A person wearing a dark blue quilted vest, a black knit beanie, and blue gloves is leaning over a large metal recycling bin. They are sorting through several large, empty metal cans, including a prominent one with a blue and white label. In the background, a blue recycling bin and a silver car are visible on a paved area. The background is slightly blurred, showing a line of trees under a clear sky.

# Yukon Solid Waste Action Plan

*Ideas, Opportunities, Action*



## Message from the Minister

**Hon. Archie Lang**, Minister of Community Services

The Yukon government is modernizing solid waste management practices in Yukon through our commitment to create a sustainable waste management system that meets the current and future needs of all Yukon communities.

The Yukon Solid Waste Action Plan provides us with a path forward that includes improved infrastructure and services, including new regional transfer station routes, enhanced

recycling, waste reduction and diversion programs, and partnerships with community groups, municipalities and First Nations that will help us to look ahead for new opportunities that support our vision of a modern sustainable waste management system.

There are many unique challenges in managing solid waste in our remote northern environment. By working together, we will create a state-of-the-art solid waste management system that will adapt to the changing needs of future generations of Yukon communities.

A handwritten signature in black ink, appearing to read 'A. Lang'.

**Hon. Archie Lang**

*Minister of Community Services*

# Our Vision

A modern, sustainable waste management system, based on community partnerships, best management practices, and cost effective solutions suited to our unique northern climate.



In 2009 the Yukon government undertook an extensive review of its solid waste operations with the objective of modernizing and improving solid waste management in the territory.

**THIS FACILITY  
IS NOW A  
TRANSFER STATION.  
PLEASE PUT ALL  
HOUSEHOLD  
GARBAGE IN  
BLUE CONTAINERS**

The review includes two key components:

**Comprehensive Solid Waste Study** Released in August, 2009, the Study includes an assessment of all Yukon solid waste facilities, a summary of community and stakeholder consultations, and research into waste management approaches in other Canadian jurisdictions. It offers a wide range of recommendations to improve Yukon waste management and the report will continue to be an important resource as we move ahead. The Study was conducted by independent engineering consultants in collaboration with the Department of Community Services. Find the Study online at [www.community.gov.yk.ca](http://www.community.gov.yk.ca) (click on Solid Waste Review).

**Solid Waste Facility Operating Permits** In spring 2009, the Department of Environment issued new Solid Waste Facility Operating Permits for all Yukon solid waste facilities based on extensive research and review of environmental standards, and best management practices across Canada. Meeting the requirements of these new permits will reflect the Yukon government's commitment to improve community infrastructure, and ensure effective and sustainable environmental management and monitoring practices.

The Yukon Solid Waste Action Plan outlines how the Yukon government will move to modernize and improve solid waste management practices in the territory through community partnerships, immediate action, and exploration of future opportunities. The Yukon Solid Waste Action Plan further highlights priorities, actions and strategies that bring together waste reduction, diversion and disposal in a Yukon-wide coordinated approach to waste management.





Yukon  
**Waste**  
Management  
– *a shared*  
*responsibility*

# Waste Management *responsibilities* in Yukon

- Waste management in Yukon is a shared responsibility. Not only between the Yukon government and municipal governments who are each responsible for operating solid waste facilities in the territory, but also between community partners, industry, and all people of Yukon.
- Yukon's Department of Community Services, operates 19 solid waste facilities in unincorporated communities. These include basic landfill sites, and larger facilities that provide containers for sorting various kinds of waste.
- Yukon's Department of Environment regulates solid waste facilities in the territory and issues permits for operation. The Department is also currently responsible for programs and regulations related to recyclable materials and special waste, and works in partnership with community groups to support public education programs for recycling and waste reduction.
- Municipal governments operate solid waste facilities in incorporated communities such as Whitehorse, Dawson City and Haines Junction. In addition, stakeholder, community and industry groups operate recycling facilities and public education programs in communities across the territory.
- As part of the Solid Waste Action Plan many of the recycling, diversion and waste reduction programs will be consolidated with the Department of Community Services' Operation Branch to create a more integrated waste management system.
- First Nation Governments have an interest in solid waste management within traditional territories. Exploring partnerships with First Nations Governments is important as Yukon moves to modernize solid waste practices.





