

COMMUNICATION AND PUBLIC CONSULTATION FOR BIOSOLIDS MANAGEMENT

A BEST PRACTICE BY THE NATIONAL GUIDE TO
SUSTAINABLE MUNICIPAL INFRASTRUCTURE

National Guide
to Sustainable
Municipal
Infrastructure



Guide national pour
des infrastructures
municipales
durables

Canada

NRC · CNRC



Communication and Public Consultation for Biosolids Management

Version No. 1.0

Publication Date: January 28, 2005

© 2004 Federation of Canadian Municipalities and National Research Council

ISBN 1-897094-xx-x

The contents of this publication are presented in good faith and are intended as general guidance on matters of interest only. The publisher, the authors and the organizations to which the authors belong make no representations or warranties, either express or implied, as to the completeness or accuracy of the contents. All information is presented on the condition that the persons receiving it will make their own determinations as to the suitability of using the information for their own purposes and on the understanding that the information is not a substitute for specific technical or professional advice or services. In no event will the publisher, the authors or the organizations to which the authors belong, be responsible or liable for damages of any nature or kind whatsoever resulting from the use of, or reliance on, the contents of this publication.

TABLE OF CONTENTS

Introduction	iii
Acknowledgements	v
Executive Summary	ix
1. General	1
1.1. Introduction	1
1.2. Purpose and Scope	1
1.3. How to Use this Document	2
1.4. Glossary.....	2
2. Rationale	5
2.1. Background	5
2.2. Risks and Benefits	6
3. Methodology	7
3.1. General	7
3.2. Building the Communications Team	8
3.2.1. Decision-Making.....	8
3.3. Developing a Strategy	8
3.3.1. Situation Analysis.....	9
3.3.2. Communications Objectives	10
3.3.3. Stakeholder Identification	11
3.3.4. Strategic Approach	13
3.3.5. Messaging	15
3.4. Devising the Activity Work Plan	16
3.4.1. Choosing Communications Tools and Tactics.....	17
3.5. Evaluation.....	18
3.5.1. Test Strategy and Tools	18
3.5.2. Test Progress Against Objectives	18
4. Implementation	20
4.1. General	21
4.1.1. Work at the Local Level	21
4.1.2. Build Public Relationships	21
4.1.3. If Yours is a Small Municipality.....	23
4.2. Putting your Strategy into Practice.....	23
4.2.1. Do You Need a Visioning Workshop?	23
4.2.2. Forming an Advisory Committee.....	24
4.2.3. Media Relations	26
4.2.4. Developing Questions and Answers (or FAQ - Frequently Asked Questions)	27
5. Evaluation	28

Appendix A: Communications Tools and Tactics..... 31
Appendix B: Communicating Risk..... 35
References..... 37

Figures:

Figure 4-1: Success – Step by Step..... 22

Tables:

Table 4-1: Potential Biosolids Stakeholders..... 11

INTRODUCTION

INFRAGUIDE – INNOVATION AND BEST PRACTICES

Why Canada Needs InfraGuide

Canadian municipalities spend \$12 to \$15 billion annually on infrastructure but it never seems to be enough. Existing infrastructure is ageing while demand grows for more and better roads, and improved water and sewer systems. Municipalities must provide these services to satisfy higher standards for safety, health and environmental protection as well as population growth. The solution is to change the way we plan, design and manage infrastructure. Only by doing so can municipalities meet new demands within a fiscally responsible and environmentally sustainable framework, while preserving our quality of life.

This is what the National Guide to Sustainable Municipal Infrastructure: Innovations and Best Practices (InfraGuide) seeks to accomplish.

In 2001, the federal government, through its Infrastructure Canada Program (IC) and the National Research Council (NRC), joined forces with the Federation of Canadian Municipalities (FCM) to create the National Guide to Sustainable Municipal Infrastructure (InfraGuide). InfraGuide is both a new, national network of people and a growing collection of published best practice documents for use by decision-makers and technical personnel in the public and private sectors. Based on Canadian experience and research, the reports set out the best practices to support sustainable municipal infrastructure decisions and actions in six key areas: municipal roads and sidewalks, potable water, storm and wastewater, decision making and investment planning, environmental protocols, and transit. The best practices are available on-line and in hard copy.

A KNOWLEDGE NETWORK OF EXCELLENCE

InfraGuide is made possible through \$12.5 million from Infrastructure Canada, in-kind contributions from various facets of the industry, technical resources, the collaborative effort of municipal practitioners, researchers and other experts, and a host of volunteers throughout the country. By gathering and synthesizing the best Canadian experience and knowledge, InfraGuide helps municipalities get the maximum return on every dollar they spend on infrastructure—while being mindful of the social and environmental implications of their decisions.

Volunteer technical committees and working groups—with the assistance of consultants and other stakeholders—are responsible for the research and publication of the best practices. This is a system of shared knowledge, shared responsibility and shared benefits. We urge you to become a part of the InfraGuide Network of Excellence. Whether you are a municipal plant operator, a planner or a municipal councillor, your input is critical to the quality of our work.

Please join us.

Contact InfraGuide toll-free at **1-866-330-3350** or visit our Web site at www.infraguide.ca for more information. We look forward to working with you.

ACKNOWLEDGEMENTS

The dedication of individuals who volunteered their time and expertise in the interest of the *National Guide to Sustainable Municipal Infrastructure (InfraGuide)* is acknowledged and much appreciated.

This Best Practice was developed by stakeholders from Canadian municipalities and specialists from across Canada based on information from a scan of municipal practices and an extensive literature review. The following members of InfraGuide's Storm and Wastewater Technical Committee provided guidance and direction in the development of this best practice. They were assisted by InfraGuide Directorate staff, by R. V. Anderson Associates Limited and Adhawk Communications.

André Aubin	Associate Director, City of Montréal, Quebec
Richard Bonin	Communauté urbaine de Québec, Quebec
David Calam	Director, City of Regina, Saskatchewan
Kulvinder Dhillon	Nova Scotia Utility and Review Board, Halifax, Nova Scotia
Tom Field	Delcan Corporation, New Westminster, British Columbia
Wayne Green	Green Management Inc, Mississauga, Ontario
John Hodgson, Chair	City of Edmonton, Alberta
Claude Ouimette	OMI Canada Inc, Fort Saskatchewan, Alberta
Peter Seto	Environment Canada — Urban Water Management, National Water Research Institute (Environment Canada), Burlington, Ontario
Timothy A. Toole	Town of Midland, Ontario
Bilgin Buberoglu	Technical Advisor, National Research Council Canada, Ottawa, Ontario

In addition, the Storm and Wastewater Technical Committee would like to express its sincere appreciation to the following individuals and institution for their participation in working groups and for their support.

Tom Field, Chair	Delcan Corporation, Vancouver, British Columbia
Conrad Allain	Greater Moncton Sewage Commission, Moncton, New Brunswick
Jerry Cheshuk	Resort Municipality of Whistler, British Columbia
Robin Forest	City of Montréal, Quebec
Tony Ho	Ontario Ministry of Environment, Toronto, Ontario
Jacqueline Malboeuf	Consultant, Ottawa, Ontario
Alan Newcombe	EarthTech, City of Kelowna, British Columbia
Kiyoshi Oka	Regional Municipality of Halton, Oakville, Ontario
Ted Tatem	Formerly with the City of Calgary (retired), Calgary, Alberta

The Committee would also like to thank the following individuals for their participation in the review of the best practice.

Elmer Bittner	City of Edmonton, Alberta
Catherine Clement	City of Vancouver, British Columbia
Gary Manson	District of Maple Ridge, British Columbia
Dale Synnett-Caron	Natural Resources Canada, Ottawa, Ontario

This and other best practices could not have been developed without the leadership and guidance of the InfraGuide Governing Council, the Relationship Infrastructure Committee and the Municipal Infrastructure Committee, whose members are as follows.

