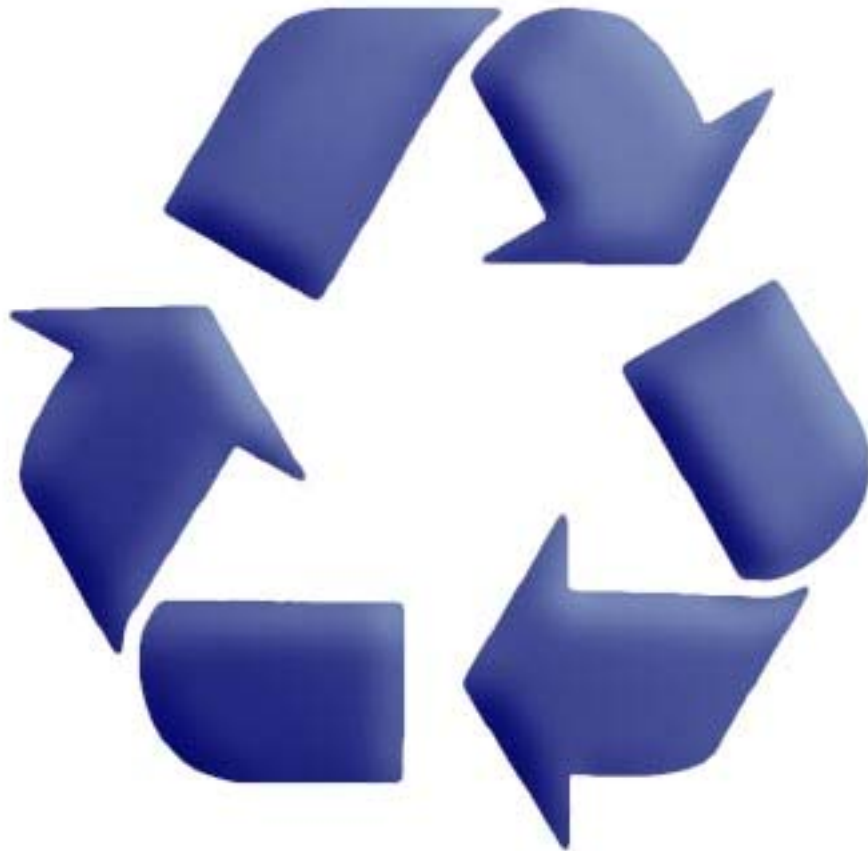


Blue Box Program Plan Review Report and Recommendations



Waste Diversion Ontario

April 2009

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1.0 Background

Waste Diversion Ontario (WDO) is a non-crown corporation created under the Waste Diversion Act (WDA) on June 27, 2002. WDO was established to develop, implement and operate waste diversion programs for a wide range of materials.

The WDA empowers the Minister to designate a material for which a waste diversion program is to be established. Once the Minister has designated a material through a regulation under the WDA, the Minister asks WDO to develop a diversion program. WDO is required by the Act to work co-operatively with an Industry Funding Organization (IFO) to develop a waste diversion plan for the designated waste.

Waste Diversion Ontario is also required by the Act to conduct public consultation on any matter referred to it by the Minister.

To date, the Minister has requested diversion programs for Blue Box Wastes, Used Tires, Municipal Hazardous or Special Waste (MHSW) and Waste Electrical and Electronic Equipment (WEEE). While Used Oil Material was designated in 2003, the Minister set aside this designation when including used oil bottles and used oil filters in the MHSW designation.

The Blue Box Program Plan (BBPP) was approved by the Minister on December 22, 2003 and commenced on February 1, 2004. Stewardship Ontario is the Industry Funding Organization with whom WDO works co-operatively to implement the Program.

2.0 Minister's Request for Blue Box Program Plan Review

On October 16, 2008, WDO received correspondence from the Honourable John Gerretsen, Minister of the Environment, requesting that WDO conduct a review of ten BBPP issues, provided in an addendum to the letter, using the principles of extended producer responsibility to form the review framework. The Minister directed that the BBPP review be completed in a manner that is transparent and incorporates consultation with relevant stakeholders, including members of the public, municipalities, businesses, Blue Box Program stewards and environmental non-government organizations.

The Minister requested that WDO submit a report by March 20, 2009 that:

- summarizes the BBPP review process that was completed, including stakeholder consultation,
- makes recommendations regarding the BBPP issues, including the rationale for the recommendations such as key arguments made during stakeholder consultation, and
- indicates how extended producer responsibility principles shaped the framework of the review and informed the recommendations.

The report submitted by WDO to the Minister is comprised of two volumes:

- a separate document titled *Report on Consultation to Support Review of the Blue Box Program Plan* that summarizes the BBPP review process including the stakeholder consultation; and

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- this document which includes recommendations regarding the BBPP issues and the rationale for these recommendations and indicates how EPR principles shaped the review framework and informed the recommendations.

As the recommendations contained in this report may form the basis for substantive changes to the BBPP in Ontario, the WDO Board carefully and thoroughly considered the potentially far-reaching questions posed by the Minister and the strong and varied response by stakeholders. As a result, this report and recommendations were submitted to the Minister in early April rather than by March 20, 2009 as requested.

3.0 Consultation Process

WDO has implemented a consultation process comprised of the following activities:

- public focus groups and a public opinion survey;
- one day meetings with five stakeholder groups:
 - representatives of Ontario municipalities
 - members of the Stewardship Ontario Board
 - Ontario Waste Management Association Board and members
 - representatives of affected industries
 - representatives of non-government organizations;
- two day meeting of the Municipal Industry Program Committee (MIPC) for the Blue Box Program Plan;
- posting of a draft report with draft recommendations for public consultation;
- a consultation workshop with simultaneous webcast to review the draft recommendations;
- archiving of the webcast on the WDO website; and
- written submissions.

To review comments submitted during the consultation process, refer to the *Report on Consultation to Support Review of the Blue Box Program Plan*.

4.0 Extended Producer Responsibility

4.1 Defining Extended Producer Responsibility

The definition for extended producer responsibility developed by the Canadian Council of Ministers of the Environment (CCME) was utilized as a starting point for purposes of the consultation process:

Extended Producer Responsibility (EPR) means an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle.

Some stakeholders commented that this definition is too vague to be helpful in understanding what is expected of producers under EPR. Two areas in particular were raised as being unclear:

- the scope of the producer's responsibility; and
- the scope of the post-consumer stage of a product's life cycle.

