
Technical Memorandum 3

CSRD Solid Waste Management Plan Update – Developing a Long List of Policies

Prepared for
Columbia Shuswap Regional District (CSRD)

March 2008



Metrotower II, Suite 2100
4720 Kingsway
Burnaby, BC V5H 4N2

Contents

1.	Background.....	1
2.	Purpose	1
3.	Findings.....	2
3.1	Trends in Solid Waste Management.....	2
3.2	Solid Waste Management Strategic Framework.....	2
3.3	Preliminary Long List of Waste Management Policies for Discussion.....	4

Exhibits

Exhibit 1	Seven Milestones to Complete 3 Stages	1
Exhibit 2	Columbia Shuswap Regional District Solid Waste Strategic Framework	3
Exhibit 3	Rethinking	5
Exhibit 4	Reduce.....	10
Exhibit 5	Reuse	10
Exhibit 6	Recycling.....	10
Exhibit 7	Recovering	12
Exhibit 8	Residual Management	13
Exhibit 9	Policies from Existing Plan to be Included in Long List for Consideration in the Plan Update.....	15

Appendices

Appendix	Draft Table of Contents for Updated Solid Waste Management Plan	
----------	---	--

Abbreviations and Acronyms

CSRD	Columbia Shuswap Regional District
TM3	Technical Memorandum 3
Plan	Solid Waste Management Plan
TM	Technical Memorandum
AC	Advisory Committee
5Rs	Reduce, Reuse, Recycle, Resource Recovery, Residual Management
EPR	Extended Producer Responsibility
GIS	Geographic Information System (manages mapping data)
MSW	Municipal Solid Waste
GAP	Generally Accepted Principles (for municipal waste measurement)
GHG	Greenhouse Gas
EPIC	Environment and Plastics Industry Council
TNRD	Thompson Nicola Regional District
ICI	Institutional, Commercial, and Light Industrial
DCC	Development Cost Charge
OC	Operational Certificate
DLC	Demolition, Landclearing, and Construction
UBCM	Union of BC Municipalities
RCBC	Recycling Council of BC
WtE	Waste-to-Energy
OCC	Old Corrugated Cardboard
HDPE	High-Density Polyethylene
TSBC	Tire Stewardship BC
MoE	Ministry of Environment
RDOS	Regional District of Okanagan-Similkameen
LFG	Landfill Gas
HHW	Household Hazardous Waste
SRM	Specified Risk Material
SWMP	Solid Waste Management Plan
lb.	Pound
TBL	Triple Bottom Line

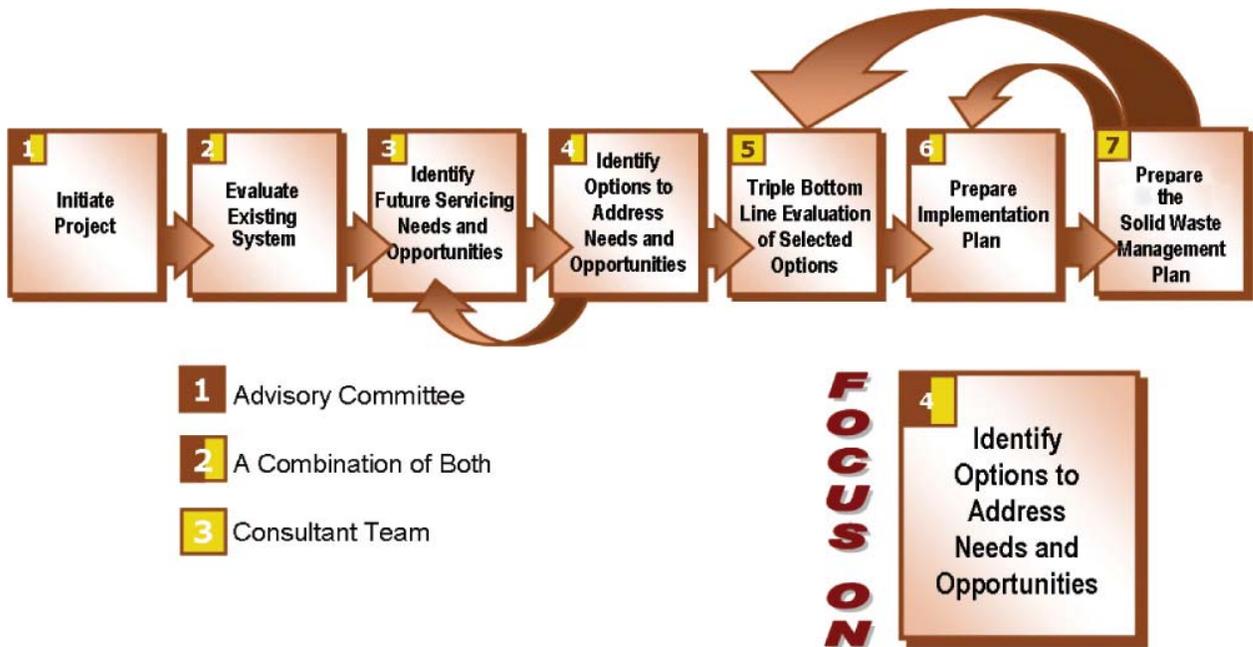
Technical Memorandum 3 (TM 3) focuses primarily on the determination of a Solid Waste Management Plan (Plan) Long List of future policies potentially feasible within the Columbia Shuswap Regional District (CSRD).

1. Background

TM 3 follows from earlier technical memoranda (TMs) that evaluated the existing CSRD solid waste management system and identified future needs and opportunities through a number of consultative initiatives. Policies (in later sections of this report) that propose to address these needs and opportunities also stem from a review of the latest trends in solid waste management (in the consultant’s opinion) suitable within the CSRD.

As specified in earlier TMs, there are seven steps to completing this three-stage process (evaluate existing system, consider future policies, develop the Plan) for reviewing the CSRD’s Plan. This process will ultimately consist of six TMs and a final updated CSRD Plan. Each of these TMs is to be reviewed by the CSRD and approved by the Advisory Committee. This TM 3 completes milestone 4 of the process (Exhibit 1).

EXHIBIT 1
Seven Milestones to Complete 3 Stages



2. Purpose

The purpose of this information is to provide an exhaustive long list of program and policy options to form a basis from which to select preferred options (Short List) through a triple bottom line analysis performed by the consultants. The short listed options would then be prioritized and presented to the public through a series of open houses.