Open burning  
of waste to  
be phased  
out by 2012

## Key Objectives of the *Action Plan*

- Modernize and standardize existing solid waste facilities based on sustainable, best management practices
- Develop a coordinated, regional approach to Yukon solid waste management
- Work in partnership with municipalities, communities, industry and stakeholders



## What We Heard From Yukoners

- Strong opposition to the burning of wastes
- Focus on waste diversion rather than waste disposal
- Develop waste management alternatives





# Moving Forward

## – A Modern Approach

**T**he cornerstone of the Action Plan is to modernize Yukon's waste management activities by bringing them in line with current environmental practices and sustainability objectives.

Waste management practices have evolved, and programs such as the composting pilot projects in Whitehorse and Dawson City and recycling initiatives in a number of communities are demonstrating Yukoners' desire to invest in, and use more modern and sustainable waste programs to reduce, reuse, recycle, and ultimately, divert more waste from our landfills.

The Yukon government aims to support more sustainable waste management activities, improve infrastructure and enhance user-friendly services to our communities. In moving ahead to modernize waste management we are committed to taking a Yukon-wide, partnership approach and to exploring innovative, longer term solutions, consistent with sustainable energy and land use objectives.

Moving forward, the Yukon government aims to:

- support more sustainable waste management activities
- improve infrastructure and enhance user-friendly services to our communities
- form Yukon-wide partnerships
- explore innovative, long-term solutions, consistent with sustainable energy and land use objectives.

This Solid Waste Action Plan sets the stage for the Yukon government to implement key improvements and to work with community groups, municipalities and First Nations to look ahead at ideas and opportunities that will support our vision of a modern sustainable waste management system.



# Ideas into Action

## – Key Improvements

### We're Moving On

The Yukon government is moving now to take the following actions:

#### 1. Improve Site Management

Solid waste facilities in Yukon communities range from basic landfills to more organized and developed sites that provide for sorting, storing and organizing various types of waste. As we work to improve recycling, environmental protection, and waste diversion, all facilities will require basic sorting and proper storage for special wastes.

##### a) Key facility improvements will include:

- Provide and/or enhance storage bins and containers for recyclables.
- Enhance special waste containers for environmental protection and public safety.
- Improve and standardize signage to assist users to dispose and recycle different wastes.
- Increase site supervision to better manage and maintain facilities and assist users.

##### b) Update landfill site operational plans for all Yukon government facilities

The plans will include site specific improvements to address the following:

- Better segregation of waste types
- Handling of special and “troublesome” waste
- Phasing out and elimination of open burning of waste - facilities to transition to new approaches by 2012
- Environmental studies and monitoring - develop a plan to conduct surface and groundwater assessments, and instal required groundwater monitoring
- Enhance infrastructure for better environmental protection - an increased level of engineered “waste cells” to ensure better containment of waste and protection of groundwater