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With respect to the scope of the producer's responsibility, stakeholder comments suggest that a producer's responsibility under EPR can be limited to financial responsibility for the management of products and packaging, as in the shared responsibility model, or can also include physical responsibility for the management of products and packaging, including responsibility for achieving program performance objectives, as in the full responsibility model.

With respect to the scope of the post-consumer stage of a product's life cycle, stakeholder comments suggest that a producer's responsibility under EPR can include some or all of the following:

- reduction in
 - the quantity of (primary or secondary) materials (weight and/or volume) used to manufacture a product or package, and/or
 - the toxicity or other characteristics that affect the environmental impact of the product or package;
- reuse of the product or package;
- recycling of the product or package;
- recovery of energy from the product or package; and
- landfilling of the product or package.

4.2 Extended Producer Responsibility Principles

The principles for extended producer responsibility developed by CCME were utilized as a starting point for purposes of the consultation process.

Comments from stakeholders during the consultation process identified areas where clarification of the CCME principles would be beneficial.

Principle 3 implies that EPR programs can directly encourage design for environment (DfE). The mechanism available to EPR programs to affect DfE is the levying of fees on stewards. As experience suggests that the effect of stewards' fees on DfE is limited, focusing on the objective and the mechanism to achieve this objective may be more appropriate than assuming an outcome. Inclusion of the italicized text in Principle 3 may be helpful in clarifying the relationship between EPR programs and DfE:

Fees levied on stewards under EPR programs can be designed to encourage producers to incorporate design for environment to minimize impacts to environment and human health.

Principle 13 was misunderstood by some stakeholders. Replacing the phrase 'without charge' with the italicized text would clarify the meaning of the principle:

Consumers have reasonable access to collection systems *with no charge for use of the collection system* to maximize recovery opportunities.

4.3 Shaping the Review Framework

The Minister directed WDO to undertake the BBPP review using the principles of extended producer responsibility to form the review framework.

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The definition of EPR and EPR principles developed by CCME were utilized as starting points for purposes of the consultation process. Discussions during the consultation meetings considered:

- setting targets, establishing a consistent list of materials, addressing problematic wastes, ensuring environmentally responsible management and options to utilize the fee setting methodology within the context of the existing BBPP under full EPR; and
- utilizing EPR to expand the scope of the BBPP to include a wider definition of Blue Box materials and to address Blue Box materials from the IC&I sector and in the garbage and litter stream.

Some stakeholder comments are relevant only under full EPR. For example, municipalities indicated certain activities that are not reflected in existing service provider contracts or have financial implications for the Blue Box system should be deferred until full EPR is in place.

Other stakeholder comments were provided on the basis that full EPR is one possible scenario for the Blue Box Program Plan. Stakeholders are also participating in the WDA review and recognize that amendments to Section 25(5), which is the basis for the Blue Box Program Plan shared responsibility model, would be required to establish full EPR.

5.0 Summary of Issues Identified in Consultation Process

5.1 Different Perspectives

Consultation with stakeholders identified a number of different and, in some cases, contrasting perspectives on key issues. The following paragraphs outline some of the key differences in perspective among stakeholders.

Shared Responsibility Model

The shared responsibility model is the basis for the existing BBPP and was designed as a partnership between Blue Box stewards and municipalities. Under this partnership, municipalities manage and deliver the Blue Box system and Blue Box stewards contribute 50% of the system cost.

Blue Box stewards reported that, in their view, the shared responsibility model remains the best way to keep municipalities and consumers engaged in waste diversion and is an effective partnership.

Municipalities reported that, in their view, the shared responsibility model is not an effective partnership because stewards' contribution has been less than 50% and because stewards don't consider end-of-life handling issues faced by municipalities when designing products and packaging.

Role of Stewards under Full EPR

Industry indicated that, under full EPR, stewards should be entitled to control the Blue Box system design and operation.

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Other stakeholders raised concerns that industry will seek the lowest cost system design which may not yield the desired environmental objectives. These stakeholders believe that industry must be held accountable by operating within provincial regulation and/or policy direction and that it may be necessary for municipalities to deliver curbside collection services to ensure reasonable service levels for residents.

Driving More Diversion

Industry indicated that it would drive diversion where it is most cost effective through focusing on the 'next least cost tonne'.

Municipalities indicated they want higher diversion in order to reduce garbage and litter and raised concerns that the 'next least cost tonne' in the diversion system may not address the disposal and litter problems managed by municipalities.

Other stakeholders indicated they want more diversion in order to achieve broader environmental objectives and to drive Ontario's green economy using secondary resources.

Need for Flexibility

Stakeholders generally agreed on the need for flexibility to design a cost efficient system for Blue Box wastes under full EPR. However, views on the form and scope of the flexibility varied among stakeholders.

As indicated above, industry indicated it would expand the Blue Box system based on the 'next least cost tonne' and wants system flexibility within which to select the materials to collect.

Other stakeholders believe that industry should operate within defined program performance and policy objectives, including accessibility and material recycling targets and defined service levels. Under this policy framework, industry could design a cost efficient system, based on the 'next least cost collection method' rather than the 'next least cost tonne'.

Producer Responsibility for Garbage and Litter

Industry reported that, in their view, garbage and litter are behaviour problems that are best addressed through education of residents. As industry believes it cannot affect residents' behaviour, producers therefore should have no responsibility for garbage and litter.

Other stakeholders reported that, in their view, producers should be responsible for all products and packaging put into marketplace including items that remain in garbage and litter.

Communicating with Residential Generators

Industry reported that, in their view, they have no control over consumers and that education of residential generators should be managed by municipalities.

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Other stakeholders reported that, in their view, industry effectively markets products and packages to consumers and should therefore also be able to effectively market diversion to residential generators.

5.2 Key Themes

The Minister directed WDO to undertake the BBPP review using the principles of extended producer responsibility to form the review framework. For many stakeholders, considering the BBPP within the framework of EPR represented a move to privatize residential Blue Box services that have historically been delivered as a public service in Ontario. While industry has contributed to the early Blue Box system capital investments and more recently, through the shared responsibility model, to system operating costs, the Blue Box system continues to be viewed as a public service.

Some stakeholders expect that a shift from a shared responsibility model to a full EPR model will address certain issues on the assumption that industry will move to invest in market development to maximize revenue and will track materials to final destination to avoid media risk to industry brands.

