



Nova Scotia's **ILLEGAL DUMPING** Cleanup Guide

A guide to understanding illegal dumps, and the steps and resources to a successful cleanup program.

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Illegal dumping is a major problem that impacts all municipalities in Nova Scotia. It is defined as the disposal/abandonment of materials in an unauthorized area. Illegal dumpsites can vary in size and contain a combination of waste materials. Examples of materials typically found include: construction and demolition debris (wood, shingles), furniture (sofa, chairs), appliances, household waste and recyclables, and vehicles/vehicle parts.

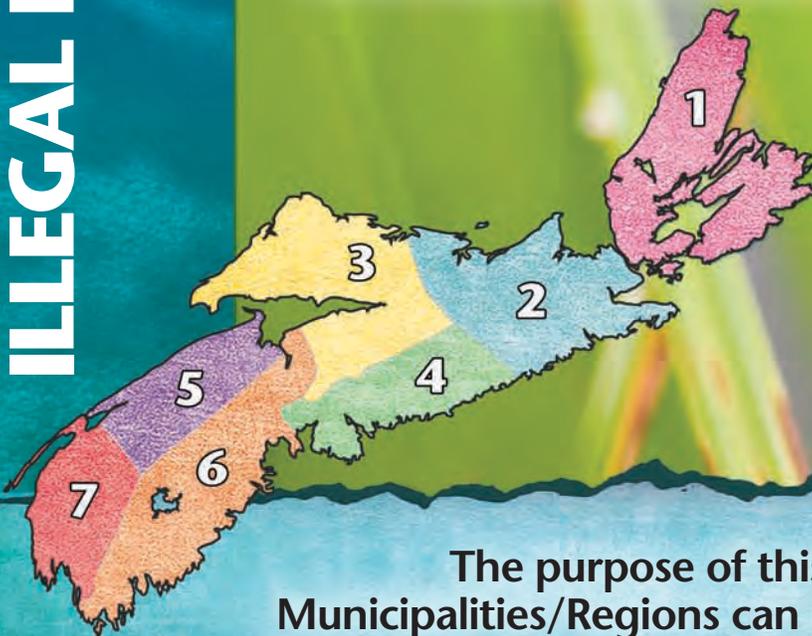
There are few, if any, communities located in the Province that can't identify local illegal dumpsites. These sites raise significant concerns regarding public health and safety, decrease property values, increase property taxes, impact economic development and impact quality of life.



Reasons or excuses for dumping include:

- Avoiding tipping fee costs
- Travel distance to landfill site or transfer station
- Lack of community pride
- Abandoned or undeveloped land
- Lack of knowledge relating to proper source-separation requirements
- Time and effort to properly sort materials for disposal
- Adding to an existing site

Nova Scotia's Solid Waste Management Regions



- Region 1 - Cape Breton
- Region 2 - Eastern Region
- Region 3 - Northern Region
- Region 4 - Halifax Region
- Region 5 - Valley Region
- Region 6 - South Shore/West Hants
- Region 7 - Western Region

The purpose of this guide is to provide a tool that Municipalities/Regions can use to address illegal dumping.



It is important to be able to document the extent of the dumping problem in a geographic area, develop a time line for the cleanup, involve the community in compiling an inventory of sites and in preventing new dumping after a site has been cleaned up. Community consultation has proven to be most effective in completing these tasks.

It is recommended that at least six months be dedicated to obtaining the most complete inventory possible.

PURPOSE:

To communicate with local individuals and groups that utilize the community and its woodlands. Contact with these groups and associations can provide important information to investigators on site location and initial site description.

CONSULTATION METHODS:

Media
(radio, newspapers)

Static Displays
(located in malls, stores, etc – showing pictures of existing sites)

Door-to-Door Surveys

CONSULTATION WITH:

Municipal Government Departments

- Bylaw Enforcement
- Operational Services / Waste Management
- Engineering
- Planning / Development
- Council

Provincial Government Departments

- Environment
- Natural Resources
- Infrastructure and Renewal

Community Groups/Associations

- ATV/Snowmobiling Clubs
- Fish and Wildlife Associations
- Private Road Associations

Consultation with the broader community is effective. Community residents are knowledgeable about illegal dumping sites and often welcome the opportunity to provide input and assistance. These consultations will fill in gaps and validate site inventory.

