement with E-Waste Commission (Month 9): $250,000
- Prior to commencement of fee collection activities (Months 9-15): Approximately $1,250,000

6.2.3 General contract requirements

Assuming that the TPO would “hire” recyclers through a contractual process, the following qualifications/standards would be included as contract conditions:

- Ongoing compliance with local, state, federal and any relevant international laws and regulations pertaining to health and safety, environmental protection, waste management, transportation, and business licenses and practices.
- Appropriate liability and environmental insurance.
- Certification of destruction related to information potentially contained in computers and other electronic equipment.
- Certification of ultimate disposition of the recycled/processed materials.
- Provide for pre-screening of collected materials for reuse. (This could happen at point of collection, but the recycler should only accept from collectors who do this, otherwise, they will be responsible for doing it themselves.)

- Assuming that no state or federal laws and regulations have been established that set performance or ESM standards, the primary monitoring would occur through oversight of contract provisions by the TPO. If laws and regulations are established at the state and/or federal level, then government could monitor and enforce against those requirements. Monitoring and enforcement could be done in the following manner:
- Site visits (one or two a year) to the contract recyclers resulting in published information on the findings.
- Annual review of compliance status records with any local, state, federal and international requirements pertaining to the recycler, e.g. OSHA inspection reports, confirming business license status, obtaining a certificate of insurance, etc.
- Through the contract, require specific quarterly or annual reporting, by type and amount, of materials processed. In addition, require information on where the materials came from geographically, and the ultimate disposition of processed material.
- The TPO would cumulate data gathered from the enforcement efforts and would provide and publish system reports against performance standards for each contractor as well as for the entire system by state.

6.2.4 ESM standards

TPO service contracts will utilize the draft EPA Plug-in to eCycling Guidelines and successor guidelines.

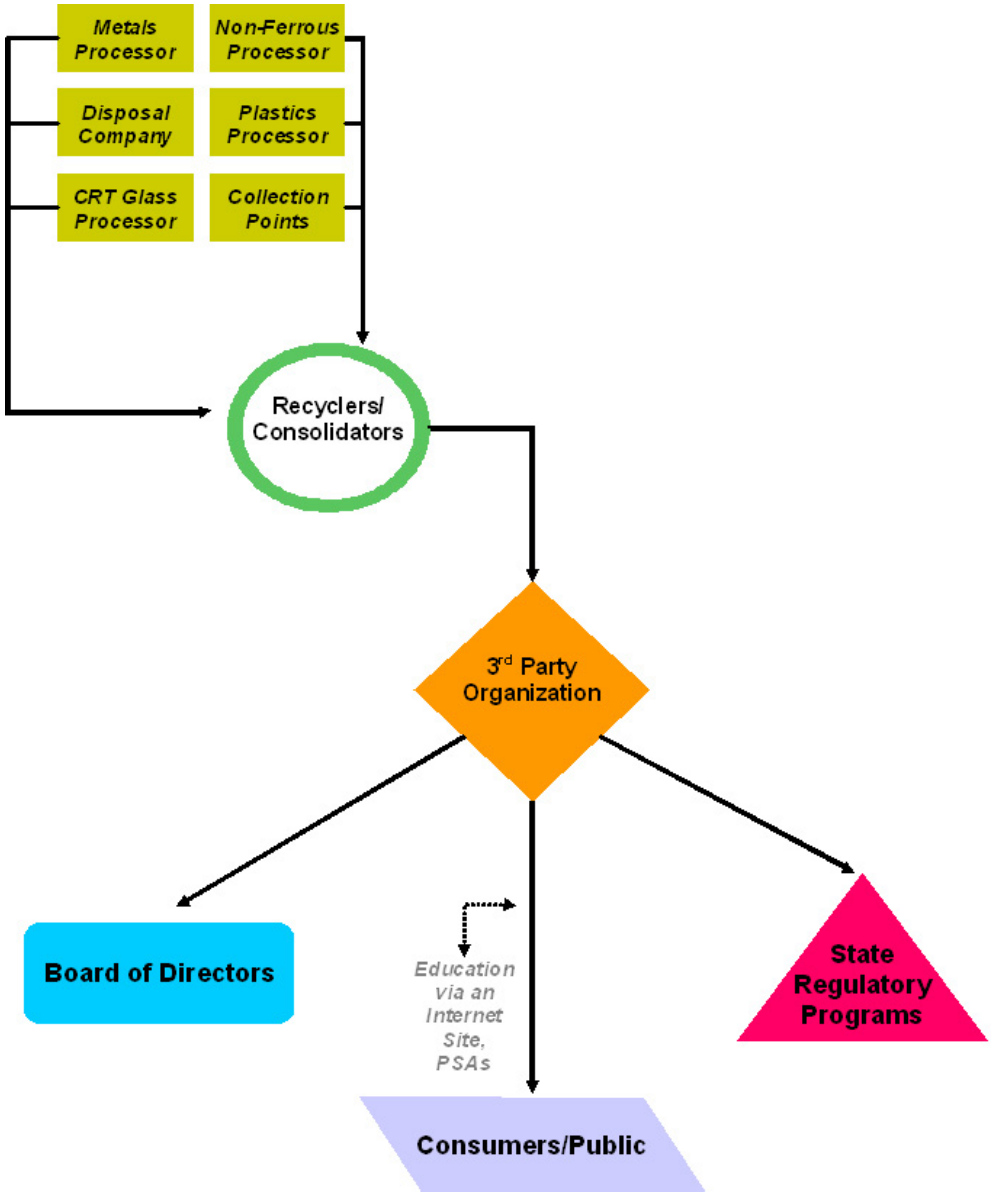
6.2.5 Specific services to be contracted – e.g. processing, collection, auditing, publicity and marketing.

- Contractor auditing function to be competitively outsourced.
- Admin and bookkeeping services to be competitively outsourced.
- External auditor to be hired by Board of Directors.
- Leasing costs for office space.
- Information Management System outsourced in order to maximize use of the Internet for major functions: materials tracking, invoicing, contract negotiation, reimbursement of consolidators, audit data reporting, public relations and information. Also includes cost of office PCs and computer network.
- Outreach and education expenses include development of advertising, PSAs, free media exposure, educational materials about the program and response to queries as needed.
- Legal services to assist in draft/negotiation of contracts with recycling/shipping contractors, consolidators, outsourcing vendors and regulation compliance.
- Insurance needs.

6.2.6 Product flow data management

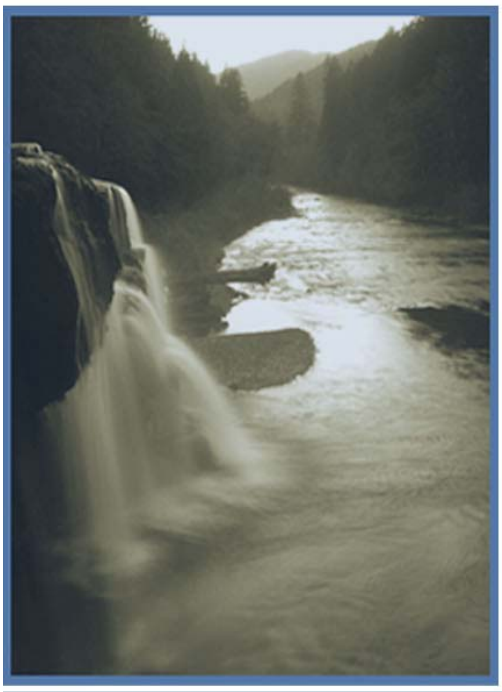
The TPO information architecture will meet the goals listed in Section 1 of this Business Plan. Given the public interest in the TPO mission and activities, this information architecture is the primary mechanism for ensuring that the TPO maintains transparency to external stakeholders. A high-level diagram of information flows within the TPO system is presented below.

TPO INFORMATION FLOW



APPENDIX A:

Pacific Northwest Third Party Organization Project Overview



April 2006

PROJECT OVERVIEW

A Project of Research and Implementation of a Private Third-Party Organization Dedicated to Electronic Product Stewardship in the Pacific Northwest

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PHASE ONE PROJECT OVERVIEW

A PROJECT OF RESEARCH AND IMPLEMENTATION
OF A PRIVATE THIRD-PARTY ORGANIZATION
DEDICATED TO ELECTRONIC PRODUCT STEWARDSHIP
IN THE PACIFIC NORTHWEST

EXECUTIVE SUMMARY

Historical and Current Context
The 20th century experienced a revolution in the way people communicate, store and process information. Landmark technologies such as the cathode ray tube and the semiconductor enabled this revolution, and were manufactured on a mass scale in the years following World War II. These and more recent technologies allowed the extension of information and entertainment to nearly everyone, improved quality of life and changed the world. Growth of this technology markedly accelerated in the late 1990s.

One impact of this revolution was the rapid antiquating of some electronic products as new products with greater function replaced them. New electronic equipment is comprised of hundreds of different materials gleaned from thousands of natural and recycled sources. These materials are expertly crafted and assembled at component and product manufacturing facilities, then distributed globally at ever-decreasing prices to *billions of people each year*. Once these electronic products become obsolete by primary and secondary users, what once was a functional information/communication device inevitably becomes, once again, merely a composite of basic materials like glass, aluminum, steel and copper. This project examined how a private third-party organization could assist in managing a process for collection and reuse and/or recycling of used electronic devices that consumers and business no longer need.

The environmental challenge posed by used electronics is a challenge of re-assembling a highly distributed set of materials scattered concurrently with human settlement patterns around the globe. It is thus a challenge of capture (i.e., collection) and reuse of those materials. Not only are current use and disposal patterns wasteful, they also increase environmental stress on natural systems. Capturing and recycling electronic waste offers a way to reduce the burden from mining and drilling to produce raw materials.

Northwest TPO Project Leadership
The Northwest TPO Project was performed under the guidance and direction of a Steering Committee of national/international electronics manufacturers. The project focused on the feasibility of a private Third Party Organization (TPO) dedicated to electronic product stewardship in the Pacific Northwest, specifically in the states of Washington and Oregon. This project explored the form, function and feasibility of using a private not-for-profit TPO serving the interests of consumers in order to deliver electronic scrap collection and recycling services.

The project was originally conceived by the Northwest Product Stewardship Council (NWPSC, a group of government agencies in the Northwest U.S.) and was organized by NWPSC members with assistance from the Polymer Alliance Zone, Rifer Environmental and the U.S. EPA. The project work was performed throughout by a Support Team chaired by a representative from the Washington Department of Ecology.

Project Steering Committee Members (January, 2006)

David Thompson (Panasonic)

Frank Marella (Sharp)

Butch Teglas, Ric Erdheim (Philips)

Doug Smith (Sony)

Tim Mann (IBM)

Ed Nevins (JVC)

Mike Moss (Samsung)

Shelby Houston (Epson)

Project Support Team Members (January, 2006)

David Nightingale (PM/Washington DOE)

Tamie Kellogg (facilitator)

Jan Whitworth (Oregon DEQ)

R. V. "Buddy" Graham (Polymer Alliance Zone)

David Weinberg (RBRC)

Garth Hickle (Minnesota)

Jeff Hunt (U.S. EPA Region X)

Jason Linnell (NCER)

Walter Alcorn (Alcorn Consulting/NCER)

Lisa Sepanski (King County)

Norm England (RBRC)

Saskia Mooney (RBRC)

Scott Klag (Metro Regional Government, Oregon)

Sego Jackson (Snohomish County)

Signe Gilson (City of Seattle)

Steven Johnson (Garvey, Schubert, Barer)

Viccy Salazar (U.S. EPA)

Wayne Rifer (Rifer Environmental)

Jay Shepard (Washington DOE)

Funding for the project came from a combination of industry funds and governmental grants. The TPO project was focused in the Pacific Northwest, but the process engaged national participants, and is intended to inform both the policy considerations in Washington and Oregon as well as the national challenge to develop an effective electronics end-of-life management system.

A New Approach

Business and government stakeholders have indicated support for third party oversight and management of an electronics reuse and recycling system. Stakeholder support for third party services and related infrastructure development stems from multiple interests, including the desire to relieve the government of recycling program administration responsibility and a push for industry to assume a management role as part of a shared responsibility approach.

In the context of electronics recycling systems, an industry-led TPO could efficiently fulfill one or more roles that otherwise would be borne by government, individual companies or other stakeholders. For example, once authorized by one or more states (or by Congress), a primary TPO function could be to provide a mechanism of delivering electronic waste (e-waste) management services that engage electronics manufacturers and other stakeholders to help achieve statewide and/or regional program objectives. Such a TPO could, but would not necessarily have to, collect and disburse government-sanctioned revenue. States and/or Congress could create or designate a TPO to operate a recycling system under government oversight.

At the onset of this project, this complex set of possible TPO roles and structures raised numerous legal, business and policy questions. Thus, the project explored several key legal questions using outside counsel and other legal expertise. To illustrate how a TPO could provide practical value on a business and policy basis, the Steering Committee developed a TPO Business Plan based on a series of assumptions about TPO responsibilities and the broader, legislated electronics recycling system. The NW TPO project explored concerns expressed by other stakeholders outside of the Steering Committee about the TPO concepts and implementation impacts. Analysis was also performed regarding the viability of a TPO using alternative assumptions from those included in the TPO Business Plan.

Overall Findings

- An electronics recycling system utilizing a privately-managed, regional multi-state TPO provides an efficient alternative to state-by-state recycling administrations.
- While there are several legal issues that could limit the function of a regional TPO, any new recycling system will require legislative authorization at the state and/or federal level. Thus, legal restrictions on TPO establishment, operation and financing are limited to a relatively narrow set of constitutional issues.
- A base level of “free and convenient” service managed by a regional TPO could be implemented with a cost-per-new unit sold of under $6. The Steering Committee selected financing of these services through an Advance Recycling Fee (ARF) model.
- A hybrid recycling system model combining government collection and oversight of a government-mandated Advanced Recycling Fee and private sector TPO management of the collection/recycling system offers the best guarantee of fee assessment on all product sales, as well as privately-run collection and recycling. Providing service through contractors guarantees that costs will not escalate and

prevents the need to create a new government bureaucracy. In addition, a privately functioning TPO is flexible enough to operate in any state that wishes to participate.

- A "wholly-private" TPO that did not have a legislatively-authorized fee-collection authority could only accept ARF money on a voluntary basis, which would not guarantee full market participation.

Availability of NW TPO Documents

The Northwest Product Stewardship Council in coordination with the Washington State Department of Ecology has published the results of this project. The TPO Business Plan, legal analyses, project overview and related documents are available at http://www.productstewardship.net/ and www.electronicrecycling.org/TPO.

PHASE ONE PROJECT OVERVIEW

1. INTRODUCTION

This report summarizes a project to research the form, function and feasibility of using a private third-party organization (TPO), or a not-for-profit entity that engages product distribution channels, recyclers, manufacturers and others to deliver electronic scrap collection and recycling services. The project was led by representatives of electronics manufacturers working as a Steering Committee. It was organized and supported throughout by a technical Support Team that included other stakeholders and interested parties whose views are not necessarily reflected in this report. The project was funded by a combination of industry funds and governmental grant funding.

Phase One of the TPO project was focused in the Pacific Northwest, but it engaged national participants and is intended to inform the national challenge to develop an electronics end-of-life management system. Primary consideration was given to identifying a possible TPO solution that would complement existing and developing localized infrastructure. Many approaches and options were reviewed and analyzed, and this report reflects an approach identified as reasonable in the Pacific Northwest.

1.1 Why a TPO?

The strengths--as well as some of the weaknesses--of a TPO are laid out in detail in the Business Plan. A TPO prevents the necessity of forming a substantial new bureaucracy to deliver collection and recycling services, and engages the private sector in organizing and providing those services. In addition, by consolidating diverse collection and recycling efforts under a TPO, a greater and more consistent level of service can be provided to consumers at a lower cost.

This general TPO approach has precedents in other industries (e.g., rechargeable batteries, thermostats) in the U.S. and strong support in many other countries where product stewardship programs are implemented for the end-of-life management of products, primarily Europe and Canada. Applying this approach to used electronics is a new concept in the U.S., where by tradition, local governments are generally the default agent for organizing or delivering waste services. ***This project was intended to outline the financial, organizational and legal basis for a private electronics product stewardship TPO in the United States.***

Ideally a TPO would provide a flexible mechanism for managing e-waste collection and recycling as needs evolve. Given the rapid changes in new product technologies, recycling technologies, industry business models and localized collection/recycling infrastructure, the challenges facing the TPO are a moving target. Thus, the TPO functions assumed in this report and project Business Plan may also evolve as needs change over time. Electronics industry stakeholders are accustomed to this dynamic environment and will bring unique experience and perspective to managing the evolving recycling challenge.

1.2 A TPO and the Funding System

A TPO cannot generate the funds to pay for collection and processing. The TPO would act as the agent authorized to disperse funds that are legislatively authorized to run the system. Both this report and the Business Plan are based on the premises of an advance recycling fee funding the system. This is a set fee on the sales of new products, and would be collected from consumers at the retail point of sale or at the first sale into the state.

1.3 A Two-Phased Project

This overview and the Business Plan summarize the work during Phase One. At this point, it has not been decided if Phase Two will be undertaken. The project proposal described the two phases as follows:

Phase One will undertake background research, including legal research, and engage the participants in answering critical questions and developing a draft TPO implementation plan. If the project leadership group determines that implementation is feasible (a go/no-go decision), then Phase Two will be initiated.