Some stakeholders expect that high diversion targets with defined consequences for non-performance will resolve certain issues on the assumption that industry will move to ensure consistency in materials collected, educate residents and find cost-effective ways to handle problematic wastes and cost-effective collection systems to increase diversion.

Some stakeholders expressed qualified support for:

- consistency of materials collected across all municipalities while recognizing that collection methods may vary across Ontario to reflect regional differences;
- alternate collection systems for Blue Box materials where these materials are problematic in the curbside system; and
- expanding the BBPP to include more materials using criteria to select materials, such as market capacity and compatibility with collection and processing systems.

Stakeholders generally agreed that better baseline data on management of printed papers and packaging generated by the IC&I sector are required. Stakeholders disagreed about the role of EPR in managing printed papers and packaging from the IC&I sector.

Stakeholders raised the need to balance:

- financial responsibility for printed papers and packaging and physical control of the diversion system;
- accountability for program performance and control over program design;
- policy direction and operational flexibility;
- increased diversion and a cost effective system;
- increased diversion and other environmental and social objectives;
- minimum service levels and regional differences across Ontario; and
- a free marketplace and intervention in the marketplace to achieve policy objectives.

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6.0 Recommendations

The following sections present recommendations on each of the ten issues raised by the Minister.

6.1 Program Performance

The BBPP has reached its 60% waste diversion target. A new target may encourage further increases in waste diversion. Recommend a new target for the next 5 years of the BBPP that goes beyond the 60% target originally set for the 2004-2008 period.

Context

Some stakeholders suggested that targets should not be set in advance of the Ministry of the Environment (MOE) establishing environmental goals, without an assessment of the barriers to increased diversion under the BBPP and without an assessment of the cost implications of collecting and processing additional Blue Box materials.

Other stakeholders suggested that a higher global target for the BBPP would drive efforts to increase diversion, noting that municipalities are currently managing Blue Box materials remaining in the garbage stream without assistance from producers.

End markets suggested that program performance should consider residues resulting from processing at end markets. It was suggested that measuring recycling of printed papers and packaging based on the portion that is utilized in new products, rather than based on materials marketed by municipalities, would be a more accurate measure of the recycling rate.

Some stakeholders suggested targets should be limited to residential Blue Box materials and should not incorporate those activities that would expand the scope of the BBPP. The 5 year performance targets proposed in response to Question 1 (and Question 2) focus on residential Blue Box materials and do not consider the possible expanded scope of the BBPP.

Recycling targets proposed by stakeholders ranged from 70% proposed by industry representatives to 90% or higher proposed by representatives from municipalities and environmental non-government organizations (ENGOS).

Some stakeholders pointed out that the BBPP focuses only on residential Blue Box materials managed by municipalities while excluding residential Blue Box materials managed by other collection systems. This arrangement results in some residential generators being treated inequitably under the BBPP. These stakeholders suggested that both municipal and non-municipal collection systems for residential Blue Box materials should be incorporated into the BBPP. This inequity has been addressed by proposing to include Blue Box materials collected from the residential sector by non-municipal collection systems in the BBPP.

Some stakeholders noted that stewards determine reduction and reuse opportunities for printed papers and packaging while an Industry Funding Organization is responsible for recycling, rather than diversion of these materials. These stakeholders suggested

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presentation of program performance targets in terms of recycling rather than diversion targets.

Some stakeholders suggested that additional Blue Box materials can be sorted from processing residues from Blue Box material recycling facilities (MRFs) if these materials were directed to a mechanical sorting facility (MSF)¹ for additional sorting. It was also suggested that MSFs could be utilized to process residues from end markets and recyclable materials collected in public space recycling systems if these materials are too contaminated to process in a regular Blue Box MRF.

Some stakeholders suggested that some printed papers and paper packaging could be directed to composting facilities and a waste diversion program for Blue Box wastes should consider both recycling and composting as diversion options for these materials.

Rationale for Recommendations

The rationale for the draft recommendations is:

- to provide a response to the Minister's request for a new waste diversion target for the next five years of the BBPP;
- to include residential Blue Box materials collected through non-municipal collection systems in the BBPP and to count these materials towards the program's collection target;
- to include residential Blue Box materials sorted from processing residues in the BBPP and directed to markets and to count these materials towards the program's diversion targets;
- to include residential Blue Box materials directed to composting and directed to markets and to count these materials towards the program's diversion targets;
- to set targets that fall within the range suggested by stakeholders with the diversion target slightly above the bottom of the range and the collection target slightly below the top of the range;
- to improve the accuracy of reporting on Blue Box wastes collected by including all forms of collection of residential Blue Box wastes for diversion;
- to improve the accuracy of reporting on Blue Box wastes diverted by identifying residue at all stages of processing; and
- to improve transparency of program performance by also reporting on residue from processing of Blue Box materials.

Recommendation # 1

To set the following 5 year Blue Box Program Plan performance targets:

- a collection target of 85%²;
- a diversion target of a minimum of 75%³ that includes

¹ A mechanical sorting facility (MSF) is a facility that processes highly contaminated recyclable materials and/or mixed waste rather than fully source separated recyclable materials.

² Materials collected will be processed with some loss to residue. A collection target is therefore higher than a diversion target to account for processing residue.

³ The diversion target of 75% is based on materials marketed for consistency with the existing BBPP diversion target of 60% and the 2007 recycling rate of 63%. The proposed 85% collection target and the proposed 75% diversion target should be reviewed following implementation of Recommendations # 2 and # 3, when the 2007 recycling rate of 63% can be expressed on the

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- printed papers and packaging materials directed to composting or anaerobic digestion to produce a humus product, net of residue; and
- printed papers and packaging materials directed to recycling markets, net of residue.

Recommendation # 2

To improve the methodology to calculate the quantity of Blue Box wastes collected by incorporating the following collection systems for residential Blue Box materials in the Blue Box Program Plan and by counting the residential Blue Box tonnes collected towards the collection target:

- collected from residential generators by municipalities reported via the Municipal Datacall;
- collected from residential generators by stewards reported via steward reports to Stewardship Ontario;
- collected from residential generators by retailers (e.g. grocery store carry out bags);
- collected from residential multi-unit buildings directly by private contractors; and
- collected from residential generators by charities and other organizations (e.g. aluminum can collections).

Recommendation # 3

To modify the methodology to calculate the quantity of Blue Box materials recycled⁴:

- from measuring recycling on the basis of Blue Box materials marketed as a portion of these materials is disposed as residue through subsequent processing;
- to, instead, measure recycling as materials utilized in new products which would be net of all processing residues.