Governing Council:

Joe Augé	Government of the Northwest Territories, Yellowknife, Northwest Territories
Mike Badham	City of Regina, Saskatchewan
Sherif Barakat	National Research Council Canada, Ottawa, Ontario
Brock Carlton	Federation of Canadian Municipalities, Ottawa, Ontario

Jim D’Orazio	Greater Toronto Sewer and Watermain Contractors Association, Toronto, Ontario
Douglas P. Floyd	Delcan Corporation, Toronto, Ontario
Derm Flynn	Town of Appleton, Newfoundland and Labrador
John Hodgson	City of Edmonton, Alberta
Joan Lougheed	Councillor, City of Burlington, Ontario
Saeed Mirza	McGill University, Montréal, Quebec
Umendra Mital	City of Surrey, British Columbia
René Morency	Régie des installations olympiques Montréal, Quebec
Vaughn Paul	First Nations (Alberta) Technical Services Advisory Group, Edmonton, Alberta
Ric Robertshaw	Public Works, Region of Peel, Brampton, Ontario
Dave Rudberg	City of Vancouver, British Columbia
Van Simonson	City of Saskatoon, Saskatchewan
Basil Stewart, Mayor	City of Summerside, Prince Edward Island
Serge Thériault	Government of New Brunswick, Fredericton, New Brunswick
Tony Varriano	Infrastructure Canada, Ottawa, Ontario
Alec Waters	Alberta Infrastructure Department, Edmonton, Alberta
Wally Wells	The Wells Infrastructure Group Inc. Toronto, Ontario

Municipal Infrastructure Committee:

Al Cepas	City of Edmonton, Alberta
Wayne Green	Green Management Inc, Mississauga, Ontario
Haseen Khan	Government of Newfoundland and Labrador St. John's, Newfoundland and Labrador
Ed S. Kovacs	City of Cambridge, Ontario
Saeed Mirza	McGill University, Montréal, Quebec
Umendra Mital	City of Surrey, British Columbia
Carl Yates	Halifax Regional Water Commission, Halifax, Nova Scotia

Relationship Infrastructure Committee:

Geoff Greenough	City of Moncton, New Brunswick
Joan Lougheed	City Councillor, Burlington, Ontario
Osama Moselhi	Concordia University, Montréal, Quebec
Anne-Marie Parent	Parent Latreille and Associates, Montréal, Quebec
Konrad Siu	City of Edmonton, Alberta
Wally Wells	The Wells Infrastructure Group Inc. Toronto, Ontario

Founding Member:

Canadian Public Works Association (CPWA)

EXECUTIVE SUMMARY

Biosolids are the solid by-products of wastewater treatment plants. Their re-use as fertilizer or fuel is a source of public concern. Despite that, a January 2003 InfraGuide survey revealed that 60 per cent of municipalities have no biosolids communications strategy. This best practice is a guide for municipalities—large or small—for creating such a strategy. It is equally useful for municipalities planning a biosolids management program as it is for those that already have a program in place.

Including the public as a partner in your biosolids management program builds trust and contributes to the program's success. However, successful partnerships are achieved by *building public relationships*, not *doing public relations*. The best municipal communication and public consultation programs are based on a foundation of five principles:

- Trust
- Quality of information (knowledge)
- Communications (courtesy)
- Fairness (justice)
- Commitment (respect)

Biosolids public consultation should not be an isolated undertaking. It is most effective as part of overall public stewardship related to health and the environment. A good communication and public consultation program can build a foundation for improved trust, respect and dialogue between the municipality and the public.

Best practices for communication and public consultation in biosolids management programs include:

- a commitment to including the public in the full decision-making process
- a skilled and focused communications team
- consultation with provincially mandated advisers and authorities such as health and environmental officers, and with the academic community
- soliciting the support of Municipal Council
- soliciting the cooperation of other departments or branches such as the solid waste division

The steps taken to create an effective communication and public consultation program include:

Situation analysis: Start by taking an inventory of the situation. Identify the real issues within the context of past events and future plans. Know your strengths and weaknesses. Identify all stakeholders.

Identification of communication objectives: What do you want to achieve as a result of this communications strategy? Can it be quantified?

Strategic approach: How can you state your position in a way that makes sense to stakeholders?

Communications tools and tactics and work plan: What are the best tools to deliver your message? How will you pull it all together? Determine what you can accomplish within the constraints of available time, staff and money.

Program evaluation: Continually evaluate your program against communications objectives - even after the program is up and running.

1. GENERAL

1.1. INTRODUCTION

Biosolids are the processed solid by-products of wastewater treatment plants. They can be recycled as fertilizer or fuel. Many municipalities apply biosolids on land but there are other alternatives to land application such as incineration or landfilling.

Because biosolids derive from wastewater, public concern and interest in their use or disposal is often high. A communication and public consultation program that includes the public as partners in biosolids decisions can do much to allay such concerns. However, a January 2003 scan of municipalities revealed that 60 per cent had no strategy for communicating their biosolids management practices to the public and involving them in the program. Half of the respondents thought that such a communication strategy was important.

When the public is not included in biosolids decisions, municipalities are more likely to meet resistance. Community consultation has the opposite effect. Consultation gives the public a greater understanding of the issues, encourages discussion and involves people in a collaborative process. Consequently, the public will feel greater trust and ownership of the decisions made.

Done at its best, public consultation should be a process of developing *public relationships*, not *public relations*. Public relations exercises such as poorly publicized open houses and scant advertising do not build trust.

1.2. PURPOSE AND SCOPE

For those who are embarking on a biosolids program, this best practice offers practical guidelines for establishing an effective relationship with the public around biosolids management. For those who have a program in place, it offers a useful reference point.

What are municipalities *required to do*? Currently the only legislated requirement for interaction with the public on biosolids is during a provincial or federal environmental assessment. This is usually done at the planning stage. (**Note:** Municipalities considering a total quality management approach based on environmental management systems per the National Biosolids Partnership or ISO 14001 are required to consult the public before implementing a biosolids program.)

What *should* municipalities do? Every municipality, large or small, rural or urban, will benefit when taxpayers know the real cost of dealing with waste. The biosolids-recycling alternative should be presented in the context of overall community health and environmental responsibility.

1.3. HOW TO USE THIS DOCUMENT

This best practice is divided into the following sections:

Rationale: What is a public relationship program and why you need one. Benefits and risks of action and inaction are discussed.

Methodology: How to design the program; what pitfalls to avoid—what you should be doing at each stage (planning, development and delivery).

Implementation: Rolling out the program.

Evaluation: What is the public response? Do people understand the issues? Could you make improvements?

1.4. GLOSSARY

Beneficial use (of biosolids) — Taking advantage of the nutrient content and soil conditioning properties of a biosolids product to supply some or all of the fertilizer needs for an agricultural crop or for stabilizing vegetative cover (in land reclamation, silviculture, landfill cover or similar ventures); or using the biosolids as a fuel source

Biosolids — A primarily organic product produced by wastewater treatment processes. This solid or semi-solid residue is a by-product of domestic sewage treated in a sewage/wastewater facility. (Such facilities may also receive a commercial and industrial component.) Biosolids must meet regulations of the jurisdiction where they are produced and/or applied. Requirements may include pollutant concentration, pathogen reduction and vector-attraction reduction criteria.

Generating community — The community that produces biosolids at its wastewater treatment plant(s).

Hazard — Environmental or health danger, peril or exposure that could cause loss or injury.

Municipality — A legally incorporated or duly authorized association of inhabitants of limited area for local governmental or other public purposes, and for the purposes of this best practice, includes any village, town, township, city, regional municipality, borough or county.

Planning — The establishment of goals, policies and procedures for a social or economic unit

Private/corporate — Members of the business community.

Public — All those community members who are not political representatives or public service staff.

Public consultation — Two-way information exchange between the municipal government and the public before decisions are made. It is an open and accountable procedure whereby individuals and groups can participate in the decision-making process and influence the outcomes.

Recipient community — Any community that receives biosolids generated by another municipality.

Recycle — To process so that basic raw material may be used again, e.g., to treat wastewater to meet standards for safe re-use.

Risk — The combination of the probability and severity of impact of a particular circumstance on an organization.

Risk Assessment — The analysis of the severity of the potential loss and the probability that the loss will occur, leading to quantification of impacts.

Risk management — The collective assessment of risks and management actions taken to address them.