Phase Two will implement a pilot TPO to support electronics collection programs in Oregon and Washington for a limited period.

The Steering Committee decided to produce the Business Plan as a part of Phase One, even though it was originally projected for a third phase.

1.4 Description of NW TPO Business Plan

This report is a companion document to the Electronic Product Stewardship TPO Business Plan and serves as a summary of Phase One project activities. The Business Plan incorporates the substantive assumptions and decisions made by the Project Steering Committee during the course of the project.

The Business Plan provides the basis for the formation of a TPO, and the delivery of recycling services, operating within a legislatively authorized funding mechanism. The Plan assumes that the funding mechanism is a fee on the market sales of electronic products for which the funds are dedicated to providing end-of-life management services. The Plan analyzes the feasibility of this approach on single-state and multi-state bases.

2. BACKGROUND ON THE PROJECT

2.1 Project purpose

The following text from the original proposal summarizes the project purposes.

The purpose of this project is to investigate what is needed to establish a TPO and then, if feasible, to implement a limited-duration simulated TPO pilot program. This will be a means for manufacturers, local governments and recyclers to gain experience with the use of a TPO, and it is hoped this will eventually result in the permanent establishment of such an organization. The project overview and TPO Business Plan will provide answers to many key questions regarding legislative adoption and implementation of a TPO.

Though attractive in principle, a private TPO poses many practical challenges. A type of TPO approach has been implemented in other industries in the U.S. and in other countries, including Europe and Canada, but for electronics the same approach may require a new kind of institution in the U.S. Some of the questions that need to be answered are:

- *Is a private TPO operated at the state/regional level feasible?*
- *How would one be established?*
- *What roles could/should it play?*
- *What are the administrative costs and how can they be kept at a minimum?*
- *What are the benefits and difficulties of a private versus public entity?*
- *Assuming costs are involved, how can they be spread fairly across products and brands?*
- *How to allow for brand operated recycling centers to compete on fair level with other recyclers?*

The organizational structures, functions and costs associated with the administration of the infrastructure through a private TPO have not been demonstrated for electronics management. In the first phase, this project will address these, and other, questions through research and dialogue. In the second (optional) phase, it will take them on in practice.

2.2 Initial Project Partners

Initial project partners organized the startup seed funding, solicited manufacturer input and participation, and prepared the initial framework for the project. Partners included U.S. EPA Region 10, Oregon Department of Environmental Quality, King County Solid Waste Division (SWD), Snohomish County Solid Waste Division, Metro (Portland), City of Seattle, City of Tacoma, the NW Product Stewardship Council (NWPSC), and the MARCEE project. This group is referred to hereinafter as the “project organizers.”

2.3 Project Steering Committee

In order to ensure that electronics manufacturers participating in the project were able to guide the process in a way that would represent their interests in forming a TPO, the project organizers decided that exclusively participating manufacturers would comprise the project’s Steering Committee. Because Phase Two included the option of the

manufacturers actually establishing a TPO, the project organizers determined that it would be more appropriate if manufacturers were able to control the process.

The Steering Committee's purpose was to direct the research and writing and have control over the final recommendations and decisions. The Steering Committee served as the voting members in Phase One. After soliciting manufacturer participation in late 2004 and early 2005–including submission of a collaborative action proposal at the EPA National Meeting on March 1st and 2nd–the following manufacturers agreed to serve on the Steering Committee:

- Epson America, Inc.
- IBM
- JVC
- Panasonic
- Philips
- Samsung
- Sharp
- Sony

The Steering Committee provided direction on the initial TPO models, decision points in the TPO Business Plan, and the priority legal research questions over the course of conference calls and meetings described in Section 2.6.

2.4 Project Support Team

The TPO Support Team coordinated the execution of Phase One and provided technical and advisory support to the Steering Committee. The TPO Support Team participated in all project activities, calls and meetings, predominately taking a back seat to the discussions and decisions conducted by the Steering Committee. Support Team members were the primary drafters of documents requested by the Steering Committee, and arranged the logistics for each meeting and conference call. The Support Team did not vote in decision items, but its members did provide input as needed to assist the Steering Committee.

Members of the Support Team were comprised primarily of government representatives from the Northwest Product Stewardship Council, with David Nightingale at the Washington Department of Ecology serving as the primary project manager. The National Center for Electronics Recycling also participated on the Support Team and coordinated stakeholder input (see Section 3). At the request of the Steering Committee, the Rechargeable Battery Recycling Corporation (RBRC) was invited to join the Support Team, along with the RBRC counsel at Wiley Rein & Fielding, who joined to provide support on legal issues. Kellogg Consulting Services was selected to provide independent facilitation services for the Steering Committee and Support Team meetings. Organizations represented on the Support Team were:

- City of Seattle
- EPA Region 10, Office of Air, Waste & Toxics
- King County (WA) Solid Waste Division
- MARCEE (Mid-Atlantic Recycling Center for End-of-Life Electronics) Project

- Metro (Portland, OR)
- National Center for Electronics Recycling
- Oregon Department of Environmental Quality
- Polymer Alliance Zone
- Rechargeable Battery Recycling Corporation
- Rifer Environmental
- Snohomish County (WA) Solid Waste Management Division
- Seattle Public Utilities
- Washington State Department of Ecology
- Wiley Rein & Fielding LLP

The Polymer Alliance Zone of West Virginia (PAZ), a 501(c)3 non-profit, provided fiscal agent services by invoicing and collecting manufacturer payments, and paying for approved project expenses from a designated fund. PAZ provided similar services for manufacturer contributions during the 2001-2002 U.S. EPA Region III eCycling Pilot.

2.5 Project Funding

Several sources of direct and in-kind funding from the government and private sector were obtained for this project.

2.5.1 Government Sources

Washington State Department of Ecology secured seed funding from EPA Region 10 of $12,250 to hire a facilitator. U.S. EPA also provided additional funding to continue facilitation services through the end of the project. The MARCEE Project, a grant program funded by the Department of Energy and the U.S. Environmental Protection Agency via a cooperative agreement with West Virginia University, provided in-kind contributions.

2.5.2 Manufacturer Sources

Manufacturers who were solicited to participate in the project were asked to provide up to $7,000 each. After the initial meeting of the Steering Committee, committed manufacturers decided to allow additional companies to participate at a lower contribution level. One company joined the project at this level and contributed $1,400. In all, eight manufacturers contributed at the $7,000 level, and one contributed at the $1,400 level for a total of $57,400 in manufacturer funding.

2.5.3 In-Kind Contributions

Numerous other organizations provided either direct contributions for meeting expenses or in-kind project resources. The in-kind resources come in the form of staff participation, travel, and/or professional assistance. Generous in-kind support was

provided by the MARCEE project, RBRC, and all of the state and local governments represented on the Support Team.

2.6 Project Activities

The Pacific Northwest Third Party Organization (TPO) project held 13 Steering Committee meetings over a 7 month period following the Steering Committee formation conference call on May 25, 2005:

- June 15 (conference call)
- June 29 (conference call)
- July 13 (meeting in Federal Way, WA)
- July 27 (conference call)
- September 7 (conference call)
- September 20 (meeting in Tacoma, WA)
- October 12 (conference call)
- October 26 (meeting at E-Scrap conference in Orlando, FL)
- November 9 (conference call)
- November 30 (conference call)
- December 7 (meeting in Olympia, WA)

These meetings provided the opportunity for the Steering Committee to discuss project direction, prioritize research questions and draft assumptions for inclusion in the Business Plan. Phase One project activities focused on development of several key documents and draft working papers, including:

- The Business Plan
- A detailed spreadsheet model reflecting the assumptions in the text of the Business Plan
- A report from the project attorney hired to review several key TPO legal questions
- A summary of concerns about the TPO concept as articulated by various stakeholders in the U.S. during various electronics recycling discussions
- A list of questions about the TPO concept raised by manufacturers and other stakeholders
- A Steering Committee Charter document, including a set of Guiding Principles and a schedule for Phase One
- Several “strawmen” and model documents used to identify research questions and make assumptions underlying in the Business Plan

Phase One attempted to accommodate different financing approaches and was not initiated as an advocacy effort for any particular approach to financing an electronics recycling system. Project activities and deliverables were developed independently of any particular system financing assumptions until late in Phase One when the Steering Committee prioritized the delivery of free and convenient services financed by current sales of electronic products.

2.7 Legal research

The law firm of Garvey, Schubert & Barer was hired to identify and describe the principal legal constraints that would affect the formation and operation of conceptual models in the states of Washington and Oregon. Additional legal analysis was also provided by Wiley Rein & Fielding LLP, including the outlining of legal issues associated with a hybrid organizational governance structure ultimately selected as the assumed governance model by the Steering Committee in the Business Plan.

Appendix D presents the results of legal research conducted during Phase One of the Pacific Northwest TPO Project.

3. RELATED STAKEHOLDER ACTIVITIES, ISSUES AND CONCERNS

To facilitate communication with other stakeholders (other governments, non-participating manufacturers, NGOs, etc.), the National Center for Electronics Recycling (NCER) organized a Multi-State TPO Project Committee and an additional committee for recyclers. The project committee was organized to provide input and comments on the progress of the NW pilot and to develop plans for expanding the effort into other states or regions. The recycler committee was organized to provide targeted recycler input and comments.

3.1 Report on stakeholder committee meetings

The NCER held 4 conference calls with the multi-stakeholder committee to report progress on the NW TPO project and TPO discussions in others states/regions, and to gather stakeholder comments and concerns. Out of these discussions, several documents were produced:

- TPO Fact Sheet
- Possible Roles for TPO in Existing/Proposed Programs Matrix
- TPO Survey
- Specific comments from the multi-stakeholder committees are addressed in Appendix E: Stakeholder Concerns. In general, stakeholders focused on the following topics when discussing an electronics recycling TPO:

- Strong preference for TPO that would work across state lines–inefficiencies in multiple TPOs in different states noted.
- Desire to resolve legal precedent issues–TPO structure, voluntary/mandatory TPO, fee collection issues, setting producer responsibility shares while ensuring no free-riders, operating in multiple states, etc.
- Need for outreach to other states/regions to educate about TPO roles, possible models.

- Recyclers voiced the following comments and concerns regarding their potential interaction with a TPO:
  - There must be certainty that the TPO would be more efficient than government.
  - TPO must maintain a high-level of transparency, particularly with auditing.
  - Preference is for a TPO that would operate across state lines.
- A summary of the comments provided by various stakeholder groups from the NCER TPO Survey is provided in Appendix E.

3.2 Stakeholder issues from Washington 2488 process

The Washington State Legislature directed the Department of Ecology to conduct research and develop recommendations for implementing and financing an electronic product collection, recycling and reuse program within the state ("2488 process"). This parallel, but separate, process managed by the Department of Ecology, included recommendations for a state electronics recycling program incorporating a TPO or "Materials Management and Financing Authority." Since a TPO was included in the draft of the recommendations, several stakeholder concerns were gathered during this process. A summary of these concerns is provided in Appendix E. In most cases, these concerns were addressed in the NW TPO Business Plan. A description of how these concerns are addressed in the Business Plan is also included in Appendix E.

Note that the financing approach assumed under this study differs from the recommendations from the 2488 process. The Steering Committee decided that the TPO should focus on a comprehensive free and convenient system financed by current sales and assume the advance recycling fee funding method.

4. UNFINISHED ISSUES

4.1 Marketing/Public Education Plan & Recovered Materials Market Development Plan

Due to time and resource constraints, the final version of the Business Plan developed for the TPO project does not include an approach for two important functions of the TPO: the development of a Marketing/Public Education Plan and a Recovered Materials Market Development Plan. Plans for these activities could be developed during Phase

Two or during other TPO efforts initiated in a different geographic region of the United States.

4.2 Other Questions Not Studied during Phase One

At the initiation of Phase One, the Project Support Team assembled a list of TPO-related questions for study by this project. While many of these questions have been explored and discussed thoroughly by the Steering Committee, several questions were not explored–or at least not explored in depth–during the course of the project due to time and resource constraints. These questions include:

- How does this TPO work with other states or regions that may want to participate? (explored to some extent)
- What mechanisms, if any, are available at both the pilot and permanent TPO phase to eliminate "free rider" products?
- What are the constraints on the TPO to act in the public interest in its programmatic responsibilities or in establishing requirements in the absence of notice-and-comment rulemaking?
- Are the anti-trust implications different under a system that allows for multiple TPOs?
- How could the TPO be structured to allow individual manufacturers or groups of manufacturers to provide an equivalent level of service without participating in the primary TPO?
- What access would the public have to the TPO's records and actions?
- Are there issues regarding shipment to different states with different regulations? Can we realize efficiencies despite different state laws? (explored to some extent)
- How can the TPO encourage improved design for the environment and/or recycling? (explored to some extent)
- Can a TPO establish responsibility (return share, etc) under producer responsibility systems?
- What are the specific documentation and reporting needs to be borne by service providers in a TPO-run recycling system?

Depending on the responsibilities and scope assumed by a TPO, answers to these questions may provide important insight into the smooth functioning of a TPO in a multi-state electronics recycling system.

Appendix B:

Spreadsheet models with financial details underlying the Business Plan

Major Assumptions & Calculations

Ultimate annual TPO throughput in lbs. per capita (for both Washington and Oregon)	2.6		
		Washington Population	*Oregon Population*
		2.18%	*1.25%*
Population estimates (2004 U.S. census estimates)		*6,203,788*	*3,549,586*
Total Projected Pacific NW TPO annual throughput following program rampup (in lbs.)	**25,358,772**		
Average fee charged to TPO by recycling contractors per lb.recycled	$0.24		
Average shipping costs charged to TPO per lb. from consolidator to recycler	$0.03		
Average consolidator fees/collection incentive payments paid by TPO (per lb.)	$0.15		
TPO administrative costs per pound in month 48 (based on costs detailed in "Staffing" and Exp&Rev Data" sheets)	$0.06		
Rounded cost per new TV unit >19" sold without vendor compensation	**$6**		
Rounded cost per new TV unit <19" sold without vendor compensation	**$3**		
Rounded cost per new desktop PC unit sold without vendor compensation	**$2**		
Rounded cost per new CRT/large LCD monitor unit sold without vendor compensation	**$4**		
Rounded cost per new LCD monitor unit <22" sold without vendor compensation	**$2**		
Rounded cost per new laptop unit sold without vendor compensation	**$1**		
			Avg Weight (lbs.) (preliminary EPA estimates)
Cost "percent allocation" placed on new TVs > 19" (based on avg weight)	100%		*72*
Cost "percent allocation" placed on new TVs > 19" (based on avg weight)	57%		*41*
Cost "percent allocation" placed on new desktop PCs (based on avg weight)	31%		*22*
Cost "percent allocation" placed on new CRT/large LCD monitors (based on avg weight)	63%		*45*
Cost "percent allocation" placed on new LCD monitors <22" (based on avg weight)	26%		*19*
Cost "percent allocation" placed on new laptops (based on avg weight)	10%		7
Number of new TVs >19" sold (estimate of WA+OR sales based on population)	791,100		
Number of new TVs <19" sold (estimate of WA+OR sales based on population)	236,303		
Number of new desktop computers sold (estimate of WA+OR sales based on population)	1,267,131		
Number of new CRT/large LCD monitors sold (estimate of WA+OR sales based on population)	1,027,403		
Number of new LCD monitors <22" sold (estimate of WA+OR sales based on population)	342,468		
Number of new laptops sold (estimate of WA+OR sales based on population)	473,804		
Monthly revenues to the TPO	$637,704		
TPO revenue collection rate	90%		
ARF adjustment to account for bad collections, payback of capital	1.11		
Total cost for first 48 months of operation:	$28,684,000		
Total annual cost of entire system in Year 4 (used as basis to estimate per unit cost):	$11,137,748	*Cost per lb. collected:*	*$0.44*
- Total annual system cost in Year 4	$11,137,748		
- Total annual system cost in Year 4 per WA/OR household	$3.08		
- TPO Administrative costs in year 4	$1,623,136	15%	
- TPO Administrative costs per WA/OR household in year 4	$0.45		
Monthly interest on accumulated deficit/surplus:			
If deficit, interest calculated at prime rate (6.25%) plus 1%	0.6042%		
If surplus, earnings calculated at 91-day T-Bill rate (3.345%)	0.2788%		

TPO begins booking revenue in month 9

TPO awards recycling and transportation contracts beginning in Q3, material collection/recycling begins in month 9, and payment for services initiated in Q4.

