



Canadian Fertilizer
Products Forum

Forum Canadien sur
les produits fertilisants



WORKING GROUP REPORT ON

BIOSOLIDS PRODUCTS



Prepared for the
**Canadian Fertilizer
Products Forum**





THE CANADIAN FERTILIZER PRODUCTS FORUM

The Canadian Fertilizer Products Forum (CFPF) was launched in the fall of 2006 to provide a forum for stakeholder input into the regulatory process for fertilizers and supplements. The CFPF brings together producer groups, industry representatives, non-governmental organizations and regulatory officials from across the country to provide recommendations to improve the regulatory system.

The CFPF recognizes that fertilizers and supplements are the most important crop input. Agricultural producers in Canada spend about \$3 billion on fertilizers and supplements per year, more than on pesticides, seeds, fuel, or any other crop inputs.

ACKNOWLEDGEMENTS

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Agriculture and Agri-Food Canada (AAFC) is pleased to participate in this project. AAFC is committed to working with industry partners to increase public awareness of the importance of the agriculture and agri-food industry to Canada. Opinions expressed in this document are those of the Canadian Fertilizer Products Forum and not necessarily those of AAFC.



TABLE OF CONTENTS

Highlights	3
Description of Consultation Process	4
Issues Considered by WG	6
Recommendations/Options Made by Working Group (Areas of Consensus)	8
Terms of Reference	8
Mandate	9
Title change.....	10
Recommendations that Reflect Alternate Points of View	11
Biosolids Definitions Subgroup.....	11
Waste vs. Product	12
Cross-Canada Provincial Biosolids Regulations Subgroup.....	13
Recommendations in Progress to meet remaining Strategic Objectives.....	15
Other Strategic Objectives not addressed from CFPF Strategic Plan.....	16
Appendix A – Work Group Members	17
Appendix B – Key Results Area: Biosolids and Compost	20



HIGHLIGHTS

- ★ The Biosolids Products Working Group was established in March 2007, later than most other CFPF working groups.
- ★ The group was first known as the Biosolids and Compost Working Group (BCWG), changed its name in Biosolids Working Group (BWG) and changed its name again to the final Biosolids Products Working Group (BPWG) to reflect the evolution of the groups understanding of its purpose (more details below).
- ★ It took approximately 6 months (4 meetings) to establish a foundation and determine a commonly accepted Terms of Reference, Mandate and Title, the last of which was only finalized and approved in September 2007. The group also put significant effort into determining overlap issues with other groups, which had a significant impact on its development. It began to address primary issues related to its three primary areas of concern; Quality Assurance and Quality Control Information Requirements, Registration and Efficacy Requirements, Policies and Standards Harmonization, in May and June of 2007.
- ★ In June, September and October of 2007, the group established sub-groups or task committees around 3 key subjects, which have been the focus of the work of the BPWG: Biosolids Definitions (June 2007), Waste vs. Product discussion paper (September 2007) and finally a discussion paper on a cross-Canada Provincial checkup for Biosolids regulations (September 2007). This work is still “in progress”.



DESCRIPTION OF CONSULTATION PROCESS

- 2 Biosolids Products Working Group face-to-face meetings have been held (November 28, 2006 and November 29, 2006).
- 7 Biosolids Products Working Group moderated teleconference meetings have been held (March 6, 2007; April 5, 2007; May 3, 2007; June 7, 2007; September 6, 2007; October 4, 2007; November 1, 2007).
- 3 BPWG subgroups (task committees) were established on as-needed basis.
- Average attendance per BPWG meeting: 10–15 people.
- Representative BPWG Membership includes (approval body):
 - American Water Canada Corp.
 - Biosolids Committee, Water Environment Association of Ontario
 - British Columbia Ministry of Environment
 - Canadian Biosolids Partnership Coordinator, CWWA
 - Canadian Federation of Agriculture
 - Canadian Food Inspection Agency
 - Canadian Water and Wastewater Assoc. (CWWA)
 - CH2M Hill
 - Composting Council of Canada
 - Curry Jefferson & Associates Environmental Services Inc.
 - Department of Environment and Conservation, Government of Newfoundland and Labrador
 - Environment Association of Ontario
 - EPB, Saskatchewan Environment
 - Greater Moncton Sewerage Commission
 - Milorganite
 - Ministère du Développement durable, de l'Environnement et des Parcs, Québec
 - Mouvement Au Courant, Quebec
 - Nova Scotia Environment and Labour
 - Ontario Ministry of the Environment
 - Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
 - Sludge Watch
 - Water Environment Association of Ontario
 - Webber Environmental