The information presented in this TM includes:

- A summary table of input from the Advisory Committee (AC) collected at the October 23, 2007 AC meeting (attached)
- The minutes taken from the October 23, 2007 AC meeting (attached)
- A brief discussion about the latest solid waste management trends and how these were considered in developing new policies
- A discussion on the Strategic Framework used to organize the policies based on key areas of waste management and aspects needed to further describe each priority policy (Exhibit 1)
- Tables of policies (Long List) developed to address needs, opportunities, and solid waste management trends, as identified in previous consultative efforts (Exhibits 2 to 7)
- A table of policies from the existing Plan identified as needing further consideration if they are to remain within the future Plan (Exhibit 8).
- The draft Table of Contents for the final SWMP report (Appendix A).

3. Findings

The following sections provide a summary of the findings to support Milestone 4 in Exhibit 1.

3.1 Trends in Solid Waste Management

Solid waste management, like so many other technical fields, is advancing quickly with trends and innovative policies. CH2M HILL and Footprint Environmental (the subconsultant) assigned internal staff experts the task of identifying policies consistent with these latest trends and forward-thinking programs suitable for application within the CSRD and currently not included in the Plan. These policies are included in the Long List.

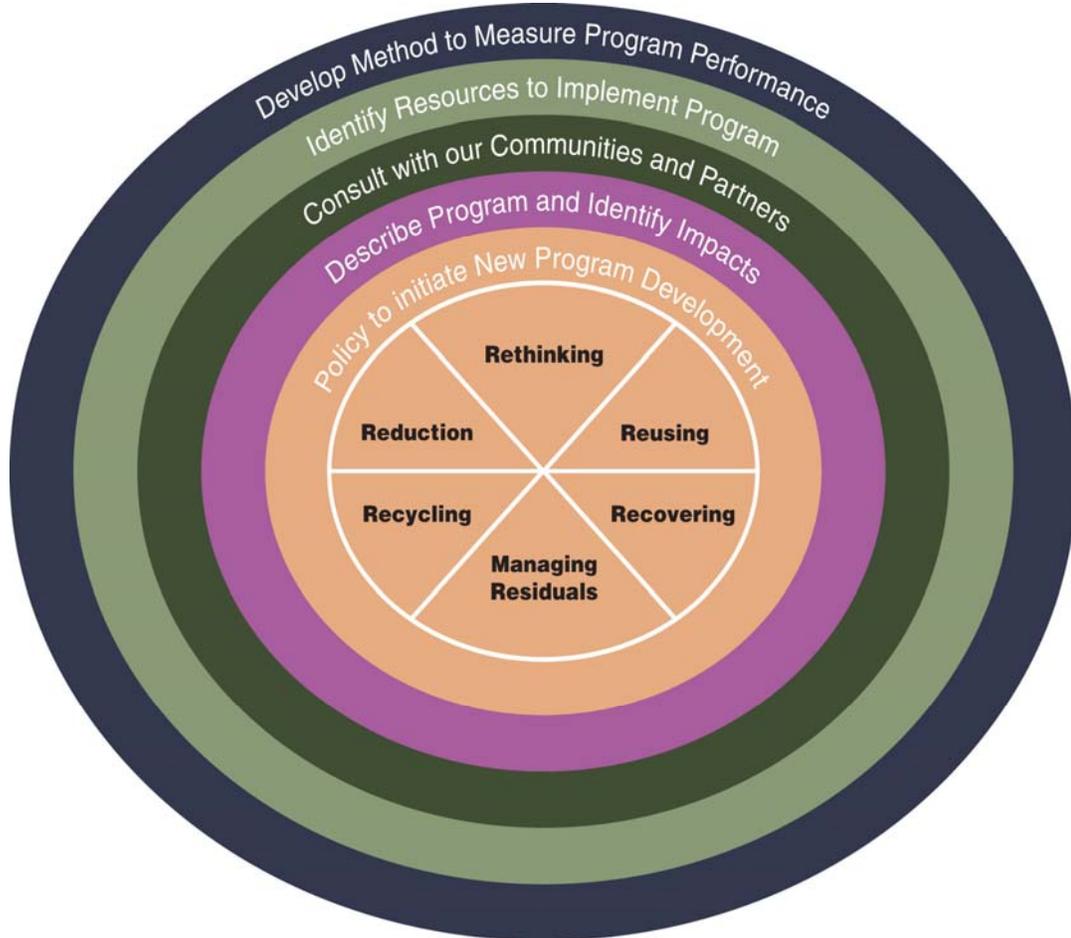
3.2 Solid Waste Management Strategic Framework

Policy development is a daunting task for the complex field of solid waste management, especially in such a large geographic area that contains many diverse communities such as the CSRD. Organizing this large and varied list of policies demands careful consideration of the primary Plan strategies to provide efficient management and successful implementation.

To this end, a strategic framework (Exhibit 2) has been developed to efficiently categorize policies according to the core strategies (salmon colour) which is consistent with the Provincial 5 R waste management hierarchy (reduce, reuse, recycle, resource recovery, residual management) for managing solid wastes. The outer rings identify needs to be determined for short-listed policies which will be implemented within 5 years to improve the overall understanding of the policy scope during implementation. As the policy list is shortened and more specifically defined it will be further organized into one of four waste

sheds (Golden, Revelstoke, Sicamous, and Salmon Arm). Appendix “A” includes a Table of Contents which will be used in the final SWMP report.