Stakeholders — All those who have an interest in a particular decision or action, either as individuals or as a group. This includes people who can influence a decision as well as those affected by the decision.

2. RATIONALE

2.1. BACKGROUND

The Water Environment Federation (WEF) defines biosolids as “primarily organic solid products, produced by wastewater treatment processes, that can be beneficially recycled”. Biosolids recycling has been practised successfully in North America and Europe for several decades. Although agricultural applications are the best known use of biosolids, they can also be used for fuel and to produce such products as compost and soil.

When applied on agricultural land, biosolids return valuable nutrients such as nitrogen, phosphorus, potassium and sulphur to the soil, as well as restoring organic content lost through erosion or cultivation and harvesting. To ensure public health and ecosystem safety, it is essential that both the product and its application meet the highest standards.

People who know little about biosolids recycling are less likely to support it. A 2002 U.S. national survey found that people supported “wastewater treatment” but were uneasy about “biosolids recycling” because they couldn’t accurately assess true risks. Respondents were most likely to trust knowledgeable and objective sources—government agencies, researchers and academia—for this information.

Few knew what “biosolids” were; only 2.5% could define the word. When asked about the acceptability of a neighbour using biosolids, 44% thought it would be acceptable. When asked about the acceptability of a neighbour using sewage sludge, acceptance dropped to 32% and negative response increased from 34% to 43%. (2002 Biosolids Knowledge and Perception Survey, University of New Hampshire Survey Center, February 2002)

In Canada, incidents such as the contamination of the Walkerton water supply have sensitized the public to potential risk. There is also concern about potential presence of heavy metals and pathogens in wastewater as well as aesthetic concerns about odour. Municipal biosolids recycling programs must take these concerns seriously.

Communicating risk is more difficult than addressing conflicts or public disagreements. The public may feel that they have no control over risks, no knowledge of how to control these risks and insufficient information to measure the degree of risk. For these reasons, a comprehensive communications program that includes education, public awareness and consultation is a vital part of developing an effective biosolids management program.

2.2. RISKS AND BENEFITS

The public needs to see well-documented evidence establishing the level of risk and the advantages of beneficial uses of biosolids to support a program. Factors that can *increase* public concern include biosolids originating from other municipalities as well as industrial wastewater. Factors that can *decrease* public concern include certification of staff and applications, accreditation of facilities, regular and visible monitoring and advising the public of program details on an ongoing basis (e.g., prior to spreading biosolids).

Municipalities that see a communication and public consultation program as an opportunity to “tell people what is good for them” instead of an opportunity to share information and forge a common objective are more likely to meet public resistance. When this happens, the probability of negative outcomes such as political failure of the initiative; loss of public trust in local government and conflict between urban and rural communities increase. Municipalities that cannot recycle biosolids may suffer increased costs in the form of plant expansion or contracting to send biosolids to landfill. Potential biosolids users also lose a source of inexpensive fertilizer or soil amendments.

When public consultation is done right, the municipality will enjoy a better relationship with the community and all the benefits that shared responsibility for social, health and environmental issues bring.

If the public accepts the program and biosolids are recycled, potential benefits can include:

- safe and economical disposal of a waste
- responsible management of a resource
- return of valuable nutrients and organic material to the soil

3. METHODOLOGY

3.1. GENERAL

This section details the components of a communication and public consultation program for biosolids. The next section, Implementation, demonstrates how to put these components to work.

Public consultation is a collaborative process involving the municipality (generating and recipient) and all stakeholders, including potential users of biosolids. Where biosolids are used in agriculture, the requirements of customers and end-users may need to be considered.

The extent of the consultation and the methods used depend on the size and nature of the community, the size and complexity of the biosolids program, the end product, the end-use, available funds and previous history of controversy, if any.

Communications *campaigns* are usually seen as having “a beginning, a middle and an end.” However, it is essential to continue communicating with the public after the biosolids management program is implemented to ensure that the public relationships you have worked so hard to build are maintained. (Communications professionals use the word *campaign* to summarize all the steps required to plan and implement a communications program. In this best practice, we will refer to it as a communication and public consultation program.)

The program typically includes these steps:

- Building the communications team
- Analysing the situation
- Developing a strategic approach
- Devising the work plan
- Implementing the work plan
- Evaluating results and renewing public relationships

3.2. BUILDING THE COMMUNICATIONS TEAM

The communications team plans and implements the communication and public consultation program. As such, it requires members who have communications expertise and are supported by management. Smaller municipalities may have only one staff member to take on the responsibility. Larger municipalities may have a department of communications professionals to lead the program. In either case, you may require additional design, editorial, communications or market research professionals to assist you.

Whether the program is led by a staff member (either biosolids program staff or communications staff) or a consultant, the project requires a coordinator. This person will manage the program, ensure team members and stakeholders are kept informed, handle the logistics of public meetings and advertising, document progress, and depending on the municipality's policy, act as the single point of contact for internal and external liaison.

3.2.1. DECISION-MAKING

Part of building the communications team is understanding the decision-making process. For instance, what is the timeframe for the municipality to assess the biosolids process and management alternatives? When will the report be tabled at the committee and at Council? Who will make the final decision of which option to adopt? When will the program begin if it is approved?

The final decision often rests with elected representatives. It is important, therefore, to involve councillors from the start. Does the biosolids management program have Council support? Who are the program's champions inside and outside municipal government? Do Council members have all the information they need to support the communication and public consultation program?

3.3. DEVELOPING A STRATEGY

It is easy to arrive at the right destination when you know where you are going, why you are going there and whom you are going with. The communications strategy directs the program and includes:

- Situation analysis
- Communications objectives
- Stakeholder identification
- Strategic approach
- Messaging

- Communication tools and tactics
- Evaluation

3.3.1. SITUATION ANALYSIS

Also known as an *environmental scan* or *gap analysis*, the situation analysis establishes the “here and now”. It helps the team get to the heart of the problem or opportunity, to recognize the real issue and then come up with a strategic approach to address the situation. Too often, people identify issues and act without fully considering the circumstances around the issue. The result may be a flurry of brochures or advertisements that may not address the real issue or be directed to the wrong audience.

A good situation analysis digs deep into the issue and defines the variables that influence opinion, behaviour and outcomes. Tools for doing so include research, surveys, SWOT analysis (strengths, weaknesses, opportunities and threats) and interviews. In the context of biosolids, a situation analysis should include examination of the history of the wastewater treatment plant, its future expansion and upgrading plans, media coverage on biosolids, as well as previous programs’ successes and failures. It should take into consideration the various audiences and address elements such as the source of the wastewater treated at the plant, the generating and recipient communities, the end product and the end-use.

Following are two examples of a situation analysis framework:

a. Identification of issues or challenges

Begin with basic research about trends in biosolids and wastewater treatment—you need all the facts about your subject and your audience. Who knows about biosolids? Who needs to know and why? What do they believe? How did we get to where we are? Where are we going? Analyze how the public develops knowledge and understanding and how conflict does or might develop. Often, if you persist, you will learn more about the public’s point of view and the public will come to understand yours.

Try to focus on issues or challenges of the project or what you think are issues. Examples of biosolids issues can include:

- The wastewater at the plant comes from municipalities outside our borders.
- We have received complaints of odour at application sites.
- There are strong advocates in our community.
- There is a strong perception in our community that biosolids have health impacts.

It helps to predict both the potential “fall-out” from an issue and the possible ways to mitigate their negative effects.

Most people know little about biosolids; what they do know is often negative. Even if biosolids handling methods are changed to mitigate a problem you must listen to and validate public concerns, provide objective information to as many as possible and be prepared for criticism. The earlier you engage the public in discussions and decisions regarding the economical and environmentally responsible disposal of waste, the more constructive the process will be.

b. Strengths, weaknesses, opportunities and threats (SWOT)

SWOT analysis is a systematic way to itemize the internal and external factors influencing the biosolids program’s success. Examples of **internal** influences include the biosolids product, the municipality’s finances and political constraints. Examples of **external** influences include public opinion, social trends and ecological impacts.

