

Berkes, Andrea HLTH:EX

From: Lambert, Tim HLTH:EX
Sent: Thursday, April 23, 2015 10:27 AM
To: Paton, Arlene HLTH:EX; Kendall, Perry HLTH:EX
Subject: RE: TNRD request for IH-Health Protection/MHO support for TNRD resolution on Biosolids to SILGA

Hi Arlene and Perry

The MOE approach was discussed at length at EHPAC previously and the protection of public health. If you recall Peter Barss raised the issue.

EHPAC reached the point (and our staff did lots of work on this) where RHAs were to provide concerns to MOE on the process or human health. MOE has been conducting a review and inviting comments from stakeholders over the last few years.

We will look into this again – but perhaps the response should be the RHAs should participating in the process as previously discussed at EHPAC.

In addition, MOE should be brought into the loop.

Tim

From: Paton, Arlene HLTH:EX
Sent: Thursday, April 23, 2015 9:55 AM
To: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX
Subject: FW: TNRD request for IH-Health Protection/MHO support for TNRD resolution on Biosolids to SILGA
Importance: High

His response to TNRD seems reasonable to me, the bigger issue is how to proceed provincially. We can certainly put it on the agenda for EHPAC and bring MoE into the discussion at our June meeting? I can also talk to Lori Halls about the Premier situation and see if there is any work going to happen out of that.

Thoughts?

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Parker, Dr. Rob [<mailto:Rob.Parker@interiorhealth.ca>]

Sent: Thursday, April 23, 2015 8:25 AM

To: Paton, Arlene HLTH:EX

Cc: XT:HLTH Kosatsky, Tom; Kendall, Perry HLTH:EX; XT:Corneil, Trevor Dr. HLTH:IN; XT:HLTH Halpenny, Robert; McMahon, Martin; XT:HLTH Parsonage, Roger; XT:Swan, Michaela HLTH:IN; XT:Braman, Jamie HLTH:IN; Norlin, J Ivor

Subject: TNRD request for IH-Health Protection/MHO support for TNRD resolution on Biosolids to SILGA

Importance: High

Hi Arlene – as the chair of the prov Environmental Health Policy Advisory committee (EHPAC) I just wanted to alert you to this request for support we have just received from the TNRD on their resolution on biosolids, going first to SILGA and then assumedly later in the early fall to UBCM.

As you know we have discussed at EHPAC the issue of biosolids, but I don't think as yet formed a consensus of the issues needing addressing and a way forward. There is the very good paper on Odor and Biosolids Composting (attached) by UBC resident Dr. Althea Hayden while in Dr. Tom Kosatsky's shop at BCCDC that was reviewed at EHPAC, but I am not up to date on any outcomes. While speaking to odor issues, the paper actually does a very good job outlining the multitude of authorities and regulations in BC that cover biosolids, organic matter and composting/land application.

The IH-Health Protection land management team (with Ivor Norlin, HP manager) and I, discussed this yesterday and are considering sending the TNRD the following draft response. While we think the idea of a multi-agency/stakeholder committee to review the issues is appropriate, we do not concur with some phrasing of the TNRD resolution preamble statements, so could not support the resolution as a whole:

" DRAFT April xx, 2015

File: Nicola Valley Biosolids

*Randy Murray, Director, Electoral Area "M"
Thompson-Nicola Regional District
300 – 465 Victoria Street
Kamloops, BC V2C 2A9*

Dear Director Murray:

Re: SILGA resolution for review of provincial Biosolids approval process

Thank you for the opportunity to support the TNRD and City of Merritt Biosolids Resolution submission to the Southern Interior Local Government Association (SILGA) at the upcoming April 29 – May 1, 2015 convention.

Interior Health recognizes that biosolids processing from sewage treatment plant production through to land application involves many stakeholders locally and provincially.

IH Health Protection and Medical Health Officers support reviewing the existing management tools and considering new ones for the promotion of best practice and a broader appreciation for community health and wellness. Establishing BC community engagement through a provincial multi-stakeholder consultation process for productive dialogue and positive outcome is a step in the right direction. "

I would be interested in your thoughts, and others cc'd here, on our draft response to TNRD.

While I think the multi-agency review committee may be the best way to resolve ongoing issues around OMRR and biosolids....I am not clear yet what are the best strategies to get to that process. I have had some preliminary discussions with a few other RHA MHOs who have faced similar public concerns recently (particularly VIHA MHO Dr. Murray Fyfe), and think there may be some broader MHO support for joint MoE/MoH and stakeholder review of provincial biosolid and OMRR legislation and processes.

I recognize there is political sensitivity on this issue, and I am not aware of what commitments might have been made to Merritt area First Nations chiefs for example, to end their sit in occupation of the Premiers office in West Kelowna this past weekend, or other government processes underway to deal with community concerns. Our IH-HP DWO and EHO review is still ongoing, of Merritt area expressed concerns of water contamination or odor/health problems secondary to biosolid composting in the area.

Many thanks for whatever thoughts of input you and others can provide. TNRD was requesting some form of response from us prior to the SILGA meetings next week.

Rob

Dr. Rob Parker
Medical Health Officer
Interior Health

Berkes, Andrea HLTH:EX

From: Lambert, Tim HLTH:EX
Sent: Thursday, April 23, 2015 6:05 PM
To: Heinze, Laura R GCPE:EX; Kendall, Perry HLTH:EX
Cc: HLTH HAD Issues HLTH:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: RE: Heads Up - Biosolids

Hi Laura

The IH note addresses the risk - it is outside the area of the wells - so perhaps the note needs to be revised to bring this information forward first as Perry suggests

Tim

- The land application plan for Sunshine Valley was received and there are no restrictions for the application of Class A biosolids or Class A compost within a watershed.
- The Class A biosolids will be applied as per the land application plan submitted by the Qualified Professional as required by section 7 of OMRR.
- IH also reviewed the Source Water Protection Plan completed by Kala Geosciences Ltd. (qualified professional) in April 2013. This information details that are the two groundwater wells servicing the Nooaitch Indian Band are both considered not to be under the direct influence of surface water.
- The Source Water Protection Plan recommends that the source water protection areas are set at a specific area, and both the composting facility and biosolids land application are located outside of these areas.

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 6:01 PM
To: Kendall, Perry HLTH:EX
Cc: HLTH HAD Issues HLTH:EX; Lambert, Tim HLTH:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: Re: Heads Up - Biosolids

:) thx.

Sent from my iPhone

On Apr 23, 2015, at 5:55 PM, "Kendall, Perry HLTH:EX" <Perry.Kendall@gov.bc.ca> wrote:

It is not a particularly strategic response and I doubt it will satisfy the FNs. I would start off by addressing any risk. Then BTW point out that I actually didn't have the authority to intervene.

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria BC V8W 3C8
Phone: 250 952-1330
Fax: 250 952-1362

perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho>

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 04:32 PM
To: HLTH HAD Issues HLTH:EX; Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one – IH will be sending a letter to The Nooaitch Indian Band denying their request for a drinking water investigation.

Let me know if any concerns!

Laura

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, April 23, 2015 4:18 PM
To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX
Cc: XT:Lindsay, Darshan GCPE:IN
Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN
Communications Officer, IH West
INTERIOR HEALTH
office: 250.314.2100 ext 3750 | cell: s.17
IH QuickDial: 8-200-3750

<image001.png> <image002.png> <image003.png>

Benson, Stacey HLTH:EX

From: Parsonage, Roger <Roger.Parsonage@interiorhealth.ca>
Sent: Tuesday, March 24, 2015 3:22 PM
To: Lambert, Tim HLTH:EX
Subject: RE: Biosolids management meeting in Kamloops

Thanks, Tim. This certainly wouldn't hurt and the first point could be expanded to state that the referral meets MOE's policy objectives and will occur in accordance with best management practices. I would suggest the health issue part of (a) be taken out so that it is clear that MHO's (and their delegates) are the ones to form an opinion about potential human health effects. I would also want it clear to MOE that their comments on the purpose of the review will help but they don't preclude the health authority review subject to the limits of our role to do so.

Does that make sense? On a related note, the Sylvis rep has promised to come back with an agenda and statement of meeting purpose/desired outcome. I'll keep you posted.

Roger

From: Lambert, Tim HLTH:EX [mailto:Tim.Lambert@gov.bc.ca]
Sent: Tuesday, March 24, 2015 10:13 AM
To: Parsonage, Roger
Subject: RE: Biosolids management meeting in Kamloops

Hi Roger

I think our next step is to send a note to Kris Ord (MOE), that when referring issues to RHAs, they should clearly articulate either:

- a) that the submission meets MOE's policy objectives, and they see no health issues, or
- b) that there may be some potential issues and are seeking RHA advice on the issue.

This approach would mitigate the RHAs becoming involved in disputes between MOE and stakeholders, and articulate the purpose of the referral.

What do you think?

Tim

From: Parsonage, Roger [mailto:Roger.Parsonage@interiorhealth.ca]
Sent: Tuesday, March 24, 2015 8:43 AM
To: Lambert, Tim HLTH:EX
Subject: RE: Biosolids management meeting in Kamloops

Thanks, Tim. I agree and have declined the meeting.

From: Lambert, Tim HLTH:EX [mailto:Tim.Lambert@gov.bc.ca]
Sent: Monday, March 23, 2015 3:20 PM
To: Parsonage, Roger
Subject: RE: Biosolids management meeting in Kamloops

Hi Roger

From a quick read, this is an MOE issue and they should attend alone. They need to talk with their stakeholders and determine how to support them with this issue.

I am not sure the value of MOH/IHA attending = and would recommend declining at this point. I would not want to get put in the position of trying to bring stakeholders onside either, i.e., become MOEs spokesperson for health concerns.

My understanding at this time is that we are questioning the referral role or policy itself. And if we do not want to raise questions with the policy, I think we should use a different avenue and not do this in a stakeholder meeting.

Does that make sense?

Tim

From: Parsonage, Roger [<mailto:Roger.Parsonage@interiorhealth.ca>]
Sent: Monday, March 23, 2015 2:59 PM
To: Lambert, Tim HLTH:EX
Subject: FW: Biosolids management meeting in Kamloops

Good afternoon,

Please see the email request below for a meeting to discuss bio-solids; while it is precipitated by the ongoing controversy in the Nicola Valley (now spreading to other parts of IH) I am concerned about the purpose of the meeting and the participants. Without knowing any more than this about the proposed agenda, I can see potential for the discussion to extend into areas related to provincial policy in which case these would not be the right participants. Additionally, I wonder if there is some clarity that first must be obtained between the Ministries of Environment and Health, and the HA's.

Your thoughts?

From: Mike Van Ham [<mailto:mvanham@sylvia.com>]
Sent: Tuesday, March 17, 2015 9:31 AM
To: Caunce, Cassandra ENV:EX; Kris.Ord@gov.bc.ca; Laurie.Ford@metrovanancouver.org; Yamada, Christina
Subject: Biosolids management meeting in Kamloops

Good morning,

Given the biosolids management situation in the Merritt area, which appears to be growing within the Thompson Nicola Regional District (TNRD), I believe it is important to have a meeting of the minds between the regulators, biosolids generators, and myself as someone that has been involved with the evolution of biosolids use in BC and throughout Canada for over 25 years including:

- worked extensively with the BC Ministry of Environment in the development of the BC Organic Matter Recycling Regulation (OMRR),
- completed a regulatory review and scoping studies in support of the BC Code of Practice for Soil Amendments (CoPSA),
- authored the Best Management Guidelines for the OMRR and the CoPSA for the Province,
- authored the Canada-wide Guidance Document for the Beneficial Use of Municipal Biosolids, Municipal Sludge and Treated Septage under contract to the Canadian Council of Ministers of the Environment (CCME), and

- recently (2015) drafted a Consolidated Residuals Management Guideline for Alberta Environment and Sustainable Resource Management (ESRD) that provide standards and best management practices for biosolids, pulp sludge, ash, lime and septage in Alberta.

It appears that there is a lot of misinformation circulating and public concern around the current practice of biosolids land application, and as a practitioner I think it's in all of our interest to put our heads together to discuss the scope of the OMRR and how we can work together to ensure protection of human health and the environment concurrent with the agricultural practice of biosolids fertilization.

I propose an in-person meeting with representatives from the Ministry of Environment, Interior Health, Metro Vancouver as the largest biosolids generator in the province, and myself. The Kamloops MOE office is likely the best location and in speaking with Cassandra we can use a MOE meeting room. Kamloops is in the relevant area and most central for all invited, and I envision the meeting to be approximately 1.5 hours.

Please indicate your availability by completing the following doodle poll by *Friday, March 20*:

<http://doodle.com/9n7ha6gcp6erhdbr>

I look forward to meeting with you in Kamloops. I will circulate a draft agenda and meeting room details prior to the meeting. If you have any questions in the meantime please do not hesitate to contact me.

Mike Van Ham, R.P.Bio., R.P.F., P.Ag.
President

SYLVIS

427 Seventh Street
New Westminster, BC V3M 3L2

Phone: 604.777.9788
Cell: 604.341.7345
Toll-free: 1.800.778.1377
Fax: 604.777.9791
www.sylvis.com

Click here to learn how we research, recommend and implement beneficial residuals management

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Thursday, April 23, 2015 5:36 PM
To: Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Kendall, Perry HLTH:EX
Subject: Re: Heads Up - Biosolids

Any concerns? I haven't been able to connect with Lori Halls.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Thursday, April 23, 2015 5:29 PM
To: Zemanek, Michael HLTH:EX; Paton, Arlene HLTH:EX
Subject: FW: Heads Up - Biosolids

Fyi

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 4:32 PM
To: HLTH HAD Issues HLTH:EX; Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one – IH will be sending a letter to The Nooaitch Indian Band denying their request for a drinking water investigation.

Let me know if any concerns!
Laura

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, April 23, 2015 4:18 PM
To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX
Cc: XT:Lindsay, Darshan GCPE:IN
Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH

office: 250.314.2100 ext 3750 | cell: s.17

IH QuickDial: 8-200-3750



Benson, Stacey HLTH:EX

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 6:01 PM
To: Kendall, Perry HLTH:EX
Cc: HLTH HAD Issues HLTH:EX; Lambert, Tim HLTH:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: Re: Heads Up - Biosolids

:) thx.

Sent from my iPhone

On Apr 23, 2015, at 5:55 PM, "Kendall, Perry HLTH:EX" <Perry.Kendall@gov.bc.ca> wrote:

It is not a particularly strategic response and I doubt it will satisfy the FNs. I would start off by addressing any risk. Then BTW point out that I actually didn't have the authority to intervene.

P. R. W. Kendall

OBC, MBBS, MSc, FRCPC

Provincial Health Officer

Ministry of Health

4th Floor, 1515 Blanshard Street

Victoria BC V8W 3C8

Phone: 250 952-1330

Fax: 250 952-1362

perry.kendall@gov.bc.ca

<http://www.health.gov.bc.ca/pho>

From: Heinze, Laura R GCPE:EX

Sent: Thursday, April 23, 2015 04:32 PM

To: HLTH HAD Issues HLTH:EX; Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX

Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX

Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one – IH will be sending a letter to The Nooaitch Indian Band denying their request for a drinking water investigation.

Let me know if any concerns!

Laura

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]

Sent: Thursday, April 23, 2015 4:18 PM

To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX

Cc: XT:Lindsay, Darshan GCPE:IN

Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH s.17

office: 250.314.2100 ext 3750 | cell:

IH QuickDial: 8-200-3750

<image001.png> <image002.png> <image003.png>



Interior Health

IH Communications Briefing Note

April 23, 2015

Topic

Merritt Biosolids – Drinking Water Protection Act Investigation Request Denied

Background

- Since December 2014, Interior Health has been involved in significant public and political attention regarding the use of biosolids in the Merritt and Nicola Valley areas. This attention has included media interviews, presenting at a public forum on Jan. 26, and briefing elected officials at the Thompson Nicola Regional District.
- The community and local First Nations continues to protest, lobby various levels of government, and most recently occupied Premier Christy Clark's office in Kelowna.
- On January 12, IH received a letter from the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Nlaka'pamux Territory. They request that all current activities cease and that no new notification proceed until the Crown and ministry regulators establish a meaningful dialogue. This letter references the Supreme Court of Canada's decision regarding the rights of aboriginal title to manage the land and resources in a manner that fits the vision for the territory.
- Interior Health responded to the letter referring the First Nations leaders back to the Ministry of Environment as the agency that oversees the legislation covering biosolids. This includes the Organic Matter Recycling Regulation (OMRR) and the Environmental Management Act.
- IH – Health Protection staff attended a meeting with the Environment Minister and local First Nation representatives on Feb. 2 to discuss their concerns further.
- Throughout this time, Health Protection has established a tracking document to track complaints and calls related to biosolids. To date, ## complaints have been received. In response, Health Protection provides information on the process of biosolids and options for the complainant.
- On March 23, Interior Health received a request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the Drinking Water Protection Act (DWPA). This request is in regards to the Class B composting facility and biosolids land application plan located at 2988 Sunshine Valley Road near Merritt. The Nooaitch band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two ground water wells.
- When these requests are received, Interior Health designates a statutory decision maker (Environmental Health Officer) to review the complaint and available information to determine the next steps.
- After reviewing the request from the Nooaitch Indian Band, applicable submissions and the legislation, the Environmental Health Officer concludes that the evidence and facts do not warrant a Section 29 Investigation of a threat to drinking water at this time.
- This is based on the following:
 - Since the composting facility and land application process are regulated by the OMRR, any prohibitions outlined in Sec 23(1) and 23(2) of the DWPA do not apply as it is clearly stated in Section 23 (3)(b) and 23(3)(c) of the DWPA that:
 - (3) The prohibitions in subsection (1) and (2) do not apply

(b) if the introduction or activity is authorized or required under an enactment or the person is otherwise acting with lawful authority, or
(c) in relation to an activity prescribed by regulation that is undertaken in accordance with any conditions prescribed by regulation.

- The land application plan for Sunshine Valley was received and there are no restrictions for the application of Class A biosolids or Class A compost within a watershed.
- The Class A biosolids will be applied as per the land application plan submitted by the Qualified Professional as required by section 7 of OMRR.
- IH also reviewed the Source Water Protection Plan completed by Kala Geosciences Ltd. (qualified professional) in April 2013. This information details that the two groundwater wells servicing the Nooaitch Indian Band are both considered not to be under the direct influence of surface water.
- The Source Water Protection Plan recommends that the source water protection areas are set at a specific area, and both the composting facility and biosolids land application are located outside of these areas.
- Finally, IH does recommend the wells providing water to Nooaitch Indian Band be evaluated for Groundwater at Risk of Containing Pathogens as per the provincial guidelines. It also recommends that a long-term water quality program be developed for the water system that includes both microbiological and chemical parameters, which is best practice for water source protection and the safety of public health.

Key Messages

- Interior Health is committed to the protection of human health through the appropriate management of organic matter, including biosolids. We have recently been requested to conduct an investigation under the Drinking Water Protection Act regarding the impacts of biosolids on Sunshine Valley Road to wells serving the Nooaitch Indian Band.
- Based on the information available at this time, Interior Health finds the information does not warrant any further investigation of a threat to drinking water.
- We understand the community is concerned about the safety of biosolids in the Merritt and Nicola Valley and based on the information available there are currently no known drinking water health hazards.

PREPARED FOR:	Manager, Public Affairs & VP Public Affairs
PREPARED BY:	Michaela Swan, Communications Officer, IH West
SPOKESPERSON:	TBD

Benson, Stacey HLTH:EX

From: Kosatsky, Tom <Tom.Kosatsky@bccdc.ca>
Sent: Thursday, April 23, 2015 6:00 PM
To: Lambert, Tim HLTH:EX
Cc: Glassford, Karen
Subject: RE: EHPAC - biosolids documentation

Karen has the minutes, Tim and will look first thing tomorrow.
tom

Dr. Tom Kosatsky

Medical Director, Environmental Health Services (EHS)
Scientific Director, National Collaborating Centre for Environmental Health (NCCEH)
Ph: 604-707-2447

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: April 23, 2015 5:59 PM
To: Kosatsky, Tom; Glassford, Karen
Cc: Kendall, Perry; Arlene.Paton@gov.bc.ca
Subject: RE: EHPAC - biosolids documentation

Hi Tom

Thanks for the quick response. It was during late 2012 and early 2013. It was on the agenda for review as RHAs (IHA) raised concerns about MOEs biosolid land farming regulation.

Tim

From: Kosatsky, Tom [<mailto:Tom.Kosatsky@bccdc.ca>]
Sent: Thursday, April 23, 2015 5:57 PM
To: Lambert, Tim HLTH:EX; Glassford, Karen
Cc: Kendall, Perry HLTH:EX; Paton, Arlene HLTH:EX
Subject: RE: EHPAC - biosolids documentation

Not sure I know what you are referring to, but will ask Karen to look for discussions on biosolids.
Any idea of when this may have come up, or other clues as to where to look.
t

Dr. Tom Kosatsky

Medical Director, Environmental Health Services (EHS)
Scientific Director, National Collaborating Centre for Environmental Health (NCCEH)
Ph: 604-707-2447

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: April 23, 2015 5:48 PM
To: Kosatsky, Tom
Cc: Kendall, Perry; Arlene.Paton@gov.bc.ca
Subject: EHPAC - biosolids documentation
Importance: High

Hi Tom,

Can you provide us with the EHPAC minutes and documentation with respect to the MOE bio-solids program. You may recall Peter Bars raised this issue. We need this information ASAP.

Thanks

Tim



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

*Secretariat
Environmental Health Services*

BC Environmental Health Policy Advisory Committee
Face to Face Meeting at BCCDC, Vancouver
Minutes
October 9, 2012

Attendees:

Dr. Peter Barss
Lucy Beck
Dr. Tom Kosatsky
Tim Lambert
William Osei

Dr. Perry Kendall
Dr. Nadine Loewen
Dr. James Lu
Roger Parsonage
Arlene Paton

Mona Shum
Dr. Richard Stanwick
Richard Taki
Dr. Jason Wong (guest)

General Discussion

1 Introductions
Review of Minutes from July 18 Meeting

NR

Page 018

Withheld pursuant to/removed as

NR

NR

NR **IHA**

- Sewage sludge applications (sometimes used as fertilizer) – concern around the possibility of heavy metal contaminants. Need source control. Discussion around documents already prepared on this subject (Ray Copes' document as well as EPA doc from 2003). Contact Ministry of Environment to speak to issue. **Action:** Tim to contact MoE for speaker. **Action:** Secretariat to add to agenda for November meeting.

NR

Page 020 to/à Page 022

Withheld pursuant to/removed as

NR

Next Meeting – December 17, 2012, 1:30 - 3 pm (teleconference)

Glassford, Karen

From: Lambert, Tim HLTH:EX [Tim.Lambert@gov.bc.ca]
Sent: Friday, November 16, 2012 1:22 PM
To: Glassford, Karen; [FHA] Loewen, Nadine; [FHA] Shum, Tim; [IHA] Barss, Peter; [NHA] Osei, William; [VCH] Taki, Richard [VC]; ann.thomas@viha.ca; Paton, Arlene HLTH:EX; [VCH] Lu, James [RH]; perry.kendall@gov.bc.ca; richard.stanwick@viha.ca; Kosatsky, Tom; [NHA] Beck, Lucy; [IHA] Parsonage, Roger
Cc: Michael.Zemanek@gov.bc.ca
Subject: EHPAC: Biosolids Land Application

Hello Everyone

With respect to biosolid land application below is some information that will be useful to all the RHAs, and hopefully address the issue.