EXHIBIT 2
Columbia Shuswap Regional District Solid Waste Strategic Framework



These core strategies form the basis of the framework and are described as follows:

1. **Rethinking** the way we manage and view our solid wastes (including decision-making tools, administration, management, etc.)
2. **Reducing** the amount of materials we consume (e.g., purchasing products with less packaging)
3. **Reusing** items that still have functional value to delay the replacement of the product or substitution for another product (e.g., garage-sale items)
4. **Recycling** the materials contained within a product to manufacture new products to reduce the need for extracting further natural resources (e.g., recycled-content paper and compost)

5. **Recovering** energy by heating materials contained within products (in an oxygen-controlled environment) to produce electricity, heat, or fuel to conserve existing energy supplies (e.g., gasification)
6. **Residual Management** to manage wasted materials in a way that reduces environmental impacts where there are no feasible higher uses (e.g., gas collection at landfills)

To achieve these core strategies, policies and associated programs must be designed and implemented in the following way:

- **Define the Program and its Primary Potential Impacts** to enunciate the program goal, while identifying social, environmental, and economic impacts
- **Consult with our Communities and Partners** through public and stakeholder consultation.
- **Identify the Resources Needed to Implement the Program** to fully understand program costs, and partnerships during the decision-making process
- **Identify Criteria to Measure the Program’s Performance** to ensure the program is effective and achieving the intended goals

Following confirmation of the Short List to be completed in TM 4, selected general policies will be further defined according to the relevant waste shed (see draft Table of Contents in Appendix A). This approach will be used in the Plan to provide individualized programs (where necessary) for each waste shed, reflecting the specific needs of each community and their surrounding areas within the CSRD. As a result, not only will the reader gain a regional sense to managing solid waste in the CSRD, but the reader will also have a closer sense of efforts made directly within their own community. Regional thinking is important to ensure that a consistent, efficient approach to solid waste management is maintained; however, the CSRD acknowledges that policies will need to be adjusted and “fine tuned,” as needed to suit the specific circumstances of each unique community and/or area.

3.3 Preliminary Long List of Waste Management Policies for Discussion

The preliminary Long List of programs has been generated as a result of the following actions:

- Consideration of the evaluator comments in TM 1
- Detailed input from the Extended Producer Responsibility (EPR) Stewards
- Input gained from agencies not attending AC Meetings
- October 23, 2007 interview with Art Anthony, AC member representing Neskonlith First Nations Band
- Some additional targeted literature review
- Further AC input facilitated at the October 23, 2007 AC Meeting in Revelstoke
- Input received from CSRD staff

Also, the purpose of this Long List is to complement the current regional Plan by adding to or amending the many relevant existing policies (as identified in TM 1). Some comments and suggestions received are already addressed within the existing Plan.

Following approval of TM 3, the next step in the process is for the AC to confirm criteria to be used by the Consultant to develop a short list of options which, once accepted by the AC, would further be explored through a triple bottom line analysis. The Short Listed options and the TBL would be forwarded to the public for review.

The following exhibits represent the Long List of Options for consideration:

EXHIBIT 3 Rethinking	
Policy Number	Policy
All Solid Waste Streams	
1.1	The CSRD will adopt a Zero Waste policy with associated waste reduction targets.
1.2	The Solid Waste Management Plan will be viewed as a “Plan of Partnerships” where all initiatives are done in partnership with the various groups and agencies we work with, both locally, and outside the CSRD.
1.3	The CSRD will adopt a principle that the CSRD Plan is a document that is “living and learning”, forever adjusting and evolving to the needs of the CSRD and its partners.
1.4	The CSRD refuse disposal sites will be referred to as “resource recovery centers and containment facilities”.
1.5	The CSRD will perform a carbon footprint assessment on all existing CSRD SWM programs as a benchmark to assess new program delivery.
1.6	The CSRD will explore offset methods to achieve a carbon neutral waste management system.
1.7	The CSRD will emphasize and encourage the 5R hierarchy, and continually strive towards a higher “R” in waste management practice.
1.8	The CSRD will incorporate the following discretionary elements into a decision-making process: triple bottom line approach, life cycle analysis, and full cost accounting techniques. Solid waste decisions will also consider the emissions to the land, water and air while identifying the greenhouse gases (GHGs) produced amongst alternative waste management options.
1.9	A “Plan Monitoring Advisory Committee” with representation by a variety of stakeholders will monitor the progress of plan implementation and meet on a regular basis.
1.10	The CSRD SWMP will be reviewed by a stakeholder driven advisory committee in its entirety every 5 years.
1.11	Employees of the CSRD must lead by example and not promote programs to reduce solid waste that the CSRD as an organization is not willing to adopt or practice.
1.12	The CSRD will utilize the “Integrated Value Modeling” techniques (attaching a numerical weighting of importance to values important to the CSRD) to make solid waste management decisions (e.g., the importance of odour control or the convenience of a program).
1.13	To standardize the measurement of Municipal Solid Waste (MSW), the CSRD will adopt the General Accepted Principles (GAP) for future waste composition studies. The CSRD will partner with stewards on methodology and costs associated with categorization of EPR related products.

EXHIBIT 3 Rethinking	
Policy Number	Policy
1.14	The CSRD will develop GIS database of the entire solid waste system.
1.15	Surveys of service users will be conducted, and suggestion boxes will be provided at convenient locations throughout the CSRD to collect ideas about how to improve existing services.
1.16	The CSRD will work with adjacent Regional Districts on sharing information regarding cross boundary waste migration due to differing revenue collection.
1.17	The CSRD will consider mutual agreements with neighboring Regional Districts to allow waste importation to bordering refuse disposal sites.
1.18	The hours of operation will be reviewed at all CSRD landfills and transfer stations. The CSRD will ensure the hours of operation at all landfills and transfer stations meet the needs of the general user and will consider increasing or altering hours if necessary.
1.19	In addition to consulting external agencies, the CSRD will form an interdepartmental working group to maximize opportunities and share relevant information on environmental initiatives.
1.20	The CSRD will develop a policy to be incorporated within the building inspection process so that the construction of all facilities throughout the CSRD has a high level of emphasis on waste material diversion and proper disposal.
1.21	The CSRD will develop a differential tipping fee for source separated metal waste, wood waste, yard and garden waste and other recyclable or reusable products. The CSRD will apply monetary incentive fees on metal, woodwaste and other recyclable and reusable material (concrete, shingles, and asphalt) and disincentive fees on co-mingled and banned substances. Tipping fees will be harmonized across the CSRD. (e.g. NORD and CORD tipping fee schedules)
1.22	The CSRD will develop a ticketing bylaw to assess fines for solid waste management disposal bylaw infractions.
1.23	The CSRD will conduct a literature review of outreach programs developed, and consider their potential for use in the CSRD (e.g., David Suzuki's Nature Challenge).
1.24	The CSRD will develop a process to work with municipalities, and, in harmony, implement solid waste policies into both the CSRD and member municipality regulatory frameworks. The CSRD will work with member municipalities to ensure the two-way flow of solid waste information between the CSRD and its member municipalities occurs to ensure consistency between promotional efforts and local bylaws, reduce effort duplication, maximize cooperation, and provide a common message to all residents.
1.25	The CSRD will develop a specific policy to address biomedical and pharmaceutical wastes that complement EPR programs.
1.26	The CSRD will consider utilizing the Integrated Waste Management Model prepared by Environment and Plastics Industry Council (EPIC) to evaluate larger-scale waste management alternatives.
1.27	The CSRD will ensure the Bear Aware/Bear Smart programs are considered with any initiatives involving new solid waste management programs.
1.28	When designing programs, the CSRD will ensure there are clear targets and methods to measure performance for the purpose of monitoring progress.
1.29	The CSRD will develop a comprehensive Illegal Dumping Strategy and Toolkit that includes facilitation, education, and legislation to complement an Illegal Dumping Policy (include current policy for having strong anti-litter laws).