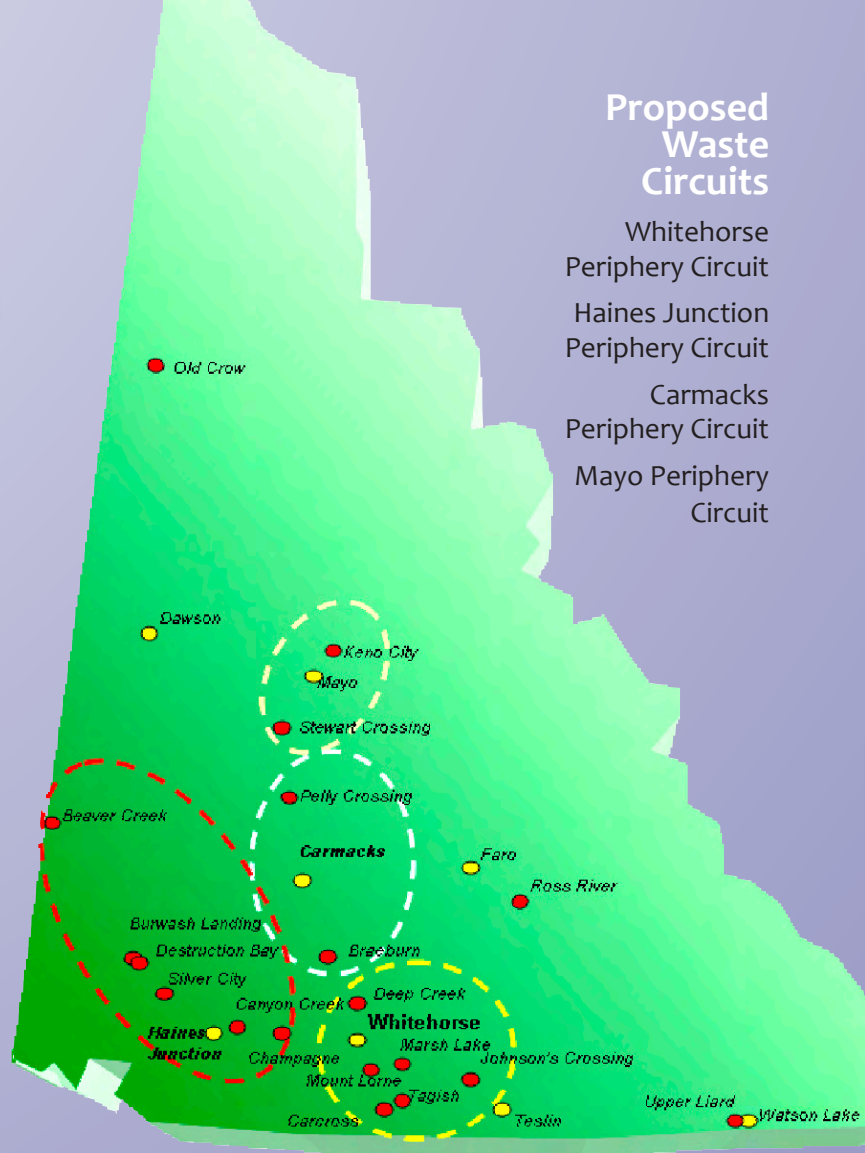
#### Proposed Waste Circuits

Whitehorse  
Periphery Circuit

Haines Junction  
Periphery Circuit

Carmacks  
Periphery Circuit

Mayo Periphery  
Circuit



The map (above) shows where other transfer circuits may be implemented over the next couple of years.

#### 2. Regional Coordination: Establishing Waste Transfer Stations in the Whitehorse Periphery

Our facilities and programs can be viewed as a “network” that provides new opportunities to coordinate waste management, maximize resources, promote more sustainable land use and significantly improve community facilities.

In the Comprehensive Solid Waste Study, a regional approach was recommended that would feature a number of community transfer stations and shared landfills to be established along a “waste circuit”. Moving to transfer stations and regional landfills offers a number of benefits to communities, while continuing to provide waste facilities conveniently close to home.

Investments in regional coordination will achieve long term cost savings, more efficient transportation of waste and recyclable materials, and allow for planning



future waste management needs. As a first step, the Yukon government will immediately develop transfer stations in the Whitehorse periphery, with the installation of new waste transfer stations in Carcross, Tagish, and Deep Creek. This is in addition to existing transfer stations in Marsh Lake and Mount Lorne. Waste from these communities will be transported to the City of Whitehorse landfill.

As part of the work on developing and implementing site specific landfill Operational Plans, the Yukon government will be exploring the development of waste circuits in other parts of Yukon in order to improve facilities and transition away from the burning of waste.

### 3. Establish a Yukon Solid Waste Advisory Committee

With the range of governments and groups involved in Yukon waste management, a key theme heard throughout the Study and our work to date has been the need to look at waste management Yukon-wide, and to take a partnership approach.

A Yukon Solid Waste Advisory Committee would bring together key representatives involved in various aspects of solid waste management, including the Yukon government, recycling, processing and transportation industry groups, Yukon communities, municipal governments and Yukon First Nations to collaborate and generate ideas for programs and initiatives to better manage waste in the territory.

The Committee will be established to assist in the successful implementation of this Solid Waste Action Plan and as an ongoing opportunity for partnerships and ideas. The Committee would act in an advisory role by reviewing implementation options and making recommendations to the Yukon government regarding the management of solid waste and recycling programs in Yukon.

This Committee would be the first of its kind for looking at Yukon waste management in a coordinated fashion - it would provide a formal venue and opportunity to explore partnership opportunities, share information and provide broader advice to governments and communities on waste management. By coming together to discuss waste management in this way, Yukon will continue to develop and implement modern and sustainable waste management practices.