Thx

Tim Lambert

An information session held on October 18, 2012 with a presentation from Maryam Mofidpoor, Environmental Management Officer from the Ministry of Environment, was organized in response to a request by Interior Health at the EH Policy Committee for more information on biosolid land applications (Peter Barss, Ivor Norlin and Karin Goodison from IHA attended). Sylvia Struck from the BCCDC was also present to ask questions of Maryam.

Three key outcomes of the information session were:

1. Class A and Class B biosolids are stabilized, pathogen-reduced substances, meaning that many water-insoluble contaminants are often bound to organic compounds in the biosolid matrix and do not migrate into food or drinking water pathways. Allowable parameters for the organic and inorganic components present within the biosolids are identified in the schedules of the Organic Matter Recycling Regulation (OMRR). Maryam stated that the allowable limits provided in the schedules are largely drawn from the US EPA and MoE standards, with some small downward adjustments to reflect better provincial waste controls that prevent many contaminants from even appearing in BC biosolid products. The US EPA and MoE standards reflect scientific assessments of acceptable risk to human health and take into account multiple pathways of human exposure for a broad range of contaminants, which is why they have been adopted into the provincial regulation.

2. The Ministry of Environment is developing many changes to the OMRR. One of the anticipated changes will be reference to a 'Health Officer' for referrals, rather than a MHO. There should be a discussion of how health authorities will ensure that these requests are routed to the correct individual with the knowledge and authority to comment/approve these referrals. A follow up concern was raised by Ivor concerning the broad basis of referral given in the OMRR which is that any land application located in 'a watershed that has a drinking water intake' requires a referral to the health authority. Is there a screening process that can be developed to better determine which applications truly need a health risk assessment? Answer: The guidelines applied incorporate drinking water protection (see additional information below) and Health Authorities should develop internal processes for routing and review.
3. There needs to be some operations discussion within each health authority on how each health authority deals with biosolid land application referrals. Each RHA needs to communicate with MOE on who to refer the applications.
4. To understand what aspects of these referrals are commonly concerns for MHOs/EHOs, please review the information for land application and the approach such that we can discuss at EHPAC. This will ensure all RHAs are responding and identifying any issues consistently. The Ministry can then set up a meeting with MOE to discuss the issues.

Some additional information to help respond to the land applications is below:

- Land Application Plans must be prepared as part of the MoE's permit process, and these can be requested by the RHA/MHO/EHO to provide additional information on the soil of the application site and the constituents of the biosolid being applied.
- Provincial supporting documentation for the implementation of the OMRR is available through the Land Application Guidelines for the Organic Matter Recycling Regulation and the Soil Amendment Code of Practice, Best Management Practices (produced for the Ministry of Environment in 2008). This document provides information on how biosolid land applications are developed and permitted.
- The CCME (Canadian Council of Ministers of Environment) have very recently released a high-level national document entitled Guidance Document for the Beneficial Use of Municipal Biosolids, Municipal Sludge And Treated Septage.
- Background on the US EPA Part 503 Rule (which served as the basis for the OMRR schedules) showing the risk assessments used to identify pollutant limits for biosolids can be found http://water.epa.gov/scitech/wastetech/biosolids/503rule_index.cfm
- The Water Environment Federation hosts a National Biosolids Partnership "Biosolids 101" webcast. Registration with the website is required to view the webcast.



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

*Secretariat
Environmental Health Services*

BC Environmental Health Policy Advisory Committee
Teleconference – Minutes
December 17, 2012

Attendees:

Dr. Peter Barss	Dr. William Osei	Arlene Paton
Dr. David Bowering	Dr. Perry Kendall	Dr. Richard Stanwick
Dr. Nick Foster (guest)	Dr. Nadine Loewen	Richard Taki
Dr. Tom Kosatsky	Dr. James Lu	Ann Thomas
Tim Lambert	Roger Parsonage	

Item General Discussion

Introductions

NR

- 4 Sewage sludge regulations** – Refer to Tim Lambert's email circulated Nov 16th, 2012.
Action: Secretariat to re-circulate (sent Dec 18). All to review and respond to Tim Lambert by January 7, 2013

NR

NR

Meeting adjourned at 3:04 pm

**Next Meeting – March 25, 2013
face to face - Victoria**

Benson, Stacey HLTH:EX

From: Heinze, Laura R GCPE:EX
Sent: Friday, April 24, 2015 8:19 AM
To: Kendall, Perry HLTH:EX; HLTH HAD Issues HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: RE: Heads Up - Biosolids

They are sending it now and I'll flip to you shortly!

From: Kendall, Perry HLTH:EX
Sent: Friday, April 24, 2015 8:05 AM
To: Heinze, Laura R GCPE:EX; HLTH HAD Issues HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: RE: Heads Up - Biosolids

Can we see the letter? I am concerned about messaging and a couple of other things too.

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 4:32 PM
To: HLTH HAD Issues HLTH:EX; Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one – IH will be sending a letter to The Nooaitch Indian Band denying their request for a drinking water investigation.

Let me know if any concerns!
Laura

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, April 23, 2015 4:18 PM
To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX
Cc: XT:Lindsay, Darshan GCPE:IN
Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH

office: 250.314.2100 ext 3750 | cell: S.17

IH QuickDial: 8-200-3750



Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, April 24, 2015 2:47 PM
To: Halls, Lori D ENV:EX
Cc: Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX
Subject: Biosolids

Importance: High

Hi Lori – in preparation for when you call me today (my cell is s.17), the key question I have is this: on the MoE website the review of the Organic Matter Recycling Regulation seems to still be open for comments. Should we be directing Interior Health to engage in that process rather than supporting a UBCM resolution to set up a UBCM committee to work with you on OMRR? Your staff referred us to you on this question.

I'd also like to hear what else if anything MoE may be doing related to the Nicola Valley situation – I believe I shared with you that we now have FNHA meeting with the chiefs next Wednesday. Any further information we can have from you to support that meeting would be very helpful.

NR

Thanks Lori...

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Halls, Lori D ENV:EX
Sent: Thursday, April 23, 2015 5:42 PM
To: Paton, Arlene HLTH:EX
Subject: Fwd: Heads Up - Biosolids

Sorry I couldn't connect with you early. Can you call my cell 250-217-5246

Lori Halls
Assistant Deputy Minister

Begin forwarded message:

From: "Murphy, Bernadette GCPE:EX" <Bernadette.Murphy@gov.bc.ca>
Date: April 23, 2015 at 4:37:17 PM PDT
To: ENV Ministerial Assistants <ENVMINAS@Victoria1.gov.bc.ca>
Cc: "Crebo, David GCPE:EX" <David.Crebo@gov.bc.ca>, "Halls, Lori D ENV:EX" <Lori.D.Halls@gov.bc.ca>, "Cotton, Brian GCPE:EX" <Brian.Cotton@gov.bc.ca>
Subject: FW: Heads Up - Biosolids

FYI

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 4:36 PM
To: Leslie, Lisa GCPE:EX; Ritchie, Leanne GCPE:EX; Murphy, Bernadette GCPE:EX; Crebo, David GCPE:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Thistle-Walker, Carlene GCPE:EX; Lawrie, Hannah GCPE:EX
Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one...

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, April 23, 2015 4:18 PM
To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX
Cc: XT:Lindsay, Darshan GCPE:IN
Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN
Communications Officer, IH West
INTERIOR HEALTH
office: 250.314.2100 ext 3750 | cell: S.17
IH QuickDial: 8-200-3750

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, April 24, 2015 2:48 PM
To: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX
Cc: Zemanek, Michael HLTH:EX
Subject: RE: biosolids -

So definitely something we can put on the agenda for EHPAC to discuss further with MoE as maybe there will be more comments now... As soon as I hear from Lori Halls, I can respond to Rob Parker.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Lambert, Tim HLTH:EX
Sent: Friday, April 24, 2015 2:31 PM
To: Paton, Arlene HLTH:EX; Kendall, Perry HLTH:EX
Cc: Zemanek, Michael HLTH:EX
Subject: RE: biosolids -

Hi Perry and Arlene

Karen Glassford got the EHPAC minutes on biosolid from Dec 2012.

. 4 Sewage sludge regulations – Refer to Tim Lambert's email circulated Nov 16th, 2012.
Action: Secretariat to re-circulate (sent Dec 18). All to review and respond to Tim Lambert by January 7, 2013

I don't believe any comments came back from the RHAs on the biosolid policy.

Tim

From: Lambert, Tim HLTH:EX
Sent: Thursday, April 23, 2015 5:56 PM
To: Paton, Arlene HLTH:EX; Kendall, Perry HLTH:EX
Cc: Zemanek, Michael HLTH:EX
Subject: biosolids -

Hi Arlene/Perry

I sent this email out to everyone on the issue.

I have bolded some salient points below that might be helpful.

Of note, I don't recall any additional issues coming from the RHAs after this point.

I don't seem to have the EHPAC minutes handy – can't find the issue, so I asked Tom. Perhaps information was sent that I did not track.

Tim

From: Lambert, Tim HLTH:EX [mailto:Tim.Lambert@gov.bc.ca]

Sent: Friday, November 16, 2012 1:22 PM

To: Glassford, Karen; [FHA] Loewen, Nadine; [FHA] Shum, Tim; [IHA] Barss, Peter; [NHA] Osei, William; [VCH] Taki, Richard [VC]; ann.thomas@viha.ca; Paton, Arlene HLTH:EX; [VCH] Lu, James [RH]; perry.kendall@gov.bc.ca; richard.stanwick@viha.ca; Kosatsky, Tom; [NHA] Beck, Lucy; [IHA] Parsonage, Roger

Cc: Michael.Zemanek@gov.bc.ca

Subject: EHPAC: Biosolids Land Application

Hello Everyone

With respect to biosolid land application below is some information that will be useful to all the RHAs, and hopefully address the issue.

Thx

Tim Lambert

An information session held on October 18, 2012 with a presentation from Maryam Mofidpoor, Environmental Management Officer from the Ministry of Environment, was organized in response to a request by Interior Health at the EH Policy Committee for more information on biosolid land applications (Peter Barss, Ivor Norlin and Karin Goodison from IHA attended). Sylvia Struck from the BCCDC was also present to ask questions of Maryam.

Three key outcomes of the information session were:

1. **Class A and Class B biosolids are stabilized, pathogen-reduced substances, meaning that many water-insoluble contaminants are often bound to organic compounds in the biosolid matrix and do not migrate into food or drinking water pathways.** Allowable parameters for the organic and inorganic components present within the biosolids are identified in the schedules of the Organic Matter Recycling Regulation (OMRR). Maryam stated that the allowable limits provided in the schedules are largely drawn from the US EPA and MoE standards, with some small downward adjustments to reflect better provincial waste controls that prevent many contaminants from even appearing in BC biosolid products. **The US EPA and MoE standards reflect scientific assessments of acceptable risk to human health and take into account multiple pathways of human exposure for a broad range of contaminants, which is why they have been adopted into the provincial regulation.**
2. The Ministry of Environment is developing many changes to the OMRR. One of the anticipated changes will be **reference to a 'Health Officer' for referrals, rather than a MHO.** There should be a discussion of how health authorities will ensure that these requests are routed to the correct individual with the knowledge and authority to comment/approve these referrals. A follow up concern was raised by Ivor concerning the broad basis of referral given in the OMRR which is that any land application located in 'a watershed that has a drinking water intake' requires a referral to the health authority. Is there a screening process that can be developed to better determine which applications truly need a health risk assessment? Answer: The guidelines applied incorporate drinking water protection (see additional information below) and Health Authorities should develop internal processes for routing and review.

3. There needs to be some operations discussion within each health authority on how each health authority deals with biosolid land application referrals. Each RHA needs to communicate with MOE on who to refer the applications.
4. **To understand what aspects of these referrals are commonly concerns for MHOs/EHOs, please review the information for land application and the approach such that we can discuss at EHPAC. This will ensure all RHAs are responding and identifying any issues consistently. The Ministry can then set up a meeting with MOE to discuss the issues.**

Some additional information to help respond to the land applications is below:

- Land Application Plans must be prepared as part of the MoE's permit process, and these can be requested by the RHA/MHO/EHO to provide additional information on the soil of the application site and the constituents of the biosolid being applied.
- Provincial supporting documentation for the implementation of the OMRR is available through the Land Application Guidelines for the Organic Matter Recycling Regulation and the Soil Amendment Code of Practice, Best Management Practices (produced for the Ministry of Environment in 2008). This document provides information on how biosolid land applications are developed and permitted.
- The CCME (Canadian Council of Ministers of Environment) have very recently released a high-level national document entitled Guidance Document for the Beneficial Use of Municipal Biosolids, Municipal Sludge And Treated Septage.
- Background on the US EPA Part 503 Rule (which served as the basis for the OMRR schedules) showing the risk assessments used to identify pollutant limits for biosolids can be found http://water.epa.gov/scitech/wastetech/biosolids/503rule_index.cfm
- The Water Environment Federation hosts a National Biosolids Partnership "Biosolids 101" webcast. Registration with the website is required to view the webcast.

Benson, Stacey HLTH:EX

From: Kendall, Perry HLTH:EX
Sent: Friday, April 24, 2015 5:46 PM
To: Paton, Arlene HLTH:EX; Stevenson, Lynn HLTH:EX
Cc: Lambert, Tim HLTH:EX; Marsh, Jania HLTH:EX
Subject: Re: Biosolids issue in Interior

This is helpful. I think IHA would be quite happy to hold off on the letter or any definitive discussion of it's contents, if they knew a bigger process was in play.

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria BC V8W 3C8
Phone: 250 952-1330
Fax: 250 952-1362

perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho>

From: Paton, Arlene HLTH:EX
Sent: Friday, April 24, 2015 05:31 PM
To: Stevenson, Lynn HLTH:EX; Kendall, Perry HLTH:EX
Cc: Lambert, Tim HLTH:EX; Paton, Arlene HLTH:EX; Marsh, Jania HLTH:EX
Subject: Biosolids issue in Interior

Hi, I just got off the phone with the ADM at Environment. As you can imagine the centre is fully engaged in this situation and everything is being very carefully planned. Environment is spending the weekend pulling together a strategy for consideration next week by the premier's office which may include a 60 – 90 day pause on biosolid permits in the area, initiation of a science panel to review the situation, and some consideration at what additional monitoring and/or consultation could or should be put in place in the future. None of this is approved yet, but I provide this info as an indication of what may be in the plan.

Obviously, lots of implications in getting this wrong (liability issues related to bonefide businesses operating in accordance with the regulation, Right to Farm Act, importance of biosolids as a fertilizer, etc. etc.) and as you are all aware, very little risk to human health. If IHA can wait before any communication with the FNs for this to play out in the next week, that would be helpful.

Perry, I understand that IHA will be invited to the meeting on Wednesday with FNHA and the chiefs but it sounds like the expectation is that they will send the letter or explain what will be in the letter?

MoE is happy to meet with Environmental Health Policy Advisory Committee to work through the various issues MHO's and Health Protection Directors have – so we'll arrange that and hopefully that's a better place for Rob to have the discussion than encouraging a UBCM committee.

Lynn, we put together some info in the document attached, a bit more than was in Perry's earlier note, but might be helpful for your IHA meeting on Tuesday.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, April 24, 2015 7:47 PM
To: Heinze, Laura R GCPE:EX
Cc: Jabs, Ryan GCPE:EX; Lambert, Tim HLTH:EX
Subject: RE: Heads Up - Biosolids

Perfect, thanks Laura! Happy weekend all...

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Heinze, Laura R GCPE:EX
Sent: Friday, April 24, 2015 7:38 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Lambert, Tim HLTH:EX
Subject: Re: Heads Up - Biosolids

Thanks Arlene - not to worry, Have connected w Perry on it. Have a great night,
Laura

Sent from my iPhone

On Apr 24, 2015, at 7:12 PM, "Paton, Arlene HLTH:EX" <Arlene.Paton@gov.bc.ca> wrote:

Hi – just seeing this again and worried that no one got back to you, Laura. MoE is working on this with the Premier's office, very challenging situation. We think best that IHA not respond immediately as the situation may change over the next week or so. We've communicated with the MHO about this, but want to close the loop with you as well.

Perry has also responded to MTL's request that FNHA (Evan Adams) be pulled in and meet with the chiefs and that's happening this Wed. Apparently FNHA was already involved, according to MoE. Anyway, more news to come on this file – IHA should be cautious of taking any steps for a week or two – that's what we've told the MHO and Perry will give him a call next week to reconfirm.

Regards,

Arlene Paton

Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Lambert, Tim HLTH:EX
Sent: Thursday, April 23, 2015 5:29 PM
To: Zemanek, Michael HLTH:EX; Paton, Arlene HLTH:EX
Subject: FW: Heads Up - Biosolids

Fyi

From: Heinze, Laura R GCPE:EX
Sent: Thursday, April 23, 2015 4:32 PM
To: HLTH HAD Issues HLTH:EX; Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: FW: Heads Up - Biosolids

Hi folks,

Heads up on this one – IH will be sending a letter to The Nooaitch Indian Band denying their request for a drinking water investigation.

Let me know if any concerns!
Laura

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, April 23, 2015 4:18 PM
To: Heinze, Laura R GCPE:EX; Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX; May, Stephen GCPE:EX
Cc: XT:Lindsay, Darshan GCPE:IN
Subject: Heads Up - Biosolids

Good afternoon,

Please find a briefing note regarding a Health Protection statutory decision around biosolids in Merritt.

The Nooaitch Indian Band had requested an investigation of threat to drinking water under the Drinking Water Protection Act. Interior Health will be sending a letter denying their request for an investigation.

Please let me know as soon as possible if you have any questions or concerns

Michaela

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH

office: 250.314.2100 ext 3750 | cell: s.17

IH QuickDial: 8-200-3750

<image001.png> <image002.png> <image003.png>

<BN_Merritt Biosolids Update_23Apr2015_final.doc>

Biosolid Land Application - General Information

- The Organic Matter Recycling Regulation (OMRR), under which these facilities and the land application of biosolids are permitted is administered by the Ministry of Environment.
- Under OMRR, health officers at the local health authority have the opportunity to comment on land applications of biosolids when a Land Application Plan is referred by the applicant to the health authority office.
- Concerns with a proposed land application can be raised by the health officer at that time, including, if necessary, a directive to not apply the biosolid. Health officers can also respond to concerns raised by community members over the perceived risks to human health that may result from a proposed biosolid application or a composting facility.
- Operational criteria developed in OMRR is designed to protect human health and the environment, including protection of ground water supplies used for drinking water.

MHO Rob Parker request to support a UBCM Resolution for a Provincial Review of Biosolid Land Application

- The combined City of Merritt and TNRD SILGA resolution approved by TNRD Board and Merritt City Council for convention presentation is as follows:

THEREFORE BE IT RESOLVED that the Province form a committee including local government representatives to examine and make recommendations for changes to the Provincial biosolid review process and changes to the content in the Organic Matter Recycling Regulation and Agricultural Land Commission Act that govern the biosolid regulatory process in the Province of British Columbia.

- The Ministry of Environment had started a review of OMRR two years ago but decided not to open up the regulation and make any changes.
- MOE has presented the biosolids regulation to RHAs at both Environmental Health Policy Advisory Committee and the Drinking Water Leadership Council in December 2012, and RHAs were to provide comments but did not.
- The Environmental Health Policy Advisory Committee, co-chaired by Perry and Arlene, can arrange to have further discussions about bio-solids regulation with the Ministry of Environment to help air concerns and strategize on how to support these often difficult community issues.

IHA Response To First Nations On Drinking Water Protection Order In Nicola Valley

- Since December 2014, Interior Health has been involved in significant public and political attention regarding the use of biosolids in the Merritt and Nicola Valley areas. This attention has included

media interviews, presenting at a public forum on Jan. 26, and briefing elected officials at the Thompson Nicola Regional District.

- On January 12, IH received a letter from the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Nlaka'pamux Territory. They request that all current activities cease and that no new notification proceed until the Crown and ministry regulators establish a meaningful dialogue. This letter references the Supreme Court of Canada's decision regarding the rights of Aboriginal title to manage the land and resources in a manner that fits the vision for the territory.
- Interior Health responded to the letter referring the First Nations leaders back to the Ministry of Environment as the agency that oversees the legislation covering biosolids. This includes the Organic Matter Recycling Regulation (OMRR) and the Environmental Management Act.
- A meeting of the 5 chiefs and the FNHA has been arranged for Wednesday April 29th. The agenda seems to be to give the chiefs a forum where their explicit concerns over health impacts can be heard and addressed. Dr Evan Adams and regional FNHA reps will be in attendance and Evan has committed to get an invitation to IHA.
- In addition to OMRR, under section 29 of the Drinking Water Protection Act, any person has a right to request an investigation by a drinking water officer if they consider there is a threat to their drinking water. The drinking water officer is obligated to consider this request and should be able to make a decision whether to initiate an investigation.
- Based on the evidence brought forward, if a drinking water officer deems that a potential threat exists, they will initiate an investigation
- If the investigation finds a threat to drinking water, the drinking water officer can require any party causing the threat to mitigate the risk.
- The Nootka Indian Band had requested a section 29 investigation under the Drinking Water Protection Act.
- Interior Health has considered the information and will be sending a letter denying the request for an investigation.
- Based on the information available at this time, Interior Health finds the information does not warrant any further investigation of a threat to drinking water.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, April 28, 2015 2:55 PM
To: Kendall, Perry HLTH:EX; Heinze, Laura R GCPE:EX; Lawrie, Hannah GCPE:EX
Cc: Henry, Bonnie HLTH:EX; Lambert, Tim HLTH:EX
Subject: Re: I'm not invited to tomorrow's Chiefs meeting on biosolids

I've let MoE know

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Kendall, Perry HLTH:EX
Sent: Tuesday, April 28, 2015 5:04 PM
To: Heinze, Laura R GCPE:EX; Lawrie, Hannah GCPE:EX
Cc: Henry, Bonnie HLTH:EX; Paton, Arlene HLTH:EX; Lambert, Tim HLTH:EX
Subject: FW: I'm not invited to tomorrow's Chiefs meeting on biosolids

FYI- MoE might know what's going to be on tomorrow's agenda. I have no sources.
Perry

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Evan Adams [<mailto:Evan.Adams@fnha.ca>]
Sent: Tuesday, April 28, 2015 1:48 PM
To: Kendall, Perry HLTH:EX
Subject: I'm not invited to tomorrow's Chiefs meeting on biosolids

I haven't been invited to the "Nicola Technical table meeting" tomorrow – the FNHA regional lead asked and I was not accepted. She did go on to say: "The chiefs have asked for a moratorium on application of biosolids until they had discussions with high level provincial officials of the province. The Chiefs have five conditions that they have requested from the province."

Evan Adams, MD, MPH
Chief Medical Officer
First Nations Health Authority
#501 – 100 Park Royal South
West Vancouver, BC V7T 1A2
o. 604-693-6552
evan.adams@fnha.ca

Benson, Stacey HLTH:EX

From: Heinze, Laura R GCPE:EX
Sent: Monday, May 4, 2015 9:43 AM
To: Kendall, Perry HLTH:EX; Henry, Bonnie HLTH:EX; Paton, Arlene HLTH:EX; Lambert, Tim HLTH:EX; Brown, Stephen R HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX
Subject: IH update on Biosolids

Hi there,

Just a brief update from Interior Health on the biosolids request –

At this point, the First Nation's group has not responded to a meeting date, we've given them a range of dates throughout May – and I understand the meeting scheduled with FNHA last week also was canceled. IH is working on scheduling a meeting with the group as soon as mutually possible. Once the timeline is all confirmed, we will have the materials to you before going ahead. The letter is still in process.

Will ensure we share the draft letter when we get it.