Audit/review process is phased in, interim audit/review system established in Q2 for first 18 months of operation

Total ARF Revenue by Product	% of Total	
$4,208,781	37.8%	(TVs >19")
$715,887	6.4%	(TVs <19")
$2,059,853	18.5%	(PCs)
$3,416,218	30.7%	(heavier monitors)
$480,801	4.3%	(LCD monitors <22")
$245,069	2.2%	(laptops)
$0	0.0%	(printers)
$11,126,610	99.9%	

THIRD PARTY ORGANIZATION STAFFING PROJECTIONS

In Fiscal Years beginning October 1, 2006

	2007				2008				2009				2010			
Staffing	**1st Qtr.**	**2nd Qtr.**	**3rd Qtr.**	**4th Qtr.**	**1st Qtr.**	**2nd Qtr.**	**3rd Qtr.**	**4th Qtr.**	**1st Qtr.**	**2nd Qtr.**	**3rd Qtr.**	**4th Qtr.**	**1st Qtr.**	**2nd Qtr.**	**3rd Qtr.**	**4th Qtr.**
Executive Director	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Communications Director	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contracts Manager	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
AR/AP Manager	0	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Office Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Local Outreach/Communication Coordinator		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Support Staff	0	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
Total Headcount	**2.5**	**5**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Annual Salary			Yearly Increase													
Executive Director	110000		5%		115500				121275				127339			
Communications Director	70000				73500				77175				81034			
Contracts Manager	60000				63000				66150				69458			
Accounts Receivable Manager	55000				57750				60638				63669			
Office Manager	45000				47250				49613				52093			
Local Outreach Coordinator	45000				47250				49613				52093			
Support Staff	25000				26250				27563				28941			
Fringe Benefit Rate	30%															
Labor Costs																
Executive Director	35750	35750	35750	35750	37537.5	37537.5	37537.5	37537.5	39414	39414	39414	39414	39414	39414	39414	39414
Communications Director	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contracts Manager	9750	19500	19500	19500	20475	20475	20475	20475	21499	21499	21499	21499	21499	21499	21499	21499
Accounts Receivable Manager	0	8937.5	17875	17875	18768.75	18768.75	18768.75	18768.75	19707	19707	19707	19707	19707	19707	19707	19707
Office Manager	14625	14625	14625	14625	15356	15356	15356	15356	16124	16124	16124	16124	16124	16124	16124	16124
Local Outreach Coordinator	0	7312.5	14625	14625	15356	15356	15356	15356	16124	16124	16124	16124	16124	16124	16124	16124
Support Staff	0	8125	8125	8125	8531.25	8531.25	17062.5	17062.5	17915.625	17915.625	17915.625	17915.625	17915.625	17915.625	17915.625	17915.625
Total Labor Cost	**$60,125**	**$94,250**	**$110,500**	**$110,500**	**$116,025**	**$116,025**	**$124,556**	**$124,556**	**$130,784**	**$130,784**	**$130,784**	**$130,784**	**$130,784**	**$130,784**	**$130,784**	**$130,784**

TPO / 48 Months Projection

Expense	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Recycling Contractors	0	0	0	0	0	0	0	0
Shipping Contractors	0	0	0	0	0	0	0	0
Consolidator Payments/CIPs	0	0	0	0	0	0	0	0
Contractor Audit Services	0	0	0	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	0	0	0	1,000	1,000	1,000	1,000	1,000
Market Development	0	0	0	0	0	0	0	0
External Financial Audit Services	0	2,500	2,500	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	20,000	0	0	20,000	0	0	0	0
Annual Board Meeting (also quarterly mtg)	0	0	0		0	0	50,000	0
Outreach/Education (incl. printing, publications)	5,000	10,000	10,000	15,000	25,000	25,000	25,000	25,000
Legal Services	10,000	25,000	25,000	20,000	20,000	15,000	15,000	10,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	15,000	0	0	0	0	0	0	0
Misc. Supplies, Postage	500	500	500	500	500	750	750	750
Employee Training and Workshops	0	0	1,000	1,000	1,500	1,500	1,500	2,000
Employee Travel	3,750	3,750	3,750	7,500	7,500	7,500	9,000	9,000
Conference Fees	0	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	20,042	20,042	20,042	31,417	31,417	31,417	36,833	36,833
Staff Headcount	2.5	2.5	2.5	5	5	5	6	6
% of Eventual Year 4 TPO Throughput	0%	0%	0%	0%	0%	0%	0%	0%
Total Lbs. Recycled	0	0	0	0	0	0	0	0
Total Monthly Expense	$98,292	$88,292	$89,292	$132,917	$123,417	$118,667	$175,583	$121,083
TPO total costs in cents/lb. recycled	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Revenue								
Fees	$0	$0	$0	$0	$0	$0	$0	$0
Interest Earnings/Expense	0	(594)	(1,131)	(1,677)	(2,490)	(3,251)	(3,988)	(5,073)
Total Revenue	$0	-$594	-$1,131	-$1,677	-$2,490	-$3,251	-$3,988	-$5,073
Monthly Deficit/Surplus	-$98,292	-$88,886	-$90,423	-$134,594	-$125,907	-$121,918	-$179,571	-$126,156
Accumulated Deficit/Surplus	-$98,292	-$187,177	-$277,600	-$412,194	-$538,101	-$660,018	-$839,589	-$965,745
Prime Interest Rate plus 1%	7.25%							
91-day T-Bill Rate	3.35%							

TPO / 48 Months Projection

Expense	**Month 9**	**Month 10**	**Month 11**	**Month 12**	**Month 13**	**Month 14**	**Month 15**
Recycling Contractors	50,718	76,076	101,435	121,722	142,009	162,296	182,583
Shipping Contractors	6,340	9,510	12,679	15,215	17,751	20,287	22,823
Consolidator Payments/CIPs	31,698	47,548	63,397	76,076	88,756	101,435	114,114
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	1,000	1,000	1,000	1,000	1,500	1,500	1,500
Market Development	0	0	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	0	20,000	0	0	20,000	0	0
Annual Board Meeting (also quarterly mtg)	0	0	0	0	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Legal Services	10,000	10,000	10,000	10,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	0	0	0	0	0	10,000
Misc. Supplies, Postage	750	1,000	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,000	2,000	2,000	2,000	2,500	2,500	2,500
Employee Travel	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Conference Fees	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	36,833	36,833	36,833	36,833	38,675	38,675	38,675
Staff Headcount	6	6	6	6	6	6	6
% of Eventual Year 4 TPO Throughput	10%	15%	20%	24%	28%	32%	36%
Total Lbs. Recycled	211,323	316,985	422,646	507,175	591,705	676,234	760,763
Total Monthly Expense	$209,839	$274,467	$298,845	$334,347	$387,691	$403,193	$448,696
TPO total costs in cents/lb. recycled	$0.99	$0.87	$0.71	$0.66	$0.66	$0.60	$0.59
Revenue							
Fees	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	(5,835)	(3,285)	(1,110)	429	1,276	1,977	2,636
Total Revenue	$631,869	$634,419	$636,593	$638,133	$638,980	$639,680	$640,339
Monthly Deficit/Surplus	$422,030	$359,952	$337,749	$303,786	$251,289	$236,487	$191,644
Accumulated Deficit/Surplus	-$543,715	-$183,764	$153,985	$457,771	$709,059	$945,546	$1,137,190

Prime Interest Rate plus 1%
91-day T-Bill Rate

TPO / 48 Months Projection

Expense	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**
Recycling Contractors	202,870	223,157	238,372	253,588	268,803	278,946	289,090
Shipping Contractors	25,359	27,895	29,797	31,698	33,600	34,868	36,136
Consolidator Payments/CIPs	126,794	139,473	148,983	158,492	168,002	174,342	180,681
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	1,500	1,500	1,500	1,500	1,500	2,000	2,000
Market Development	0	0	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	20,000	0	0	0	0	0	20,000
Annual Board Meeting (also quarterly mtg)	0	0	0	50,000	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Legal Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	0	0	0	0	0	0
Misc. Supplies, Postage	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Employee Travel	9,000	9,000	9,000	10,500	10,500	10,500	10,500
Conference Fees	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	38,675	38,675	38,675	41,519	41,519	41,519	41,519
Staff Headcount	6	6	6	7	7	7	7
% of Eventual Year 4 TPO Throughput	40%	44%	47%	50%	53%	55%	57%
Total Lbs. Recycled	845,292	929,822	993,219	1,056,616	1,120,012	1,162,277	1,204,542
Total Monthly Expense	$494,198	$509,700	$536,327	$617,297	$593,924	$612,175	$649,926
TPO total costs in cents/lb. recycled	$0.58	$0.55	$0.54	$0.58	$0.53	$0.53	$0.54
Revenue							
Fees	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	3,170	3,579	3,946	4,239	4,308	4,442	4,525
Total Revenue	$640,873	$641,282	$641,649	$641,943	$642,011	$642,145	$642,229
Monthly Deficit/Surplus	$146,676	$131,582	$105,322	$24,645	$48,087	$29,970	-$7,697
Accumulated Deficit/Surplus	$1,283,866	$1,415,448	$1,520,770	$1,545,416	$1,593,503	$1,623,473	$1,615,776
Prime Interest Rate plus 1%							
91-day T-Bill Rate							

TPO / 48 Months Projection

Expense	**Month 23**	**Month 24**	**Month 25**	**Month 26**	**Month 27**	**Month 28**	**Month 29**
Recycling Contractors	299,234	304,305	314,449	319,521	324,592	329,664	334,736
Shipping Contractors	37,404	38,038	39,306	39,940	40,574	41,208	41,842
Consolidator Payments/CIPs	187,021	190,191	196,530	199,700	202,870	206,040	209,210
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Market Development	0	0	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	0	0	20,000	0	0	20,000	0
Annual Board Meeting (also quarterly mtg)	0	0	0	0	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Legal Services	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	5,000	0	0	0	0	0
Misc. Supplies, Postage	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Employee Travel	10,500	10,500	10,500	10,500	10,500	10,500	10,500
Conference Fees	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	41,519	41,519	43,595	43,595	43,595	43,595	43,595
Staff Headcount	7	7	7	7	7	7	7
% of Eventual Year 4 TPO Throughput	59%	60%	62%	63%	64%	65%	66%
Total Lbs. Recycled	1,246,806	1,267,939	1,310,203	1,331,336	1,352,468	1,373,600	1,394,732
Total Monthly Expense	$647,677	$661,553	$696,380	$685,256	$694,131	$723,007	$711,882
TPO total costs in cents/lb. recycled	$0.52	$0.52	$0.53	$0.51	$0.51	$0.53	$0.51
Revenue							
Fees	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	4,504	4,489	4,435	4,284	4,163	4,017	3,791
Total Revenue	$642,208	$642,192	$642,138	$641,987	$641,866	$641,721	$641,494
Monthly Deficit/Surplus	-$5,470	-$19,361	-$54,242	-$43,269	-$52,265	-$81,286	-$70,388
Accumulated Deficit/Surplus	$1,610,306	$1,590,945	$1,536,704	$1,493,435	$1,441,170	$1,359,885	$1,289,496

Prime Interest Rate plus 1%
91-day T-Bill Rate

TPO / 48 Months Projection

Expense	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**
Recycling Contractors	339,808	344,879	355,023	365,166	370,238	380,382
Shipping Contractors	42,476	43,110	44,378	45,646	46,280	47,548
Consolidator Payments/CIPs	212,380	215,550	221,889	228,229	231,399	237,738
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	2,000	2,000	2,000	2,000	2,000	2,000
Market Development	0	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	0	0	0	0	20,000	0
Annual Board Meeting (also quarterly mtg)	0	50,000	0	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000	25,000
Legal Services	5,000	5,000	5,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	0	0	0	0	0
Misc. Supplies, Postage	1,000	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,500	2,500	2,500	2,500	2,500	2,500
Employee Travel	10,500	10,500	10,500	10,500	10,500	10,500
Conference Fees	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	43,595	43,595	43,595	43,595	43,595	43,595
Staff Headcount	7	7	7	7	7	7
% of Eventual Year 4 TPO Throughput	67%	68%	70%	72%	73%	75%
Total Lbs. Recycled	1,415,865	1,436,997	1,479,262	1,521,526	1,542,659	1,584,923
Total Monthly Expense	$720,758	$779,633	$747,385	$765,136	$794,011	$791,762
TPO total costs in cents/lb. recycled	$0.51	$0.54	$0.51	$0.50	$0.51	$0.50
Revenue						
Fees	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	3,594	3,373	2,987	2,689	2,342	1,912
Total Revenue	$641,298	$641,077	$640,690	$640,393	$640,045	$639,616
Monthly Deficit/Surplus	-$79,460	-$138,557	-$106,694	-$124,743	-$153,966	-$152,146
Accumulated Deficit/Surplus	$1,210,037	$1,071,480	$964,785	$840,042	$686,076	$533,930
Prime Interest Rate plus 1%						
91-day T-Bill Rate						

TPO / 48 Months Projection

Expense	**Month 36**	**Month 37**	**Month 38**	**Month 39**	**Month 40**	**Month 41**
Recycling Contractors	390,525	400,669	410,812	420,956	431,099	436,171
Shipping Contractors	48,816	50,084	51,352	52,619	53,887	54,521
Consolidator Payments/CIPs	244,078	250,418	256,758	263,097	269,437	272,607
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	2,000	2,000	2,000	2,000	2,000	2,000
Market Development	0	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	0	20,000	0	0	20,000	0
Annual Board Meeting (also quarterly mtg)	0	0	0	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000	25,000
Legal Services	5,000	5,000	5,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	0	0	0	0	0
Misc. Supplies, Postage	1,000	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,500	2,500	2,500	2,500	2,500	2,500
Employee Travel	10,500	10,500	10,500	10,500	10,500	10,500
Conference Fees	2,500	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	43,595	43,595	43,595	43,595	43,595	43,595
Staff Headcount	7	7	7	7	7	7
% of Eventual Year 4 TPO Throughput	77%	79%	81%	83%	85%	86%
Total Lbs. Recycled	1,627,188	1,669,453	1,711,717	1,753,982	1,796,246	1,817,379
Total Monthly Expense	$809,514	$847,265	$845,016	$862,767	$900,518	$889,394
TPO total costs in cents/lb. recycled	$0.50	$0.51	$0.49	$0.49	$0.50	$0.49
Revenue						
Fees	$637,704	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	1,488	1,014	432	(313)	(1,675)	(3,273)
Total Revenue	$639,192	$638,717	$638,136	$637,390	$636,029	$634,431
Monthly Deficit/Surplus	-$170,322	-$208,548	-$206,880	-$225,377	-$264,489	-$254,963
Accumulated Deficit/Surplus	$363,608	$155,060	-$51,820	-$277,196	-$541,686	-$796,648
Prime Interest Rate plus 1%						
91-day T-Bill Rate						

TPO / 48 Months Projection

Expense	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**
Recycling Contractors	446,314	456,458	466,601	476,745	486,888
Shipping Contractors	55,789	57,057	58,325	59,593	60,861
Consolidator Payments/CIPs	278,946	285,286	291,626	297,966	304,305
Contractor Audit Services	5,000	5,000	5,000	5,000	5,000
Non-AR Administrative Services (AP, payroll)	2,000	2,000	2,000	2,000	2,000
Market Development	0	0	0	0	0
External Financial Audit Services	5,000	5,000	5,000	5,000	5,000
Rent	2,500	2,500	2,500	2,500	2,500
Information Management System (incl. extranet, intranet)	10,000	10,000	10,000	10,000	10,000
Telecommunications	1,500	1,500	1,500	1,500	1,500
Quarterly Board meeting expenses	0	0	0	0	20,000
Annual Board Meeting (also quarterly mtg)	0	50,000	0	0	0
Outreach/Education (incl. printing, publications)	25,000	25,000	25,000	25,000	25,000
Legal Services	5,000	5,000	5,000	5,000	5,000
Insurance ?? (property, directors & officers)	10,000	10,000	10,000	10,000	10,000
Office Furniture and Equipment	0	0	0	0	0
Misc. Supplies, Postage	1,000	1,000	1,000	1,000	1,000
Employee Training and Workshops	2,500	2,500	2,500	2,500	2,500
Employee Travel	10,500	10,500	10,500	10,500	10,500
Conference Fees	2,500	2,500	2,500	2,500	2,500
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	43,595	43,595	43,595	43,595	43,595
Staff Headcount	7	7	7	7	7
% of Eventual Year 4 TPO Throughput	88%	90%	92%	94%	96%
Total Lbs. Recycled	1,859,643	1,901,908	1,944,173	1,986,437	2,028,702
Total Monthly Expense	$907,145	$974,896	$942,647	$960,398	$998,149
TPO total costs in cents/lb. recycled	$0.49	$0.51	$0.48	$0.48	$0.49
Revenue					
Fees	$637,704	$637,704	$637,704	$637,704	$637,704
Interest Earnings/Expense	(4,813)	(6,470)	(8,546)	(10,440)	(12,453)
Total Revenue	$632,890	$631,234	$629,157	$627,263	$625,251
Monthly Deficit/Surplus	-$274,254	-$343,663	-$313,490	-$333,135	-$372,899
Accumulated Deficit/Surplus	-$1,070,903	-$1,414,565	-$1,728,055	-$2,061,190	-$2,434,089
Prime Interest Rate plus 1%					
91-day T-Bill Rate					

