

Solid Waste and Resource Management Plan
Advisory Committee # 4

Other Solid Waste Management
Services

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Agenda

1. Construction and demolition waste management
2. Landclearing waste management
3. Waste stream management licensing and flow control
4. Land use planning
5. Wildlife/human conflict management
6. Illegal dumping

Other Solid Waste Management Services

Construction and Demolition Waste Management



Construction & Demolition Waste



- * All waste materials generated during construction, renovation or demolition activities
- * 17% of all waste sent to landfill from Whistler TS
- * No data for Squamish or Lillooet landfills
- * 75% of residual waste at Pemberton TS

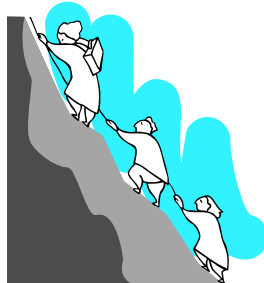


Current Programs for C&D

- * Variable tipping fees
- * Building material reuse centres
- * Recovery of reusable and recyclable materials from mixed loads
 - * RMOW transfer station
 - * Carney's Cheekeye Recycling Yard
- * RMOW's Green Building Policy



Challenges in the SLRD



- * No facilities to support C&D diversion in Pemberton and Lillooet
- * Export of waste from large projects to private landfills in Metro Vancouver or Fraser Valley
- * Lack of programs to support C&D waste management planning at start of project



Infrastructure Options

- Separate bins for source separated C&D waste streams at Pemberton TS (space constraints?)
- Assess potential for private or non-profit C&D reuse and recycling facility for Pemberton and Lillooet



Policy Options

- Assess effectiveness of RMOW's green building policy
- Consider similar policies for SLRD and member municipalities



Whistler Green: Project Checklist (Detached and duplex dwellings)

Whistler Green is our community standard for healthy homes that use energy and resources efficiently in a mountain setting. Considered early in the home planning and design process, many of the measures in this checklist are easily incorporated and cost no more than conventional practices. Benefits include reduced energy and maintenance costs, and a more comfortable home.

If you require more information to determine whether your plans meet the standard, or how many points would be awarded for credits, refer to the Whistler Green Program Guide, speak with an RMOW Community Planning staff member, or consult an architect or builder.

Tag	Title	Definition and Target	Max pts	Points
Site and Landscape (SL)				
SL.1	Trees	Protect all mature and unique trees, and should not immediately affect the building footprint or its immediate safety zones.		
SL.2	Soils	Protect, save and restore existing capacity. Follow best practices or equivalent guidelines for erosion and sediment control.		
SL.3	Stormwater	Minimise natural or pre-development hydrology by absorbing stormwater on the site. Target 60% effective impermeability and/or up new drain to storm drain.		Required
SL.4	Landscape Plants	Use only regionally appropriate trees, plants and shrubs for landscaping, refer to "Plant selection" tabular for the Whistler Green.		
SL.5	Outdoor Lighting	Minimise light pollution by using only fully cut-off fixtures for outdoor lighting and more than 10% of lamp lumens between 80 - 90 degree of cast.		
SL.6	Site Selection	Build on a previously disturbed site (1 point); no utility or road extensions required (1 point); 30-minute year round bus service and neighbourhood retail within 500m of site centre (1 point).	3	



Permit Related Options

- Require large projects to commit to 3Rs as condition of building permit
- Establish permit for deconstruction
- Encourage building reuse

Waste Management Plan

Project Name: _____

Project Address: _____

Project Type: ☐ Residential ☐ Commercial ☐ Industrial ☐ Other _____

Project Size: ☐ Small (Less than 10,000 sq. ft.) ☐ Medium (10,000 to 50,000 sq. ft.) ☐ Large (More than 50,000 sq. ft.)

Project Description: _____

Project Manager: _____

Project Start Date: _____

Project End Date: _____

Project Status: ☐ New ☐ Renovation ☐ Demolition

Project Location: _____

Project Owner: _____

Project Contact: _____

Project Phone: _____

Project Email: _____

Project Website: _____

Project Description: _____

Project Manager: _____

Project Start Date: _____

Project End Date: _____

Project Status: ☐ New ☐ Renovation ☐ Demolition

Project Location: _____

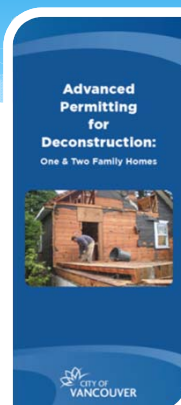
Project Owner: _____

Project Contact: _____

Project Phone: _____

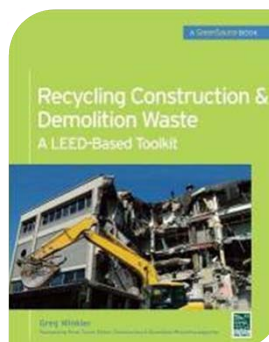
Project Email: _____

Project Website: _____



Promotion and Education Options

- Promote C&D waste reuse and recycling opportunities
- Collaborate with local construction associations to establish a 3R's education and information program