EXHIBIT 3 Rethinking	
Policy Number	Policy
1.30	The CSRD will post No Dumping and/or Area Under Surveillance signs at common illegal dump sites.
1.31	The CSRD will inform local media of community clean-up events and successful prosecutions against illegal dumpers.
1.32	The CSRD will create radio, newspaper, and/or billboard advertisements that discourage illegal dumping, burying, or burning. In addition, the CSRD will encourage our member municipalities to run an illegal dumping and burning awareness campaign on their own local cable TV channels (if applicable).
1.33	The CSRD will implement a facility licensing bylaw (waste stream management bylaw) and administrative structure complete with enforcement resources to enforce standards solid waste facilities (such as for the storage of recyclables). This study could also <u>consider</u> hauler licensing, as well as how to prevent the improper disposal of MSW.
1.34	An extensive review of CSRD departmental initiatives will be carried out to identify windows of opportunity to incorporate a solid waste policy. (A table could be developed that would identify the CSRD initiative (e.g., development permit application, amendment to a bylaw, etc.), the trigger for an action, and the policy/action to be taken to address solid waste. This table could be provided to CSRD departmental staff to remind them of such opportunities. A similar effort could be made for each member municipality).
1.35	Major industrial partners exist in the Town of Golden – CP Rail and Louisiana-Pacific – and should be consulted when designing and implementing programs in the Golden area.
1.36	Recommended public education media and venues include: <ul style="list-style-type: none"> ✓ Shopping mall/trade show displays ✓ Open houses and public meetings ✓ Schools (assemblies, school newsletters, guest speakers) and public forums ✓ Booth at the recycling fair to educate about how to reduce products going to the landfill ✓ Exciting web page with electronic newsletters ✓ Local newspapers ✓ Libraries ✓ Senior citizen centres ✓ Other sites identified by the AC and summarized in TM 2 ✓ Hospitals and Health facilities ✓ Curriculum development for solid waste reduction ✓ Increased awareness for teachers on prof. development days. ✓ Environmental mind grind
1.37	The CSRD will launch an education and promotion campaign to discourage the burning of MSW in backyards and fireplaces. References can include U.S. Environmental Protection Agency website www.epa.gov/msw/backyard .
1.38	CSRD staff will be familiar with Social Marketing techniques used to encourage the public to align their behaviour with Plan goals and requirements.

EXHIBIT 3 Rethinking	
Policy Number	Policy
1.39	Despite having a number of solid waste servicing arrangements with First Nations, the CSRD will continue to work cooperatively in this regard with First Nations for mutual benefit, recognizing that First Nations lands are outside the jurisdiction of the Plan.
1.40	Public education campaigns will include: <ul style="list-style-type: none"> ✓ A focus on how reducing and diverting our solid wastes reduces GHGs and preserves our natural resources ✓ The fact that our current way of living is not sustainable ✓ The idea that corporations should institute policies that promote reducing consumption (e.g. reduced packaging while maintaining product integrity) ✓ A message to discourage the use of one-time use products (e.g. coffee cups) and encourage suppliers to provide alternatives. ✓ Public educational programs should also include teachers and students at the public school systems and colleges
1.41	The CSRD will conduct reviews of new, innovative technologies and equipment to determine if they are suitable for application within the CSRD (e.g. multi-use garbage cans in Nova Scotia).
1.42	When applicable, the CSRD will consider the harmonizing of User Pay curbside collection programs with adjacent regional districts to provide consistent services and to streamline approaches and to improve efficiencies in service delivery and communication (all regional districts interested, except East and Central Kootenay).
1.43	The CSRD will work with the Neskonlith Band and the Thompson Nicola Regional District (TNRD) to explore the provision of convenient waste management services to the Band and local regional district residents.
1.44	The CSRD will explore ways that First Nations in general can be included as a full partner within the Solid Waste Management Plan through agreement to the overall Plan Vision, Mission, and Guiding Principles.
1.45	The CSRD Review all infrastructure and equipment life to develop long-term reserves to provide initial capital for the upgrade to new facilities.
Residential Waste Only	
1.46	Although all member municipalities are encouraging the densification of development, the District of Sicamous has identified a policy to develop affordable housing and is encouraging new multi-family housing development projects. A program to result in the inclusion of sufficient resource recovery space and infrastructure in development plans should be an important consideration in Sicamous.
1.47	The CSRD will ensure new and existing services reflect the changing demographics within the region with an increase in part-time residents and an increasing ratio of senior citizens to youth.
1.48	For curbside collection service contracts, the CSRD will ensure a policy is in place to require the option of the contractor to provide co-collection services to maximize truck loads.
Institutional, Commercial, and Light Industrial (ICI)	
1.49	The CSRD will look into providing the option for account holders to download handouts with receipts and billing information on solid waste tipping fees and other fees directly from the CSRD website.
1.50	The CSRD will initiate a business award system to recognize businesses that champion the principles of sustainability with efforts to reduce their solid waste.