TPO / 48 Months Projection

Expense	**Month 47**	**Month 48**	Year 4 Total	48 month total	Y3 calcs	Y4 calcs
Recycling Contractors	497,032	507,175	$5,436,921			
Shipping Contractors	62,129	63,397	$679,615			
Consolidator Payments/CIPs	310,645	316,985	$3,398,076			
Contractor Audit Services	5,000	5,000	$60,000			
Non-AR Administrative Services (AP, payroll)	2,000	2,000	$24,000			
Market Development	0	0	$0			
External Financial Audit Services	5,000	5,000	$60,000			
Rent	2,500	2,500	$30,000			
Information Management System (incl. extranet, intranet)	10,000	10,000	$120,000			
Telecommunications	1,500	1,500	$18,000			
Quarterly Board meeting expenses	0	0	$60,000			
Annual Board Meeting (also quarterly mtg)	0	0	$50,000			
Outreach/Education (incl. printing, publications)	25,000	25,000	$300,000			
Legal Services	5,000	5,000	$60,000			
Insurance ?? (property, directors & officers)	10,000	10,000	$120,000			
Office Furniture and Equipment	0	0	$0			
Misc. Supplies, Postage	1,000	1,000	$12,000			
Employee Training and Workshops	2,500	2,500	$30,000			
Employee Travel	10,500	10,500	$126,000			
Conference Fees	2,500	2,500	$30,000			
Total Labor Cost (Incl. 30% for payroll taxes & benefits)	43,595	43,595	$523,136			
Staff Headcount	7	7				
% of Eventual Year 4 TPO Throughput	98%	100%				
Total Lbs. Recycled	2,070,966	2,113,231				
Total Monthly Expense	$995,901	$1,013,652	$11,137,748	$28,684,000		
TPO total costs in cents/lb. recycled	$0.48	$0.48			$7,295,719	$9,514,611
					82%	85%
Revenue					$1,100,000	$1,100,000
Fees	$637,704	$637,704				
Interest Earnings/Expense	(14,706)	(16,959)				
Total Revenue	$622,998	$620,745				
Monthly Deficit/Surplus	-$372,903	-$392,907				
Accumulated Deficit/Surplus	-$2,806,992	-$3,199,899				
Prime Interest Rate plus 1%						
91-day T-Bill Rate						

Staffing and Expense Justifications

Recycling contract rates of 24 cents/lb. estimate
Actual shipping costs per pound will depend on distance shipped; 3 cents is an estimate for the Pacific NW.
Consolidator payments are intended to cover costs of collection (i.e., getting material into bulk form). The estimate of 15 cents/lb. is within the range of the Collection Modeling Study done by Reggie Caudill, Sego Jackson, Wayne Rifer, et al in 2003.
Accounts receivable function for vendors/retailers to be outsourced
Contractor auditing function to be competitively outsourced.
Admin and bookkeeping services to be competitively outsourced.
Market Development costs for development of long-term markets/applications for recovered plastic and glass.
External auditor to be hired by Board of Directors.
Leasing costs for office space.
Information Management System outsourced to maximize use of the Internet for major functions: materials tracking, invoicing, contract negotiation, reimbursement of consolidators, audit data reporting, public relations and information. Also includes cost of office PCs, network.
Telephone, cell phone, fax charges
Quarterly meetings include meeting space, Board member reimbursement for travel, per diem.
Annual Board meeting to include participation by key public and private sector stakeholders.
Outreach and education expenses include development of advertising, PSAs, free media exposure, educational materials about the program, and response to queries.
Legal services to assist in draft/negotiation of contracts with recycling/shipping contractors, consolidators, outsourcing vendors , and reg compliance.
Insurance costs are a major unknown pending results from the Priority Research Question identified by the Steering Committee

Executive Director position required to run TPO
Contracts Manager position required to plan and execute deals with hired recycling and shipping contractors.
Accounts Receivable Manager position required to plan, manage outsourcing countract and troubleshoot outsourced AR functions
Office Manager required to administer TPO office.

Cash Flow Statement

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Net Income	($98,292)	($88,886)	($90,423)	($134,594)	($125,907)	($121,918)	($179,571)	($126,156)
Change in Noncash Current Assets and Liabilities								
Less: Accounts Receivable - Net	$0	$0	$0	$0	$0	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0	$0	$0	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0	$0	$0	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0	$0	$0	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0	$0	$0	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0	$0	$0	$0	$0	$0
Cash Flow	($98,292)	($88,886)	($90,423)	($134,594)	($125,907)	($121,918)	($179,571)	($126,156)
Cash, Beginning of Month	-	($98,292)	($187,177)	($277,600)	($412,194)	($538,101)	($660,018)	($839,589)
Cash, End of Month	($98,292)	($187,177)	($277,600)	($412,194)	($538,101)	($660,018)	($839,589)	($965,745)

Cash Flow Statement

	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
Net Income	$422,030	$359,952	$337,749	$303,786	$251,289	$236,487	$191,644
Change in Noncash Current Assets and Liabilities							
Less: Accounts Receivable - Net	$0	$0	$0	$0	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0	$0	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0	$0	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0	$0	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0	$0	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0	$0	$0	$0	$0
Cash Flow	$422,030	$359,952	$337,749	$303,786	$251,289	$236,487	$191,644
Cash, Beginning of Month	($965,745)	($543,715)	($183,764)	$153,985	$457,771	$709,059	$945,546
Cash, End of Month	($543,715)	($183,764)	$153,985	$457,771	$709,059	$945,546	$1,137,190

Cash Flow Statement

	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21
Net Income	$146,676	$131,582	$105,322	$24,645	$48,087	$29,970
Change in Noncash Current Assets and Liabilities						
Less: Accounts Receivable - Net	$0	$0	$0	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0	$0	$0	$0
Cash Flow	$146,676	$131,582	$105,322	$24,645	$48,087	$29,970
Cash, Beginning of Month	$1,137,190	$1,283,866	$1,415,448	$1,520,770	$1,545,416	$1,593,503
Cash, End of Month	$1,283,866	$1,415,448	$1,520,770	$1,545,416	$1,593,503	$1,623,473

Cash Flow Statement

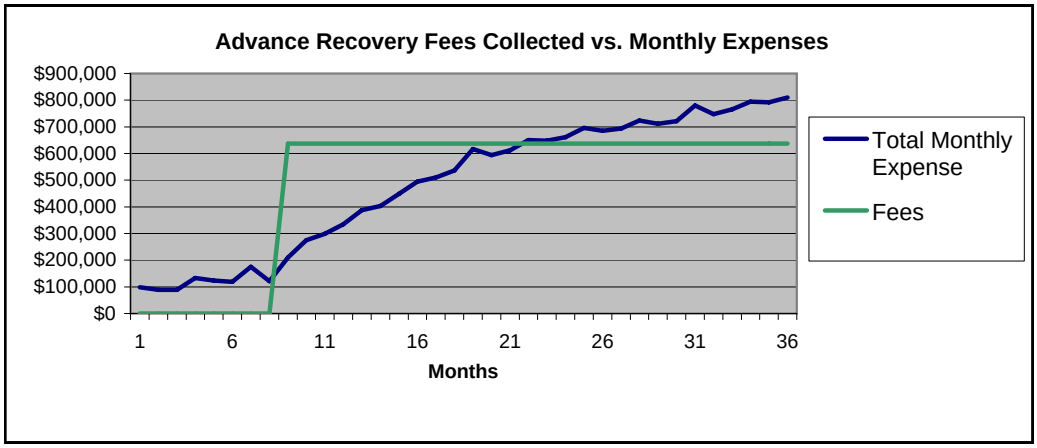
	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
Net Income	($7,697)	($5,470)	($19,361)	($54,242)	($43,269)	($52,265)
Change in Noncash Current Assets and Liabilities						
Less: Accounts Receivable - Net	$0	$0	$0	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0	$0	$0	$0
Cash Flow	($7,697)	($5,470)	($19,361)	($54,242)	($43,269)	($52,265)
Cash, Beginning of Month	$1,623,473	$1,615,776	$1,610,306	$1,590,945	$1,536,704	$1,493,435
Cash, End of Month	$1,615,776	$1,610,306	$1,590,945	$1,536,704	$1,493,435	$1,441,170

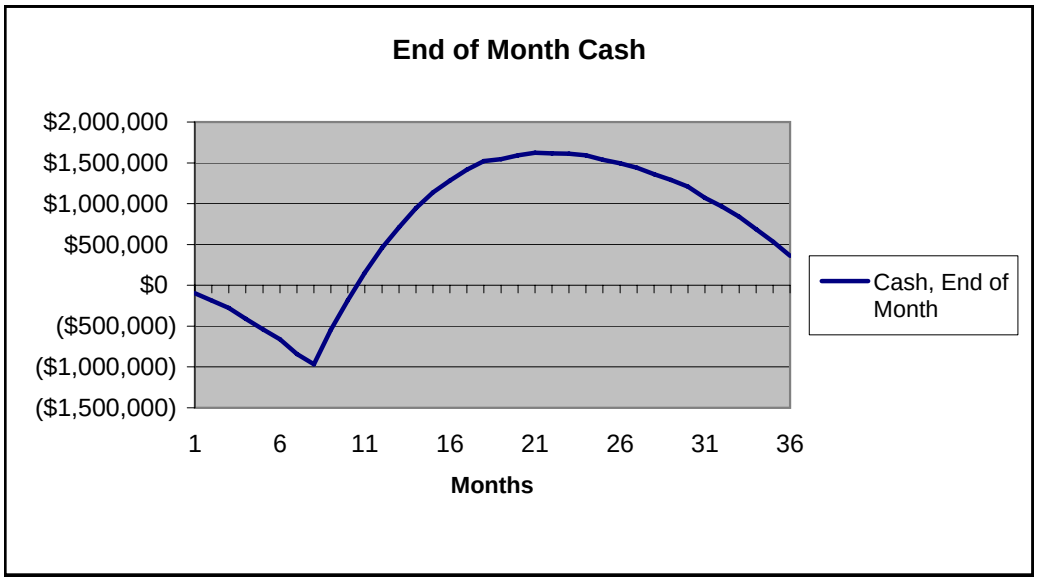
Cash Flow Statement

	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33
Net Income	($81,286)	($70,388)	($79,460)	($138,557)	($106,694)	($124,743)
Change in Noncash Current Assets and Liabilities						
Less: Accounts Receivable - Net	$0	$0	$0	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0	$0	$0	$0
Cash Flow	($81,286)	($70,388)	($79,460)	($138,557)	($106,694)	($124,743)
Cash, Beginning of Month	$1,441,170	$1,359,885	$1,289,496	$1,210,037	$1,071,480	$964,785
Cash, End of Month	$1,359,885	$1,289,496	$1,210,037	$1,071,480	$964,785	$840,042

Cash Flow Statement

	Month 34	Month 35	Month 36
Net Income	($153,966)	($152,146)	($170,322)
Change in Noncash Current Assets and Liabilities			
Less: Accounts Receivable - Net	$0	$0	$0
Add: Accounts Payable - Net	$0	$0	$0
Add: Income Taxes Payable	$0	$0	$0
Less: Prepaid Insurance	$0	$0	$0
Less: Prepaid Rent	$0	$0	$0
Total Change in Noncash Current Assets and Liabilities	$0	$0	$0
Cash Flow	($153,966)	($152,146)	($170,322)
Cash, Beginning of Month	$840,042	$686,076	$533,930
Cash, End of Month	$686,076	$533,930	$363,608


Advance Recovery Fees Collected vs. Monthly Expenses
$900,000
$800,000
$700,000
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$0
1
6
11
16
21
26
31
36
Months
Total Monthly Expense
Fees


End of Month Cash
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
($500,000)
($1,000,000)
($1,500,000)
1
6
11
16
21
26
31
36
Months
Cash, End of Month

APPENDIX C:

TPO Viability Analysis, including sensitivity analyses from spreadsheet model

Pacific Northwest TPO Viability Analysis

Driving Considerations for a <100% TPO

On October 26, 2005 the project Steering Committee reviewed the financial and other impacts of a "<100% TPO" on TPO viability. Several scenarios resulting from a <100% TPO are posited below and, where possible, financial implications of these scenarios were modeled using the baseline TPO spreadsheet model developed following the assumptions established by the project Steering Committee. The TPO baseline assumes a "100% TPO" that provides a single management entity wholly responsible for recycling system implementation.

Baseline Financial Metrics:

- 100% participation in the TPO
- TPO implemented in both Oregon and Washington
- Overall system collection rate begins at 1.35 lbs/capita in Year 1 and ramps up to 2.6 lbs./capita over 4 years
- TPO cost per new unit sold ranges from about $1 (laptop) to about $5 (TV)
- TPO fixed public education and administrative costs are 15% of total TPO costs, or 6 cents/lb. of collected electronics, or 45¢ per OR/WA household per year
- Costs referred to as "administrative" include operational activities such as contracts management, an accounts receivables manager, communications and local outreach as well as traditional administrative functions such as office support and Board of Directors costs
- Financial assumptions are consistent with the draft business plan
- Fee collection would be an administrative responsibility of the government, not the TPO

Financial Viability Drivers

*Scenario 1: TPO **fixed public education and administrative costs remain constant** while variable costs and revenues decline due to company opt-outs*

- TPO fixed public education and administrative costs include:
- Outreach/education (assumed a fixed cost by legislation or by agreement with state regulators)
- Set-up/management costs to meet 1-per-10,000 residents town convenience goal
- Staffing
- Contractor audit services
- Administrative/overhead services such as AP, payroll
- External audit services
- Rent
- Information system setup, operation

- Telecommunication
- Board expenses
- Legal services
- Insurance
- TPO variable costs include:
- Recycling contractor costs
- Shipping costs
- Collection costs
- TPO revenues decline proportionately to share of opt-out company share

% of Baseline:	**100%**	**85%**	**70%**	**50%**
TPO fixed public education and admin costs per pound of collected electronics	6¢	7¢	9¢	12¢
TPO fixed public education and admin costs as % of total TPO costs	15%	17%	20%	25%

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*Scenario 2: TPO **public education and administrative costs, and variable costs, decline** proportionately with declines in revenues due to company opt-outs*

- TPO is somehow able to "downsize" its public education and administrative costs
- Viable ways to reduce TPO fixed administrative costs have not yet been identified

% of Baseline:	**100%**	**85%**	**70%**	**50%**
Total TPO costs per OR/WA household	45¢	37¢	31¢	22¢

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*Scenario 3: TPO fixed administrative costs remain constant while public education, variable costs and revenues decline due to **single state implementation** of the TPO*

- Assumes TPO fixed administrative costs would be required regardless of whether the TPO is implemented in both Oregon and Washington, or only in a single state
- Assumes that public education costs decrease for single state systems proportionate to population

% of Baseline:	**Both States**	**Just WA**	**Just OR**

TPO fixed admin costs per pound of collected electronics	6¢	9¢	16¢
TPO fixed admin costs as % of total TPO costs	15%	20%	30%
TPO fixed admin costs per household	45¢	66¢	$1.15

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*Scenario 4: TPO **fixed public education and administrative costs, and variable costs, remain constant** while revenues decline due to company opt-outs*

- Regardless of number and scale of opt-out companies the TPO burden remains constant because either:
  - Opt-out plans are paper-only and do no actual collection, and/or
  - The amount of e-waste collected remains constant independent of any opt-out company activities.

% of Baseline Revenues:	**100%**	**85%**	**60%**	**50%**
Per unit cost for new TVs sold in WA/OR	$4.50	$5.25	$7.50	$9
Per unit cost for new monitors sold in WA/OR	$3.50	$4	$5.50	$6.75
Total per unit cost for new desktops sold in WA/OR	$2.25	$2.75	$3.75	$4.50

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*Scenario 5: TPO fixed public education and administrative costs, and non-collection variable costs, remain constant while opt-out companies "**cherry pick**" easily available e-waste*

- Either because the larger program does not prohibit such cherry picking, or such provisions are not enforced

% increase in TPO collection costs due to cherry picking:	**25%**	**75%**
Total per unit cost for new TVs sold in WA/OR	$4.75	$5.50
Total per unit cost for new monitors sold in WA/OR	$3.50	$4
Total per unit cost for new desktops sold in WA/OR	$2.50	$2.75

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*Scenario 6: TPO variable costs run higher because of a **lack of procurement economies of scale** provided by a 100% TPO*

	100% TPO (full economies of scale)	50% TPO (variable costs 20% higher)
Total per unit cost for new TVs sold in WA/OR	$4.50	$5.25
Total per unit cost for new monitors sold in WA/OR	$3.50	$4
Total per unit cost for new desktops sold in WA/OR	$2.25	$2.75

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*Scenario 7: All TPO **costs decline due to competition** from opt-out companies*

- It is not clear at this point how the TPO costs would or could decrease

% decrease in TPO costs due to increased TPO efficiencies due to competition or other market forces:	**0%**	**10%**	**20%**	**30%**
Total per unit cost for new TVs sold in WA/OR	$4.50	$4	$3.50	$3.25
Total per unit cost for new monitors sold in WA/OR	$3.50	$3	$2.75	$2.50
Total per unit cost for new desktops sold in WA/OR	$2.25	$2	$1.75	$1.50

Scenario 8: Instead of a function performed by a government agency, the TPO is responsible for fee collection at point of sale (i.e., retail). TPO staffing is increased by 5 FTE and costs are increased to administer fee collection @ 10 cents/transaction, resulting in an increase in the ARF of approximately 4%.

Scenario 9: TPO fixed public education and administrative costs, and variable costs, remain constant and are based on a market share obligation, while opt-out companies base their obligation on return share amounts that are less than the opt-out companies' market share. [not modeled]

Operational Viability Drivers

Scenario 1: Retailers, charities and municipal governments performing collection operations are approached by multiple entities seeking their electronics, each with their own programs and requirements.