Laura Heinze

Manager, Media Relations – Ministry of Health

(250) 952-3387

(cell) s.17

Laura.Heinze@gov.bc.ca

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 12, 2015 6:04 PM
To: Lambert, Tim HLTH:EX
Subject: Re: Communication Materials re: Biosolids

Let's discuss both these issues tomorrow.

Sent from my BlackBerry 10 smartphone on the TELUS network.

Original Message

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 12, 2015 6:02 PM
To: Paton, Arlene HLTH:EX
Subject: Re: Communication Materials re: Biosolids

Hi Arlene

This would be good to bring to EHPAC on June 2. MoE is supposed to be presenting to the RHAs on biosolids. They can go over all of this.

We can forward to Karen the email to send to EHPAC.

Do you want to see if this works for Lori?

Tim

Sent from my iPhone

> On May 12, 2015, at 6:00 PM, Paton, Arlene HLTH:EX <Arlene.Paton@gov.bc.ca> wrote:

>

> Hi Tim - can we provide these materials to IHA. I'll ask Lori what she expects as ways to disseminate. You'll want to review and ensure we agree from a health perspective. Thx!

>

> Sent from my BlackBerry 10 smartphone on the TELUS network.

> **From:** Halls, Lori D ENV:EX <Lori.D.Halls@gov.bc.ca>

> **Sent:** Tuesday, May 12, 2015 5:47 PM

> **To:** Paton, Arlene HLTH:EX

> **Cc:** Crebo, David GCPE:EX

> **Subject:** Communication Materials re: Biosolids

>

>

> Arlene --- we've been asked by PO to look at having IHA help get the basic facts out about biosolids. MOE has developed the attached.....could you help facilitate this with IHA?

>

>

>

> Lori Halls

> Assistant Deputy Minister

> Environmental Protection Division

> 5th Floor, 2975 Jutland Road, Victoria Phone (250)387-6177 Fax
> (250)953-3414
> Email: lori.d.halls@gov.bc.ca<<mailto:lori.d.halls@gov.bc.ca>>
>
> <Biosolids FAQ and Case Studies REV.PDF> <Biosolid Life Cycle (rvsd
> April 29 2015) (2).pptx>

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 9:44 AM
To: XT:Corneil, Trevor Dr. HLTH:IN; Parker, Dr. Rob; XT:HLTH Parsonage, Roger
Cc: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX
Subject: FW: Communication Materials re: Biosolids
Attachments: Biosolids FAQ and Case Studies REV.PDF; Biosolid Life Cycle (rvsd April 29 2015) (2).pptx

Hi Trevor, Rob and Roger – Ministry of Environment has prepared the attached documents to help explain biosolids and the related regulatory framework to the public and has asked me to share them with you and your staff, as their dissemination will hopefully be helpful in the continued public discussions about biosolids in your region.

Tim and I are also working with MoE to have them attend our June Environmental Health Policy Advisory Committee so that we can all have a more in-depth discussion about biosolids. If there are specific angles on this issue that you'd like MoE and the committee to focus in on, please let me know so we can get some preparatory work done ahead of time.

Thank you!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 9:54 AM
To: Glassford, Karen (Karen.Glassford@bccdc.ca)
Cc: Lambert, Tim HLTH:EX; XT:HLTH Kosatsky, Tom; Kendall, Perry HLTH:EX
Subject: FW: Communication Materials re: Biosolids
Attachments: Biosolids FAQ and Case Studies REV.PDF; Biosolid Life Cycle (rvsd April 29 2015) (2).pptx

Here are the communication materials from Min of Environment that we should send out to EHPAC with the agenda for the June meeting. I don't yet have confirmation that MoE staff can attend and present on biosolids, but even if they can't I think we should still have biosolids on the agenda for a brief discussion and these materials provide some basis for that discussion.

Thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.



Biosolids Frequently Asked Questions and Case Studies

March 2015

1 INTRODUCTION

The BC Ministry of Environment (MOE) consulted with Sylvis Environmental Services Inc. to create a list of "frequently asked questions" (FAQ) and case studies in order to provide information to the public on the beneficial use of biosolids. This document provides answers to common questions that have been raised and provides three case studies for consideration.

2 FREQUENTLY ASKED QUESTIONS

2.1 WHAT ARE BIOSOLIDS?

The term "biosolids" means different things in different places.

In British Columbia, "biosolids" and "sludge" do not mean the same thing. In BC, sludge means the solid, semi-solid or liquid material that is generated during the wastewater treatment process and before the criteria for beneficial use have been met.

In BC, the term "biosolids" has a very specific definition that is provided in the BC Organic Matter Recycling Regulation (OMRR). The OMRR says that biosolids "means stabilized municipal sewage sludge resulting from a municipal wastewater treatment process or septage treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled in accordance with the requirements of this regulation."

To summarize, municipal wastewater treatment generates sludge which is further processed into biosolids – biosolids are sludge that has been treated to reduce pathogens and odours, stabilized, and tested to ensure that treatment requirements and quality criteria are met.

The OMRR does not allow the land application of sludge.

- Photograph 1 depicts biosolids generated through different wastewater treatment processes.

2.2 HOW ARE BIOSOLIDS REGULATED IN BC?

In BC, biosolids are regulated under the BC Organic Matter Recycling Regulation (OMRR) which is administered by the BC Ministry of Environment and falls under the umbrella of both the BC *Environmental Management Act* and BC *Public Health Act*. The OMRR was developed through public consultation and was promulgated (signed into law) in 2002.

The OMRR divides biosolids into 2 categories:

1. Class A biosolids and,
2. Class B biosolids

The categories differ in the requirements for treatment, quality, management and distribution and are dependent on the quality of the material produced.

Specific biosolids management practices have been put into place to protect human health and the environment. One of the management practices is a Land Application Plan (LAP). A LAP is a document that is authored and signed by a qualified professional that provides details on the quality of the biosolids and the soil where the biosolids will be applied, outlines how the land application will take place including where and when, and provides monitoring requirements. The BC Ministry of Environment is notified of all land application plans.

According to the Regulation, public notification of land application is not required; however, some companies provide public notification and information on a voluntary basis. Depending on the quality and class of biosolids, having visible signage after land application that explains the land application and the required restrictions is mandatory under the regulation.

The OMRR, supporting Guidelines for best management practice, and a summary of the most recent public engagement process are available for viewing on the Ministry's website: <http://www2.gov.bc.ca/gov/topic.page?id=2C130233751D44AEB77A7ACE4A014A8>

- Photograph 2 aims to depict qualified professional involvement in a biosolids beneficial use project.

2.3 HOW ARE BIOSOLIDS PRODUCED?

Biosolids are produced through municipal wastewater treatment– In BC the term “biosolids” does not include material generated by industrial wastewater treatment. Municipal wastewater treatment plants are designed to take the incoming material (called “influent”) and produce two products: water (called “effluent”) and biosolids. Influent quality is also protected by source control bylaws (local/regional laws that describe what can and cannot be put into the local/regional wastewater treatment system) and in some cases, pre-treatment of the wastewater. It is against the law (specifically the Hazardous Waste Regulation) to dispose of hazardous materials into the sewer system.

Many people think that biosolids are the solids that are flushed down your toilet; they are not. Once the influent enters the wastewater treatment plant it is treated in a series of steps that may include any combination of physical, biological and chemical processes depending on the type

of treatment facility and the level of treatment. These processes generate sludge. The sludge is then further treated to meet the requirements of the BC Organic Matter Recycling Regulation (OMRR). Only once the OMRR requirements are met can the term "biosolids" be used.

Many municipalities offer tours of their wastewater treatment facilities, we encourage you to contact your local wastewater treatment plant if you would like to learn more about how wastewater is treated and biosolids are produced in your area.

- Photograph 3 depicts a wastewater treatment plant.

2.4 WHAT IS IN BIOSOLIDS?

Biosolids are made up primarily of water, organic matter and nutrients. These properties allow the biosolids to be used as a soil amendment and/or fertilizer.

Adding organic matter to the soil allows air, water and nutrients to move more easily in the soil which is beneficial for plant establishment and growth. The increase in soil organic matter also increases the amount of water the soil can hold which helps to prevent soil erosion, reduces run-off and supports plants.

Biosolids contain nutrients that are needed for plant growth. These nutrients include nitrogen, phosphorus and potassium (these are referred to as "macro nutrients") and smaller amounts of zinc, copper and iron (these are referred to as "micro-nutrients"). The combination of organic matter and nutrients allows the biosolids to act like a slow release fertilizer when applied to the soil.

Similar to animal manures, biosolids contain micro-organisms some of which are pathogens (organisms that have the potential to cause disease); dissimilar to animal manure, the amount of pathogens in the biosolids is controlled (the OMRR provides maximum limits) and has been reduced in the wastewater treatment process. Not all microorganisms contained in biosolids are pathogenic (capable of causing disease).

Biosolids contain trace elements some of which are beneficial to plant growth and others which are not and must be controlled. The OMRR specifies the maximum concentrations of trace elements that may be present in the biosolids, as well as maximum limits for soils post application which are protective of soils in a wide variety of situations. It is important to understand that soils naturally have background levels of all trace elements, and that all soil amendments, including manures, fertilizers and composts provide trace element addition to the soil. Biosolids are the only soil amendment where post application trace element limits are controlled through regulation.

Biosolids can also contain ultra-trace amounts of other materials that enter the wastewater treatment system. These constituents can include personal care products, pharmaceuticals, flame retardants, antibiotics, and hormone mimics. We use or are exposed to these compounds on a regular basis in our daily lives, and as a result they are found in dilute quantities in biosolids. These compounds are generally found in the parts per billion to parts per trillion range in biosolids. To understand how small these concentrations are, a part per billion is

roughly equivalent to a few drops diluted in an Olympic sized swimming pool, while a part per trillion is analogous to trying to find a loonie within an area the size of Canada. Research shows that some of these compounds are reduced or eliminated in the wastewater treatment process and others degrade rapidly in sunlight, or when they contact the soil once the biosolids are land applied. The presence of these compounds in biosolids has not been determined to cause any risk to people or the environment through biosolids application, and it is important to consider that they are used in much greater quantities in our everyday activities.

The best way to protect biosolids quality is to consider what you put 'down the drain', which empties into the wastewater treatment system. For example return unused medication to your local pharmacy, and recycle oil and paint at appropriate recycling facilities rather than disposing of it in the toilet or drain. We all contribute to biosolids production and we all play a role in protecting biosolids quality.

- Photograph 4 depicts a biosolids sampling event.

2.5 ARE THERE ANY QUALITY REQUIREMENTS FOR BIOSOLIDS?

The OMRR provides quality criteria for biosolids, compost and biosolids growing media (BGM). These criteria include:

- maximum trace element concentrations in the biosolids and in the soil after the biosolids have been applied;
- maximum concentration of fecal coliforms in the biosolids, compost or BGM (fecal coliforms are a group of bacteria found in human and animal intestines, *E.coli* is an example of a type of fecal coliform);
- maximum concentration of foreign matter (materials not normally found in the soil) in the biosolids, compost and BGM; and,
- requirements for pathogen reduction and vector attraction reduction (odour control).

The biosolids trace element criteria used in BC are based on the extensive risk assessments completed by the United States Environmental Protection Agency (US EPA) and are more restrictive than the criteria used in the US. A Guide to the Biosolids Risk Assessments has been prepared by the USEPA which outlines the scientific process that was completed in setting safe limits for biosolids.

Trace element concentrations in the soil receiving biosolids must comply with soil quality standards. The soil standards are based on the criteria provided in the BC Contaminated Sites Regulation. These standards take into consideration site-specific factors such as land use, water resources and soil pH.

- Photograph 5 depicts a soil sampling event prior to land application of biosolids.

2.6 HOW ARE BIOSOLIDS MANAGED?

In 2012, the Canadian Council of Ministers of Environment (CCME) developed a Canada-Wide Approach for Biosolids Management (CCME, 2012) that "promotes the beneficial use of valuable resources such as nutrients, organic matter and energy contained within municipal biosolids..." CCME is made up of the environment ministers from the federal, provincial and territorial governments that work together to address environmental issues of national importance.

Biosolids are managed in a variety of ways in British Columbia including land application and as an ingredient in creating compost and fabricated soil. The BC Ministry of Environment, through the OMRR, promotes the beneficial use of biosolids rather than disposal – this is in line with the direction provided by CCME in their Canada-Wide Approach for Biosolids Management.

Beneficial use of biosolids as a fertilizer and soil amendment returns necessary nutrients to the soil, decreases the need for chemical fertilizer and adds organic matter that helps reduce soil erosion and run-off.

In BC, biosolids are used for:

- soil fabrication;
 - compost production;
 - land restoration;
 - mine reclamation;
 - agricultural land fertilization;
 - forest fertilization;
 - erosion control;
 - horticulture;
 - slope stabilization; and
 - roadside aesthetic improvements.
-
- Photograph 6 depicts land application of biosolids.

2.7 WHAT MECHANISMS ARE IN PLACE TO PROTECT THE ENVIRONMENT?

In BC, biosolids land application must be beneficial (biosolids cannot be land applied as a method of disposal) and the biosolids application rate selected to match the desired beneficial use. For example, if the biosolids are being land applied as a nitrogen fertilizer the application rate should meet the nitrogen requirements of the intended crop, without providing more nitrogen than the crops needs. This protects water resources by reducing the possibility of nitrogen movement, or 'runoff' to surface water, or leaching to groundwater.

Before they are land applied, biosolids must meet the quality criteria provided in the BC Organic Matter Recycling Regulation. A qualified professional must specify the biosolids application rate and select the most appropriate time for application.

Biosolids land application must also adhere to a variety of management practices such as:

- Set-backs from roads, occupied dwellings or boundaries of property zoned for residences or recreation;
- Buffers zones (areas where biosolids applications are prohibited) from water resources including groundwater wells;
- Domestic animal grazing restrictions;
- Signage indicating biosolids have been applied; and,
- Waiting periods before consuming food crops.

In comparison to manure and chemical fertilizers, the land application of biosolids as a fertilizer or soil amendment is much more highly regulated.

- Photograph 7 depicts a demarcated setback distance line along which a biosolids land application has taken place.

2.8 ARE THERE HUMAN HEALTH CONSIDERATIONS WHEN USING BIOSOLIDS?

Health considerations when using biosolids are the same as those when working in your garden, or when using any other organic amendment, like manure. Practice good hygiene such as washing your hands after touching the biosolids and before eating or before using the bathroom. If you have open wounds on your hands, they should be protected from biosolids.

- Photograph 8 depicts the handling of biosolids using gloves as protection.

2.9 WHO IS RESPONSIBLE FOR BIOSOLIDS MANAGEMENT?

Owners of wastewater treatment plants are responsible for treating wastewater and for managing the biosolids that are produced. The Ministry of Environment, through the BC Organic Matter Recycling Regulation, provides criteria for biosolids use. The Ministry of Environment also provides best management practice guidelines to assist users in complying with the requirements of the OMRR.

The OMRR specifies that Land Application Plans (LAP), authored by qualified professionals, must be prepared in advance of land application of managed organic matter (Class A biosolids, Class B biosolids and Class B compost). Following land application, the qualified professional is required to certify that the biosolids application occurred as per the LAP. A qualified professional is defined in the OMRR as a person that:

- "(a) is registered in British Columbia with his or her appropriate professional association, acts under that professional association's code of ethics, and is subject to disciplinary action by that professional association, and
- (b) through suitable education, experience, accreditation and knowledge may be reasonably relied on to provide advice within his or her area of expertise as it relates to this regulation."

The Ministry of Environment, and in specific cases the regional Medical Health Officer and Agricultural Land Reserve Commission, review the land application plans and request additional information if required. The Ministry of Environment can also require additional management practices if necessary to protect human health and the environment.

All biosolids generators, users and qualified professionals must act according to the OMRR and best management practices.

2.10 WHERE CAN I FIND OUT MORE ABOUT BIOSOLIDS?

There is a wealth of information and a large body of scientific knowledge supporting beneficial use of biosolids.

Description	Website
BC Organic Matter Recycling Regulation	http://www.bclaws.ca/Recon/document/ID/freeside/15_18_2_002a
Land Application Guidelines for the OMRR	http://www2.gov.bc.ca/gov/DownloadAsset?assetId=60205D2806594021BAEE71AEA0F82638
BC Ministry of Environment	http://www2.gov.bc.ca/gov/topic.page?id=F6522EBC38844E69830A81536C9748CA http://www2.gov.bc.ca/gov/topic.page?id=2C130233751D44AEBC77A7ACE4A014A8
BC Water and Wastewater Association	http://www.bcwwa.org/
Canadian Council of Ministers of the Environment	http://www.ccme.ca/en/resources/waste/biosolids.html
Canadian Water and Wastewater Association	http://www.cwwa.ca/fagbiosolids_e.asp
National Biosolids Partnership (US)	http://www.wef.org/biosolids/
Northwest Biosolids Management Association	http://www.nwbiosolids.org/
Northeast Biosolids Management Association	http://www.nebiosolids.org/
Ontario Ministry of Agriculture, Food and Rural Affairs	http://www.omafra.gov.on.ca/english/nm/nasm/info/brochure.htm
Water Environment Federation	http://www.wef.org/

For additional information on how the BC Ministry of Environment manages the beneficial use of biosolids, please contact the Environmental Protection Division at envprotdiv@Victoria1.gov.bc.ca.

- Photograph 9 depicts a tour group at a biosolids land application project

3 CASE STUDIES

Case studies on beneficial biosolids use in the agricultural, forestry, and mine reclamation sectors are presented in the following sections.

3.1 CASE STUDY 1: FORESTRY

More than 40% of BC's regional economies are forestry-based, and forestry supports over 55,000 direct jobs in more than 7,300 businesses. A lack of plant essential nutrients, especially nitrogen, limits the productivity of many BC forest ecosystems. For over 25 years, municipalities in British Columbia and throughout the Pacific Northwest of Canada and the United States have been applying biosolids to improve the productivity of forestland.

Extensive biosolids forest fertilization research conducted in local forest ecosystems in the Pacific Northwest has shown that biosolids applications in forestry:

- improve the quality of the soil;
- increase the growth rate of the trees and therefore the rate of timber production; and
- promote the growth of understory plants.

Biosolids can be beneficially used in traditional forests, short-rotation intensive culture of fast growing trees such as hybrid poplar, and Christmas tree plantations.

When land applied, biosolids provide organic matter and nutrients such as nitrogen that are often lacking in forest soils. The addition of organic matter increases the ability of the soil to retain nutrients and water. The increased water-holding capacity of the soil is beneficial as many second-growth forests grow in rocky, nutrient-poor soils where water shortages occur, especially during dry summer months.

The high organic matter content of the biosolids also allows it to act as a slow-release fertilizer. Trees fertilized with biosolids generally show an increased growth rate for five to eight years following biosolids application. Some tree species such as Douglas fir show a consistent and significant growth response to biosolids fertilization, increasing the rate of timber production by up to 75%. Biosolids are also especially well-suited to the fertilization of short-rotation plantations. For example, hybrid poplar trees grown in short rotation as a biomass crop have a high nutrient demand and can capitalize on the nutrients provided by the biosolids. In addition to promoting tree growth, biosolids application also benefits the understory vegetation. Understory plants grow faster and typically have a higher nutrient content therefore providing habitat and food for wildlife.

- Photograph 10 depicts growth response in a coniferous tree following biosolids fertilization.
- Photograph 11 depicts land application of dewatered biosolids to a short-rotation hybrid poplar plantation.
- Photograph 12 depicts application of dewatered biosolids to traditional forest stand.

3.2 CASE STUDY 2: AGRICULTURE

Throughout BC and the rest of Canada there are many active agricultural land application programs using biosolids as a fertilizer and soil amendment. Ongoing research programs, particularly in the Pacific Northwest, continually add to our knowledge about the application of biosolids to agricultural land.

Biosolids applications to agricultural land provide a number of benefits such as:

- improved soil structure including increased water holding capacity and decreased soil erosion;
- fertilization and replenishing of the nutrients in the soil that are removed through intensive agriculture;
- increased yield; and,
- pH adjustment of the soil.

These benefits are a result of the unique characteristics of biosolids. Biosolids contain a high concentration of organic matter which when land applied improves the quality of the soil. Soil quality improvements include increased water retention, tilth, erosion resistance and nutrient holding capacity.

As a fertilizer, biosolids provide a unique blend of macro-nutrients such as nitrogen and phosphorus and micro-nutrients such as calcium, iron, magnesium, copper, and zinc. The nutrients contained in the biosolids are released slowly over time as they are found in both plant-available and organically-bound forms. Plant-available nutrients can be immediately used by plants; organically bound nutrients are released slowly as the organic matter breaks down over a three to five-year period following biosolids fertilization. This slow release not only provides sustained fertilization benefits for the farmer for multiple years following a single application it also protects water resources in comparison to traditional chemical fertilizers that release nutrients quickly and are more prone to leaching.

When determining biosolids application rates for agricultural land the qualified professional takes into consideration the nutrient requirements of the crop, the nutrient concentration in the biosolids and the soil and the nutrient release rates. The application rate is selected so that the amount of plant-available nutrient released in the first year is equal to the crop demand. In this way, there is no excess nutrient left over after the growing season, reducing the potential for nutrient leaching. Biosolids fertilization results in crop yield increases that are similar and often more significant than those provided by chemical fertilization.

Depending on the characteristics of the biosolids they can also be used for pH adjustment of the soil. Some municipalities use lime in their treatment processes resulting in biosolids that have a high pH. These biosolids can be land applied to improve plant growth and soil productivity by increasing the pH of acidic soils.

- Photograph 13 depicts land application of dewatered biosolids.
- Photograph 14 depicts an example of vegetation response (i.e., a deeper green lushness) of biosolids-fertilized grasses.

- Photograph 15 depicts a method for ensuring that the target biosolids application rate is achieved.

3.3 CASE STUDY 3: MINE RECLAMATION

Mine reclamation is required as a normal part of mining activities in BC. Surface mining operations remove topsoil and stockpile it in preparation for future reclamation activities while they conduct mining operations. Following mining activities the resulting soil is typically low in nutrients and organic matter and there is insufficient topsoil to complete the reclamation activities. Although the original topsoil is stockpiled, it often loses organic matter through decomposition, so that by the time reclamation activities begin, the topsoil is no longer suitable for re-vegetating and reclaiming an area.

In British Columbia, biosolids have been used for:

- soil development;
- slope stabilization;
- aesthetic improvement through vegetation establishment;
- wildlife habitat creation including the creation of an artificial wetland on a former quarry sedimentation pond; and,
- reduction of acid mine drainage.

In reclamation projects, biosolids are typically applied either only once or infrequently and at a higher application rate than would be used for agricultural or forestry applications. As mine soils often lack nutrients and organic matter, the biosolids application can be higher and the higher rate initiates the nutrient cycling process in the soil. Biosolids contain plant-essential nutrients and organic matter, which helps build the soil and improve its tilth, moisture retention, and nutrient-holding capacity.