EPR for C&D Waste Materials

- Canada-wide Action Plan for Extended Producer Responsibility
- C&D waste materials will be added by 2017



Discussion

- * Which of these C&D waste management options have the most merit for application in the Sea to Sky corridor?
- * Other ideas?
- * How could the preferred options be implemented?
 - * Who (collaboration potential)?
 - * When?



Other Solid Waste Management Services

Land Clearing Waste Management



Landclearing Waste

- * Tree waste including trunks and stumps from clearing land for development
- * Managed by:
 - * Grinding and leaving on-site
 - * Hauling off-site for grinding or burning
- * Potential for air quality issues associated with burning



Options for Management

- Establish alternatives to burning in northern SLRD, Pemberton and Electoral Area C
- Develop municipal and SLRD bylaws to prohibit burning where alternative is available (and such bylaws are not already in place)



Discussion

- * Is the current approach to land clearing waste management appropriate? For now? For the future?
- * What changes, if any, should be made?



Other Solid Waste Services

Waste Stream Management Licensing and Flow Control



WSML and Flow Control

- * High tipping fees
 - * Increase waste diversion 
- * High tipping fees
 - * "Fly-by-Night" operations 
 - * Transfer of waste out of the SLRD
- * Results:
 - * Undermine environmental objectives/diversion rate
 - * Threaten financial viability of existing infrastructure
- Options:
 - Regulation of solid waste management facilities
 - Flow control



Regulation of Facilities and Waste Flow

- * BC Environmental Management Act gives RDs the authority to regulate:
 - * The types and quantities of waste materials managed at a site
 - * The types and quantities of waste materials transported within the regional district
 - * The operation, closure & post-closure of a site
 - * The fees applied to waste management activities
 - * The recording and submission of waste management information
 - * The requirement to hold a license
 - * The requirement to comply with a code of practice
 - * The requirement for operators to obtain risk insurance or provide some form of security



Approaches to Regulation of Facilities

Three approaches to facility regulation:

- * Waste stream management licensing
- * Facility authorization
- * Codes of practice bylaws



Waste Stream Management Licensing

- * A regulatory tool for achieving operational and administrative control over sites and facilities managing recyclable material and municipal solid waste
- * Approach used by Metro Vancouver, CVRD and RDN



Waste Stream Management Licensing: CVRD/RDN

Drivers:

1. Ongoing Incidents



Waste Stream Management Licensing: CVRD/RDN

Drivers:

1. Ongoing Incidents
2. Existing Regulatory Approach not working
 - * Local Government
 - * Agricultural Land Reserve
 - * Ministry of Environment
3. Industry Perspective
 - * Level playing field guarantees investment
 - * High tipping fees increased the incidence of alternative waste management operations
 - * Legitimate operators were tired of being undercut by unscrupulous operators



Waste Stream Management Licensing: CVRD/RDN

- * Part of Solid Waste Management Plan
- * Allows unique terms and conditions to be established for different operations, thus the Bylaw can accommodate a wide variety of waste management facilities and materials
- * Not used to fix land use conflicts, but is used to avoid/mitigate problems



Overview of CVRD/RDN WSML

- * Licensing Approach for MSW Facilities
 - * Applicant must have letter from host municipality regarding approved zoning
 - * Opportunity for municipal and public input into license conditions
 - * Set operating standards
 - * Performance “deposit” posted as part of obtaining a license
 - * Materials must go to a licensed facility
 - * Annual reporting by license holders (data tracking)
 - * On-going inspections and enforcement



Waste Stream Management Licensing: CVRD/RDN

- * Staffing implications of WSML :
 - * 1 FTE for application review and licensing, monitoring, enforcement and data tracking (RDN)
 - * *Intended* to be paid through licensing fees
- * RDN has 14 licensed facilities
- * CVRD has 7 licensed facilities