- Existence of multiple entities may require localities to establish time-consuming bidding procedures to manage TPO/opt-out company relations
- Potentially a time consuming and confusing situation for municipalities, particularly for smaller/rural governments
- May complicate coordination of collection services by making collection strategies a competitive, and therefore potentially proprietary, issue

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Scenario 2: More TPO time will be focused on reporting, monitoring processes due to higher government oversight required of a multi-entity system.

APPENDIX D:

Legal Analyses

(Weinberg Memo - TPO Sponsor Liability; TPO Model 3; Johnson Memos – Review of Legal Issues, Further Discussion; Weinberg Memo – Antitrust Issues)

Wiley Rein & Fielding LLP

MEMORANDUM

TO: NW TPO Project Steering Committee

FROM: David B. Weinberg

DATE: September 16, 2005

RE: TPO Sponsor Liability

This memorandum responds to the question, raised by a Steering Committee member, about the potential liabilities under "Superfund"-type laws of companies that sponsor a TPO if materials sent for recycling or recovery are mishandled.

My premise is that the TPO would be set up as a corporate entity, either for profit or not-for-profit. In the former case, each sponsoring companies would make some financial contribution and obtain a portion of the company's stock. The same situation would apply in a not-for-profit corporation situation, but the owners would be known as "members. " As explained more fully below, as long as the TPO is operated as an independent entity, in either case such companies should not face any individual exposure.

1. The "Piercing" Doctrine Provides the Primary Protection for Sponsors

The obligations of a corporation – whether arising out of contracts, debts or liability judgments – must be paid from the assets of the corporation. These assets would include whatever initial capital each shareholder/member contributed, funds collected or retained by the company, insurance proceeds and other corporate holdings.

As long as the corporation is run as an entity independent of any one shareholder, no individual shareholder should face responsibility for the entity's obligations. Insulation of owners from liability is the fundamental reason the corporate form exists. The general rule is that the "corporate veil" can only be "pierced" to hold stockholders individually liable for a corporate obligation if the corporate form has been significantly misused. In a 1998 decision, the United States Supreme Court expressly held that this rule applied in the Superfund context. *United States v. Bestfoods, Inc.*, 524 U.S. 51 (1998).

Bestfoods involved the question of a parent corporation's liability under CERCLA for pollution caused by its subsidiary. (A parent is simply the controlling shareholder of a subsidiary.) The Court explained that "the corporate veil may be pierced and the shareholder held liable for the corporation's conduct [only] when the corporate form

would otherwise be misused to accomplish certain wrongful purposes, most notably fraud, on the shareholder's behalf . . . . Nothing in CERCLA purports to rewrite this well settled rule . . . ." 524 U.S. at 64.

The piercing doctrine also is recognized under Washington and Oregon law. *See, e.g.*, *Amfac Foods, Inc. v. Int'l Sys. & Controls Corp.*, 294 Or. 94, 105, 654 P.2d 1092, 1099 (Or. **1982) (en** banc) ("The court has uniformly held that the corporate entity of a subsidiary corporation should be disregarded only to prevent fraud or injustice and to protect persons whose rights have been jeopardized by the conduct of the parent corporation.") (quoting *Schlect v. Equitable Builders*, 272 Or. 92, 535 P.2d 86 (1975))[1]; *Minon v. Ralston Purina Co.*, 47 P.3d 556, 562 (Wash. 2002) (en banc) ("To pierce the corporate veil and find a parent corporation liable, the party seeking relief must show that there is an overt intention by the corporation to disregard the corporate entity in order to avoid a duty owed to the party seeking to invoke the doctrine. Generally a party must show that the corporation manipulated the entities in order to avoid the legal duty.").

2. Even Without the Piercing Doctrine, It is Unlikely that the TPO (or its Sponsors) Would Face Significant "Superfund" Liabilities

Even in the absence of the piercing doctrine, any liabilities of the TPO sponsors would be derivative of those of the TPO itself. It is unlikely, however, that the TPO itself will face significant "Superfund"-type risk.

First of all, the likelihood of liability arising from a well-managed recycling program is low. A well-managed program is not likely to send materials for recovery to a facility that fails to meet proper management standards. (RBRC, for example, requires compliance in its contracts and undertakes independent environmental audits.) Most Superfund exposures have arisen from facilities operated before current standards were put into place.

Second, if the TPO were established by state statute, the same statute could insulate it from any state law liability exposure.

Third, there is not likely to be any Federal risk. A provision was added to the Federal Superfund statute in 1999 to protect *bona fide* recyclers. CERCLA, § 127; 42 U.S.C. § 9627. It expressly excludes from liability any person who "arrange[s] for recycling of recyclable material" if certain criteria are met. "Recyclable material" is defined to include scrap plastic, scrap glass, scrap metal, spent batteries, and "minor amounts of material incident to or adhering to the scrap material as a result of its normal and customary use prior to becoming scrap . . . . " (*Id.,* § 9627(b)).

[1] Only one Washington decision has directly addressed shareholder liability under CERCLA. *Unigard v. Leven*, 983 P.2d 1155, 1162 (Wash. App. 1999). The case involved an insurance coverage dispute. The Court followed the *Bestfoods* rationale, holding that to impose CERCLA liability on a shareholder of the corporation that caused contamination, the shareholder must "manage, direct, or conduct operations specifically related to the pollution." Because the shareholder had stated he had no involvement in the operations of the site, the insurance company was found to have no duty to defend.

Several criteria must be met to establish the *bona fides* of a person claiming this protection, but they seem likely to apply to any TPO. For example, there must be a market for the recyclable material, and the person must exercise reasonable care in choosing the recycling facility.

Nonetheless, a note of caution is in order. In the handful of decisions that have interpreted the recycling exemption provision since it was enacted, courts have been cautious about giving it too broad a reading. For example, in *DTSC v. Interstate Non-Ferrous Corp.*, 298 F. Supp. 930 (E.D. Cal. 2003), the Court ruled as a matter of law, at an early stage of the suit, that a company that had brought to a recycler insulated copper wire, lead cable and wire from motors did not face any responsibility for the recycler's mishandling of those materials. At the same time, however, the court refused to rule out the same party's potential liability for the recycler's mishandling of dross and ash that resulted from the melting of those materials.

However, the caution of a few Courts to find the recycling exemption applicable should be read in context. The outcome of preliminary motions in Superfund cases tends to be result-oriented, with the Courts making every possible effort to retain in a case deep corporate pockets. One would expect a Court to be less enthusiastic, however, about putting at risk the finite funds, obtained from an ADF or tax of some sort, that were being used to support a TPO.

cc: NW TPO Support Team

NWTPO Strawman Model 3: Commission & TPO

12/5/05

Concept: Legislation in each state would establish an "e-waste commission" to be appointed by the Governor. The legislation would require that a majority of commission members would be drawn from product manufacturers whose products are sold in the state, and that other members represent specified constituencies such as retailers and/or local government. The legislation would assign to the commission responsibility and authority to:

- Establish advance recovery fees for all products covered by the legislation
- Establish payment mechanisms
- Authorize retailers to retain a portion of the ARF(s) to cover their expenses
- Enforce payment of the ARF(s)
- Contract with a TPO to provide all collection, recycling and related services
- Limit the use of ARF funds for the purposes specified above plus the cost of operating the commission

The legislation would also define the criteria for an acceptable TPO. These would include that the TPO be a not-for-profit organization, commit to comply with certain policy objectives (e.g., provide service to every county), and be supported by companies who supply a specified percentage of covered products to the state (to be based on data collected with the ARF). If, for example, that percentage were set at 33%, there probably would be only a single TPO established, but theoretically three competitors could emerge. The legislation would specifically authorize the state's commission to contract with a TPO that served other states, but would require that the TPO's eligibility turn on support from the specified percentage of suppliers in the state at issue.

The legislation would also include various other provisions exempting the commission from administrative procedure and government contracting statutes, limiting the nature of public communications efforts that the commission or a TPO could undertake (to avoid First Amendment issues), and addressing other relevant operational matters.

Principal Attractions: This model would have the following favorable characteristics: (1) it incorporates an ARF; (2) it places major operating responsibilities on product manufacturers; (3) it maximizes the opportunities for product manufacturers to control costs of operating an e-waste recycling and to minimize the ARF fee imposed to support those costs, while still assuring transparency in ARF-setting; (4) it provides for segregation of funds from other governmental monies, thus avoiding diversion into other programs; (5) it allows for multi-state operation of a TPO, as long as the enabling legislation that defines TPO requirements is consistent among the states; and (6) it avoids imposing on a state agency an additional responsibility for which funding may be insufficient, and precludes political pressures on the agency to favor certain contractors over others.

Principal Negatives: This model also has some less favorable characteristics: (1) like the second model (state agency hiring a TPO) this model requires some overlapping bureaucracies; (2) because there probably could not be significant overlap between the members of the commission and the board of any qualifying TPO, it places greater demand for personnel resources on the private sector than would the second model; and (3) the concept could be corrupted by authorizing the commission to collect funds in some way other than an ARF, or by limiting manufacturer control of the commission.

Practical consideration: Adoption of an ARF system is a central requirement of all manufacturers supporting this NWTPO exercise. In essence, they have expressed their willingness to accept the considerable burden of managing an e-waste collection program in return for adoption of an ARF system. This approach places a greater burden on the manufacturers than does the second model, while conversely minimizing the burdens of government. At the same time, it also assures a considerable degree of transparency.

GARVEY SCHUBERT BARER

MEMORANDUM

TO: Jason Linnell
Executive Director
National Center for Electronics Recycling

CC: David Nightingale

FROM: Stephen B. Johnson

DATE: December 13, 2005

RE: **Review of Legal Issues Relevant to Structuring An Entity To Manage Collection, Recycling and Disposal Of Waste Electronics in Washington and Oregon**

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1. Problem Statement

There are unique environmental issues associated with the disposal of waste electronic equipment ("E-waste"). To address these issues, the disposal of E-waste must be managed separately from the general solid waste stream. Recycling may be a viable alternative to disposing of significant components of the E-waste stream. The present task is to conceptualize how the collection, recycling and disposal of E-waste might be managed in the states of Washington and Oregon.

Disposal of general solid waste is primarily managed and regulated at the local (city and county) level in both Oregon and Washington, subject to broad state standards. New state-wide or regional management structures are needed to address the special problems posed by E-waste and the opportunities that exist to recycle a portion of the E-waste stream. State-wide or regional management is necessary to achieve economies of scale for E-waste management and recycling facilities that could not otherwise be achieved except in the largest metropolitan areas.

Working-level representatives of state and local governments and the electronics industry have pooled their thinking on how to manage E-waste in Oregon and Washington. They have suggested that consideration should be given to the formation of a new special-purpose entity with responsibility for E-waste management. A working assumption is that E-waste management will be financed by a charge paid by manufacturers or others in the chain of distribution of electronics equipment. Related assumptions are that (a) manufacturers and distributors of electronics equipment are the parties best suited to manage recycling of used electronic equipment; and (b) giving substantial control of E-

waste management to the parties footing the bill for it will ensure that costs for the program are minimized and that buy-in by the payers is maximized.

Two conceptual models ("straw men") have emerged for a new entity to manage E-waste in Washington and Oregon on the basis of these assumptions: (1) A special-purpose state agency formed solely for this purpose and operated with a substantial degree of input from, if not de facto control by, the electronics manufacturers and distributors who are funding it; and (2) a private non-governmental corporation formed and directly controlled by electronics manufacturers and distributors that would be funded either through contracts with government or through the private cost sharing arrangements among participating manufacturers and distributors, or both. In either case, the objective is to create an entity capable of managing a unitary scheme for the collection, recycling and disposal of all E-waste generated within in each state and, if possible, in both states.

The purpose of this paper is to identify and describe the principal legal constraints that would affect the formation and operation of these conceptual models in the states of Washington and Oregon.

At the outset it should be noted that this legal review is limited by the abstract nature of the conceptual models developed for the project to date. While it is hoped that an overview of relevant legal principles may contribute to developing more specific proposals, a definitive legal analysis is not possible on the basis of the existing conceptual models. Because there are innumerable ways in which these models could be implemented, a legal analysis at this stage can only address the most general principles. The alternative would be to attempt to describe all the ways in which each of the models might be implemented and evaluate each of them. Because most of these alternatives will not be seriously considered for one reason or another, such an exercise would be pointless, not to mention very expensive, and has not been attempted here.

2. Special Purpose State Agency: The Apple Commission Model

Can a special purpose state agency like the Washington Apple Commission be used to manage E-waste in Washington and Oregon? The short answer is "probably yes."

The Oregon and Washington legislatures have created or authorized the creation of numerous special purpose state and local commissions, boards, authorities and districts to achieve particular governmental objectives. Like many states, Oregon and Washington have created special purpose state agencies to promote and regulate the marketing of agricultural commodities.[2] The Washington Apple Commission is one such agency.[3] Its primary charge is to promote Washington apples. The Apple Commission also has certain regulatory functions but its primary function is promotional. The Commission is funded by an assessment imposed on apples grown in Washington. This assessment is subject to review and approval at certain intervals through a referendum process in which all producers of Washington apples have a vote. Members of the Commission are

[2] For Washington, *see* chapters 15.66 RCW (agricultural commodity commissions), 15.24 (apple commission), 15.62 (honey bee commission), 15.74 (hardwoods commission), 15.88 (wine commission), 15.100 (forest products commission); for Oregon, *see* ORS 576.054 et seq. (commodity commissions).
[3] *See* chapter 15.24, RCW (apple commission).

appointed by the Director of the Washington Department of Agriculture from individuals nominated by growers and distributors of Washington apples. Most of the Commission's plans, programs and projects are subject to review and approval by the Director.[4] Thus, although appointed and subject to supervision by the Director of the Department of Agriculture, significant control of the Apple Commission is vested in the apple growers and dealers who fund the Commission's operations.

a. Funding Issues

State government functions are funded by taxes and fees. Taxes may be earmarked for specific purposes in authorizing legislation, but if not so earmarked, taxes are available for any public purpose. Taxes may be disbursed from the state treasury and allocated to particular uses only by legislative appropriation.[5] The amount of a tax may be limited by special procedural requirements set out in the state constitution but otherwise the amount of a tax is limited primarily by political constraints. Generally, taxes must be imposed by legislative bodies -- the state legislature or the legislative bodies of cities and counties authorized to legislate on local matters or, in some cases, by the taxpayers themselves.[6]

Fees, on the other hand, are paid for regulatory purposes, to pay for particular governmental services that uniquely benefit the fee payer or to compensate for burdens the fee payer's activities impose on government or the public.[7] Fees assessed to defray the costs of particular governmental services must be reasonable in relation to the cost of those services.[8] Fees assessed to compensate for burdens imposed by the payer must bear a reasonable relation to the burden imposed.[9] If authorized by appropriate legislation, fees may be determined and assessed by administrative agencies within legislative guidelines.[10]

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[4] RCW 15.24.065.

[5] *See*, *e.g.*, Wash. Const. Art. VII, §§ 1 (public purpose), 6 (deposit in state treasury); Art. VIII, §4 (appropriation). In some circumstances, the requirement for an appropriation may be satisfied by a "continuing appropriation" in the authorizing legislation.

[6] *See*, *e.g.*, New Orleans Water-Works Co. v. Louisiana Sugar Refining Co., 125 U.S. 18, 31 (1888) ("[T]he power of determining what persons and property shall be taxed belongs exclusively to the legislative branch and . . . is strictly a legislative power.").

[7] *See*, *generally*, Covell v. Seattle, 127 Wn. 2d 874 (1995) (street utility charge); Northern Counties Trust v. Sears, 30 Ore. 388 (1895) (service fee), cited with approval in Bobo v. Kulongoski, 338 Ore. 111, 122 (2005); Haugen v. Gleason, 226 Ore. 99 (1961) (development fee); Sproul v. State Tax Commission, 234 Ore. 579 (fire protection fee); Union Pacific Railroad Company v. Public Utility Commission, 899 F. 2d 854 (9th Cir. 1990) (Oregon fee to pay costs of railroad regulation).

[8] Hayes v. City of Albany, 7 Ore. App. 277, 285 (1971); Carrillo v. City of Ocean Shores, 122 Wn.App. 592, 607 (2004).

[9] Teter v. Clark County, 104 Wn. 2d 227, 237-8 (1985) (assessments imposed on property owners for storm water improvements bore a reasonable relation to the contributions of each lot to surface runoff).

[10] Robison v. Dwyer, 58 Wn. 2d 576, 583-4 (1961) (assessment by the Washington Wheat Commission pursuant to statutory formula); State ex rel. Sherman v. Pape, 103 Wash. 319, 323 (1918) (assessment by state forester against forest landowners to pay for fire protection); First State Bank of Sutherlin v. Kendall Lumber Co., 107 Ore. 1 (1923) (assessment for forest fire protection); Starker v. Scott, 183 Ore. 10 (1948) (same); State ex rel. Peninsula Neighborhood Ass'n. v. Department of Transportation, 142 Wn. 2d 328, 338-9 (2000) (authority to set tolls properly delegated to stated department of transportation).

