

**REGIONAL DISTRICT OF NANAIMO  
REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING  
HELD ON THURSDAY, FEBRUARY 18, 2016  
BOARD CHAMBERS**

**Present:**

|                     |                            |
|---------------------|----------------------------|
| Alec McPherson      | Chair, RDN Director        |
| Bill McKay          | Deputy Chair, RDN Director |
| Jan Hastings        | Non Profit Representative  |
| Derek Haarsma       | Business Representative    |
| Wally Wells         | Business Representative    |
| Craig Evans         | Member at Large            |
| Michele Green       | Member at Large            |
| John Finnie         | Member at Large            |
| Jim McTaggart-Cowan | Member at Large            |
| Ellen Ross          | Member at Large            |
| Amanda Ticknor      | Member at Large            |
| Stewart Young Jr.   | Business Representative    |
| Fred Spears         | District of Lantzville     |

**Also in Attendance:**

|                  |                                 |
|------------------|---------------------------------|
| Howard Houle     | RDN Director                    |
| Wendy Pratt      | RDN Director                    |
| Bill Veenhof     | RDN Director                    |
| Maureen Young    | RDN Director                    |
| Larry Gardner    | Manager of Solid Waste, RDN     |
| Rebecca Graves   | Recording Secretary, RDN        |
| Sharon Horsburgh | Senior Solid Waste Planner, RDN |
| Jane MacIntosh   | Superintendent, RDN             |
| Dennis Trudeau   | CAO, RDN                        |
| Maggie Warren    | Superintendent, RDN             |

**Regrets:**

|                   |                                   |
|-------------------|-----------------------------------|
| Gerald Johnson    | Member at Large                   |
| Charlotte Davis   | City of Nanaimo                   |
| Geoff Goodall     | City of Nanaimo                   |
| John Marsh        | Town of Qualicum Beach            |
| Chief & Council   | Nanoose First Nation              |
| Chief & Council   | Snuneymuxw First Nation           |
| Michael Recalma   | Qualicum First Nation             |
| Glenn Gibson      | Island Heath                      |
| Al Leuschen       | Ministry of Environment           |
| Karen Muttersbach | Environment Canada                |
| Michael Tripp     | Business Representative           |
| Randy Alexander   | General Manager, RCU, RDN         |
| Jeff Ainge        | Zero Waste Coordinator, RDN       |
| Meghan Larson     | Special Projects Coordinator, RDN |

**CALL TO ORDER**

The Chairperson called the meeting to order at 5:04 PM and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

**DELEGATES**

**MINUTES**

MOVED J. McTaggart-Cowan, SECONDED B. McKay, that the minutes from the meeting of the Regional Solid Waste Advisory Committee regular meeting held February 4, 2016, be received for information only and be amended. CARRIED

#### **BUSINESS ARISING FROM THE MINUTES**

#### **UNFINISHED BUSINESS**

#### **COMMUNICATIONS/CORRESPONDENCE**

#### **REPORTS**

#### **Residual Management Options (Morrison Hershfield - K. Fichtner – Presentation)**

L. Gardner gave an introduction to the Residual Management Presentation and discussed the upcoming Stage 2 timeline for RSWAC/SWMSA meetings.

K. Fichtner gave a presentation on Waste Processing Technologies. Technologies available to process waste include Material Recovery Facilities, Waste to Fuel, Biological Energy Recovery and Thermal Energy Recovery. Summary of costs, diversion rates along with advantages and disadvantages of each technology was presented.

B. McKay asked if there are any examples of businesses that are using one of these processes that would produce lower emissions than the current endeavour?

K. Fichtner replied that from his experience cement kilns have the potential to offset the use of coal and lower overall emissions if they are permitted to use waste as a fuel source.

B. McKay commented on the composition of waste and the new material being introduced causing an increase in the level of non-recyclable materials which are becoming almost impossible to recycle.

K. Fichtner remarked that some material is getting harder to recycle and therefore creating the development of product stewardship programs. Construction and demolition materials in a lot of municipalities are causing a problem and composite materials are challenging to recycle.

J. Finnie questioned if the information provided was showing higher costs for combustion and pyrolysis processes and how much of that cost is due to emission control systems or is it part of the technology cost?