✿ Sector summary (approximate)

- Federal Government = 2
- Provincial/Territorial Government = 7
- Municipal government = 1
- ENGO sector = 3
- Association Federal = 2
- Association Provincial = 3
- Biosolids Sector /Industry = 5

✿ 22 members (as of November 1, 2007)

✿ Representative Membership for Subgroups (proposal development level)

- ENGO sector = 2
- Biosolids Sector/Industry = 3
- Association Federal = 1
- Provincial/Territorial Government = 1
- Federal (CFIA) = 1



ISSUES CONSIDERED BY WG

- ◆ Three (3) issues were selected of highest importance to the group on an ongoing basis:
 1. Quality Assurance and Quality Control Information Requirements
 2. Registration and Efficacy Requirements
 3. Policies and Standards Harmonization

The following issues were gleaned directly from the minutes of the meetings:

From April 5, 2007:

- ◆ Overlap issues were addressed through a separate meeting of working group chairs around the 3 primary issues mentioned above. Clarity of roles was established.
- ◆ Links were established for communication between CFPF and the Working Group. CFIA actively shares information related to the three issues above (QA/AC, registration and efficacy, and policies and standards harmonization).

From May 3, 2007:

- ◆ The Draft Terms of Reference were accepted.
- ◆ The group began the process of formulating a mandate for the group.
- ◆ Members from BCWG have volunteered to sit in on other WG meetings in an effort to prevent overlap; BCWG is hoping to have someone from each of the working groups represented at the BCWG meetings as well.
- ◆ The issue of member compensation for involvement on the BPWG was addressed by the group. Individuals needing funding support were referred to CFIA to request support for involvement on an individual basis.

From June 7, 2007:

- ◆ Strategic Action Plan comments and actions were identified and amended.
- ◆ Definitions – were discussed and in progress.
- ◆ Recommendation that “compost” be removed from working group title.

From September 6, 2007:

- ◆ The group decided upon a working group Mandate.
- ◆ Waste vs. Product Subgroup Developed a Waste vs. Product perspective paper.
- ◆ The Biosolids Definitions Subgroup developed a definitions paper.
- ◆ The BPWG responded to a question about Upper limit Nutrient Variance and referred the question to CFIA.



From October 4, 2007:

- Waste vs. Product Subgroup developed a final version Waste vs. Product perspective paper pending approval.
- The Biosolids Definitions Subgroup developed a definition paper that was debated.
- A cross-Canada checkup paper to see how biosolid products are regulated provincially was started through the Cross-Canada Provincial Biosolids Regulations Subgroup.

From November 1, 2007:

- A decision/agreement was made by the group that consensus around the three proposed recommendation documents could not be reached by the current constituents of the BPWG.
- The BPWG decided to put forward ‘majority view’ recommendations to the CFPF Executive for the three issues: Waste vs. Product perspective paper; the Biosolids Definition Recommendation; and Cross-Canada checkup discussion paper.
- To ensure the ‘minority view’ was reflected in the paper, the BPWG decided to include an addendum to each recommendation document that would highlight the divergent, or ‘minority’ viewpoint.
- The ‘majority view’ in each case was reflected by 7 out of 10 perspectives at the November 1 meeting.



RECOMMENDATIONS/OPTIONS MADE BY WG (AREAS OF CONSENSUS)

Terms of Reference

Terms of Reference were identified, clarified and articulated on May 3, 2007. The Terms of Reference were described as follows:

Purpose

The Biosolids and Compost Working Group is a permanent working group of the CFPF. Its purpose is to review and discuss issues related to product quality, related quality management systems, product safety, regulatory efficiency, and the need for harmonization of federal-provincial standards, uniformity and efficacy requirements, labeling and monitoring requirements, and registration; all as specifically related to the regulation of biosolids based fertilizers, supplements and composts under the *Fertilizers Act*. These issues have been identified as areas of concern by the provinces, the generating/manufacturing community, other interest groups and the Canadian Food Inspection Agency (CFIA) in its strategic plan. The issues addressed will be those referred to the working group by the CFPF Executive Committee, or will have been raised by the Working Group itself. The findings of these reviews/discussions will be reported or forwarded on a timely basis to the CFPF Executive Committee and/or CFIA through the group's Chair or Vice-Chair.