For example, your SWOT chart might look like this:

Strength: strong community associations in recipient community; municipal staff is qualified; the municipality has a number of water environment protection programs

Weakness: insufficient funds to implement further treatment of biosolids

Opportunity: turfgrass sod industry shows interest in using biosolids

Threat: previous history of biosolids use without consultation caused opposition

However you analyse the situation, your goal is to uncover all the challenges you will face, to understand the local history of the issue and related attitudes, and to know the players (including those who will be most affected). It is your job to ensure that your strategic approach addresses these challenges.

3.3.2. COMMUNICATIONS OBJECTIVES

The situation analysis often suggests possible communications objectives. What do you seek to accomplish as a result of your communications program? The objectives should be measurable, realistic and achievable.

Examples of communications objectives might include:

- achieving positive changes in public opinion based on media coverage or decrease of neighbour complaints
- increased public participation in the consultation process
- increased demand for recycled biosolids from farmers or other users

- increased awareness of the municipality's role in protecting the water environment

It is only when you know your communications objectives that you can identify a proper approach to realizing them. Revisit objectives periodically to see whether they need to be updated in the light of new information or experience.

3.3.3. STAKEHOLDER IDENTIFICATION

Stakeholders are the people interested in or affected by the biosolids program. Most stakeholders will be identified during the situation analysis but it is worth casting your net wide to avoid missing anyone. It is especially important to include from the start all communities that send their wastewater to your plant as well as the receiving communities, the end-user and the customers if any.

Your communications plan should rank the audiences based on your communications objectives. The list should be inclusive and should break stakeholder groups down into the smallest segment possible. That way, you will not forget anyone and your program can be targeted for greatest effect.

It is impossible to prescribe a standard list because each municipality has unique needs and publics. Use the following table as a starting point.

Table 4–1: Potential Biosolids Stakeholders

STAKEHOLDER	DEFINITION	EXAMPLES
Community elected officials	Elected officials in the community generating the biosolids, the communities where the wastewater comes from and the communities receiving biosolids	Mayor, councillors, trustees
Municipal staff	Municipal staff/departments from the generating and receiving communities involved in or affected by the biosolids program	Municipal Health Department; Environment; Transportation/Public Works; Facility Operations
Regulatory agencies	Recognized regulatory agencies that have jurisdiction over or involvement in the program	Environment, Health, Agriculture, Natural Resources, Transportation, Canadian Food Inspection Agency
Community associations, lobby groups	Groups in the generating and receiving community	Public interest groups; rate payers associations; economic development organizations; chambers of commerce
Property owners/tenants (in the vicinity of the plant)	All property tenants and owners near the wastewater treatment plant in the generating community	Homeowners; landowners; lease holders; farmers (non-users)
Property owners/tenants (near application sites)	All property tenants and owners near biosolids application sites	Homeowners, landowners, neighbours, farmers (non-users)

STAKEHOLDER	DEFINITION	EXAMPLES
End-users	Any business or individual who may use biosolids, possibly also their clients	Farmers and agricultural organizations, nurseries, sod farms, landscapers, land reclamation site owners, individuals
Contractors	Any business or individuals whose services have been retained by the municipality to perform any part of the biosolids management program	Haulers, spreaders, the land application management firm
Resource groups	Those that could provide assistance with technical information or for research	University representation, technical associations
Environmental groups	Groups who by their mandate are involved in the preservation of the environment or wildlife	Watershed groups incl. conservation authorities; environmental stewardship groups (Ducks Unlimited, Trout Unlimited); wildlife protection groups; forestry associations
Recreational groups	Associations or clubs whose primary interest is recreational activities	Anglers, hunters and their clubs and associations
Outside communities	Communities outside the generating community that could be affected by any part of the program—primarily residents in recipient communities. Also includes communities that haul their wastewater to your plant.	Residents near facilities or application sites; residents along principal transportation routes; elected officials in recipient communities; businesses in recipient communities; communities that haul their wastewater to other municipalities
Media	Members of the local and national media	Newspapers (including community newspapers), radio and television stations, magazines, web sites
Businesses	Businesses affected by any part of the program, including those adjacent to facilities or application sites	Businesses near biosolids facilities or end-use locations; food processing industries; fertilizer manufacturers/suppliers
Places of congregation	Places where people congregate or work on a regular basis that are close to biosolids facilities or to application areas	Schools, places of worship, hospitals, prisons, parks and recreational areas
Emergency services	Local or provincial organizations with emergency response jurisdiction	Police, fire, ambulance
Public	Other public members not included above	Taxpayers

3.3.4. STRATEGIC APPROACH

Strategic communications methods range from the very direct (for example, enlisting of public support for an advisory committee) to targeted (for example, delivering brochures to specific neighbourhoods, holding open houses or briefing councillors one on one) and to less targeted (for example, informing the public via the mass media).

Depending on the issues and challenges, your municipality will choose one or more communications approaches to reach stakeholders. Some approaches will be used for some but not all phases of the program. Refer to **Appendix A** for suggested tools and tactics for the various approaches.

Public awareness is the background against which the program will be implemented. Awareness strategies provide the public with the information they need to understand biosolids issues in general and the municipality's biosolids program in particular. An informed public makes informed decisions. Public awareness/education components should increase the public's knowledge of the health, environmental, economic and technical issues relating to wastewater, stormwater, surface water quality and waste management in general. The awareness campaign may extend beyond the actual education and decision-making stages to include periodic reporting back to the community.

Social marketing components actively seek to change public behaviour based on increased knowledge of the issues. For example, a door-to-door canvass that demonstrates the effects of flushing toxic substances down the toilet and encourages people not to do so is a social marketing campaign.

Public consultation sets a framework for stakeholder participation in the design of programs and solutions. Components include creating formal and informal opportunities to tell the public about biosolids and to hear suggestions for how this product can be beneficially used or disposed of. (If an environmental assessment is required, public consultation is mandatory.) It also includes consulting with the research community. The public awareness process will be addressed to as many people as possible, whereas the consultation program might limit the number of people and will select representatives based on how the public will be affected by the biosolids program.

The final form of the biosolids program will be developed based on input from this public consultation process and parallel examinations by municipal standing committees, the municipal council and provincial authorities.

Successful public consultation builds a foundation for future collaboration. This success depends on a genuine sharing of power and responsibility.

Public consultation can take the form of public meetings, outreach or workshops. It should be linked clearly to decision-making. Decisions made through public consultation might include:

- developing measures to manage, minimize or mitigate concerns identified during the consultation process
- developing compromises that are acceptable to all stakeholders
- identification of technology options for the wastewater treatment plant
- selection of screening and evaluation criteria
- evaluation and selection of the preferred options
- revision of technical submissions, proposals and bids
- identification of communications tools and activities
- going with the program/going with conditions/not going

Media relations is the process of working with reporters, editors, publishers and producers of publications, radio and television to inform the public about your program. Managing the media to deliver *your* message is easier said than done. If your municipality doesn't have a media relations or communications officer on staff, you may wish to engage a media relations consultant to help you with a media plan and to package your story for best effect. Refer to section 4.2.3 for a list of guidelines for working with the media.

Council relations is the process of working with the elected officials in the development of your program. Don't wait too long to get elected officials in the loop. Councillors are not just a court of last resort; they are a valuable conduit to their constituents. Best practices include:

- doing face-to-face briefings
- conducting tours of the facilities
- seeking a council champion

Whether it's through the communications person, the biosolids program staff or the contractor, explain early and often what the program is all about, what has been happening, current status and so forth. Be clear about the associated risks and benefits. Make sure you include rural councillors at all stages. Be prepared for Council and committee meetings. Ensure that council has the best information—in advance—to make the best decision.

Community relations is the process of developing and nurturing partnerships. The stronger your partnerships with the community—and the stronger their reciprocal trust—the more options you will have to discuss, experiment with and adjust the biosolids program. Fine-tune and target your messaging for maximum effect. Although it is hard to resist, do not spend the majority of your time and money attempting to win over a vocal minority. Make it your job to find out what the majority believe but pay special attention to those who are caught at the centre of the controversy—for example farmers under fire although they are using best practices or householders worried about property values. Be on the lookout for friends—government agencies that may be of assistance, champion councillors and others.