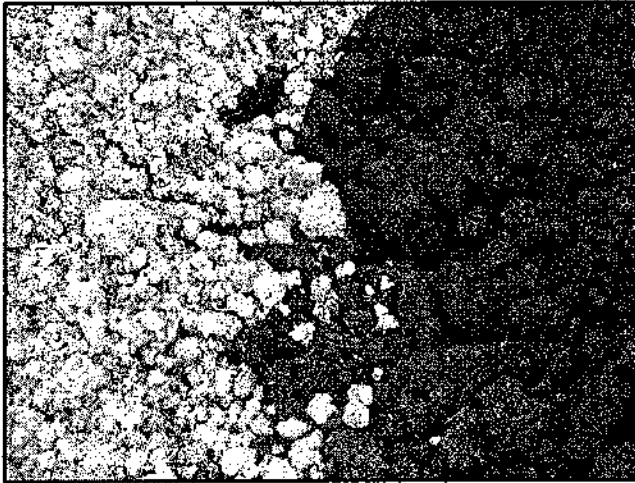
In addition to soil development, biosolids act as a fertilizer by providing macro and micro-nutrients needed to establish and sustain vegetation. The vegetation improves the aesthetics of the mine, suppresses dust generation, creates wildlife habitat and improves slope stability. Depending on the characteristics of the biosolids they can also be used for reduction of acid mine drainage. Some municipalities use lime in their treatment processes resulting in biosolids that have a high pH. These biosolids can be land applied to prevent the generation of acid mine drainage by increasing the pH of the soil.

Biosolids have been used in mine reclamation in British Columbia for over 20 years and have been recognized as a key innovation in award-winning mine reclamation programs.

- Photograph 16 depicts a dry former tailings pond on a windy day where dust is being generated.
- Photograph 17 depicts land application of biosolids to a dry former sedimentation pond as a first step in reclamation leading from soil development to establishment of vegetation.

- Photograph 18 depicts the development of a soil layer rich in organic matter as a result of land application of biosolids in a mine reclamation project.

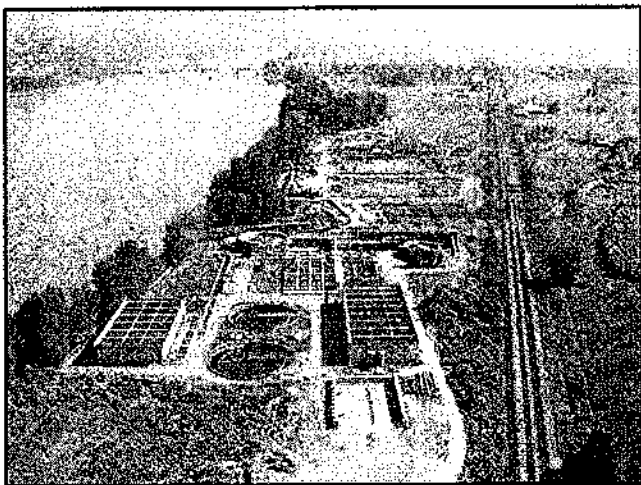
PHOTOGRAPHS



Photograph 1: Examples of biosolids resulting from different treatment processes. The biosolids on the left result from lime treatment and the biosolids on the right from treatment by anaerobic digestion.



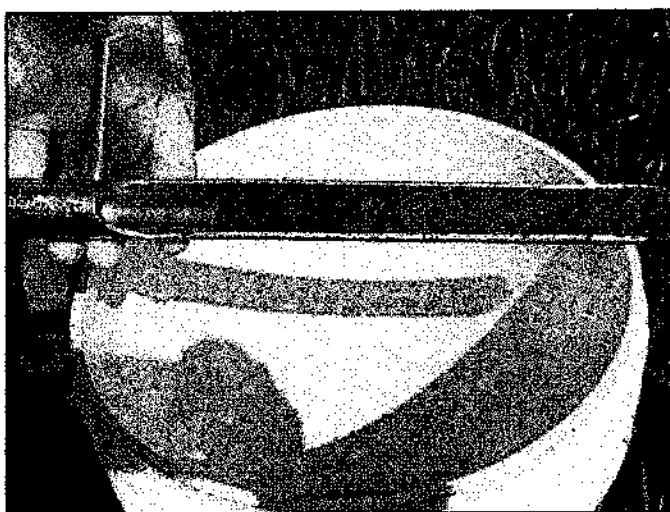
Photograph 2: Biosolids management must involve a qualified professional, who takes responsibility for the specific biosolids beneficial use project.



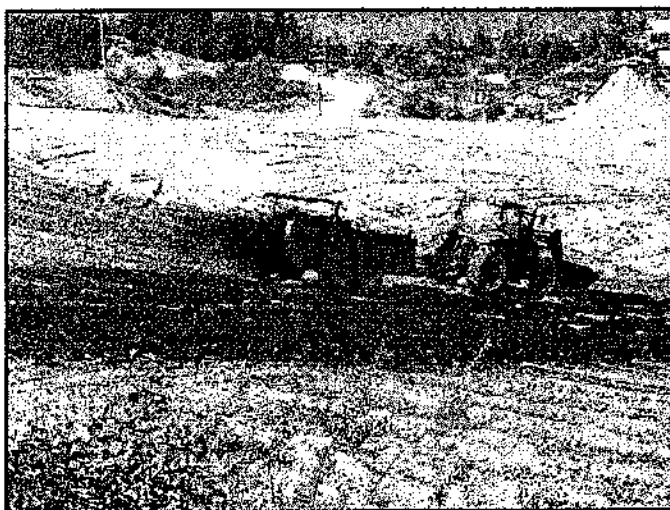
Photograph 3: Biosolids are produced at a wastewater treatment plant.



Photograph 4: Biosolids are sampled prior to use to ensure quality parameters comply with criteria listed in the *BC Organic Matter Recycling Regulation*.



Photograph 5: Soil samples are taken from a biosolids land application site to ensure that post-application soil concentrations of trace elements do not exceed the relevant soil quality limits.



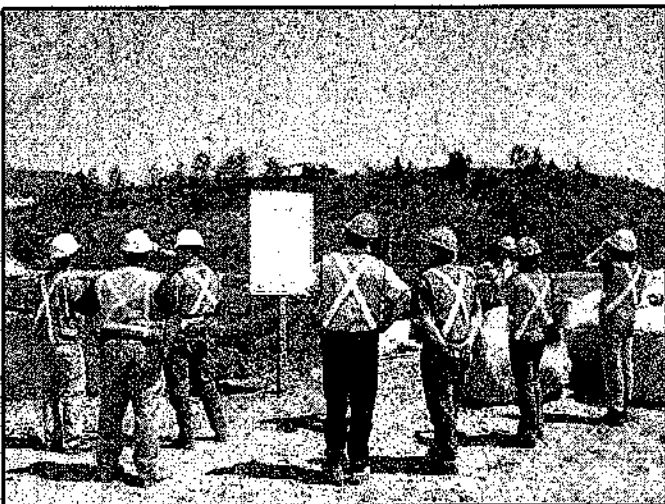
Photograph 6: Land application of biosolids can aid in soil development and subsequent establishment of vegetation in land reclamation projects.



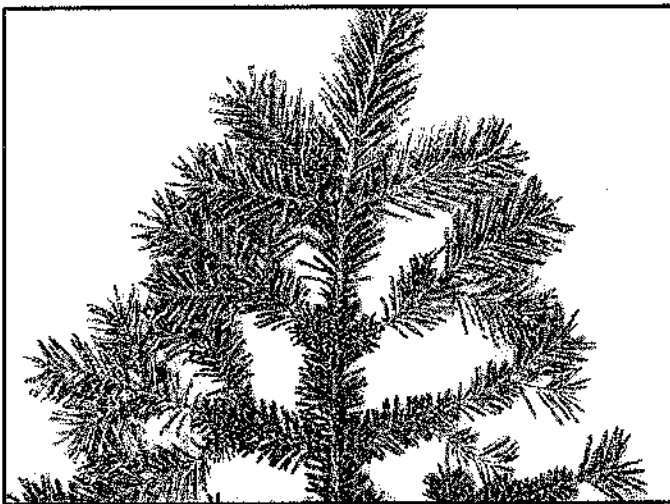
Photograph 7: Biosolids land applications must respect a 30-meter setback distance, demarcated with stakes in this photo, from surface water.



Photograph 8: When handling biosolids, as with other animal manures, basic hygiene should be followed and protection such as gloves should be worn.



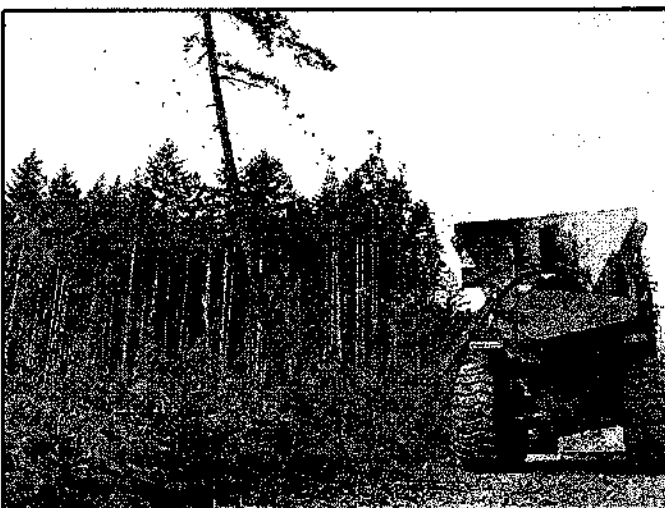
Photograph 9: Participants in a biosolids land application project tour learn about biosolids beneficial use.



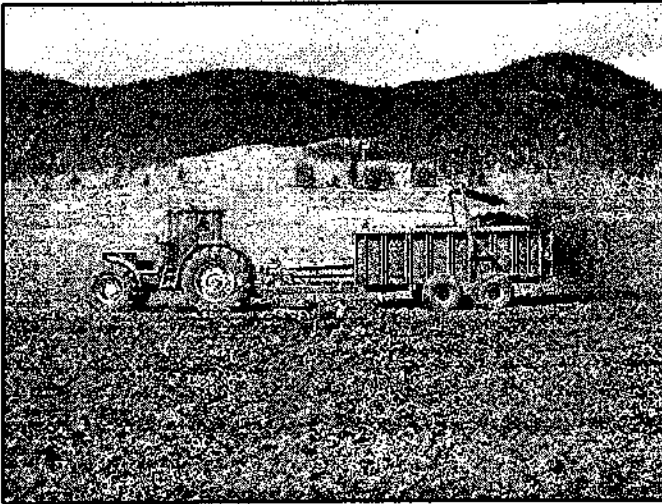
Photograph 90: The effects of biosolids fertilization on a Douglas Fir tree are readily visible when comparing the current year's to the previous year's growth.



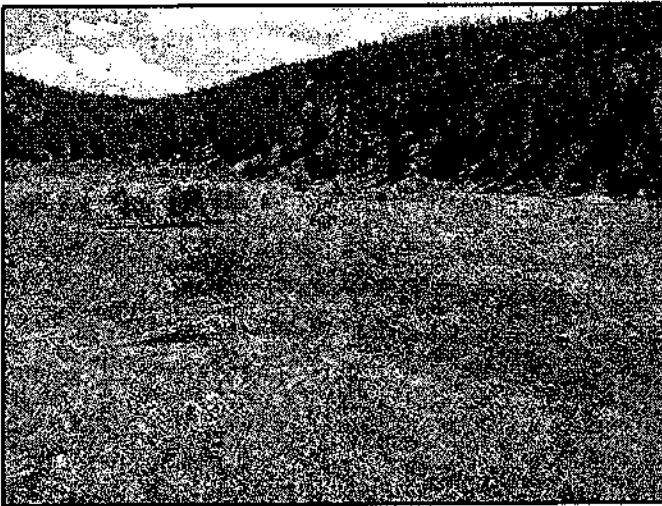
Photograph 101: Dewatered biosolids are applied to a short-rotation hybrid poplar plantation.



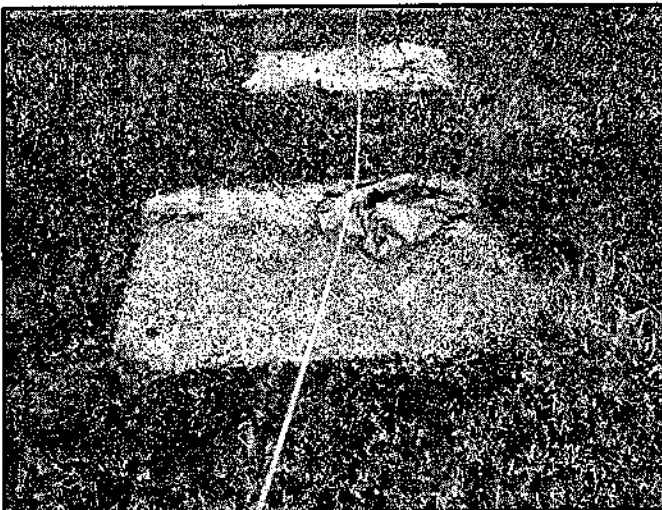
Photograph 112: Depending on the terrain and access, specialized rather than traditional agricultural equipment must be used. Here, biosolids are applied using a side-discharge manure spreader in a forest stand.



Photograph 123: Biosolids are land-applied to a hayfield in the BC Interior using traditional agricultural equipment.



Photograph 134: The beneficial effects of biosolids fertilization can be seen in the lushness of the grasses in the center portion of the photo.



Photograph 145: Biosolids application rates, which are tailored to site vegetation requirements, are calibrated by measuring the amount of biosolids applied to a specific area (the "tarp method").



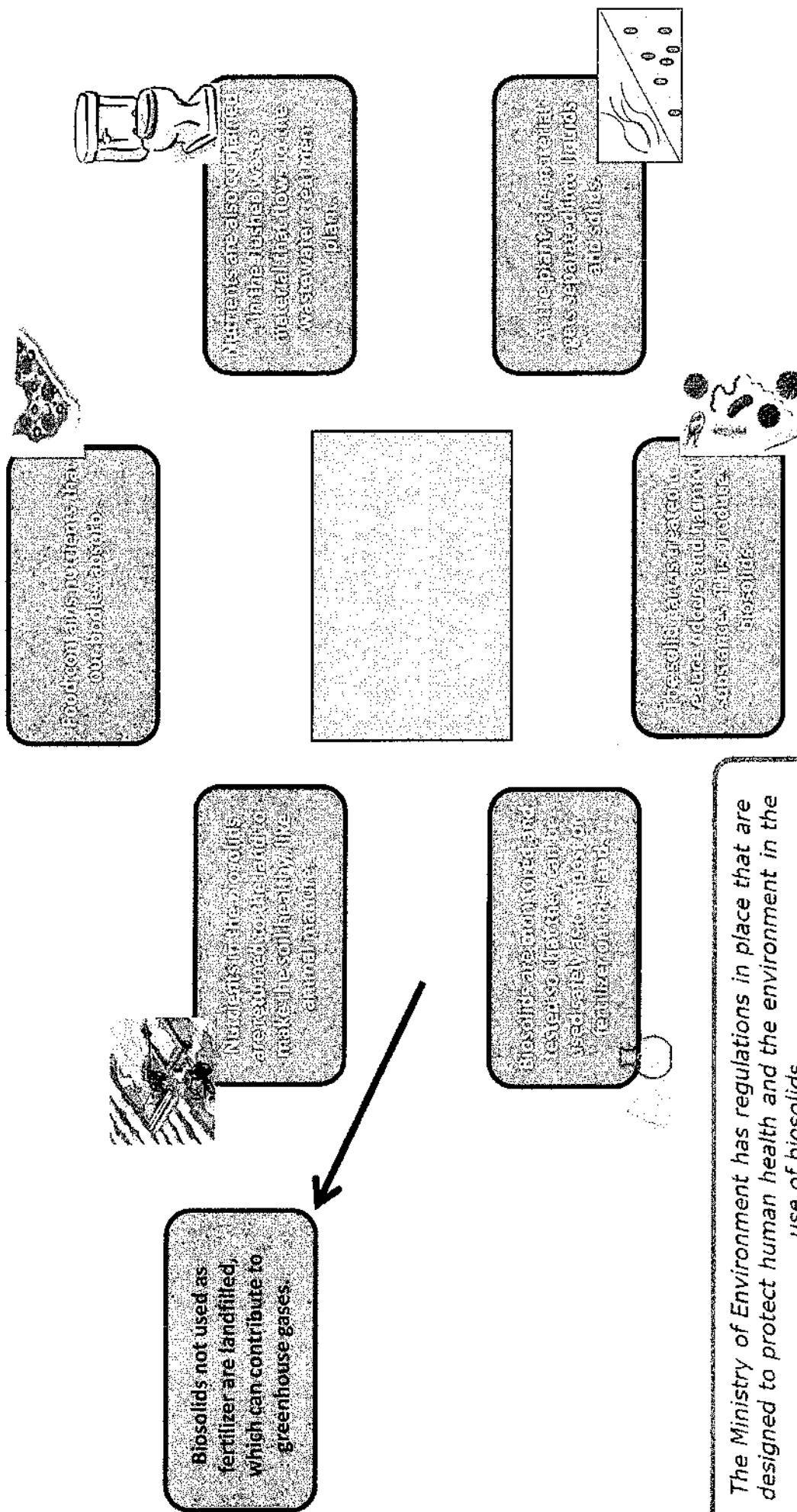
Photograph 156: Mining areas such as former tailings ponds are characterized by soils low in nutrients and organic matter. Such soils are prone to water and wind erosion, and can realize numerous benefits associated with biosolids land application.



Photograph 167: Biosolids are land-applied to a dry former tailings pond in order to aid in soil development and eventual establishment of a self-sustaining vegetation community.



Photograph 178: The beneficial effects of land application of biosolids on soil development, soil fertility, and vegetation establishment make it an effective method of mine reclamation. Here, a deer browses on grass in a poplar plantation established on biosolids-amended soil.



The Ministry of Environment has regulations in place that are designed to protect human health and the environment in the use of biosolids.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Wednesday, May 13, 2015 12:52 PM
To: Halls, Lori D ENV:EX
Cc: Lambert, Tim HLTH:EX; Muller, Bev HLTH:EX
Subject: Biosolids presentation at Env Health Policy Advisory Committee on June 2

Importance: High

Hi Lori – we spoke of this earlier that it would be great to have MoE present on biosolids and engage in a dialogue with this committee in the near future. Our face-to-face meeting is on June 2nd which is fast approaching. As a reminder, this committee includes Medical health officers and health protection directors from every health authority along with BCCDC and ministry staff. Perry Kendall and I co-chair the committee. This is taking place at BCCDC in Vancouver. Could you please let me know if you have someone available to come and do this on that date? If not, we can try for the late fall meeting, but given the focus on biosolids this day, it would be great if it works out for June 2nd. Thank you!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Thursday, May 14, 2015 4:10 PM
To: Lambert, Tim HLTH:EX
Subject: Re: Communication Materials re: Biosolids

No doubt! Thx...

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Thursday, May 14, 2015 4:08 PM
To: Paton, Arlene HLTH:EX
Subject: Re: Communication Materials re: Biosolids

Hi Arlene
Remind Lori to speak to this on June 2 as well.

I have a call with Kris Ord next week on biosolids as well - don't know the agenda but perhaps related?

Tim

Sent from my iPhone

On May 14, 2015, at 4:07 PM, Paton, Arlene HLTH:EX <Arlene.Paton@gov.bc.ca> wrote:

Ok, i'll send out first thing tomorrow to them and then our comments to Lori.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Thursday, May 14, 2015 3:53 PM
To: Paton, Arlene HLTH:EX
Subject: Re: Communication Materials re: Biosolids

Hi Arlene
Sounds good. I would include Roger for sure as he has been directly involved.

Tim

Sent from my iPhone

On May 14, 2015, at 12:18 PM, Paton, Arlene HLTH:EX <Arlene.Paton@gov.bc.ca> wrote:

Lori has asked that I facilitate the distribution of these materials to IHA. So I will forward to Trevor as CMHO, Rob as the MHO most involved and Roger (would that be your advice?), noting that this has been prepared by MOE and may be of use in their further discussions with the public, noting that these materials don't necessarily address all the issues that public is raising. At the same time, I'll raise these concerns with Lori and see if MoE will be producing FAQs to address these.

Does that work?

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Lambert, Tim HLTH:EX
Sent: Thursday, May 14, 2015 11:40 AM
To: Paton, Arlene HLTH:EX
Subject: Fwd: Communication Materials re: Biosolids

Hi Arlene

Below is a review of the material provided by MOE in biosolids.

Steve raises some good questions that I could see coming up with distribution of the material.

These could be raised on June 2 or perhaps MOE may want to address these now - in particular, collecting the health issues into a robust section to assess stakeholder concerns.

Should we send to RHAs for review to see their thoughts on distributing this as is?

Tim

Sent from my iPhone

Begin forwarded message:

From: "Lambert, Tim HLTH:EX" <Tim.Lambert@gov.bc.ca>
Date: May 14, 2015 at 10:37:11 AM PDT
To: "Baumber, Steve HLTH:EX" <Steve.Baumber@gov.bc.ca>
Cc: "Zemanek, Michael HLTH:EX" <Michael.Zemanek@gov.bc.ca>
Subject: Re: Communication Materials re: Biosolids

Thanks Steve. Good overview.

Tim

Sent from my iPhone

On May 14, 2015, at 10:35 AM, Baumber, Steve HLTH:EX
<Steve.Baumber@gov.bc.ca> wrote:

Hi Mike and Tim,

Both of these documents are fine in the facts that they deliver, and I think that they can be provided 'as is' to inform the health authorities and their staff about what constitutes a biosolid in B.C.

However, neither of these documents directly address the pre and post-application human health concerns that have been expressed by the public that the health authority is being expected to address. The "Biosolid Life Cycle" diagram has a statement that "The Ministry of Environment has regulations in place that are designed to protect human health and the environment in the use of biosolids." It doesn't provide any further specifics and that may cause further frustration as a communication piece.

The "Biosolids FAQ" document has a single section on human health which is related to the direct handling of biosolids. Within the various other Question and Answer sections are details that speak to the numerous reasons why there is a reduced risk to human health, such as regulated levels for metals, pathogens and other trace contaminants within biosolids. Some answers speak to the extensive research conducted by the US EPA to set the limits that have been adopted into BC's regulation. This information is fine and forms the basis for talking about the risks to human health and potential exposure pathways, but what might be more suitable is a document or additional sections in the current document that specifically address the questions that have come up with respect to the concern over human health from the manufacturing and storage of biosolids, and the land application of biosolids. For example, "Is the air quality around a biosolid facility dangerous to my health?", "Will surface water be contaminated from surface runoff from an area where a biosolid has been land applied?", "Will a land application of a biosolid contaminate the ground water?", "Can wild animals or cattle become contaminated from biosolids?", or "Can I eat berries or collect food or traditional use plants from an area that has been treated with biosolids?".

Steve Baumber, MSc, RPF

Health Protection Professional Specialist – Land and Water
Use

BC Ministry of Health

Tel: (250) 952-3591 Fax: (250) 952-1713

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Zemanek, Michael HLTH:EX

Sent: Wednesday, May 13, 2015 4:54 PM

To: Baumber, Steve HLTH:EX

Subject: FW: Communication Materials re: Biosolids

Given your background, I think you should look rather than Rupert. Any concerns with the attached before we give green light to Arlene?

From: Lambert, Tim HLTH:EX

Sent: Wednesday, May 13, 2015 2:02 PM

To: Zemanek, Michael HLTH:EX

Subject: FW: Communication Materials re: Biosolids

Hi Mike

Can you have Rupert review this, to see if there are any issues – just give Arlene an Fyi. And then we can send to RHAs.

Tim

From: Paton, Arlene HLTH:EX

Sent: Tuesday, May 12, 2015 6:00 PM

To: Lambert, Tim HLTH:EX

Subject: Fw: Communication Materials re: Biosolids

Hi Tim - can we provide these materials to IHA. I'll ask Lori what she expects as ways to disseminate. You'll want to review and ensure we agree from a health perspective. Thx!