It is not clear whether the assessment that funds the Washington Apple Commission is a tax or a fee. The Washington legislature has imposed an assessment of 8.75 cents per hundred pounds of apples grown or packed in Washington to fund the Commission's activities. Thus, the basic assessment is imposed by the legislature itself, not the Commission. However, the Commission is authorized to increase or decrease the assessment with approval by a vote of the apple growers. This hybrid assessment mechanism has some of the characteristics of a tax (a specific amount or rate per unit imposed by the state legislature) and some of the characteristics of a fee (adjustment of the assessment by an administrative agency). Although it is possible that the Apple Commission could have been authorized to impose a fee on apple growers and dealers to cover the cost of the Commission's activities on the theory that the payers receive the benefit of those activities, fees tied to benefits received from government services are normally tied to benefits individually sought and received by the particular beneficiary, rather than benefits provided on a uniform basis to all members of a class, whether or not they seek those benefits. In all events, because the level of the initial assessment was set by the Washington legislature and the Commission's authority to make subsequent adjustments is subject to approval by the payers, the assessment that funds the Apple Commission may meet the legal requirements applicable to both taxes and fees.

The Washington and Oregon legislatures could impose a tax or fee on the sale or distribution of covered electronic equipment ("E-products") in their respective states to fund a special purpose agency charged with managing E-waste as part of an E-waste regulatory program. While we have found no decisions by the Washington or Oregon courts specifically upholding a tax or fee of this kind, we note that Washington has imposed taxes to fund environmental programs on the "first possession" of petroleum products in the state[11] and on the receipt of crude oil or petroleum products at marine terminals in the state since 1989 and 1992, respectively.[12] Other states have imposed taxes or fees on the distribution of environmentally problematic products.[13] The fee imposed by California on manufacturers and distributors of products containing lead to fund the cost of mitigating adverse health effects of such products was upheld by the California Supreme Court in 1997.[14]

It is not clear that a state agency could be authorized to impose a fee on manufacturers or distributors of E-products to defray the cost of E-waste management on the theory that the agency's activities would benefit such payers. However, if it is desirable for the agency to control the level of the assessment, Washington and Oregon courts have long recognized that the authority to impose a fee to defray the cost of a governmental service may also be justified as compensation for a burden imposed by the payer's property or activities.[15] This rationale would seem to support the assessment of a fee on

[11] *See* Chapter 82.23A, RCW.
[12] *See* Chapter 82.23B, RCW. *See also* ORS 465.104 (fee imposed on bulk petroleum withdrawals, imports).
[13] *See, e.g.*, Childhood Lead Poisoning Prevention Act of 1991, Cal. Health and Safety Code §105275 *et seq.*; Electronic Waste Recycling Act of 2003, Cal. Public Res. Code §42460 *et seq.*
[14] Sinclair Paint Co. v. State Bd. Of Equalization, 15 Cal. 4th 866, 64 Cal. Rptr. 2d 447, 937 P. 2d 1350 (1997).
[15] Teter v. Clark County, *supra*, at 234-6 (1985) (assessments to defray costs of storm water management against property owners whose properties contributed to increased storm water runoff); Thurston County Rental Owners Association v. Thurston County, 85 Wn.App. 171, 179 (1997) (fee assessed against owners of septic

manufacturers and distributors of E-products to defray E-waste management costs made necessary by the environmental burdens imposed by such products.

A special purpose state agency could probably be authorized to assess a fee against manufacturers distributors or consumers to fund E-waste management costs incurred by the agency, so long as adequate guidelines and/or procedural protections are provided to guide the agency's actions. Manufacturers and distributors benefit from the sale of E-products to Washington and Oregon consumers. These sales and the use of these products impose a burden on the environment of the state where such products will be disposed and, therefore, on governmental agencies responsible for E-waste management. To defray the cost of the E-waste management burden which their activities impose on the state, a state agency with responsibility to manage E-waste disposal could be authorized to assess a fee against consumers purchasing E-products or against enterprises subject to the state's jurisdiction engaged in the manufacture or distribution of such products, as part of a comprehensive scheme to regulate the disposal of such products.

b. Management and Control Issues

The Apple Commission model involves a substantial degree of input and control by the industry sector that funds the agency's activities. No impediment has been identified under the constitution or laws of Washington or Oregon that would prevent the electronics industry from having a similar relationship with an "E-Waste Commission" in one or both of these states and, perhaps, an even greater degree of input and/or control.

As currently constituted, the Washington Apple Commission consists of the Director of the Washington Department of Agriculture or his designee and thirteen apple growers and dealers (nine growers and four dealers) appointed by the Director. Each grower member must, either individually or as an executive officer of a corporation, firm or partnership, be a person who "has been actually engaged in growing and producing apples within the state of Washington for a period of five years, currently operates a commercial producing orchard in the district represented, and has during that period derived a substantial portion of his or her income therefrom."[16] The dealer members must be persons who, either individually or as the executive officer of a corporation, firm, partnership, association, or cooperative organization, "have been actively engaged as dealers in apples within the state of Washington for a period of five years . . . and are engaged as apple dealers in the district represented."[17] The Director appoints the grower and dealer members of the Commission from nominees selected by the growers and dealers, respectively, through an advisory ballot.[18] Most of the Commission's plans, programs and projects are subject to review and approval by the Director.[19]

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systems was related to burden created by septic system pollution); Sproul v. State Tax Commission, *supra*, at 599-600 (special fire protection assessment on lands posing high fire danger: "There is a rational connection between the [assessment] and 'the danger to the public welfare or the public burden which is sought to be avoided or relieved.'").

[16] RCW 15.24.020.

[17] Id.

[18] RCW 15.24.035, .040.

[19] RCW 15.24.065.

The statutory provisions giving the Director of the Department of Agriculture the authority to appoint the members of the Commission and to review and approve the Commission's activities are new. In 2003 and 2004, the Washington legislature amended the statutes governing the Apple Commission to reinforce and strengthen the Department of Agriculture's control over the Commission. For the first time, these amendments required the Director of the Department of Agriculture to appoint the members of the Commission and subjected most of the Commission's activities to review and approval by the Director.

These changes in the Apple Commission statute were enacted in response to a decision by the United States District Court for the Eastern District of Washington enjoining the collection of the Apple Commission's assessment.[20] The U.S. District Court concluded, based on the Apple Commission statute as it existed before the recent amendments, that imposition of the assessment violated the First Amendment to the United States Constitution, because the objecting growers were forced to fund speech (the Commission's promotional activities) by a private entity to which the growers objected. By amending the Apple Commission statute, the Washington legislature sought to insulate the assessment from First Amendment challenge by making clear that the Commission is a state agency, subject to oversight and control by state officials, rather than a private industry organization. Since payers of governmental assessments (taxes or fees) can be required to make payments that support "government speech" with which they do not agree, the recent changes to the Washington statute were intended to ensure that the promotional activities of the Apple Commission would be considered "governmental speech" and thus immune from First Amendment attack.

If advertising and other promotional speech would be a significant part of the functions of an "E-Waste Commission," these First Amendment issues would limit the extent to which industry could control the Commission. If speech will not be a significant element of the Commission's functions (*e.g.*, if promotional activities related to the "E-Waste Commission's" functions are undertaken by other state and local environmental or waste management agencies), then greater industry control and Commission independence may be possible.

While a substantial degree of input and control by the electronics industry seems possible, some oversight by elected state officials or their appointees will be necessary to avoid constitutional restrictions on the delegation of governmental powers to private parties.[21] Decisions of the Washington and Oregon courts seem to indicate that delegations of authority to private parties are permissible if proper standards and guidelines and procedural safeguards are prescribed in the legislation.[22] At a minimum,

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[20] In re Washington State Apple Advertising Commission, 257 F. Supp. 2d 1290 (E.D. Wash. 2003).

[21] *See* United Chiropractors of Washington, Inc. v. State, 90 Wn. 2d 1 (1978) (statute allowing association of chiropractors to appoint members of quasi-judicial chiropractic disciplinary board held unconstitutional as improper delegation of authority to private parties).

[22] *See* United Chiropractors of Washington, Inc. v. State, *supra*; Entertainment Industry Coalition v. Tacoma-Pierce County Health Dept., 153 Wn. 2d 657, 664 (2005) ("the legislature may grant regulatory authority to private parties only if proper standards , guidelines, and procedural safeguards exist," *citing* United Chiropractors); Warren v. Marion County, 222 Ore. 307, 314 (1960) ("the important consideration is . . . whether

the power to appoint the members of the E-Waste Commission must be lodged with officials directly or indirectly responsible to the electorate.[23]

With recent statutory revisions, the Apple Commission model may include a substantial degree of oversight by a state agency with related responsibilities. In the case of an "E-Waste Commission," the most logical place to lodge such supervisory responsibility is with the agency responsible for the regulation of solid waste disposal. In Washington, this agency is the Department of Ecology; in Oregon, it is the Department of Environmental Quality. The Department of Ecology has already been tasked by the Washington legislature with developing recommendations to the legislature for "implementing and financing an electronic product collection, recycling, and reuse program." Washington Laws, 2004, Ch. 194 (ESHB 2488).

The statute creating the Apple Commission and levying the assessment on apples grown in Washington and packed as Washington apples provides that "[a]ll moneys collected hereunder shall be expended to effectuate the purpose and objects of this chapter."[24] The statute further authorizes the Apple Commission to collect the assessments and provides that "[a]ll money received by the commission, or any other state official from the assessment herein levied, shall be paid to the treasurer [appointed by the commission], deposited in such banks as the commission may designate, and disbursed by order of the commission. None of the provisions of RCW 43.01.050 [requiring state officers to remit moneys to the state treasury] shall apply to money collected under this chapter."[25] Thus, revenues derived from the assessment to fund the Washington Apple Commission (whether deemed a tax or a fee) are dedicated to funding its activities, maintained in bank accounts controlled by the Commission and thus protected against use for other purposes. The comparable funding regime of the Washington Wheat Commission was upheld in an early case decided by the Washington Supreme Court.[26] We have identified no impediment in the laws of Washington or Oregon to funding an E-waste management agency on a similar basis.

c. Multi-State Operations

It would be anomalous (and unlikely) for the Oregon legislature to authorize an agency of the state of Washington to manage E-waste collection, recycling and disposal in Oregon or vice versa. It is doubtful that an agency of one state could be authorized to exercise another state's authority to assess and collect fees. Thus, it is not practical to

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the procedure established for the exercise of the power furnishes adequate safeguards to those who are affected by the administrative action."); Corvallis Lodge No. 1411 v. OLCC, 67 Ore. App. 15, 22 (1984) (action overturned as involving an "invalid delegation of governmental authority to private individuals because it fails to provide procedural safeguards to protect against unaccountable exercise of governmental power delegated to" private individuals).

[23] *See* 45 Op. Atty Gen. Ore. 160 (1987) (Oregon statute delegating authority to appoint members of a state board to private associations is unconstitutional, *citing* Megdal v. Board of Dental Examiners, 288 Ore. 293, 307 n. 12 (1980), at 20-21); United Chiropractors, *supra*.

[24] RCW 15.24.100.

[25] RCW 15.24.150.

[26] Robison v. Dwyer, *supra*. *See also* the cases upholding similar funding arrangements for Washington and Oregon fire protection assessments: State ex rel. Sherman v. Pape, *supra*; First State Bank of Sutherlin v. Kendall Lumber Co., *supra*; Starker v. Scott, *supra*.

consider the possibility that a state agency organized in one state could perform E-waste management functions beyond the borders of that state.

Where it is desirable to organize governmental functions on a multi-state basis, an interstate compact is the appropriate vehicle. Washington and Oregon have used interstate compacts to form multi-state agencies or organizations in many such situations. There is no apparent legal impediment to using an interstate compact to form a "Pacific Northwest E-Waste Commission" with authority either to coordinate the activities of separate state "E-Waste Commissions" in Washington and Oregon or to act as a regional E-waste management agency for the two states.

Interstate compacts must be approved by the legislatures of the participating states and, if they affect federal interests, by the U.S. Congress under Article I, section 10, of the United States Constitution.[27] Interstate compacts are typically made effective by their terms upon approval by Congress, if required, and some minimum number of state legislatures and can be left open for other states to join on a regional or other basis.

The Western Interstate Nuclear Compact is an example of an interstate compact in which substantial powers were granted to a regional agency.[28] This compact created "an agency of the party states" known as the "Western Interstate Nuclear Board." The Board consists of one member from each party state appointed in accordance with the laws of the respective state parties. The Board acts by majority vote of its members. The Board is authorized to appoint an Executive Director who in turn is authorized, with the approval of the Board, to "appoint and remove or discharge such personnel as may be necessary for the performance of the Board's functions irrespective of the civil service, personnel or other merit system laws of any of the party states." Article II (d), (e). The Board is authorized to accept donations and grants of money, equipment, supplies, etc., from any state or the United States or any subdivision thereof, or from any other institution, person, firm or corporation and to receive, utilize and dispose of the same. Article II (h). The Board is authorized to contract for the services of personnel. Article II(g). The Board is authorized to "establish and maintain such facilities as may be necessary for the transacting of its business" and to "acquire, hold and convey real and personal property and any interest therein." Article II(i).

The powers of the Western Interstate Nuclear Board include encouraging and promoting cooperation between the party states, encouraging the development and use of scientific discoveries and advances, collecting and disseminating information, recommending changes in laws, rules and regulations, organizing and conducting training, operating research facilities or programs under contract or license from the United States or a

[27] Art. I, §10, cl. 3 of the U.S. Constitution provides: "No State shall, without the Consent of Congress, . . . enter into any Agreement or Compact with another State, or with a foreign Power . . . ." However, in U.S. Steel Corp. v. Multistate Tax Commission., 434 U.S. 452 (1978), a case challenging a 21-state compact formed to assist states in formulating and administering state tax laws relating to multistate businesses, the U.S. Supreme Court held that lack of such approval was not a constitutional violation unless there was a potential impact on the balance of authority between state and federal governments or a threat to federal supremacy.

[28] *See* RCW 43.21F.400.

state party, and preparing and implementing a regional plan or plans for carrying out the Board's functions.

The Western Interstate Nuclear Board does not assess or collect fees. Instead, the Board is required to submit a budget for its activities to the governors of each state party, specifying the amount recommended to be appropriated by each state. Article III(a), (b). The Board's requests for appropriations must be apportioned equally among the party states. Article III(b). Other funding formulas are specified in other state compacts. See, e.g., the Pacific Marine Fisheries Compact, RCW 77.75.030 (80% of the annual budget shared equally by coastal states; not less than 5% of the annual budget contributed by any other member state; the balance shared by the coastal states in proportion to the primary market value of the products of their commercial fisheries).

There is no apparent reason why a "Pacific Northwest E-Waste Commission" could not be formed and funded by the states in proportion to the value of sales or the number of E-product units sold in each state party. The state E-waste commissions could be designed to function primarily as funding conduits, with the principal E-waste management and contracting functions carried out at the regional level, or the regional organization could be limited to planning and coordinating functions, with the management and contracting for E-waste facilities carried out by the state commissions. The selection of the members of the compact organization's board and its powers to borrow and expend funds and contract for services could be tailored to support the functions to be performed at the regional level.[29]

3. The Private, Non-Governmental Organization Model

Could a legislatively enabled private, non-governmental organization ("NGO") organized, controlled and funded by E-products manufacturers and distributors be used to manage E-waste in Washington and Oregon? While the Washington Apple Commission comes close to this model, particularly as the Commission functioned before the recent statutory amendments, the Apple Commission is an agency of the state of Washington for most purposes, subject to many of the legal constraints applicable to state agencies. Could a purely private entity perform the E-waste management functions under consideration?

a. Funding Issues

Individual electronics manufacturers or distributors may presently collect, recycle and dispose of E-waste. They could pool their resources and form a separate private entity to carry out these functions. No particular statutory support for these activities is required and, in fact, some manufacturers and retailers of computer equipment currently offer "take back" programs, either limited to the products they sell or extending to all similar products. To use these programs, the consumer may be required to pay a fee or surmount other barriers. Such programs are an unsatisfactory answer to the problem of

[29] Delegating governmental powers to a regional organization created by interstate compact increases the likelihood that the consent of Congress would be required. See U.S. Steel Corp. v. Multistate Tax Commission, *supra*.

E-waste because they are too limited in terms of the products covered and their accessibility to consumers.

The problem is to develop a model for E-waste management by a private NGO that combines ready accessibility, universal participation by (and cost sharing among) the relevant manufacturers and distributors and universal coverage of this waste stream. Some of these objectives could be achieved by the state through the assessment of a charge on the products, prohibiting disposal except by delivery to a collection or disposal facility approved by state, and then letting private enterprise produce collection, recycling and disposal contractors willing to handle this waste stream within the limit of the funds generated from the assessment and on other terms acceptable to the state.[30] However, such a system would not achieve the economies of scale that could be provided by unitary management or the incentives for cost reduction that would be achieved by giving the payers control over the cost of recycling and disposal within the limits of state regulatory requirements. Further, a market based recycling and disposal system might not ensure accessibility in all parts of the state. Economies of scale and universal accessibility are benefits that might be achieved by employing a single private NGO to manage E-waste.