Issues management starts with a list of issues that have been or will be addressed. Which issues are important to the community? An example of an issue is a complaint from a resident that the biosolids are spread too close to his or her property. In response, the municipality could extend the minimum distance between the application site and residences beyond that mandated by legislation. As a communicator, you would ensure this is included in fact sheets, correspondence to elected officials, etc.

Issues management components mobilize expert resources to inform the debate and to direct the flow of information to the public to increase knowledge and build trust. Strategies can include developing a communications contingency plan or a rapid response protocol for cases such as spills or non-compliance by the contractor. See **Appendix B** for information on communicating risk.

A separate issues-management plan may be needed for public meetings and council meetings. Your plan should detail who will present what information, what questions may be posed and their answers, what expert resources are required, who will speak to the media, what information will be given to the media and what information councillors require to be prepared.

3.3.5. MESSAGING

Positioning statement

Once you have developed your communications objectives, determined who is your prime audience and what communications approach(es) you will use, your program requires one clear and simple positioning statement such as “We are committed to recycling biosolids in a safe and sustainable manner.” This does not need to be a catchy slogan but it needs to state the program’s goal. The positioning statement guides all aspects of communications. It is supported by key messages.

Key Messages

Key messages interpret the positioning statement for different audiences. Write a one- or two-sentence message that communicates each objective to each stakeholder. The content of the message would depend on your communications objectives, your communications approach and who your target audience is. A message might work for one audience but not for another. It all depends on what their *issue* is.

Examples of messages:

- To ensure the quality and safety of biosolids, the treatment process is regularly monitored as well as the program itself.
- Application of biosolids on land has been practised for over 75 years. In that time there have been no documented cases whereby biosolids have been identified as the cause of any illness.

3.4. DEVISING THE ACTIVITY WORK PLAN

The activity work plan details how you will achieve your communications objectives and deliver your messages. The components include tools, tactics, scheduling and costs. The best tools are those that:

- improve public knowledge
- build public relationships
- earn trust

Which tools are right for you will depend on which strategic communications approach(es) you decided to use and your municipality's budget and resources. For municipalities with a modest consultation budget, the work plan can set priorities and milestones for each phase and set conditions (such as funding) for proceeding to the next phase.

Your worksheet should include:

- Issues (from the situation analysis compiled earlier)
- Objectives
- Stakeholders: who they are for each issue
- Messages: a one or two-sentence message for each objective or stakeholder
- Media/timing: list the tools and tactics (the vehicles) that will be employed along with timelines and responsibilities

- Resources needed (budget, people)
- Potential problems (any roadblocks you can think of)
- Measurement: plan assessment methods

3.4.1 CHOOSING COMMUNICATIONS TOOLS AND TACTICS

“Tools and tactics” are products and actions you can use for communication and consultation, such as brochures, letters to the editor, news articles, TV spots, radio talk shows, inquiry hotline, tours, briefings, Q&As (Questions and Answers), open houses and neighbourhood or community advisory groups. Choose the tools that build relationships. Tools that put you in direct personal contact with stakeholders are the most effective. See **Appendix A** for suggested tools.

Public awareness tools and tactics include fact sheets, ecotours of the wastewater treatment plant, communications about surface water quality programs (industrial wastewater/sewer use by-law, water conservation, run-off prevention), guides or kits for schools, etc.

Social marketing tools and tactics include canvasses, demonstrations for potential users, giveaways that demonstrate pollution prevention and/or conservation, audits and follow-ups to confirm compliance and understanding.

Public consultation tools and tactics include forming advisory committees, visioning exercises, open houses, advertising, public meetings and a telephone line, among many others.

Media relations tools and tactics include news releases, backgrounders, fact sheets, biographies, FAQs (Frequently Asked Questions), articles, media tours or op-ed pieces.

Council tools and tactics include briefing materials such as fact sheets, reports or case studies, testimonials, presentations or tours.

Issues management tools and tactics include technical papers, media briefings, council briefings, business community briefings, issues matrix, Q&As for spokesperson, quick response plan, example of case studies, briefing on previous research papers.

3.5. EVALUATION

3.5.1. TEST STRATEGY AND TOOLS

As the strategy takes shape, some municipalities use focus testing as a “reality check” to make sure that messaging, objectives and stakeholder identification are on target. Formal focus testing assembles a group of people (usually randomly selected but representative of the target group) in a neutral setting to view materials or evaluate ideas, which are presented in an objective manner by a facilitator. Informal focus testing may involve presenting the materials in a community centre to local representatives, program participants or even passers-by. The results of the latter “straw vote” methodology are frequently very close to those from a formal focus test.

3.5.2. TEST PROGRESS AGAINST OBJECTIVES

At least once a year, program effectiveness should be evaluated against objectives. Should the program be falling short, reassessment is required. Are the objectives realistic? Has the situation changed? Are stakeholders—all of them—involved in a genuine partnership? The results of such evaluation should be reported to Council and made public. Municipalities that do not have a trained communications person should consider hiring external help for this.

Following are examples of ways success can be evaluated:

Attendance at public meetings — Has there been broad representation of the various stakeholder groups?

Feedback from meetings — Has there been active participation? Did the provided information satisfy questions and concerns? Ask the participants to complete a feedback form and offer various ways to return it (leave after meeting, fax, email).

Questionnaire — A small questionnaire can be sent out to representatives from the various stakeholder groups during various stages of the biosolids program planning. The questionnaire should take a maximum of five minutes to complete. Consideration should be given to making the questionnaire web based or returnable via e-mail.

Inquiries/Complaints log — A record of the inquiries and complaints received should be maintained and compared to previous years. Are the numbers increasing or decreasing? Are complaints being forwarded to that person/number? Have councillors received complaints?

Media monitoring — Have there been any negative articles in the media? Have reporters called for interviews prior to publishing an article to provide biosolids management staff with a chance “to set the record straight?” Have there been any positive articles? Is the coverage fair? Did the media call the key spokesperson for clarifications? How is the relationship “municipality/media”?

Product usage — Has there been increased uptake of biosolids by users? In the case of more processed products (e.g., pellets or compost) has there been an increase in demand? Has the customer base increased?

Hotline — What type and number of inquiries are being received?

Web site — How many hits are being recorded on the web site?

Public opinion — Conduct short interviews from stakeholder meetings or public meetings — polling members of the public on their way out of the building to provide another opportunity for comment.

4. IMPLEMENTATION

4.1. GENERAL

4.1.1. WORK AT THE LOCAL LEVEL

Without public acceptance, your biosolids program is at risk of failure. Acceptance is best achieved through honest collaboration with the public and other stakeholders. Lack of public support can quickly corrode your efforts. Use this best practice as a guide for navigating the waters of public opinion but do so with an eye to what is best for your community. Take the time to watch, listen and learn.

Assess your existing programs (both the communications and biosolids programs) with respect to public perception and participation as well as their impact on the community. You have to know where you are, what you are doing right, what has been happening over the years and what you could improve. Imagine how your project is experienced by others (e.g., neighbours, local political leadership). What do you communicate to the public? How? When? What are your key messages? Invite meaningful public input in decisions. The better your lines of communication with the community, the more relevant your program will be.

Develop an ethic for continual improvement. Demonstrate compliance, use best practices, apply due diligence, customize your program according to your community, listen to your critics. Ensure quality of information.

Use environmental management system (EMS) methodology to formalize the process of continual improvement in environmental performance by implementing a “Plan-Do-Check-Review” approach.

Choose tools that improve perceptions, build public relationships, earn trust and encourage participation.

4.1.2. BUILD PUBLIC RELATIONSHIPS

Your communication and public consultation program should aim to build relationships, not to bend the public to your point of view. Here are some tips to keep in mind when you are designing your program:

Trust

- Engage neighbours and involve the public and key stakeholders early on.
- Quality of information (knowledge).
- Provide a variety of sources of independent information.

