Technical Memo 1: Efficiency within RDKS Solid Waste Management Functions

The Regional District of Kitimat-Stikine (RDKS) is developing a new Solid Waste Management Plan (SWMP) to provide direction for how to reduce, reuse, recycle and dispose of our waste for the next decade. The SWMP will be developed in consultation with stakeholders; a Public and Technical Advisory Committee (PTAC) will advise the Regional District Board on the development of plan targets and strategies. The primary focus of the SWMP will be to improve the operational efficiency of existing programs, services and facilities. Multiple topics have been identified for discussion and policy development. Each topic requires scope and context, problem formulation, research to close information gaps, consultation with stakeholders, evaluation of options and recommended implementation approach(es). This information will then be presented to the PTAC for recommendations on how the RDKS should proceed with each issue or topic.

This technical memo presents information to confirm efficiency objectives in the context of RDKS Solid Waste Management facilities and programs.

1. Scope and Context

A wide range of facilities were built under the previous SWMP, including engineered landfills with leachate collection and treatment, transfer stations, Industry, Commercial and Institutional (ICI) cardboard facility, and an in-vessel composting system. Programs and policies to support the facilities were also implemented, including extensive waste diversion programs and supporting education and outreach.

The RDKS has identified the following objectives to efficiently operate facilities and programs:

- Users are continually well-informed on servicing programs and expectations;
- Facilities and programs are reasonably convenient for most users;
- Facility contractors are well trained and familiar with the service standards and standard operating procedures (SOPs) to reduce RDKS staff supervision time;
- Expectations and requirements for RDKS staff are clear and well documented so staff utilize their time efficiently;
- RDKS staff have the training and skills needed to perform their duties competently;
- Contractor and administrative operations are streamlined, so workload and wait times for customers are minimal;
- Information needed to guide program and policy development is available when required (e.g. waste audits, inventory of waste management systems for large generators, solid waste tracking information, site visits to industrial, commercial and institutional (ICI) users, load audits, etc.);
- Clear policies and guidelines are established for routine occurrences to empower staff to address situations without requiring management or Board guidance;
- Clear policies and guidelines are established for situations, such as reduced servicing revenues and/or increased operational costs; and
- Servicing standards and plans for future programs are established and approved, so resources can be allocated accordingly.





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2. Problem Formulation

Multiple new facilities, programs and policies have been introduced in the Terrace Service Area and Hazelton and Highway 37 North Service Area over the past two years. Users of the service, RDKS staff, and contractors providing services, must continue to become accustomed to new operations and expected standards of service. The RDKS has identified that optimizing operations to get maximum benefit from the infrastructure and services is a priority. One way to do this is to ensure that all aspects of the operations are efficient (i.e. achieve performance standards without extra resources). This memo describes the current situation and the target operational objectives. Strategies to achieve efficiency goals will be developed under the Plan.

2.1. Service Delivery Method

The current service delivery method for the operation of facilities (Transfer Stations and Landfills) and some components of service (i.e., operation of Transfer Stations and Landfills, ICI cardboard facility, and curbside collection) within the RDKS is through contracted services. During the commissioning of new facilities and programs, contracting operations was the historically used and most easily implemented method of running facilities. Since the time of commissioning, RDKS has had sufficient time to evaluate operational considerations. The RDKS may review the service delivery method as contract terms with service providers expire. This review may include a cost-benefit analysis of operating facilities and programs, or certain components thereof, utilizing in-house RDKS resources.

2.2. Contractor Performance

Contractors operating RDKS facilities may, at times, be inconsistent with Standard Operating Procedures (SOPs), resulting in failure to meet the standards expected by the RDKS. Currently, RDKS staff are required to provide more supervision and interventions than initially anticipated, leading to increased cost and reduced capacity.

Servicing plans and ongoing training will better support contractors to comply with required SOP's, bylaws, and contract expectations. Contractors will be able to operate with reduced supervision, freeing up RDKS resources.

2.3. RDKS Staff

Staff roles within the RDKS have been evolving to meet the needs of the new systems. Several new staff have been hired, and responsibilities of existing staff have changed. As a result, senior staff have been required to spend more time providing direction on operational details.

Existing servicing plans should be regularly reviewed and updated. This will support RDKS staff in ensuring they have the appropriate knowledge needed to administer services and implement projects.