The BCWG will also represent the interests of the provinces, the industry and other stakeholders in discussions on proposed new regulations and revisions to existing regulations under the *Fertilizer's Act* that CFIA plans to introduce, and will provide input and advice to the federal government acting as the sounding board to CFIA. The BCWG will work closely with the Canadian Water and Wastewater Association (CWWA) as the clearinghouse for national biosolids issues through the proposed Canadian Biosolids Partnership to ensure harmonization of federal and provincial legislation with respect to biosolids; and the Canadian Compost Council with respect to compost issues.

Membership

The working group will be from both biosolids and composting communities and will operate under the direction of a Chair appointed by the CFPF Executive Committee and a Vice-Chair selected from the general membership. There will also be at least 13 additional members consisting of at least one member of the CFPF Executive Committee and at least 12 members that provide both a provincial and national regulatory perspective.

Members should have a sound technical knowledge of biosolids and/or compost processing and the manufacture and use of biosolids and compost based products. Members should also have knowledge of the mechanisms in place to bring provincially regulated waste materials to market as federally regulated fertilizer products and supplements as well as the issues involved in this transition. Members should have practical experience in the issues related to applying for and obtaining biosolids and/or compost based product approvals under the *Fertilizers Act*, and have an understanding of the commercial, political, social, and environmental implications of the



current regulation of biosolids and compost based products under that Act as well as any proposed regulatory changes at both the federal and provincial levels of government.

Frequency of Meetings

Meetings will initially be scheduled monthly, normally at the call of the Chair. Meetings will be by teleconference unless otherwise agreed upon. Meeting dates, times, and agendas will be communicated by email.

Reporting

The BCWG will provide timely reports (with recommendations) to the CFPF Executive Committee on all issues placed before it. Minutes of meetings and copies of draft reports will be made available electronically, and CFPF members will be invited to comment or provide written responses. The CFPF Executive Committee will co-ordinate rising issues from the individual working groups to the entire Forum.

***NOTE:** *It is noted that the above Terms of Reference still reference 'Compost'. While this has not officially been amended, it is understood that the group has removed compost from its title, and agreed to work on composting issues only as they relate to biosolid products.*

Mandate

Mandate was identified, clarified and articulated on September 6, 2007. It was described as follows:

The Biosolids Working Group (BCWG) is a permanent working group of the Canadian Fertilizer Products Forum (CFPF). The BWG mandate is to:

1. Review issues and formulate recommendations related to the regulation under the *Fertilizers Act* of fertilizers and supplements that are derived from biosolids or that result from a production or blending process that includes the use of biosolids; and
2. Liaise with the other CFPF Working Groups to insure that all BWG issues receive due consideration and avoid duplication of effort.

BWG issues for consideration include:

- ◆ product quality
- ◆ Quality Assurance/Quality control (QA/QC) protocols
- ◆ product quality management systems
- ◆ product safety
- ◆ uniformity and efficacy requirements
- ◆ labeling and monitoring requirements
- ◆ regulatory efficiency
- ◆ the need for harmonization of federal-provincial standards
- ◆ communicating regulatory requirements
- ◆ social/political concerns
- ◆ definitions
- ◆ materials that are blends



Title change

Title Change to Biosolids Products Working Group from the Biosolids and Compost Working Group reflects the increased understanding that broader compost issues were outside of the scope of the working group, and the group specifically was looking only at Biosolids as they relate to products to be sold. Change made September 6, 2007.

No other recommendations that reflect full BPWG agreement (consensus) exist to report to date.



RECOMMENDATIONS THAT REFLECT ALTERNATE POINTS OF VIEW

Biosolids Definitions Subgroup

Objective from Strategic Work Plan

To assist and support CFIA to define biosolids products that are sold, and define them as products.