EXHIBIT 3 Rethinking	
Policy Number	Policy
1.51	The CSRD will prepare business-specific self-audit kits for small entrepreneurs (see Metro Vancouver and California, U.S., for examples).
1.52	The CSRD will consider the feasibility of establishing an Enterprise Fund or Diversion Credits to assist solid waste diversion companies who cannot meet the needs of financial institutions due, in part, to feedstocks that have no guarantees and for other reasons.
1.53	The CSRD will provide educational material and assistance to agricultural sector members, such as commercial farms and orchards.
1.54	The CSRD will consider partnerships with other sectors producing complementary feedstocks to make resource recovery initiatives more viable. Other sectors can include agriculture and industry despite the exclusion of these two sectors from the legal definition of municipal solid waste and thus the jurisdiction of the Plan.
1.55	The “World Class Revelstoke Mountain Resort” in Revelstoke is currently under development and will have similar solid waste needs and challenges as other ski resort communities. The CSRD will conduct a literature review, and interview staff of other resort communities to determine how best to provide solid waste services for this community that reflects the tenets of the Plan.
1.56	The CSRD will incorporate current Plan ICI waste policies into a comprehensive ICI Waste Reduction Strategy and Toolkit that includes facilitation, education, and legislation programs.
Demolition, Landclearing, and Construction (DLC)	
1.57	The CSRD will develop a comprehensive DLC Waste Reduction Strategy and Toolkit that includes facilitation, education, and legislation programs.
1.58	The CSRD will work with municipal representatives and their respective Building Departments to identify a method to encourage the proper management of DLC (e.g., proof of proper disposal prior to the issuance of an Occupancy Permit).
EPR	
1.59	When encouraging senior government to adopt new stewardship programs or to comment on existing ones, the CSRD will promote the need to provide direct market incentives for industry to design for the environment (i.e. product can be recycled into nature or the marketplace safely).
1.60	The CSRD will assist industry stewards where reasonable to rezone property suitable for EPR depots.
1.61	<p>An EPR perspective will be provided throughout the Plan, per the following items:</p> <ul style="list-style-type: none"> ✓ The CSRD will participate on the BC Product Stewardship Council (BCPSC), Union of BC Municipalities (UBCM), Recycling Council of BC (RCBC), or equivalent to lobby for more and expanded EPR programs. ✓ The CSRD will initiate an annual stewardship program evaluation in advance of Stewardship Plan reviews to systematically approach stewards to provide sufficient convenient service through the CSRD. ✓ The CSRD will consider the “Cooperative EPR Transition Strategy and Evaluation Strategy” developed by Footprint Environmental for the Regional District of Kitimat-Stikine and the BC Stewardship Council into the Plan and annual reviews (currently under review; adoption anticipated by Fall 2008). ✓ The CSRD will require, wherever feasible, detailed information on MSW materials recovered by stewards to determine where services are needed to divert materials received as refuse. ✓ The CSRD will assist stewards with the implementation of initiatives wherever reasonable; however, all out-of-pocket costs must be borne by the steward involved by the end of a reasonable transition period.

EXHIBIT 4 Reduce	
Policy Number	Policy
Residential Waste Only	
2.1	The CSRD will develop a Master Composter and Natural Yardcare program.
2.2	The CSRD will develop an educational program for backyard composting through workshops or Master Composter program.
2.3	The CSRD will develop an information resource to educate residents on the how-to's of grasscycling and natural landscaping (see North Vancouver website).
ICI	
2.4	CSRD will partner with municipal planners to encourage identification of eco-industrial parks in OCP's to not only encourage economic development, but to provide space for additional, nearby companies that manage solid waste.
2.5	The CSRD's Plan Vermiculture policy will be updated to include businesses and institutions.

EXHIBIT 5 Reuse	
Policy Number	Policy
Residential Waste Only	
3.1	The CSRD will consider the feasibility of having curbside waste exchanges within communities.
3.2	The CSRD will provide areas within select transfer stations and landfills for a waste exchange area, following a review of potential risks.
ICI	
3.3	The CSRD will promote and link up with the RCBC Industrial Materials Exchange to encourage reuse amongst industry.

EXHIBIT 6 Recycling	
Policy Number	Policy
All Solid Waste Streams	
4.1	The CSRD will partner with stakeholders (adjacent RD's, member municipalities, private sector, community groups) (waste shed specific) to provide yard and garden composting services throughout the Regional District.
4.2	The CSRD will expand on current wood chipping policy and services, including the provision of this service in the more remote rural areas, with the chips being used in the most beneficial manner.

EXHIBIT 6 Recycling	
Policy Number	Policy
4.3	The CSRD will develop a procurement policy, and develop a Procurement Guide similar to the City of Richmond's to encourage and require the purchasing of products and services that have a reduced negative environmental impact. Educate staff in the use of this Guide. See also Metro Vancouver's Sustainable Purchasing guide.
4.4	The CSRD will institute a ban on CSRD and private sector accepted recyclable material (waste shed specific)
4.5	The CSRD will provide marshalling areas at refuse disposal sites for auto and household batteries, fluorescent tubes, and other recyclable items not listed in the BC Recycling Regulation.
4.6	The CSRD will create composting operational standards with the goal of incorporating best management practices to reduce fugitive odours at facilities.
4.7	The CSRD will provide additional signage and recycling bins in and around areas frequented by tourists in Revelstoke and in CSRD Regional Parks to encourage higher diversion rates from this group.
Residential Waste Only	
4.8	The CSRD will expand the commodities collected at residential recycle depot facilities to include OCC, and mixed plastics.
4.9	The CSRD will develop a policy to subsidize backyard composters annually or on an as needed basis to the residents of the CSRD.
4.10	The CSRD will develop a Master Recycler program.
4.11	The CSRD will review the management of car hulks at landfill facilities to ensure a consistent approach while minimizing regulatory concerns, such as the discharge of regulated chemicals. Alternatively, ban car hulks if a local automobile recycler is available.
4.12	The CSRD will provide a publication that provides residents a clear understanding of how their recycling efforts have improved the environment.
4.13	The CSRD will provide curbside recycling collection of mixed waste paper, mixed plastics, newspaper, and OCC within municipalities of Golden, Revelstoke, Sicamous, and Salmon Arm.
4.14	The CSRD will provide curb side collection of recyclables to high density areas within electoral areas.
4.15	Where gaps in delivery of provincial stewardship programs exist, the CSRD will work with agencies such as Tire Stewardship BC (TSBC), Product Care, BC Used Oil Management Association (BCUOMA) and others to provide marshalling areas at select refuse disposal sites and transfer stations) to collect EPR related items (such as tires), with all costs being borne by the stewards.
4.16	The CSRD will work with member municipalities to set standards for multi-family dwellings to provide sufficient space for recycling.
4.17	The CSRD will utilize a Special Event Recycling Promotional trailer to encourage recycling at special events. The trailer will be available to organizations where needed.
ICI	
4.18	The CSRD will provide monetary incentives to divert or separate recyclable materials, such as construction materials.