Recommendation # 4

To report the quantity of residue resulting from each stage of Blue Box material processing, including MRFs and end markets, to increase the transparency of program operation.

6.2 Material Specific Performance

Certain Blue Box wastes are not achieving high diversion rates (e.g., plastics), and may benefit from material-specific diversion targets. Recommend material-specific diversion targets for Blue Box wastes to encourage further increases in waste diversion for the next 5 years of the BBPP.

basis of all sources of residential materials rather than solely municipal collection systems and materials utilized in new products rather than materials marketed by municipalities.

⁴ Until such time as this methodology is developed, recycling targets will be measured based on materials marketed.

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Context

Stakeholders differed in their support for material specific targets.

Some industry representatives opposed material specific targets on the basis that they would reduce operational flexibility. Other industry representatives proposed a maximum of two categories – printed papers and packaging with a target of 80% to 85% for printed paper and 50% to 55% for packaging.

Some material suppliers and Blue Box system service providers supported material specific targets.

Some industry stakeholders expressed concern that material specific targets that differ among material groups could affect competing packaging materials differently.

Municipal and ENGO stakeholders proposed material specific targets for each of the more than twenty Blue Box material categories used to report Blue Box Program recycling rates in 2007 on the basis that this approach to material specific targets would drive increased diversion. Suggested approaches for setting each material specific target included:

- applying the principle of continuous improvement year over year;
- requiring a specified increase (e.g. 10% or 25%) each year; and
- setting a uniformly high target for each material but extending the period of compliance for those materials with lower current recycling rates.

For comparison with stakeholder suggestions, the following table presents recycling rates achieved under the BBPP from 2004 to 2007 extrapolated forward over five years.

Material Groups	Recycling Rates				5 Year Extrapolated Projections
	2004	2005	2006	2007	
Printed paper	67.4%	68.4%	71.6%	79%	94%
Paper packaging	47.8%	50.7%	53.2%	58%	71%
Plastics packaging	16.2%	18.0%	20.3%	22%	29%
Steel packaging	48.7%	46.9%	57.5%	56%	65%
Aluminum packaging	38.2%	40.0%	42.1%	39%	40%
Glass packaging ¹	58.7%	63.1%	60.9%	83%	72%

¹The 2007 recycling rate for glass packaging in the residential Blue Box system excludes wine and spirits containers managed under the Ontario Deposit Return System after February 2007. As this represented a significant system change, the 5 year extrapolated projection for glass is based on the average change in recycling rates between 2004 and 2006 extrapolated over 2007 plus 5 years.

Some stakeholders expressed concern that stewards would naturally gravitate to the lowest cost approach to implementing the Blue Box Program and would not strive for higher diversion without defined consequences for failing to meet the diversion targets. It was noted that other types of environmental regulations are often based on

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established performance objectives (e.g. air emission limits) and defined consequences (e.g. fines) for non-performance so that industry clearly understands the consequences of failure and can take these into account when assessing the options available to achieve the established objectives.

Some industry stakeholders suggested that consequences for failing to meet material specific targets are not required, citing the performance of the BBPP to date. However, the historical performance of the municipal Blue Box system may not be a useful comparison to an EPR program for printed papers and packaging. Under the existing shared model, municipalities, motivated by residents or difficulty disposing of waste, set the pace for expansion of diversion programs. Under a full EPR model, expansion may rest with stewards who may not react to the same pressures.

Rationale for Recommendation

The rationale for the recommendations is:

- to provide a response to the Minister's request for material specific targets for the next five years of the BBPP;
- to establish the first material specific targets for the BBPP based on the six primary material categories used to report recycling rates under the BBPP to be consistent with categories used in other jurisdictions to track material specific recycling rates;
- to incorporate the principle of continuous improvement while recognizing that material groups currently have varying recycling rates and different challenges to achieve higher material specific targets;
- to be generally consistent with the year over year rate of growth in recycling rates under the BBPP while setting material specific targets that are proportionately above existing recycling rates recognizing that:
 - incorporating Blue Box materials from non-municipal collection systems may benefit certain materials more than others (e.g. aluminum);
 - sorting materials for recycling during pre-processing at MSFs may benefit certain materials more than others (e.g. steel);
 - materials achieving recycling rates in the 80% range have less remaining material on which to draw to increase their recycling rates;
 - material specific targets would be expected to yield the 75% program recycling target;
- to establish consequences for failing to meet material specific targets in order to motivate stewards to actively work to meet the targets; and
- to establish a process, through development and approval of an action plan, that provides WDO with the opportunity to increase targets, where the targets are easily met, or to adjust targets or extend the period to achieve targets, should significant challenges be identified.

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Recommendation # 5

To set the following 5 year Blue Box Program Plan material specific diversion targets, supported by an implementation plan developed by the Industry Funding Organization within Year 1 and by regular reporting on progress towards targets:

Material	2007 Diversion Rate	Year 1 Diversion Rate	Year 2 Diversion Rate	Year 3 Diversion Rate	Year 4 Diversion Rate	Year 5 Diversion Rate
	(%)	(%)	(%)	(%)	(%)	(%)
Printed Paper	79%	80%	81%	82%	83%	85%
Paper Packaging	58%	60%	63%	65%	67%	70%
Plastics Packaging ¹	22%	27%	32%	38%	44%	50%
Steel Packaging	56%	58%	61%	64%	67%	70%
Aluminum Packaging ²	39%	45%	51%	57%	63%	70%
Glass Packaging	83%	83%	83%	84%	84%	85%

¹ Increasing the rate of plastics packaging recycling is directly related to overcoming technical challenges related to processing and developing markets which will be addressed in the implementation plan.

² Increasing the rate of aluminum packaging recycling under the BBPP is directly related to implementing effective tracking systems for non-municipal collection of this material which will be addressed in the implementation plan.

Recommendation # 6

To require the Industry Funding Organization to address a failure to meet annual material specific diversion targets by preparing and implementing, upon WDO approval, an action plan to increase recycling rates that:

- identifies the factors that contributed to failing to meet the annual targets and the most effective remedial actions to achieve future annual recycling targets;
- incorporates some or all of the following tools or other proposed tools
 - an expanded public education campaign
 - market development to increase capacity and/or improve technical capability
 - research and development to overcome technical barriers to collection, processing and marketing of materials
- is based on an annual budget for the action plan at a value equal to the avoided cost of managing the quantity of material by which the annual target was missed, at a minimum; and
- if the trend in recycling rates indicates that the years 4 and 5 targets will not be met, the Industry Funding Organization will provide a material specific plan to WDO for approval incorporating the necessary resources to meet material specific targets.