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Halls, Lori D ENV:EX <Lori.D.Halls@gov.bc.ca>

Sent: Tuesday, May 12, 2015 5:47 PM

To: Paton, Arlene HLTH:EX

Cc: Crebo, David GCPE:EX

Subject: Communication Materials re: Biosolids

Arlene --- we 've been asked by PO to look at having IHA help get the basic facts out about biosolids. MOE has developed the attached.....could you help facilitate this with IHA?

Lori Halls
Assistant Deputy Minister
Environmental Protection Division
5th Floor, 2975 Jutland Road, Victoria
Phone (250)387-6177
Fax (250)953-3414
Email: lori.d.halls@gov.bc.ca

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Thursday, May 14, 2015 4:18 PM
To: Lambert, Tim HLTH:EX
Subject: Fw: Biosolids letter
Attachments: Section 29 Request - Nooaitch First Nations - final.pdf

Importance: High

Perry is handling this and asking for edits on this letter, but you should also be looped in.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Heinze, Laura R GCPE:EX <Laura.Heinze@gov.bc.ca>
Sent: Thursday, May 14, 2015 3:46 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Subject: FW: Biosolids letter

Sorry Arlene – should have included you here.

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 3:34 PM
To: Kendall, Perry HLTH:EX; Brown, Stephen R HLTH:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Cc: Lawrie, Hannah GCPE:EX
Subject: Biosolids letter
Importance: High

Hi all – attached is what I think is being considered the final letter. They are not providing this in advance but will be giving it to them at their meeting tomorrow. I've asked what time the meeting is at.

This has been changed, but it still feels a little problematic to me... Not sure that they would be open to further changes, however.

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, May 14, 2015 3:30 PM
To: Heinze, Laura R GCPE:EX
Subject:

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH

office: 250.314.2100 ext 3750 | cell: 5.17

IH QuickDial: 8-200-3750



Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 9:52 AM
To: Halls, Lori D ENV:EX
Cc: Crebo, David GCPE:EX; Lambert, Tim HLTH:EX
Subject: RE: Communication Materials re: Biosolids

Hi Lori – I've sent these materials on to the MHOs and health protection director at IHA. We'll also use these as part of the package for our discussion at Environmental Health Policy Advisory Committee on June 2nd (am hoping your staff will be able to attend as per my earlier email) so that the other Health Authorities also have these materials.

Tim and his team reviewed the materials and commented that these documents don't directly address the pre and post-application human health concerns that the public often raises with health authorities. Questions such as:

- Is the air quality around the biosolid facility dangerous to my health?
- Will surface water be contaminated from surface runoff from an area where a biosolid has been applied to the land?
- Can wild animals or cattle become contaminated from biosolids?
- Can people eat berries, or collect food or traditional use plants from an area that has been treated with biosolids?

I don't know if you want to add to the FAQs or not, but some of these questions will get raised at EHPAC so wanted to make sure your staff are aware. Thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Halls, Lori D ENV:EX
Sent: Tuesday, May 12, 2015 5:48 PM
To: Paton, Arlene HLTH:EX
Cc: Crebo, David GCPE:EX
Subject: Communication Materials re: Biosolids

Arlene --- we've been asked by PO to look at having IHA help get the basic facts out about biosolids. MOE has developed the attached.....could you help facilitate this with IHA?

Lori Halls
Assistant Deputy Minister
Environmental Protection Division
5th Floor, 2975 Jutland Road, Victoria
Phone (250)387-6177
Fax (250)953-3414
Email: lori.d.halls@gov.bc.ca

Sitar, Natalie HLTH:EX

From: Muller, Bev HLTH:EX
Sent: Monday, June 15, 2015 9:58 AM
To: Sitar, Natalie HLTH:EX
Subject: FW: Biosolids letter

NR

From: Kendall, Perry HLTH:EX
Sent: Friday, May 15, 2015 10:27 AM
To: Paton, Arlene HLTH:EX
Subject: RE: Biosolids letter

They decided to speak to the issue and not send a letter.

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 10:21 AM
To: Kendall, Perry HLTH:EX
Subject: FW: Biosolids letter
Importance: High

Hi Perry – do you have a final version of what IH is tabling today?

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 3:46 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Subject: FW: Biosolids letter
Importance: High

Sorry Arlene – should have included you here.

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 3:34 PM
To: Kendall, Perry HLTH:EX; Brown, Stephen R HLTH:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Cc: Lawrie, Hannah GCPE:EX
Subject: Biosolids letter
Importance: High

Hi all – attached is what I think is being considered the final letter. They are not providing this in advance but will be giving it to them at their meeting tomorrow. I've asked what time the meeting is at.

This has been changed, but it still feels a little problematic to me... Not sure that they would be open to further changes, however.

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, May 14, 2015 3:30 PM
To: Heinze, Laura R GCPE:EX
Subject:

MICHAELA SWAN

Communications Officer, IH West

INTERIOR HEALTH

office: 250.314.2100 ext 3750 | cell:

IH QuickDial: 8-200-3750

s.17



Sitar, Natalie HLTH:EX

From: Muller, Bev HLTH:EX
Sent: Monday, June 15, 2015 9:58 AM
To: Sitar, Natalie HLTH:EX
Subject: FW: Biosolids letter
Attachments: image001.png; ATT00001.htm; ATT00002.htm; image003.png; ATT00003.htm; Section 29 Request - Nooaitch First Nations - final.pdf; ATT00004.htm

NR

From: Zacharias, Mark ENV:EX
Sent: Tuesday, May 19, 2015 1:06 PM
To: Paton, Arlene HLTH:EX
Subject: Fwd: Biosolids letter

Here's what I have. Good luck.

Regards, Mark
250-415-6466

Begin forwarded message:

From: "Mitschke, Matt ENV:EX" <Matt.Mitschke@gov.bc.ca>
Date: May 19, 2015 at 12:45:39 PM PDT
To: "Zacharias, Mark ENV:EX" <Mark.Zacharias@gov.bc.ca>
Cc: "Halls, Lori D ENV:EX" <Lori.D.Halls@gov.bc.ca>
Subject: FW: Biosolids letter

Matt Mitschke
Chief of Staff to the Honourable Mary Polak
Minister of Environment
Office of the Minister
Province of British Columbia
T. 250-387-1187
F. 250-387-1356
Email matt.mitschke@gov.bc.ca

From: Murphy, Bernadette GCPE:EX
Sent: Thursday, May 14, 2015 3:37 PM
To: ENV Ministerial Assistants
Cc: Crebo, David GCPE:EX; Cotton, Brian GCPE:EX; Halls, Lori D ENV:EX
Subject: FW: Biosolids letter

FYI

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 3:34 PM
To: Crebo, David GCPE:EX; Murphy, Bernadette GCPE:EX; Cotton, Brian GCPE:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX
Subject: Biosolids letter

Attached is what I think is the final IH letter. This will be provided to the First Nation at their meeting tomorrow.

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, May 14, 2015 3:30 PM
To: Heinze, Laura R GCPE:EX
Subject:

MICHAELA SWAN
Communications Officer, IH West
INTERIOR HEALTH
office: 250.314.2100 ext 3750 | cell: S.17
IH QuickDial: 8-200-3750



Interior Health

May 15, 2015

Arlene Johnston
Administrator
2954 Shackelly Rd
Merritt, BC, V1K 1N9

Dear: Arlene Johnson

Re: Section 29 Investigation Request for Nooaitch Community Water System

This letter is provided in response to the request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the *Drinking Water Protection Act (DWPA)*, received March 23, 2015.

The concerns that warranted this request were the possible impacts from the existing Class B composting facility and the Class A biosolids land application plan located at 2988 Sunshine Valley Rd., Merritt BC. The Nooaitch Indian Band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two groundwater wells.

Both the composting facility and biosolids land application project are regulated by the *Organic Matter Recycling Regulation (OMRR) (B.C. Reg. 18/2002)*. The composting facility was constructed and is operating as per the requirements outlined in Section 24 of the *OMRR*, and as such, the provisions of Sections 23 of the *DWPA* do not apply. The evidence provided has, therefore, been reviewed in terms of likelihood of causing a drinking water health hazard under Section 25 of the *DWPA*.

The biosolids land application project is limited to the application of Class A biosolids and Class A compost. The Class A biosolids will be applied as per the land application plan submitted by the Qualified Professional as required by section 7 of the *OMRR*. Under section 13 of the *OMRR* there are no volume restrictions for the distribution of Class A compost. Additionally there are no restrictions for the land application of either Class A biosolids or Class A compost within a watershed.

The *Source Water Protection Plan (SWPP)* completed by Kala Geosciences LTD., in April of 2013 was also reviewed. In this document it is stated that the two wells being used (PW2 and PW3), are both considered not to be under the direct influence of surface water (Non-GWUDI). There was also chemical sampling conducted for the purposes of this report, and all parameters are within those set by the *Canadian Drinking Water Guidelines*. The *SWPP* recommends that the source water protection areas be set at an area of 100m around PW2, and 50m around PW3. Both the composting facility and biosolids land application project are located outside of these areas. The wells were not evaluated for *Groundwater at Risk of Containing Pathogens (GARP)* at this time, and it is recommended that this evaluation be conducted as per the Provincial guideline. It is also recommended that a long-term water quality monitoring program

Bus: (250) 851-7322 Fax: (250) 851-7341
Email: Jessy.Bhatti@interiorhealth.ca
Web: interiorhealth.ca

HEALTH PROTECTION
Less Risk ~ Better Health

Kamloops Health Unit
519 Columbia St.
Kamloops BC, V2B 5B2

be developed for the water system which should include both microbiological and chemical parameters.

After reviewing the written request for the investigation, applicable submissions and legislation, I have come to the conclusion that the evidence and facts do not warrant further investigation of a threat to drinking water at this time. If there is further evidence or facts that you would like to submit in relation to this request, please re-submit your application for an investigation of a threat to drinking, including this information.

Sincerely,



Jessy Bhatti, CPHI(C)
Environmental Health Officer
Interior Health

cc by email:

- Dr Rob Parker, *Medical Health Officer, Interior Health*
- Roger Parsonage, *Director Health Protection, Interior Health*
- Ivor Norlin, *Manager Health Protection, Interior Health*
- Robert Birtles, *Team Leader Health Protection, Interior Health*
- Christina Yamada, *Program Coordinator Health Protection, Interior Health*
- Michaela Swan, *Communications, Interior Health*
- Peter Mazey, *Manager, First Nations Health Authority*
- Casey Neathway, *Manager, First Nations Health Authority*
- David Lawrence, *Nooaitch Indian Band*

Benson, Stacey HLTH:EX

From: Heinze, Laura R GCPE:EX
Sent: Friday, May 15, 2015 10:49 AM
To: Kendall, Perry HLTH:EX; Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Lawrie, Hannah GCPE:EX; Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Frattaroli, Angela GCPE:EX
Subject: FW: Merrit Biosolids
Attachments: BN_Merritt Biosolids Update_15May2015_final.doc

Hi folks – Just FYI, an updated note from IH on this...

Laura Heinze
Manager, Media Relations – Ministry of Health
(250) 952-3387
(cell) s.17
Laura.Heinze@gov.bc.ca



Interior Health

IH Communications Briefing Note

May 15, 2015 - UPDATED

Topic

Merritt Biosolids – Drinking Water Protection Act Investigation Request Denied

Background

- Since December 2014, Interior Health has been involved in significant public and political attention regarding the use of biosolids in the Merritt and Nicola Valley areas. This attention has included media interviews, presenting at a public forum on Jan. 26, and briefing elected officials at the Thompson Nicola Regional District.
- The community and local First Nations continues to protest, lobby various levels of government, and most recently occupied Premier Christy Clark's office in Kelowna.
- On January 12, IH received a letter from the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Niaka'pamux Territory. They request that all current activities cease and that no new notification proceed until the Crown and ministry regulators establish a meaningful dialogue. This letter references the Supreme Court of Canada's decision regarding the rights of aboriginal title to manage the land and resources in a manner that fits the vision for the territory.
- Interior Health responded to the letter referring the First Nations leaders back to the Ministry of Environment as the agency that oversees the legislation covering biosolids. This includes the Organic Matter Recycling Regulation (OMRR) and the Environmental Management Act.
- IH – Health Protection staff attended a meeting with the Environment Minister and local First Nation representatives on Feb. 2 to discuss their concerns further.
- Throughout this time, Health Protection has established a tracking document to track complaints and calls related to biosolids. To date, ## complaints have been received. In response, Health Protection provides information on the process of biosolids and options for the complainant.
- On March 23, Interior Health received a request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the Drinking Water Protection Act (DWPA). This request is in regards to the Class B composting facility and biosolids land application plan located at 2988 Sunshine Valley Road near Merritt. The Nooaitch band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two ground water wells.
- When these requests are received, Interior Health designates a statutory decision maker (Environmental Health Officer) to review the complaint and available information to determine the next steps.
- After reviewing the request from the Nooaitch Indian Band, applicable submissions and the legislation, the Environmental Health Officer concludes that the evidence and facts do not warrant a Section 29 Investigation of a threat to drinking water at this time.
- Health Protection staff are meeting with the Nooaitch First Nation on May 15 to verbally communicate this decision.
- During this meeting IH will also recommend the wells providing water to Nooaitch Indian Band be evaluated for Groundwater at Risk of Containing Pathogens as per the provincial guidelines. It also recommends that a long-term water quality program be developed for the water system that

includes both microbiological and chemical parameters, which is best practice for water source protection and the safety of public health.

Key Messages

- Interior Health is committed to the protection of human health through the appropriate management of organic matter, including biosolids. We have recently been requested to conduct an investigation under the Drinking Water Protection Act regarding the impacts of biosolids on Sunshine Valley Road to wells serving the Nooaitch Indian Band.
 - Based on the information available at this time, Interior Health finds the information does not warrant any further investigation of a threat to drinking water.
 - We understand the community is concerned about the safety of biosolids in the Merritt and Nicola Valley and based on the information available there are currently no known drinking water health hazards.
-

PREPARED FOR:	Manager, Public Affairs & VP Public Affairs
PREPARED BY:	Michaela Swan, Communications Officer, IH West
SPOKESPERSON:	TBD

Benson, Stacey HLTH:EX

From: Zemanek, Michael HLTH:EX
Sent: Tuesday, May 19, 2015 11:04 AM
To: Lambert, Tim HLTH:EX
Subject: RE: IH - Biosolids

If you want, I can craft a note to Roger for you?

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 11:00 AM
To: Paton, Arlene HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: RE: IH - Biosolids

Hi Arlene

We will inquire with IH – I presume that is the request. Do you know who attended the meeting on behalf of IH?

Tim

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 10:57 AM
To: Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: FW: IH - Biosolids
Importance: High

Hi – this is urgent, as the PO is asking. Thanks

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:55 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX
Subject: IH - Biosolids

Hi Arlene,

In short last Friday the Nooaitch First Nation and IH met to chat about the section 29 request. Please see the Attached BN for background.

What I'm looking to find out ASAP is how the meeting went, I have spoken to Dr. Kendall but I'm wondering if we can get a summary, who attended, what their reactions were. Did they accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too. Also I need to know if IH has done any testing in the past 4 years. I would need it in chronological order. There is some confusion that IH did some testing under the Source Water Protection Plan (SWPP) completed by Kala Geosciences LTD., in April of 2013 (But I think that would have been ENV). It is my understanding that no testing was done.

S.

Sabrina Loiacono

Chief of Staff

Honourable Terry Lake

Minister of Health

250-953-3547

Email: sabrina.loiacono@gov.bc.ca

Please consider the environment before printing this email.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 12:59 PM
To: Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: RE: IH - Biosolids

No, I don't but they met on Friday, thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 11:00 AM
To: Paton, Arlene HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: RE: IH - Biosolids

Hi Arlene

We will inquire with IH – I presume that is the request. Do you know who attended the meeting on behalf of IH?

Tim

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 10:57 AM
To: Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: FW: IH - Biosolids
Importance: High

Hi – this is urgent, as the PO is asking. Thanks

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health

PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:55 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX
Subject: IH - Biosolids

Hi Arlene,

In short last Friday the Nooaitch First Nation and IH met to chat about the section 29 request. Please see the Attached BN for background.

What I'm looking to find out ASAP is how the meeting went, I have spoken to Dr. Kendall but I'm wondering if we can get a summary, who attended, what their reactions were. Did they accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too. Also I need to know if IH has done any testing in the past 4 years. I would need it in chronological order. There is some confusion that IH did some testing under the Source Water Protection Plan (SWPP) completed by Kala Geosciences LTD., in April of 2013 (But I think that would have been ENV). It is my understanding that no testing was done.

S.

Sabrina Loiacono
Chief of Staff
Honourable Terry Lake
Minister of Health
250-953-3547
Email: sabrina.loiacono@gov.bc.ca
Please consider the environment before printing this email.

Benson, Stacey HLTH:EX

From: Parsonage, Roger <Roger.Parsonage@interiorhealth.ca>
Sent: Tuesday, May 19, 2015 1:00 PM
To: Lambert, Tim HLTH:EX
Subject: RE: biosolids - update requested

I'll try and get you something today.

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: Tuesday, May 19, 2015 12:44 PM
To: Parsonage, Roger
Cc: Zemanek, Michael HLTH:EX
Subject: biosolids - update requested
Importance: High

Hi Roger

We have an immediate request from the Premier's office for an update on the meeting between the Nooaitch First Nation and IH on the section 29 request. Can you answer these or let me know who was present and I can send this to?

Here are the kinds of questions being asked:

They are looking for how the meeting went and a summary, who attended, what their reactions were?

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order.

Thanks
Tim

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 1:08 PM
To: Lambert, Tim HLTH:EX; Zemanek, Michael HLTH:EX
Cc: Cowan, Darynn HLTH:EX
Subject: FW: IH - Biosolids

Importance: High

Hi – how is this going. We need to provide Sabrina with a few key bullets of info re how the Drinking Water Protection Act works and what the DWO is saying (in the letter that wasn't sent but discussed with the FN on Friday). She is being asked to find out how the meeting went on Friday and she is expected to have this info by her meeting at 3 this afternoon – which means we need to get this pulled together very quickly. Thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 1:05 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX
Subject: Re: IH - Biosolids

Hi,

I have a meeting on this at 3 and any update or information you can provide would be helpful. I also have more questions around this. I'm trying to understand how this works...

Do regional Surface Water protection plans fall under the health authorities?

In the letter that IH did not send it talks about Section 25. What is a section 25.

ENV says that they would not be in charged of testing. This seems strange as they approved it.
Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 11:13 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Perry Kendall (Perry.Kendall@gov.bc.ca); Foran, Grace E HLTH:EX

Subject: RE: IH - Biosolids

And sorry, I sent this to the wrong Kendall.

S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:59 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX; Foran, Grace E HLTH:EX
Subject: RE: IH - Biosolids

Sorry I should have looped Grace in on this email...

S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:55 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX
Subject: IH - Biosolids

Hi Arlene,

In short last Friday the Nooaitch First Nation and IH met to chat about the section 29 request. Please see the Attached BN for background.

What I'm looking to find out ASAP is how the meeting went, I have spoken to Dr. Kendall but I'm wondering if we can get a summary, who attended, what their reactions were. Did they accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too. Also I need to know if IH has done any testing in the past 4 years. I would need it in chronological order. There is some confusion that IH did some testing under the Source Water Protection Plan (SWPP) completed by Kala Geosciences LTD., in April of 2013 (But I think that would have been ENV). It is my understanding that no testing was done.

S.

Sabrina Loiacono
Chief of Staff
Honourable Terry Lake
Minister of Health
250-953-3547
Email: sabrina.loiacono@gov.bc.ca
Please consider the environment before printing this email.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 1:10 PM
To: Loiacono, Sabrina HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Lambert, Tim HLTH:EX
Subject: RE: IH - Biosolids

We'll get you the info shortly, Sabrina.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 1:05 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX
Subject: Re: IH - Biosolids

Hi,

I have a meeting on this at 3 and any update or information you can provide would be helpful. I also have more questions around this. I'm trying to understand how this works...

Do regional Surface Water protection plans fall under the health authorities?

In the letter that IH did not send it talks about Section 25. What is a section 25.

ENV says that they would not be in charged of testing. This seems strange as they approved it.
Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 11:13 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Perry Kendall (Perry.Kendall@gov.bc.ca); Foran, Grace E HLTH:EX
Subject: RE: IH - Biosolids

And sorry, I sent this to the wrong Kendall.

S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:59 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX; Foran, Grace E HLTH:EX
Subject: RE: IH - Biosolids

Sorry I should have looped Grace in on this email...
S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:55 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX
Subject: IH - Biosolids

Hi Arlene,

In short last Friday the Nooaitch First Nation and IH met to chat about the section 29 request. Please see the Attached BN for background.

What I'm looking to find out ASAP is how the meeting went, I have spoken to Dr. Kendall but I'm wondering if we can get a summary, who attended, what their reactions were. Did they accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too. Also I need to know if IH has done any testing in the past 4 years. I would need it in chronological order. There is some confusion that IH did some testing under the Source Water Protection Plan (SWPP) completed by Kala Geosciences LTD., in April of 2013 (But I think that would have been ENV). It is my understanding that no testing was done.

S.

Sabrina Loiacono
Chief of Staff
Honourable Terry Lake
Minister of Health
250-953-3547
Email: sabrina.loiacono@gov.bc.ca
Please consider the environment before printing this email.

Benson, Stacey HLTH:EX

From: Parsonage, Roger <Roger.Parsonage@interiorhealth.ca>
Sent: Tuesday, May 19, 2015 1:34 PM
To: Lambert, Tim HLTH:EX
Subject: FW: biosolids - update requested

Here's what I have. I also understand that communications is gathering much the same information.

From: Norlin, J Ivor
Sent: Tuesday, May 19, 2015 1:26 PM
To: Parsonage, Roger
Subject: RE: biosolids - update requested

I just sent an e-mail to Michaela asking much the same.

They are looking for how the meeting went and a summary, who attended, what their reactions were? I'd try to convey the highlights as you saw from our conversation this morning. Attendees from IH were Jessy and I. Casey was in person representing FNHA with Fionna Gorman, Sylvia Struck, and Peter Masey by phone. Nooaitch staff took minutes, but I have not received them yet.

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too.

If by "accept" we mean had their concerns fully addressed, I'd so no. We discussed the Section 29 and DWPA in context of the broader issues of healthy communities and sustainable water and air sheds. Although I believe they understood (but didn't agree with) where Jessy was coming from, it was clear they are not satisfied that they have been listened too and had their concerns fully addressed.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order. As you pointed out, this investigation request is in context of a First Nations water system. IH does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to my knowledge ever). Could Tim clarify what sort of testing they are enquiring about and how it might differ from that done under jurisdiction of the Ministry of Environment and the Ministry of Forests, Lands, and Natural Resources?

J. Ivor Norlin
Manager, Infrastructure Programs
Interior Health, Health Protection
P.O. Box 627, Salmon Arm, BC, V1E 4N7
Phone: 250-833-4173
Fax: 250-833-4117

~ We are committed to being a trusted leader in creating the healthiest and the safest environments in which we live, work, learn and play ~

Note: The information contained in this email and any attachments is confidential and may be legally privileged. If you are not the intended recipient please do not disclose, distribute, copy, print or rely on this email's content. If you are not the intended recipient, please notify the sender immediately and then delete the email and any attachments from your system.

From: Parsonage, Roger
Sent: Tuesday, May 19, 2015 1:01 PM

To: Norlin, J Ivor
Subject: FW: biosolids - update requested
Importance: High

Hi Ivor,

Are there any points you want me to specifically pass on when I address this email? I'm assuming that we haven't done any testing given that the water system is located on FN land.