K. Fichtner replied 30-50% of the cost is for emission control systems.

B. McKay questioned if Vancouver Island has been viewed as a model and if Nanaimo could become a central clearing house for a polymer plant?

K. Fichtner could not answer but would like to follow-up. There is a recent study conducted for Regional Districts from Central and Southern Vancouver Island that concluded both highway and rail transportation was more expensive than to have a regional facility to manage their own residual waste.

J. McTaggart-Cowan enquired about a cost estimate to make the material at Nanaimo Organic Waste (NOW) a Class A product?

L. Gardner, NOW produces a Class A compost in accordance with the Provincial Organic Matter Recycling Regulation. However due to contaminants the finished compost is difficult to market. NOW is a privately owned facility and the current owners would be required to invest significant Capital in the plant to improve the end produce. The owners have reviewed the option of installing an anaerobic digestion (AD) system. Orgaworld that are building the new facility in Surrey visited NOW and gave the owners some advice and a cost estimate with regards improving the operation and the quality of the finished product. It is not improvements at the front end of the operation but a change in how the feedstock is processed to help remove contamination that will greatly improve the end product.

D. Haarsma questioned the waste material in a dirty MRF if under ideal conditions we could capture 45% and the remainder 55% would still go to landfill?

K. Fichtner replied that the material balance is maximum 20% recycling, maximum 40% organics, and 40% left for residuals and those residuals could be made to fuel or be landfilled.

J. MacIntosh questioned if the waste material prepared for the digestion system could be used at a wastewater treatment facility?

K. Fichtner replied that the AD systems are designed for a certain biological oxygen demand and if you add a lot of solids it would overload the system.

B. McKay asked if there are any examples of facilities that produce energy from these technologies that is utilized as district energy?

K. Fichtner commented that Houwelling Nurseries Co generation plant in Delta utilizes landfill gas in its greenhouses near the Vancouver Landfill.

B. McKay questioned if glass is going the way of newsprint as far as volume?

K. Fichtner replied that there is a bit of glass recycling in some areas but the use of glass is getting less. There aren't a lot of markets for used glass and manufactures can make glass cheaper from sand than from cullet.

**GROUP EXERCISE**

L. Gardner introduced the group exercise and the Committee broke off into groups to discuss the topics "Which residual management options would you advise the board to consider and why?" and "What would trigger you to advise the Board to consider any new technologies in the future?"

The results from the Group Exercise are shown in Table 1 below.

| TABLE 1 | Group Exercise  |  |
|---------|---|--|
| Group   | Which Residual Management Options Would You Advise The Board to Consider And Why? | What would trigger you to advise the Board to consider any new technologies in the future? |



|    |  |  |
|----|--|--|
| #1 | <ul style="list-style-type: none"> <li>• Landfill capacity (somewhere/somewhat)</li> <li>• Integrate with clean MRF</li> <li>• Continue to embrace new and emerging technologies</li> </ul>  | <ul style="list-style-type: none"> <li>• Collaborating with other jurisdictions for new ideas, economies of scale, including diversion strategies.</li> </ul>  |
| #2 | <ul style="list-style-type: none"> <li>• MRF- for residual, (dirty) for ICI and for what is already going to the landfill (garbage) with an AD closed system</li> <li>• Prefer SS to create a more robust system first.</li> </ul>       | <ul style="list-style-type: none"> <li>• We define technology as regulation and enforcement and the “force is with us”, we have been triggered</li> </ul>  |
| #3 | <ul style="list-style-type: none"> <li>• Island solution</li> <li>• Education/Enforcement</li> <li>• Keep eyes open/stay informed</li> <li>• Source control improvements</li> <li>• Siting new landfill extremely hard (0.1%)</li> </ul> | <ul style="list-style-type: none"> <li>• No other alternatives – must</li> <li>• New technology arises</li> <li>• Cost effective</li> <li>• Known markets</li> <li>• High social value</li> <li>• Community benefit</li> </ul> |

**ADDENDUM**

**NEW BUSINESS**

**ADJOURNMENT**

MOVED B. McKay, SECONDED J. McTaggart-Cowan, that this meeting be adjourned.

Time: 7:30 pm.

  
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 CHAIRPERSON