EXHIBIT 6 Recycling	
Policy Number	Policy
4.19	The CSRD will consider slaughterhouse byproduct solutions through composting within the overall regional composting strategy.
4.20	The CSRD will work with Ministry of Environment (MoE) and Agriculture to implement an agricultural program to educate and encourage farmers to recycle (see RDOS pilot program and template)
DLC	
4.21	The CSRD will develop and distribute DLC recycling education material to support private DLC reuse and recycling efforts.
4.22	The CSRD will include programs to capture organics generated in the agricultural and wood processing industry to generate large enough feedstocks to make central composting or WtE more viable.
4.23	The CSRD will design Disaster Debris Management Plans to address solid waste response during priority disasters (as defined by Emergency Services, such as interface fires).
EPR	
4.24	The CSRD will partner with stewardship agencies tasked with providing opportunities for collection of materials within the Provincial Recycling Regulation to encourage the development of collection facilities within the private sector.
4.25	Where collection facilities for EPR related items are not available or sufficient, the CSRD will provide depot space at select landfills and/or transfer stations to accommodate this material on a short term basis provided all costs are borne by the steward.
4.26	The CSRD will ban items specified within the Recycling Regulation from the CSRD recyclable collection system provided there is sufficient opportunities to dispose of the listed material.
4.27	The CSRD will work with industry stewards to site eco-depots that allow the one-stop drop of as many EPR and recyclable commodities as possible.
4.28	The CSRD will place de-rimming and washing facilities where tires are collected.
4.29	The CSRD will ensure tire collection services are provided by Tire Stewardship BC at their Recycle Fairs.
4.30	The CSRD will work with Product Care to provide a Paint+ drop-off depot at the Golden Landfill.
4.31	The CSRD will work with Electronics Stewardship BC to provide an electronics drop-off depot at the appropriate CSRD facilities.

EXHIBIT 7 Recovering	
All Solid Waste Streams	
Policy Number	Policy
5.1	The CSRD will conduct literature review, and contact municipalities where WtE facilities exist to determine feasibility of such facilities in the CSRD (e.g., Genesis Gasification Systems, Ensyn Technologies, Heuristic Envirocycler, Olivine, etc.).

EXHIBIT 7 Recovering	
All Solid Waste Streams	
Policy Number	Policy
5.2	The CSRD will consult with the City of Revelstoke and Tolko in Armstrong Energy Plant as to determine the feasibility of using their Energy Plants to recover energy from wood waste and mixed paper waste.
5.3	The CSRD will look at the feasibility of collecting biomass in the Golden area to fuel a heat generation system that could aid local businesses (e.g., Louisiana-Pacific facilities).
5.4	The CSRD will consider increasing wood waste quantities from residential and commercial lots that result from Pine Beetle infestation, and design programs to address this problem, particularly WtE.

EXHIBIT 8 Residual Management	
Policy Number	Policy
All Solid Waste Streams	
6.1	The CSRD will maximize capacity at landfill sites through horizontal and vertical expansions to existing facilities only and adopt a policy to not develop any new landfills in the CSRD if the future option for the long-haul transport of waste to large interregional facilities is available.
6.2	The CSRD will look at the potential of purchasing the land directly north of the current Revelstoke landfill for purposes of buffer and storage lagoons.
6.3	The CSRD will review landfill gas (LFG) capture systems at all landfills to determine the feasibility of constructing such facilities to reduce fugitive methane.
6.4	Where feasible, the CSRD will mitigate GHG emissions at all regional landfills, and identify the resulting carbon credits.
6.5	The CSRD will provide a regulatory framework to deal with inappropriate waste dumping within transfer stations and depots
6.6	The CSRD will adopt a bylaw to ensure loads entering CSRD refuse disposal facilities are properly secured in order to prevent littering, and increase the safety of the workers and public at the sites.
6.7	The CSRD will increase the tipping fee rate for bulky, hard to handle wastes to ensure compensation suitable to cover disposal costs.(e.g., over 8' in length or occupying a volume of more than 1.5 m ³)
Residential Waste Only	
6.8	The CSRD will conduct annual HHW round ups in conjunction with recycling fairs in Salmon Arm, Revelstoke and Golden.
6.9	The CSRD will determine the costs and benefits of having permanent HHW drop off facilities at each refuse disposal site..
6.10	The CSRD will encourage all member municipalities provide collection services for residential curbside garbage pickup
6.11	The CSRD will determine costs and benefits to a curbside collection system provided by the CSRD within higher density areas of electoral areas.

EXHIBIT 8 Residual Management	
Policy Number	Policy
6.12	The CSRD will compare the effectiveness and costs of annual HHW roundup events in member municipalities to providing a permanent drop-off facility at each refuse disposal site.
ICI	
6.13	The CSRD will a conduct feasibility study to determine the viability of having de-listed biomedical waste disposed of in CSRD landfills.
6.14	The CSRD will review the appropriate legislation and requirements for a landfill to accept specified risk materials (SRMs) to determine the handling/landfilling requirement, if feasible.
DLC	
6.15	The CSRD will review existing bylaws and the Building Code to see where solid waste management diversion and disposal controls can be implemented to require the proper disposal or diversion of DLC wastes.
6.16	The private DLC site located in Salmon Arm may close shortly and result in a substantial increase in this type of waste received at CSRD facilities. To address the immediate concern of this issue, the CSRD will develop a short-term strategy for the management of this material ahead of the proposed DLC Waste Reduction Strategy specified in Exhibit 2.
6.17	The CSRD will identify areas of high growth within the CSRD, and provide expanded services for new construction wastes.

The following policies were identified in TM 1 when the existing SWMP was evaluated through a TBL process by the consultants. TM 1, dated November 16, 2007, was accepted and approved by the AC on October 23, 2007. Policies that received a high rating and were considered valid in 2008 have been listed in Exhibit 9 for further consideration to determine the Short List. Some minor amendments to a select few policies have been made to ensure the intent of the policy has been maintained while outdated elements were made current. Although the policies were not segregated according to MSW type as in the above exhibits, they have been divided according the 6 R elements used in Exhibits 3 through 8. The policy numbering continues from the Long List of new policies for identification purposes. Some policies overlap between the new and existing select policies and thus, during the Short Listing process, these redundancies will be removed with the development of policies that consolidate these commonalities.