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6.3 Consistency Across Municipalities

The collection of different Blue Box wastes across Ontario municipalities creates public confusion. Recommend how the program can achieve greater consistency in the Blue Box wastes that are collected across Ontario municipalities to minimize public confusion, facilitate province wide communication and outreach activities, and encourage further increases in waste diversion for the next 5 years of the BBPP.

Context

Generally, stakeholders recognized the potential benefits of standardization in Blue Box materials collected across Ontario. However, views on which materials should be included in a standardized program differed and concerns were raised about the operational implications of standardization. For example, municipal representatives raised concerns regarding imposing standardized materials on municipal programs prior to the introduction of full EPR to the Blue Box system.

Stakeholders' views differed on which Blue Box materials should be collected in all municipalities. Some comments reflected the stakeholder's particular interest in a package type or end market industry. While views differed on which materials should be consistently collected, there was general consistency in the criteria proposed as the basis for selecting these materials.

Residential service standards under full EPR were an issue of concern raised by many stakeholders. Establishing a transparent process that involves stakeholders in confirming and applying the criteria to select the printed papers and packaging to be collected consistently across the province would provide opportunity for stewards, municipalities, service providers and end markets to contribute to establishing a sustainable collection system for printed papers and packaging.

Rationale for Recommendation

The rationale for the recommendation is:

- to expand the list of materials collected across Ontario to support higher collection and material recycling targets;
- to recognize that materials collected and collection methods are important aspects of service levels to be addressed under full EPR;
- to establish a process that will involve consultation to develop criteria and apply these criteria to select materials for standardization; and
- to establish a process that will involve consultation to determine appropriate collection approaches for the standardized materials in different areas of the province.

Recommendation # 7

To establish a process led by Waste Diversion Ontario and including consultation with Stewardship Ontario, stewards, municipalities, service providers and end markets to:

- select Blue Box materials to be collected in all municipalities based on specific criteria such as

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- percentage of Ontario households already receiving collection service for the material;
- capacity in the curbside collection container if collected at curbside;
- compatibility with the depot collection system if collected at depot;
- ability to be managed in processing systems;
- will not contaminate other materials during processing;
- availability of sustainable markets; and
- determine differential service levels (e.g. curbside or depot) to reflect regional variations based on specific criteria such as population, population density and/or location.

6.4 Problematic Wastes

Some Blue Box or non-Blue Box wastes create operational inefficiencies for municipal recycling programs and may increase costs. An example of a problematic blue box waste is the 15 litre non-refillable water bottle. Recommend how problematic Blue Box and non-Blue Box wastes can be addressed through the BBPP or other mechanisms.

Context

Some stakeholders noted that problematic materials may have been introduced into the marketplace with the best of intentions and that stewards may not fully understand the impact of the new product or package on the Blue Box system. These stakeholders suggested mechanisms to prevent the introduction of problem packaging, including an advisory service available to stewards and a packaging review process.

While information on an existing plastic packaging review panel operating in other jurisdictions was provided as a possible model, this approach was considered to be challenging due to the large number of new printed paper products and packages introduced into the Ontario marketplace each year combined with the proprietary nature of new product and packaging design.

Some stakeholders suggested that a regulatory mechanism is required to prohibit a shift from one collection system (e.g. return-to-retail) to another collection system (e.g. curbside) if that shift would result in lower diversion.

While stakeholders acknowledged that stewards would be responsible for managing problematic materials under full EPR, it was noted that an IFO, as a collective of competing stewards, requires a policy framework or direction in order to take action on problematic wastes.

Rationale for Recommendations

The rationale for the recommendations is:

- to explore the demand for and likely use of an advisory service for stewards inquiring about management of their products or packaging in Ontario's Blue Box system to avoid the introduction of problematic materials;
- to provide more information to stewards through distribution of checklists and standards related to the recyclability of printed papers and packaging;

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- to establish a regulatory framework to prevent shifting a product or package to an alternative collection system if it would result in reduced diversion; and
- to assign responsibility for identifying problematic materials and determining an appropriate course of action to ensure increased collection and recycling of printed papers and packaging and a sustainable Blue Box system to an organization other than the IFO due to the composition of the IFO Board which is comprised of representatives of competing companies.

Recommendation # 8

To minimize the introduction of problematic printed papers and packaging into the Ontario marketplace by:

- requiring the Industry Funding Organization to:
 - distribute to stewards a checklist to self-assess compatibility of new printed paper products and packaging with collection and processing systems for diverting these materials from disposal;
 - establish and publicize preferred standards for printed papers and packaging based on compatibility with collection and processing systems for diverting these materials from disposal; and
- requiring WDO to explore the feasibility of implementing an independent advisory service to respond to steward inquiries about compatibility of new printed paper products and/or packaging with the collection and processing system that would be used to collect and divert the material.

Recommendation # 9

To address management of problematic printed papers and packaging once introduced into the Ontario marketplace by:

- implementing a regulatory mechanism to prevent moving a product or package from one collection system to another collection system if the diversion rate for that item will decrease; and
- authorizing WDO to identify problematic materials, evaluate options for collecting and managing the materials in co-operation with Stewardship Ontario and provide direction to Stewardship Ontario on the management of problematic materials.

6.5 Blue Box Wastes from the IC&I Sector

The industrial, commercial and institutional (IC&I) sector generates more designated Blue Box wastes than the residential sector, but is not included in the BBPP. Recommend if, and how, the BBPP could be extended to include Blue Box wastes generated by the IC&I sector.

Context

Some stakeholders reported that, based on their direct experience, certain IC&I organizations or sectors have implemented effective recycling programs. Other stakeholders cited examples of minimal recycling activities in the IC&I sector.

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All stakeholders agreed that better data are required on which to base decisions regarding activities to increase IC&I diversion.

Some stakeholders suggested that IC&I diversion can be addressed through provincial enforcement of Regulations 102 and 103. Some stakeholders also suggested that the reporting requirements under these regulations could be utilized to gather data on IC&I recycling activities.

Other stakeholders felt that these regulations require amendment to be effective, for example extending these regulations to apply to service providers so that:

- IC&I generators would be responsible for implementing recycling programs, and
- service providers would be responsible for providing recycling services, recycling the materials collected and reporting on the quantity of materials collected and recycled.