The principal impediment to using a single private NGO to carry out E-waste management functions is the difficulty in obtaining universal participation in funding. Universal coverage cannot be achieved without universal participation. Universal coverage is necessary to maximize economies of scale and accessibility to the public. Unless a mechanism can be found to ensure nearly universal participation in funding by all parties whose business activities are responsible for the E-waste problem, there seems little practical prospect that a private NGO to manage E-waste would ever get off the ground.

Under the Apple Commission model discussed above, where a special purpose governmental agency imposes and collects a fee to cover the cost of collection, recycling and disposal, the fee would be universally assessed (to the extent of the state's jurisdiction) and manufacturers and distributors would have a legal obligation to "participate." In the private NGO model, manufacturers and distributors would form a private entity to manage the recycling and disposal of E-waste. If an existing governmental agency assesses and collects fees and funds the activities of this entity by means of contracts or grants, the funding scenario is essentially the same as discussed above, except that (a) the electronics industry could not directly set the fee or control the disposition of the revenues generated by the fee;[31] and (b) payment to the NGO of the funds generated by the fee would be governed by a contract between the agency and the NGO.[32]

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[30] This is the system California has adopted. *See* Electronic Waste Recycling Act of 2003, Cal. Public Res. Code §42460 *et seq.*

[31] If the agency contracting with the private NGO is a special purpose "E-Waste Commission," substantial industry control over fees and revenues could be achieved.

[32] A state legislature has great flexibility in authorizing a state agency to enter into contract arrangements with private parties for public purposes. Oregon and Washington public contracting statutes are discussed below. However, enabling legislation would presumably address the terms on which the agencies would enter into

An alternative scenario would have the manufacturers and distributors fund the private management entity directly through private assessments. Under this scenario, participating manufacturers and distributors would directly control the amount of their contributions and how their contributions are spent, subject only to state regulatory requirements.

But if E-waste management is to be privately funded, how do we get all of the relevant manufacturers and distributors to participate? Two approaches are logically possible. First, it may be possible by statute to require manufacturers and distributors of E-products to join and fund a private E-waste management entity as a condition to permitting them to sell their products in Washington or Oregon. A similar requirement was upheld by the Washington Supreme Court in a case involving the insurance industry.[33] The insurance industry is highly regulated and the sale of insurance is viewed as a privilege that may be denied or granted on any conditions specified by a state. It is not clear that the courts would take a similar view of sales of electronic equipment. Further research would be required before a conclusion could be drawn on the availability of this option.

Second, it may be possible to ensure nearly universal participation by providing financial incentives for participation. Such financial incentives might be provided, *e.g.*, by imposing a tax or fee on E-products at a level sufficient to cover perhaps 150% of the cost of collection, recycling and disposal but waiving the assessment if the payer directly funds E-waste services through an authorized E-waste NGO approved by the state.[34] By funding and operating a private NGO to provide E-waste services, each manufacturer or distributor that would otherwise pay the governmental assessment could reduce their costs by 1/3 by participating in the NGO. Taxes or fees paid by non-participants could be used to support the services of the NGO, thus reducing the obligations of the participants.

Other financial incentives to participation in the NGO could be provided by requiring all manufacturers and distributors to provide without charge collection, recycling and disposal services acceptable to the state for the E-products they sell and/or to designate an authorized third party to provide such service on their behalf. The state might require manufacturers and distributors subject to this requirement to arrange for local collection facilities accessible to consumers throughout the state. By thus directly imposing the

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contracts with a private NGO formed to provide E-waste management services. In this context, it is difficult to imagine any arrangement a legislature might plausibly authorize that would not be legally permissible.

[33] Aetna Life Ins. Company v. Washington Life and Disability Insurance Guaranty Ass'n, 83 Wn. 2d 523, 526, 540 (1974) (all insurance companies authorized to do business in Washington are obligated to be and remain members of the Guaranty Association, "private, nonprofit association," as a condition to their authority to transact life and disability insurance business in Washington and to assure the performance of contractual insurance obligations to state residents of insurers that become insolvent).

[34] Such an arrangement would be similar to that involved in the Oregon forest fire protection cases. Under the statutory regime addressed in those cases, a forest landowner was required to provide adequate fire protection services itself (either directly or through an association of landowners) and only became liable for the statutory assessment if it failed to do so. "The individual timber owner is deemed to have complied with the statute . . . if he files with the State Forester an adequate protection plan and has the facilities to carry it out, or if he belongs to an association having such a plan and facilities." Sproul v. State Tax Commission, supra, at 582.

costs of handling E-waste on manufacturers and distributors, these parties would presumably have a strong incentive to participate in a collective NGO with other manufacturers and distributors to reduce their costs.

b. Management and Control Issues

If the NGO is privately funded, the manufacturers and distributors who participate in the private entity would control its activities and their costs, subject to state regulatory requirements and possible additional requirements imposed by the state concerning such matters as governance of the entity and allocation of costs among participants. Presumably, if the state's objective is to maximize participation in the NGO by the parties engaged in the manufacture and distribution of E-products, the state will want to ensure that the NGO will accept new participants, that all participants will have a voice in governance and that the cost of the NGO's operations will be fairly apportioned among participants. If the NGO is funded in whole or in part by a tax remitted to the state treasury or by a fee imposed by an existing state agency with broad governmental responsibilities, the industry would not have direct control over the level of the tax or fee. Although the statute establishing the E-waste program could restrict the use of revenues derived from such a tax or fee for unrelated purposes, such restrictions would have to be tightly drafted to ensure that all cost savings realized in the operation of the NGO would benefit the participants.

c. Multi-State Operations

A private NGO could operate in Oregon, Washington and other states, so long as the state statutes authorizing the program, the rules adopted by state regulators and the contractual requirements in each state are consistent. Because public officials and the legislatures of the two states can be expected to act independently over time, some mechanism to ensure coordination on these issues might be desirable and perhaps necessary. The NGO itself might be able to perform some coordinating functions but a policy-oriented industry/government coordinating body might also be desirable.

Coordination of the legislative and regulatory policies of the two states might be achieved through an interstate compact on E-waste management.

4. Public Contracting Statutes

Statutes in Washington and Oregon establish procedures that govern public contracting. Both of the conceptual models under consideration involve contracts entered into by public agencies for E-waste management services and facilities. In the first model, the "E-Waste Commission" would presumably contract with private parties for the performance of some or all of the Commission's collection, recycling and disposal functions. In the second model, the state environmental agency would contract with a private E-waste NGO for such services. What procedural requirements of the Oregon and Washington public contracting statutes would apply to such contracts?

In Washington, the answer appears to be that the public contracting statutes would impose no specific procedural requirements on contracts entered into by a state agency

for solid waste collection, recycling and disposal services. The principal public contracting statute, title 39, RCW, regulates only certain types of public contracts; *i.e.*, those dealing with "public works" (RCW 39.04), typically construction projects. While the scope of the public works statute is less than clear in all respects, the authorities seem to establish that (a) the competitive bidding procedures applicable to "public works" contracts are limited to contracts directly related to construction projects;[35] and (b) contracts for solid waste disposal are not "public works" contracts.[36]

However, the fact that no specific statutory requirements apply does not mean that there are no procedural requirements applicable to public contracting for E-waste services, only that the applicable requirements are vague. Many Washington cases describe a strong public policy in favor of competitive bidding[37] or a procedure that incorporates the principal safeguards of competitive bidding; *i.e.*, public notice of applicable criteria, a deliberative process involving evaluation of proposals and the articulation of a basis for contracting decisions.[38] However, the Washington courts and legislature have also recognized that solid waste disposal is within the police power and that public agencies have greater authority and flexibility when contracting for solid waste disposal than in other contracts.[39] Under the provisions of the Washington Administrative Procedure Act, the Washington courts will not overturn such agency contracts unless the contract is "arbitrary and capricious." *See* RCW 34.05.570(4)(b)(iii). An action is arbitrary and capricious when it is "willful and unreasoning action in disregard of facts and circumstances."[40]

Oregon has adopted a new Public Contracting Code that became effective March 1, 2005.[41] The Oregon public contracting code deals comprehensively with all forms of public contracting. Most contracts for services and facilities related to E-waste management, except construction projects, would be governed by ORS 279B. This section of the Code requires that public contracts be awarded on the basis of "competitive sealed bidding" or "competitive sealed proposals." Procedures are specified for each of these methods. Competitive bidding involves a more formal

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[35] *See* 1984 Op. Atty Gen. Wash. No. 17 at p. 23 ("Only the construction phase of the [management] contract falls within the definition of the term 'public work' as set forth in *RCW 39.04.010* . . . .).

[36] *See* Shaw Disposal, Inc. v. City of Auburn, 15 Wn.App. 65, 67 (1976) (statutory requirements applicable to municipal contracts for "public improvement" or "public work" do not apply to contracts for garbage collection services).

[37] *See, e.g.,* Manson Construction & Engineering Co. v. State, 24 Wn.App. 185, 190 (citing Washington's "strong public policy" favoring competitive bidding in public contracting).

[38] Washington Waste Systems, Inc. v. Clark County, 115 Wn. 2d 74, 78 (upholding county's use of the alternative contracting procedure prescribed by RCW 36.58.090 in entering into solid waste contract without competitive bidding).

[39] Shaw Disposal, Inc. v. City of Auburn, *supra*, at 68-9 ("The collection and disposal of garbage and trash by the city constitutes a valid exercise of the police power and a governmental function which the city may exercise in all reasonable ways to guard the public health."); State ex rel. Citizens Against Tolls v. Murphy, 151 Wn.2d 226, 244 ("garbage and trash collection is exempt from the statutory bidding requirement because this function is a matter that public agencies are authorized to address using the best means available to protect the public health," citing Shaw, *supra*).

[40] Washington Waste Systems, *supra*, at 81 ("The record reflects a conscientious effort to choose the best proposal and evaluate the information available. Accordingly, we conclude that the selection of Tidewater was not arbitrary and capricious.").

[41] *See* ORS 279A, B and C.

process. Both methods require public notice and evaluation according to stated criteria. If competitive bidding is used, the contract must be awarded to the lowest responsible bidder. The competitive proposal procedure can involve almost any process of evaluation and decision, so long as notice is given of the procedure to be employed.

Construction projects are generally governed by ORS 279C and generally require competitive bidding.

Both of the conceptual models under discussion here assume enactment of specific enabling statutes. Such statutes can and frequently do provide exemptions to otherwise applicable state statutes, including state statutes governing public contracting. Given the objectives of the E-waste management models
discussed here, it seems likely that the enabling statutes would directly address the contracting authority and obligations of the state agencies involved.[42]

5. Conclusion

Our preliminary legal review has identified no insurmountable legal impediments to the formation and operation of an E-waste management entity based on either of the two conceptual models that have been proposed. Further analysis will be required based on more specific statutory proposals.

[42] It should also be noted that there have been a number of instances in recent years in which state legislatures have authorized innovative "public-private partnerships" to carry out governmental responsibilities. An example is the Public-Private Transportation Initiatives Act, Chapter 47.46, RCW. Under the authority of this Act, the Washington Dept. of Transportation entered into a contract with a private entity to finance, construct, manage and maintain the new Tacoma Narrows bridge. This contract delegated substantial control over the bridge project to private parties. *See* State ex rel. Peninsula Neighborhood Ass'n v. Dept. of Transportation, *supra*. A comparable "public-private partnership" for E-waste management might be specifically authorized in the enabling statute.

GARVEY SCHUBERT BARER

MEMORANDUM

TO: Jason Linnell
Executive Director
National Center for Electronics Recycling

CC: David Nightingale

FROM: Stephen B. Johnson

DATE: December 13, 2005

RE: **Further Discussion of Compact Clause and First Amendment Issues**

What conditions will trigger the requirement for congressional approval of an interstate compact under Article I, Section 10 of the U.S. Constitution?

The "Compact Clause," Article I, Section 10 of the United States Constitution provides that "No State shall, without the Consent of Congress . . . enter into any Agreement or Compact with another State, or with a foreign Power . . . ." Although this prohibition is absolute on its face, the few federal cases interpreting it have limited the requirement for congressional approval to those circumstances where the agreement or compact at issue alters the constitutional balance of power between the states and the federal government. In Virginia v. Tennessee, 148 U.S. 503, 519 (1893), the U.S. Supreme Court reasoned that congressional consent to agreements between states was only required if the compact involved "the formation of any combination tending to the increase of political power in the States, which may encroach upon or interfere with the just supremacy of the United States."

The reasoning of the Court in Virginia v. Tennessee was cited with approval and followed in New Hampshire v. Maine, 426 U.S. 363 (1976) (holding that an interstate agreement locating the boundary between two states did not require congressional consent) and in United States Steel Corp. v. Multistate Tax Commission, 434 U.S. 452 (1978). The latter case dealt with the Multistate Tax Compact to which 21 states had become parties at the time the litigation commenced. The Multistate Tax Compact was developed to promote uniformity and compatibility of state tax systems and to avoid duplicative taxation of multistate taxpayers. The Commission formed by the Compact was authorized to develop rules and standards for the application of state taxes to such taxpayers, but each state party was entirely free to disregard these rules and standards in the application of its own tax system. Uniformity could only be achieved by state parties adopting parallel standards and procedures. Each state party was free to withdraw from the Compact at any time. The Commission was empowered to conduct audits of multistate taxpayers at the request of a state but could only obtain compulsory process in aid of such audits in the courts of a state that permitted that procedure.

Although the approval of Congress had been sought, Congress had not acted. The Compact was challenged by taxpayers who objected to this audit procedure.

In evaluating the requirements of the Compact Clause in the context of the Multistate Tax Compact, the Supreme Court concluded that "[t]he relevant inquiry must be one of impact on our federal structure." 434 U.S. at 471. "[T]he pertinent inquiry is one of potential, rather than actual, impact upon federal supremacy." 434 U.S. at 472. Applying the principles of Virginia v. Tennessee to the Multistate Tax Compact, the Court concluded that the Compact did not impermissibly enhance state power at the expense of federal supremacy.

> On its face the Multistate Tax Compact contains no provisions that would enhance the political power of the member States in a way that encroaches upon the supremacy of the United States. There well may be some incremental increase in bargaining power of the member States *quoad* the corporations subject to their respective taxing jurisdictions. Group action in itself may be more influential than independent action by the States. But the test is whether the Compact enhances state power *quoad* the National Government. This pact does not purport to authorize the member States to exercise any powers they could not exercise in its absence. Nor is there any delegation of sovereign power to the Commission; each State retains complete freedom to adopt or reject the rules and regulations of the Commission. Moreover . . . each State is free to withdraw at any time.

434 U.S. at 473. Finally, the Court noted that the audit and other powers exercised by the Commission were powers that could be exercised by a member state, acting individually. 434 U.S. at 473-475. Thus, the Commission was not exercising any powers that could not be exercised by an individual state. The Court concluded that the Multistate Tax Compact did not require congressional consent under the Compact Clause. *See also*, Star Scientific, Inc. v. Beales, 278 F.3d 339, 359-60 (4th Cir. 2002) (upholding multistate settlement agreement with tobacco companies).

The application of these principles to the circumstances of an interstate compact to address collection, recycling and disposal of electronics waste would depend on the specific terms of the "E-Waste Compact." There is no obvious reason to believe that an E-Waste Compact could not be written to avoid the need for congressional consent.

What activities by a private organization funded by legally mandated assessments would trigger First Amendment issues (compelled funding of private speech)?

The United States Supreme Court has issued a series of decisions under the First Amendment to the United States Constitution, holding that private organizations may not be authorized by law to compel their members to support speech to which some of those members object. The first case in this series was Abood v. Detroit Bd. of Education, 431 U.S. 209 (1977) (governmental authorities may not require public school teachers to pay fees to a teacher's union not germane to the union's bargaining functions). In 1997, the Supreme Court decided Glickman v. Wileman Brothers & Elliott,

Inc., 521 U.S. 457 (1997), rejecting the claims of a group of agricultural producers who argued that the First Amendment did not permit them to be compelled to pay assessments to support advertising. However, just a few years later, the Supreme Court revisited this issue and largely reversed course. In United States v. United Foods, Inc., 533 U.S. 405 (2001), the Court held that an agricultural marketing program, funded by assessments on mushroom growers, violated the First Amendment. The Court distinguished Glickman on the ground that the advertising at issue in Glickman was "ancillary to a more comprehensive program" of economic regulation, whereas in United Foods, "the advertising itself, far an being ancillary, is the principal object of the regulatory scheme." 533 U.S. at 409-10.

One issue not dealt with in the United Foods case, however, was whether an advertising program funded by mandatory assessments could be defended as government speech exempt from the First Amendment limitations applicable to compelled funding of private speech. Under the "government speech doctrine," the government may compel funding of government speech without violating the First Amendment.

The "government speech" issue was directly addressed by the U.S. District Court for the Eastern District of Washington in In re Washington Apple Advertising Commission, 257 F. Supp.2d 1290 (2003). In that case, the court concluded that the Washington Apple Commission was not a state agency for First Amendment purposes. In reaching this conclusion, the court noted that "the Commission is not answerable to the State of Washington, or any of its political subdivisions." 257 F. Supp.2d at 1297.