Facility Authorization

- * A tool for authorizing **new** waste management facilities
- * Links with SWMP
 - * Approved facilities to be included in SWMP
 - * New facilities to go through a review process: Does the facility align with the goals of SWMP?
 - * Allows for facility specific requirements
- * Approach used by FVRD and SLRD



Facility Authorization: FVRD

- * Authorization process:
 - * Proponent has pre-application with FVRD and MOE
 - * MOE determines if FVRD has the authority to review the proponent's application
 - * Proponent files application with FVRD with a fee (to cover administrative costs)



Facility Authorization: FVRD

- * Application includes:
 - * Operating plan
 - * Approval of host municipality
 - * Letter from MOE's regional waste manager
- * Application submitted to Board for approval to continue application process
- * Application review by staff
 - * Technical studies may be required
- * If approved, goes to public consultation
- * Board has final approval of the application for inclusion in the SWMP



Codes of Practice: CRD

- * Similar to WSM, but targets a specific type of waste management activity as a need is identified
- * Approach to facility regulation used by CRD
 - * Composting facility bylaw
 - * Salt Spring Island transfer station bylaw
- * Establishes a high standard and level playing field
- * Less cumbersome than a full WSM system
 - * But does not assist with waste tracking or address site specific issues



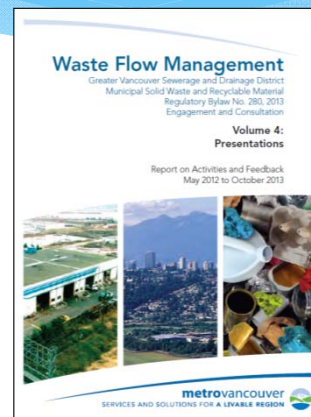
Comparison of Options

	Scope of Regulation	Establishes Level Playing Field	Site Specific Terms & Conditions	Enhances Data Picture	Staffing/ Admin
WSML	All	Yes	Yes	Yes	Significant
Facility Authorization	New only	No	Yes	Partial	As required
Codes of Practice	Targeted	Yes	No	Partial	As required



Regulation of Waste Flow

- * Intended to regulate where waste can be delivered
- * Approaches:
 - * Hauler licensing
 - * Waste stream management licensing
 - * Requiring delivery by haulers only to licensed facilities



Regulation of Waste Flow: Hauler Licensing

- * Authority to license haulers included in Environmental Management Act
- * Has not been adopted by any regional district
 - * Metro Vancouver has reviewed hauler licensing twice
 - * Controversial
 - * Significant additional administrative burden



Regulation of Waste Flow: Facility Licensing

- * Uses existing facility licensing system to affect control over delivery of waste
- * RDN WSML bylaw requires haulers to deliver to licensed facilities
 - * Maintains level playing field
 - * **But** does not have influence over haulers trucking waste out of RDN
- * Metro Vancouver's pending bylaw requires haulers to deliver residential and ICI garbage only to "regional facilities"
 - * Maintains level playing field
 - * Ensures that taxpayers interests are protected



WSML & Flow Control Options

Proactive Approach:

- Maintain (but possibly refine) existing *facility authorization* process
- Develop a licensing, code of practice and/or flow control system now to pre-empt sub-standard facilities

Reactive Approach:

- Develop a licensing, code of practice and/or flow control system when and if problems emerge
- Monitor the level of unauthorized waste export to determine need for flow control



Discussion

- * Is regulation of facilities needed in the SLRD now?
- * Is regulation of flow (where waste materials can be delivered) needed in the SLRD now?
- * Could some form of control over waste facilities or flow be needed in the future? If so, what type of conditions are likely to prompt a need for this type of authority?



Other Solid Waste Management Services

Land Use Planning



Land Use Planning

- * Public resistance to the siting of waste management facilities
- * Community planning for waste management facilities
 - * Land use conflicts with solid waste management facilities
 - * Development encroaching on solid waste facilities
 - * Poor zoning decisions/rezoning pressure
 - * Lack of proper land base for solid waste management facilities
 - * People want/need the solid waste facilities, but NIMBY
 - * E.g. bottle depots, composting facilities, recycling plants



Land Use Planning Issues

- * Siting of facilities challenging due to public perception and/or availability of suitable land
 - * Increasing need to site facilities for waste diversion and EPR
- * Long-term viability of solid waste operations must reconcile potential land-use conflicts
- * Advanced identification and acquisition of land may reduce potential land use conflict