Some illegal dumping cases require an enforcement approach. Here are a few common enforcement principles and procedures that municipal staff can use as a guideline.

Bylaw Provisions: A municipal bylaw should be created/amended and have enforceable illegal dumping provisions.

Receiving a Complaint by Phone: All information about an illegal dump site should be recorded in an Incident Report form and a file started.



- ▣ Ask systematic questions and get as much information as possible (Who? What? When? Where? Why?)
- ▣ Date and time of the alleged offence
- ▣ Exact location (civic address, distance from nearest intersection, nearby geographic features)
- ▣ Names and contact information for complainant, witnesses, suspected dumper
- ▣ Vehicle description and plate number
- ▣ Description of dumped materials and size of dump

Field Investigation

The following are specific procedures for staff conducting the investigation component of an illegal dump site assessment.

- ▣ Validate and refine complaint and information
- ▣ Wear proper protective clothing
- ▣ Take photographs
- ▣ Gather material evidence. Significant items such as: paper documents, prescription containers, delivery boxes, etc.
- ▣ Secure the evidence and handle evidence carefully to protect it from damage or contamination (e.g. place in re-sealable bags).
- ▣ Label evidence with date and location
- ▣ Preserve continuity of evidence at your office by keeping it secure under lock and key
- ▣ Use evidence to locate violator and witnesses
- ▣ Interview complainant and witnesses and obtain statements

If Perpetrator IS Identified: No Punitive Action - Persuade person verbally or by letter to clean up the dumpsite. (This approach works in a large majority of cases.)

Provide the person with a detailed cleanup form. This is a form that outlines the type and quantity of material the person has to clean up. The form is to be handed in at the scale house and signed off by the Scale Operator. The person is provided a copy and a copy is sent to the waste management staff. This ensures the material was not only cleaned, but was received at the appropriate disposal location.

If Perpetrator IS Identified: Options for Punitive Action

1. Write a written cleanup order accompanied by an administrative Bylaw Ticket
2. Municipality can clean up the illegal dumpsite and invoice the dumper for costs
3. Prosecution through Summary Offense Ticket (SOT) or Long Form Information

If Perpetrator IS NOT Identified - In All Cases: Municipalities may choose not to clean up the illegal dumpsite. Municipalities can forward the case to NSE for a cleanup order to the property owner under the NS Environment Act.

Conducting a thorough site assessment is not only important, but crucial to the success of the process. These assessments aid in prioritizing sites for clean up, and provide information on how to approach the cleanup.

Initial Steps Before Beginning A Site Assessment:

1. Determine property ownership. This will require research of maps and deed information.
2. Obtain property owner's permission to access property. While this may not always be possible, common sense should be used to determine if there will be resistance to having a site assessed. Generally, sites located in wooded areas away from populated areas should not result in any objection from the owner; if the owner can be located. It is also advisable to determine who has the legal right to venture on these properties, (i.e. Bylaw Enforcement Officer, NS Environment Inspector) and request their presence for the site assessment.

Who Should Conduct a Site Assessment?

While anyone can conduct a site assessment, it is recommended that the lead person have formal training. Hazards to human health, asbestos, sharps and various chemicals can be encountered during a site assessment. Due to the potential hazards, it is essential that a safe work practice for site investigations be written and followed as part of the municipality's Occupational Health and Safety program.

If legal action is required, ensuring proper investigation techniques were used by the lead assessor could be a factor in determining the successful outcome of a court case/trial.

What Should Be Included In The Site Assessment?

Utilizing a global positioning system (GPS) can be helpful when recording information at an illegal dumpsite location. The map of the site location should be accurate and transferable to others who require the information, such as contractors hired to clean up the site. It will also ensure that all property owners impacted by the dumpsite will be identified and notified.