Communications (courtesy)

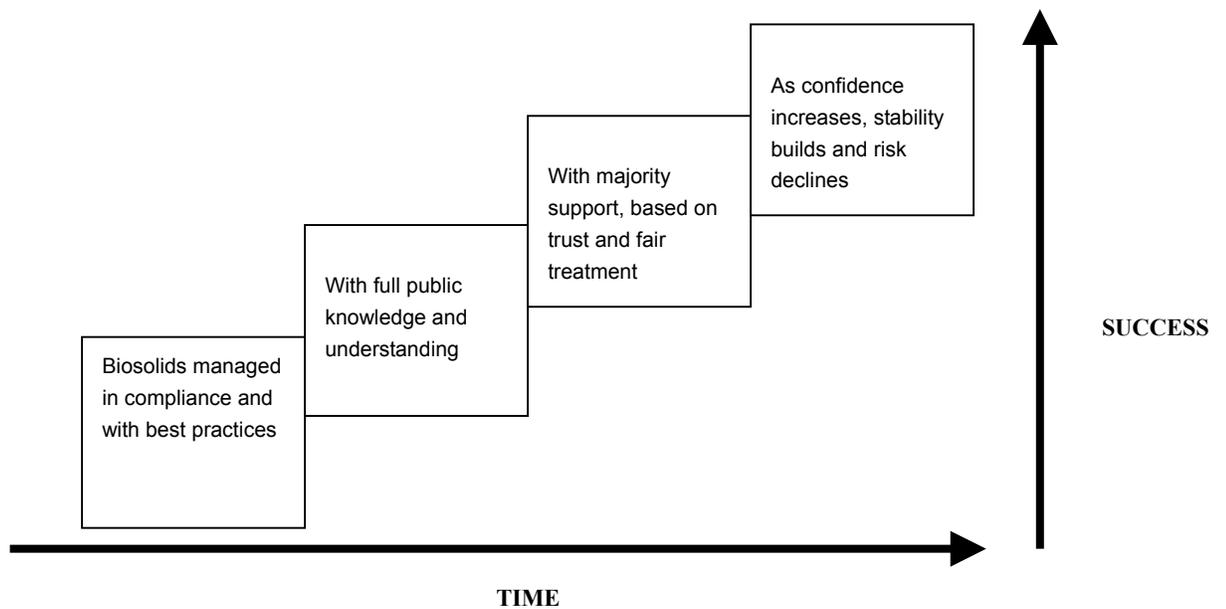
- Are clear and factual terms used to convey your information?
- Who will be speaking for your program?
- Does this person have technical knowledge and interpersonal skills to communicate to a diverse population of stakeholders?

Fairness (justice)

- Facilitate fair and honest information sharing guided, in part, by the stakeholders.
- Involve neighbours and communities in ensuring adequate management and monitoring so that they are comfortable that all is being done right.

Commitment (respect)

- Someone in your organization must have the responsibility and the resources (including funding and strong upper management support) to ensure that all of these things happen.
- Continue to work with the community throughout operations.
- As success develops, your biosolids program's stability will increase and its vulnerability will decrease.

Figure 4-1: Success — Step by Step

Adapted from Hartley, Troy W. - Framework for Public Perception and Participation

4.1.3. IF YOURS IS A SMALL MUNICIPALITY

Municipalities with limited resources and staff can benefit from this best practice. Even if all the tools and tactics cannot be implemented, smaller municipalities can create successful partnerships. Choose the tools and tactics that put you in closest contact with the public. For example, a well-publicized workshop is more effective than a printed brochure. Get help from community associations, farm federations and environmental organizations to address the challenge. Ask the right questions and take a collaborative approach:

Good approach — What is the best, most economic and environmentally sound way for our community to deal with biosolids?

Not so good approach — How can we talk the public into accepting our biosolids plan with minimum fuss?

4.2. PUTTING YOUR STRATEGY INTO PRACTICE

Even if your communication and public consultation is based on meetings and face-to-face contact, you will require printed materials and possibly a web site to support your activities. Where funds allow (and if you do not have the resources in-house), it is best to contract a professional communications or social marketing company to package your program (graphic design, copywriting and supervision of manufacturing). Remember that design, printing, web programming and manufacturing take time. Start early, determine who is responsible for approvals and stick to your deadlines to get your materials in time. In some cases, you may be able to share the cost of such tools with municipalities embarking on similar projects or adapt materials from other municipalities (with their approval) to meet your needs, thus saving costs.

Note: The communication and public consultation program can continue even when the biosolids program is in place. The public needs assurance that the program is managed competently. For example, a biosolids telephone line can continue to be active and neighbours should continue to be advised when biosolids are to be spread.

4.2.1. DO YOU NEED A VISIONING WORKSHOP?

Not every public consultation includes a visioning workshop but it is a useful tool in a community that has not worked together before (or that might have a history of conflicting values).

The visioning workshop can be an opportunity for all parties—biosolids program staff, communications staff, stakeholders, regulatory authorities and technical advisers—to meet. It might be part of a larger environmental/health awareness program or be a simple biosolids project-launch meeting. Visioning workshops are best led by an experienced facilitator. The facilitator may be a consultant or a volunteer from a neutral organization either within the community or from the outside. A good facilitator must be effective at drawing feedback out of participants, involving everyone in the discussions, and helping the group to reach consensus.

The agenda for a visioning workshop can include:

- Introduction of the biosolids project
- Discussion of the issues brought to light by the situation analysis
- Discussion of the desired outcomes of the project
- Identification of obstacles to success
- Development of a mission statement and guiding principles for the project

4.2.2. FORMING AN ADVISORY COMMITTEE

Whether the consultation takes the form of a door-to-door canvass, public meetings or an Internet discussion forum, most municipalities convene a voluntary stakeholder advisory committee. This committee contributes technical expertise, community experience and local knowledge.

Volunteers have limited time. You can help the committee meet its objectives by doing some of the legwork—for example writing terms of reference, and defining the committee’s role, meeting schedule and any procedural rules for their review and comment. Ensure that committee members (and all stakeholders) are given advance information to optimize meeting time.

- Decide on composition of membership, political involvement, ex-officio presence, etc. (The person in charge of the communications program for the municipality should be a member.)
- Identify and contact members. (Publish an advertisement asking for interested parties to submit their resume and a letter stating why they are interested.)
- Develop the terms of reference (mandate and guidelines) for the committee. (This should be confirmed by the committee when formed.)

- You might select a facilitator for each meeting (could be a member of the committee).
- Decide on number of meetings.
- Set goals and priorities.
- Develop and execute a plan of action.
- Evaluate continuously.

Stakeholders need access to information to make an informed contribution. A tour of the wastewater treatment plant could be on the first meeting agenda. Information provided may be about:

- Wastewater treatment and biosolids production processes
- Plant capacity, waste disposal options and biosolids program history
- Sewer-use by-law programs
- Other municipalities' biosolids programs
- The municipality's environmental protection programs
- Public health protection and safety issues

Committee activities may include any or all of the following:

- Presentations and discussion on regulatory aspects
- Presentations on the issues and concerns for biosolids and particularly on those that affect the generating and recipient municipalities
- Presentations and discussions on the technical options and potential end-uses, including advantages and disadvantages for each one
- Development of evaluation criteria, weightings and scoring protocol
- Participation in evaluation and short listing of options
- Participation in the selection of the preferred alternative(s)
- Participation in the development and dissemination of the communications tools
- Participation in the program evaluation
- Participation in the presentation of the program to Council

It is advisable to agree upon a decision making/conflict resolution process at the beginning of the stakeholder committee process. It is important to take note of all public comments at public meetings and to ensure there is follow through within minutes of meetings. Develop a response plan to address concerns.

4.2.3. MEDIA RELATIONS

Skilled media relations requires training and experience. These guidelines are from the Water Environment Federation:

- Build credibility by being open, accessible, honest and accurate
- Be prepared and respect reporters' deadlines
- Provide background material for complex issues
- Follow up on articles with praise or suggestions
- Get to know reporters before you need one
- Make sure that the information that you provide is accurate so that they can be accurate in what they report

Know beforehand:

- Who is the reporter?
- What is his/her reputation for fairness?
- What is the news peg (subject matter, angle, audience)?
- What other elements are being included in the story?
- Why is the story being done at this time?
- Is anyone else being interviewed? Who? Why?
- When is the deadline and when will it be aired? (Radio and television have different requirements and deadlines than the press does.)