Land Use Planning : Zoning

Zoning

- * Defines where various activities (land uses) can occur, e.g. residential, commercial and industrial.
- * Within each broad classification, sub-types may be identified, e.g. light industrial vs. heavy industrial
- * Solid waste uses are generally not defined outright in municipal zoning, but may be allowed at the discretion of the municipality
 - * Allows for the impact of NIMBY
- * Typically planners associate “waste management” with heavy industrial use
 - * May not be appropriate for many waste management facilities, e.g. EPR take-back facilities



Land Use Planning: OCPs

Official Community Plans (OCPs)

- * Defines future land uses
- * Most OCPs do not define where solid waste facilities will go
- * Can be used to pre-define where facilities (land uses) can go
 - * surrounding land uses can also be appropriately defined to minimize encroachment and land use conflicts



Land Use Planning Options

Work with municipal and SLRD planning departments to:

- Establish dedicated zoning for waste management facilities
- Ensure land use planning decisions do not compromise viability of existing or planned facilities
- Ensure long-range planning tools like OCP's identify and preserve land for future waste management facilities



Discussion

- * Does solid waste management in the SLRD require greater consideration by land use planners?
- * If so, what are the most critical things that land use planners could do to support our waste management objectives?



Other Solid Waste Management Services

Wildlife-Human Conflict Management



Wildlife/Human Conflict Management

- * Improper waste handling and storage can attract wildlife
- * Municipalities in SLRD have established strategies and bylaws to deal with issue
- * Active Bear Aware groups in Squamish and Whistler



Management Options

- * Maintain awareness-building activities
- * Ensure that all facilities that receive food waste are designed and maintained to not allow bears
- * All municipal, provincial and SLRD litter containers should be bear-proof
- * All commercial garbage containers that contain food should be bear proof



Discussion

- * Is additional effort needed to minimize the potential for wildlife-human conflict, as it relates to waste management?
- * If so, what are the most critical things that could be done to enhance existing efforts?



Other Solid waste Management Services

Illegal Dumping



Illegal Dumping

- * Refers to a range of activities where waste materials have been intentionally disposed in an unauthorized location
- * Abandonment of used goods in urban areas e.g. sidewalks, in alleyways and other public spaces
- * Dumping of waste in rural areas, e.g. logging roads, in power line corridors and other rural spaces
- * Deposition of valueless used goods at charity organizations' stores and drop-off bins



CRD's Illegal Dumping Strategy

- * On-going stakeholder surveys
- * Monitoring approaches used in other jurisdictions
- * A communications plan
- * Funding of community clean up initiatives



Don't abandon your better judgement.

Visit myrecyclopedica.ca to find out how to responsibly dispose of old electronics, furniture and other unwanted items.

PROUDLY SUPPORTED BY:

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CRD's Illegal Dumping Strategy

- * Supporting non-profit organizations involved in the re-use of goods through:
 - * Reduced tipping fees on the disposal of non-salable goods
 - * Receiving abandoned household hazardous waste
 - * Establishing a “donate responsibly” communications campaign
- * Working with member municipalities towards a synchronized enforcement approach for the CRD



RDN's Approach to Illegal Dumping

- * RDN's strategy focus on surveillance, reporting and enforcement
- * Utilize WSML bylaw to put the onus for proper disposal on those who generate waste
 - * This authority is used by their Zero Waste Compliance Officer to undertake enforcement activities (clean ups, fines)



RDN's Approach to Illegal Dumping

- * Work with stakeholder groups to enhance surveillance and enforcement activities
- * Encourage the public to "observe, record and report"



Metro Portland

- * RID (Regional Illegal Dumping) Patrol
- * Abandoned waste in urban and suburban areas
- * Encourage residents to observe and report
- * RID tagging results in removal of 45% of items annually



Options to Tackle Illegal Dumping

- Conduct a survey of member municipalities, local recycling depots and non-profit organizations to develop SLRD strategy
- Initiate comprehensive approach including surveys, communications, funding, advertising, and waiving tipping fees
- Establish a bylaw making generator of waste responsible for disposal
- Establish enforcement capacity



Options to Tackle Illegal Dumping

- Work with stakeholder groups to establish “observe, record, report”
- Establish a reporting hotline
- Post signs at frequent illegal dumping sites
- Consider working collaboratively with CN/CP or BC Hydro to prevent future illegal dumping on properties abutting power/rail lines



Discussion

- * Is an illegal dumping strategy necessary?
- * If so, what components should be included in the strategy?



Other Solid Waste Management Services

Questions?