### 4. Conduct targeted discussions with Municipalities and Communities

In addition to establishing the Yukon Solid Waste Committee, the Department of Community Services

will work directly with municipalities and communities to identify opportunities to partner and share resources to meet specific community needs.

## 5. Integrate Yukon government Waste Disposal and Recycling Programs

The Yukon government currently administers a number of programs related to waste management through the Department of Community Services and waste recycling and diversion through the Department of Environment.

The Department of Community Services and the Department of Environment will be working to consolidate waste disposal and recycling programs. This “whole of government approach” will ensure better integration of waste disposal facility activities, with recycling and waste reduction efforts, to implement the objectives of this Action Plan. This work will begin with the transfer of waste reduction, and diversion programs from the Department of Environment to the Department of Community Services.

## Waste Management Challenges

**Waste Mixing:** Ideally every type of waste should be segregated to allow for maximum landfill diversion and recycling.

**Inconsistency and Unpredictability of Waste**

**Deposits:** Due to the small size of waste facilities unpredictable spikes are difficult to predict and handle.

**Remoteness of Facilities:** Transportation costs are considerable in the Yukon and current waste facilities are widely spread across the territory.

**Environmental Concerns, Public Safety and**

**Liability:** Each facility needs to be as safe as possible for both environmental health and human safety

**Funding:** With limited funding available and high costs for operations in Yukon not every waste solution is feasible





## 6. Conduct a Baseline Study to identify community waste types and levels and support the Development of Waste Reduction Target

Developing a complete understanding of the quantity and composition of waste accepted at our facilities is important in order to measure improvements in waste diversion and reduction initiatives as well monitoring environmental impacts. Conducting baseline studies on a regular basis will allow us to track and measure Yukon waste and set measurable waste reduction targets.

## 7. Exploring New Technologies in Waste to Energy for A Northern Climate

Technology is advancing in the waste to energy field and adopting this technology may become a strategy worth pursuing. Engaging with private sector companies with expertise in this area will be the first step to investigating the value of waste to energy technologies in Yukon.

# Composting

Composting is the process through which organic materials are biodegraded and mixed with soil to provide nutrient rich topsoil. Compostable wastes include food wastes, “contaminated” paper products (i.e. paper towels), non-recyclable paper products, yard waste, hair, and wood shavings or sawdust. Oxygen and water are also important components in the composting process, which requires that compost be turned and watered regularly so that air and moisture are distributed throughout.

Composting can be a challenge, particularly in rural Yukon. Nevertheless, there is a potential to increase waste diversion substantially in Yukon through composting.

## Community Partnerships in Waste Management

People generate waste and the Yukon is fortunate to have many individuals and groups who are stepping up to improve waste management practices in their communities. These include groups in Marsh Lake, Mt Lorne, Haines Junction, Carmacks, Dawson and Whitehorse.

The Yukon government provides funding support for many of these groups for their operations. Working with these groups to provide local solutions, harness community support and improve practices based on local needs, is an important part of the Yukon Solid Waste Action Plan.







# Government of Yukon Reduce, Recycle and Diversion Initiatives

- Beverage Container Recycling Program
- Used Tire Program
- Household Hazardous Waste Collection
- Special Waste Collection
- Recycling Fund Grants
- Recycling Education Fund
- The Recycling Club
- The Waste Reduction and Recycling Initiative
- E-waste Collection and Processing Program

## A Look Ahead - Ideas and Opportunities

Our work to date and particularly the Comprehensive Solid Waste Study has offered a range of short and long term ideas for improving specific activities, and Yukon's overall approach to waste management in the territory. The Yukon government will work with the input of the new Solid Waste Advisory Committee, municipalities and communities to explore these recommendations and other ideas to implement the new Action Plan territory wide.

Key areas to explore in the long term will be:

### 1. Enhancing our efforts for Recycling, Waste Reduction and Diversion

Taking action to avoid waste generation in the first place is perhaps the most important aspect of waste management and reduces the requirement for diversion and disposal. There are a number of considerations and challenges that need to be considered to reduce wastes:

- **Personal Choices:** As people become more accustomed to recycling and composting, less waste will be discarded with greater focus placed on reduce, reuse, recycle and recovery practices.
- **Extended Producer Responsibility:** Under this type of framework, producers or first importers of products would be responsible for developing, implementing and running recovery and recycling programs for their products.
- **Packaging:** The majority of consumer products in Yukon are imported which results in large quantities of packaging waste. Choosing products with less



packaging reduces the size of our waste stream.