When you do get an interview, keep these guidelines in mind:

- *Appoint a spokesperson* who is knowledgeable and a good communicator. Every spokesperson should have some training as this can be quite challenging for inexperienced persons. Larger municipalities may have special spokespersons for specific issues.
- Find out the reason for the interview. Try to find out how much the reporter knows about the topic before the interview; gather background material that will be helpful. How much do they know about the biosolids program?

- Find out how much time you will have to explain the information (this is less an issue for a print media interview).
- Prepare your material in advance. Have three or four key messages in addition to the background material. Think through a logical information sequence— what, when, where, how, how much.
- If the topic is controversial apply the risk communications rules (see Appendix B) when preparing and delivering the messages. Keep in mind what the “opposition” is saying.
- Remember that you are the spokesperson or voice of the organization; avoid putting your personal viewpoints forward.

4.2.4. DEVELOPING QUESTIONS AND ANSWERS (OR FAQs – FREQUENTLY ASKED QUESTIONS)

You might prepare for the media and for other stakeholders sheets containing the questions and answers which illuminate the issues and are commonly asked. Not to be confused with internal Questions and Answers tools which are for in-house consumption only. You can refer to the sets in the Water Environment Association of Ontario video, entitled *The Nature of Biosolids*. It is available as a public education tool for municipalities with biosolids programs.

For example, your questions and answers tools can address:

- Who is in charge of and responsible for the biosolids process?
- What is the process?
- Who is being included in the consultation process?
- Why recycling is being proposed?
- What is the cost of recycling biosolids compared to other management practices such as landfilling?
- What biosolids recycling hopes to achieve?
- How the responsible organization is addressing concerns related to biosolids recycling?
- Where will biosolids recycling take place?
- Whether pollutants in the biosolids renders them hazardous.
- What information there is on benefits and risks of biosolids beneficial use?
- What are the potential benefits (environmental and economic) of biosolids recycling?

5. EVALUATION

Throughout the implementation of your communication public consultation program and at all your milestones, test your results against your strategic objectives. Most importantly:

Are you building public relationships or just doing public relations? Building relationships by being in direct personal contact with stakeholders, engaging neighbours, involving the public and key stakeholders early on and conveying information in clear, factual terms is the key. Continuously evaluate your program for:

- Trust
- Quality information (knowledge)
- Communication (courtesy)
- Fairness (justice)
- Commitment (respect)

The communication and public consultation strategy and plan should identify ways to measure success (Refer to section 3.5.2).

APPENDIX A: COMMUNICATIONS TOOLS AND TACTICS

TOOL	DESCRIPTION/ PROPERTIES	AIM	APPLICABILITY
Information Distribution and Exchange			
Advertising	<ul style="list-style-type: none"> • Technique for reaching a broader audience • Newspapers, radio or television advertisements • Notice of project start, meetings, public consultation exercises, public open houses, etc. 	<ul style="list-style-type: none"> • Could invite stakeholder input • Provides continued awareness throughout the program. 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities • Advertisements in community newspapers are effective.
Collateral materials, fact sheets, brochures, newsletters, CDs/DVDs, videos	<ul style="list-style-type: none"> • Provides a summary of the process, program, issues and benefits • Content, style, frequency and length to meet the needs of the reader • Example: Fact sheets on Beneficial Use of Biosolids, Nutrients in Biosolids, etc. 	<ul style="list-style-type: none"> • Could invite stakeholder input • Provides continued awareness throughout the program • Helps to educate the stakeholders 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities • Elected officials and staff
Hot line	<ul style="list-style-type: none"> • A widely advertised toll free telephone service • A convenient form of participation for those not inclined to public forms of communication 	<ul style="list-style-type: none"> • Could invite stakeholder input • Provides continued awareness throughout the program 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities
Media advisories, Public Service Announcement and Media releases	<ul style="list-style-type: none"> • A media advisory is a short text to the media inviting them to an upcoming event, meeting or announcement. • A Public Service Announcement is usually short and is used by the media to inform the public of an event or an important message. • A media release gives details to the media of the meeting or announcement that just occurred. • All above vehicles may result in media coverage. 	<ul style="list-style-type: none"> • Can be used to stimulate interest • Could invite stakeholder input • Provides continued awareness throughout the program • Provides assurance that the municipality is not trying to hide anything. • Helps to educate the stakeholders 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities
Public meeting	<ul style="list-style-type: none"> • May be part of a consultation program • Group gatherings to discuss an issue, exchange views and generate output • May be used in response to an important event or issue • Consider the use of a facilitator 	<ul style="list-style-type: none"> • Opportunity for information exchange and feedback 	Easily implemented in smaller communities

TOOL	DESCRIPTION/ PROPERTIES	AIM	APPLICABILITY
Report	<ul style="list-style-type: none"> Provides a detailed description or analysis Outlines options and their impacts Describes community feedback received Good for relaying detailed technical information Can be made available on the web site, public libraries and at municipal offices 	<ul style="list-style-type: none"> Provides continued awareness throughout the program Helps to educate the stakeholders Provides an analysis of the issues Identifies concerns/issues 	<ul style="list-style-type: none"> Effective in both large and small urban and rural communities Elected officials and municipal staff
Web list serv	<ul style="list-style-type: none"> May be part of a consultation program A convenient form of participation for those not inclined to public forms of communication 	<ul style="list-style-type: none"> Opportunity for information exchange and feedback 	Effective in both large and small urban and rural communities
Web site	<ul style="list-style-type: none"> Technique for reaching a broader audience Provides a summary of the process, program, issues and benefits Ideal for time-sensitive information such as notice for meetings, public consultation, public open houses 	<ul style="list-style-type: none"> Potential for interactive features (surveying etc.) Could invite stakeholder input Provides continued awareness throughout the program Helps to educate the stakeholders 	<ul style="list-style-type: none"> Effective in both large and small urban and rural communities Elected officials and municipal staff
Workshop	<ul style="list-style-type: none"> Group gatherings to discuss an issue, exchange views and generate output Work in a series of small groups then meet as a whole to discuss and pool ideas 	<ul style="list-style-type: none"> Helps to educate the stakeholders Helps in decision-making Develops scenarios Potential for achieving a consensus Opportunity for getting feedback 	Effective in both large and small urban and rural communities
Issues Management			
Corporate and program visual identity	<ul style="list-style-type: none"> A common look and feel for all communications materials Use appropriate language for the audience 	<ul style="list-style-type: none"> Presents a united front Consistency Adds to the organization's credibility 	Effective in both large and small urban and rural communities
Briefing	<ul style="list-style-type: none"> Useful to inform individuals or groups face-to-face Can be preceded by a briefing paper Terminology should be adjusted to the audience 	<ul style="list-style-type: none"> Could invite stakeholder input Provides continued awareness throughout the program Helps to educate the stakeholders 	Elected officials and municipal staff
Issues tracking table	<ul style="list-style-type: none"> Useful to keep track of issues/complaints and how they are addressed 	<ul style="list-style-type: none"> Provides assurance that all issues are being addressed 	Municipal staff and elected officials