These proposed amendments to Regulations 102 and 103 would reduce the number of data points from many thousands of generators to a smaller number of service providers. While this process would provide information on the quantity of materials collected and recycled (i.e. the numerator⁵ in a diversion percentage), it would not provide information on the quantity of Blue Box materials available for collection (the denominator⁶ in a diversion percentage).

Other stakeholders felt that EPR would be more effective than relying on amendments to, or enforcement of, Regulations 102 and 103, noting that these Regulations, in their view, have not been effective in increasing IC&I diversion since their implementation in 1994.

Rationale for Recommendations

The rationale for the recommendations is:

- to establish a system to compile data on IC&I diversion activities on which to base decisions regarding increasing IC&I diversion;
- to establish a process to resolve possible barriers to the application of the EPR model to the IC&I sector; and
- to establish a process to determine whether EPR can be utilized to increase collection and recycling of printed paper and packaging wastes generated by the IC&I sector.

Recommendation # 10

To establish a system to compile data on IC&I sector diversion activities and determine an IC&I recycling rate⁷ by:

- assessing whether stewards can identify sales into the IC&I sector and, if feasible, compiling data for the denominator based on stewards' sales into the marketplace through reports to an IFO; or

⁵ A recycling rate is calculated as a percentage with the numerator representing the quantity of materials recycled and the denominator representing the quantity of materials available for collection.

⁶ See footnote 5.

⁷ See footnote 5.

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- if stewards cannot identify sales into the IC&I sector, compiling data for the denominator based on generators' quantity of Blue Box materials purchased under an amended Regulation 103 or an IFO's material tracking system; and
- compiling data for the numerator based on:
 - generators' quantity recycled under an amended Regulation 103 or an IFO's material tracking system; or
 - service providers' quantity recycled under an amended Regulation 103 or an IFO's material tracking system.

Recommendation # 11

To assess if, and how, printed paper and packaging wastes generated by the IC&I sector could be managed under full EPR by assessing, within one year after baseline data has been compiled, whether an incentive model or a fee-for-service model could be utilized by stewards to increase collection and recycling of printed papers and packaging wastes generated by the IC&I sector.

6.6 Blue Box Wastes Collected Outside of the Blue Box

Blue Box wastes not captured in the Blue Box are collected as garbage or litter by municipalities, fully at their cost. Recommend (1) how collection options beyond municipal curbside and depot could be used to increase collection of Blue Box wastes and (2) how steward responsibility can be used to address Blue Box wastes that are collected beyond municipal curbside and depot, or disposed as waste or litter.

Context

Stakeholders noted that printed papers and packaging remain in garbage and litter for a variety of reasons:

- Where residents don't make the effort to separate the materials for recycling, motivation is required;
- Where residents don't know what is accepted in their collection systems, education is required;
- Where residents are confused about what is accepted, consistently collecting the same materials across all municipalities and education are required;
- Where residents generate printed paper and packaging waste away from home, increased collection accessibility is required;
- Where materials are accepted in some but not all collection programs, increasing processing or end market capability and/or capacity is required; and
- Where materials are not accepted in any collection programs, overcoming technically barriers to collection, processing or recycling is required.

Some stakeholders proposed activities to increase diversion of Blue Box wastes from the garbage and litter stream including:

- education of consumers;
- increasing the cost of disposal or restricting access to disposal; and
- alternate collection systems including depots, return-to-retail, public space recycling systems, reverse vending machines, etc.

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Some stakeholders pointed out that public space recycling results in highly contaminated materials. It was suggested that these materials should be directed to a MSF⁸ for sorting. It was also suggested that MSFs could be utilized to process 'recyclable rich' residues from Blue Box MRFs and end markets to sort additional Blue Box materials for recycling.

Some stakeholders pointed out that, if stewards were to assume responsibility for both diversion and disposal, an economic incentive would be incorporated into the program to direct materials to disposal, since disposal typically costs less than diversion. Other stakeholders pointed out this could be addressed through collection and recycling targets. Some municipal stakeholders suggested that all residential printed papers and packaging should be accepted in the Blue Box collection system in order to shift responsibility for all Blue Box wastes to stewards.

Rationale for Recommendations

The rationale for the recommendations is:

- to increase collection and recycling of Blue Box materials under the BBPP and reduce the amount of these materials remaining in the garbage and litter streams; and
- to further process 'recyclable rich' streams such as residues from Blue Box MRFs and end markets to sort additional materials for recycling.

Recommendation # 12

To:

- reduce the generation of printed paper and packaging waste through public education; and
- increase collection of Blue Box waste by:
 - educating the public to use collection systems (to improve capture rate) and to use these systems correctly (to reduce contamination);
 - encouraging municipalities to utilize the full range of available tools to restrict disposal (e.g. disposal bans, bag limits, clear bags, bi-weekly garbage collection, etc.) and increase the cost of disposal (e.g. garbage fees); and
 - considering other collection options (e.g. private depots, return-to-retail, etc.) taking into account the effect of parallel systems on system efficiencies and consumers.

Recommendation # 13

To increase recycling of Blue Box waste by:

- utilizing MSFs to sort marketable printed papers and packaging from residues from Blue Box MRFs and end markets and recyclable materials collected through public space recycling systems (if too contaminated to process in a regular MRF) and other sources as appropriate;
- with these materials counting towards recycling targets.

⁸ A mechanical sorting facility (MSF) is a facility that processes highly contaminated recyclable materials and/or mixed waste rather than fully source separated recyclable materials.

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6.7 Additional Blue Box Wastes

Some of the designated Blue Box wastes, such as plastic products, are not included in the BBPP.

Recommend how the BBPP can be expanded to include additional wastes already designated by regulation within the program.

Context

Stakeholders raised concerns about the ability of the Blue Box system to incorporate additional items while producing marketable materials. Some stakeholders raised concerns about confusing consumers by adding materials beyond printed papers and packaging to the Blue Box collection system.

Most stakeholders agreed that the existing infrastructure should be utilized to maximize capture of printed papers and package.

Stakeholders suggested utilizing a set of criteria to determine if additional materials already designated by the Blue Box Waste regulation but excluded from the BBPP definition of printed papers and packaging should be added to the BBPP and referring materials deemed inappropriate for the BBPP to another diversion program.