EXHIBIT 9 Policies from Existing Plan to be Included in Long List for Consideration in the Plan Update	
Policy Number	Policy
Rethinking	
7.1	Provision will be made for SWMP review every second year after 1995. It is intended that any reporting requirements established by the MOE will be followed.
7.2	The maximum tipping fee rates established by the CSRD in Bylaw No. 1272 is currently under review and shall be changed to more closely reflect true costs of disposal of these items.
7.3	Provide opportunities by all segments in society to participate in reduction and recycling programs.
7.4	To encourage participation by all segments of society in reduction and recycling activities.
7.5	To improve existing facilities. To establish environmentally and fiscally responsible ways of disposing of solid wastes that can't be Reduced, Reused, Recycled, or Recovered.
Reduce	
7.6	The CSRD shall continue to urge provincial and federal governments to encourage manufacturers to assume life-cycle responsibility for their products and packaging.
7.7	The CSRD shall establish and continue a public education and waste reduction promotion campaign, utilizing local media, pamphlets, landfill newsletters, the Welcome Wagon Program, and the local cable companies.
7.8	The CSRD shall encourage, through financial grants and contributions, the educational, informational work of local Environmental and Recycling Societies in waste reduction.
7.9	The CSRD shall assist in distribution of waste reduction educational materials through local school districts.
7.10	The CSRD shall encourage waste reduction initiatives throughout the school system, such as worm composting and ongoing contests.
7.11	The CSRD shall continue to encourage backyard composting of kitchen and yard wastes and assess the demand for further subsidized sales of commercial composters.
7.12	The CSRD shall move to ban from all refuse disposal sites and transfer stations those items which are being handled through provincial EPR programs, such as, but not restricted to: scrap tires, used oil, and lead acid batteries.
7.13	The CSRD, in conjunction with the implementation of more stringent waste reduction measures aimed at the ICI sector, shall make available to ICI establishments waste audit information and technical assistance in performing waste audits.
7.14	The CSRD shall continue to explore and encourage private sector opportunities in solid waste management.
7.15	The CSRD shall, wherever practical, cooperate with neighbouring regional districts in implementing waste reduction initiatives.

EXHIBIT 9 Policies from Existing Plan to be Included in Long List for Consideration in the Plan Update	
Policy Number	Policy
Reuse	
7.16	The CSRD shall support the standardization of all beverage and food containers.
7.17	The CSRD shall continue, through refuse site operations agreements or specific salvage agreements, to encourage the controlled salvage of reusable/recyclable materials by the operator for subsequent use or sale off of the premises.
Recycle	
7.18	Household Hazardous Wastes – The CSRD will include, along with the recycling and reduction promotional materials, a list of existing facilities where household hazardous wastes may be dropped off. Citizens will be encouraged to take advantage of the facilities available.
7.19	Waste Oils – A waste oil collection program is in place within the Province and is available in most parts of the Province. This program is expanding with the development of more waste oil drop-off depots. The CSRD supports the oil collection program and will specifically ensure that waste oils are not accepted at any of its disposal or transfer facilities. The location of oil drop-off centres will be provided along with the recycling promotional material.
7.20	Automobile Batteries – Collection facilities will be provided at landfills where batteries may be dropped off. With the Provincial Government program encouraging vendors to accept used batteries on a one-for-one basis when a new battery is purchased, acceptance of batteries may be terminated.
7.21	ODS Containing Appliances – Appliances containing ozone-depleting substances (ODS) will be stored in a separate area from 1997 09 24 other white goods and will be purged of ODS by a certified technician prior to recycling of the appliances by salvage contractors.
7.22	The CSRD shall establish and maintain a recycling service, mandated by the public, where there exists reasonable potential for significant waste stream diversion and where the private sector cannot offer the service.
7.23	The CSRD shall provide voluntary recycling drop-off depots at each CSRD refuse disposal facility and transfer station, as well as at locations within each Regional District member municipality.
7.24	The CSRD shall continue to promote, through pamphlets, the media, and other educational tools, the redirection of ICI and residential wastes to whatever recycling, reuse, or recovery programs that are in existence.
7.25	The CSRD shall continue to monitor existing and future recycling collection and processing systems to maximize capture and diversion from rural waste streams.
7.26	The CSRD shall, wherever possible, assist in the development of recycling initiatives by societies and non-profit organizations through assistance in provincial grant applications.
7.27	The CSRD shall endeavour to set a positive example to the public by actively participating in office recycling programs.
7.28	The CSRD shall develop an in-house procurement policy for paper products utilized in day-to-day operations in all departments requiring a minimum post-consumer recycled content.
7.29	The CSRD shall investigate cooperative measures in recycling with neighbouring regional districts such as, but not limited to, program development and marketing strategies.

EXHIBIT 9 Policies from Existing Plan to be Included in Long List for Consideration in the Plan Update	
Policy Number	Policy
7.30	The CSRD shall consider the best demonstrated composting technology, as it pertains to the needs of the CSRD, to help achieve projected waste reduction goals.
7.31	The CSRD shall encourage BC Parks to establish recycling services throughout the local provincial parks in accordance with the CSRD program.
Resource Recovery	
Residual Management	
7.32	The CSRD shall require that all landfill operators be trained in proper landfill procedures.
7.33	The CSRD shall schedule the implementation of a user-pay strategy for any and/or all refuse deposited in its refuse transfer and disposal sites.
7.34	The CSRD may, in cooperation with municipalities, impose bag limits on curbside refuse collection.
7.35	An economic analysis will be carried out to determine the most appropriate means of providing the best possible landfill compaction equipment at each of the landfill sites.
7.36	Discussions will be held with other regional districts to determine the possibility of one or more regional districts utilizing a mobile chipping service.
7.37	In the event that an inordinate amount of metal or rock contamination is present in a wood waste pile, making the pile impractical to grind or chip, or if a small burn can meet BC Environment criteria, permission may be sought from BC Environment on a site and situation specific basis to open burn a wood waste pile.
7.38	Bulky Items – As with automobile hulks, the onus will be on the owner of other bulky materials, which cannot fit into transfer containers, to transport such items to the nearest regional landfill. The CSRD will install open topped containers for bulky items at transfer stations if such containers become necessary. Non-recyclable bulky materials will be crushed and buried along with regular refuse.
7.39	All other refuse disposal sites within the CSRD shall be closed and refuse hauled to the nearest regional landfill in 40 or 50 cubic yard roll-off containers. These containers shall be available for public use at CSRD Refuse Transfer Stations.
7.40	With the exception of Seymour Arm, sites will be conventional roll-off type transfer stations. In regard to Seymour Arm, remoteness of the site, low contributing population, and use of the ferry service will require detailed examination before selection of the refuse container system to be used.
7.41	A Capital Contingency and Closure Reserve shall be established and added to annually to address the eventuality of closure costs at CSRD landfills.
7.42	An allocation of \$75,000 per annum at the rate of return (5%) should accrue (\$1,716,145) in 15 years.
7.43	The CSRD shall be changing the context of its next landfill maintenance contracts to gain control over the collection of tipping fees.
7.44	Negotiations shall occur between the CSRD and other jurisdictions operating and/or depositing refuse in CSRD-owned refuse disposal/transfer stations to determine the extent of financial contribution assumed by each party.