TOOL	DESCRIPTION/ PROPERTIES	AIM	APPLICABILITY
Issues/position paper	<ul style="list-style-type: none"> • A paper that presents a position on a topic or issue supported by research or if applicable by other existing examples or programs • Provides an initial summary of the program or issue and the effects on those involved • Should clearly attribute the background and source of the paper 	<ul style="list-style-type: none"> • Provides continued awareness throughout the program. • Helps to educate the stakeholders • Provides an analysis of the issues 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities • Effective tool for briefing elected officials or stakeholders • Can be widely distributed
Information Distribution			
Corporate and program visual identity	<ul style="list-style-type: none"> • Creates a common look for all communications • Use appropriate language for the audience (i.e. technical terminology) 	<ul style="list-style-type: none"> • Presents a united front • Consistency • Adds to the organization's credibility 	<ul style="list-style-type: none"> • Effective for any size municipality, urban or rural communities
Report	<ul style="list-style-type: none"> • Provides detailed description or analysis • Outlines options and their impacts • Describes processes undertaken and community feedback received • Good for relaying detailed technical information 	<ul style="list-style-type: none"> • Provides continued awareness throughout the program. • Helps to educate the stakeholders • Provides an analysis of the issues • Identifies concerns/issues 	<ul style="list-style-type: none"> • Effective for any size municipality, urban or rural communities • Can be made available on a web site, public libraries and at municipal offices
Advertising	<ul style="list-style-type: none"> • Placed in newspapers, on the radio or television. • Can target particular groups • Technique for reaching a broader audience • Notice of project, notice for meetings, public consultation, public open houses and information centres 	<ul style="list-style-type: none"> • Could invite stakeholder input • Provides continued awareness throughout the program. 	<ul style="list-style-type: none"> • Potential for reaching the silent majority • Reach stakeholders easily in rural communities (through local newspapers)
Collateral materials, fact sheets, brochures, newsletters, CDs/DVDs, videos	<ul style="list-style-type: none"> • Provides a summary of the process, program, issues and benefits • Content, style, frequency and length to meet the needs of the reader • Example: "The Nature of Biosolids" video/DVD 	<ul style="list-style-type: none"> • Could invite stakeholder input • Provides continued awareness throughout the program. • Helps to educate the stakeholders 	<ul style="list-style-type: none"> • Effective in both large and small urban and rural communities • Elected officials and staff
Web site	<ul style="list-style-type: none"> • Technique for reaching a broader audience • Provides a summary of the process, program, issues and benefits • Ideal for time-sensitive information such as notice for meetings, public consultation, public open houses 	<ul style="list-style-type: none"> • Potential for interactive features (surveying etc.) • Could invite stakeholder input • Provide continued awareness throughout the program. • Helps to educate the stakeholders 	<ul style="list-style-type: none"> • Ideal for all municipalities, especially those with sparse populations

APPENDIX B: COMMUNICATING RISK

“There is a fundamental and permanent divide between the way risk assessment experts present risk information ... and the way in which most members of the public think about risk issues. And this divide is not going to go away” Dr. William Leiss.

Risk communication is the process of communicating responsibly and effectively the risk factors associated with industrial technologies, natural hazards and human activities. These communication responsibilities arise for those who oversee public health and environmental management for technologies, natural hazards (including diseases), wildlife, natural habitat management, and public health.

The following seven principles of risk communication were adopted by the US Environmental Protection Agency in the late 1980s:

Rule 1: Accept and involve the public as a legitimate partner

The public has a right to participate in decisions that affect their lives, property and things of value. Demonstrate sincerity and respect for the public by involving them in advance of important decisions. Show that quality of life as well as magnitude of risk are considered important. For example, although there is no documented scientific evidence of health impacts from biosolids, it is recognized that their odour negatively affects quality of life.

Rule 2: Plan carefully and evaluate performance

Risk communication strategies should be tailored for your different goals, audiences and media. For instance, if you are to address a town hall meeting in a recipient municipality, there should be health and science experts present – in the audience or on the panel – who can validate what is said or answer queries. The experts must be credible, authoritative and comfortable in explaining the technical material. Be aware of the various sub-groups in your audience and begin with clear objectives. Wherever possible, test your messages beforehand.

Rule 3: Listen to your audience

If you do not listen to what the people are saying, they will not listen to your message. People relate better to trust, credibility, control, benefits, competence, empathy, courtesy and compassion, than to mortality statistics or risk assessment numbers. Do not assume you know what people think. Elicit their opinions and concerns through interviews, focus groups and surveys. Respect people’s emotions and empathize with them by demonstrating that you understand what they said. Recognize hidden agendas and political considerations, which can complicate risk communication.

Rule 4: Be honest frank and open

Trust and credibility are the two biggest assets when communicating risk information. They are difficult to obtain and, once lost, are almost impossible to regain. Disclose risk information as soon as possible and do not minimize or exaggerate the level of risk. Discuss data uncertainties, strengths and weaknesses—including the ones identified by other credible sources and critics. If you do not know the answer, tell the public when and how you will get back to them with answers. *Do not speculate. If you must, do so with great caution.*

Rule 5: Coordinate and collaborate with other credible sources

Few things make risk communication more difficult than conflicts or public disagreements with other credible sources. Be sure to resolve all conflicts before each appearance. Try to issue communications jointly with other trustworthy sources. Devote some effort to building bridges with other organizations.

Rule 6: Meet the media's needs

The news media are the prime transmitters of risk communications. They tend to focus on polarized and emotional factors such as uncertainty (related to biosolids and water re-use), dreaded events (such as cancer in children) and risks to future generations (such as endocrine disruptors). Be open and accessible with reporters and respect their deadlines. Prepare up to three key messages in advance and tailor them to each medium.

Rule 7: Speak clearly and with compassion

Technical language and jargon are barriers to communicating successfully. For example, learn how to explain parts per billion in plain English. Your responsibility is to explain the relevance of risk numbers in relationship to easily understood concepts to achieve an appropriate level of concern. Be sensitive to local norms and use simple non-technical language. Never let your efforts to inform people about risks prevent you from acknowledging—and saying—that any illness, injury or death is a tragedy. Acknowledge and respond to the emotions that people express. Always include a discussion of actions that are underway or that can be taken.

REFERENCES

This list of documents and web sites have either been used as sources of material included in the main text of the Best Practice or were accessed during general research on the topic. They are listed here because of their usefulness to anyone wishing to gain more insight into public communication for biosolids management program, and associated topics.

Canadian Centre for Management Development- *Risk Management*–

<http://ccmd->

ccg.gc.ca/research/publications/html/risk_mgmt_rt/risk_mgmt_rt_5_e.html

Center for Environmental Comminations, USA 2003 presentation - *Public Perception of Biosolids Recycling and Developing Public Participation and Earning Trust*.

Covello, Vincent, Wolf S, Water Environment & Technology, January 2003, *The Seven Cardinal Rules of Risk Communication*

Hartley, Troy W. - *Framework for Public Perception and Participation* -

<http://www.dred.unh.edu/Troy.htm>

Leiss, Dr. William - *The Importance of Risk Communication* –

<http://www.leiss.ca/articles/65>

Loken, Lorraine and Kelly, Linda, 2001. *High Impact Communications for Water Environment Professionals*, Washington County, Oregon.

McLoughlin MultiMedia Publishing Ltd. – *Encountering the Media, Media Strategies and Techniques*, Ottawa, Ontario.

National Biosolids Partnership, March 2001. *Biosolids EMS Guidance Manual*, Arlington, Virginia.

National Guide to Sustainable Municipal Infrastructure, 2003. *Biosolids Management Programs Best Practice*

National Guide to Sustainable Municipal Infrastructure, 2003. *Scan Report- Biosolids Management*

Nazareth, Vincent, Kuzyk, Robert, Szoke, Nick, Oka, Kiyoshi, Barsalou, Paul, and Wilson, Steve, 2003. *Proceedings of the 2nd Canadian Organic Residuals Recycling Conference*, “A Tale of Two Cities – Toronto and Winnipeg: Public Participation in Biosolids Management Planning”, Canada.

R.V. Anderson Associates Limited, 2003. *Toronto Biosolids Beneficial Use Program Community Outreach*, Toronto, Ontario

Water Environment Association of Ontario 2003 - *The Nature of Biosolids* – video

WEF – High Impact Communications for Water Environment Professionals – Toronto, September 2001

www.biosolids.policy.net/ – sponsored by National Biosolids Partnership, USA.

www.nebiosolids.org/ – sponsored by Northeastern Biosolids and Residual Association, USA.

www.ene.gov.on.ca – Ontario Ministry of Environment (MOE) website.

www.omafra.gov.on.ca – Ontario Ministry of Agriculture and Food (OMAF) website.

www.city.ottawa.on.ca/city_services/waterwaste/27_2_6en.html – sponsored by the City of Ottawa.

www.epa.gov/waterscience/biosolids - sponsored by US Environmental Protection Agency, Office of Water.

www.nebiosolids.org/werf