The Biosolids Definition subgroup, consisting of 5 members, met by telephone, September 27, 2007, following discussion by e-mail, but could not agree on a definition for biosolids.

The Nature of the Difference of Opinion

The crux of the issue is that some members would like to replace the Designated (product) Name “Processed sewage” at Item 1.19 in Schedule II of the *Fertilizers Act and Regulations* with the name “Municipal biosolids”, while other members of the subgroup are content with the present terminology of Schedule II.

The two definitions are:

Municipal Biosolids – are the end product, predominantly organic in nature, resulting from treatment of municipal wastewater and septic system waste to a level that meets federal and provincial regulatory requirements for beneficial use.

Numerous “beneficial uses” of municipal biosolids include: agricultural and forest land application, and use in soil reclamation, as a compost feedstock, as fuel for energy recovery and etc.

Reference may be made to other types of biosolids which are products of specific sectors (e.g. pulp and paper, food processing, etc.), and these too must meet specific regulatory requirements for beneficial use.

For the purposes of the CFPF and CFIA, the agency responsible for administering the Fertilizer Act and Regulations, the term “**municipal biosolids**” is suggested as more currently relevant than the term “**processed sewage**”.

Processed sewage (Specify grade.)

Products made from sewage, freed from grit and coarse solids, that are dried, ground and screened.



Recommendation-building Process and Decisions

The BPWG, at its October 4 meeting, took note of the impasse reported by the definitions subgroup.

Don Hoekstra, acting as BPWG chair, produced a synthesized recommendation document by working with the leads of the subgroup to synthesize, summarize, and package existing material into a presentation ready document in the hopes that it would clarify and move the group toward recommendations.

Final Decision

The outcome of this discussion at the November 1, 2007 teleconference, was that the synthesized document reflected the “majority view” well, but did not encompass the “minority view” to the degree needed for consensus.

The group decided that it was important to reflect the discussion and viewpoint of the minority and it was decided that an addendum would be added to the definition to explain the minority viewpoint.

It was decided that the majority view / minority addendum report would be put forward to the CFPF Executive as the final recommendation of the BPWG.

The Biosolids Definition recommendation was approved by the BPWG on November 26, 2007 and sent to the CFPF Executive on November 29, 2007.

Waste vs. Product: The situation from an Ontario Perspective¹

The subgroup was developed as a response to concerns expressed by Ontario members that there are specific and unique circumstances as well as requirements in place under Ontario provincial legislation that make it difficult to shift or re-classify a provincially regulated waste material such as pelletized biosolids (further processed sewage biosolids) to a non-provincially regulated product.

The purpose of the discussion paper is to share these circumstances and requirements with the members of the CFPF Biosolids Working Group, as their identification may be beneficial to the efforts of the working group. It is thought that similar circumstances and/or requirements may also be in place in other provincial jurisdictions in Canada.

History and Status of Discussion

The discussion paper reached the point at which the document has been commented on by several members of the Waste vs. Product Subgroup, and a fourth revised draft was being validated for content accuracy with CFIA and with Ontario Ministry of Environment. The paper was validated by CFIA, but was not yet validated by Ontario MOE, as of the November 1 teleconference.

¹ Title Pending.



In the meantime, BPWG chair Don Hoekstra, produced a synthesized recommendation document by working with the leads of the subgroup to synthesize, summarize, and package existing material into a presentation ready document in the hopes that it would clarify and move the group toward recommendations. This document was presented to the group on November 1, 2007.

As with the Biosolids Definition document, the outcome of this discussion at the November 1, 2007 teleconference, was that the synthesized document reflected the “majority view” well, but did not encompass the ‘minority view’ to the degree needed for consensus.

The group decided that it was important to reflect the discussion and viewpoint of the minority and it was decided that an addendum would be added to the definition to explain the minority viewpoint.

The majority view / minority addendum report was discussed at the November 26 forum meeting, and it was discovered that further changes needed to be made to the recommendation document following Ontario MOE response to the document that was submitted shortly before the forum meeting.

The recommendation document is still undergoing final editing and it is anticipated that it will be forwarded to the CFPF Executive before February 14, 2008.