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: Tuesday, May 19, 2015 12:44 PM
To: Parsonage, Roger
Cc: Zemanek, Michael HLTH:EX
Subject: biosolids - update requested
Importance: High

Hi Roger

We have an immediate request from the Premier's office for an update on the meeting between the Nooaitch First Nation and IH on the section 29 request. Can you answer these or let me know who was present and I can send this to?

Here are the kinds of questions being asked:

They are looking for how the meeting went and a summary, who attended, what their reactions were?

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order.

Thanks
Tim

Benson, Stacey HLTH:EX

From: Parsonage, Roger <Roger.Parsonage@interiorhealth.ca>
Sent: Tuesday, May 19, 2015 4:04 PM
To: Lambert, Tim HLTH:EX
Subject: RE: biosolids - update requested

This meeting was very specifically to talk to the Nooaitch Indian Band about their request for an investigation under S.29 of the Drinking Water Protection Act; the Chief of the Nooaitch Band was there, along with some councillors and staff.

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: Tuesday, May 19, 2015 3:58 PM
To: Parsonage, Roger
Subject: RE: biosolids - update requested

Hi Roger

An additional question has come back, about the Chief's attendance at the meeting.

I surmised the following answer below that was not sufficient:

If I understand the question, why the Chiefs were not included in the IHA meeting? We don't have that information, and I gather neither does IHA. My guess would be that this was perhaps a technical meeting between IHA and the FN; and they decided not to attend.

Perhaps, and I am not sure, but can you shed some light on this - who called the meeting and who was invited?

thanks
Tim

From: Parsonage, Roger [<mailto:Roger.Parsonage@interiorhealth.ca>]
Sent: Tuesday, May 19, 2015 1:34 PM
To: Lambert, Tim HLTH:EX
Subject: FW: biosolids - update requested

Here's what I have. I also understand that communications is gathering much the same information.

From: Norlin, J Ivor
Sent: Tuesday, May 19, 2015 1:26 PM
To: Parsonage, Roger
Subject: RE: biosolids - update requested

I just sent an e-mail to Michaela asking much the same.

They are looking for how the meeting went and a summary, who attended, what their reactions were? I'd try to convey the highlights as you saw from our conversation this morning. Attendees from IH were Jessy and I. Casey was in person representing FNHA with Fionna Gorman, Sylvia Struck, and Peter Masey by phone. Nooaitch staff took minutes, but I have not received them yet.

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too.

If by "accept" we mean had their concerns fully addressed, I'd so no. We discussed the Section 29 and DWPA in context of the broader issues of healthy communities and sustainable water and air sheds. Although I believe they understood (but didn't agree with) where Jessy was coming from, it was clear they are not satisfied that they have been listed too and had their concerns fully addressed.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order. As you pointed out, this investigation request is in context of a First Nations water system. IH does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to my knowledge ever). Could Tim clarify what sort of testing they are enquiring about and how it might differ from that done under jurisdiction of the Ministry of Environment and the Ministry of Forests, Lands, and Natural Resources?

J. Ivor Norlin
Manager, Infrastructure Programs
Interior Health, Health Protection
P.O. Box 627, Salmon Arm, BC, V1E 4N7
Phone: 250-833-4173
Fax: 250-833-4117

~ We are committed to being a trusted leader in creating the healthiest and the safest environments in which we live, work, learn and play ~

Note: The information contained in this email and any attachments is confidential and may be legally privileged. If you are not the intended recipient please do not disclose, distribute, copy, print or rely on this email's content. If you are not the intended recipient, please notify the sender immediately and then delete the email and any attachments from your system.

From: Parsonage, Roger
Sent: Tuesday, May 19, 2015 1:01 PM
To: Norlin, J Ivor
Subject: FW: biosolids - update requested
Importance: High

Hi Ivor,

Are there any points you want me to specifically pass on when I address this email? I'm assuming that we haven't done any testing given that the water system is located on FN land.

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: Tuesday, May 19, 2015 12:44 PM
To: Parsonage, Roger
Cc: Zemanek, Michael HLTH:EX
Subject: biosolids - update requested
Importance: High

Hi Roger

We have an immediate request from the Premier's office for an update on the meeting between the Nooaitch First Nation and IH on the section 29 request. Can you answer these or let me know who was present and I can send this to?

Here are the kinds of questions being asked:

They are looking for how the meeting went and a summary, who attended, what their reactions were?

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order.

Thanks
Tim

Benson, Stacey HLTH:EX

From: Loiacono, Sabrina HLTH:EX
Sent: Wednesday, May 20, 2015 2:24 PM
To: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

I want you all to know that I really appreciate all your efforts in getting me the information I needed. Thank you.

S.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Wednesday, May 20, 2015 9:30 AM
To: Loiacono, Sabrina HLTH:EX; Kendall, Perry HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Sabrina
That is my understanding from IHA.

Tim

From: Loiacono, Sabrina HLTH:EX
Sent: Wednesday, May 20, 2015 9:25 AM
To: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

Thanks and just to triple check the chief was there.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Wednesday, May 20, 2015 9:21 AM
To: Kendall, Perry HLTH:EX; Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Everyone

IHA called the meeting, and the purpose of the meeting was to fulfill IHA obligation under 29(4) of the Drinking Water Protection Act, to advise the requesting person of our decision on their Section 29 request. It was believed that meeting with the First Nation in person would be more respectful and the opportunity for dialogue might help dial down the pressure.

Tim

From: Kendall, Perry HLTH:EX
Sent: Tuesday, May 19, 2015 4:58 PM
To: Lambert, Tim HLTH:EX; Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

My impression was that Nooaitch Band set up the meeting? Can you confirm that Tim?

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria BC V8W 3C8
Phone: 250 952-1330
Fax: 250 952-1362

perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho>

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 04:12 PM
To: Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Sabrina

This meeting was very specifically to talk to the Nooaitch Indian Band about their request for an investigation under S.29 of the Drinking Water Protection Act; **the Chief of the Nooaitch Band was there**, along with some councillors and staff.

Tim

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 4:01 PM
To: Lambert, Tim HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

Thank you!!!!

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 3:58 PM
To: Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Trying to find out.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 3:54 PM
To: Lambert, Tim HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

Can I get confirmation on that?

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 3:53 PM
To: Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Sabrina

If I understand, why the Chiefs were not included in the IHA meeting?

We don't have that information, and I gather neither does IHA.

My guess would be that this was perhaps a technical meeting between IHA and the FN; and they decided not to attend.

Tim

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 3:50 PM
To: Lambert, Tim HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

Hello all (again),

Do you know why the chiefs were not included?

S.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 2:42 PM
To: Loiacono, Sabrina HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Sabrina

The question of jurisdiction (legal authority) with respect to FNs drinking water is complex.

There is a new federal FN drinking water Act and the application details are still being worked out. FNHA does not currently have jurisdiction over the drinking water although they play a role. I believe the jurisdiction still resides with the Federal government. The actual specifics on how this currently functions (legally) would require some effort to figure out.

Tim

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 2:28 PM
To: Lambert, Tim HLTH:EX; Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

Thanks this is very very VERY helpful. Do FNHA have jurisdiction over testing? Or can they assist the FN with the testing?

S.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Tuesday, May 19, 2015 2:18 PM
To: Paton, Arlene HLTH:EX
Cc: Loiacono, Sabrina HLTH:EX; Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: RE: IH - Biosolids

Hi Arlene

In addition to your remark below, I think it is important to note that IHA also does not have jurisdiction over the water system or to do an actual section 29 investigation as in the questions below: "IHA does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to their knowledge ever)."

Tim

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 2:14 PM
To: Lambert, Tim HLTH:EX
Cc: Loiacono, Sabrina HLTH:EX; Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Zemanek, Michael HLTH:EX
Subject: Re: IH - Biosolids

So basically IH was suggesting to the FN that IH does not see any cause for concern, but if the FN is concerned they could test as they are the water supplier and the water system is on reserve (ie, federal) land.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health

On May 19, 2015, at 2:03 PM, Lambert, Tim HLTH:EX <Tim.Lambert@gov.bc.ca> wrote:

Hello Arlene and Sabrina

Below are the answers we have been able to get together. I understand IHA communications is working on bullets as well.

Let me know if this suffices?

Tim

How the meeting went and a summary, who attended, what their reactions were?

Attendees from IH were Jessy (?) and Ivor Norlin. Casey was in person representing FNHA with Fionna Gorman, Sylvia Struck, and Peter Masey by phone. Nooaitch staff took minutes, but IHA has not received them yet.

Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too?

If by "accept" that means the Nooaitch had their concerns fully addressed, no - it was clear they are not satisfied that they have been listened too and had their concerns fully addressed. They discussed the Section 29 and DWPA in context of the broader issues of healthy communities and sustainable water and air sheds. Although IHA believes they understood (but didn't agree with) where IHA was coming from.

They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order.

The section 29 investigation request is in context of a First Nations water system. IHA does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to their knowledge ever).

Do regional Surface Water protection plans fall under the health authorities?

No. Source water protection is a multi-jurisdiction, multi-stakeholder responsibility depending on who is doing what on the land. Under the Drinking Water Protection Act, it is the water suppliers responsibility to assess and understand the risks in the watershed, and to provide treatment to mitigate those risks.

In the letter that IH did not send it talks about Section 25. What is a section 25.

Section 25 of the Drinking Water Protection Act says that a drinking water officer may make an order if the drinking water officer has reason to believe that a drinking water health hazard exists, or if there is a significant risk of an imminent drinking water health hazard.

The band was calling for an investigation under the Drinking Water Protection Act. That is section 29 of the Drinking Water Protection Act (noted below). Section 29 is a request that anyone who has evidence of a threat to drinking water can request the health authority investigate.

Info from IHA suggests that after reviewing the request from the Nooaitch Band, applicable submissions and the legislation, the Environmental Health Officer concluded that the evidence and facts do not warrant a Section 29 investigation of a threat to drinking water at this time.

MOE says that they would not be in charge of testing. This seems strange as they approved?
Generally, proponents of an activity are required to test. For biosolids, it would be the proponent that would be required to do testing of the compost. See above, IHA did not test nor does the drinking water system fall under their jurisdiction.

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 1:10 PM
To: Loiacono, Sabrina HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX; Cowan, Darynn HLTH:EX; Lambert, Tim HLTH:EX
Subject: RE: IH - Biosolids

We'll get you the info shortly, Sabrina.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 1:05 PM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Perry HLTH:EX; Foran, Grace E HLTH:EX
Subject: Re: IH - Biosolids

Hi,

I have a meeting on this at 3 and any update or information you can provide would be helpful. I also have more questions around this. I'm trying to understand how this works...

Do regional Surface Water protection plans fall under the health authorities?

In the letter that IH did not send it talks about Section 25. What is a section 25.

ENV says that they would not be in charged of testing. This seems strange as they approved it.
Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 11:13 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Perry Kendall (Perry.Kendall@gov.bc.ca); Foran, Grace E HLTH:EX
Subject: RE: IH - Biosolids

And sorry, I sent this to the wrong Kendall.
S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:59 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX; Foran, Grace E HLTH:EX
Subject: RE: IH - Biosolids

Sorry I should have looped Grace in on this email...
S.

From: Loiacono, Sabrina HLTH:EX
Sent: Tuesday, May 19, 2015 10:55 AM
To: Paton, Arlene HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Kendall, Kim LASS:EX
Subject: IH - Biosolids

Hi Arlene,

In short last Friday the Nooaitch First Nation and IH met to chat about the section 29 request. Please see the Attached BN for background.

What I'm looking to find out ASAP is how the meeting went, I have spoken to Dr. Kendall but I'm wondering if we can get a summary, who attended, what their reactions were. Did they accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too. Also I need to know if IH has done any testing in the past 4 years. I would need it in chronological order. There is some confusion that IH did some testing under the Source Water Protection Plan (SWPP) completed by Kala Geosciences LTD., in April of 2013 (But I think that would have been ENV). It is my understanding that no testing was done.

S.

Sabrina Loiacono
Chief of Staff
Honourable Terry Lake
Minister of Health
250-953-3547
Email: sabrina.loiacono@gov.bc.ca
Please consider the environment before printing this email.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Tuesday, May 19, 2015 5:58 PM
To: Halls, Lori D ENV:EX
Cc: Lambert, Tim HLTH:EX; Llewellyn-Thomas, Marnie ENV:EX; Ord, Kris ENV:EX; Glassford, Karen (Karen.Glassford@bccdc.ca); Muller, Bev HLTH:EX
Subject: RE: Communication Materials re: Biosolids

Perfect, thank you, Lori and team! Karen, please send meeting details to Lori and the cc's of this note, after discussing with Tim re agenda times.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Halls, Lori D ENV:EX
Sent: Tuesday, May 19, 2015 5:54 PM
To: Paton, Arlene HLTH:EX
Cc: Lambert, Tim HLTH:EX; Llewellyn-Thomas, Marnie ENV:EX; Ord, Kris ENV:EX
Subject: RE: Communication Materials re: Biosolids

Hi Arlene
Hi Arlene

Myself, Kris Ord and Maryam Mofidpoor will attend the Environmental Health Policy Advisory Committee on June 2nd. Please confirm a time and place. We will ensure the presentation speaks to the questions identified below.

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 9:52 AM
To: Halls, Lori D ENV:EX
Cc: Crebo, David GCPE:EX; Lambert, Tim HLTH:EX
Subject: RE: Communication Materials re: Biosolids

Hi Lori – I've sent these materials on to the MHOs and health protection director at IHA. We'll also use these as part of the package for our discussion at Environmental Health Policy Advisory Committee on June 2nd (am hoping your staff will be able to attend as per my earlier email) so that the other Health Authorities also have these materials.

Tim and his team reviewed the materials and commented that these documents don't directly address the pre and post-application human health concerns that the public often raises with health authorities. Questions such as:

- Is the air quality around the biosolid facility dangerous to my health?
- Will surface water be contaminated from surface runoff from an area where a biosolid has been applied to the land?
- Can wild animals or cattle become contaminated from biosolids?
- Can people eat berries, or collect food or traditional use plants from an area that has been treated with biosolids?

I don't know if you want to add to the FAQs or not, but some of these questions will get raised at EHPAC so wanted to make sure your staff are aware. Thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Halls, Lori D ENV:EX
Sent: Tuesday, May 12, 2015 5:48 PM
To: Paton, Arlene HLTH:EX
Cc: Crebo, David GCPE:EX
Subject: Communication Materials re: Biosolids

Arlene --- we've been asked by PO to look at having IHA help get the basic facts out about biosolids. MOE has developed the attached.....could you help facilitate this with IHA?

Lori Halls
Assistant Deputy Minister
Environmental Protection Division
5th Floor, 2975 Jutland Road, Victoria
Phone (250)387-6177
Fax (250)953-3414
Email: lori.d.halls@gov.bc.ca

Benson, Stacey HLTH:EX

From: Parsonage, Roger <Roger.Parsonage@interiorhealth.ca>
Sent: Wednesday, May 20, 2015 8:18 AM
To: Lambert, Tim HLTH:EX
Subject: RE: Biosolids

Ah the joys of public service! I'm looking forward to talking about this at EHPAC because I think there are some real opportunities to improve the process.

-----Original Message-----

From: Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
Sent: Wednesday, May 20, 2015 8:12 AM
To: Parsonage, Roger
Subject: Re: Biosolids

Thanks Roger!

In my next life I am going to be a carrier pigeon - I can just tell :-)

Sent from my iPhone

> On May 20, 2015, at 8:07 AM, Parsonage, Roger <Roger.Parsonage@interiorhealth.ca> wrote:

>

> No, we did and I can't recall if it was on the advice of the PHO or Dr. Corneil. In any event, the purpose of the meeting was to fulfill our obligation under 29(4) of the Drinking Water Protection Act, to advise the requesting person of our decision on their Section 29 request. It was believed that meeting with the First Nation in person would be more respectful and the opportunity for dialogue might help dial down the pressure.

>

> -----Original Message-----

> **From:** Lambert, Tim HLTH:EX [<mailto:Tim.Lambert@gov.bc.ca>]
> **Sent:** Wednesday, May 20, 2015 7:32 AM
> **To:** Parsonage, Roger
> **Subject:** Biosolids

>

> Hi Roger

> Hopefully last question, who called the meeting - was it the Band?

>

> Thanks

> Tim

>

> Sent from my iPhone

Benson, Stacey HLTH:EX

From: Glassford, Karen <Karen.Glassford@bccdc.ca>
Sent: Wednesday, May 20, 2015 1:20 PM
To: Paton, Arlene HLTH:EX
Cc: XT:HLTH Kosatsky, Tom; Lambert, Tim HLTH:EX
Subject: RE: Communication Materials re: Biosolids
Attachments: PROPOSED Agenda_BC Environmental Health Policy Advisory Committee_June 2, 2015.docx

Importance: High

Hello Arlene. I'm a little confused – won't you be determining timing during your planning call on Friday? Draft proposed agenda (attached above) is with Tom for review. I will forward a revised copy (if necessary).

Karen Glassford | Administrative Assistant | Environmental Health Services | Ph 604-707-2440

From: Paton, Arlene HLTH:EX [<mailto:Arlene.Paton@gov.bc.ca>]
Sent: Tuesday, May 19, 2015 5:58 PM
To: Halls, Lori D ENV:EX
Cc: tim.lambert@gov.bc.ca; Llewellyn-Thomas, Marnie ENV:EX; Ord, Kris ENV:EX; Glassford, Karen; Bev.Muller@gov.bc.ca
Subject: RE: Communication Materials re: Biosolids

Perfect, thank you, Lori and team! Karen, please send meeting details to Lori and the cc's of this note, after discussing with Tim re agenda times.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Halls, Lori D ENV:EX
Sent: Tuesday, May 19, 2015 5:54 PM
To: Paton, Arlene HLTH:EX
Cc: Lambert, Tim HLTH:EX; Llewellyn-Thomas, Marnie ENV:EX; Ord, Kris ENV:EX
Subject: RE: Communication Materials re: Biosolids

Hi Arlene
Hi Arlene

Myself, Kris Ord and Maryam Mofidpoor will attend the Environmental Health Policy Advisory Committee on June 2nd. Please confirm a time and place. We will ensure the presentation speaks to the questions identified below.

From: Paton, Arlene HLTH:EX
Sent: Friday, May 15, 2015 9:52 AM
To: Halls, Lori D ENV:EX
Cc: Crebo, David GCPE:EX; Lambert, Tim HLTH:EX
Subject: RE: Communication Materials re: Biosolids

Hi Lori – I've sent these materials on to the MHOs and health protection director at IHA. We'll also use these as part of the package for our discussion at Environmental Health Policy Advisory Committee on June 2nd (am hoping your staff will be able to attend as per my earlier email) so that the other Health Authorities also have these materials.

Tim and his team reviewed the materials and commented that these documents don't directly address the pre and post-application human health concerns that the public often raises with health authorities. Questions such as:

- Is the air quality around the biosolid facility dangerous to my health?
- Will surface water be contaminated from surface runoff from an area where a biosolid has been applied to the land?
- Can wild animals or cattle become contaminated from biosolids?
- Can people eat berries, or collect food or traditional use plants from an area that has been treated with biosolids?

I don't know if you want to add to the FAQs or not, but some of these questions will get raised at EHPAC so wanted to make sure your staff are aware. Thanks!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Halls, Lori D ENV:EX
Sent: Tuesday, May 12, 2015 5:48 PM
To: Paton, Arlene HLTH:EX
Cc: Crebo, David GCPE:EX
Subject: Communication Materials re: Biosolids

Arlene --- we've been asked by PO to look at having IHA help get the basic facts out about biosolids. MOE has developed the attached.....could you help facilitate this with IHA?

Lori Halls
Assistant Deputy Minister
Environmental Protection Division
5th Floor, 2975 Jutland Road, Victoria
Phone (250)387-6177
Fax (250)953-3414
Email: lori.d.halls@gov.bc.ca

Proposed

BC Environmental Health Policy Advisory Committee

June 2, 2015 – 9:00 am to 4:00 pm (Face to Face)

AGENDA

Video Conference: To be arranged

Item	Time	General Discussion	Lead
1.0	NR		
2.0			
3.0			
4.0			
4.1			Tim Lambert
4.2			Tim Lambert
4.3			Tim Lambert
4.4			
4.5			
5.0			
5.1			
6.0			
6.1		Biosolids (MOE Presentation?)	

7.0	NR	
7.1		
7.2		
7.3		
7.4		

Benson, Stacey HLTH:EX

From: Kendall, Perry HLTH:EX
Sent: Wednesday, May 20, 2015 2:35 PM
To: Lambert, Tim HLTH:EX
Subject: FW: FOR REVIEW - re: biosolids
Attachments: Biosolids Review.docx

Importance: High

Have you seen this?

P. R. W. Kendall
OBC, MBBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Plank, Sarah GCPE:EX
Sent: Wednesday, May 20, 2015 2:00 PM
To: Kendall, Perry HLTH:EX
Cc: Berkes, Andrea HLTH:EX
Subject: FOR REVIEW - re: biosolids
Importance: High

Hi Perry – does any of this bring up any concerns from your end? It is a proposal that will be put forward for the chiefs. I think biosolids was something the provincial MHO group was going to look at, so I thought you may have some additional context to be aware of. And of course I know you have had several discussions with Interior Health's medical health officer(s) on this file.

Thanks!

Sarah Plank
Communications Director | Ministry of Health
Government Communications & Public Engagement
Mobile: 250.208.9621 | Email: sarah.plank@gov.bc.ca

From: Loliacono, Sabrina HLTH:EX
Sent: Wednesday, May 20, 2015 1:48 PM
To: Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX
Subject: Fw: Review

This is what I will be sending to Nicola Chiefs in the next hour. Can you take a read and let me know your thoughts.

Page 115 to/à Page 119

Withheld pursuant to/removed as

s.13

Benson, Stacey HLTH:EX

From: Kendall, Perry HLTH:EX
Sent: Wednesday, May 20, 2015 2:38 PM
To: Lambert, Tim HLTH:EX
Subject: FW: FOR REVIEW - re: biosolids

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Kendall, Perry HLTH:EX
Sent: Wednesday, May 20, 2015 2:38 PM
To: Plank, Sarah GCPE:EX
Cc: Berkes, Andrea HLTH:EX
Subject: RE: FOR REVIEW - re: biosolids

It does establish a precedent.
Do what degree will the results be generalizable and useful more broadly?
What is missing is any consideration of odour- and possible adverse health effects.
That is a major concern for people living near these sites and the science and the regulatory aspects are very vague and unhelpful.
I'd suggest sharing with Tim Lambert.
Perry

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Plank, Sarah GCPE:EX
Sent: Wednesday, May 20, 2015 2:00 PM
To: Kendall, Perry HLTH:EX
Cc: Berkes, Andrea HLTH:EX

Subject: FOR REVIEW - re: biosolids

Importance: High

Hi Perry – does any of this bring up any concerns from your end? It is a proposal that will be put forward for the chiefs. I think biosolids was something the provincial MHO group was going to look at, so I thought you may have some additional context to be aware of. And of course I know you have had several discussions with Interior Health's medical health officer(s) on this file.

Thanks!

Sarah Plank

Communications Director | Ministry of Health

Government Communications & Public Engagement

Mobile: S.17 | Email: sarah.plank@gov.bc.ca

From: Loiacono, Sabrina HLTH:EX

Sent: Wednesday, May 20, 2015 1:48 PM

To: Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX

Subject: Fw: Review

This is what I will be sending to Nicola Chiefs in the next hour. Can you take a read and let me know your thoughts.