Data should be collected in a methodical way, recording all elements present in the site as well as estimated quantities.

SAFETY FIRST! Equipment should include:

**Rubber Gloves
(cut resistant)**



Safety Vests



Coveralls



**Protective Eyewear
(optional)**



Respirators (optional)



Steel Toe Boots

**Recommended Tetanus
& Hepatitis Shots**



If possible having someone with you when investigating sites (Buddy System) is recommended. Illegal Dumping Sites tend to be on embankments and in isolated areas where an injury could happen. Hunter orange clothing is also recommended during hunting seasons and when working in the woods.

For the purpose of prioritization the following are the classifications to be considered.



Environmental/Health Sensitivities: These sites are chosen based on their threat to environment/health:

- near water or actually immersed in water presenting a clear environmental risk
- contamination containing asbestos or other hazardous wastes
- threat to wildlife
- threat to land and/or air

It's important to note that under the Emergency Spill Regulations for the Province of Nova Scotia, there are reporting requirements regarding the unauthorized release of hazardous substances. (Please refer to **Emergency Spill Regulation for Nova Scotia.**)

Potential for Volunteer Clean Up:

Volunteers can help clean up illegal dumpsites that have a manageable quantity of material with no asbestos or hazardous material. They can clean up the safe material in the site and leave any hazardous material for trained professionals to remove.

Inaccessible to Volunteers:

Sites that are large in size and contain heavy materials that would be beyond volunteer capability and would need to be removed by heavy equipment. In some cases, only portions of a site need to be categorized as inaccessible to volunteers.

Community Esthetics:

Sites that are in close proximity to residential and business areas, parks, beaches or tourist attractions.

SITE DOCUMENTATION

Photographs:

Documenting site information should include pictures. Photos should be labeled & include the date, time & site location for identification purposes. This type of documentation is an essential tool for creating an effective strategy as well as a useful enforcement tool. Pictures provide concrete and detailed information about sites that may be missed during initial site assessment. Pictures allow for closer examination by people responsible for the cleanup & provide evidence for enforcement.

Maintaining Permanent Records:

No matter what level of data collection is undertaken, it is important to maintain accurate records. Each site should have a separate file for hard copy documentation. These records should be stored in a safe place for use in future work.



A detailed cleanup plan should be developed. The plan should include the cleanup process, removal of materials, & preventative steps to avoid recontamination in the future.



PARTICIPANTS

Selecting Participants:

Who will be involved in the cleanup? Will you use experienced employees, enthusiastic volunteers, or both? You will need to weigh the pros and cons of each. Use the following checklist as a reference to engage local resources and to determine who you will recruit to participate and at what level. Each cleanup should be characterized individually.

In-Kind Participation:

If site conditions are not dangerous recruiting volunteers is a great way to keep budgets down. You may wish to begin with "internal" volunteers, such as the private landowner, his/her family, and local residents of the area, as well as your own organization. To recruit "external" volunteers you should know the resources in the area. Obtain a list of local clubs and organizations with contact information for the surrounding areas.

Size of Illegal Dumpsite:

The size of the site will determine an approximate number of participants required. As you contact people, be sure to add them to your participant checklist and do a running total so as not to end up with too many people with too few tasks.

You may choose to use avenues other than calling or writing to organizations to request assistance. For example, the local newspaper may offer you free advertising space to recruit assistance for your cleanup. A detailed list of options for participants is listed at the bottom of this page.

Preparing a professional Volunteer Application, (which can be filled out at any time) is a great way to keep track of interested volunteers. Having a volunteer database makes it easier to match people with projects depending on their capabilities and time availability.

PARTICIPANTS CHECKLIST

- Private landowners
- Community Groups
- Agencies
- Businesses
- Law Enforcement Officials
- Waste Haulers
- Landfill Operators
- Residents
- Neighborhood Organizations
- Youth Groups
- Governmental Organizations
- Correctional Programs
- Public Works and/or Highway Agencies
- Media
- Other

SERVICES/EQUIPMENT: Determine what services these key people are willing to contribute. This information can be added to your checklist under Level of Involvement. You will need to prepare an Equipment Checklist. Any equipment that has not been provided "in kind" will need to be budgeted.