Cross-Canada Provincial Biosolids Regulations Subgroup

The Nature of the Difference of Opinion

The Cross-Canada Provincial Biosolids Regulations Subgroup was tasked in September 2007 to begin a discussion document that begins to identify a summary of nutrient, pathogen, inorganics and organics limits in Canadian regulatory instruments for wastewater sludge beneficial re-use.

History and Status of Discussion

A preexisting document, written by subgroup member Mel Webber was circulated as a beginning point to cross-Canada regulation discussion. The pre-existing document was a modified Chapter 3 from a report that Mel Webber helped prepare for Environment Canada.

It was discussed that the next step was to identify those areas of concern related to "products" for the CFPF, and to highlight any remaining issues for CFIA's work with the Provinces.

The BPWG chair, Don Hoekstra, worked with the lead of the this subgroup, Mel Webber, to synthesize, summarize, and package existing material into a presentation ready document in the hopes that it will clarify and move the group toward recommendations. This synthesized document was presented at the November 1, 2007 teleconference meeting.

As with the two previous recommendation documents, the outcome of this discussion at the November 1, 2007 teleconference was that the synthesized document reflected the ‘majority view’ well, but did not encompass the ‘minority view’ to the degree needed for consensus.



The group decided that it was important to reflect the discussion and viewpoint of the minority and it was decided that an addendum would be added to the document to explain the minority viewpoint.

It was decided that the majority view / minority addendum report would be put forward to the CFPF Executive as the final recommendation of the BPWG. As with the previous recommendation, the document is still undergoing final editing and it is anticipated that it will be forwarded to the CFPF Executive before February 14, 2008.



RECOMMENDATIONS IN PROGRESS TO MEET REMAINING STRATEGIC OBJECTIVES

At the November 2007 CFFP forum, BPWG members reviewed the BPWG mandate and Strategic Objectives (Please see Appendix B for Strategic plan document). The group decided to develop recommendations around the remaining strategic objectives that had not been yet addressed.

Five main issues were identified for completion in the remaining time of the WG. It was acknowledged that with the completion of recommendations around these five issues, the BPWG strategic objectives would be met.

1. Sale of Biosolids
2. Turn-around Time of Label Review
3. Blends
4. Communication from Regulators (CFIA)
5. QA/QC related to “Emerging” Science

The BPWG created an action plan around the remaining five issues, all of which must be completed in final draft form by February 14, 2008. The action plan can be found in the BPWG minutes for the November 2007 forum.



OTHER STRATEGIC OBJECTIVES NOT ADDRESSED FROM CFPF STRATEGIC PLAN

With the development of recommendations around the remaining five issues, the BPWG considers its strategic objectives to be met.



APPENDIX A – WORK GROUP MEMBERS

Name	Title & Company
Antler, Susan <i>CFPF Executive Committee Member</i> <i>Chair, COEWG</i>	The Composting Council of Canada Toronto, ON
Archer, Mike	Market Development & Distribution Manager Milorganite Milwaukee, WI
Billingsley, Kate	Acting National Manager, Fertilizer Safety Office, CFIA Ottawa, ON
Bryden, Jack	Environmental Management Officer Environmental Quality Branch British Columbia Ministry of Environment Victoria BC
Burcombe, John <i>BWG representative on MMLWG</i>	Mouvement Au Courant Montréal, QC
Hebert, Marc	Gouvernement de Québec Ministère du Développement durable, de l'Environnement et des Parcs Québec, Québec
Hoekstra, Don <i>Biosolids Working Group Chair</i>	Water Environment Association of Ontario St. Catharines, ON
Janiec (formerly Patterson), Janice <i>BWG representative on COEWG</i>	CH2M Hill Active member of the Biosolids Committee in the Water Environment Assoc. of ON Kitchener, ON
Jefferson, Catherine <i>Biosolids Working Group Vice-Chair</i> <i>Lead - Biosolids definitions subgroup</i>	Director and CEO Curry Jefferson & Associates Environmental Services Inc. Canadian Biosolids Partnership Coordinator, CWWA Exec. Director, Water Environment Assoc of ON Lakefield, ON