• **Zero Waste:** According to the Zero Waste International Alliance the concept behind zero waste is to “conserve and recover all resources and not to burn or bury them.” While zero waste may a challenge, it provides a target to strive for and there are always improvements that can be made with waste segregation, reuse, recycling and recovery of materials.

## 2. Exploring potential new waste management programs and technologies

There are and will continue to be new waste management programs and technologies that could assist Yukon in achieving the vision of this Action Plan. The Yukon government will explore strategies and infrastructure for managing waste, especially “troublesome” wastes such as e-waste (electronic appliances) which consist of many components that are toxic and non-biodegradable; white waste (major appliances) which are bulky and consist largely of metal and plastic that is not easily separated; and household hazardous wastes (HHW) which need to be stored safely and not mingled with the regular waste stream. The Department of Environment’s website (<http://www.environmentyukon.gov.yk.ca/>) describes the preferred handling and disposal of HHW wastes. The Yukon government also provides funding to any community wishing to hold a HHW Collection Day.

The Yukon government is currently considering a number of programs and solutions to enhance recycling and diversion of “troublesome” waste as part of the Yukon Solid Waste Action Plan. These range from discussion about Extended Producer Responsibilities, e-waste collection days, increasing site supervision, and the establishment of a “Waste Line” to get information about the proper handling of “troublesome” wastes and to report any issues with them at local landfills.

Other opportunities to be explored include:

- community composting programs
- fostering grassroots waste management initiatives

# Troublesome and Special Waste

- Household Hazardous Waste (HHW)
- Litter (plastic bags & packaging)
- White goods (major appliances)
- Auto body hulks
- Scrap Metal
- Tires
- Construction & Demolition (C&D)
- Wastes
- E-Waste (electronic waste)
- Propane tanks
- Lead Acid batteries

The Yukon government will review and explore changes to programs and regulations to enhance waste reduction and diversion activities. One key area requiring exploration is Yukon’s management of “troublesome” wastes and bulk wastes from construction and development projects.





by supporting residents in managing their own waste in effective and efficient ways such as local composting and recycling programs

- methods that offer the potential for energy recovery through the collection of the landfill and methane gases which are generated through the decomposition of wastes in landfills
- carbon offset revenue potential
- waste reduction targets.

### 3. Working with communities to develop measurements and targets for waste reduction and ongoing monitoring and review

The Yukon government will conduct regular baseline studies to allow us to track and measure Yukon waste and set measurable waste reduction targets. Ongoing monitoring and review will allow us to evaluate progress and set new targets when necessary.

The Yukon government will monitor and review its waste management practices on an ongoing basis.

### 4. Exploring potential partnership and business opportunities

The Yukon government will explore potential partnership and business opportunities that could positively impact on Yukon's waste management system, including:

- shipping and transport of recyclable and special wastes to regional locations and out of territory
- potential materials processing facilities for recyclable materials, bulk wastes, scrap metal, tire shredding, and glass crushing
- "secondary industries" for the use of recyclable materials processed within the territory

### 5. Assessing possible future impacts on waste management

The Yukon government will need to monitor future changes that could effect waste management such as continuously monitoring the waste management practices outside the territory to ensure Yukon is up to date and operating as effectively as possible, monitoring indirect influences such as fuel prices and assessing the impacts of such changes.

The Yukon government will monitor its waste management practices on an ongoing basis.

## Conclusion: A Modern Approach is an Evolving Approach

Taking a more modern approach to our waste management activities in Yukon is more than upgrading our facilities in the short term. Best management practices, technology, and opportunities to improve will continue to evolve.

This Solid Waste Action Plan is a first step. Over the long term, the Yukon government will continue to explore ongoing improvements for environmental and community health, researching innovative new technologies, and long-term solutions for our Yukon communities.


Together, we will create a state-of-the-art solid waste management system that will adapt to the changing needs of future generations of Yukon communities.











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