The effective operation of the Blue Box system and the production of high quality marketable materials were issues of concern raised by many stakeholders. A transparent process that involves stakeholders in selecting additional materials to be collected in the Blue Box system would provide opportunity for stewards, municipalities, service providers and end markets to contribute to establishing a sustainable collection system for printed papers and packaging.

Rationale for Recommendation

The rationale for the recommendations is:

- to establish a process to select additional materials to be added to the BBPP; and
- to refer unacceptable materials to another diversion program.

Recommendation # 14

To expand the Blue Box Program Plan to include additional wastes already designated by the Blue Box Waste regulation but excluded from the BBPP definition of printed papers and packaging by establishing a process led by Waste Diversion Ontario and including consultation with Stewardship Ontario, stewards, municipalities, service providers, end markets and environmental non-government organizations to evaluate whether specific products and/or packages should be added to the Blue Box Plan using criteria including but not limited to:

- sufficient collection capacity;
- compatibility with collection systems;
- sufficient processing capacity;
- compatibility with processing systems;

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- available end market capacity;
- clarity for the consumer;
- ability to track the material from collection to final disposition; and
- ability of the IFO to levy a steward fee that meets the nexus test.

Recommendation # 15

To refer products and packages that may fall under the Blue Box Wastes Regulation deemed unacceptable for inclusion in the Blue Box Program Plan for consideration as a separate diversion program plan.

6.8 Environmentally Responsible Management

There are concerns that some Blue Box wastes may not be managed in an environmentally responsible manner, including waste marketed in Ontario or sent offshore. Recommend mechanisms that can be added to the BBPP to assure that Blue Box wastes are managed in an environmentally responsible manner from collection to final market.

Context

Stakeholders generally agreed that actions to assure environmentally responsible management are required. However, stakeholders held different views on appropriate actions. Some stakeholders raised concerns about imposing more requirements on secondary materials than are placed on primary materials.

Most stakeholders supported tracking materials from collection to final disposition. Tracking to final disposition would be required in order to measure recycling as materials utilized in new products, as proposed by Recommendation # 3, as information from primary and downstream processors and end markets would be required to establish the actual amount of residue and the quantity of Blue Box materials utilized in new products.

Many stakeholders indicated that vendor standards may not be required as existing regulatory requirements, such as Certificates of Approvals with appropriate enforcement, may be sufficient for Blue Box materials since these materials are not hazardous and there is, for most materials, a well established commodity based management system.

Discussions around the role of stewards under full EPR suggested that, over time, stewards would want to assume full responsibility for service provider contracts, likely through competitive proposals. Requests for proposals typically include performance requirements which would have the effect of incorporating vendor standards on which to base decisions regarding selection of processing facilities and end markets.

Most stakeholders indicated that supporting Ontario processing and end markets would minimize tracking requirements, contribute to Ontario's green economy and avoid the environmental impacts of additional transportation to export markets.

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Rationale for Recommendation

The rationale for the recommendation is:

- to assure environmentally responsible management of Blue Box wastes by establishing a system that tracks materials to final disposition;
- to be consistent with the recommendation to calculate the recycling target by measuring recycling as materials utilized in new products which will require information from end markets; and
- to promote Ontario processing in order to produce market-ready materials for Ontario end markets and to strengthen Ontario's green economy.

Recommendation # 16

To assure that Blue Box wastes are managed in an environmentally responsible manner by:

- establishing a material tracking system from collection to final disposition; and
- promoting Ontario processing and end markets as part of Ontario's green economy.

6.9 Stewardship Fees

Current steward fees for certain Blue Box wastes may be too low to encourage either increased waste diversion or the use of materials in product manufacturing or packaging that can be easily recycled. Recommend how the steward fee structure can be revised to (1) increase the waste diversion rate for certain Blue Box wastes (e.g., plastics) and (2) encourage stewards to incorporate materials that are easily recycled into their products or packaging.

Context

Stakeholders proposed a number of approaches for utilizing the BBPP fee setting methodology to achieve the objectives of increasing diversion and designing products and packaging to be easily recycled. As the BBPP fee setting methodology results in steward fees that may act as price signals to design products and packaging to be easily recycled, stakeholders suggested increasing program costs in order to increase the value of the price signal on the assumption that a stronger price signal would be more likely to achieve the desired objective.

Limitations of the fee setting methodology were also discussed including:

- the requirement for reliable product-specific cost data to support cost allocation during the fee setting process;
- the 'nexus' requirement to link costs to stewards' fees;
- fees being levied on Ontario stewards while product and packaging design decisions often occur in corporate offices located outside of Ontario; and
- the fees being a 'net sum game' where a credit to one steward would become the financial responsibility of another steward.

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Rationale for Recommendations

The rationale for the recommendation is:

- to incorporate costs associated with achieving program and material specific targets, including implementation of any actions required if material specific targets are not met, non-municipal collection systems, public education, sorting of 'recyclable rich' streams in MSFs and a material tracking system in the BBPP fee setting methodology.

Recommendation # 17

To revise the Blue Box Program Plan steward fee structure to increase waste diversion:

- by moving towards differential fees to more closely reflect the cost of managing specific printed papers and packaging in the fees levied on stewards;
- by incorporating costs incurred to:
 - operate or provide incentives to non-municipal collection systems;
 - achieve program collection and diversion⁹ targets and material specific diversion targets and implement any actions required if material specific targets are not met;
 - educate the public to reduce the generation of printed paper and packaging waste, to use collection systems (to improve capture rate) and to use these systems correctly (to reduce contamination);
 - sort 'recyclable rich' streams in MSFs; and
 - implement a material tracking system.

6.10 EPR Funding

The BBPP does not reflect full Extended Producer Responsibility (EPR) funding since the WDA requires Blue Box stewards to fund 50% of municipal program costs, with municipalities funding the rest. Recommend how to move the BBPP towards full EPR funding.

Since different collection and processing systems for Blue Box wastes are the result of decisions made by local municipalities, in your review and recommendation, please consider the potential impact to the management of municipal recycling programs as industry moves to full EPR funding.

Context

The consultation process for the BBPP review identified differences in opinion among stakeholders regarding the relative benefits of the shared producer responsibility model and the full EPR model. Generally, industry stakeholders expressed support for the shared responsibility model while municipalities indicated that, in their view, the model was not an effective partnership.

⁹ Diversion targets include printed papers and packaging materials directed to composting or anaerobic digestion to produce a humus product, net of residue; and printed papers and packaging materials directed to recycling markets, net of residue (refer to Recommendation # 1).