Benson, Stacey HLTH:EX

From: Kendall, Perry HLTH:EX
Sent: Wednesday, May 20, 2015 3:25 PM
To: Lambert, Tim HLTH:EX
Subject: RE: FOR REVIEW - re: biosolids

Give it a quick scan. I don't know who drafted it. Obviously from the premier's office some how.

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Lambert, Tim HLTH:EX
Sent: Wednesday, May 20, 2015 2:40 PM
To: Kendall, Perry HLTH:EX
Subject: Re: FOR REVIEW - re: biosolids

Hi Perry
I have not seen this until now. Did MOE draft this?

Would you like us to review for you?
Tim

Sent from my iPhone

On May 20, 2015, at 2:34 PM, Kendall, Perry HLTH:EX <Perry.Kendall@gov.bc.ca> wrote:

Have you seen this?

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Plank, Sarah GCPE:EX
Sent: Wednesday, May 20, 2015 2:00 PM
To: Kendall, Perry HLTH:EX
Cc: Berkes, Andrea HLTH:EX
Subject: FOR REVIEW - re: biosolids
Importance: High

Hi Perry – does any of this bring up any concerns from your end? It is a proposal that will be put forward for the chiefs. I think biosolids was something the provincial MHO group was going to look at, so I thought you may have some additional context to be aware of. And of course I know you have had several discussions with Interior Health's medical health officer(s) on this file.

Thanks!

Sarah Plank
Communications Director | Ministry of Health
Government Communications & Public Engagement
Mobile: S.17 | Email: sarah.plank@gov.bc.ca

From: Loiacono, Sabrina HLTH:EX
Sent: Wednesday, May 20, 2015 1:48 PM
To: Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX
Subject: Fw: Review

This is what I will be sending to Nicola Chiefs in the next hour. Can you take a read and let me know your thoughts.

<Biosolids Review.docx>

Benson, Stacey HLTH:EX

From: Zemanek, Michael HLTH:EX
Sent: Wednesday, May 20, 2015 4:49 PM
To: Lambert, Tim HLTH:EX
Subject: RE: FOR REVIEW - re: biosolids

Hi Tim,

I've had a look at it. It's a proposal to study the biosolids application area proposed in the Nicola Valley. s.13
s.13

Let me know if you have any questions.

Mike

From: Lambert, Tim HLTH:EX
Sent: Wednesday, May 20, 2015 3:28 PM
To: Zemanek, Michael HLTH:EX
Subject: FW: FOR REVIEW - re: biosolids
Importance: High

Can you have someone do a quick review?

Tim

From: Kendall, Perry HLTH:EX
Sent: Wednesday, May 20, 2015 2:35 PM
To: Lambert, Tim HLTH:EX

Subject: FW: FOR REVIEW - re: biosolids

Importance: High

Have you seen this?

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Plank, Sarah GCPE:EX
Sent: Wednesday, May 20, 2015 2:00 PM
To: Kendall, Perry HLTH:EX
Cc: Berkes, Andrea HLTH:EX
Subject: FOR REVIEW - re: biosolids
Importance: High

Hi Perry – does any of this bring up any concerns from your end? It is a proposal that will be put forward for the chiefs. I think biosolids was something the provincial MHO group was going to look at, so I thought you may have some additional context to be aware of. And of course I know you have had several discussions with Interior Health's medical health officer(s) on this file.

Thanks!

Sarah Plank
Communications Director | Ministry of Health
Government Communications & Public Engagement
Mobile: S.17 | Email: sarah.plank@gov.bc.ca

From: Loiacono, Sabrina HLTH:EX
Sent: Wednesday, May 20, 2015 1:48 PM
To: Plank, Sarah GCPE:EX; Jabs, Ryan GCPE:EX
Subject: Fw: Review

This is what I will be sending to Nicola Chiefs in the next hour. Can you take a read and let me know your thoughts.

Benson, Stacey HLTH:EX

From: Kendall, Perry HLTH:EX
Sent: Thursday, May 21, 2015 3:53 PM
To: Lambert, Tim HLTH:EX
Subject: FW: Biosolids letter?
Attachments: Section 29 Request - Nooaitch First Nations.pdf

It is interesting that this letter clearly states that testing of the wrll water was done in 2013.
Perry

P. R. W. Kendall
OBC, MBBS, MSc, FRCPC
Provincial Health Officer
Ministry of Health
Physical Address: 4th Floor, 1515 Blanshard Street
Mailing Address: PO Box 9648, STN PROV GOVT
Victoria BC V8W 9P4
Phone: 250 952-1330 Fax: 250 952-1362
Email: perry.kendall@gov.bc.ca
<http://www.health.gov.bc.ca/pho/>

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 9:58 AM
To: Kendall, Perry HLTH:EX; Brown, Stephen R HLTH:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Subject: FW: Biosolids letter?

Here's the letter doesn't look like it's changed too much...

Getting what we can from Environment now

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, May 14, 2015 9:56 AM
To: Heinze, Laura R GCPE:EX; XT:Lindsay, Darshan GCPE:IN
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Subject: RE: Biosolids letter?

Hi Laura,

As discussed, please find attached a copy of the sec 29 decision letter for the Nooaitch First Nations. The group has recently confirmed a meeting for tomorrow in Merritt. IH will be in attendance, with a representative from the FNHA. The Nooaitch has requested a copy of the decision letter in order to prepare for tomorrow's meeting. IH – Health Protection intends to send this letter to them this afternoon.

Please let me know if you have any questions or concerns, as soon as possible.

Regards,
Michaela

From: Heinze, Laura R GCPE:EX [<mailto:Laura.Heinze@gov.bc.ca>]
Sent: Monday, May 04, 2015 9:40 AM
To: Swan, Michaela; Lindsay, Darshan
Cc: Jabs, Ryan [External Email]; Plank, Sarah GCPE:EX
Subject: RE: Biosolids letter?

Thanks!

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Monday, May 4, 2015 9:35 AM
To: Heinze, Laura R GCPE:EX; XT:Lindsay, Darshan GCPE:IN
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX
Subject: RE: Biosolids letter?

Good morning Laura,

At this point, the First Nation's group has not responded to a meeting date, we've given them a range of dates throughout May – and I understand the meeting scheduled with FNHA last week also was canceled. IH is working on scheduling a meeting with the group as soon as mutually possible. Once the timeline is all confirmed, we will have the materials to you before going ahead. The letter is still in process.

Michaela

From: Swan, Michaela
Sent: Monday, May 04, 2015 8:42 AM
To: 'Heinze, Laura R GCPE:EX'; Lindsay, Darshan
Cc: Jabs, Ryan [External Email]; Plank, Sarah GCPE:EX
Subject: RE: Biosolids letter?

Will checkin with program

Michaela

From: Heinze, Laura R GCPE:EX [<mailto:Laura.Heinze@gov.bc.ca>]
Sent: Monday, May 04, 2015 8:41 AM
To: Lindsay, Darshan; Swan, Michaela
Cc: Jabs, Ryan [External Email]; Plank, Sarah GCPE:EX
Subject: Biosolids letter?

Hi guys,

Sorry to bug on this one, but just following up to see if you had a revised copy of the letter/BN yet? Have had a couple questions from folks at this end, just wanting to make sure everyone is in the loop.

Any further info on meeting date?

Thx!
Laura

Laura Heinze
Manager, Media Relations – Ministry of Health

(250) 952-3387
(cell) s.17
Laura.Heinze@gov.bc.ca



Interior Health

April 22, 2015

Arlene Johnston
Administrator
2954 Shackelly Rd
Merritt, BC, V1K 1N9

Dear: Arlene Johnson

Re: Section 29 Investigation Request for Nooaitch Community Water System

This letter is in response to the request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the *Drinking Water Protection Act (DWPA)*, received March 23, 2015.

The concerns that warranted this request were the possible impacts from the existing Class B composting facility and the Class A biosolids land application plan located at 2988 Sunshine Valley Rd., Merritt BC. The Nooaitch Indian Band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two groundwater wells.

Both the composting facility and biosolids land application project are regulated by the *Organic Matter Recycling Regulation (OMMR) (B.C. Reg. 18/2002)*. The composting facility was constructed and is operating as per the requirements outlined in section 24 of the *OMMR*, and a signed sealed copy of this Operating Plan was provided to the Ministry of Environment and Interior Health by the Qualified Professional acting on behalf of the proponent.

Since the composting facility and land application process are regulated by the *OMMR*, any prohibitions outlined in section 23(1) and 23(2) of the *DWPA* do not apply as it is clearly stated in Section 23(3)(b) and 23(3)(c) of the *DWPA* that:

(3) The prohibitions in subsection (1) and (2) do not apply

- (b) if the introduction or activity is authorized or required under an enactment or the person is otherwise acting with lawful authority, or
- (c) in relation to an activity prescribed by regulation that is undertaken in accordance with any conditions prescribed by regulation.

The biosolids land application project is limited to the application of Class A biosolids and Class A compost. The Class A biosolids will be applied as per the land application plan submitted by the Qualified Professional as required by section 7 of the *OMMR*. Under section 13 of the

Bus: (250) 851-7322 **Fax:** (250) 851-7341
Email: Jessy.Bhatti@interiorhealth.ca
Web: interiorhealth.ca

HEALTH PROTECTION
Less Risk ~ Better Health

Kamloops Health Unit
519 Columbia St.
Kamloops BC, V2B 5B2

OMMR there are no volume restrictions for the distribution of Class A compost. Additionally there are no restrictions for the land application of either Class A biosolids or Class A compost within a watershed.

It is important to note that the *Source Water Protection Plan (SWPP)* completed by Kala Geosciences LTD., in April of 2013 was also reviewed. In this document it is stated that the two wells being used (PW2 and PW3), are both considered not to be under the direct influence of surface water (Non-GWUDI). There was also chemical sampling conducted for the purposes of this report, and all parameters are within those set by the *Canadian Drinking Water Guidelines*. The SWPP recommends that the source water protection areas be set at an area of 100m around PW2, and 50m around PW3. Both the composting facility and biosolids land application project are located outside of these areas. The wells were not evaluated for *Groundwater at Risk of Containing Pathogens (GARP)* at this time, and it is recommended that this evaluation be conducted as per the Provincial guideline. It is also recommended that a long-term water quality monitoring program be developed for the water system which should include both microbiological and chemical parameters.

After reviewing the written request for the investigation, applicable submissions and legislation, I have come to the conclusion that the evidence and facts do not warrant a Section 29 Investigation of a threat to drinking water at this time. If there is further evidence or facts that you would like to submit in relation to this request, please re-submit your application for an investigation of a threat to drinking, including this information.

Sincerely,



Jessy Bhatti, CPHI(C)
Environmental Health Officer
Interior Health

cc by email:

- Dr Rob Parker, *Medical Health Officer, Interior Health*
- Roger Parsonage, *Director Health Protection, Interior Health*
- Ivor Norlin, *Manager Health Protection, Interior Health*
- Robert Birtles, *Team Leader Health Protection, Interior Health*
- Christina Yamada, *Program Coordinator Health Protection, Interior Health*
- Michaela Swan, *Communications, Interior Health*
- Peter Mazey, *Manager, First Nations Health Authority*
- Casey Neathway, *Manager, First Nations Health Authority*
- David Lawrence, *Nooaitch Indian Band*

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, May 22, 2015 1:39 PM
To: Halls, Lori D ENV:EX; Ord, Kris ENV:EX; Mofidpoor, Maryam ENV:EX
Cc: Lambert, Tim HLTH:EX; Glassford, Karen (Karen.Glassford@bccdc.ca); XT:HLTH Kosatsky, Tom
Subject: Biosolids presentation and discussion at Env Health Policy Advisory Committee on June 2

Hi – we’ve got you on the agenda from 1:00 – 2:00 at a boardroom at BC Centre for Disease Control, 655 West 12th (near City Hall station on the Canada Line). We’ve got some flexibility to change that time before Tuesday May 26 when the agenda goes out to the group, so let me know if that works or not.

We are also trying to line up another presentation on odours and compost at 2:00, so you are welcome to stay for that item as well (if it gets arranged).

Again, thank you for doing this – am sure it will be an informative discussion!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Friday, May 22, 2015 3:54 PM
To: XT:HLTH Parsonage, Roger
Cc: Lambert, Tim HLTH:EX; Parker, Dr. Rob
Subject: RE: Communication Materials re: Biosolids

It will be good to have the discussion with Ministry of Environment on June 2nd at EHPAC, thanks Roger.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Parsonage, Roger [<mailto:Roger.Parsonage@interiorhealth.ca>]
Sent: Friday, May 22, 2015 3:08 PM
To: Paton, Arlene HLTH:EX
Cc: Lambert, Tim HLTH:EX; Parker, Dr. Rob
Subject: RE: Communication Materials re: Biosolids

Good afternoon,

My team has provided comments which I've included below in their entirety because I think they nicely articulate our concerns. We do want to stress the issue of transparency, which has put us at odds with the Ministry of Environment and it has really reinforced the perception in the Nicola Valley that this material is being dumped on them without their knowledge and input.

"Technically there does not seem to be anything incorrect, although we are not biosolids experts and are presuming the authors are. We note the documents clarifies MoE administers OMRR with Health Authorities' being limited in reviewing land application plans (top of p.7). We cannot, however, support these documents as a means for increasing community awareness and acceptance of organic matter recycling. They come across as biased towards the status quo and the general assumption that biosolids can be applied virtually anywhere without concern. This is not helped by the SYLVIS logo appearing on every page.

In our experience over the past 12 months since the HBE Team took on referral response for organic matter recycling we've truly appreciated the importance of local impacts and stakeholder engagement. The strict provincial regulatory approach to administering biosolid recycling has at best failed to appropriately inform local stakeholder and contributed to undo concern and conflict. At worse it is allowing the creation of facilities and operations that are not focused on

maximizing local benefits (e.g. enhancing viable agricultural land) while minimizing local costs (e.g. odour). A clear provincial strategy that accounts for the full scope of need (i.e. to manage municipal biosolids from urban centres) while maximizing benefits (i.e. the highest possible quality products applied to the most at need areas using the best available practices and technology) should be our goal; that is not reflected in these documents."

From: Paton, Arlene HLTH:EX [<mailto:Arlene.Paton@gov.bc.ca>]

Sent: Friday, May 15, 2015 9:44 AM

To: Corneil, Dr. Trevor; Parker, Dr. Rob; Parsonage, Roger

Cc: Lambert, Tim HLTH:EX; Kendall, Perry HLTH:EX

Subject: FW: Communication Materials re: Biosolids

Hi Trevor, Rob and Roger ~ Ministry of Environment has prepared the attached documents to help explain biosolids and the related regulatory framework to the public and has asked me to share them with you and your staff, as their dissemination will hopefully be helpful in the continued public discussions about biosolids in your region.

Tim and I are also working with MoE to have them attend our June Environmental Health Policy Advisory Committee so that we can all have a more in-depth discussion about biosolids. If there are specific angles on this issue that you'd like MoE and the committee to focus in on, please let me know so we can get some preparatory work done ahead of time.

Thank you!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Monday, May 25, 2015 12:22 PM
To: Lambert, Tim HLTH:EX
Subject: RE: Biosolids Fact Sheet

Not sure – we'd better take that out.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Lambert, Tim HLTH:EX
Sent: Monday, May 25, 2015 11:51 AM
To: Paton, Arlene HLTH:EX
Subject: RE: Biosolids Fact Sheet

Hi Arlene
I am not sure – isn't this what PMO/MOE are talking with FN about?

Tim

From: Paton, Arlene HLTH:EX
Sent: Monday, May 25, 2015 11:44 AM
To: Lambert, Tim HLTH:EX
Subject: RE: Biosolids Fact Sheet

Is the last bullet public?

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Lambert, Tim HLTH:EX
Sent: Monday, May 25, 2015 11:18 AM
To: Paton, Arlene HLTH:EX; Sitar, Natalie HLTH:EX; Cowan, Darynn HLTH:EX
Subject: Biosolids Fact Sheet

Hi Arlene
Please find attached a fact sheet for Biosolids.

Tim

FACT SHEET

Biosolids in Merritt and Nicola Valley

ISSUE

Concerns raised by the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Nlaka'pamux Territory

KEY FACTS

- The Ministry of Environment oversees the legislation covering biosolids. This includes the Organic Matter Recycling Regulation (OMRR) and the Environmental Management Act.
- Since December 2014, Interior Health (IH) has been involved in significant public and political attention regarding the use of biosolids in the Merritt and Nicola Valley areas. This attention has included media interviews, presenting at a public forum on January 26, and briefing elected officials at the Thompson Nicola Regional District.
- On January 12, IH received a letter from the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Nlaka'pamux Territory. The letter requested that all current activities cease and that no new notification proceed until the Crown and ministry regulators establish a meaningful dialogue. This letter references the Supreme Court of Canada's decision regarding the rights of aboriginal title to manage the land and resources in a manner that fits the vision for the territory.
- The community and local First Nations continue to protest and lobby various levels of government, and recently occupied Premier Christy Clark's office in Kelowna.
- Interior Health Authority, Health Protection staff attended a meeting with the Environment Minister and local First Nation representatives on Feb. 2 to discuss their concerns further.
- On March 23, Interior Health received a request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the Drinking Water Protection Act (DWPA). The request was in regards to the Class B composting facility and biosolids land application plan located at 2988 Sunshine Valley Road near Merritt. The Nooaitch band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two ground water wells.
- When these requests are received, Interior Health designates a statutory decision maker (Environmental Health Officer) to review the complaint and available information to determine the next steps.
- After reviewing the request from the Nooaitch Indian Band, applicable submissions and the legislation, the Environmental Health Officer concluded that the evidence and facts do not warrant a Section 29 investigation of a threat to drinking water at this time.
- Health Protection staff met with the Nooaitch First Nation on May 15 to verbally communicate this decision.
- During this meeting Interior Health also recommend the wells providing water to Nooaitch Indian Band be evaluated for Groundwater at Risk of Containing Pathogens as per the provincial guidelines. It also recommends that a long-term water quality program be developed for the water system that includes both microbiological and chemical parameters, which is best practice for water source protection and the safety of public health.
- s.13,s.17

FINANCIAL IMPLICATIONS (if not applicable please indicate N/A)

None

Approved by:

[name, program area]; [date approved]

[name], Finance and Corporate Services Division; [date approved] delete if N/A

FACT SHEET

[name], Health Sector Planning & Innovation Division; [date approved] delete if N/A

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Monday, May 25, 2015 2:03 PM
To: Ord, Kris ENV:EX
Cc: Lambert, Tim HLTH:EX; Halls, Lori D ENV:EX; Mofidpoor, Maryam ENV:EX; Llewellyn-Thomas, Marnie ENV:EX; Peacock, Tanya ENV:EX; Glassford, Karen (Karen.Glassford@bccdc.ca)
Subject: RE: Biosolids presentation and discussion at Env Health Policy Advisory Committee on June 2

Thanks Kris. Karen, please send Kris the terms of reference and current membership of the committee. And yes, we'll be having lunch between 12:15 and 1, so Karen can help you set up your presentation just before 1.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Ord, Kris ENV:EX
Sent: Monday, May 25, 2015 12:55 PM
To: Paton, Arlene HLTH:EX
Cc: Lambert, Tim HLTH:EX; Halls, Lori D ENV:EX; Mofidpoor, Maryam ENV:EX; Llewellyn-Thomas, Marnie ENV:EX; Peacock, Tanya ENV:EX
Subject: RE: Biosolids presentation and discussion at Env Health Policy Advisory Committee on June 2

Hello Arlene

Thanks for the logistics. We should be able to make that time. Our presentation will be a ppt and we will be bringing it on a stick so will there be an opportunity to get set up before 1:00? Also, could you please forward the membership of the committee and the terms of reference to me.

Tim and I had a brief meeting last Friday to discuss the presentation so I believe we are on track.

Many thanks,

Kris

A/Executive Director
Environmental Standards Branch
Environmental Protection Division

Phone: 250-387-9933

Fax: 250-356-7197

From: Paton, Arlene HLTH:EX

Sent: Friday, May 22, 2015 1:39 PM

To: Halls, Lori D ENV:EX; Ord, Kris ENV:EX; Mofidpoor, Maryam ENV:EX

Cc: Lambert, Tim HLTH:EX; Glassford, Karen (Karen.Glassford@bccdc.ca); XT:HLTH Kosatsky, Tom

Subject: Biosolids presentation and discussion at Env Health Policy Advisory Committee on June 2

Hi – we've got you on the agenda from 1:00 – 2:00 at a boardroom at BC Centre for Disease Control, 655 West 12th (near City Hall station on the Canada Line). We've got some flexibility to change that time before Tuesday May 26 when the agenda goes out to the group, so let me know if that works or not.

We are also trying to line up another presentation on odours and compost at 2:00, so you are welcome to stay for that item as well (if it gets arranged).

Again, thank you for doing this – am sure it will be an informative discussion!

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

Benson, Stacey HLTH:EX

From: Cowan, Darynn HLTH:EX
Sent: Thursday, May 28, 2015 10:58 AM
To: Lambert, Tim HLTH:EX
Subject: FW: Today: Minister Meeting re: Biosolids in the Nicola Valley
Attachments: IN_Biosolids_May 25_2015.docx; BN_Merritt Biosolids Update_15May2015_final.doc

Darynn Cowan | Executive Coordinator, Assistant Deputy Minister's Office, Population and Public Health, Ministry of Health | P: 250.952.1468 | F: 250.952.1713

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Cowan, Darynn HLTH:EX
Sent: Thursday, May 28, 2015 10:57 AM
To: Paton, Arlene HLTH:EX
Subject: FW: Today: Minister Meeting re: Biosolids in the Nicola Valley

Here's Environment and IH's note on this. Ryan advised they don't have a ministry IN. printing off for you plus our fact sheet.

Darynn Cowan | Executive Coordinator, Assistant Deputy Minister's Office, Population and Public Health, Ministry of Health | P: 250.952.1468 | F: 250.952.1713

Warning: This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.

From: Andrachuk, Andrea HLTH:EX
Sent: Thursday, May 28, 2015 10:40 AM
To: Muller, Bev HLTH:EX; Cowan, Darynn HLTH:EX
Cc: Foran, Grace E HLTH:EX
Subject: Today: Minister Meeting re: Biosolids

Hi Bev,

Thank you for making Arlene available to attend this afternoon with the Minister at this meeting with ranchers of the Nicola Valley regarding the Biosolids issue.

Date: Thursday, May 28
Time: 3:00-3:30
Location : room TBD

Attendees:

Michele Cadario (Premier's office)
Minister Lake

Minister Polak
Minister Rustad
Minister Letnick

I understand the other Ministers will be bringing Ministry staff and in some cases the staff will attend on behalf of their Ministers.
There is no material.

Many thanks,

Andrea Andrachuk | Acting Manager/Executive Operations
Office of the Deputy Minister
Ministry of Health

P: 250.952.1908 | C: ^{S.17} | email: andrea.andrachuk@gov.bc.ca

From: Jukes, Shaina HLTH:EX
Sent: Thursday, May 28, 2015 10:00 AM
To: Andrachuk, Andrea HLTH:EX
Subject: FW: Meeting re: Biosolids

Hi Andrea, The Biosolids meeting has been scheduled for today 3:00pm-3:30pm and other ministers are bringing staff.
Can you see if we can get someone down here to attend with MTL.