EXHIBIT 9 Policies from Existing Plan to be Included in Long List for Consideration in the Plan Update	
Policy Number	Policy
7.45	The CSR D will initiate bans on certain materials, such as those collected by provincial EPR programs wherever practical.
7.46	The effectiveness of the SWMP will, therefore, be monitored through a combination of volumetric and scaled measurements.
7.47	The CSR D shall investigate targeting difficult to dispose of items, bulky items, and readily recyclable items from the ICI waste stream for specific increased tipping fees and/or complete bans from refuse disposal facilities.
7.48	The CSR D shall investigate and establish conditions of acceptance of wood wastes (i.e., land clearing debris, demolition debris) at refuse disposal sites. Options may include accepting chipped wood wastes only and/or specific tipping fees reflective of processing costs.
7.49	The concept of a DLC site adjacent to a transfer station shall be considered. These sites shall provide convenience to residents for disposal of materials not allowed in refuse transfer containers.

APPENDIX

**DRAFT TABLE OF CONTENTS FOR
UPDATED SOLID WASTE MANAGEMENT PLAN**

Draft Table of Contents for Updated Solid Waste Management Plan

Executive Summary

1. Introduction

- 1.1. Our Community of Communities
- 1.2. Our Neighbours
- 1.3. The Basis for Reducing Our Solid Waste
- 1.4. Shifting the Responsibility for Waste and Recyclables to Industry
- 1.5. Plan Organization
- 1.6. Plan Preparation
- 1.7. Public and Stakeholder Participation

2. Solid Waste in the CSR D

- 2.1. Wastesheds
- 2.2. The Solid Wastes We Generate
- 2.3. Waste Composition
- 2.4. Landfill Capacity
- 2.5. Diversion
- 2.6. Extended Producer Responsibility Programs

3. CSR D Plan Management, Administration, and Regulation

- 3.1. Responsibility
- 3.2. Decision-Making
- 3.3. Financing the System
- 3.4. Bylaws
- 3.5. Plan Upkeep
- 3.6. Annual Reporting

4. Managing Our Solid Waste Within Each Wasteshed

- 4.1. All Wastesheds
 - 4.1.1 Vision, Mission, Goals and Objectives
 - 4.1.2 Policies for New Programs and Infrastructure
 - 4.1.2.1 Rethink
 - 4.1.2.2 Reduce
 - 4.1.2.3 Reuse
 - 4.1.2.4 Recycle
 - 4.1.2.5 Resource Recovery
 - 4.1.2.6 Residual Management

- 4.1.3 Transitioning to Extended Producer Responsibility
- 4.2. Golden and Area Wasteshed
 - 4.2.1 Introduction
 - 4.2.2 Existing Programs and Infrastructure
 - 4.2.3 Policies for New Programs and Infrastructure
 - 4.2.3.1 Reduce
 - 4.2.3.2 Reuse
 - 4.2.3.3 Recycle
 - 4.2.3.4 Resource Recovery
 - 4.2.3.5 Residual Management
 - 4.2.4 Extended Producer Responsibility Programs
 - 4.2.5 Community Resources
 - 4.2.6 Managing the Carbon Footprint
 - 4.2.7 Implementation Schedule
- 4.3. Revelstoke and Area Wasteshed
 - 4.3.1 Introduction
 - 4.3.2 Existing Programs and Infrastructure
 - 4.3.3 Policies for New Programs and Infrastructure
 - 4.3.3.1 Reduce
 - 4.3.3.2 Reuse
 - 4.3.3.3 Recycle
 - 4.3.3.4 Resource Recovery
 - 4.3.3.5 Residual Management
 - 4.3.4 Extended Producer Responsibility Programs
 - 4.3.5 Community Resources
 - 4.3.6 Managing the Carbon Footprint
 - 4.3.7 Implementation Schedule
- 4.4. Sicamous and Area Wasteshed
 - 4.4.1 Introduction
 - 4.4.2 Existing Programs and Infrastructure
 - 4.4.3 Policies for New Programs and Infrastructure
 - 4.4.3.1 Reduce
 - 4.4.3.2 Reuse
 - 4.4.3.3 Recycle
 - 4.4.3.4 Resource Recovery
 - 4.4.3.5 Residual Management
 - 4.4.4 Extended Producer Responsibility Programs
 - 4.4.5 Community Resources
 - 4.4.6 Managing the Carbon Footprint
 - 4.4.7 Implementation Schedule

- 4.5. Salmon Arm and Area Wasteshed
 - 4.5.1 Introduction
 - 4.5.2 Existing Programs and Infrastructure
 - 4.5.3 Policies for New Programs and Infrastructure
 - 4.5.3.1 Reduce
 - 4.5.3.2 Reuse
 - 4.5.3.3 Recycle
 - 4.5.3.4 Resource Recovery
 - 4.5.3.5 Residual Management
 - 4.5.4 Extended Producer Responsibility Programs
 - 4.5.5 Community Resources
 - 4.5.6 Managing the Carbon Footprint
 - 4.5.7 Implementation Schedule

Appendices

- Appendix A Existing Solid Waste Management System and Plan Evaluation
- Appendix B Future Solid Waste Needs and Opportunities
- Appendix C Consultation Strategy and consultation results
- Appendix D TBL Evaluation
- Appendix E Transition Strategy from Municipal to Industry Responsibility

*NOTE – As needed, each policy for the first 5 years will include a description of a program(s) to support it as per the activity sheets as sent to you after TBL evaluations where needed have been done. They will include a program description, action by who, importance rating (to prioritize), benefits of program, staffing requirements, funding requirements, and completion criteria, and possibly some form of measurement.

Also note, that the finalized programs will be put in the up front report, but generally all the detailed efforts to make decisions including evaluations etc. will be put in the appendix with summarized information in the up-front report.