Khan, Haseen	Manager, Water Resources Management Division Dept. of Environment and Conservation Government of Newfoundland and Labrador St. John's, NL
Langman, Michael N.	Special Advisor on Environmental Management and Relationships Nova Scotia Environment and Labour N.S. lead on Biosolids Mgmt Halifax, N.S.
Murray, Rob	CFIA
Omvlee, Wendy <i>CFPF Executive Committee Member</i>	Canadian Federation of Agriculture Hamilton, ON
Reilly, Maureen <i>BWG representative on REWG</i>	Sludge Watch Toronto ON
Richard, Roland P	Manager of Special Projects Greater Moncton Sewerage Commission Riverview, New Brunswick
Schut, Larry <i>Lead, Waste Vs Product SubGroup</i>	Non-Agricultural Source Materials Specialist Ontario Ministry of Agriculture, Food & Rural Affairs (OMAFRA) Guelph, ON
Sidhwa, Phil	Vice President, Business Dev. American Water Canada Corp. Active member of the Biosolids Committee in the Water Environment Assoc. of ON Sits on the provincial Biosolids Utilization Committee Hamilton, ON



Teshima, Mark	Project Coordinator SYLVIS New Westminster, BC
Thirunavukkarasu, O.S.(Arasu)	Drinking Water/Standards Engineer EPB, Saskatchewan Environment Regina, SK
Toth, Adrian <i>CFPF Executive Committee Member</i>	Canadian Water and Wastewater Assoc. (CWWA) Ottawa, ON
Webber, Mel <i>Lead, Cross-Canada Provincial Regulations SubGroup</i>	Webber Environmental Representing – Terratec Environmental Ltd Sits on the provincial Biosolids Utilization Committee Burlington, ON
Wilkinson, Bonnie	Environmental Policy Officer Waste Management Policy Branch Ontario Ministry of the Environment (OME) Toronto, ON



APPENDIX B – CFPF STRATEGIC PLAN

Key Results Area: Biosolids and Compost (Now known as the Biosolids Products Working Group)

Mandate

Its purpose is to review and discuss issues related to product quality, product safety, regulatory efficiency, efficacy requirements, labeling and monitoring requirements, and registration—all as specifically related to biosolids based fertilizers and supplements, as well as composts. These issues have been identified as areas of concern by both the generating/manufacturing community and CFIA in its strategic plan.

Strategic Objectives (Projects and Programme Elements)	Operational Goals (Action Plan: Tasks and Milestones)
To address the possibility of developing biosolid specific registration process	
To address QA/QC information requirements	By coordinating with the MMLWG to address issues related to standardizing each application, and identifying limitations in scope.
To review/standardize registration and efficacy requirements and recommend possible requirements for biosolids.	By developing recommendations to make possible efficacy requirements the same for Biosolids based fertilizer products as they are for petrochemical, mineral, or peat based products.



<p>To promote and assist in the harmonization of policy and standards across all levels of government.</p>	<p>By reviewing regulatory influences (i.e. provincial ministries and CCME(Canadian Council of Ministers of the Environment))</p> <p>By developing recommendations that address the ability of province to supersede federal regulation.</p>
<p>To address Social/Political concerns around biosolids.</p>	<p>By working with CFIA to provide publicly accessible information to explain technical and scientific background of CFIA's position.</p> <p>By liaising with the communications working group to promote information on biosolids.</p>
	<p><i>Please be advised that Janice Janiec, Janice.Janiec@ch2m.com, has agreed to liaise between the CFPF - Biosolids and Compost WG (BCWG) and the COEWG.</i></p> <p>By building strategy to address public perception that based upon perceived rather than confirmed risk.</p> <p>By working with CFIA to base any regulation upon scientifically valid criteria.</p> <p>By establishing public accessibility to reference documents to increase the transparency of the process.</p>
<p>To address import regulations/inconsistencies for imported products. (treated differently than Canadian products).</p>	
<p>To address similarities in composts and soil amendment.</p>	
<p>To assist and support CFIA to define biosolid products that are sold and define them as <u>products</u>.</p>	
<p>To act as a liaison between CFIA and other agencies such as the Canadian Biosolids Partnership.</p>	