As noted by the court, at the time the Apple Commission case was decided, the members of the Apple Commission were not appointed by government officials but were instead elected by apple growers and dealers. 257 F. Supp2d at 1298. The court thus distinguished Lebron v. National R.R. Corp., 513 U.S. 374, 400 (1995), in which the U.S. Supreme Court recognized that a corporation organized to further governmental objectives would be considered part of the government if government officials held the power to appoint a majority of the corporation's directors.[43] In the absence of such control over the entity itself, the Apple Commission court concluded that "speech is government speech only when the government is responsible for it." 257 F. Supp2d at 1298. The court noted that no government official had the power to exercise any control over the advertisements generated by the Apple Commission and no power to veto (or even to vote on) Commission decisions. Id.

The court in the Apple Commission case distinguished the statutory regime under which the Washington Apple Commission operated from the statutory regime for the federal Cattlemen's Beef Promotion and Research Board ("Beef Board"). The court noted that the U.S. Secretary of Agriculture has final authority over all the activities of the Beef Board and appoints its members. All contracts, budgets, plans and projects, including advertising undertaken by the Beef Board require the approval of the Secretary of Agriculture. The court contrasted the statutory regime governing the Apple

[43] The court reserved consideration of the possibility that "a nominal power to appoint and approve activities" might not create government speech if the supervising government official "merely rubber stamped the decisions of the relevant industry," *citing* United States v. Frame, 885 F.2d 1119 (3rd Cir. 1989).

Commission. "As neither the State of Washington, nor any of its political subdivisions, retains control over the Commission's speech, the government is not responsible for the speech. For that reason, the Commission's speech is not government speech." 257 F. Supp.2d at 1298.[44]

In 2005, the U.S. Supreme Court upheld the assessments imposed by the federal Beef Board based on reasoning similar to that advanced by the district court in the Apple Commission case. Johanns v. Livestock Marketing Association, 125 S. Ct. 2055 (2005). In that case, the Court held that the promotional speech of the Beef Board was "from beginning to end the message established by the Federal Government." 125 S. Ct. at 2063. "Congress and the Secretary have set out the overarching message and some of its elements, and they have left the development of the remaining details to an entity whose members are answerable to the Secretary (and in some cases appointed by him as well)." Id. "[T]he record demonstrates that the Secretary exercises final approval authority over every word used in every promotional campaign." Id. In these circumstances, the Court concluded that the Beef Board's advertising was government speech for which funding could be compelled either by general taxes or "targeted assessments devoted exclusively to the program to which the assessed citizens object." Id.

The Beef Board case establishes a model for the type of governmental involvement and oversight that would protect an "E-Waste Commission" from First Amendment challenge. The recent revision of the statute governing the Washington Apple Commission reflects this model. Another option would be for the E-Waste Commission to refrain from all but the most limited advertising,[45] leaving it to state and local government agencies responsible for solid waste management to promote use of the E-waste channel to the general public.

[44] The court noted further that, far from being ancillary to a regulatory program, between 62.5% and 85% of the Apple Commission's budget was devoted to marketing. 257 F. Supp.2d at 1303.

[45] Although not clearly permitted by the case law, advertising limited to, *e.g.*, availability and location of collection facilities and hours of operation might be sufficiently limited to withstand challenge. Such limited advertising might be deemed sufficiently "ancillary" to the functions of collecting, recycling and disposing of E-waste as to look more like the circumstances addressed in Glickman than like those addressed in United Foods.

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MEMORANDUM

TO: NWTPO Support Team

FROM: David B. Weinberg

DATE: December 21, 2005

RE: Antitrust Issues Associated with NWTPO

You have asked me to summarize the points I have made at NWTPO project meetings with regard to the antitrust issues. This memorandum does so. It should not be understood, however, as a definitive legal analysis of the issues discussed or even as a flagging of every possible competition law issue that could arise.

The issues discussed here are those which seem most likely to be of concern in the event a state adopts the so-called "hybrid model" for e-waste recycling – that is, establishes a commission to collect and advance recycling fee (or collects the fee through an existing state agency) and engages an industry-sponsored TPO to implement and manage e-waste collection and further handling.

State Law Issues

With regard to State law issues, analysis need go no further than recognizing that the TPO will only be established if legislation is enacted imposing an advanced recycling fee. Such legislation presumably also can be written to exempt the TPO from any state competition law issues that could otherwise impose impediments.

Federal Law Issues

On the Federal level, the principal concerns must be with (1) avoiding exchange among companies of competitively sensitive market and pricing information and (2) avoiding any activities that could be construed as collusive efforts to disadvantage some competitor or competitors. As explained below, these are readily manageable. Moreover, if the TPO were to be formed pursuant to state legislation, its activities likely would be exempt from antitrust challenge on another basis, the so-called "state action" immunity.

Avoiding improper information disclosure

The concern here is that the TPO might become the forum for improper sharing of sensitive information among competitors. This could occur through conversations at meetings or if data collected by the TPO, such as the basis for ownership interests if these were based on sales, was improperly shared.

These concerns are readily dealt with, however, if the TPO adopts and complies with an antitrust policy like the one put in place during the NWTPO project. Moreover, to the extent the management of the TPO finds it necessary to collect sensitive information, it can take steps to screen that material from sponsors and Board members.

Avoiding activities that could be construed as collusive

Three types of activities are most likely to cause concerns in this area: activities that could be characterized as exclusionary; activities that could be asserted to be an unlawful monopsony; and standard setting. All, however, are easily avoidable.

By exclusionary, I mean refusing to allow participation by a company in a way that frustrates its ability to have fair access to some market. If, for example, the state only allowed certain products to be sold if a TPO were in place, but the sole TPO said it were only going to handle certain brands of used products, a troublesome situation could arise. In practice, however, if either the system does not discriminate among different producers or sources of e-scrap, or if the system allows for establishment of multiple TPOs, this issue can be overcome.

Monopsony is a situation in which all potential customers get together and refuse to deal in some unlawful way with potential suppliers. If, for example, the TPO were the only entity in a state that could be expected to purchase recycling services, and refused to pay service suppliers more than some set amount, one of them might assert an unlawful combination in restraint of trade. However, given the complexity of the state economies, the fact that the TPO will be seeking competitive bids for services and will have a contractual obligation (to the Board or state agency) to provide those services, and the fact that other entities likely also will be seeking recycling services (for example, corporate, bulk e-waste generators), this seems a very modest concern. (The concern would be even further ameliorated if the State were actively regulating the "sole source" TPO activities, which seems likely if a "sole source" model were to be adopted.)

Finally, standard setting is an area that involves potential antitrust concerns, because it also can be used to exclude some potential competitors from a market. These concerns can be avoided, however, by having open, neutral criteria for service provider qualification that are clearly tied to legitimate requirements, such as the need for responsible environmental management. The fact that most of these requirements are likely to be established by the underlying state legislation further reduces potential concerns.

Other issues

As indicated in the introduction, the foregoing is not an exhaustive analysis of potential antitrust issues that could arise in connection with a TPO. It should give you some comfort, however, that there are no insurmountable impediments to the program you are considering.

APPENDIX E:

Stakeholder Concerns about an Electronics Recycling Third Party Organization

Addressing Stakeholder Concerns About an Electronics Recycling Third Party Organization

1. Common Concerns about TPOs

The following statements/concerns have been voiced by various stakeholders in electronics recycling policy discussions in the Pacific Northwest and elsewhere. The statements are not intended to represent an exhaustive list of concerns about a potential electronics recycling TPO. After each numbered statement, a list of stakeholder groups who have expressed this concern is identified. It is important to note that not all stakeholders identified with each concern share the same view. In fact, there are some conflicting concerns expressed by different representatives within each stakeholder groups represented in this list.

After each numbered concern, there is a paragraph that describes how it is addressed in the business plan for the NW TPO. Where possible, references to the specific section of the business plan are included.

1. *The TPO will be monopolistic*. Resulting in:

    a. Higher costs. Higher costs for those financing the TPO and therefore for customers. (other companies, consumer groups)
    b. Take it or leave it approach to contracting. An over reaching effort to drive costs down and lack of other options will financially squeeze collectors and other service providers down to a level that is not sustainable. (local governments, charities, other collector types, haulers and processors)

    The concerns about a high-cost TPO are addressed in two ways. First, the assumption for the business plan is that the TPO would be operating under legislated requirements. The legislation may create the TPO as a quasi-governmental entity, or it may give authority to the appropriate government agency to "authorize" or "designate" an organization that meets certain requirements to act as the TPO. The legislation will set the parameters and oversight to ensure that the TPO is creating an efficient and sustainable system. Second, the business plan section 1.3 outlines several specific goals and objectives that aim to reduce the costs of the system while ensuring an adequate level of service for collection and recycling

    - Relevant BP sections: 1.3 (goals 2 and 3), context statement, Section 3.3 on cost efficiency

2. *The TPO will not utilize existing private infrastructure within the state and will instead funnel all business to a single processor (out of state) and perhaps even have its own fleet of trucks, etc*. The State will also therefore have less economic development than would otherwise be possible. Note that this is also raised as a concern in a "producer responsibility system" and with "independent plans." (State, local governments, haulers, processors)

    Section 3.3 of the business plan outlines a proposed approach to service contracting that addresses these concerns. The business plan does NOT envision a TPO that

would create an entirely new infrastructure in WA and OR and disregard existing local actors. Instead, the TPO would competitively contract all direct services via an RFP/RFQ process open to existing/developing business in the area and regional/national vendors. The contractors will be paid on the basis of their bids for pounds of product managed. This will include a pass-through payment for collection services – the Collection Incentive Payment (CIP) – as well as payment for the net costs of downstream transportation and processing. The TPO outlined in the business plan would have a small staff, and would therefore rely on contracting of this sort to fulfill its legislated goals.

- Relevant BP section/s: Section 3.3

3. *The TPO will attempt to establish a "one size fits all" system and will not be adaptable to customer/local needs and a diversity of service providers*. (local governments, charities, consumer and environmental NGOs, haulers, processors)

   The TPO would contract with processors or "consolidators" who would be responsible for – that is they will compete for – arrangements with local collection entities of any type. This competitive process, along with legislated requirements, will ensure a diversity of collectors operating in the system as well as appropriate geographic coverage.

   - Relevant BP section/s: Section 3.3.

4. *The TPO will allow manufacturers to sidestep any true responsibility in making the system effective or in seeking ways to decrease costs through Design for Recycling and Design for the Environment*. (other manufacturers, State, consumer and environmental NGOs)

   Manufacturers' involvement in the TPO will depend on the requirements established in legislation. The TPO board may be comprised entirely/primarily of manufacturers, or represent a balance of stakeholder interests, depending on the system financing and structure. The business plan envisions active participation of manufacturers and states two goals related to manufacturer involvement. The first goal includes manufacturers in the governance structure of the TPO. The second goal looks to provide manufacturers and others in the supply chain with information on design characteristics as they relate to recycling efficiency. The TPO will require this information from contracted processors and submit it to manufacturers/brand owners.

   - Relevant BP section/s: TPO Goals 1 and 5

5. *A TPO board, dominated or made up entirely of manufacturers, will operate independent of other stakeholder interests and concerns and cannot be trusted*. (local governments, consumer and environmental NGOs, haulers, retailers, processors)

   The TPO board may be comprised of representatives other than manufacturers, depending on the structure defined or outlined in legislation. Even if the board is comprised solely of manufacturers, the business plan assumes a significant level of

government agency oversight of the TPO operations – including review and approval of the TPO annual budget – to prevent undesirable activities.

- Relevant BP section/s: Section 2

6. *A TPO controlled by (some) manufacturers will be unfair to other manufacturers*. (other companies)

   Regardless of the TPO structure, the business plan assumes a significant level of government agency oversight of the TPO operations to prevent companies on the TPO board from attempting to gain competitive advantage over other companies not in the TPO governance structure.

   - S Relevant BP section/s: Section 2

7. *A TPO system cannot be trusted to be fair and operate within the regulatory structure of the state, compared to a State operated system*. (WA state haulers)

   The TPO will have a significant level of government agency oversight to ensure fairness, state review and approval of the TPO's annual budget. The TPO will alleviate the need to create new government functions and will be able to operate more efficiently than an government-operated system

   - Relevant BP section/s: Section 1.3, over TPO goal: "The overarching goal of the TPO is to meet legislated requirements for e-waste management."

8. *State elected officials will be wary of passing a new revenue generating law and have that money go directly to a private entity (TPO) for management*. This has been more of a statement than a concern. (legislative aides, State staff, politicos)

   Under a legislated system, it is assumed that the TPO would need to enter into a cooperative agreement or similar contractual relationship detailing a collection and recycling plan to be approved by the relevant state agencies. The TPO would also submit its budget annually for approval and report on its annual activities. This public information can be used to provide oversight on the effectiveness of the TPO operations.

   - No specific business plan reference

2: Feedback from NCER TPO Survey

As stated in Section 3 of the final report, the National Center for Electronics Recycling (NCER) organized a Multi-State TPO Project Committee and an additional committee for recyclers in order to gather targeted stakeholder input. One of the tasks that the project committee completed was a survey of preferences on TPO characteristics. The survey asked respondents to identify themselves as one of eight stakeholder groups: Manufacturer/Trade Association, Recycler, Repair/Resale, Non-Profit Organization, Retailer, Local Government, State Government, or Federal Government. The survey was open to any stakeholder in the above categories. In order to provide some context on what a TPO is and why the NCER was conducting the survey, the survey included the following statement:

In the context of recycling programs, a "TPO" is a private organization established to implement and administer programs to collect and manage particular used consumer products for reuse and recycling. During the National Electronics Product Stewardship Initiative (NEPSI), there was a general agreement on the need for development of a third-party organization (TPO) to coordinate and administer the logistics and payment schedules of an electronics collection and processing system. The TPO was described as an organization that would manage the funds generated by a front-end financing system and disperse those funds to create and operate all or portions of the collection, transportation, reuse, and recycling infrastructure. For more information on TPOs and their role in electronics recycling systems, see the NCER TPO factsheet and matrix of TPO roles in current recycling systems available at:
http://www.electronicsrecycling.org/NCER/mstpo

The survey asked respondent to state their preferences for each question, to the greatest extent possible, answer the questions without regard to the particular financing mechanism under which the TPO operates. A list of the specific questions asked in the survey is included below.

2.1 Findings

Overall, there is a wide range in opinions among stakeholder groups on the key roles and characteristics of an electronics recycling TPO.

- **Government** stakeholders tend to view the TPO as a vehicle to engage manufacturers in the recycling process, and as an organization that will relieve the government from the burden of managing the recycling system. The government respondents preferred a TPO that would use a competitive bidding process to secure contracts with processors who would then interact with the local collection infrastructure using a collection incentive payment. Their preference for the structure of the TPO is a quasi-governmental organization controlled primarily by manufacturers but representing a balance of stakeholders as well. While they tended to support the ability for individual manufacturers to operate outside the TPO system, they were wary of the possibility of multiple TPOs. Finally, the government respondents saw an important role for the TPO in providing public education in coordination with local government.

- **A Recycler** respondent stressed the need for the TPO to assure environmentally sound management of collected materials. The recycler expressed a preference for a quasi-governmental entity in order add leverage over contractors on matters such as pricing and ESM standards. The preference was for a balance of stakeholders to be represented on the TPO board.

- **One Non-Governmental Organization (NGO)** stated a strong preference for multiple TPOs in order to allow competition and reduce costs. Under this scenario, the makeup of the board is not as important as a single TPO system. Like the Government stakeholders, the NGO prefers a situation where the TPO/s would use a competitive bidding process to secure contracts with processors, and then use a

collection incentive payment to ensure geographic coverage of the collection infrastructure. The NGO also preferred that the government set the baseline standard for ESM recycler performance.

2.2. Survey Questions

- What are the most important roles that a TPO could/should play?
- How should the TPO interact with the local infrastructure?
- During NEPSI, a collection incentive payment (CIP) paid by the TPO was envisioned as a way to spur local actors to collect covered products (see below description). Is this your preferred method for organizing collection activities through a TPO?
- California is set up via set cents/per pound rate paid out to recyclers, and via recyclers to collectors. Most TPO discussions have assumed that the TPO would utilize a competitive bidding process. Which type of recycler payment system would you prefer – a set reimbursement rate or a competitive bidding process with multiple awards to the lowest responsible bidders?
- Who should run the TPO? Should the board governing the TPO be made up of primarily manufacturers, manufacturers exclusively, or a balance of all stakeholders?
- TPOs can be established is several different ways. It can be private voluntary non-profit sponsored by the affected industry, or it can be a quasi-governmental organization established through legislation, authorized through legislation. What is your preference for the type of TPO that should operate electronics recycling system/s?
- Should the government have direct oversight over the TPO?
- Should the TPO mandate that all covered companies participate, or should it allow be voluntary and allow for individual companies to operate programs separate from the TPO program?
- One of the justifications for the use of TPO versus government management of the recycling system is that a private-run TPO can be more efficient. How can we ensure that the TPO does in fact operate in a more efficient manner?
- Should multiple TPOs be allowed or authorized? In your view, would this decrease the economies of scale and raise costs, or allow competition and reduce costs?
- If the TPO pursues a competitive bidding process, followed by award of one or more contracts, what standards should a TPO use for selecting and auditing a recycler? Or should this function be performed by government?
- If the TPO reimburses recyclers for services after the fact, what criteria should the TPO use to qualify recyclers?
- How can the TPO monitor and enforce recycler performance?
- What roles should the TPO and local governments play in public education?