2.4. Operations

Staff and contractors may be unsure of certain procedures to operate solid waste facilities and services. This leads to potential confusion about responsibilities and timelines required for some interactions. The goal is to ensure responsibilities (individual, team and contractor) will be well understood.





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As a method of clarifying roles and tasks, and to extend the life of solid waste infrastructure, the Regional District has recently developed a proactive Preventative Maintenance Program. A web-based Computerized Maintenance Management System (CCMS) program (HIPPO) is currently used track the preventative maintenance tasks for all RDKS facilities. This program includes required and anticipated maintenance tasks and will assist the RDKS in proactively and efficiently managing facility maintenance.

The new waste management facilities have been operational for approximately two years. Some users have expressed opinion on facility convenience (i.e., hours of operation). During consultation, the Regional District will solicit feedback regarding facility and program convenience. Any revisions to the service would be an outcome of the SWMP.

2.5. Information Availability

Historically, there has been limited data available about the kinds of materials diverted and disposed and the amount generated by each sector. This has impeded policy development on waste diversion and made it difficult to develop a more accurate cost recovery model.

Weigh scales at the Thornhill Transfer Station, Forceman Ridge Waste Management Facility and Do-Your-Part Recycling enable collection of accurate waste disposal and diversion data in the Terrace Service Area. Waste volumes now being tracked manually at the Hazelton and Meziadin Landfills will provide better data for the Hazelton and Highway 37 North Service Area. Moving forward, waste diversion programs will target high-volume materials and larger waste generators. In addition, accurate data collection will support the adjustment of fees, taxes and/or community contributions to balance the established cost recovery model.

Waste audits also support targeted education/awareness on specific materials.

2.6. Policies and Guidelines

Clear policies and guidelines help reduce delays in decision making and provide for consistent responses to stakeholder issues.

Policies and guidelines will continue to be established to cover most routine and foreseeable events, reducing the time for response. Since the policies/guidelines and resulting impacts will be part of the overall SWMP, the Board and other stakeholders will have opportunities for involvement during the SWMP development and approval process.

2.7. Service Standards and Plans

Clear servicing standards exist for numerous components of the RDKS solid waste programs (i.e., bylaws, organics and cardboard strategies, curbside guides, Recycle Coach and depot guides). However, the service standards may be limited in certain areas. This means questions may arise about how and when to adjust services in response to current conditions. The SWMP can confirm the triggers for specific service changes such as an increase in User Fees or the Tax Requisition.

Although there is more of an overall servicing plan for the Hazelton and Highway 37 North Service Area, the servicing plan does not address issues of the relationship between service level and cost. The SWMP will describe how to adjust services when costs rise (*i.e.*, determining





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a disposal alternative if the cost of recycling rises above a pre-determined threshold). The SWMP will include service plans that describe responses to anticipated scenarios.

2.8. Communication

Clear communication, both internal and external, is critical to the efficient management and operation of RDKS solid waste services and facilities. Regular communication within the RDKS organization, particularly the Solid Waste Management Team, is key to working collaboratively in the development of new projects, operation of existing facilities, management of contractors, and delivery of consistent messaging to stakeholders. Regular (i.e., weekly or biweekly) meetings of the Solid Waste Management Team promotes collaboration and information sharing among team members. Regular meetings (i.e., quarterly) of the Solid Waste, Works and Services, Planning, Finance and Economic Development departments will support the cohesive delivery of programs, common approach to stakeholder engagement, and synergies in messaging to stakeholders.

The RDKS will continue to update and maintain a central stakeholder registry so that each department can see which of their stakeholders are being contacted by other departments. An annual communication plan will be developed for the solid waste department, so information is shared with the right stakeholders at the right time (i.e. with enough lead time). This annual communication plan will be directly linked to the initiatives planned for implementation that year and may be coordinated or cross-referenced with other departments' initiatives. When implementing new services approved under the SWMP, RDKS staff will have a clear understanding of the project stakeholders, messaging and a communication timeline. For example, when recycling costs exceed a pre-determined threshold, thereby triggering the RDKS to compost, burn or landfill the material, citizens will be informed of the rationale for alternate disposal prior to change in service. The Board will have approved the service change in advance under the Plan.

3. Stakeholders

		RDKS	Contractors	Member	General	ICI	Consul-
				municipalities	public	generators	tants
1.	Contractor						
	Performance						
2.	RDKS Administration						
3.	Operations		-				
4.	Information Availability						
5.	Policies and Guidelines						
6.	Service Standards and Plans						
7.	Communication						