Equipment needs would have been established after your site assessment was completed. In coordinating the site cleanup you need to ensure funds (i.e. your project budget) will allow for some equipment rentals, should in-kind contributions be unavailable or unable to provide for all the cleanup requirements.



Media Involvement: Local media will often publicise an illegal dumpsite clean up with pictures and a story of community involvement. Reporters often like to print positive stories of community involvement like this, which provides free publicity for a great cause.

Timing: You will need to determine when the best time to initiate your cleanup & how that will affect your project budget. August may be the best time to clean up a particular property. However, if you may only access the property in April, (which may be a particularly wet month and cause difficulty accessing the property) you may need additional assistance or equipment.

FACTORS TO CONSIDER:

- Weather conditions
- Hunting season (hunter orange clothing is necessary)
- Time of year
- Public perception/profile of particular site
- Recently used or continually used site
- Accessibility of site
- Hazards/safety concerns
- Quantity of materials
- Availability of funding
- Food/Snacks for staff
- Other (specify)

EQUIPMENT CHECKLIST

- Containers for collection/ segregation of materials (dumpsters, barrels, crates)
- Industrial rakes
- Nifty nibblers or long-handled litter (suitable for lighter materials/objects)
- Garbage bags (size, purpose)
- Hard hats
- Gloves - Chemical resistant nitrile gloves if necessary, standard work gloves, tear resistant gloves for injury prevention due to sharp objects
- Shovels (length should be suited to individuals in order to prevent back injury)
- Chemical resistant suits/ outerwear
- Safety vests
- Safety glasses/goggles
- Heavy equipment needs
- Miscellaneous vehicles
- Coveralls/overalls
- Steel toe boots
- Other (specify)

COSTS

Cleanup costs for illegal dumpsites will vary from site to site. Variables that should be considered when estimating the cost to clean up an illegal dumpsite include:

- site size
- type and size of materials found
- distance to transport materials to licensed disposal sites
- equipment and vehicle rental requirements
- tipping fee rate at licensed disposal sites
- estimated number of truck loads it will take to clean site
- staffing requirement
- number of days it will take
- source separation requirements
- site accessibility may be a factor in determining equipment

The above will assist in estimating costs when applying for funding assistance.



Budget Expenses To Consider:

1. Administration Costs - staff time required to coordinate program, including:
 - Receiving and tracking site details
 - Travel time
 - Site assessment/site audits
 - Coordination of cleanup - with contractor or volunteers
 - Follow-up site visits (installation of signs, updated photos)
 - Reporting and tracking
2. Vehicle and/or Equipment Rental fees
 - Surveillance Equipment/camera
 - GPS
3. Approvals or permits required to conduct the cleanup
4. Environmental Hazards: contaminated soils, hazardous wastes
5. Contractor Costs: labour, equipment and transportation
6. Disposal Costs: tipping fees, source-separation fees
7. Snacks/Lunch for clean up crew

Funding Options:

There are many funding resources available to assist with the clean up of an illegal dumpsite. Three popular funding sources include:

RRFB Nova Scotia - Municipal Approved Programs Funding

www.rrfb.com

Nova Scotia Environment- Youth Conservation Corp

www.gov.ns.ca/nse/youth/

Environment Canada-Community Programs Resource Materials

www.ns.ec.gc.ca/community/



Services/Equipment

Monitoring and compliance should be included in an illegal dumping strategy. It is recommended that the municipality or community develop a monitoring and compliance plan to assist in combating illegal dumping. Once a site has been cleaned up, this strategy can be implemented to make sure the site remains clean.

Reporting Procedure

A consistent reporting procedure should be developed. This information is important in order to keep track of how active the site may be for dumping activities. Steps can be taken to monitor sites that tend to receive the most activity, such as the purchase of wireless motion sensors.