Thank you,
Shaina

Shaina Jukes

*Administrative Coordinator to the Honourable Terry Lake
Minister of Health | PO Box 9050 Stn Prov Govt Victoria, BC V8W 9E2
Phone: 250-953-3547 | Fax: 250-356-9587 | Hlth.Health@gov.bc.ca*

Biosolids in the Merritt area

- The Organic Matter Recycling Regulation (OMRR) is designed to protect human health and the environment in the application of biosolids.
- Currently there are four applications of biosolids in the Nicola Valley that meet the requirements of OMRR.
- The original Dry Lake proposal did not meet the requirements of OMRR and the ministry directed the proponent to provide additional information. The ministry has received the revised plan and is reviewing it to ensure it meets all the necessary requirements.
- As we've said all along, biosolids will NOT be applied at the Dry Lake site until both the ministry and Interior Health Authority have reviewed the proposal to confirm there will be no adverse impacts to the environment and human health.
- With respect to the Sunshine Valley Road composting facility, because it is a 'permitted use' under the ALC Act, rather than a 'farm use', the local government had the ability to prohibit it. The TNRD has not taken this step to prohibit or restrict this activity.
- I have met with local First Nations and the Regional District to discuss the community's concerns and we must continue to work together if we want to come to a resolution. For our part, we've ensured the use of biosolids at the Sunshine Valley Road facility has temporarily stopped.

- Biosolids have been applied to a variety of locations in the Nicola Valley – and around the province – since 2002 in accordance with OMRR.
- Example of where biosolids are being used and providing environmental benefits include: Vancouver Island University Forest, Aldergrove Regional Park, and landscaping at YVR and along the Sea to Sky Highway.
- The ministry must be notified at least 30 days in advance of any biosolids application to the land base and all notifications must meet the requirements of OMRR.
- A qualified professional with technical expertise must complete a land application plan before biosolids can be applied to any piece of land.

If asked about civil disobedience:

- We respect people's right to protest and we respect Aboriginal rights and title.
- That's why the Ministry of Environment has been consulting with the First Nations.

Background:

- Residents and First Nations in the Nicola Valley are raising concerns about biosolids application in the area – primarily about the effect of biosolids on human health and the environment. This issue has received media interest locally and from major media.
- The group Friends of the Nicola Valley claims the Nicola Valley “is scheduled to become a dumping ground for Okanagan and Lower Mainland human waste” with “no public consultation or notification, and no on-site inspection.” A petition by the group has over 1000 signatures. On March 10th, the group helped organize a blockade to stop a truck carrying biosolids from taking its load to the Sunshine Valley Rd. composting facility.
- On April 23, the Five Chiefs of the Nicola Valley announced their own moratorium on biosolids in the region. They indicated they might seek legal action, or continued protesting, blockades, and other types of civil disobedience.

- On April 14, Friends of the Nicola Valley organized a march to MLA Tegart's office to protest biosolids application in the region. On April 15, the Nicola Valley chiefs along with a number of other protestors began a 6-day sit-in at Premier Clark's constituency office stating they wouldn't leave until a moratorium on biosolids was in place. On April 21, government staff met with the First Nations to tell them there would not be a moratorium.
- On May 25, First Nations and Freineds of the Nicola Valley will be holding a rally on the Legislature lawns to protest the application of biosolids and restating that they have put their own moratorium in place.
- On January 12, the Chiefs of the Nicola Valley sent a letter to an MoE Regional Director cc'ing Ministers Polak, Rustad, and Thompson, among others, demanding all current bio-waste operations stop and no new notifications proceed "until the Crown and ministry regulators establish a meaningful dialogue" resulting in First Nations support.
- On February 2, 2015, Minister Polak met with the Chiefs of the Nicola Valley and the Thompson Nicola Regional District (TNRD) to discuss concerns. A commitment was made to continued dialogue with both groups focused on: sharing information on all biosolids applications in the Nicola Valley, possible establishment of a science panel to review biosolids research, further discussion on regulatory authorities of both MoE (what and how biosolids are applied) and TNRD (where they may be applied as part of zoning bylaw). Subsequent meetings have also taken place between MoE staff and TNRD.
- On March 20, 2015, Minister Polak and MLA Tegert met with local First Nations who asked for a moratorium on biosolids coming into the Nicola Valley. No resolution was reached at the meeting.
- BioCentral, the company who owns the Sunshine Valley Road composting facility, has voluntarily agreed not to accept any product at this site until an agreement is reached. Instead, they are trucking biosolids to a facility in Clinton.
- The ministry has received two recent notifications to apply biosolids in the Merritt area. MoE and the Interior Health Authority have reviewed the land application plan for the Woodward Road (Dry Lake) proposal (the site being primarily discussed in the media).
- Regulation of biosolids falls under the Organic Matter Recycling Regulation. To comply with OMRR, notification must be provided to MoE at least 30 days prior to biosolids application to the land base and a land application plan needs to be completed by a qualified professional.
- Due to concerns with this site, MoE directed the proponent to provide additional information about their application plan regarding setbacks from surface water and slopes, as well as an evaluation of groundwater depth, drinking water and habitat protection, among other detailed considerations.
- The land application of biosolids may not occur at the Dry Lake site until this additional information has been provided and both IHA and MoE have again reviewed the information. It is anticipated the revised plan will be submitted this spring.
- Within the Nicola Valley there are currently four effective notifications in place to apply biosolids. These notifications were reviewed by MoE staff and meet the requirements of OMRR. Once the land application is carried out, MOE will verify compliance with the plan and ensure there are no adverse impacts to the environment and health.
- The four notifications pertain to: Coquihalla Cattle Company (South of Merritt), Nicola Ranch (North of Merritt), Rey Creek (Logan Lake) and Sunshine Valley Road (West of

Merritt) compost site. Applications of biosolids have regularly taken place on these premises for years.

- First Nations have raised concerns over the Sunshine Valley Road composting facility and are requesting operations cease at the facility until consultation has been completed. Public concerns are also being raised about the Rey Creek site.
- In response to concerns raised by the community, MoE staff conducted 2 inspections at the Sunshine Valley Road composting facility (January 30 and February 10), the latter following concerns from the TNRD regarding leachate on the site. Inspection confirmed it was not leachate; it was snow melt, pooled due to a depression on the land.
- The OMRR also sets standards for metals and pathogens in biosolids and if the requirements of the OMRR are met, environmental risk is considered negligible. Compliance inspections may occur when the ministry is made aware of a potential harm or in response to a complaint.
- Public consultation or notification is not required under OMRR; however, some companies provide public notification and information on a voluntary basis.
- Majority of biosolid land applications takes place in the Southern Interior Region where the nutrient value in the land is poorer. In the Fraser Valley for instance, the soil is nutrient saturated given existing soil conditions and farming practices in the region.
- Biosolids can only be applied to the land when there is a benefit. Land applications can't be a means of disposal. If not applied, biosolids would be disposed of in a landfill, contributing to methane production and increased greenhouse gases and increased costs to landfills as space is limited.
- Under OMRR, storage of biosolids can only take place as part of the processing of biosolids and therefore is only a temporary measure. Storage can be costly to undertake given the protective measures needed under OMRR's storage provisions.
- Majority of land applications occur in the Spring in order to enrich the soil prior to the growing season. Typically, notifications of applications will come forward in the Fall/Winter. Land application plans must be received for each and every application 30 days in advance.
- The application of biosolids on ALR lands is considered a 'farm use', if all compost is used on the farm and it conforms to OMRR requirements. In that instance the local government cannot prohibit the operation. An application of compost and biosolids produced and applied not in compliance with the OMRR contravenes the ALC Act, and could result in ALC sanctions.
- However the application of biosolids on ALR land is considered a 'permitted use' if only half of the compost is used on the farm. In that instance the local government could prohibit the operation.
- The Sunshine Valley Composting Facility is considered 'permitted use' because their intent is to move half of the compost off site. Despite having the authority to restrict the facility, the TNRD approved it through its Zoning Bylaw No. 2400 (most recently revised in Nov. 2014).
- According to TNRD Zoning Bylaw No.2400, 2012 (revised Nov 6, 2014):
ECO-DEPOT means a lawfully operated facility where solid waste, organic yard waste, compostable materials, and recyclable materials are accepted and contained and may include onsite composting and acceptance of bio-solids from sewage treatment subject to the requirements of the Organic Matter Recycling Regulation of the Environmental Management Act and Public Health Act.3.15 Waste Management Facilities.

3.15 Waste Management Facilities - All waste management facilities such as but not limited to eco-depot, waste transfer station and waste management use permitted in the AF-1, RL-1, I-2 and I-3 Zones shall be approved and operated in compliance with the TNRD Solid Waste Management Plan. TNRD Zoning Bylaw 2400:

<https://tnrd.civicweb.net/Documents/DocumentList.aspx?ID=70091>

Regarding Biosolids in Clinton

- BioCentral, the company who owns the Sunshine Valley Road composting facility in Merritt, also owns another composting facility in Clinton (The OK Ranch).
- The company is temporarily trucking biosolids intended for the Sunshine Valley Road facility to Clinton because of the protests/blockades that have been occurring.
- The Mayor of Clinton, Jim Rivett, stated in an interview on CJFC there was “not a big impact on the village per se” and “There is precedence for transferring waste from the mainland and whatnot. You look at the Cache Creek Landfill - there’s another example where there’s a business opportunity. So do I think it’s the wrong thing to do? Not necessarily. If it’s governed properly and there’s no impact on the environment then I think why not?”
- The Mayor also stated on CNHL: “From a Clinton point of view, it's far enough away that it really doesn't impact us. But it does sound like they followed all the regulations and it's not harming the environment and they've been doing it for a number of years without complaints.”



Interior Health

IH Communications Briefing Note

May 15, 2015 - UPDATED

Topic

Merritt Biosolids – Drinking Water Protection Act Investigation Request Denied

Background

- Since December 2014, Interior Health has been involved in significant public and political attention regarding the use of biosolids in the Merritt and Nicola Valley areas. This attention has included media interviews, presenting at a public forum on Jan. 26, and briefing elected officials at the Thompson Nicola Regional District.
- The community and local First Nations continues to protest, lobby various levels of government, and most recently occupied Premier Christy Clark's office in Kelowna.
- On January 12, IH received a letter from the First Nation's Chiefs of the Nicola Valley regarding the application of biosolids within the Nlaka'pamux Territory. They request that all current activities cease and that no new notification proceed until the Crown and ministry regulators establish a meaningful dialogue. This letter references the Supreme Court of Canada's decision regarding the rights of aboriginal title to manage the land and resources in a manner that fits the vision for the territory.
- Interior Health responded to the letter referring the First Nations leaders back to the Ministry of Environment as the agency that oversees the legislation covering biosolids. This includes the Organic Matter Recycling Regulation (OMRR) and the Environmental Management Act.
- IH – Health Protection staff attended a meeting with the Environment Minister and local First Nation representatives on Feb. 2 to discuss their concerns further.
- Throughout this time, Health Protection has established a tracking document to track complaints and calls related to biosolids. To date, 43 complaints have been received. In response, Health Protection provides information on the process of biosolids and options for the complainant.
- On March 23, Interior Health received a request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the Drinking Water Protection Act (DWPA). This request is in regards to the Class B composting facility and biosolids land application plan located at 2988 Sunshine Valley Road near Merritt. The Nooaitch band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two ground water wells.
- When these requests are received, Interior Health designates a statutory decision maker (Environmental Health Officer) to review the complaint and available information to determine the next steps.
- After reviewing the request from the Nooaitch Indian Band, applicable submissions and the legislation, the Environmental Health Officer concludes that the evidence and facts do not warrant a Section 29 Investigation of a threat to drinking water at this time.
- Health Protection staff are meeting with the Nooaitch First Nation on May 15 to verbally communicate this decision.
- During this meeting IH will also recommend the wells providing water to Nooaitch Indian Band be evaluated for Groundwater at Risk of Containing Pathogens as per the provincial guidelines. It also recommends that a long-term water quality program be developed for the water system that

includes both microbiological and chemical parameters, which is best practice for water source protection and the safety of public health.

Key Messages

- Interior Health is committed to the protection of human health through the appropriate management of organic matter, including biosolids. We have recently been requested to conduct an investigation under the Drinking Water Protection Act regarding the impacts of biosolids on Sunshine Valley Road to wells serving the Nooaitch Indian Band.
 - Based on the information available at this time, Interior Health finds the information does not warrant any further investigation of a threat to drinking water.
 - We understand the community is concerned about the safety of biosolids in the Merritt and Nicola Valley and based on the information available there are currently no known drinking water health hazards.
-

PREPARED FOR:	Manager, Public Affairs & VP Public Affairs
PREPARED BY:	Michaela Swan, Communications Officer, IH West
SPOKESPERSON:	TBD

May 28, 2015 - Minister's Meeting with Ranchers of the Nicola Valley re Biosolids Issue

May 15th Meeting

IHA called the meeting, and the purpose of the meeting was to fulfill IHA obligation under 29(4) of the Drinking Water Protection Act, to advise the requesting person of our decision on their Section 29 request. It was believed that meeting with the First Nation in person would be more respectful and the opportunity for dialogue might help dial down the pressure.

This meeting was very specifically to talk to the Nooaitch Indian Band about their request for an investigation under S.29 of the Drinking Water Protection Act; **the Chief of the Nooaitch Band was there**, along with some councillors and staff.

Federal IHA Jurisdiction of Band Drinking Water

There is a new federal FN drinking water Act and the application details are still being worked out. FNHA does not currently have jurisdiction over the drinking water although they play a role. I believe the jurisdiction still resides with the Federal government. The actual specifics on how this currently functions (legally) would require some effort to figure out.

I think it is important to note that IHA also does not have jurisdiction over the water system or to do an actual section 29 investigation as in the questions below: "IHA does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to their knowledge ever)."

1. How the meeting went and a summary, who attended, what their reactions were?

Attendees from IH were Jessy (?) and Ivor Norlin. Casey was in person representing FNHA with Fionna Gorman, Sylvia Struck, and Peter Masey by phone. Nooaitch staff took minutes, but IHA has not received them yet.

2. Did the Nooaitch accept the information that was given to them or did it sound like their concerns were not adequately addressed and they were not listened too?

If by "accept" that means the Nooaitch had their concerns fully addressed, no - it was clear they are not satisfied that they have been listened too and had their concerns fully addressed. They discussed the Section 29 and DWPA in context of the broader issues of healthy communities and sustainable water and air sheds. Although IHA believes they understood (but didn't agree with) where IHA was coming from.

3. They would like to know if IH has done any testing in the past 4 years. I would need it in chronological order.

The section 29 investigation request is in context of a First Nations water system. IHA does not have jurisdiction over First Nation water systems and, as such, has not undertaken direct testing of the water systems over the past four years (or to their knowledge ever).

4. Do regional Surface Water protection plans fall under the health authorities?

No. Source water protection is a multi-jurisdiction, multi-stakeholder responsibility depending on who is doing what on the land. Under the Drinking Water Protection Act, it is the water suppliers responsibility to assess and understand the risks in the watershed, and to provide treatment to mitigate those risks.

5. In the letter that IH did not send it talks about Section 25. What is a section 25?

Section 25 of the Drinking Water Protection Act says that a drinking water officer may make an order if the drinking water officer has reason to believe that a drinking water health hazard exists, or if there is a significant risk of an imminent drinking water health hazard.

The band was calling for an investigation under the Drinking Water Protection Act. That is section 29 of the Drinking Water Protection Act (noted below). Section 29 is a request that anyone who has evidence of a threat to drinking water can request the health authority investigate.

Info form IHA suggests that after reviewing the request from the Nooaitch Band, applicable submissions and the legislation, the Environmental Health Officer concluded that the evidence and facts do not warrant a Section 29 Investigation of a threat to drinking water at this time.

6. MOE says that they would not be in charge of testing. This seems strange as they approved?

Generally, proponents of an activity are required to test. For biosolids, it would be the proponent that would be required to do testing of the compost. See above, IHA did not test nor does the drinking water system fall under their jurisdiction.

Benson, Stacey HLTH:EX

From: Cowan, Darynn HLTH:EX
Sent: Thursday, May 28, 2015 11:28 AM
To: Lambert, Tim HLTH:EX
Subject: May 28 - Ministers Meeting re Biosolids in Nicola Valley
Attachments: May 28 - Ministers Meeting re Biosolids in Nicola Valley.docx

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Thursday, May 28, 2015 11:47 AM
To: Lambert, Tim HLTH:EX
Subject: FW: Biosolids letter
Attachments: image001.png; ATT00001.htm; ATT00002.htm; image003.png; ATT00003.htm; Section 29 Request - Nooaitch First Nations - final.pdf; ATT00004.htm

Here's IH's letter.

Regards,

Arlene Paton
Assistant Deputy Minister
Population and Public Health
Ministry of Health
PO Box 9646 Stn Prov Govt
Victoria BC V8W 9P1
Tel: 250-952-1731

***Warning:** This email is intended only for the use of the individual or organization to whom it is addressed. It may contain information that is privileged or confidential. Any distribution, disclosure, copying, or other use by anyone else is strictly prohibited. If you have received this in error, please telephone or e-mail the sender immediately and delete the message.*

From: Zacharias, Mark ENV:EX
Sent: Tuesday, May 19, 2015 1:06 PM
To: Paton, Arlene HLTH:EX
Subject: Fwd: Biosolids letter

Here's what I have. Good luck.

Regards, Mark
250-415-6466

Begin forwarded message:

From: "Mitschke, Matt ENV:EX" <Matt.Mitschke@gov.bc.ca>
Date: May 19, 2015 at 12:45:39 PM PDT
To: "Zacharias, Mark ENV:EX" <Mark.Zacharias@gov.bc.ca>
Cc: "Halls, Lori D ENV:EX" <Lori.D.Halls@gov.bc.ca>
Subject: FW: Biosolids letter

Matt Mitschke
Chief of Staff to the Honourable Mary Polak
Minister of Environment
Office of the Minister

Province of British Columbia
T. 250-387-1187
F. 250-387-1356
Email matt.mitschke@gov.bc.ca

From: Murphy, Bernadette GCPE:EX
Sent: Thursday, May 14, 2015 3:37 PM
To: ENV Ministerial Assistants
Cc: Crebo, David GCPE:EX; Cotton, Brian GCPE:EX; Halls, Lori D ENV:EX
Subject: FW: Biosolids letter

FYI

From: Heinze, Laura R GCPE:EX
Sent: Thursday, May 14, 2015 3:34 PM
To: Crebo, David GCPE:EX; Murphy, Bernadette GCPE:EX; Cotton, Brian GCPE:EX
Cc: Jabs, Ryan GCPE:EX; Plank, Sarah GCPE:EX; Lawrie, Hannah GCPE:EX
Subject: Biosolids letter

Attached is what I think is the final IH letter. This will be provided to the First Nation at their meeting tomorrow.

From: Swan, Michaela [<mailto:Michaela.Swan@interiorhealth.ca>]
Sent: Thursday, May 14, 2015 3:30 PM
To: Heinze, Laura R GCPE:EX
Subject:

MICHAELA SWAN
Communications Officer, IH West
INTERIOR HEALTH
office: 250.314.2100 ext 3750 | cell: 5.17
IH QuickDial: 8-200-3750



Interior Health

May 15, 2015

Arlene Johnston
Administrator
2954 Shackelly Rd
Merritt, BC, V1K 1N9

Dear: Arlene Johnson

Re: Section 29 Investigation Request for Nooaitch Community Water System

This letter is provided in response to the request from the Nooaitch Indian Band for an investigation of a threat to drinking water under section 29 of the *Drinking Water Protection Act (DWPA)*, received March 23, 2015.

The concerns that warranted this request were the possible impacts from the existing Class B composting facility and the Class A biosolids land application plan located at 2988 Sunshine Valley Rd., Merritt BC. The Nooaitch Indian Band is concerned that both the composting facility and land application activities will negatively impact their drinking water, which is supplied by two groundwater wells.

Both the composting facility and biosolids land application project are regulated by the *Organic Matter Recycling Regulation (OMRR)* (B.C. Reg. 18/2002). The composting facility was constructed and is operating as per the requirements outlined in Section 24 of the *OMRR*, and as such, the provisions of Sections 23 of the *DWPA* do not apply. The evidence provided has, therefore, been reviewed in terms of likelihood of causing a drinking water health hazard under Section 25 of the *DWPA*.

The biosolids land application project is limited to the application of Class A biosolids and Class A compost. The Class A biosolids will be applied as per the land application plan submitted by the Qualified Professional as required by section 7 of the *OMRR*. Under section 13 of the *OMRR* there are no volume restrictions for the distribution of Class A compost. Additionally there are no restrictions for the land application of either Class A biosolids or Class A compost within a watershed.

The *Source Water Protection Plan (SWPP)* completed by Kala Geosciences LTD., in April of 2013 was also reviewed. In this document it is stated that the two wells being used (PW2 and PW3), are both considered not to be under the direct influence of surface water (Non-GWUDI). There was also chemical sampling conducted for the purposes of this report, and all parameters are within those set by the *Canadian Drinking Water Guidelines*. The *SWPP* recommends that the source water protection areas be set at an area of 100m around PW2, and 50m around PW3. Both the composting facility and biosolids land application project are located outside of these areas. The wells were not evaluated for *Groundwater at Risk of Containing Pathogens (GARP)* at this time, and it is recommended that this evaluation be conducted as per the Provincial guideline. It is also recommended that a long-term water quality monitoring program

Bus: (250) 851-7322 Fax: (250) 851-7341
Email: Jessy.Bhatti@interiorhealth.ca
Web: interiorhealth.ca

HEALTH PROTECTION
Less Risk ~ Better Health

Kamloops Health Unit
519 Columbia St.
Kamloops BC, V2B 5B2

be developed for the water system which should include both microbiological and chemical parameters.

After reviewing the written request for the investigation, applicable submissions and legislation, I have come to the conclusion that the evidence and facts do not warrant further investigation of a threat to drinking water at this time. If there is further evidence or facts that you would like to submit in relation to this request, please re-submit your application for an investigation of a threat to drinking, including this information.

Sincerely,



Jessy Bhatti, CPHI(C)
Environmental Health Officer
Interior Health

cc by email:

- Dr Rob Parker, *Medical Health Officer, Interior Health*
- Roger Parsonage, *Director Health Protection, Interior Health*
- Ivor Norlin, *Manager Health Protection, Interior Health*
- Robert Birtles, *Team Leader Health Protection, Interior Health*
- Christina Yamada, *Program Coordinator Health Protection, Interior Health*
- Michaela Swan, *Communications, Interior Health*
- Peter Mazey, *Manager, First Nations Health Authority*
- Casey Neathway, *Manager, First Nations Health Authority*
- David Lawrence, *Nooaitch Indian Band*

Benson, Stacey HLTH:EX

From: Paton, Arlene HLTH:EX
Sent: Monday, June 8, 2015 12:37 PM
To: Lambert, Tim HLTH:EX
Subject: Re: Media on biosolids near Merritt and IHA today

Yes, it's misleading how they wrote it...

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Lambert, Tim HLTH:EX
Sent: Monday, June 8, 2015 12:27 PM
To: Paton, Arlene HLTH:EX
Subject: RE: Media on biosolids near Merritt and IHA today

Hi Arlene

Sorry, I had not looked at the clippings, I have read them from the news clippings!

"Francesca Lucia: Friends of the Nicola Valley spokesperson Georgia Clement says they've learned that Interior Health's Anita Elly (sp) has given BioCentral approval to continue with their application plan for the dumping of biosolids in the Dry Lake area."

I would think this really means, IHA did not raise an objection to biosolid application.

Tim

From: Paton, Arlene HLTH:EX
Sent: Monday, June 8, 2015 12:13 PM
To: Lambert, Tim HLTH:EX
Subject: Media on biosolids near Merritt and IHA today

Hi Tim - did you see these articles? It makes it seem like IHA is the approve for biosolids application, but aren't they just one of the approvals that the proponent need to get before proceeding?

Sent from my BlackBerry 10 smartphone on the TELUS network.