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Some stakeholders expressed concerns regarding the accountability of industry under a full EPR program, especially with respect to achieving environmental policy objectives. Many stakeholders commented that stewards would naturally gravitate to the lowest cost approach to implementing the Blue Box Program and would not take environmental policy objectives into account without clear direction to do so. These stakeholders suggested that stewards must operate within a policy framework established by government and with appropriate oversight.

Stakeholders offered a range of suggestions for transitioning the BBPP to full EPR. All involved a period of time to address issues such as:

- communication and liaison during and after the transition period to minimize stranded assets, poor investments and contracts extending beyond the transition period;
- determining how to address historical infrastructure investments;
- determining how the Continuous Improvement Fund (CIF) can be used prior to and during the transition to assist in the transition process;
- regulatory amendments including Regulation 101, the Municipal Act and Certificate of Approval amendments for MRFs;
- communicating with municipal councils;
- ensuring seamless services to residents throughout the transition period;
- customer service and communications with residents during and after the transition period;
- managing expiry of existing contracts, both municipal labour and service providers, and replacement with new contracts;
- determining the terms of new contracts;
- cross-jurisdictional issues such as integrated collection routing and processing waste sheds;
- devising an acceptable fee-for-service payment where full EPR is implemented prior to expiry of existing municipal contracts;
- building competency within the IFO;
- managing different service levels across the province;
- marketplace intervention and competition issues;
- determining whether and/or how a municipality could opt out of full EPR;
- integrating green economic development in Ontario with full EPR;
- minimizing any 'freeze' in investments in Blue Box infrastructure due to uncertainty during the transition; and
- identifying consequences of failing to meet program targets under full EPR.

Rationale for Recommendations

The rationale for the recommendations is:

- to provide a response to the Minister's request for recommendations on how to move the BBPP towards full EPR funding;
- to ensure a provincial policy framework within which stewards can work to achieve the required objectives;
- to propose a process for transitioning the municipal delivery of Blue Box services under the shared responsibility model to steward delivery of Blue Box services under a full EPR model; and

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- to ensure that property taxpayers are aware of the transition of Blue Box system costs from municipalities to industry.

Recommendation # 18

To request that the Minister establish a clear policy framework, including program performance, accessibility and service standard objectives, for the Blue Box Program Plan under full EPR within which stewards will develop operational objectives and establish program metrics.

Recommendation # 19

To:

- require stewards and municipalities to maintain an effective dialogue and partnership during the transition from shared responsibility to full EPR including on-going commitments to maintain or improve current service levels, support infrastructure, expand programs and educate residents;
- urge stewards and municipalities to utilize resources such as the Continuous Improvement Fund and other means approved by the WDO to continuously improve the performance of printed paper and packaging collection and processing systems;
- determine, through a WDO facilitated process involving consultation, research and analysis, how to best transition to full EPR, including how and when stewards would assume full financial and physical responsibility, and how to best deliver program services under a full EPR model taking into consideration:
 - the public's interest in having reasonable access to services for collection and diversion of printed papers and packaging,
 - the interest of some municipalities to continue to collect and/or process printed papers and packaging as service providers to stewards where this approach achieves the program's environmental and financial objectives, and
 - the interest of private companies to collect and/or process printed papers and packaging as service providers to stewards where this approach achieves the program's environmental and financial objectives; and
- building on the results of WDO's facilitated process, move the delivery of Blue Box services under the Blue Box Program Plan towards full EPR funding over a five year period in the following phases:
 - Phase 1: Planning
 - The Industry Funding Organization, in consultation with affected stakeholders, will develop a detailed implementation plan that addresses the transition process for approval by Waste Diversion Ontario.
 - Phase 2: Financial EPR
 - The Industry Funding Organization will assume full financial responsibility for the Blue Box system as outlined in the implementation plan.
 - Phase 3: Physical EPR
 - The Industry Funding Organization will assume full physical responsibility for the Blue Box system as outlined in the implementation plan.

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Recommendation # 20

To urge municipalities to inform municipal property taxpayers of the transition of Blue Box system costs from municipalities to Blue Box stewards.

7.0 Other Comments

Consultation with stakeholders during the BBPP review revealed the influence of the descriptive phrase 'Blue Box' when applied to Blue Box waste, Blue Box materials, Blue Box Program Plan and Blue Box system.

The phrase 'Blue Box' is generally associated with the blue plastic container used to set out printed papers and packaging, typically at curbside, for collection. Because of this strong association, discussions about Blue Box waste, Blue Box materials, Blue Box Program Plan and Blue Box system are generally interpreted as relating to municipal curbside service for printed papers and packaging using blue plastic containers.

A number of municipalities have historically collected printed papers and packaging using containers other than blue plastic boxes, including blue plastic bags, yellow plastic barrels and red, yellow and green plastic boxes. Recently, a number of municipalities have been replacing their blue plastic boxes with larger covered carts to accommodate an increased range of acceptable materials and automated collection systems and to reduce curbside litter.

A number of the recommendations in this report propose consideration of methods of collecting printed papers and packaging in addition to curbside collection.

To accommodate the increasing variety of curbside containers used to collect printed papers and packaging and to encourage a broader view of collection of printed papers and packaging beyond boxes collected at curbside, a nomenclature change from 'Blue Box Wastes' to 'Printed Papers and Packaging' to identify the material designation and diversion program plan by the type of material being managed rather than by a particular collection method may be appropriate. This would be consistent with the designations and programs plans for Municipal Hazardous or Special Waste, Waste Electrical and Electronic Waste and Used Tires.

While many of the recommendations outlined in Section 6 are intended to increase diversion of printed papers and packaging, it is recognized that disposal of some printed papers and packaging will continue as diversion programs expand and improve. Figure 3 The Waste Value Chain in the MOE's discussion paper *Towards a Zero Waste Future* sets out four options for disposal: thermal treatment with energy recovery, landfill with energy recovery, thermal treatment without energy recovery and landfill without energy recovery. Determining the role of EPR for printed papers and packaging disposed as waste or litter would benefit from a provincial policy framework that sets out the hierarchy of preferred management methods for waste and litter.

WDO recognizes the challenges faced by diversion programs given the current waste management economics where waste diversion typically costs more than disposal. All efforts to increase diversion would benefit from supportive actions to modify the comparative waste management economics to favour diversion. Consideration should be given to supportive measures including disposal bans for materials designated under

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the WDA, service fees on materials that are sent for disposal and/or regulatory actions regarding hazardous components of products and packaging.