NOTICE

THIS SITE WAS CLEANED UP BY THE PICTOU COUNTY SOLID WASTE MANAGEMENT SYSTEM.

IT WILL NOW BE MONITORED FOR ILLEGAL DUMPING.

COSTS FOR CLEANUP AS WELL AS FINES MAY APPLY TO PERSONS CAUGHT DUMPING.

IF YOU SEE ANYONE DUMPING PLEASE NOTIFY THE LOCAL RCMP OR CALL 396-5062

Provincial & Municipal Law

Regulations in place to support the efforts to prosecute illegal dumping:

- Environment Act
- MGA Part XV - Dangerous and Unightly Premises
- Solid Waste Resource Management Regulations
- Municipal Bylaws (individually created)

Prosecution - Community Support

Prosecution of illegal dumping offenders is only possible when there is evidence to support the claim. A witness who can link an individual to the offense by pictures or video-taping the activity taking place will support the claim. Some municipalities may have Bylaws allowing prosecution based on names found on paper evidence. Public participation is necessary to gather evidence in order to **STOP** the illegal dumping from taking place. "Neighborhood Watch" groups and "Neighborhood Associations" play vital roles. If identification of an illegal dumper is found with a particular dumpsite, continued investigation takes place and the offender is pursued. Proper waste disposal is part of every citizen's responsibility and paying for proper disposal goes hand in hand with that responsibility.



THIS SITE IS BEING MONITORED FOR ILLEGAL DUMPING

Education and communication are important tools when developing an illegal dumping program strategy. Ongoing communication of initiatives being taken and preventative measures being used are significant in addressing illegal dumping activity. The strategy should identify the following:

Prevention

Toll-Free Tip Line
 Rewards for Tips
 Summary Offense Tickets (SOT)
 Surveillance Cameras
 Signage
 Community Watch
 Additional Lighting
 Gating Properties
 Advertising Incidents and Actions

Outreach Tools

Newsletters
 Brochures
 Monthly bulletins
 Community Presentations
 Flyers
 Radio
 Television
 Community Cable TV
 Website
 Signage

Target Audience

Adults
 Children
 Young Adults (Teenagers)
 Community Groups
 Other stakeholders



EDUCATION MESSAGES

The health risks associated with illegal dumping are significant. Illegal dumpsites can be easily accessible to children, who are especially vulnerable to protruding nails, broken glass, sharp edges, harmful fluids, dust, etc. Rodents, insects and other vermin are often attracted to dumpsites and can also pose health risks. In addition, dumpsites can catch fire, either by spontaneous combustion or by human involvement, causing property damage, injury, and forest fires. Dumping can impact water run-off. This runoff may contain chemicals and other materials that may contaminate surface and groundwater. These sites can also negatively impact the habitats of native plants and wildlife. These sites are also an eye sore to the communities and people who live near them.

When developing educational campaigns it is helpful to focus on specific issues of concern that several target audiences can relate to. Key issues associated with illegal dumping include:

1. Dumping is harmful to the environment - water contamination, land-user injuries
2. Decrease of property values
3. Materials dumped are often eligible for curbside collection or have minimal tipping fee

Contact Information, Acknowledgements & Other References

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The provincial Illegal Dumping Clean Up Guide has been prepared as a resource guide for municipalities and was completely funded by RRFB Nova Scotia.

There are a number of valuable websites and solid waste-resource contacts in Nova Scotia. The following websites will direct you to those resources.

Solid Waste Association of North American - Atlantic Chapter: **www.atcanswana.org**

Nova Scotia Environment (NSE): **www.gov.ns.ca/nse**

ACAP Cape Breton: **www.acapcb.ns.ca**

Clean Nova Scotia: **www.clean.ns.ca**

RRFB: **www.rrfb.com**



Dedication

This work has been graciously dedicated in memory of two past committee members, Mike Leblanc (Department of Environment) and Stuart Grue (RRFB Nova Scotia). We hope they would have been proud of this final product.



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